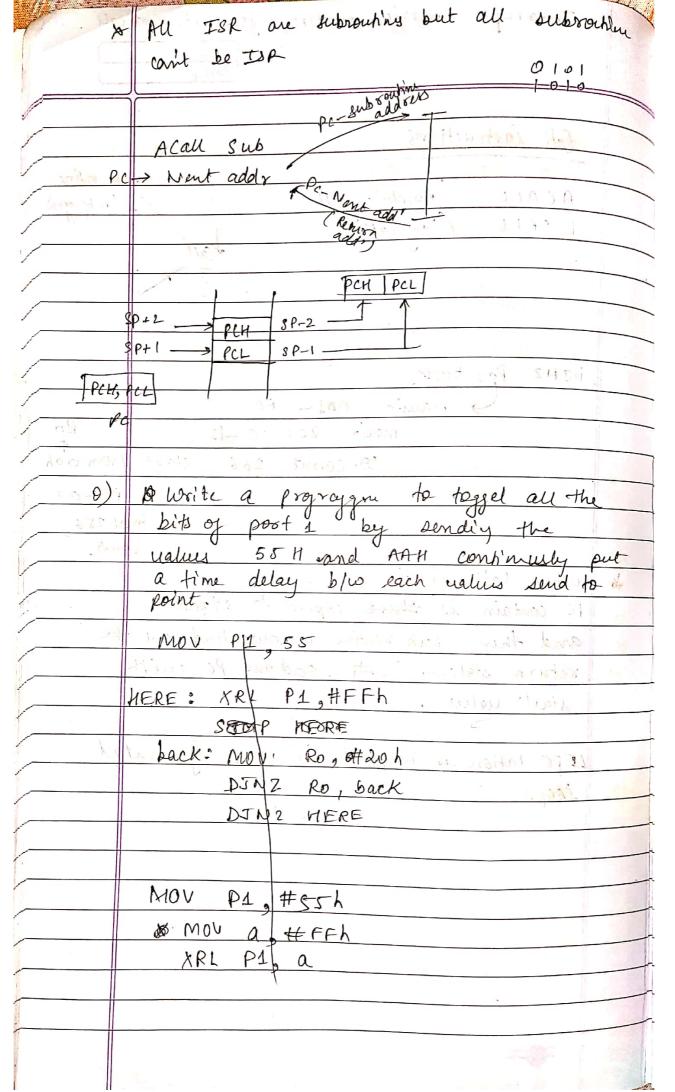
	Call instructions
///	
	ACALL (Absolute cell) = 3ub rouhine -
	LCALL (long call) = (3 ubprogra)
	Vall =
	1901 Mid. = 1
	172 172
	DJN2 Ro, back
	marin 001 - FF
	manin 200 courts Ro
	to count 266 start from och
	Marine Ma
	1 total 256
Just	Land 1997 has 1172" Land
*	when call is there and he with
	PC contain is there copied to stack
	and then sub vortice is enecuted and the
	return statemen att load the PC with
	stack value in Att att of Vax angul
	ENASTA DETES
	LEFO Fation is helpfull in case of nexted
	loop. Hand . 29 5/129
	-12/11/2/11/2/
	AZZTO LIVE VOIS
	A 1) 12 N VO. 1 %
	6 , 67 19%
	•
1 Storm	



	Date Page
	back = mow P1, #155h Here = DINZ R1, Here
	back: mow P1, HSSA Here: DINZ R1, HURL LCALL DELAY / RET
	MOV PL, FLOARH END
	LCALL DELAY
	SIMP RACK
	56.6 VOM
	Asemblar directive for the assembles
	To the state of th
	Ear directive de 1919 : Mand.
	か。学 の 女野 ·
	Count Eau 25
	MOV Ro, # Court 10 Ro = 25 1/2 1/2
	ORG 50011 - from while to start heading
500 H	Datal: DB 28d
50111	Data 2: DB 110111101B
802 h	Data 0 : DB 20 hi line sive issented
	Data 4: DB 11 3132"
5044	Data 5: DB 'I' > not 16 bib
ાં છે જિ	
	32 -2 1 Ven
Qu')	91.6 (1/18)
5054	Data of: DB "All the best", All D JUA : And
da ,	508H Space (509H)
Aut . 1	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
-	II. Optiliza

