



Tinker cad Link:

<https://www.tinkercad.com/things/3ezgucINTCI-ingenious-bombul/editel?tenant=circuits>

Arduino Code

```
const int r11 = 13, r12 = 12, buzz = 11, motor = 10, trig = 3, echo = 4;
```

```
const int ldr = A1, pir = A2, tmp = A0;
```

```
void setup()
```

```
{
```

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

```
  pinMode(motor, OUTPUT);
```

```
  pinMode(r11, OUTPUT);
```

```
  pinMode(r12, OUTPUT);
```

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

```
  pinMode(trig, OUTPUT);
```

```
  pinMode(echo, INPUT);
```

```
  pinMode(ldr, INPUT);
```

```
  pinMode(pir, INPUT);
```

```
  pinMode(tmp, INPUT);
```

```
}
```

```
void loop()
```

```
{
```

```
float temperature = analogRead(tmp);  
    temperature = map(temperature,20,258,0,100);  
float light = analogRead(ldr);  
light = map(light,6,679,0,255);  
float motion = analogRead(pir);  
long duration;  
int distance;  
digitalWrite(trig, LOW);  
delayMicroseconds(2);  
digitalWrite(trig, HIGH);  
delayMicroseconds(10);  
digitalWrite(trig, LOW);  
duration = pulseIn(echo, HIGH);  
distance = duration * 0.034 / 2;  
if(distance <14)  
{  
    digitalWrite(buzz,HIGH);  
}  
else  
{
```

```
digitalWrite(buzz,LOW);  
}
```

```
if(motion)  
{  
digitalWrite(rl1,HIGH);  
}  
else  
{  
digitalWrite(rl1,LOW);  
}
```

```
if(light <128)  
{  
digitalWrite(rl2,HIGH);  
}  
else  
{  
digitalWrite(rl2,LOW);  
}
```

```
if(temperature >30)
{
    digitalWrite(motor,HIGH);
}
else
{
    digitalWrite(motor,LOW);
}
}
```