

Assignment -1

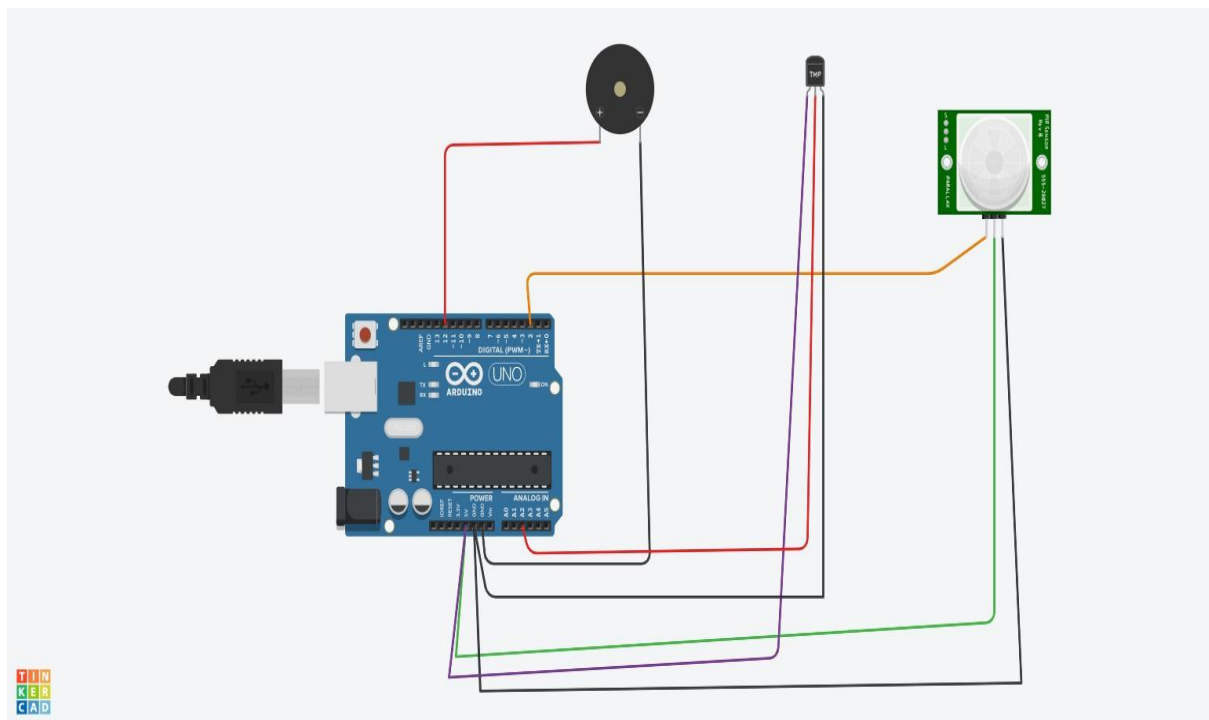
Assignment Date	19 September 2022
Student Name	Mr.Durgesam Vijay
Student Roll Number	111519106031
Maximum Marks	2 Marks

Question:

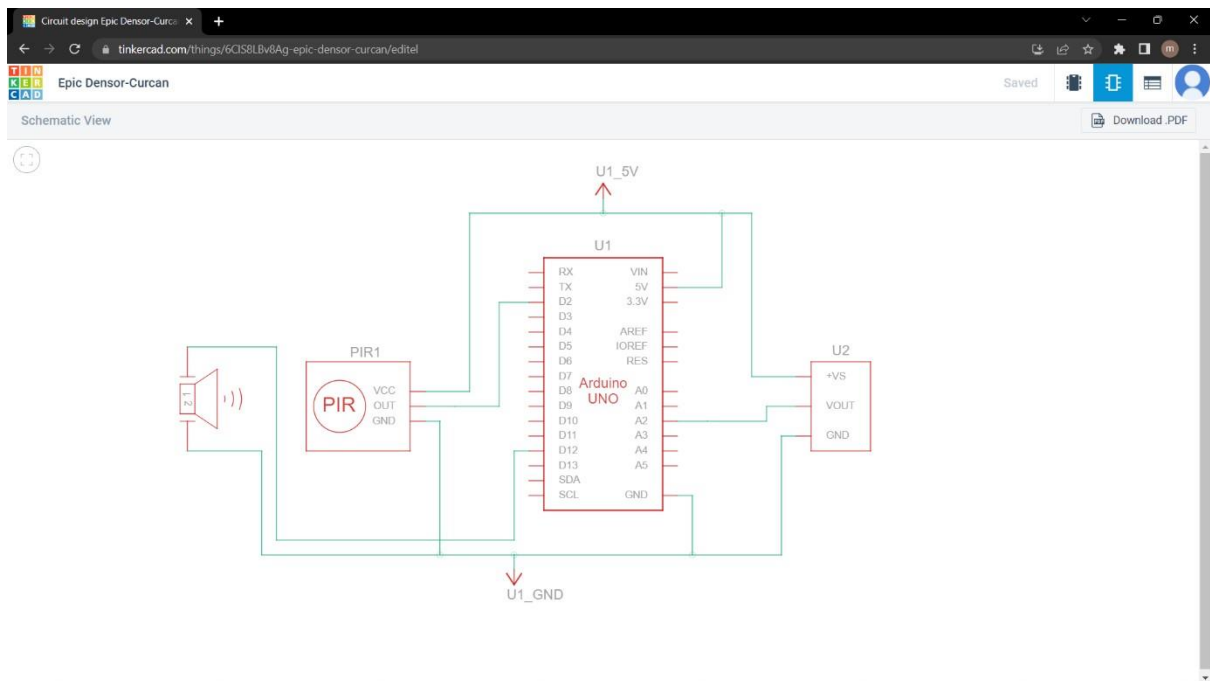
Build a smart home in Thinkercad with 2 sensors, an Led, buzzer and submit it.

Solution:

CIRCUIT DIAGRAM:



SCHEMATIC DIAGRAM:



Code:

```
// C++ code
```

```
// void setup()
```

```
{
```

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

```
pinMode(2, INPUT);
```

```
pinMode(12,  
OUTPUT);
```

```
}
```

```
void loop()
```

```
{
```

```
int motion = digitalRead(2);
if (motion == 1)
{
    Serial.println("Motion is Detected !");
    tone(12, 10);
    delay(1000);
    noTone(12);
    delay(3000);
}
else
{
    Serial.println("No Motion!!!");
    delay(1000);
}

double
data = analogRead(A2);
double n = data / 1024;
double voltage = n * 5;
double
offsetvol = voltage - 0.5;
double
```

```
temp=offsetvol*100;
if(temp>60)
{
    Serial.println("Temperature higher than
60 degrees !!");    Serial.println(temp);
tone(12,10);    delay(1000);    noTone(12);
    delay(3000);
}
else
{
    Serial.println("Temperature lesser than 60
degrees !!");    Serial.println(temp);
delay(1000);
}
}
```