Olp: Luite on ALD and execuse program-in 81 - m3900 Program -19 Write an ALP to find largest number from APPO, XA VOM FOABBE 0000: 80 FO given series of numbers. 076B : 0003 8ED8 mov DS, AX Assume cs: code, ds: data 096B:0005 00000 Mov AX,0000 opporta segment 0110 8 000 : 8 BFO mov CL, 04 B104 11St db 04H, OAH, OIH, 21H, 09H cio Lea 076B: 000A 8P360000 SI, [cooo] MOV larg db oot 9000 / 50ED 076B: 000F mov 8404 AL [51] Tre Japata ends Man 0768:0010 CMP CMP AL, [SI 401] code segment LOUVAE 0768: 0013 INB Start: mov frx, data 7303 8100 076B: 0015 MOV DS, AX AL, (SI+OI) mov 012 30 VOM MA SO VOCA mov 8100 : BBFD AX,00H 46 KH VOM INC SI mov CL, OUH 3100 : 3000 076B: 0019 FEC918 DEC CL lea SI, list 6100 : 89F0 75F3 UNIZ 0010 0100 SHE MOV AL, [SI] 0768 : 00ID (0005], AL A20500 mov 1A (2000) L2 : cmp Al, [SI+1] 076B: 0010 - INI T 3 TIAT JNC LI 0 (00) 1 8 500 (se) 14 your 3 00) MOV AL, (51+1) Ax=0001 BX=0000 Cx=0000 Dx=0000 4: INC SI 00000 = KO SP = 0000 BP=0000 51'=0004 DI=0000. DEC CL JN3 L2 99 0000 SS = 8769 CS = 076B DS = 076A 65= 075 A mov larg, AL IP=0020 NV OP ET PL ZR NA PENC NOTE A POPO INT OSH 076B: 0020 CC/ INT 3. Cmp 1 P,5 codeends ... SYD JC CFEI 2+ 0 0 -d ds:00 end start SCD JNC CF=0 onist b 076A : 0000 04 0A 01 21 09 21 S=D =F=1 largest = 21

10 00 10

00 10 PO

PSC PIxel

2500 3000

tiente esto

program -20

It III JA

[SI] AL

107

0000 96 0000 K

0000000

Data Segment

list db out, oat, oit, 214, OTH Small db OoH

9000 1 81-10

0100 1 5010

CIOO INGEO

2100 : 8 SE

0100 : Sepo

0100 : 80FG

GIODI ADEC

TION SAFE

CROS ! POFO

0166 : 0015

Data ends ..

code Segment

mov Ax data mov DS, AX

> mov CL, 04H

> > lea SI, list

0100 -2 : cmp AL, [SI+1]

> 4 SOJC

JN2 12

corlo ends

end start

lyrite an ALP to find smallest number from given series ASSume CS: code, ds: data

7/0001 8860

Start :

mov HOO, KA

mov AL, (SI)

MOV AL, [51+1]

4 : MINC SI

DEC CL

mov smail, AL

IN 13 90 VA SECUTIVE OSH

may Ax. Onen mond , manur 0000: 00FO AY, OTEA 076B: 0003 8ED8 mov DS, AX 076B:0005 B80000 mov Ax,0000 0768:0008 8104 mov CL,04 8 p3 6 0000 me 51, 10000] 076B : 000A 076B: 000E 8A04 mov - AL, [3] Comp AL, [SI+0] 076B: 0010 LOPPEE 8100 AB . LOW 0018 0763:0013 7203 076B: 0015 vom 1044B mov AL, (SI+O) 8100 : 80FG INC ST VOCES 076B:0019 FEC9 DEC CL

r-man

076B : 001B 75 F3 VOO JNZ 0010 076B : 001D A20500 GMO

(20005) AL mov 076B:0020 CC DIAL INT 3.

LI COT JA VOM -9.

