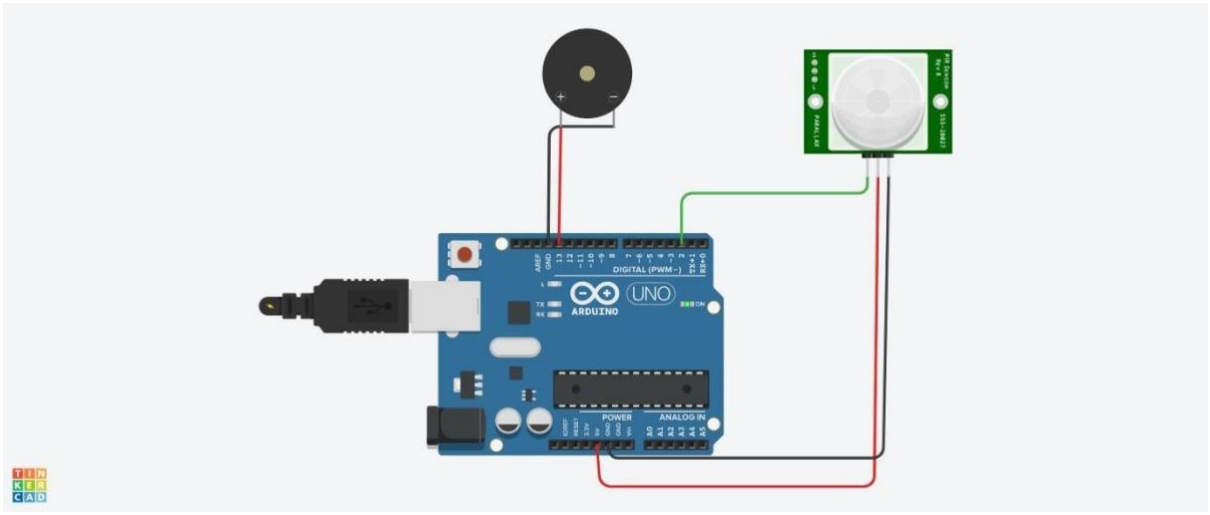
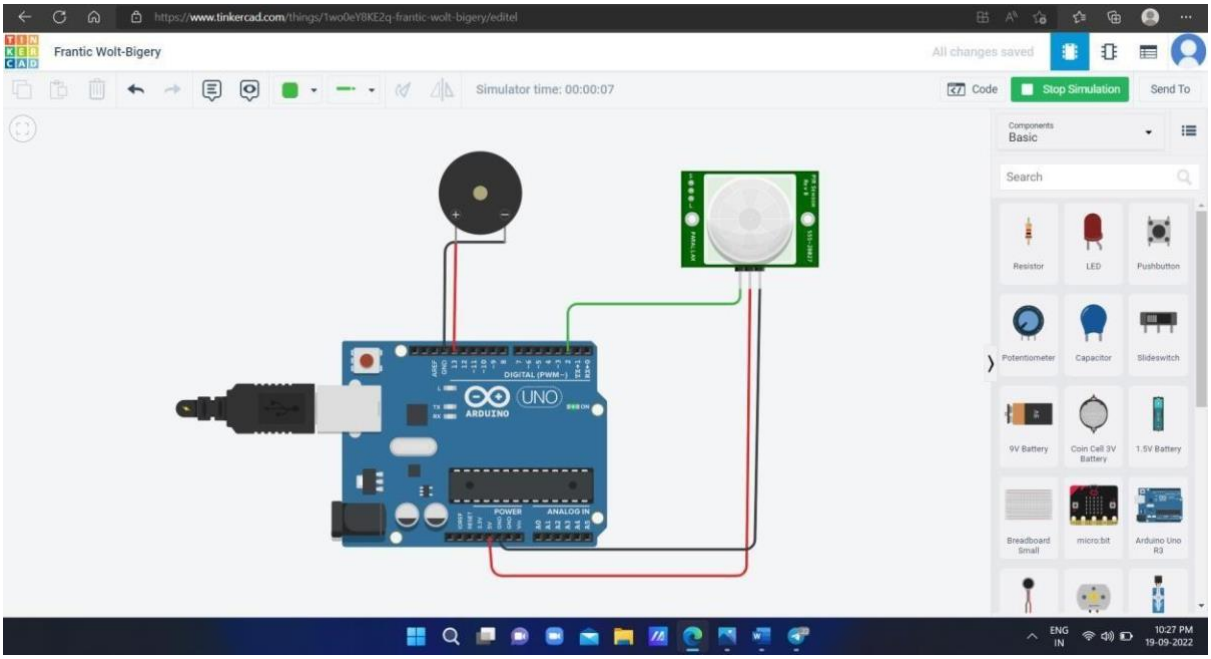
ASSIGNMENT 1

1.MOTION DETECTION USING PIR SENSOR:



