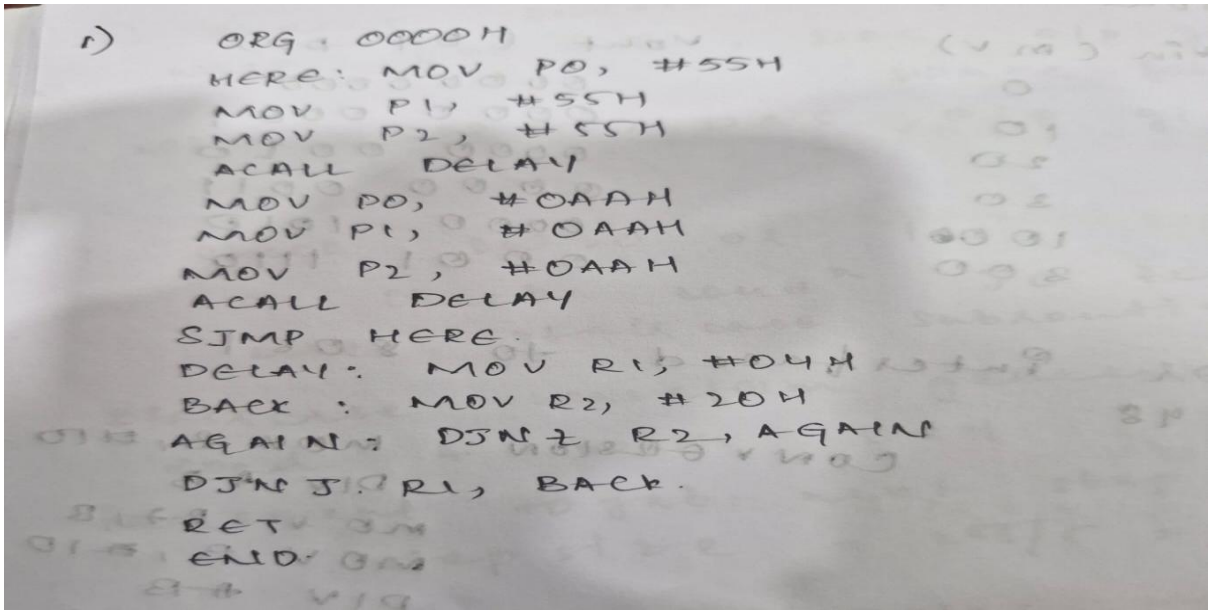
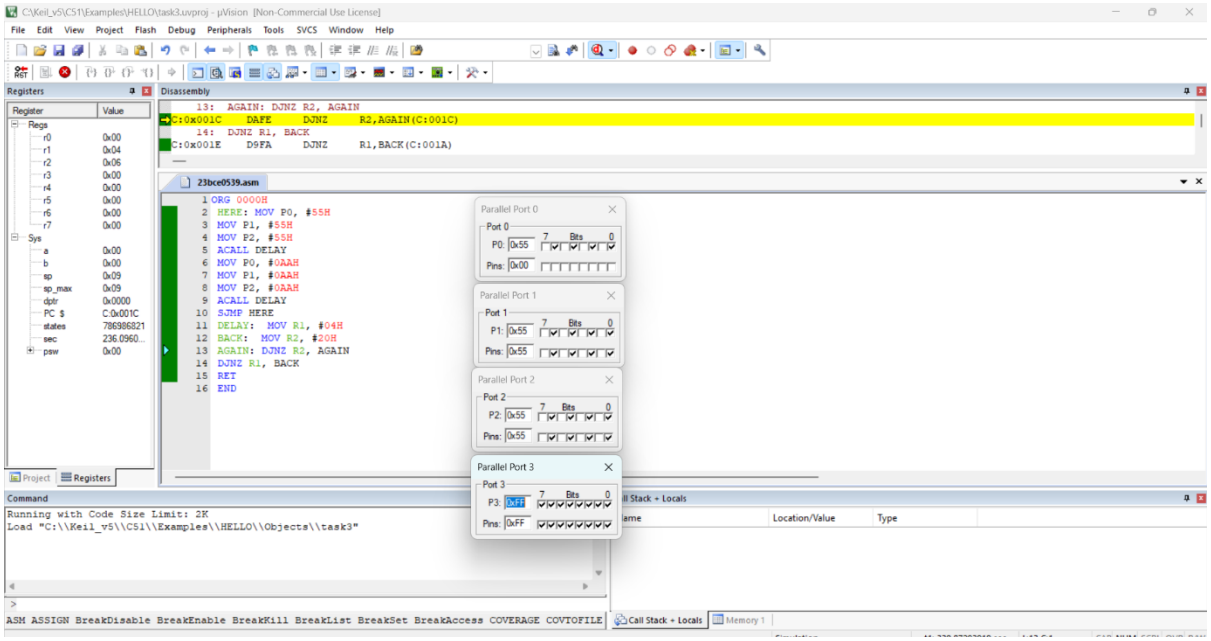
TASK 2

