



TINKER CAD LINK:

<https://www.tinkercad.com/things/9t9eU0pTTIH-neat-hango/editel?tenant=circuits>

ARDUINO CODE:

```
const int rl2 = 12,rl1 = 13, buzz = 11,motor = 10, trig = 9, echo = 8;  
const int ldr = A1, pir = A2, tmp = A0;
```

```
void setup()  
{  
  Serial.begin(9600);  
  pinMode(motor, OUTPUT);  
  pinMode(rl2,OUTPUT);
```

```
pinMode(r11,OUTPUT);  
pinMode(tmp,INPUT);  
pinMode(buzz,OUTPUT);  
pinMode(ldr,INPUT);  
pinMode(echo,INPUT);  
pinMode(trig,OUTPUT);  
pinMode(pir,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(temperature >40)
{
    digitalWrite(motor,HIGH);
}
```

```
else
```

```
{
    digitalWrite(motor,LOW);
}
```

```
if(distance <14)
```

```
{
    digitalWrite(buzz,HIGH);
```

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

```
if(light <140)  
{  
    digitalWrite(rl2,HIGH);  
}  
else  
{
```

```
    digitalWrite(r12,LOW);  
}  
if(motion)  
{  
    digitalWrite(r11,HIGH);  
}  
else  
{  
    digitalWrite(r11,LOW);  
}  
}
```