```
A7 SEGMENT PARA
PUBLIC 'CODE'

ASSUME CS:A6

ORG 1000H


START:

;control register
turn on

MOV AL,80H

OUT 1FH,AL


MOV AL,0FFH

OUT 19H,AL


MOV AL,80H

OUT 1EH,AL


M:  MOV DI,OFFSET
FIRST

    MOV DL,1AH

M1:

    MOV AL,BYTE
PTR CS:[DI]

    OUT 18H,AL

    INC DI

    MOV AL,BYTE
PTR CS:[DI]

    OUT 1AH,AL

    INC DI

    MOV AL,BYTE
PTR CS:[DI]

    OUT 1CH,AL

    INC DI

    MOV AL,BYTE
PTR CS:[DI]

    OUT 1BH,AL

    INC DI

    DEC DL


    MOV CX,0FFFFH

    M2:LOOP M2


    CMP DL,00H

    JNE M1

    JMP L3


FIRST:

;C0 R1

DB 0FFH

DB 0BFH

DB 01H

DB 01H

DB 0FFH

DB 09FH

DB 01H

DB 01H


DB 0FFH

DB 08FH

DB 01H

DB 01H


DB 0FFH

DB 087H

DB 01H

DB 01H


DB 0FFH

DB 83H

DB 01H

DB 01H


DB 0FFH

DB 081H

DB 01H

DB 01H


DB 0FFH

DB 080H

DB 01H

DB 01H


;C7 GREEN

DB 0BFH

DB 0FFH

DB 80H

DB 02H


DB 09FH

DB 0FFH

DB 80H

DB 02H


DB 08FH

DB 0FFH

DB 80H

DB 02H


DB 087H

DB 0FFH

DB 80H

DB 02H
```

```
DB 083H          DB 0FEH          DB 0FFH          L3: MOV SI,OFFSET
                                                   DATA
DB 0FFH          DB 0FEH          DB 07FH
                                                     MOV BL,1AH
DB 80H           DB 0EH           DB 06H

DB 02H           DB 0C0H          DB 01H
                                                   L:

DB 081H          DB 0FEH          DB 0FFH

DB 0FFH          DB 0FEH          DB 07FH

DB 80H           DB 01EH          DB 0EH             MOV AL,BYTE
                                                   PTR CS:[SI]
DB 02H           DB 0C0H          DB 01H
                                                     OUT 18H,AL

                                                     INC SI

DB 080H          DB 0FEH          DB 0FFH            MOV AL,BYTE
                                                   PTR CS:[SI]
DB 0FFH          DB 0FEH          DB 07FH
                                                     OUT 1AH,AL
DB 80H           DB 03EH          DB 01EH
                                                     INC SI
DB 02H           DB 0C0H          DB 01H
                                                     MOV AL,BYTE
;R0 ORANGE                                          PTR CS:[SI]

DB 0FEH          DB 0FEH          DB 0FFH            OUT 1CH,AL

DB 0FEH          DB 0FEH          DB 07FH            INC SI

DB 02H           DB 07EH          DB 03EH            MOV AL,BYTE
                                                   PTR CS:[SI]
DB 0C0H          DB 0C0H          DB 01H
                                                     OUT 1BH,AL
                 ;R7 RED
                                                     INC SI
DB 0FEH          DB 0FFH          DB 0FFH
                                                     DEC BL
DB 0FEH          DB 07FH          DB 07FH

DB 06H           DB 02H           DB 07EH

DB 0C0H          DB 01H           DB 01H             MOV CX,0FH
```

L2:LOOP L2	DB 01H	;C7 GREEN	DB 02H
		DB 0BFH	
		DB 0FFH	
	DB 0FFH	DB 80H	DB 0FDH
CMP BL,00H	DB 0F7H	DB 02H	DB 0FFH
JNE L	DB 01H		DB 80H
	DB 01H	DB 0DFH	DB 02H
JMP L3		DB 0FFH	
		DB 80H	
DATA:	DB 0FFH	DB 02H	DB 0FEH
;C1	DB 0FBH		DB 0FFH
DB 0FFH	DB 01H	DB 0EFH	DB 80H
DB 0BFH	DB 01H	DB 0FFH	DB 02H
DB 01H		DB 80H	
DB 01H		DB 02H	;R0 ORANGE
	DB 0FFH		DB 0FEH
DB 0FFH	DB 0FDH	DB 0F7H	DB 0FEH
DB 0DFH	DB 01H	DB 0FFH	DB 02H
DB 01H	DB 01H	DB 80H	DB 0C0H
DB 01H		DB 02H	
			DB 0FEH
	DB 0FFH		DB 0FEH
DB 0FFH	DB 0FEH	DB 0FBH	DB 04H
DB 0EFH	DB 01H	DB 0FFH	DB 0C0H
DB 01H	DB 01H	DB 80H	

```
DB 0FEH

DB 0FEH          DB 0FFH          EXIT:

DB 08H           DB 07FH

DB 0C0H          DB 04H           A7 ENDS

                 DB 01H           END START

DB 0FEH

DB 0FEH          DB 0FFH

DB 10H           DB 07FH

DB 0C0H          DB 08H

                 DB 01H

DB 0FEH

DB 0FEH          DB 0FFH

DB 20H           DB 07FH

DB 0C0H          DB 10H

                 DB 01H

DB 0FEH

DB 0FEH          DB 0FFH

DB 40H           DB 07FH

DB 0C0H          DB 20H

                 DB 01H

;R7

DB 0FFH          DB 0FFH

DB 07FH          DB 07FH

DB 02H           DB 40H

DB 01H           DB 01H
```