//=======================================================

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;

//=========================================LCD CONNECTION

void main() {

bit i,j,k,m;

int rc;

int lc;

int x;

int y;

int x1;

int y1;

int ave[20]; //AVEREGE

int zz;

int sum;

i=1;j=1;m=1;k=1;

uart1\_init(9600);// 9600 BITRATE

uart1\_write('m');

lcd\_init();

for(;;)

{

sum=0;

for(zz=0;zz<20;zz++)

{

ave[zz]=adc\_read(1)\*0.05;

sum=ave[zz]+sum;

}

sum=sum/20;

rc=sum;

//rc=adc\_read(1)\*0.05;

sum=0;

for(zz=0;zz<20;zz++)

{

ave[zz]=adc\_read(0)\*0.05;

sum=ave[zz]+sum;

}

sum=sum/20;

lc=sum;

//lc=adc\_read(0)\*0.05;

sum=0;

for(zz=0;zz<20;zz++)

{

ave[zz]=adc\_read(4)\*0.05;

sum=ave[zz]+sum;

}

sum=sum/20;

y=sum;

//x=adc\_read(4)\*0.05;

sum=0;

for(zz=0;zz<20;zz++)

{

ave[zz]=adc\_read(3)\*0.05;

sum=ave[zz]+sum;

}

sum=sum/20;

x=sum;

//y=adc\_read(3)\*0.05;

x1=x/0.05;

y1=y/0.05;

if(x>=18)

{

lcd\_out(1,1,"X+");

uart1\_write\_text("x+=");

x1=x1-360;

uart1\_write(x1);

uart1\_write(';');

delay\_ms(100);

}

if(x<=15)

{

lcd\_out(1,1,"X-");

uart1\_write\_text("x-=");

x1=307-x1;

uart1\_write(x1);

uart1\_write(';');

delay\_ms(100);

}

if(y>=18)

{

lcd\_out(1,1,"Y+");

uart1\_write\_text("y+=");

y1=y1-360;

uart1\_write(y1);

uart1\_write(';');

delay\_ms(100);

}

if(y<=15)

{

lcd\_out(1,1,"Y-");

uart1\_write\_text("y-=");

y1=307-y1;

uart1\_write(y1);

uart1\_write(';');

delay\_ms(100);

}

if(lc<=8&&k==1)

{

lcd\_out(2,1,"L1");

uart1\_write\_text("l1");

k=0;

m=1;

delay\_ms(100);

}

if(lc>=10&&m==1)

{

lcd\_out(2,1,"L2");

uart1\_write\_text("l2");

m=0;

k=1;

delay\_ms(100);

}

if(rc<=12&&i==1)

{

lcd\_out(2,4,"r1");

uart1\_write\_text("r1");

i=0;

j=1;

delay\_ms(100);

}

if(rc>=14&&j==1)

{

lcd\_out(2,4,"r2");

uart1\_write\_text("r2");

j=0;

i=1;

delay\_ms(100);

}}}