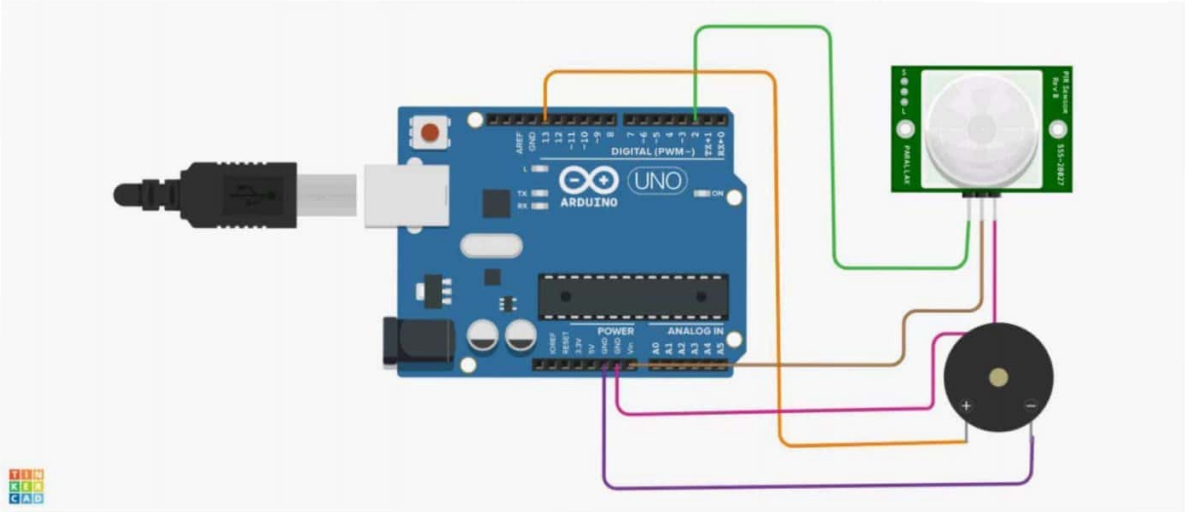
HARSHAVARTHINI A [19ECR044]

ASSIGNMENT 1

MOTION DETECTION:

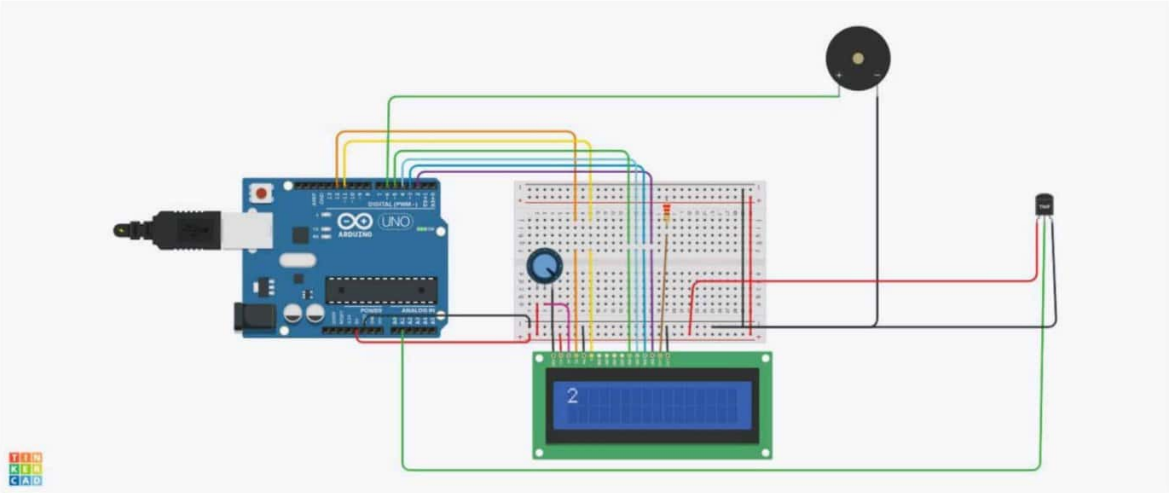


CODE:

```
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
}
```

TEMPERATURE DETETION:



CODE:

```
#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);
}
```