# EXPT. NO. : 8

# TITLE: Generation of PWM and interfacing DC motor with PIC Microcontroller

```
#include <p18f4550.h>
void myMsDelay (unsigned int time)  // Definition of delay subroutine
{
   unsigned int i, j;
   for (i = 0; i < time; i++)      // Loop for itime
      for (j = 0; j < 710; j++);  // Calibrated for a 1 ms delay in MPLAB
}

void main()
{
TRISCbits.TRISC2 = 0 ;
TRISD=0;
PR2=0xBA;
CCP1CON = 0x0C;
T2CON = 0x07;
PORTDbits.RD5 = 1 ;
PORTDbits.RD6 = 0 ;
 while(1)  // Endless Loop
   {
      // ----------Duty Cycle 80%-----------
      CCP1CONbits.DC1B0 = 0;
      CCP1CONbits.DC1B1 = 0;
      CCPR1L = 0x96;
      myMsDelay(2000);
      // -----------------------------------
      // ----------Duty Cycle 60%-----------
      CCP1CONbits.DC1B0 = 0;
      CCP1CONbits.DC1B1 = 1;
      CCPR1L = 0x70;
      myMsDelay(2000);
      // -----------------------------------
      // ----------Duty Cycle 40%-----------
      //CCP1CONbits.DC1B0 = 0;
      //CCP1CONbits.DC1B1 = 0;
```

```
    //CCPR1L = 0x4B;
    //myMsDelay(2000);
    // -----------------------------------
    // ----------Duty Cycle 20%-----------
    //CCP1CONbits.DC1B0 = 0;
    //CCP1CONbits.DC1B1 = 1;
    //CCPR1L = 0x25;
    //myMsDelay(2000);
    // -----------------------------------
  }

}
```