// LCD module connections

sbit LCD\_RS at RB4\_bit;

sbit LCD\_EN at RB5\_bit;

sbit LCD\_D4 at RB0\_bit;

sbit LCD\_D5 at RB1\_bit;

sbit LCD\_D6 at RB2\_bit;

sbit LCD\_D7 at RB3\_bit;

sbit LCD\_RS\_Direction at TRISB4\_bit;

sbit LCD\_EN\_Direction at TRISB5\_bit;

sbit LCD\_D4\_Direction at TRISB0\_bit;

sbit LCD\_D5\_Direction at TRISB1\_bit;

sbit LCD\_D6\_Direction at TRISB2\_bit;

sbit LCD\_D7\_Direction at TRISB3\_bit;

// End LCD module connections

int duty ;

int V ;

char txt1[] = "mikroElektronika";

void main()

{

Lcd\_Init();

Lcd\_Cmd(\_LCD\_CLEAR);

Lcd\_Cmd(\_LCD\_CURSOR\_OFF);

Lcd\_Out(1,1,txt1);

TRISD0\_bit=1;

TRISC=0 ;

TRISC=0 ;

PWM1\_Init(1000);

adc\_init();

PWM1\_Start();

TRISD = 0xFF; //PORTD as input

TRISC = 0x00; //PORTC as output

TRISB = 0x00; //PORTB as output

PORTB = 0x02; //Run motor in anticlock wise

while ( PortD.RD0 == 1 )

{

if (PORTD.RD1 == 1)

{

PORTC.b0= 1 ;

PORTC.b1 = 0 ;

}

else

{

PORTC.b1 = 0;

PORTC.b2=1;

}

V = adc\_read(0);

duty = V/4;

PWM1\_Set\_Duty(duty);

}

}