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# 19CS102

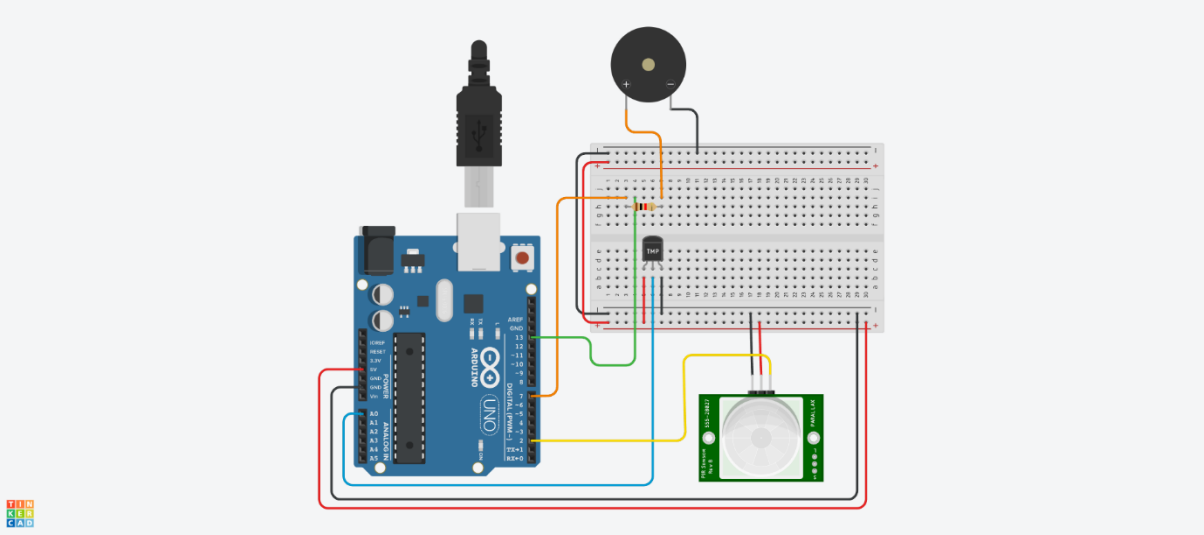
# SMART WASTE MANAGEMENT SYSTEM FOR METROPOLITAN CITIES

## ASSIGNMENT – 1

Team ID : PNT2022TMID17949

## I. Schematic Diagram

**Assignments -1 , Make a Smart Home in Tinkercad, using 2+ sensors, Led, Buzzer in single code and circuit.**



Copy of Temperature, Motion Monitoring System

with a Piezo Buzzer

## II. COMPONENTS USED :

| COMPONENTS LISTS |
|---|
| Push Button - 1 Qty |
| Red LED- 1 Qty |
| Blue LED- 1 Qty |
| PIEZO Buzzer- 1 Qty |
| Ultrasonic Distance Sensor- 1 Qty |
| PIR Sensor- 1 Qty |
| Resistor (220,560,10K)- 1 Qty |
| Arduino R3- 1 Qty |
| Breadboard Small- 1 Qty |

## III. CODE

```
int baselineTemP = 0;
int celsius = 0;
int fahrenheit = 0;
int pinSensor =4;

int pinBuzzer =7;
int pirSensor =0;

void setup()
{
 pinMode(A0, INPUT);
 Serial.begin(9600);
 pinMode(pinSensor, INPUT);
 pinMode(pinBuzzer, OUTPUT);
 pinMode(7, OUTPUT);
}

void loop()
{
 baselineTemp = 60;
 pirSensor = digitalRead(pinSensor);
 celsius = map(((analogRead(A0) - 20) * 3.04), 0, 1023, -40, 125);

  fahrenheit = ((celsius * 9) / 5 + 32);
 Serial.print(celsius);
 Serial.print(" C, ");
 Serial.print(fahrenheit);
 Serial.println(" F");


 if (celsius >= baselineTemp + 1) {
```

```
  tone(7, 220, 100);
  delay(100);
 }



 if (pirSensor == HIGH)
 {
  tone(pinBuzzer, 1000, 500);
 }
 delay(100);
}
```