```
int triggerpin=10;

int echopin=11;

long duration;

long distance;

long x;

long x1=45;

int z;

void setup() {

 // put your setup code here, to run once:

pinMode(triggerpin,OUTPUT);

pinMode(echopin,INPUT);

pinMode(9,OUTPUT);

Serial.begin(9600);

}



void loop() {

 // put your main code here, to run repeatedly:

digitalWrite(triggerpin,LOW);

delayMicroseconds(2);

digitalWrite(triggerpin,HIGH);

delayMicroseconds(10);
```

```
digitalWrite(triggerpin,HIGH);

duration=pulseIn(echopin,HIGH);

x=(duration/2)/29.1;

Serial.print("Distance :");

Serial.println(x);

z=(x1-x)/2;

x1=x;

Serial.print("\t z :");

Serial.println(z);



if(z<-10)

{

analogWrite(9,25);

delay(1000);

analogWrite(9,LOW);

delay(1000);

}

else if(z>6)

{

analogWrite(9,25);

delay(10);
```

```
analogWrite(9,LOW);
delay(10);
}
else
{
 z=map(z,-10,6,1000,5);
analogWrite(9,25);
delay(z);
analogWrite(9,LOW);
delay(z);
}
}
```