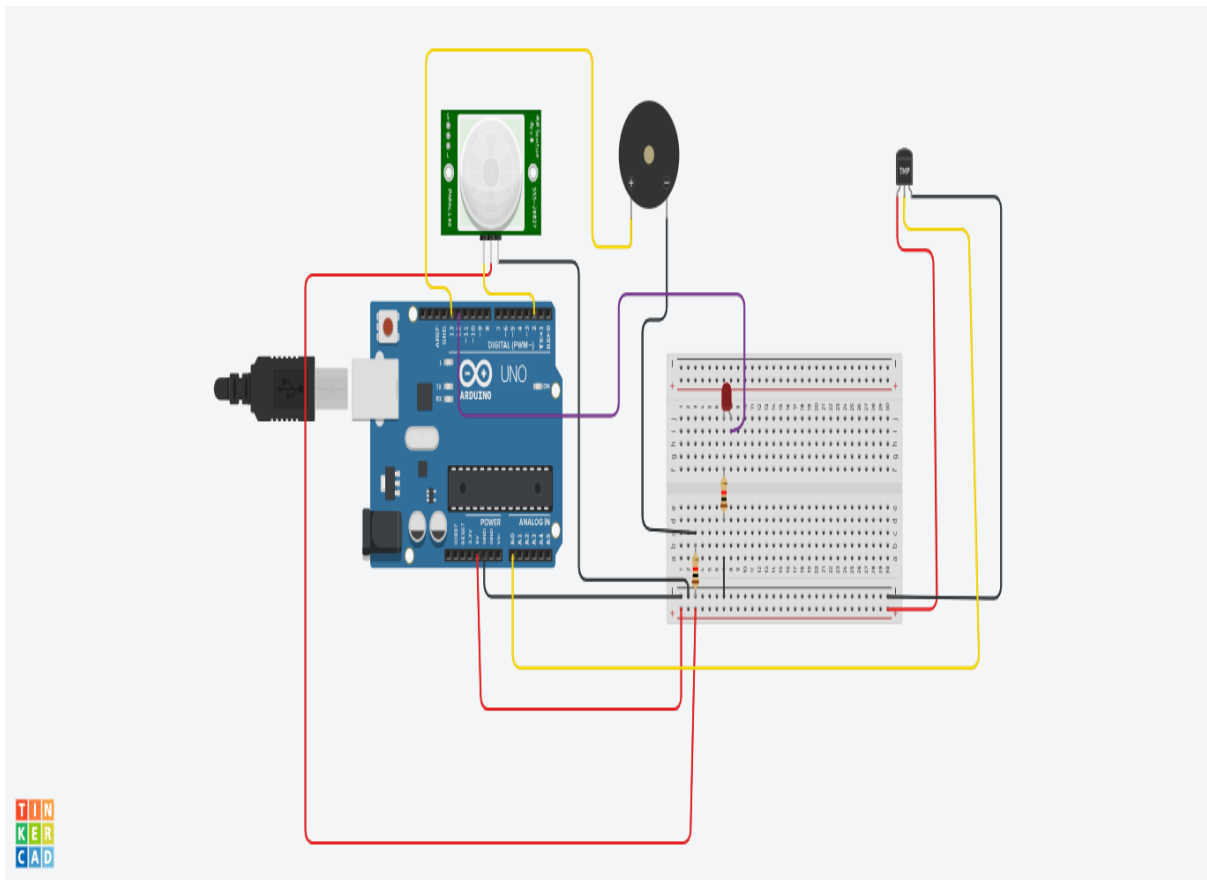


ASSIGNMENT-1

Assignment Date	17 September 2022
Student Name	AjaySaran B
Student Roll Number	910019106002
Maximum mark	2 mark

Build a smart home in Thinkercad with 2 sensors, an Led, buzzer and submit it.



Code:

```
int baselineTemp = 0;
```

```
int celsius = 0;
```

```
int pinSensor =2;
```

```
int pinLed =12;
```

```
int pinBuzzer =13;
```

```
int pirSensor =0;
```

```
int tempSensor=A0;
```

```
void setup()
```

```
{
```

```
  pinMode(pinSensor, INPUT);
```

```
  pinMode(tempSensor, INPUT);
```

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

```
  pinMode(pinLed, OUTPUT);
```

```
  pinMode(pinBuzzer, OUTPUT);
```

```
}
```

```
void loop()
```

```
{
```

```
  baselineTemp = 20;
```

```
  celsius = map(((analogRead(tempSensor) - 20) * 3.04), 0, 1023, -40, 125);
```

```
Serial.print(celsius);  
Serial.println(" C, ");  
pirSensor = digitalRead(pinSensor);  
  
if (pirSensor == HIGH && celsius >= baselineTemp + 40)  
{  
  
    digitalWrite(pinLed, HIGH);  
    tone(pinBuzzer, 1000,500);  
  
}  
  
else {  
  
    digitalWrite(pinLed, LOW);  
}  
  
delay(10);  
}
```