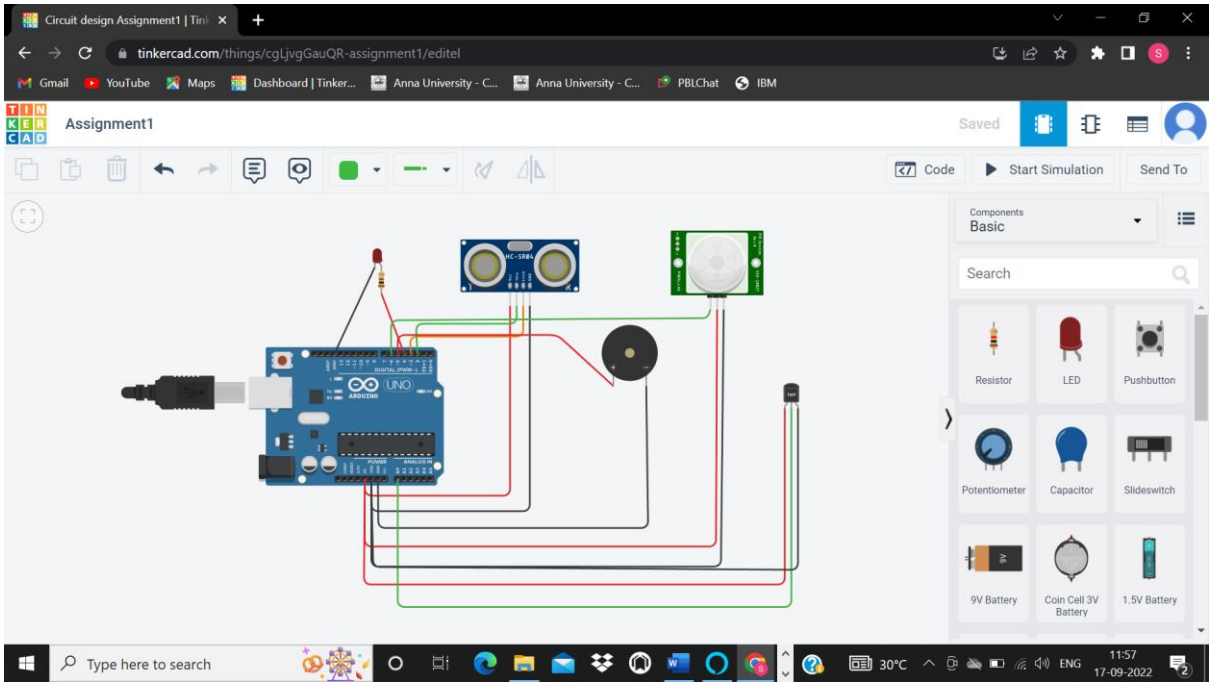
```
int t = 2;
int e = 3;
int led = 13;
int buzzer = 5;
int pir = 6;
int state = 0;
void setup()
{
  pinMode(t, OUTPUT);
  pinMode(e, INPUT);
  pinMode(led,OUTPUT);
  pinMode(pir,INPUT);
  Serial.begin(9600);
}

void loop()
{
  digitalWrite(t, LOW);
  digitalWrite(t, HIGH);
  delayMicroseconds(10);
  digitalWrite(t, LOW);
  float duration = pulseIn(e, HIGH);
  float distance = (duration * 0.034) / 2;
  Serial.print("Distance:");
  Serial.println(distance);
  if(distance < 10)
  {
     digitalWrite(led,HIGH);
     delay(100);
     digitalWrite(led,LOW);
     delay(100);
```

```
    tone(buzzer,450);
    delay(100);
    noTone(buzzer);
    delay(100);
  }
  state = digitalRead(pir);
  delay(1000);
  if (state == HIGH) {
    digitalWrite(led, HIGH);
    tone(buzzer,450);
    delay(1000);
    noTone(buzzer);
    delay(1000);
  } else {
    digitalWrite(led, LOW);
  }
  double a = analogRead(A0);
  double t = (((a/1024)*5)-0.5)*100;
  Serial.print("Temperature:");
  Serial.println(t);
  delay(1000);
}
```

Output:


Circuit design Assignment1 | Tinl
tinkercad.com/things/cgLjvgGauQR-assignment1/editel
Gmail
YouTube
Maps
Dashboard | Tinker...
Anna University - C...
Anna University - C...
PBLChat
IBM
Assignment1
Saved
Code
Start Simulation
Send To
Components
Basic
Search
Resistor
LED
Pushbutton
Potentiometer
Capacitor
Slideswitch
9V Battery
Coin Cell 3V Battery
1.5V Battery
Type here to search
30°C
ENG
11:57
17-09-2022