Assignment -1

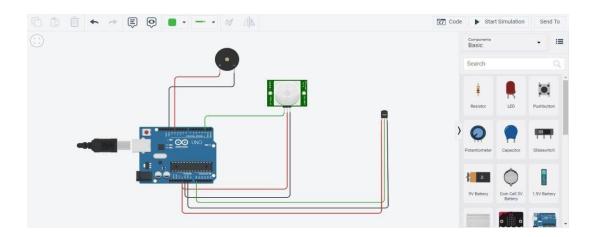
Tinkercad

Assignment Date	19 September 2022
Student Name	A. Chellamuthu
Student Roll Number	7179KCTKCTKCTKCTKCT19BEC044
Maximum Marks	2 Marks

Question-1:

Write a Smart Home in Tinkercad, using 2+ sensors, Led, Buzzer in single code and circuit.

CIRCUIT CONNECTIONS:



Code:

```
void setup()
{
    Serial.begin(9600);
    pinMode(12,OUTPUT);
pinMode(2,INPUT); }

void loop()
{ int motion=digitalRead(2);

double
    data=analogRead(A0);
    double n=data/1024;

Serial.print("Converted Analog Data: ");
Serial.println(n);

double volt=n*5; //because connected to 5v
Serial.print("Voltage data: ");
Serial.println(volt);
```

```
double off=volt-0.5;
Serial.print("Offset Data: ");
Serial.println(off);
double
temperature=off*100;
Serial.print("Temperature Data: ");
Serial.println(temperature);
if(motion==1 && temperature<60)
tone(12,100);
else if(motion==0 && temperature>60)
tone(12,200);
else if(motion==1 && temperature>60)
noTone(12);
else if(motion==0 && temperature<60)
noTone(12);
}
```

Output:

