N.S.N. COLLEGE OF ENGINEERING
AND TECHNOLOGY
N.S.N. Kalvi Nagar, NH-7, Manalmedu, Karur - 639 003, TN, India.
(Approved by AICTE New Delhi, Affiliated to Anna University, Chennai)
(An ISO 9001:2008 Certified Institution)

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

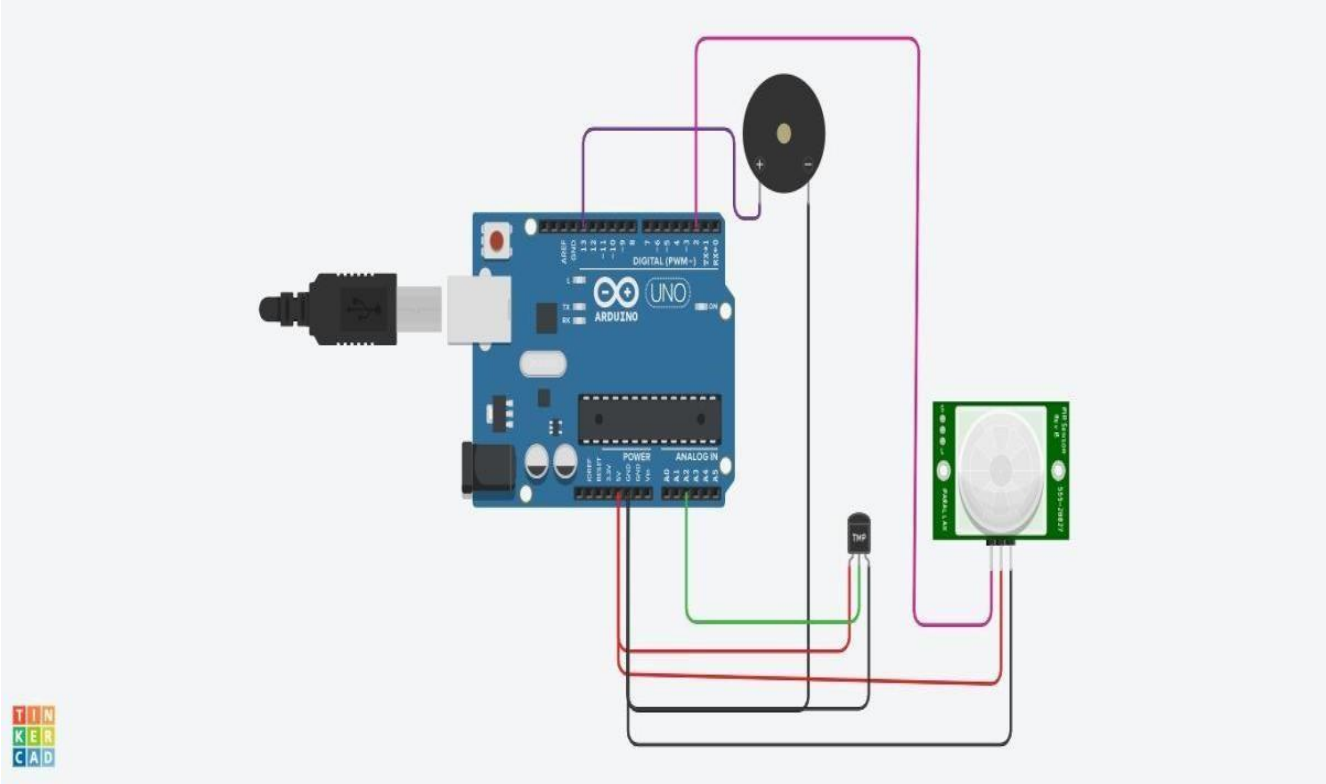
IV YEAR / VII SEMESTER (ODD)

BATCH	: 2019-2023
ACADEMIC YEAR	: 2022-2023
ASSIGNMENT	: 1
TEAM ID	: PNT2022TMID48761
TITLE OF THE PROJECT	: HAZARDOUS AREA MONITORING FOR INDUSTRIAL PLANT POWERED BY IOT
DOMAIN	: INTERNET OF THINGS
TEAM LEAD	: S .DINESH
TEAM MEMBER	: V.KARTHIK
TEAM MEMBER	: A.SIVAKUMAR
TEAM MEMBER	: M.ARUNKUMAR
TEAM MEMBER	: K.MANOJ
INDUSTRY MENTOR(S) NAME	: BHARADWAJ, SANTOSHI, BHARDWAJ
FACULTY MENTOR(S) NAME	: G.ANAND

ASSIGNMENT 1

Create a circuit with piezo alarm,PIR sensor,tmp sensor with below functionalities:

1.Alarm should sound in one manner if temp is above 60 C 2.Alarm should sound with another frequency if motion is detected in PIR sensor

