

```

#include <xc.h>

#pragma config OSC = HS //Oscillator Selection
#pragma config WDT = OFF //Disable Watchdog timer
#pragma config LVP = OFF //Disable Low Voltage Programming
#pragma config PBADEN = OFF //Disable PORTB Analog inputs

void myMsDelay (unsigned int time) // Definition of delay subroutine
{
    unsigned int i, j;
    for (i = 0; i < time; i++) // Loop for i time
        for (j = 0; j < 275; j++); // Calibrated for a 1 ms
delay in MPLAB
}

void main()
{
    TRISCbits.TRISC0 = 0 ; // Set PORTC, RC6 as output (DCM
IN1)
    TRISCbits.TRISC1 = 0 ; // Set PORTC, RC6 as output (DCM
IN2)
    TRISCbits.TRISC2 = 0 ; // Set PORTC, RC2 as output (CCP1)
    PR2 = 0x4E; // set PWM Frequency 4KHz
    CCP1CON = 0x0C; // Configure CCP1CON as PWM mode.
    T2CON = 0x07; //Start timer 2 with prescaler 1:16
    PORTCbits.RC0 = 1; // Turn ON the Motor
    PORTCbits.RC1 = 0;
    while(1) // Endless Loop
    {

        // -----
        // -----Duty Cycle 80%-----
        CCP1CONbits.DC1B0 = 0;
        CCP1CONbits.DC1B1 = 1;
        CCPR1L = 0x3E;
        myMsDelay(2000);
        // -----
        // -----Duty Cycle 60%-----
        CCP1CONbits.DC1B0 = 1;
        CCP1CONbits.DC1B1 = 1;
        CCPR1L = 0x2E;
        myMsDelay(2000);
        // -----
        // -----Duty Cycle 40%-----
        CCP1CONbits.DC1B0 = 1;
        CCP1CONbits.DC1B1 = 0;
        CCPR1L = 0x1F;
        myMsDelay(2000);
        // -----Duty Cycle 20%-----
        CCP1CONbits.DC1B0 = 0;
        CCP1CONbits.DC1B1 = 1;
        CCPR1L = 0x0F;
        myMsDelay(2000);
    }
}

```