AX = 000 1 Bx = 0000 Cx = 0000 DX = 0000 SP=0000 BP=0000 SI=0004

DI =0000 05=076A ES=075A SS-0769 CS=0768

IP = 0020 NV UP 61

PL ZR NA PE 0768:0020 CC

INT d ds:00, 0-15 SUE 038

1 75 9=8 OA Q1 21 01 00 . 9

\$ (00:80H)

	dp:-		OE-merpon	-		
-u	on to 41	9 no 5	SH YIM STREET	P		
0768:0000	FOA388	MOV 1	Ax, CAGA	M		
60003	88ED8	mov	DS, AX			
0468:0002	880000	mov ·				
0768: 000'8			CL, 04			
0768:000A	8D360000	m Let				
3000 : 80€0	8204		DL,04			
0100:88	8104		Ar (21)			
0468: 0012	3A 4401		AL, (SITI)			
0768: 0015		SNE				
0768: 0017	86 4401	Urre				
0168: 00IA	3604	may	AL, [51+1]			
0768 : 00IC	46		[SI],AL			
0100: 0010	FECA	INC	SI	,		
0768: 001F		DEC	DL			
			0010			
0768: 0021	FECA	pec	CL			
076B: 0023	, 565	FNE	900A			
0768:0025	œ	THE NE	11 3			
-9	15					
AX = 0002 Bx = 0000 CX = 0000 DX = 0000 SP = 0000						
-0000 51 = 0004 M = MOO 00						
65 = 0769 CS - 0750 DS - 0750 ES - 075A						
05 = 0769 C5 = 07613 IP = 0025 NV UP EI PL ZR						
OAGB: 0025 CC INT 3						
-d ds:00						

076A:0000

210gram - 21 . rite on ALP to Sort the given series of numbers in descending onder . Assume 'cs:code', os:data Data Segment list db 024, 224, 454, 014, 324 pata ends 1000 1 FOOD code segment start: BETON U100 1 85P0 Mov Ax, data SOP DICK AS mov os, AX COCE MOV AX, OH 018 B. 1 0015 151 tou] 10 PUBB mov CL, 04 vom 11038 4100 : 80FD G03: lea si, list DIGO : 83FO MUV DL, OHH CHOO : 8 PFS 601: MOV AL, (51+1) FIDO I DOPO CMP A4 [51+1] JNC GO2 0000 aper XCHG AL, [5] +1] 2000 : 80FO MOV [SI], AL 6102: INC 61 . 000 X8 0000 % O GO GO DEC OL 4000 Tã. JN & GOL 15 17 ES 913 VIA 80F0 :80 17:00 DEC CL VO 39 491 JNZ 603 00 000 BODO 1114 INT O3H d ds:00 Code ends end start . CO 10 0000: 0000 descending order 45, 32, 22, 2, 1

much on the to the given select on the MOV AX, OHEA 0000 : 83FO

0768:0003 8608 1 MON DS, AX

07GB: 0005 B80000 Ax,0000 mov

BIOH MO MOVE CL, OHE SOIL 3000 : 0008

076B: 000A 80360000 51, [0000] Ra

3000: 80FO mov ... DL 04 B204

0100 : 8 DFO 8A04 AL, (51) mov

AL, [51+01] 076B: 0012 3 A4401

MOV DS, FIX 0768: 0015 7205 JB OOIC HO XA VOM

C100 : 80FD XCHG D VOIL 864401 AL, [SI+O1]

076B: 001A 2804 mov [SI],AL

LEG ST HEL 036B: 001C 46 SI

MOV DE OUN 076B: 001D FECA DEC DL

076B: 001F FEFT JNZ 010

076B: 0021 FECQ LIE DEC CL

0768:0023 75E5 SOU JUS A00

076B:0025 C'C LO JA INT 3.

-9

Ax = 0032 Bx = 0000 Cx =0000 Dx =0000 SP=0000 BP = 0000

mov [st] AL

SI = 0004 DI=0000 DS=076A ES=045A

55 = 0769 (O) 5 M C5= 076B IP=0025 NV UP ET PLZR 330

NA PE CY

076B:0025 CC 5146 TNT 3

-d ds:00

65,62,23,2,3

0000: A 2FO 01 02 22 32 45 00 00

1480 111

(נמוצ בחמה

Program-22

15-morpora

Speech saved cody Write an ALP to soit the given series of in ascending Order.