REG NO: 23BCE2001

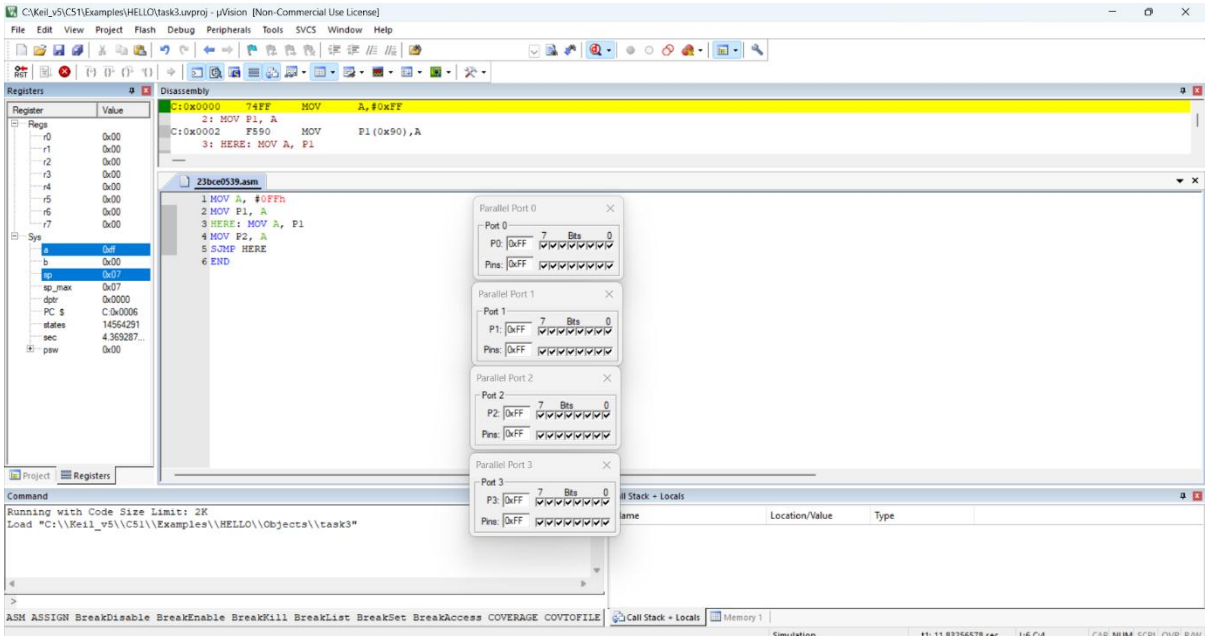
NAME: G.Siddarth

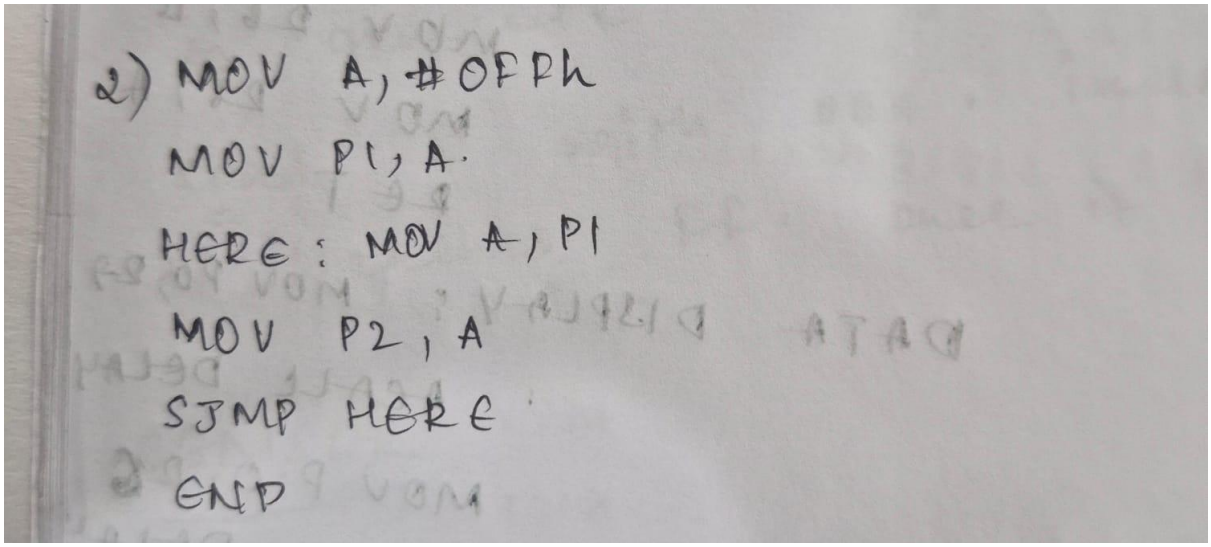
Q)Write and assemble a program to toggle all the bits of P0, P1, and P2 continuously by sending 55H and AAH to these ports. Put a time delay between the "on" and "off" states. Then using the simulator, single-step through the program and examine the ports. Do not single-step through the time delay call.



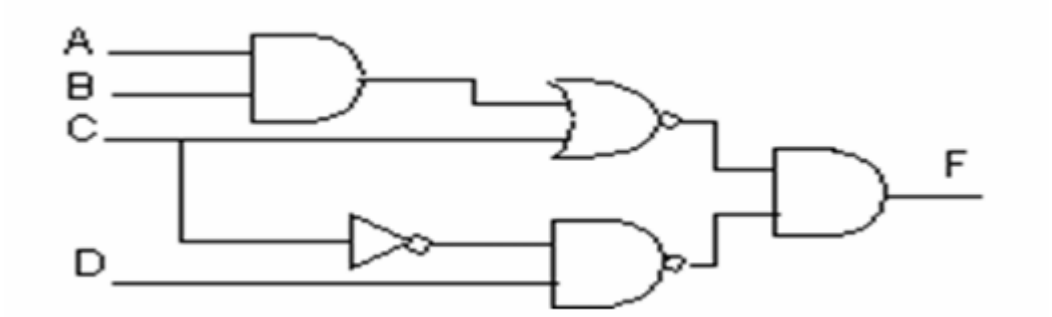


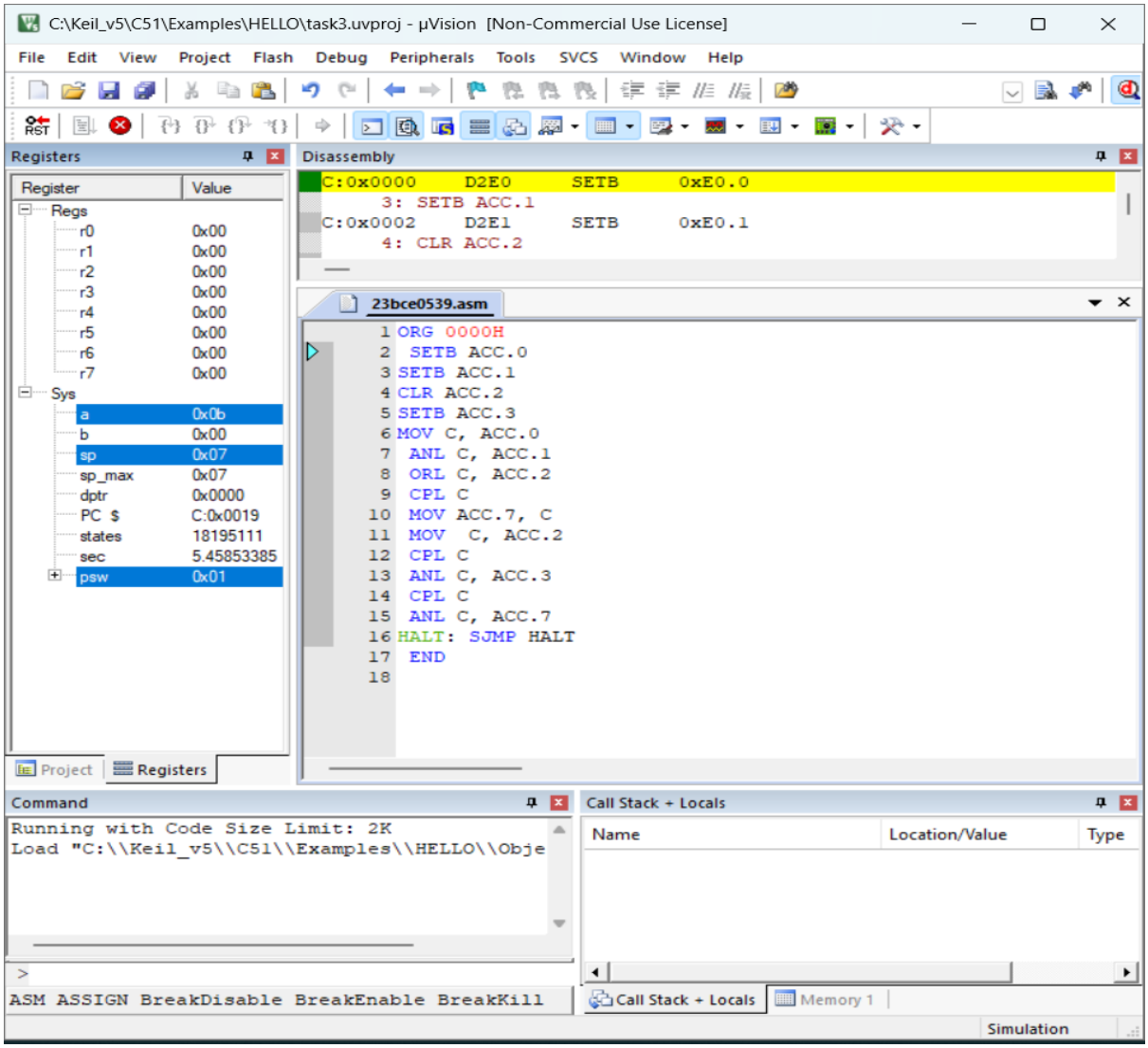
Q)Get the Data from Port P1 and Send it to Port P2, Note: P1 as input Port and P2 as Output Port

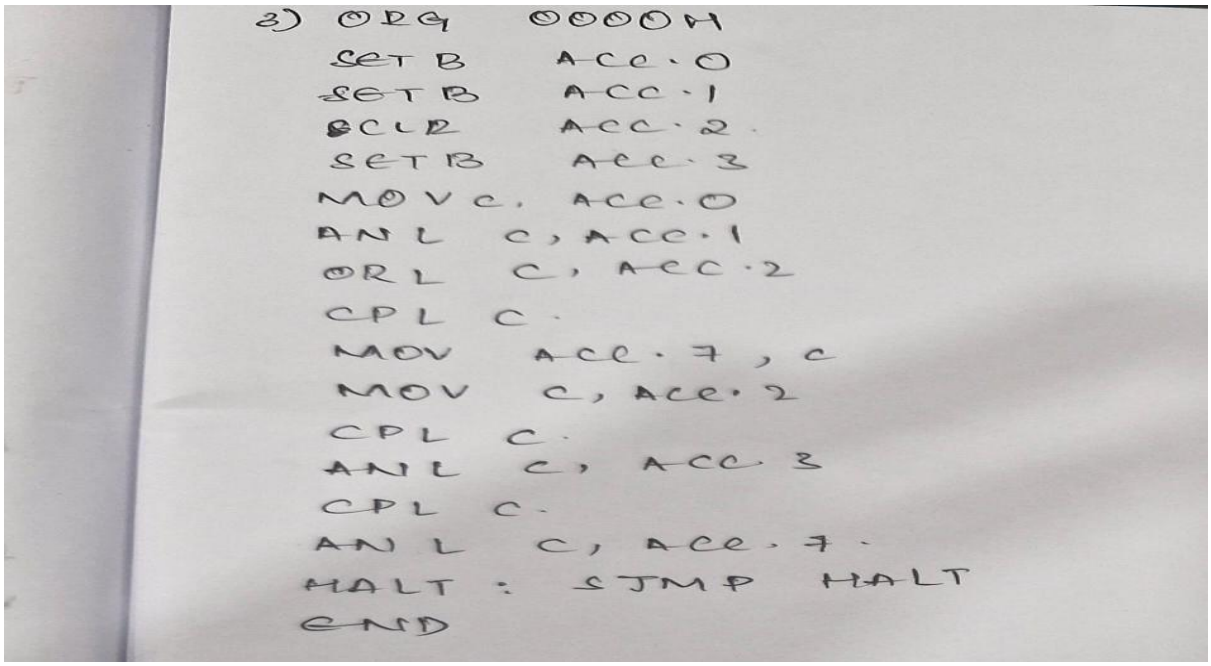




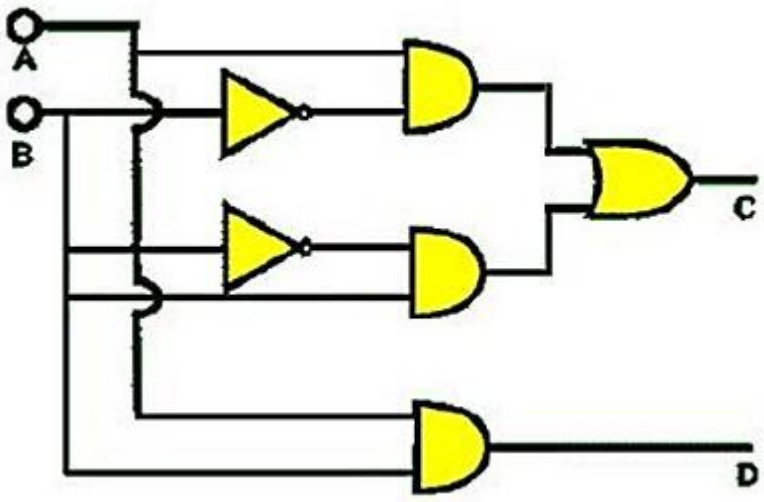
Q) Objective: To develop an assembly code for 8051 Microcontroller, to implement the given digital circuit using KEIL development tool

