



TINKER CAD LINK:

<https://www.tinkercad.com/things/hZwOS8uPHh7-shiny-bombul-wolt/editel?tenant=circuits:>

ARDUINO CODE:

```
const int rl1 = 12, rl2 = 13, buzz = 10, motor = 11, trig = 4, echo = 3;
```

```
const int ldr = A1, pir = A3, tmp = A4;
```

```
void setup()
```

```
{
```

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

```
pinMode(motor, OUTPUT);

pinMode(rl1,OUTPUT);

pinMode(rl2,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);  
}  
}
```