Assume cs: code, ds: data Data segment

list db 02H, 22H, 45H, 01H, 32H

0000

LOE 8

(100 : diamo

8100 - 80FO

CEO - KA

or pata ends · Code Segment

10 Start 19 19

1A JE

mov Ax, data

mov ds, Ax

MOV AY, OH vom

MOV CL, 04

603:

SALALE Lea SI, list

MOV DL, OUH

GOL : MOV AL, [51]

CMP AL, (SI+1)

JC 602

XCHG AL, [SI+]

mov [SI], AL

G102: INC SI

> DEC DL

JNZ GIO1

DEC CL

JNZ GO3

INT O3H

Code ends

end start.

ascending order

00:26 b

40

1, 2, 22, 32, 45

0000: 80F0	FOADS	AD FO, YA vom
0768:0000	8 € 08	mov Ds, Ax
S000: 89FD	8 YOE 0000	mov C1, [0000]
O76B:0009	80360100	lea SI (0001)
076B: 000D	8000	MON 41,00
1000 = 89EQ	13804	mov (SI) A
0763:0011	B 301	MOV BL, 01
0468: 0013	46	Inc SI
0768: 0014	0208	Add BI, AL
O76B: 0016	8810	mov [st] BT
6100 : 83FO	8A44FF	
076B:001B	FEC9	(0 00)
076B:001D	75F4	JN3: 0013
046B: 001F		INT 3
Towns Common Com		

pregram-12

600 KCHG AL (S3+3) AX = 0722 0000 = x8 DX = 0000

50

-d ds:00

1, 2 33, 32, 45

LOD THE AO 0000: ADFO 00 01 01 02 03 05 08 - 00 15 22 37 00 HOO THOO

19 030

Coas ends tiple bidg

Program - 23 Write an ALP to display tibonacci series assume cs: code, ds: data pata Segment count ab 10 Dup(?) pata ends code Segment. Start : GOOD / BUFO mov Ax, data mov DS, Ax mov CL, count DIGO: SAFO lea SJ, Fib 2100 / DOFO mov AL, OH mov

(SI), AL BL, OIH Mov GIO : INC SI

Add BL, AL mov (SI), BL mov -AL, [51-1] Dec Cu JNZ GO

INT 03H code ends start

conneal pelecile A DFO, XA VOM 076B: 0000 B86A07 5 15 10 201 MOV DS, AX 076B : 0003 8 E D8 DAGB : 0005 B86BOT MOV AX, O76B 8ECO MOV ES, AZ 8000: 80FO A000: 000A 8 D 36 0000 tea 1 31, [0000] 3000: 83FO 8030000 Lea DI, [0000] C100: 30FO Blot mor CL, of P100: 29F0 FC CLO 0760 : 0015 F3 REPZ 9100 : DOFO A4 MOVSB F100 : 20FO CC INT VOM 3 MOV BL, OIN -9 Ax = 076B Bx = 0000 CX = 0000 DX = 0000 2 THT 3 JA JA blon -d ds:00 1-101 JA voor 076A:0000 61 69 6D 6C 00 00 00 00 400 - Qiml . . . 076A:0000 61 69 GD 6C,00 00 00 00

to plan de materna write an ALP to move a string of databytes from one location to another [copy a string] Assume cs: code ds: data Data segment Str1 db 'AIMI' pata ends 000 : ADFO Extra segment Strz ab OOH Extra ends DIGO : DOIL code segment Start: mov Ax, data mov bs, Ax mov Ax, Extra ALOO : ADFO MOV ES, AR 0166 : COIC tea \$1, styl to two no reworm) lea DI, Str2 0000 - VG 0000 mov CL, 04H 0000 = X4 pro0 = X4 CLO THE DO DED : FIRE Rep mov SBurger Longe Dire INT D3H 000 at 6insta + aiml 1 code ends PD 10 0000 1 1000 end start 73 - 74 61 69 60 at

