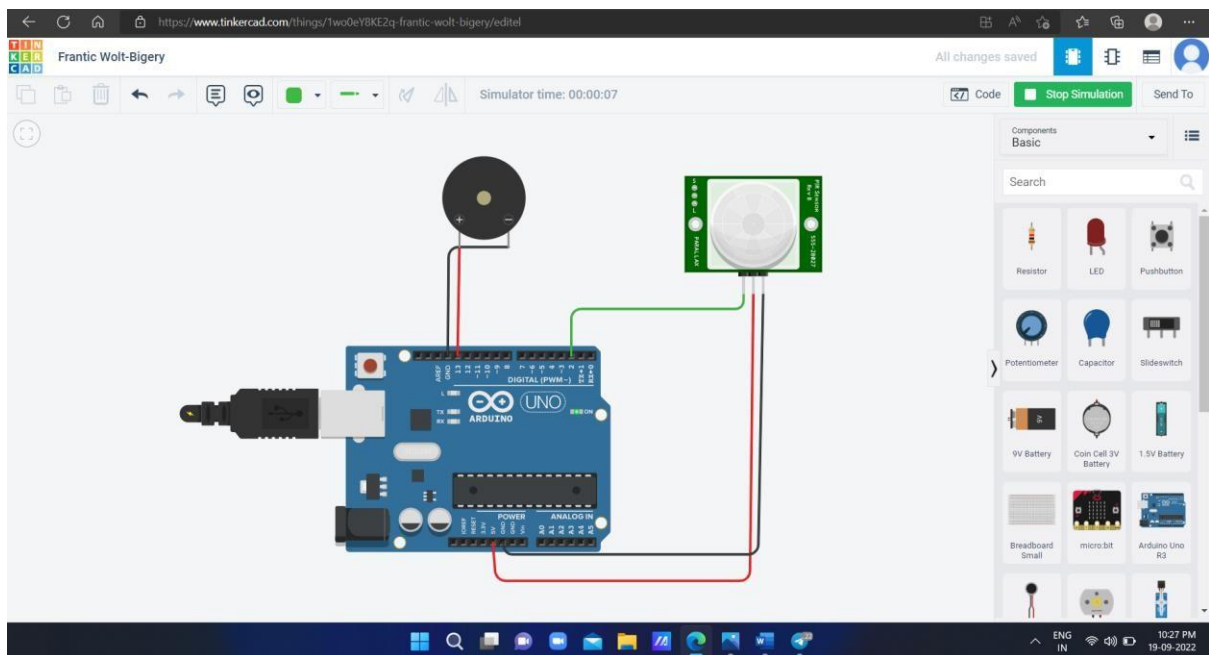
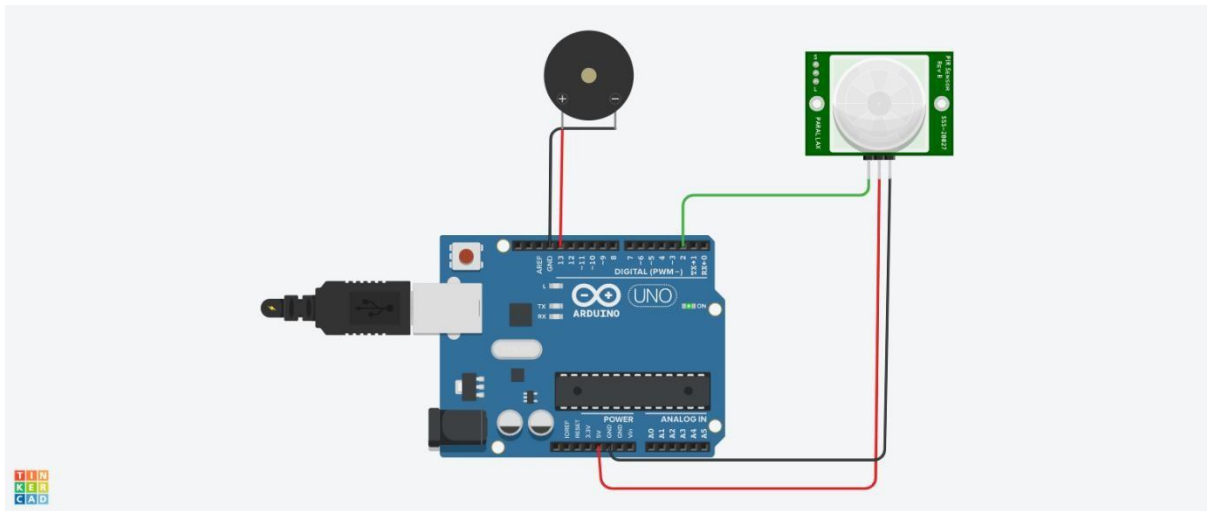