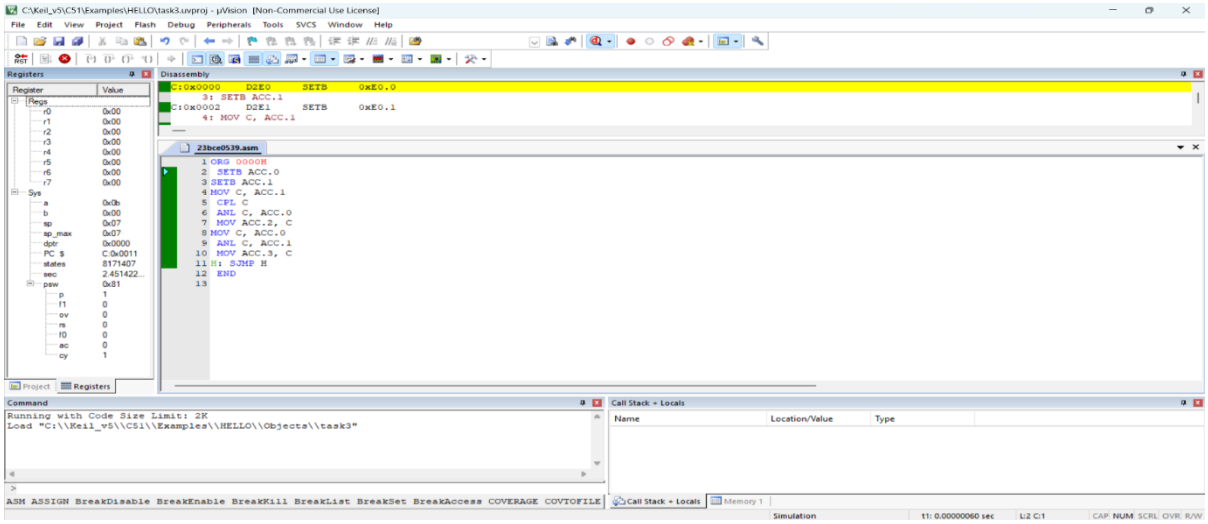


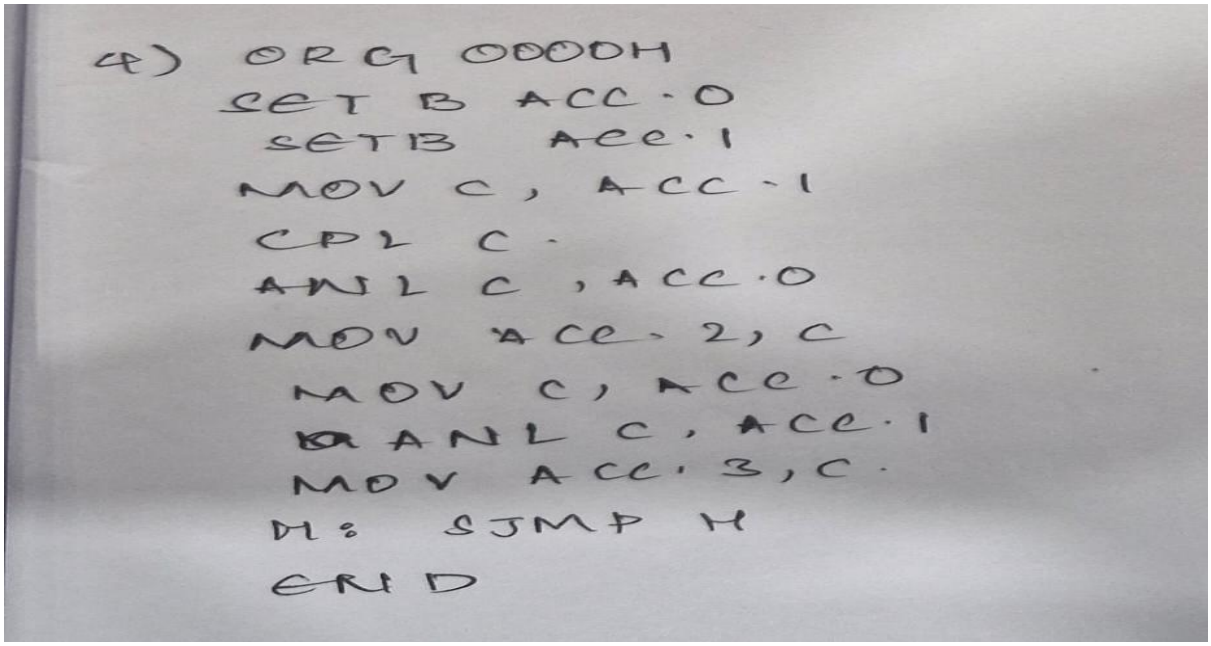

C:\Keil_v5\C51\Examples\HELLO\task3.uvproj - µVision [Non-Commercial Use License]
File Edit View Project Flash Debug Peripherals Tools SVCS Window Help
Registers
Register Value
Regs
r0 0x00
r1 0x00
r2 0x00
r3 0x00
r4 0x00
r5 0x00
r6 0x00
r7 0x00
Sys
a 0x0b
b 0x00
sp 0x07
sp_max 0x07
dptr 0x0000
PC $ C:0x0019
states 18195111
sec 5.45853385
psw 0x01
Project Registers
Disassembly
C:0x0000 D2E0 SETB 0xE0.0
3: SETB ACC.1
C:0x0002 D2E1 SETB 0xE0.1
4: CLR ACC.2
23bce0539.asm
1 ORG 0000H
2 SETB ACC.0
3 SETB ACC.1
4 CLR ACC.2
5 SETB ACC.3
6 MOV C, ACC.0
7 ANL C, ACC.1
8 ORL C, ACC.2
9 CPL C
10 MOV ACC.7, C
11 MOV C, ACC.2
12 CPL C
13 ANL C, ACC.3
14 CPL C
15 ANL C, ACC.7
16 HALT: SJMP HALT
17 END
18
Command
Running with Code Size Limit: 2K
Load "C:\\Keil_v5\\C51\\Examples\\HELLO\\Obje
ASM ASSIGN BreakDisable BreakEnable BreakKill
Call Stack + Locals
Name Location/Value Type
Call Stack + Locals Memory 1
Simulation


3) ORG 0000H
SETB ACC.0
SETB ACC.1
CLR ACC.2
SETB ACC.3
MOV C, ACC.0
ANL C, ACC.1
ORL C, ACC.2
CPL C
MOV ACC.7, C
MOV C, ACC.2
CPL C
ANL C, ACC.3
CPL C
ANL C, ACC.7