program - 24

d ds:00 - AIML territorio territorio de es 100 - AIML

be anchow operational output with a ser to move or strong of the strong 076B: 0000 AX, OTEA B86007 from one location MOV DS, AX 0763:0003 8608 coole de data mov Ax,0000 076B :0005 B80000 Dold Segment mov CL, 09 8000: BBFO B109 'IWIH' db THE 076B: 000 A 8p360000 roooo, IE post 3000 : 83FO 80360900 Lea DI [00097 0768:0012 [IZ], JA , VOM HOAB O76B: 0014 14 [Ed] vom 2088 076B :0016 46 THETING SEST mov AN dota FP INC DI 076B : 0017 0768 : 0018 CL FEC9 TA ED DEC 07GB : 001A ASFE'N XA 0012 JNS 076B : 001C CCAA CO VOINT output 110 It not Conclusion LEG D1 8412 0000 = X = 0000 = X = 0000 = XA 076B: CC INT 3 nata segment output von que HEO THE SO -d ds:00 076A:0000 61 69 60 6C 73 6E 69 troit bro

73 - 74 61 69 60 6C 73

39 d ds:00

aimlshist aimlshist

IMIA

Program-25 :write an ALP to concatenate two strings Assume cs: code ds: data G0001 83F0 pata segment SLII db 'AIML' 'SNIST' Str2 db str3 db H 00 Data ends 00809808 1000 1 80F0 code segment. BAON 0166: 0012 start: 2088 046 B : 001d mov Ax data 011 mov DS, AX 3100: A3F0 mov Ax, OH mov CL,09H C100 1546 A100 : 80F0 tea SI, Str1 3100 : 6010 lea DI, Str3 GO: MOV AL, (SI) AX = 0000 = XA = 0000 MOV (DI), AL 00:00 b INC SI DEC CL JNZ GO INT O3H . Code ends end start

output :-BE-INDICA early out stonedards of que one shape B86A07 0768:0000 mov AX, OFFA THURSA DS, AX 076B: 0003 8ED8 mov 0768: 0005 mov. Ax,0000 880000 8000 : 83FO MON Cr'OH 8104 076B: 000A mey 8036000 [00000] IE 3000 : 819E0 803€0800 01, (0008). 0768: 0012 8A04 "AL, [SI] mov 076 B: 0014 88 05 AL, [SI] mov 076B:0016 46 INC SI VOm 076B : 0017 4F D€ C DI 8100 : 80FO FEC9 HPOIN DEC 076B: 001A 75F6 JNZ 0012 0768 : 001C CC CX = 0000 DX = 0000 -d ds:00

Ax = 004C Bx = 0000

0000: ABF0 4D 4C 00 4/C 4D 49-41 AIML. LMIA - raking SWI db'AMI CL, 04H

0 24 1

DI, Str1+8

Program - 26 write an ALP to find Reverse of a string Assume CS : code, ds: data cota segment str1 db 'cse' Data ends FORD BAT code segment Start : mov ax data mov DS, AX mov Ax, OOH MOV CL, D3H #100 # 3.8FO lea SI, Str1 Lea DI, Str1+6 60: mov AL, [5] ALCO I DIES MOV (DI) AL INC SI DEC DI 1111111 AY- 0-16 B DEC CL JNZ .60 03H INT code ends end start

> Olp:-CSE. ESG

300 co cu u uu cocos no co

Octopora printed on other to stad persons of all puting 0000 : 0000 B86407 AX, OTGA MOV 0760 : 0003 8CD8 mov DS AX 0760:0005 80360000 SI, (0000) lea 0766 : 0009 B86B07 mov AX, OFB 016C : 000C SECO. mov ES, AX 3000 : D3FO 8D360000 lea (0000) IS 076C : 0012 F3 REPZ C100: 0013 A6 CMP5B 0766:0014 7404 J7 A100 D76C : 0016 BBIIII mov Bx, 1111 0760:0019 CC INT 3 076C:001A BB0000 mov BX, 0000 0760 : 0010 cc INT -8

AY = OHEB BX = 1111 8 800 = XD DX =0000 SP = 0000 BP = 0000 SI =0006 Dr= 0000 DS = 076A E5 = 0769 SS = 0769 CS = 076C IP = 0019 NV UP EI PL AN SW PE NC 0766:0019 CC IM ds:00. -010