81, 825	8051 ALP Factorial of a no	(up 10- 5T)
ANN P.S	THE PROPERTY OF THE	orange 2 July
	1,6 5. (2.10)	
	MOV 80, \$25h	30101
\longrightarrow	- 101 10	MAN
	DACK!	JM [3.
	Mov a, ro	
	Dec 80	the interest
bac	K: MOV 6, 80	
	MUL ab	per di his
	MOV @ X+, &	
_	DEC 30 901	11150
$\overline{}$	BDJNZ To, back	53 (10:1)
$\overline{}$	We will all as to be a self	103 900
	, bac	more Dakil: 66
	a loff cont	9) 10 Hall 140
	Fibonace series fill 12	T - Dolot June
	1415 7	MOV Ro, #201
1	MOV 12H, HI	MOV R1, 1+10
	MOV 13H,#1	Back: MOV A,@RO
	MOV 81 2#0Ah	INC RO
	MOV a, 12H	ADD A. @ Ro
ba	$K: ADD$ $a, 13h$ $\longrightarrow Mov $ ADD	ADD A, @ Ro
	Mov (3h, a	Mou @ lo, A
	MOV QUITO	DEC RO
	\$ 6.DINZ 8p, back	DJNZ R, Back
	15	, ,
•		
		11
		1
		4

	32
	32 96 Date Page
	(rage
,Ar	ADD two 32 but number and my
	10 10 11 17 18 10 20 40 44 10 4
	12, 13, 14, 15 16, 17, 18, 19 (1A, 1B, 1L, 1D)
	- MOV YO,04h 15 + 26 - 37 - 26 8
	MOV 71, #12h 200
	MOV 82, #16 h
	MOV Y3, # 1Ah
	CIR C
bar	K: MOV a, Q VI
	ADDC a, @ Y2
	Mov @Y3, a
7 198	1 INC 1819
	INC 82
	the va
	DINZ vo, back 1 and of and word !
	1 sep
+	internal ram location b/w 20th to 80h
	which contains coop cosecutive number.
	ADL SOF VON
	Mov* v1, #20h
	MOU & ,#41h
ł	back: Mov a, @81
	Inc Y1 (Fee) van
	SUBB a, 71 MOV TO a
	CINE TO, #00 last
	last; DINZ Ro, back
	MOV a, VI.
	DEC MON 12, a MIL 10
	Bec XI ASDA COOH H MAGS
	prov Y3, a

37/18	Date Page
xch a, ra) a (rage)
ORG OOK	ELCM. of two no
mou ro, 20h	
mov 71, 21 h	Triple of the
mov 82, #01h	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
mov a, ro	
mou bon	D As I'm I'm
subb a, ri	the state of the s
je nept	3 . 1 1
back: mov as	80
mov b, *2	~ v . · · · · · · · · · · · · · · · · · ·
mul ab	P. S. S. W. W.
mov 73, a	July 924-2 102
mod b, 72	· / -7.11 F
div as	12 111 1112
inc rz	God - Coll Coll
xch a,b	A CATE OF THE OWN
cjne a, #ooh, b	ack
simp last	
next: mov a, r	0
xch a, Y1	- Jet 1 . 1.0°
mov ro, a	. '*.
Sjimp back	Association Committee Comm
last: mov 22	h, 83
d gmil	I trans on Vani
END	,13 10 9
Lang.	11 , 2 t J 7 t
	· 10 6.60 ·
	=1 -/1 1 =1
97731	
1031	Ac 2 × 3 1 · · · ·
. 11	
El Copilio	

	To check nibble and	se pallindra
	į.	With the stem
	MOV R2 3#004	412 11 11 11
/	MOV R3, #ooh	the results
	Mov a, 25h	
	mov ro, a	With Whom I
	swap a	111,
/	Mov Y1, a	John of
<u> </u>	CLR	iten man straff
	Mov a, ro	the state of the s
	SUBB a, Y1	ic to.
	CINE a, #00, NP	Tree way
	INC R2	Dr. Ham De
	SJMP NEXT	so with the
	NP: INC R3	· 101
	NEXT: SIMA &	4,0 4,7
-	END	- dand deep n it all
		ted proplet
0)	1	niet horn sikili
- 6)	luse of no	1000 (00)
	•	Par year
	mor a, # OFFL	(a = FF .7)
	mov by # operh	(A = FF ?)
	mov yo, HOFFL	r= FF
+	MUL AB	1. : : : : : : : : : : : : : : : : : : :
	MOU RIGB	R. = HB
	MUL AB	B=FF
	MÓU 5042A	
	MOV P5, 50h	FFXFF
		FEO!
1	MOU R2 1 B	BA
		nagin I day

