**PWM signal for DC Motor control.**

#include <p18f4520.h>

#include <delays.h>

#pragma config OSC = HS // High-speed oscillator

#pragma config WDT = OFF // Watchdog Timer disabled

#pragma config LVP = OFF // Low-voltage Programming disabled

#pragma config PBADEN = OFF

void main()

{

//RC1= interfacing with STK

//RC3= interfacing with Ultralite

unsigned char dc ;

TRISC = 0 ; // set PORTC as output RC1,RC2,RC3 Configure as a PWM

PORTC = 0 ; // clear PORTC

/\*

\* configure CCP module as 10000 Hz PWM output

\*/

PR2 = 0b01111100 ;

T2CON = 0b00000101 ;

CCP1CON = 0b00001100 ;

CCP2CON = 0b00111100 ;

for(;;) // forever

{

/\*

\* PWM resolution is 10 bits

\* don't use last 2 less significant bits CCPxCON,

\* so only CCPRxL have to be touched to change duty cycle

\*/

for(dc = 0 ; dc < 128 ; dc++)

{

CCPR1L = dc ;

CCPR2L = 128 - dc ;

Delay10KTCYx(50);//200mS

}

for(dc = 127 ; dc > 0 ; dc--)

{

CCPR1L = dc ;

CCPR2L = 128 - dc ;

Delay10KTCYx(50);//200mS

}

}

}