0000 : A DFO 4F 05 00 00 49 43 52

Program - 27 write an ALP to write compare two strings Assume cs: code, ds: data es: extra pata segment Str1 db 'MICRO' count db 054 pata ends Extra Segment str2 db . 'MACRO' Extra ends 1000 : 8010 code segment start : mov Ax, data MOV DS, AX in (3000) lea st, styl mov Ax, Extra mov €5, ATL SICOPIO COOD X8 DX = 0000 COPO S XA lea 11, Str 2 MOV CX, 05H 0 18 A000 -Repe Compsb AOFO : 00 2 2 0 JENZ LI 79 94 VM 100 - 01 mov Bx, 11111 INT O3H Repe Repeat untill LI : MOV BY,0000+ zero THEO THE JZ AND 00 10 11 F 30 70 80 Code ands - Jump if zero 00 CF end start

correct - 0000 wrong = 1111

AAFO,XA 076B: 0000 FOA 388 mov

6000 : 80FO 8 E D8 DS, AX mov

D76B: 0005 8EC0 mov ES, AX

076B: 0007 0000 AL,00 MOV

P000: 80F0 Lea DI, roood 8 D3€ 0000

0768:000D FC CLD 3000 : 83FO

F2 REPNIZ 076B : 000F

SCASB AE 0100 : 80FO

4F DEC DI. 076B: 0011

893E0B00 mov IO (8000) D76B: 0015 CC INT

-9

00F0 = xA BX = 0000 CX = 0018 DX = 0000

SP = 0000 BP = 0000 51 = 0000 DI =000A

03 = 076A E6 = 076A SS = 0769 C5 = 076B

IP = 0015 NV UP ET PL NZ NA PE NC

0768:0015 CC INT 3

-a ds:00.

0000 : ADFO 63 6F 6E 74 6F

72 00

controller

Program - 28

FG - morpor?

write an ALP to find the length of the given String.

Assume Cs: code ds: data

pata segment

bata ends

3x.000

mov ES, AX

Thea DI, str 10

VICID 000088

DEC DI

moy res, DI

TNT .034

code ends

end start

length = 10 : 60 0000: Aoro

Hexadedimal - A

ACCO = Id (casholica)

str1 dis 'controller', O-zao

res dw oot

code segment

Start : mov Ax, data

mov DS, Ax POHE

MOV AL, OOH

aloo flag Repne Scasb Repne -

Repeat not equal

direction

C4613 : 000 5

0968: 000 £

CLD - clean

Scasb

- scanbyte

- d d5:00

```
output
white on the to find the longth of the u-
                      MOV AX, OTEA
           F04388
0000 : 80FO
                            DS, Ax
                      mov
            8 ED8
6000 , 80FO
07613 : 0005
                       lea
                           [0000], IS
            8 ECD
                       mov AL, 00
F000 : 8 3F0
            B000
0763:0009
                            DI, [0000]
            8D3E0000
                       Lea
076B: 000D
                       CLD
              FC
3000 : 80 PFO
                       REPNZ
               F2
076B: 000 €
               AE
                        SCASB
0100 : 83FO
                                  0016
                         J 7
               404F
                                 BY, OOFF
0763:0012
              BBFF001
                          MOV
                CC
                          INT
                                  3
076B: 0015
                                 BX,0000
0100 : 0016
                          MOV
              BB0000
076B: 0019
                 CC
                          INT
                                   3
 7-9
  00 FO = XA
             BX = 0000
                     CX = 001F
                                 DX = 0000
    SP = 0000 SI = 0000
                         DI = 000B
   -d ds:00
  076A:0000 63 6F 6E 74 72 6F
         1 6C. 6C, -. 65/
                           72 00
                          controller
```

Program-29 Write an ALP to find the given string or character, string or not ? Assume CS: code ds: data Data Segment Stri db 'controller', 10-zero dw ooH re5 bata ends code segment start: mov Ax, data MOU DS, AX mov ES, AX MOV AL, OOH lea DI, Styl CLD Repne soush LI MOV BX, DOOFFH INT O3H LI: MON BX, 0000H INT D3H code ends end start