

CODE

```
#include<Servo.h>

Servo myServo;

int t =9;

int e =8;

long time=0;

long dist=0;

void setup()

{

    myServo.attach(2);

    Serial.begin(9600);

    pinMode(e,INPUT);

    pinMode(t,OUTPUT);

    pinMode(5,OUTPUT);

}

void loop()

{

    digitalWrite(t,LOW);

    delay(100);

    digitalWrite(t,HIGH);

    delay(100);

    digitalWrite(t,LOW);

    float time = pulseIn (e, HIGH);
```

```
float dist = time*0.034/2;
```

```
double a=analogRead(A1);
```

```
double tem=((((a/1024)*5)-0.5)*100);
```

```
Serial.print("temp value:");
```

```
Serial.println(tem);
```

```
if(dist<=300 || dist>=0)
```

```
{
```

```
{
```

```
myServo.write(0);
```

```
delay(500);
```

```
myServo.write(30);
```

```
delay(500);
```

```
myServo.write(60);
```

```
delay(500);
```

```
myServo.write(90);
```

```
delay(500);
```

```
myServo.write(120);
```

```
delay(500);
```

```
myServo.write(160);
```

```
delay(500);
```

```
myServo.write(180);
```

```
    delay(500);  
  }  
  digitalWrite(5,HIGH);  
}  
else  
{  
  Serial.println("out of boundary");  
}  
{  
  myServo.write(0);  
}  
}
```

LINK

<https://www.tinkercad.com/things/irv62x9MdY4>

CIRCUIT DIAGRAM

