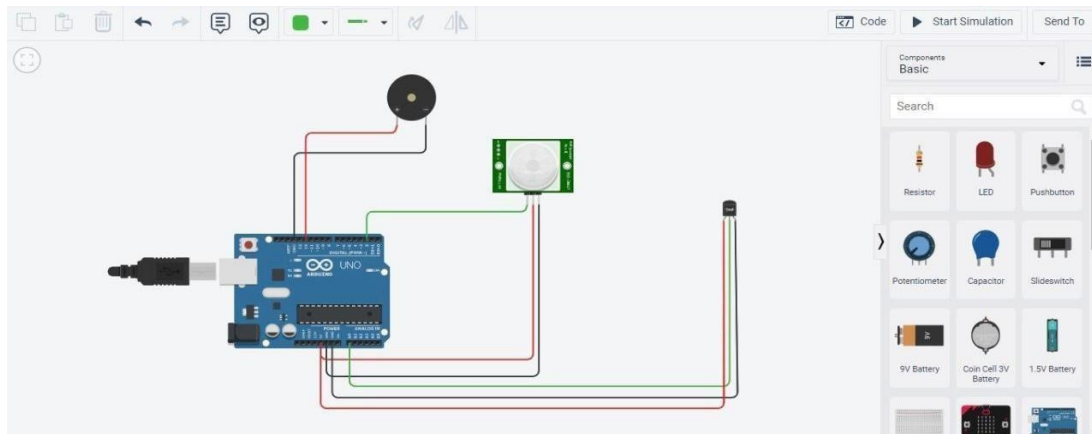# Assignment – 1

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: