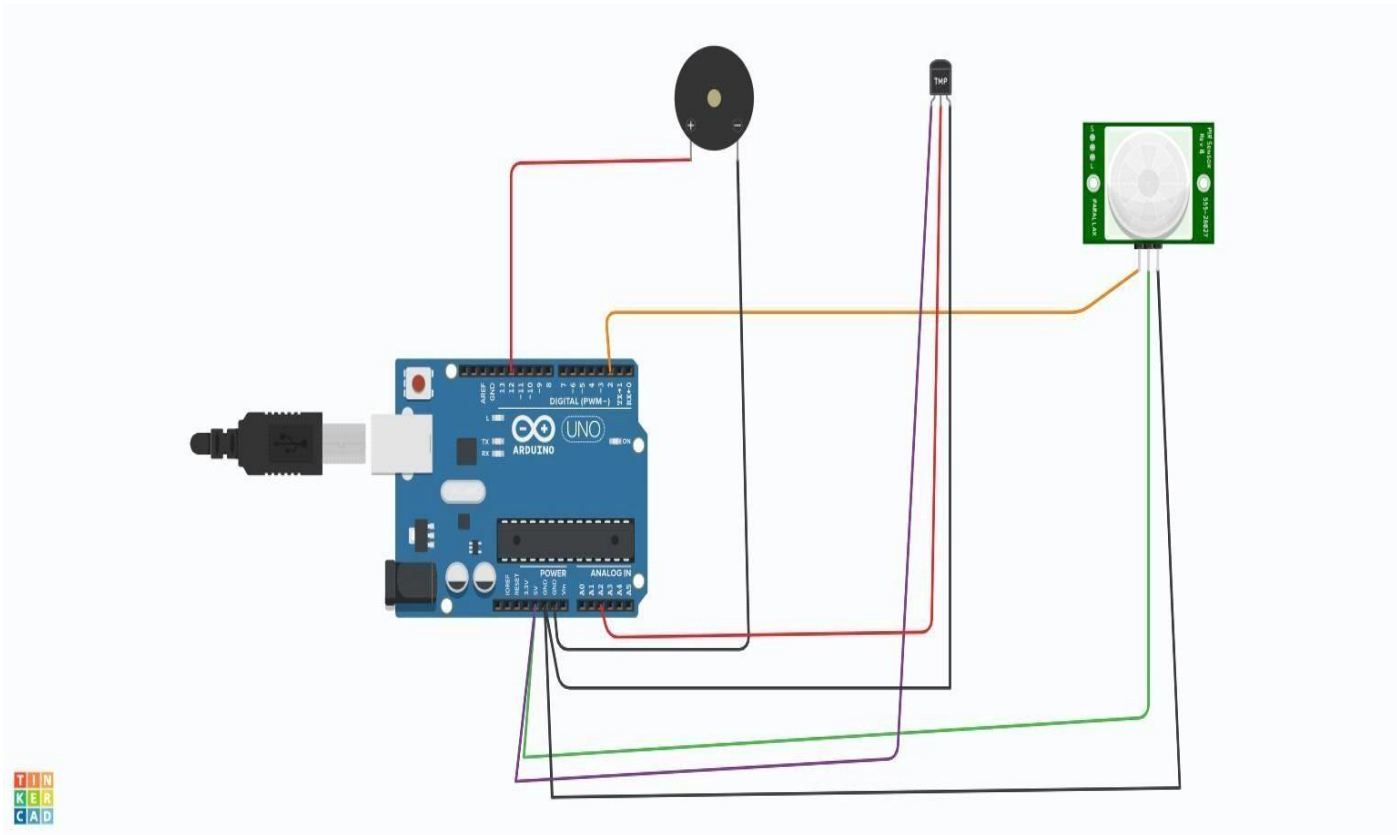


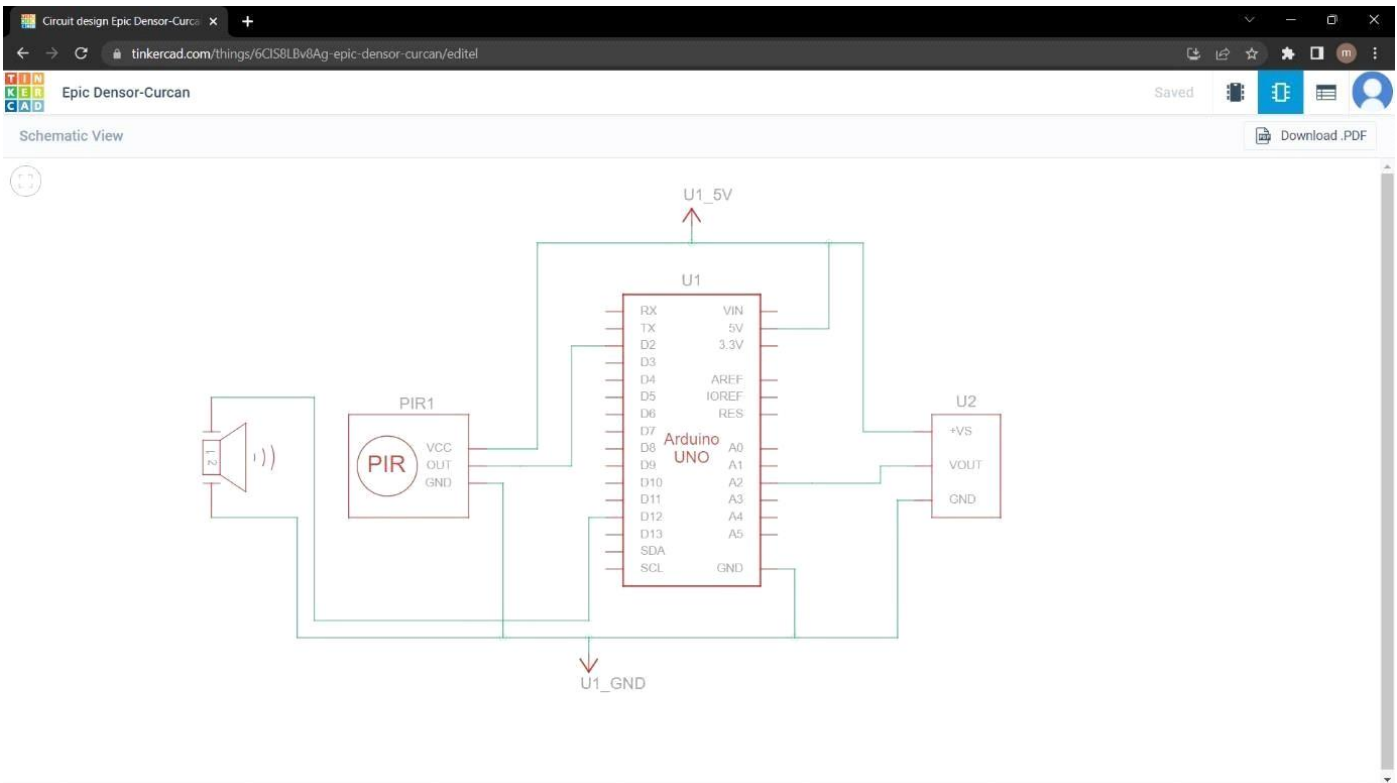
Assignment -1

Assignment Date	19 September 2022
Student Name	Gangineni chakarvathi
Student Roll Number	111519106036
Maximum Marks	2 Marks

Question 1: Build a smart home in Thinkercad with 2 sensors, an Led, buzzer and submit it.



CIRCUIT DIAGRAM:



SCHEMATIC DIAGRAM:

SOURCE CODE:

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

```
void setup()
```

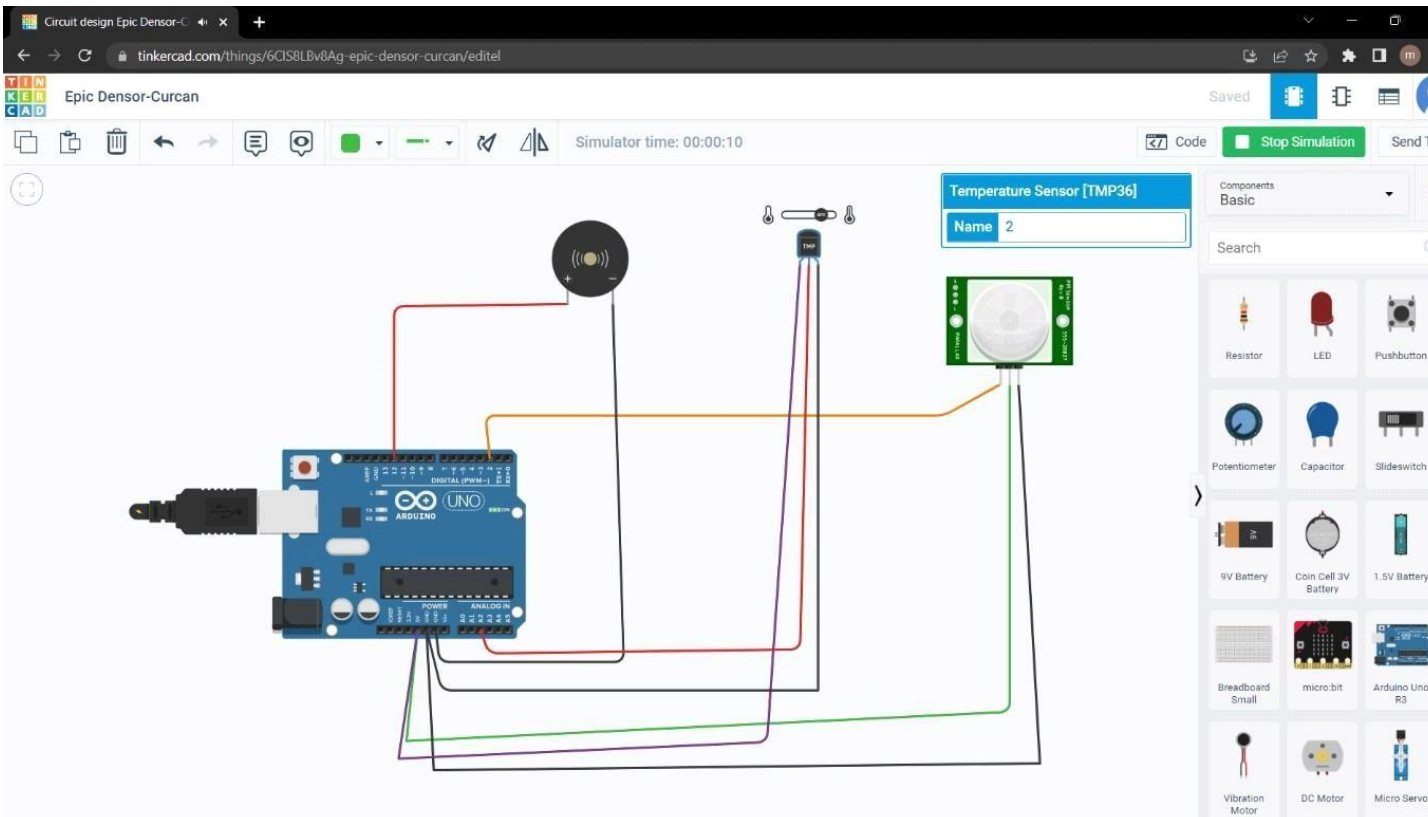
```
{
```

```
    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);  
  
}  
  
}
```



TEMP SENSOR:

PIR SENSOR:

Circuit design Epic Densor-C

tinkercad.com/things/6CIS8Lbv8Ag-epic-densor-curcan/editel

Epic Densor-Curcan

Simulator time: 00:01:43

Code Stop Simulation Send To

PIR Sensor

Name	1
Target X	1.02
Target Y	-188.42
Target Y	-182.65

Components Basic

Search

Resistor LED Pushbutton

Potentiometer Capacitor Slideswitch

9V Battery Coin Cell 3V Battery 1.5V Battery

Breadboard Small micro:bit Arduino Uno R3

Vibration Motor DC Motor Micro Servo

The image shows a Tinkercad circuit simulation. In the center, an Arduino Uno R3 is connected to several components: a PIR sensor, an LED, and a buzzer. The PIR sensor is labeled with a name '1' and has target coordinates (Target X: 1.02, Target Y: -188.42, Target Y: -182.65). The components panel on the right lists various electronic components like Resistor, LED, Pushbutton, Potentiometer, Capacitor, Slideswitch, 9V Battery, Coin Cell 3V Battery, 1.5V Battery, Breadboard Small, micro:bit, Arduino Uno R3, Vibration Motor, DC Motor, and Micro Servo. The top of the interface shows the Tinkercad logo, the project name 'Epic Densor-C', and the URL 'tinkercad.com/things/6CIS8Lbv8Ag-epic-densor-curcan/editel'. The simulator time is 00:01:43. The bottom of the interface shows the 'Code', 'Stop Simulation', and 'Send To' buttons.