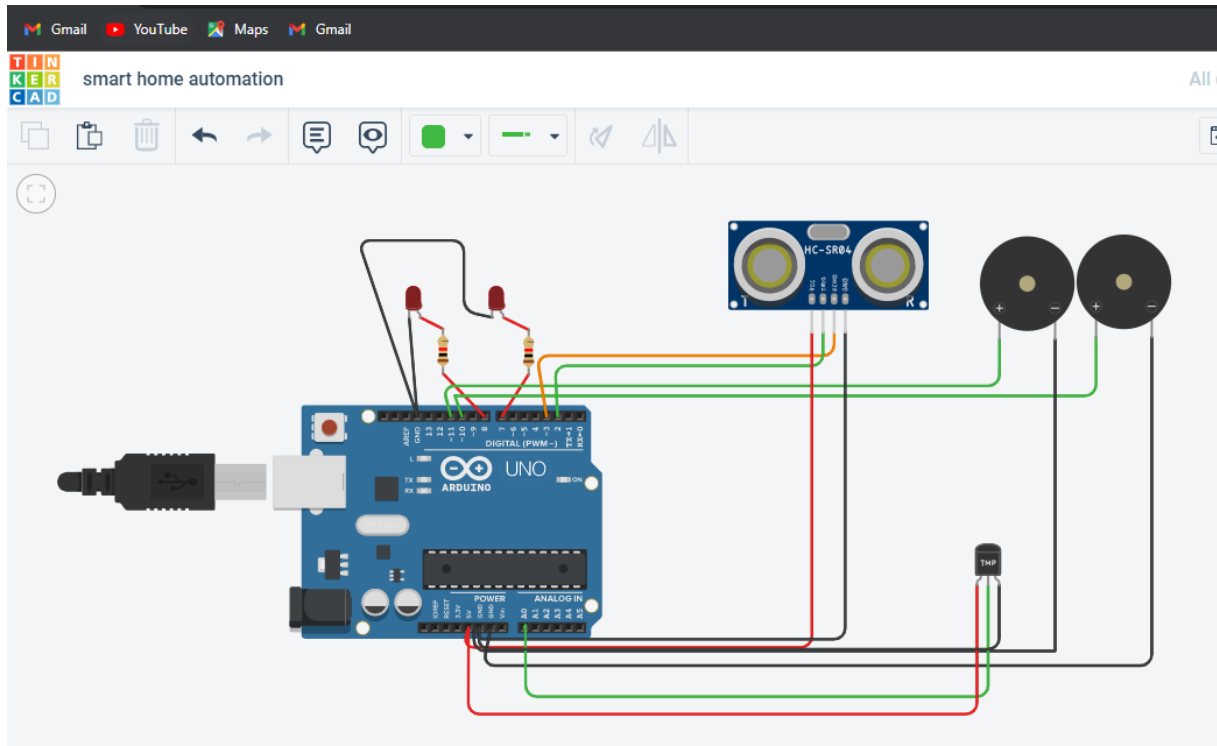


SMART HOME AUTOMATION

AMRIN FARHA

Reg- 960219106020

CIRCUIT DIAGRAM



CODE

```
int t=2;
```

```
int e=3;
```

```
void setup()
```

```
{
```

```
Serial.begin(9600);  
pinMode(t,OUTPUT);  
pinMode(e,INPUT);  
pinMode(12,OUTPUT);  
}  
  
void loop()  
{  
//ultrasonic sensor  
digitalWrite(t,LOW);  
digitalWrite(t,HIGH);  
delayMicroseconds(10);  
digitalWrite(t,LOW);  
float dur=pulseIn(e,HIGH);  
float dis=(dur*0.0343)/2;  
Serial.print("Distance is: ");  
Serial.println(dis);  
  
//LED ON  
if(dis>=100)  
{
```

```
digitalWrite(8,HIGH);  
digitalWrite(7,HIGH);  
}  
  
//Buzzer For ultrasonic Sensor  
if(dis>=100)  
{  
for(int i=0; i<=30000; i=i+10)  
{  
tone(12,i);  
delay(1000);  
noTone(12);  
delay(1000);  
}  
}
```

```
//Temperate Sensor  
double a= analogRead(A0);  
double t=(((a/1024)*5)-0.5)*100;  
Serial.print("Temp Value: ");  
Serial.println(t);
```

```
delay(1000);
```

```
//LED ON
```

```
if(t>=100)
```

```
{
```

```
    digitalWrite(8,HIGH);
```

```
    digitalWrite(7,HIGH);
```

```
}
```

```
//Buzzer for Temperature Sensor
```

```
if(t>=100)
```

```
{
```

```
    for(int i=0; i<=30000; i=i+10)
```

```
    {
```

```
        tone(12,i);
```

```
        delay(1000);
```

```
        noTone(12);
```

```
        delay(1000);
```

```
    }
```

```
}
```

//LED OFF

if(t<100)

{

digitalWrite(8,LOW);

digitalWrite(7,LOW);

}

}

TINKERCAD LINK

<https://www.tinkercad.com/things/j6yUWg48EIL>