**DEEPAK S**  
**732919ECR021**

## **ASSIGNMENT 1**

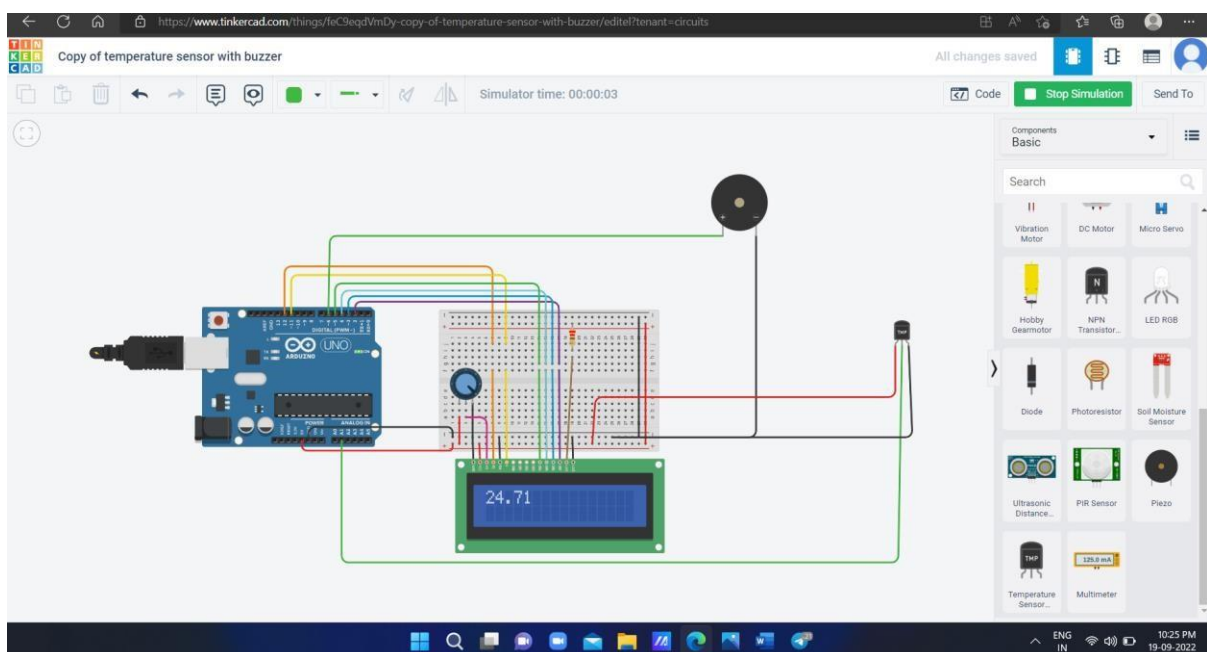
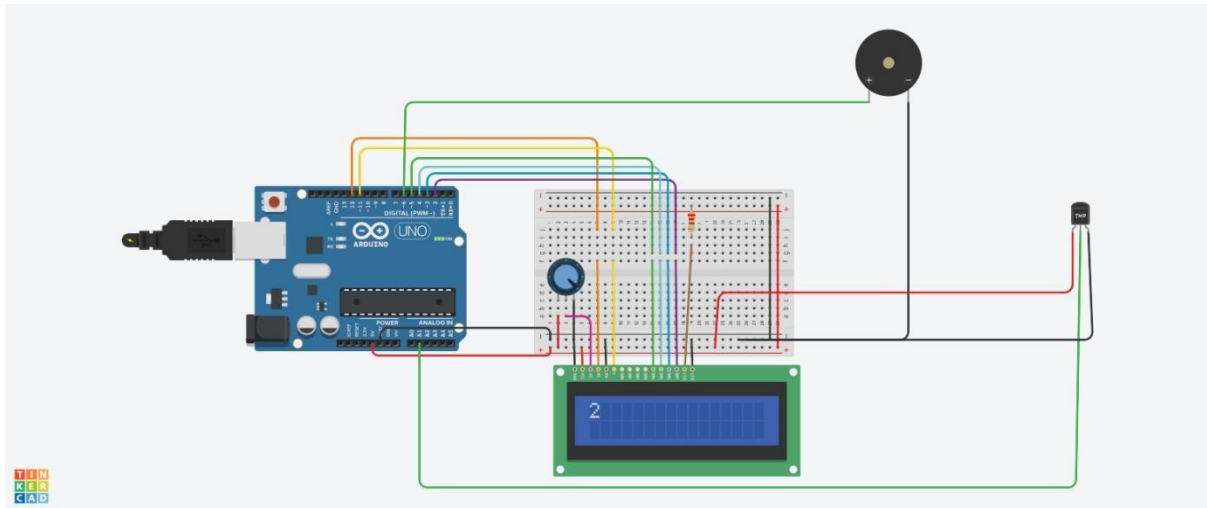
### **1.MOTION DETECTION USING PIR SENSOR:**



**PROGRAM:**

```
int sensorState = 0; void
setup()
{
    pinMode(2, INPUT);
    pinMode(13, OUTPUT);
    Serial.begin(9600);
}
void loop()
{
    // read the state of the sensor/digital input
    sensorState = digitalRead(2);
    // check if sensor pin is HIGH. if it is, set the
    // LED on.
    if (sensorState == HIGH) {
        digitalWrite(13, HIGH);
        Serial.println("Sensor activated!");
    } else {
        digitalWrite(13, LOW);
    }
    delay(10); // Delay a little bit to improve simulation performance
}
```

## 2.TEMPERATURE DETECTION USING TEMPERATURE SENSOR



```
#include <LiquidCrystal.h>

LiquidCrystal lcd(12, 11, 5, 4, 3, 2);

float a; void setup() {

  lcd.begin(16, 2);
```

```
    pinMode(6,OUTPUT);  
}  
void loop() {  
  a=analogRead(1);  
  a=a*0.0048828125;  a=(a-  
0.5)*100;  
  lcd.clear();  
  lcd.setCursor(0, 0);  
  lcd.print(a);  
  lcd.print("C");  if(a>60)  
  {  
    digitalWrite(6,HIGH);  
  }  
  else  
    digitalWrite(6,LOW);  
}
```