```
//************************************************************
//  Program for PWM Generation using PIC18F4550.
//  PWM output          :       RC2
//************************************************************
#include <p18f4550.h>
#include "vector_relocate.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 ;  // Set PORTC, RC2 as output (CCP1)
    TRISDbits.TRISD5 = 0 ;      // Set PORTD, RD5 as output (DCM IN2)
        TRISDbits.TRISD6 = 0 ;  // Set PORTD, RD6 as output (DCM IN1)
        PR2 =     187;         // set PWM Frequency 4KHz
    CCP1CON = 0x0C;         // Configure CCP1CON as PWM mode.
        T2CON = 0x07;           //Start timer 2 with prescaler 1:16
        PORTDbits.RD6 = 1;      // Turn ON the Motor
    PORTDbits.RD5 = 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);
```

```
                // ------------------------------------
        }

}
```