**T62 Tutorial 6**

* 1. Write a program to display letters “**XYZ**F” in 4 x 7-segment LED. **X**, **Y** and **Z** are the last three digits of your student ID number. Copy the program from the editor window.

(12 marks)

**Display: 680F**

LIST P=18F4520 ;directive to define processor

#include <P18F4520.INC> ;CPU specific variable definitions

DELAY\_REG EQU 0xF0

ORG 0x0000

clrf TRISB ;Set Port B direction output

clrf TRISD ;Set Port D direction output

clrf PORTB

Loop:

clrf PORTD

movlw 0x00 ;Turn on LED0

movwf PORTB

movlw 0x7D ;Display ‘6’

movwf PORTD

call Delay

clrf PORTD

movlw 0x01 ;Turn on LED1

movwf PORTB

movlw 0x7F ;Display ‘8’

movwf PORTD

call Delay

clrf PORTD

movlw 0x02 ;Turn on LED2

movwf PORTB

movlw 0x3F ;Display ‘0’

movwf PORTD

call Delay

clrf PORTD

movlw 0x03 ;Turn on LED3

movwf PORTB

movlw 0x71 ;Display ‘F’

movwf PORTD

call Delay

goto Loop

Delay: movlw 0x02 ; delay function with 02

movwf DELAY\_REG

LOOP: decf DELAY\_REG, F

bnz LOOP

return

END

**Submission**

Enter your name, student ID number, and the answers in the MS Word document file. Re-name the file with your student ID number, e.g. 12345678.docx. **Deduct 4 marks for wrong file name.**

Submit the file by e-mail ([itklchan@cityu.edu.hk](mailto:itklchan@cityu.edu.hk)) before 3:00 pm. **Late submission will not be accepted.**