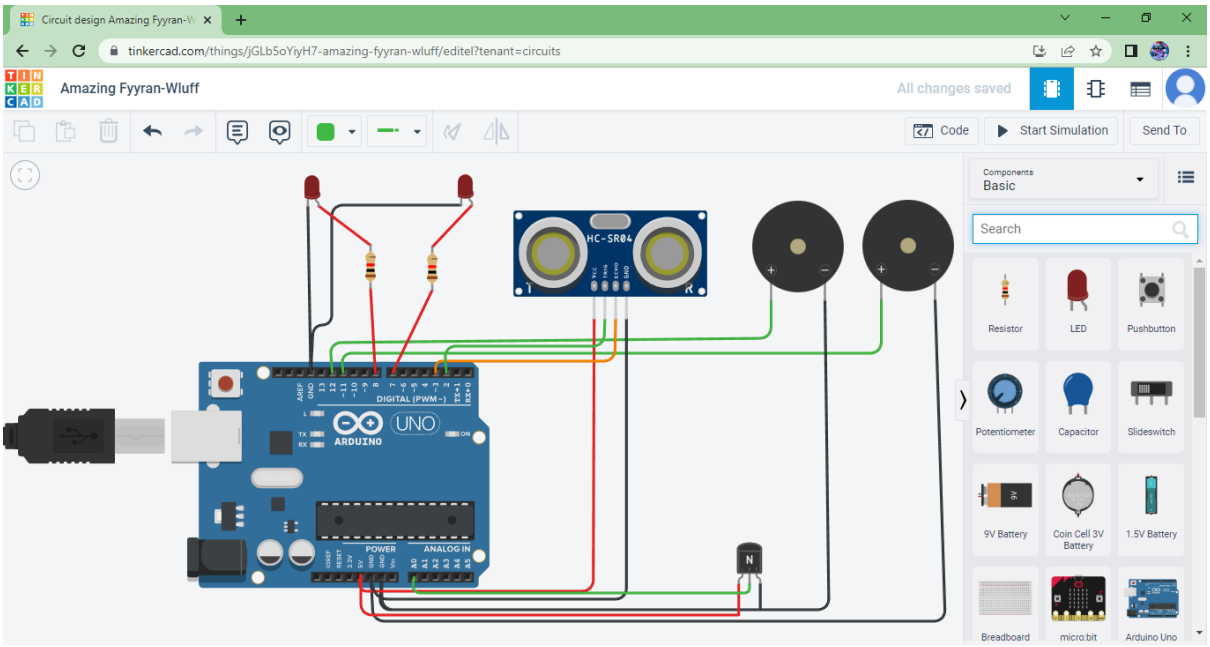
SMART HOME AUTOMATION

Asmitha.A

REG NO: 960219106042

CIRCUIT :



LINK :

https://www.tinkercad.com/things/jGLb5oYiyH7

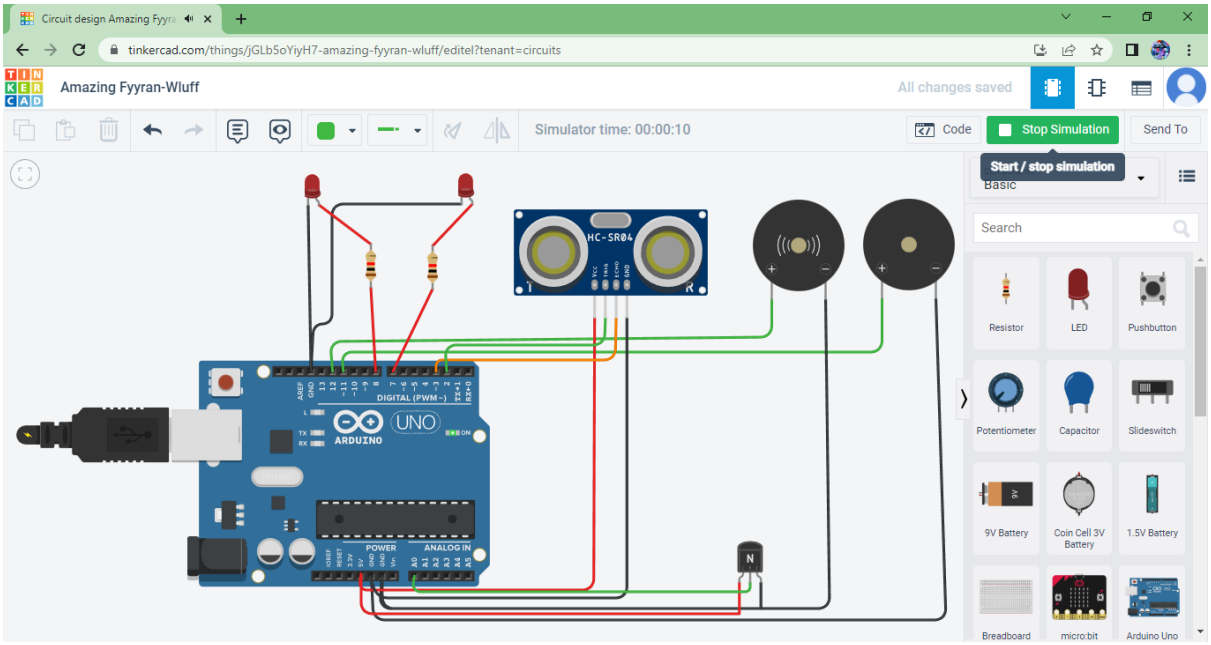
CODE :

```
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);
 }
}
```


Circuit design Amazing Fyyra
tinkercad.com/things/jGLb5oYiyH7-amazing-fyyran-wluff/editel?tenant=circuits
Amazing Fyyran-Wluff
All changes saved
Simulator time: 00:00:10
Code
Stop Simulation
Send To
Start / stop simulation
Basic
Search
Resistor
LED
Pushbutton
Potentiometer
Capacitor
Slideswitch
9V Battery
Coin Cell 3V Battery
1.5V Battery
Breadboard
micro:bit
Arduino Uno
HC-SR04
DIGITAL (PWM~)
UNO
ARDUINO
POWER
ANALOG IN