210598B – Senevirathne R.J.M.
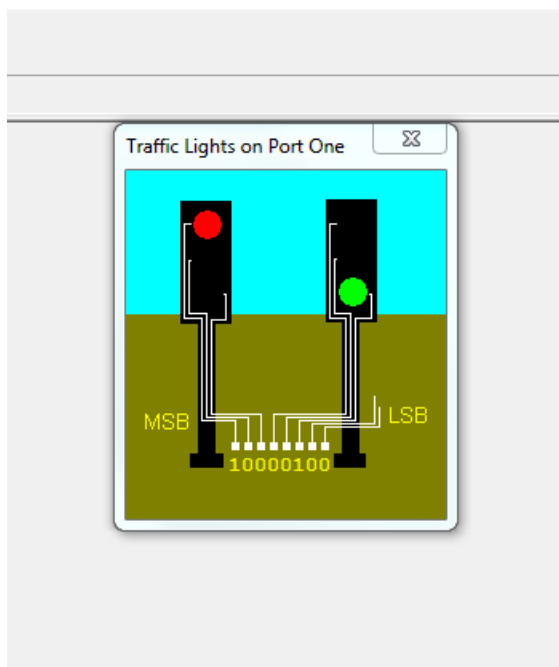
1) Assigned Lab Task

Create easy assembly programs. How to connect input and output devices to the CPU while using software to simulate their operation. Last but not least, create a program that multiplies 1 to 5 and outputs the results on a 7-segment display.
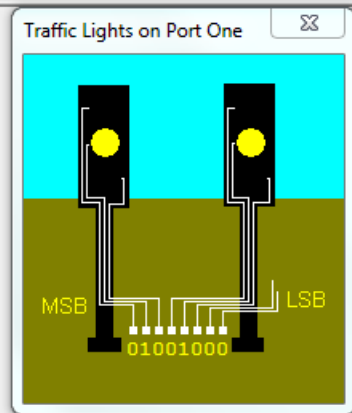
2) Screen Shots
   1) 210598B_08 Traffic Lights

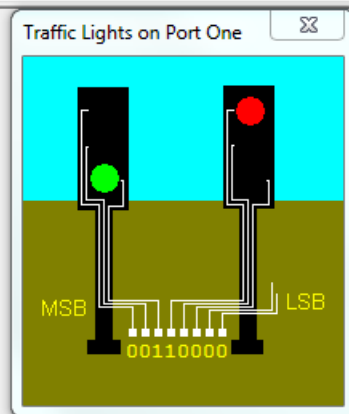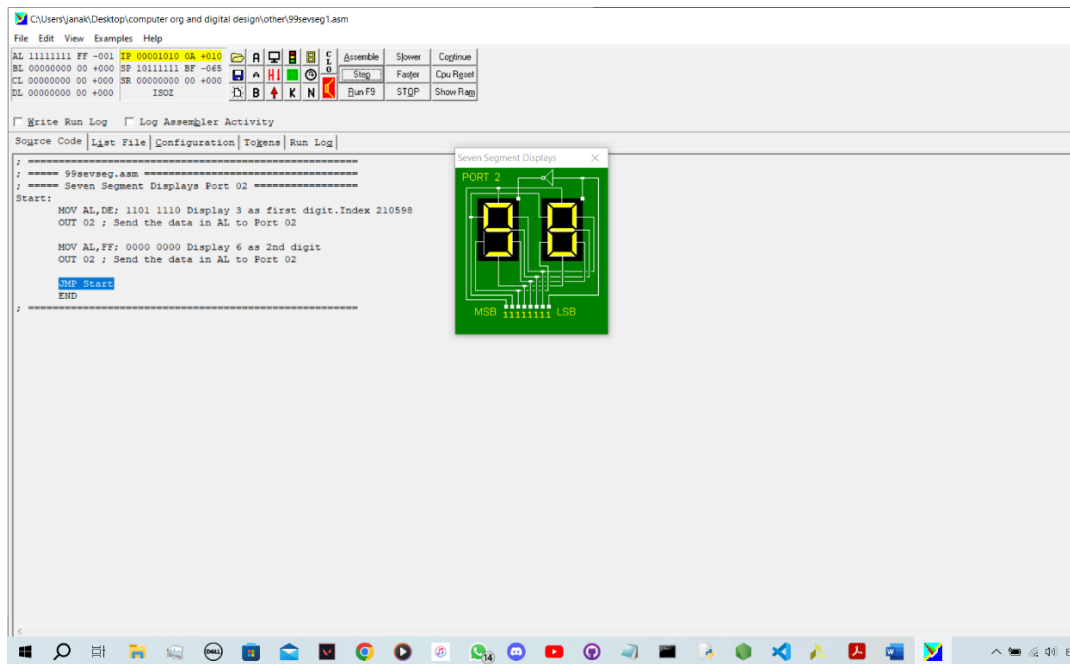   a) For t to t+10

   b) For t+10 to t+11

Traffic Lights on Port One

MSB   LSB
01001000

c) For t+11 to t+16

Traffic Lights on Port One

MSB   LSB
00110000

2)210598B_10 Last two digit of index


```
C:\Users\janak\Desktop\computer org and digital design\other\99sevseg1.asm

File  Edit  View  Examples  Help

AL 11111111 FF -001  IP 00001010 0A +010
BL 00000000 00 +000  SP 10111111 BF -065
CL 00000000 00 +000  SR 00000000 00 +000
DL 00000000 00 +000      ISOZ

□ Write Run Log    □ Log Assembler Activity

Source Code | List File | Configuration | Tokens | Run Log |

; ==========================================================
; ===== 99sevseg.asm =======================================
; ===== Seven Segment Displays Port 02 =====================
Start:
        MOV AL,DE; 1101 1110 Display 3 as first digit.Index 210598
        OUT 02 ; Send the data in AL to Port 02

        MOV AL,FF; 0000 0000 Display 6 as 2nd digit
        OUT 02 ; Send the data in AL to Port 02

        JMP Start
        END
; ==========================================================
```

3)210598B_11 Display output of 1 to 5 multiplication