```
#include <Servo.h>
//defining Servos
Servo servohori;
int servoh = 90;
int servohLimitHigh = 170;
int servohLimitLow = 10;

Servo servoverti;
int servov = 90;
int servovLimitHigh = 170;
int servovLimitLow = 10;
//Assigning LDRs
int ldrtopl = A2; //top left LDR green
int ldrtopr = A3; //top right LDR yellow
int ldrbotl = A1; // bottom left LDR blue
int ldrbotr = A0; // bottom right LDR orange

 void setup ()
 {
  servohori.attach(10);
  servohori.write(90);
  servoverti.attach(9);
  servoverti.write(90);
  delay(500);
 }

void loop()
{
```

```
servoh = servohori.read();
servov = servoverti.read();
//capturing analog values of each LDR
int topl = analogRead(ldrtopl);
int topr = analogRead(ldrtopr);
int botl = analogRead(ldrbotl);
int botr = analogRead(ldrbotr);
// calculating average
int avgtop = (topl + topr) / 2; //average of top LDRs
int avgbot = (botl + botr) / 2; //average of bottom LDRs
int avgleft = (topl + botl) / 2; //average of left LDRs
int avgright = (topr + botr) / 2; //average of right LDRs

if (avgtop < avgbot)
{
  servoverti.write(servov-1);
  if (servov > servovLimitHigh)
   {
    servov = servovLimitHigh;
   }
  delay(10);
}
else if (avgbot < avgtop)
{
  servoverti.write(servov+1);
  if (servov < servovLimitLow)
{
  servov = servovLimitLow;
}
```

```
  delay(10);
}
else
{
  servoverti.write(servov);
}

/*if (avgleft > avgright)
{
  servohori.write(servoh +1);
  if (servoh > servohLimitHigh)
  {
  servoh = servohLimitHigh;
  }
  delay(10);
}
else if (avgright > avgleft)
{
  servohori.write(servoh -1);
  if (servoh < servohLimitLow)
   {
   servoh = servohLimitLow;
   }
  delay(10);
}
else
{
  servohori.write(servoh);
}*/
```

```
  delay(50);
}
```