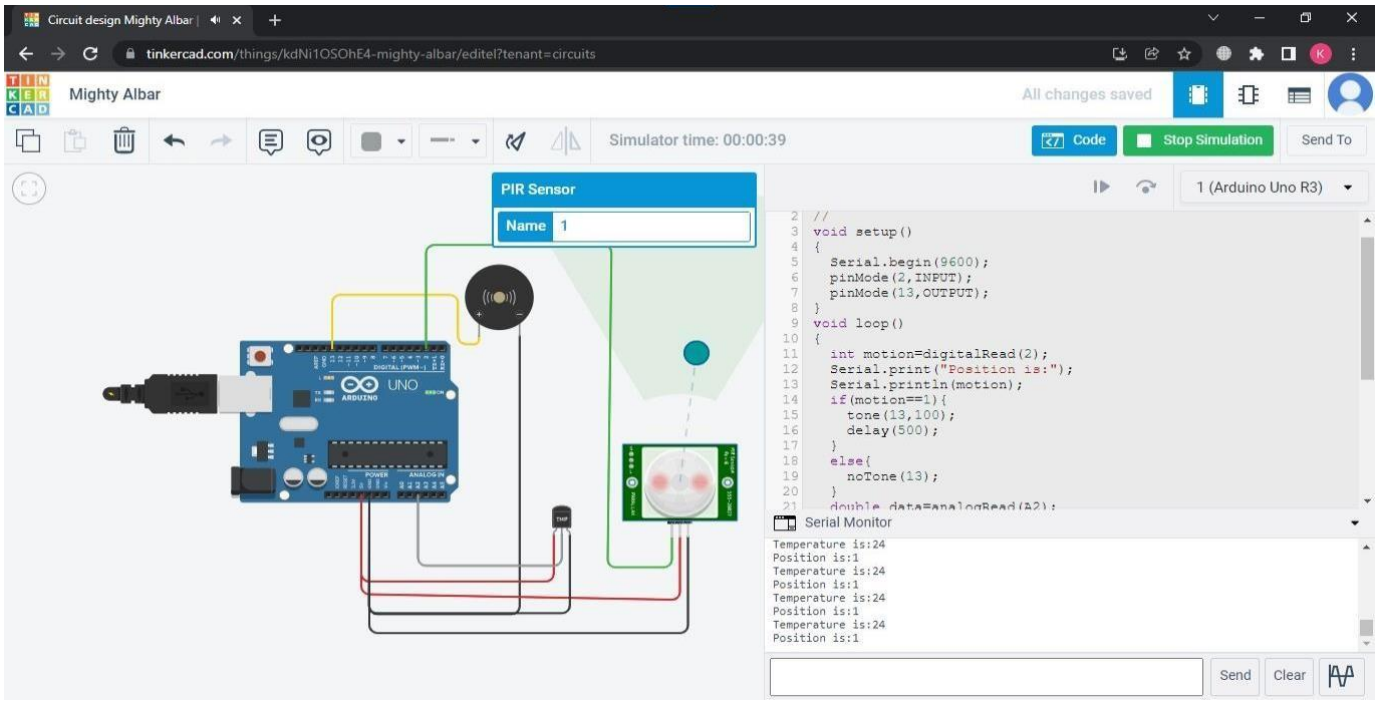


CIRCUIT

```
// C++ code
//
void setup()
{
  Serial.begin(9600);
  pinMode(2,INPUT);
  pinMode(13,OUTPUT);
}
void loop()
{
  int motion=digitalRead(2);
  Serial.print("Position is");
  Serial.println(motion);
  if(motion==1){
    tone(13,100);
    delay(500);
  }
  else{
    noTone(13);
  }
  double data=analogRead(A2);
  double n=data/1024;
  double volt=n*5;
```

```
  double off=volt-0.5;
  int temp=off*100;
  Serial.print("Temperature is:");
  Serial.println(temp);
  if(temp>=60){
    tone(13,400);
delay(500);
  }
  else{
    noTone(13);
  }
}
```

OUTPUT:


Circuit design Mighty Albar
tinkercad.com/things/kdNi1OSOhE4-mighty-albar/editel?tenant=circuits
Mighty Albar
All changes saved
Simulator time: 00:00:39
Code
Stop Simulation
Send To
PIR Sensor
Name 1
1 (Arduino Uno R3)
//
void setup()
{
Serial.begin(9600);
pinMode(2,INPUT);
pinMode(13,OUTPUT);
}
void loop()
{
int motion=digitalRead(2);
Serial.print("Position is:");
Serial.println(motion);
if(motion==1){
tone(13,100);
delay(500);
}
else{
noTone(13);
}
double data=analogRead(A2);
Serial Monitor
Temperature is:24
Position is:1
Temperature is:24
Position is:1
Temperature is:24
Position is:1
Temperature is:24
Position is:1
Send
Clear