	Mov AgRA	11.000/1 0	Le William
	MOU B, RO		
	MUL AB	120 4 .00	FF
	ADD A, R2	$\alpha : \{0, 1\}$	FIF
	JME SKIP	4 , 1. 1	7- 3
	Mov R3, #004	(A . 9	v.o.)
	INC R3		1 - 1 - 1
	SKEP: MOV 514, A	a3 3 1	
	MOV REGISTING MANT	1.1	
	MOV A, B	11 5 13	
		- g 11 3.2	.18 (1
	Mov 52 M, A	= A 11,9 + A	76.53
	MOV R7,5211		16: 255
			• • • • •
		ORO, A	2461 3
		. b.	
- i - s		1	Fif
		14 11 1	FF
		Y I	
		.\r	· territ.
0)	To check bitwise p	allindrom	· 1114
	(.	0	ab acat
	MOV A, A1Fh	70	0 00001

	Che of a number using push and:	fon
	MOV Ro, # 20h	
	MOV A, @ RO	
	MOV R1, A	
	Mov B, A	
	INC DO	
	Mov A, QRo	
	MUL AB MOV SP, # 30h	
	PUSH OFOH	
	MOV B, A 1/ B=01h	
	MOV A, RILLA = FFh	
_	MUL AB	
	INC RO	
	MOV @RO, A	
_	Mov A, B	
_	Mov R2, A	
	POP OFOH MOV A. R.I	
	MUL AB	
	0.00	
	INC RO	1
4.00	Mov @ Ro; A	
	MOV A, B	
	ADDI A Harl	
	INC RO	
	MOV @ RD. A	
	mor A.B	
	ADDC A, #ooh	
	INC RO	
	Mou aro, A in the said	

o) To implement DA A operation without using DA.A. o) To multiply 16 bits number. o) To theck given character is a character wise palindrom. (using DB)	J	Page
o) to multiply a 16 bits number. o) To thek given character is a character wise pallindrom. (using DB) o) To find HCF of a number.		
o) to multiply 16 bits number. o) To thick given character is a character wise paliendrom. (using DB) o) To find HCF of a number.	0)	To implement DA A operation without
o) To thick given character is a character wise pallindrom. (using DB) o) To find HCF of a number.		more of Dr. 11.
O) To find HCF of a number.	0)	to multiply , 16 bits number.
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	0)	To thick given character is a character wise palindrom. (using DB)
1 5 6 6 - 3 / - 15 6 20 - 11 /	0)	To find HCF of a number.
1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	ì	thought to be given borney of with all thing in
15 11-0=78 MAIN 3: 111-0=78 = 10-90 31		a com lan i alone interan
121	•	
	473.	

	delay
	Software odor program
	12 clock pulses one required to execute
	,
	B Pr 12_
	state 1
A)	find the timps period required to execute 1
	machine cycle in each case.
0	11.0592 MHZ > /11.0592 = (0-9216)
	= 1.085 Bys
(1)	16 Mn2 > 0.75 US
(3)	DOMNZ >> D-6 US
(v)	22 Mnz 3 0.54 Ms
0)	Find the size of the delay in the following program is crystal from is
	MOV A,#SEL Again: MOV PI, A
	ACALL Delay

	Date
	Page
	CPL, Acces see some 1/8
	STMP AGAIN
Dela	
	RET - 2
	is 437 us
Jose of	
10	Find the delay program for the following sub program (not give f=11-0572)
	sub program (not give f=11-0572)
	100 100 100 1000
	Mov Rg, # 250 - 1
	NOP - 1 × 250
2	NOR 1 7 200
	1.085 215
	NOP - 1 FOST
1	1630. 7549
s+20.	More: DJNZ R3, Mine — 2 x250.
	RET 2
0)	a delay of 5 mg
	a delan of 5 mg
	(4) $5 \times 10^{-3} = 0.54 \times n \times 10^{-6}$
	·
	6-10-1-12-12-13-13-13-13-13-13-13-13-13-13-13-13-13-
	= 00.
1.1 1.1	(2) n= 5×103 103
66 C	0.54 × 10=5
	0.34 x 12
-	= 9259 cycles
£.	V
K 351	Unicomia de la comia della com

3)	DJN2 - 2MC 9259 - 4630 well
	2
ч)	4630 = 18 count
712 811	258
	(256× 18) = 4630
	RI RZ
	Pal Pal
1-1-1	MOV R2, #18 - 1x.
1 ,	Here1: MOV R15# 255 - 1×18
	Nove: DJNZ R1, Hore - 2×256×18 (× 0.54
	DINZ R2, Here 1 - 2×18
	6
The The	is is ontra = 5.006 ms us 5ms
28.	theck this deay
0)	WAP to togget all the bits of post
	1 eury 200 me - Grystal frezu 11.0592
	0.1.2
50.0	$200 \times 10^{-3} = n \times 1.085 \times 10^{-6}$
	n = 200 x 103
£	N - 200 X 10
	1.085
	= 184331.7
	= 184332 yeles
	DJN2 - 2 -> 184332 = 9501 92166 cyc
	9314
- 11	92166 - 360 - 1-4 360 = 2 256 (200) 130
	256 256) divide by 180
	256 256 chiwide by 180 256 256 0 130 256 × 360 × 180 × 2 256 × 180 × 2 256 × 180 × 2

