

EE 2004

Week 4 Tutorial

1. Status register

```
10.  MyReg equ 0x20
11.
12.  ;-----
13.
14.                      ORG          0x0000
15.                      goto Main    ;go to start of main code
16.
17.  ;-----\
18.  ;Start of main program
19.
20.  Main:                movlw 0x57
21.                      addlw 0x44
22.
23.                      movlw 0x81
24.                      movwf MyReg, A
25.                      movlw 0x89
26.                      addwfc MyReg, W, A
27.
28.                      movlw 0x78
29.                      subwf MyReg, W, A
30.
31.                      movlw 0x99
32.                      xorwf MyReg, W, A
33.
34.                      movlw 0x0F
35.                      iorwf MyReg, W, A
36.
37.  ;*****
38.  ;End of program
39.  ;
40.                      END
```

Determine the N, OV, C, DC and Z flags by hand after the execution of the bold lines in the above code fragement and then use MPLAB to verify your results.

2. BCD addition

Generate a MPLAB IDE project as in Tutorial MPLAB for Week 3. Write a program to perform an addition of the decimal numbers 4780 and 3599.