

Assignment no : 05

Assignment Name: Write an assembly code to glow dots on Dot Matrix Display scroll bottom to top in this order C0(Orange)-C2(Green)-C4(Red).

Assembly Code:

g13_as5 SEGMENT	OUT 1AH,AL	MOV CX,0FFFFH	OUT 18H,AL
PARA PUBLIC 'CODE'	MOV AL,01H	L3:LOOP L3	MOV AL,080H
ASSUME CS:g13_as5	OUT 1CH,AL		OUT 1AH,AL
ORG 1000H		MOV AL,0E0H	MOV AL,01H
	MOV CX,0FFFFH	OUT 18H,AL	OUT 1CH,AL
START:	L1:LOOP L1	MOV AL,0E0H	
MOV AL,80H		OUT 1AH,AL	MOV CX,0FFFFH
OUT 1EH,AL	MOV AL,0F8H	MOV AL,01H	L6:LOOP L6
	OUT 18H,AL	OUT 1CH,AL	
C:	MOV AL,0F8H		MOV AL,00H
C0:	OUT 1AH,AL	MOV CX,0FFFFH	OUT 18H,AL
MOV AL,0FEH	MOV AL,01H	L4:LOOP L4	MOV AL,00H
OUT 18H,AL	OUT 1CH,AL		OUT 1AH,AL
MOV AL,0FEH		MOV AL,0C0H	MOV AL,01H
OUT 1AH,AL	MOV CX,0FFFFH	OUT 18H,AL	OUT 1CH,AL
MOV AL,01H	L2:LOOP L2	MOV AL,0C0H	
OUT 1CH,AL		OUT 1AH,AL	MOV CX,0FFFFH
	MOV AL,0F0H	MOV AL,01H	L7:LOOP L7
MOV CX,0FFFFH	OUT 18H,AL	OUT 1CH,AL	
L0:LOOP L0	MOV AL,0F0H		MOV AL,FFH
	OUT 1AH,AL	MOV CX,0FFFFH	OUT 18H,AL
MOV AL,0FCH	MOV AL,01H	L5:LOOP L5	MOV AL,FFH
OUT 18H,AL	OUT 1CH,AL		OUT 1AH,AL
MOV AL,0FCH		MOV AL,080H	MOV AL,00H

OUT 1CH,AL	OUT 18H,AL	M4:LOOP M4	OUT 1CH,AL
	MOV AL,0FFH		
MOV CX,0FFFFH	OUT 1AH,AL	MOV AL,0C0H	MOV CX,0FFFFH
L8:LOOP L8	MOV AL,04H	OUT 18H,AL	M7:LOOP M7
	OUT 1CH,AL	MOV AL,0FFH	
C2:		OUT 1AH,AL	MOV AL,FFH
MOV AL,0FEH	MOV CX,0FFFFH	MOV AL,04H	OUT 18H,AL
OUT 18H,AL	M2:LOOP M2	OUT 1CH,AL	MOV AL,FFH
MOV AL,0FFH			OUT 1AH,AL
OUT 1AH,AL	MOV AL,0F0H	MOV CX,0FFFFH	MOV AL,00H
MOV AL,04H	OUT 18H,AL	M5:LOOP M5	OUT 1CH,AL
OUT 1CH,AL	MOV AL,0FFH		
	OUT 1AH,AL	MOV AL,080H	MOV CX,0FFFFH
MOV CX,0FFFFH	MOV AL,04H	OUT 18H,AL	M8:LOOP M8
M0:LOOP M0	OUT 1CH,AL	MOV AL,0FFH	
		OUT 1AH,AL	C4:
MOV AL,0FCH	MOV CX,0FFFFH	MOV AL,04H	MOV AL,0FFH
OUT 18H,AL	M3:LOOP M3	OUT 1CH,AL	OUT 18H,AL
MOV AL,0FFH			MOV AL,0FEH
OUT 1AH,AL	MOV AL,0E0H	MOV CX,0FFFFH	OUT 1AH,AL
MOV AL,04H	OUT 18H,AL	M6:LOOP M6	MOV AL,010H
OUT 1CH,AL	MOV AL,0FFH		OUT 1CH,AL
	OUT 1AH,AL	MOV AL,00H	
MOV CX,0FFFFH	MOV AL,04H	OUT 18H,AL	MOV CX,0FFFFH
M1:LOOP M1	OUT 1CH,AL	MOV AL,0FFH	N0:LOOP N0
		OUT 1AH,AL	
MOV AL,0F8H	MOV CX,0FFFFH	MOV AL,04H	MOV AL,0FFH

OUT 18H,AL	MOV AL,0F0H	OUT 1AH,AL	MOV AL,010H
MOV AL,0FCH	OUT 1AH,AL	MOV AL,010H	OUT 1CH,AL
OUT 1AH,AL	MOV AL,010H	OUT 1CH,AL	
MOV AL,010H	OUT 1CH,AL		MOV CX,0FFFFH
OUT 1CH,AL		MOV CX,0FFFFH	N7:LOOP N7
	MOV CX,0FFFFH	N5:LOOP N5	
MOV CX,0FFFFH	N3:LOOP N3		MOV AL,FFH
N1:LOOP N1		MOV AL,0FFH	OUT 18H,AL
	MOV AL,0FFH	OUT 18H,AL	MOV AL,FFH
MOV AL,0FFH	OUT 18H,AL	MOV AL,080H	OUT 1AH,AL
OUT 18H,AL	MOV AL,0E0H	OUT 1AH,AL	MOV AL,00H
MOV AL,0F8H	OUT 1AH,AL	MOV AL,010H	OUT 1CH,AL
OUT 1AH,AL	MOV AL,010H	OUT 1CH,AL	
MOV AL,010H	OUT 1CH,AL		MOV CX,0FFFFH
OUT 1CH,AL		MOV CX,0FFFFH	N8:LOOP N8
	MOV CX,0FFFFH	N6:LOOP N6	JMP C
MOV CX,0FFFFH	N4:LOOP N4		
N2:LOOP N2		MOV AL,0FFH	g13_as5 ENDS
	MOV AL,0FFH	OUT 18H,AL	END START
MOV AL,0FFH	OUT 18H,AL	MOV AL,000H	
OUT 18H,AL	MOV AL,0C0H	OUT 1AH,AL	