			Page
DEL	AY: MOV R	8 9 # 2	-V-1 /20
1110 2	· MOV R.	. # 2000-180	*1 X WES 1000 2
4000 1 3	MOV DENEZ RI	* # 247	- 1 × 6 × 15 × 15
	there: DJN2	Rs, Here	-2 × 25.6 × 25.6
	DJNZ	As goton of	-2 x 16 460 180
			-2 x1x2
		<u> </u>	14.17 POP
			11 12 140
AGAIN:	MOU A, # 55%	· 1 64 0	2001 ms
	MOU PI, A		
	ACALL DELAY		
	CPL A		
	NIADA AMEZ		
0) U	AP to generate	e a squer	war of frequer
1	KHz assume	crystal fre	year jour
- ;	11.092 1	り 1 N Z	
ML			
	Bn = TOFF	Tim = 1 ma	squeau]
/			for 1 cyl
		TON = TOFF	= 0.5 ms
	0.5×10-3 = xx1	.025 x 10-1	
	n = 460.8		
	= 46 D G/CU	2	
	DJN2 > 460 =	= 230 cyclis	
	2	0	
	telay: Mov Ro.+	7 230 A	
	telay: Mov Ro, +	Heri	
	RET		
	T. C. Ito		
,			

	RESET - is non maskable
	other are mouskable Page
	5 interupts Vector address
	7 INTO [ext HIW Entire upls] 00034
giory's	TINTI [ent 4/w Saturaph] 00134
	To [Timer o interrupt] [Tro] WOOBH
	TI [Timer 1 interrupt] [TFI] 001BH
	ig 1 then I byte of data have been brassened
	Serial com^ [TI & RI flags] 0023H Transmission Review.
this is a	RESET DODOH
3	When gue press resent the Bloc program.
	Reset -> 00004 LJM L1 L1: BEOS
	total 3 byte is
	pirterrupt enable
₩.	IE reg [bit addressable rej]
	EA - ET2 ES ETI EXI ETO EXO EA = 0 - disable all itenterrepls (all interrept ismasked)
	EA = 1 - enable interrupt and are serviced y particular interrupt bit is 1

	The state of the s
0)	so the enome to do the Hollowing
(a) (b)	enable serial interrup
c)	" EXL
a)	Jet B IE. 4
<u></u>	Set B IE. 1
()	SetD IE. 2
(d)	Ur IE.1
13.	
<u> </u>	SOUY 5' IF. 7
	The problem of the second of t
	s and
	isable or mask Tiner o internal
<u>e</u>) 10	disable all the interrupt
•	
Man	7611
1st thru	MOV IE, # 100 101100
	12, 47 [00 [0]] O B
The Carried Man	demontries No marie o al tradition
A. C.	
2.1	the factor with the second of
	Scanned with CamScanner
	Seamed with Cambeanner

	Date Page
	IP Ry (Interrupt projects a
	IP Ry (Interrupt priority Ry bit addrescable)
	-car or cour
	PTZ PS PT! PX! PTO PXO
	difaust
	9 f Rx1 is set 1 in IP Ry then
	181 serve PXI is services after
	that the priority order is followed.
-(1)	Discuss what happens in interrupt
1994	INTO TFO INTA are activated and
	INTO
7.	TFO A
1 31	E TNT 4 OF OUT OUT ON
.3 34	
	To assign heights projon'ty of Timer 1
	Indenu +F1 dissues what happen if INTO 2 This & TFO are achivated
/	INTO 2 Trita & TFO are achinated
	at the same time.
	, L. Spilms Dangier Land of
<u>o</u>)	SUB IP.3 or MOV IP, # 08h
	· · · · · · · · · · · · · · · · · · ·
11	7F1
<u>b</u>)	INTO
	TFO INT1
	Efficie

	-
<i>a</i>)	Dircurs The segr
	MOU IP, # 0000 1100 B
	14.46-294
	PO INTI
	TF1
	INTO
1	TFO 1
13	indoing PS
	(TIP RI)
	Francis Is. on word interior