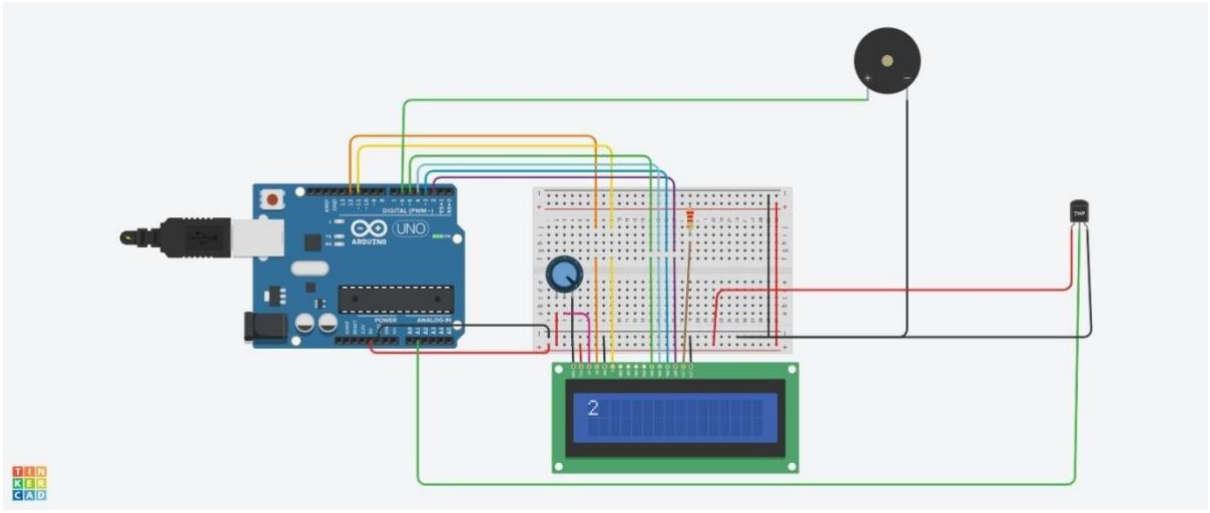


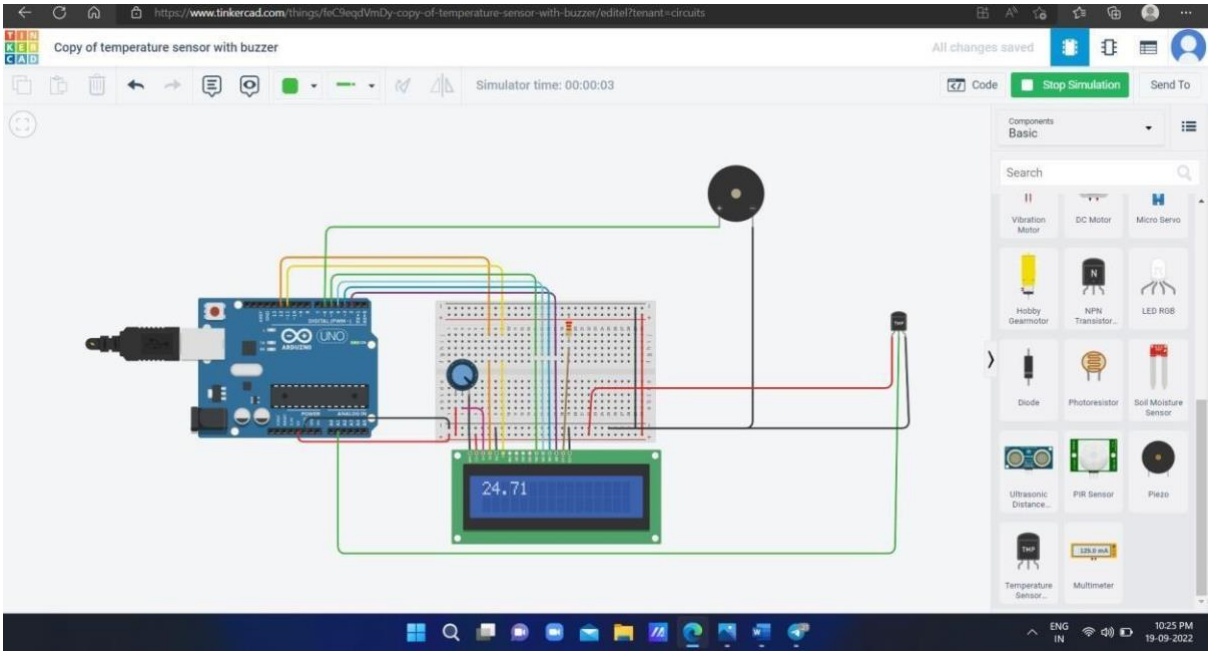
PROGRAM:

```
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=(a0.5)*100;
 lcd.clear();
lcd.setCursor(0,        0);
lcd.print(a);
lcd.print("C");   if(a>60)
 {
   digitalWrite(6,HIGH);
 }
 else
digitalWrite(6,LOW);
 }
```