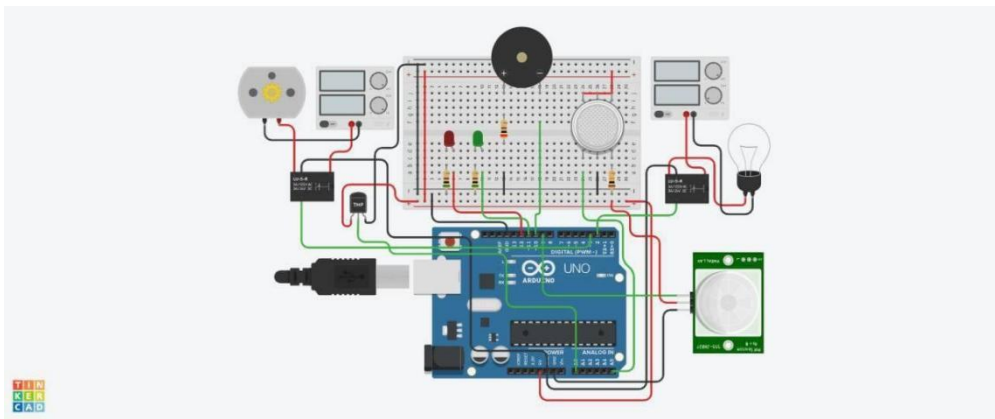


Assignment 1

Assignment Date	19 September 2022
Student Name	C. jeevan kumar
Student Roll Number	312819106016
Maximum Marks	2 Marks

Question:

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



```
int LED1 = 12;

int LED2 = 11;

int buzzer = 10;

int smoke = A5;

int bulb = 2;

int fan = 3;

int smokeThreshold = 500;

int inputPir = 9;

int baselineTemp = 0;

int celsius = 0;

int val = 0;

void setup()

{

    pinMode(LED1, OUTPUT);
```

```
pinMode(LED2, OUTPUT);  
pinMode(buzzer, OUTPUT);  
pinMode(smoke, INPUT);  
pinMode(inputPir, INPUT);  
pinMode(bulb, OUTPUT);  
pinMode(fan, OUTPUT);
```

```
Serial.begin(9600);  
}  
  
void loop()  
{  
  int analogSensor = analogRead(smoke);  
  val = digitalRead(inputPir);  
  baselineTemp = 40;  
  celsius = map(((analogRead(A0) - 20) * 3.04), 0, 1023, -40, 125);  
  Serial.print(" TEMP: ");  
  Serial.print(celsius);  
  Serial.print(" C, ");  
  
  if (celsius < 25)  
  {  
    digitalWrite(fan, LOW);  
  }  
  if (celsius > 25)  
  {  
    digitalWrite(fan, HIGH);  
  }  
  Serial.print("Co2: ");  
  Serial.print(analogSensor);  
  
  if (analogSensor > smokeThreshold)  
  {  
    digitalWrite(LED1, HIGH);  
    digitalWrite(LED2, LOW);  
    tone(buzzer, 1000, 350);  
  }  
  else
```

```
{  
    digitalWrite(LED1, LOW);  
    digitalWrite(LED2, HIGH);  
    noTone(buzzer);  
}  
delay(100);  
Serial.print(" PIR: ");  
Serial.println(val);  
if(val == HIGH)  
{  
    digitalWrite(bulb, HIGH);  
    delay(2000);  
}  
else  
{  
    digitalWrite(bulb, LOW);  
    delay(300);  
}  
}
```