# Program

```
#include <Servo.h>

Servo SMTB;
int SMTB_Angle = 0;


Servo SMLR;
int SMLR_Angle = 0;


int LDR1 = 1; //top right LDR
int LDR2 = 2; //top left LDR
int LDR3 = 3; // bottom left LDR
int LDR4 = 4; // bottom right LDR

int Threshold_low = 20;

 void setup ()
 {
  SMTB.attach(5);
  SMTB.write(0);
  SMLR.attach(6);
  SMLR.write(0);
  delay(500);
 }

void loop()
{
  SMTB_Angle = SMTB.read();
  SMLR_Angle = SMLR.read();
```

```
int ANA_LDR1 = analogRead(1);
int ANA_LDR2 = analogRead(2);
int ANA_LDR3 = analogRead(3);
int ANA_LDR4 = analogRead(4);

int AVG_TOP = (ANA_LDR2 + ANA_LDR1)/2;
int AVG_BOT = (ANA_LDR3 + ANA_LDR4)/2;
int AVG_LEFT = (ANA_LDR2 + ANA_LDR3)/2;
int AVG_RIGHT = (ANA_LDR1 + ANA_LDR4)/2;

int DIFF_TB = (AVG_TOP - AVG_BOT);
int DIFF_LR = (AVG_LEFT - AVG_RIGHT);

if(abs(DIFF_TB)> Threshold_low){
 if(DIFF_TB > 0 ){
  SMTB.write(SMTB_Angle + 1);
  }
  else {
   SMTB.write(SMTB_Angle - 1);
   }
 }else {
  SMTB.write(SMTB_Angle);
  }

  if(abs(DIFF_LR)> Threshold_low){
 if(DIFF_LR > 0 ){
  SMLR.write(SMLR_Angle + 1) ;
  }
  else {
   SMLR.write(SMLR_Angle - 1) ;
   }
 }else {
```

```
    SMLR.write(SMLR_Angle);
    }
}
```