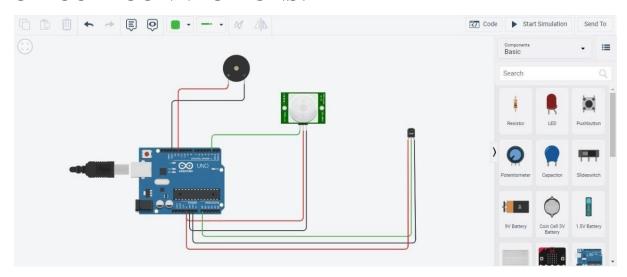
ASSIGNMENT-1

CIRCUIT CONNECTIONS:



PROGRAM:

```
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)</pre>
  noTone(12);
}
```

OUTPUT:

