```
1   Setup       mov.b #0ffh, &P1DIR
2               mov.b #0ffh, &P2DIR
3               mov.b #00000000b, &P2SEL
4               mov.b #00000000b, &P2SEL2
5               clr.b &P1OUT
6               clr.b &P2OUT
7
8   InitLCD     mov &Delay100ms, R15
9               call #Delay
10
11              mov.b #00110000b, &P1OUT
12              call #TrigEn
13              mov &Delay4ms, R15
14              call #Delay
15
16              call #TrigEn
17              mov &Delay100us, R15
18              call #Delay
19
20              call #TrigEn
21              mov &Delay100us, R15
22              call #Delay
23
24              mov.b #00100000b, &P1OUT
25              call #TrigEn
26              mov &Delay100us, R15
27              call #Delay
28
29              mov.b #00100000b, &P1OUT
30              call #TrigEn
31              mov.b #10000000b, &P1OUT
32              call #TrigEn
33
34              mov &Delay100us, R15
35              call #Delay
36
37              mov.b #00000000b, &P1OUT
38              call #TrigEn
39              mov.b #10000000b, &P1OUT
40              call #TrigEn
41
42              mov &Delay100us, R15
43              call #Delay
44
45              mov.b #00000000b, &P1OUT
46              call #TrigEn
47              mov.b #00010000b, &P1OUT
48              call #TrigEn
49
50              mov &Delay4ms, R15
51              call #Delay
52
53              mov.b #00000000b, &P1OUT
54              call #TrigEn
55              mov.b #01100000b, &P1OUT
56              call #TrigEn
57              mov &Delay100us, R15
58              call #Delay
59
60              ;initialization is over. Now we will start sending data to our LCD display
61
62  Main        clr R5
63              mov.b #00001111b, R5
64              call #SendCMD
65              mov &Delay50us, R15
66              call #Delay
67
68  ;------------------
69
70              Write your code
71
72  ;------------------
73
```

```
74  TrigEn      bis.b #01000000b, &P2OUT
75              bic.b #01000000b, &P2OUT
76              ret
77
78  SendCMD     mov.b R5, &P1OUT
79
80              call #TrigEn
81              rla R5
82              rla R5
83              rla R5
84              rla R5
85              mov.b R5, &P1OUT
86              call #TrigEn
87              ret
88
89  Delay       dec.w R15 ; Decrement R15
90              jnz Delay
91              ret
92
93
94
95              .data
96  string      .byte "ITU - Comp. Eng.",0Dh,"MC Lab. 2019",00h
97
98
99  Delay50us   .word   011h
100 Delay100us  .word   022h
101 Delay2ms    .word   0250h
102 Delay4ms    .word   0510h
103 Delay100ms  .word   07A10h
```