

LED:

CODE SEGMENT

ASSUME CS:CODE,DS:CODE,ES:CODE,SS:CODE

PPIC_C EQU 1FH

PPIC EQU 1DH

PPIB EQU 1BH

PPIA EQU 19H

ORG 1000H

MOV AL,10000000B

OUT PPIC_C,AL

L1: MOV AL,00000101B

OUT PPIB,AL

CALL DELAY

MOV AL,00000000B

OUT PPIB,AL

CALL DELAY

JMP L1

DELAY: MOV CX,1111111111111111B

TIMER1: NOP

NOP

NOP

NOP

LOOP TIMER1

RET

CODE ENDS

END

LED 10 bar:

CODE SEGMENT

ASSUME CS:CODE,DS:CODE,ES:CODE,SS:CODE

PPIC_C EQU 1FH

PPIC EQU 1DH

PPIB EQU 1BH

PPIA EQU 19H

ORG 1000H

MOV AL,10000000B

OUT PPIC_C,AL

mov bh,00001010B

L1: MOV AL,00000001B

OUT PPIB,AL

CALL DELAY

MOV AL,00000000B

OUT PPIB,AL

CALL DELAY

dec bh

cmp bh,00000000B

je end

JMP L1

DELAY: MOV CX,1111111111111111B

TIMER1: NOP

NOP

NOP

NOP

LOOP TIMER1

RET

end:

CODE ENDS

END

7 SEGMENT:

CODE SEGMENT

ASSUME CS:CODE,DS:CODE,ES:CODE,SS:CODE

PPIC_C EQU 1FH

PPIC EQU 1DH

PPIB EQU 1BH

PPIA EQU 19H

ORG 1000H

MOV AL,10000000B

OUT PPIC_C,AL

L1: MOV AL,01000000B

OUT PPIA,AL

CALL DELAY

MOV AL,11111001B

OUT PPIA,AL

CALL DELAY

JMP L1

DELAY: MOV CX,1111111111111111B

TIMER1: NOP

NOP

NOP

NOP

LOOP TIMER1

RET

CODE ENDS

END

Dot col GREEN:

CODE SEGMENT

ASSUME CS:CODE,DS:CODE,ES:CODE,SS:CODE

;

PPIC_C EQU 1EH ; control register

PPIC EQU 1CH

PPIB EQU 1AH

PPIA EQU 18H

ORG 1000H

MOV AL,10000000B

OUT PPIC_C,AL

MOV AL,11111111B

OUT PPIC,AL

MOV AL,11111111B

OUT PPIB,AL

L1: MOV AL,11111110B

L2: OUT PPIA,AL

CALL TIMER

ROL AL,1

JC L2

JMP L1

TIMER: MOV CX,0FFFFH

TIMER1: NOP

NOP

NOP

NOP

LOOP TIMER1

RET

CODE ENDS

END

Dot col GREEN(majher4 ta jolbe sudhu upore niche 2 ta kore 4 ta row jolbe na) :

CODE SEGMENT

ASSUME CS:CODE,DS:CODE,ES:CODE,SS:CODE

;

PPIC_C EQU 1EH ; control register

PPIC EQU 1CH

PPIB EQU 1AH

PPIA EQU 18H

ORG 1000H

MOV AL,10000000B

OUT PPIC_C,AL

MOV AL,00111100B

OUT PPIC,AL

MOV AL,11111111B

OUT PPIB,AL

L1: MOV AL,11111110B

L2: OUT PPIA,AL

CALL TIMER

ROL AL,1

JC L2

JMP L1

```
TIMER: MOV CX,0FFFFH

TIMER1: NOP

NOP

NOP

NOP

LOOP TIMER1

RET

CODE ENDS

END
```

Dot row RED:

```
CODE SEGMENT

ASSUME CS:CODE,DS:CODE,ES:CODE,SS:CODE;
```

```
PPIC_C EQU 1EH
PPIC EQU 1CH
PPIB EQU 1AH
PPIA EQU 18H

ORG 1000H

MOV AL,10000000B
OUT PPIC_C,AL

MOV AL,00000000B
OUT PPIB,AL

MOV AL,11111111B
OUT PPIA,AL
```

```
L1: MOV AL,00000001B

L2: OUT PPIC,AL

CALL TIMER

ROL AL,1

JNC L2
```

```
JMP L1  
TIMER: MOV CX,0FFFFH  
TIMER1: NOP  
NOP  
NOP  
NOP  
LOOP TIMER1  
RET  
CODE ENDS  
END
```

Dot row half RED-half GREEN(4 ta red,4 ta green):

```
CODE SEGMENT  
ASSUME CS:CODE,DS:CODE,ES:CODE,SS:CODE;
```

```
PPIC_C EQU 1EH  
PPIC EQU 1CH  
PIPB EQU 1AH  
PPIA EQU 18H  
ORG 1000H  
MOV AL,10000000B  
OUT PPIC_C,AL  
MOV AL,11110000B  
OUT PPIB,AL  
MOV AL,00001111B  
OUT PPIA,AL
```

```
L1: MOV AL,00000001B  
L2: OUT PPIC,AL  
CALL TIMER  
ROL AL,1
```

```
JNC L2
JMP L1
TIMER: MOV CX,0FFFFH
TIMER1: NOP
NOP
NOP
NOP
LOOP TIMER1
RET
CODE ENDS
END
```

Dot A:

```
CODE SEGMENT
ASSUME CS:CODE,DS:CODE,ES:CODE,SS:CODE
;
PPIC_C EQU 1EH ; control register
PPIC EQU 1CH ; c port
PIPB EQU 1AH
PPIA EQU 18H
;
ORG 1000H
MOV AL,10000000B
OUT PPIC_C,AL
;
MOV AL,11111111B
OUT PPIA,AL
;
L1: MOV SI,OFFSET FONT
;
MOV AH,11111110B
```



```
;
L2: MOV AL,BYTE PTR CS:[SI]
OUT PPIC,AL
```

```
MOV AL,AH
OUT PPIB,AL
CALL TIMER
INC SI
CLC
ROL AH,1
JC L2
JMP L1
```

```
TIMER: MOV CX,300
TIMER1: NOP
NOP
NOP
NOP
LOOP TIMER1
RET
```

```
;
FONT:
DB 00000000B
DB 11111100B
DB 00010010B
DB 00010001B
DB 00010001B
DB 00010010B
DB 11111100B
DB 00000000B
```

CODE ENDS

END

Dot H:

CODE SEGMENT

ASSUME CS:CODE,DS:CODE,ES:CODE,SS:CODE

;

PPIC_C EQU 1EH ; control register

PPIC EQU 1CH ; c port

PPIB EQU 1AH

PPIA EQU 18H

;

ORG 1000H

MOV AL,10000000B

OUT PPIC_C,AL

;

MOV AL,11111111B

OUT PPIA,AL

;

L1: MOV SI,OFFSET FONT

;

MOV AH,11111110B

;

L2: MOV AL,BYTE PTR CS:[SI]

OUT PPIC,AL

MOV AL,AH

OUT PPIB,AL

CALL TIMER

INC SI

CLC

ROL AH,1

JC L2

JMP L1

TIMER: MOV CX,300

TIMER1: NOP

NOP

NOP

NOP

LOOP TIMER1

RET

;

FONT:

DB 00000000B

DB 11111111B

DB 00011000B

DB 00011000B

DB 00011000B

DB 00011000B

DB 11111111B

DB 00000000B

CODE ENDS

END