

```
#include<Servo.h>
```

```
Servo s;
```

```
int buzz=12;
```

```
void setup()
```

```
{
```

```
  Serial.begin(9600);
```

```
  pinMode(13, OUTPUT);
```

```
  pinMode(buzz,OUTPUT);
```

```
  pinMode(4,INPUT);
```

```
  s.attach(3);
```

```
}
```

```
void loop()
```

```
{
```

```
  for(int i=0;i<=180;i=i+10)
```

```
  {
```

```
    s.write(i);
```

```
    digitalWrite(13, HIGH);
```

```
    delay(1000);
```

```
    digitalWrite(13, LOW);
```

```
    delay(1000);
```

```
  }
```

```
  for(int p=0;p<=180;p=p++)
```

```
{
```

```
double a = analogRead(A0);  
  
double c = (((a/1024*5)-0.5)*100);  
  
Serial.print("celcius value:");  
  
Serial.println(c);
```

```
if(c>60)  
{  
  
    tone(buzz,200);  
  
    delay(250);  
  
    noTone(buzz);  
  
    tone(buzz,200);  
  
    delay(250);  
  
    tone(buzz,200);  
  
    delay(250);  
  
    noTone(buzz);  
  
    tone(buzz,200);  
  
    delay(250);  
  
    noTone(buzz);  
  
}
```

```
else
```

```
  
    delay(100);  
  
}
```

```
int v = digitalRead(4);
```

```
if(v==1)
```

```
{  
    Serial.println("motion detected");  
    delay(100);  
}  
else  
{  
    Serial.println("motion not detected");  
    delay(100);  
}  
  
}
```