HALT: SJMP HALT
END

Q)


A
B
C
D


C:\Keil_v5\C51\Examples\HELLO\task3.uvproj - µVision [Non-Commercial Use License]
File Edit View Project Flash Debug Peripherals Tools SVCS Window Help
Registers
Register Value
Regs
r0 0x00
r1 0x00
r2 0x00
r3 0x00
r4 0x00
r5 0x00
r6 0x00
r7 0x00
Sys
a 0x0b
b 0x00
sp 0x07
sp_max 0x07
dptr 0x0000
PC $ C:0x0011
states 8171407
sec 2.451422...
psw 0x81
p 1
f1 0
ov 0
rs 0
f0 0
ac 0
cy 1
Project Registers
Disassembly
C:0x0000 D2E0 SETB 0xE0.0
3: SETB ACC.1
C:0x0002 D2E1 SETB 0xE0.1
4: MOV C, ACC.1
23bce0539.asm
1 ORG 0000H
2 SETB ACC.0
3 SETB ACC.1
4 MOV C, ACC.1
5 CPL C
6 ANL C, ACC.0
7 MOV ACC.2, C
8 MOV C, ACC.0
9 ANL C, ACC.1
10 MOV ACC.3, C
11 H: SJMP H
12 END
13
Command
Running with Code Size Limit: 2K
Load "C:\\Keil_v5\\C51\\Examples\\HELLO\\Objects\\task3"
ASM ASSIGN BreakDisable BreakEnable BreakKill BreakList BreakSet BreakAccess COVERAGE COVTOFILE
Call Stack + Locals
Name Location/Value Type
Call Stack + Locals Memory 1
Simulation t1: 0.00000060 sec L:2 C:1
CAP NUM SCRL OVR R/W


4) ORG 0000H
SETB ACC.0
SETB ACC.1
MOV C, ACC.1
CPL C
ANL C, ACC.0
MOV ACC.2, C
MOV C, ACC.0
ANL C, ACC.1
MOV ACC.3, C
H: SJMP H
END