

Εργαστηριακή άσκηση 10: Εφαρμογές των χρονιστών και των διακοπών

Λύση άσκησης 2

0000h: LJMP MAIN

0003h: LJMP INTER0

000Bh: LJMP TMER0

0013h: LJMP INTER1

001Bh: LJMP TMER1

0100h: MAIN: MOV SP, #50H

MOV R2, #00H

MOV R6, #00H

MOV R7, #00H

MOV TL1, #21H

MOV TH1, #FCH

MOV TLO, #21H

MOV TH0, #FCH

MOV TMOD, #00010001B

SETB EX0

SETB IT0

SETB EX1

SETB IT1

SETB ET1

SETB ET0

SETB EA

SETB TR0

SETB TR1

MOV P1, #80H

MOV P2, #01H

LOOP: INC R2

SJMP LOOP

0200h: INTER0: PUSH PSW

PUSH ACC

MOV P0, R2

MOV A, P0

ADD A, #05H

MOV 30H, A

POP ACC

POP PSW

RETI

0300H: INTER1: PUSH ACC

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MOV P0, R2
MOV A, P0
RR A
RR A
RR A
RR A
MOV 31H, A
POP ACC
RETI
```

0400H: TMER0: CLR TR0

```
MOV TL0, #21H
MOV TH0, #FCh
SETB TR0
INC R6
CJNE R6, #100, FINISH
MOV R6, #00H
PUSH ACC
MOV A, P1
RR A
MOV P1, A
POP ACC
```

FINISH: RETI

0500H: TMER1: CLR TR1

```
MOV TL1, #21H
MOV TH1, #FCH
SETB TR1
INC R7
CJNE R7, #70, FINISH2
MOV R7, #00H
PUSH ACC
MOV A, P2
RL A
MOV P2, A
POP ACC
```

FINISH2: RETI