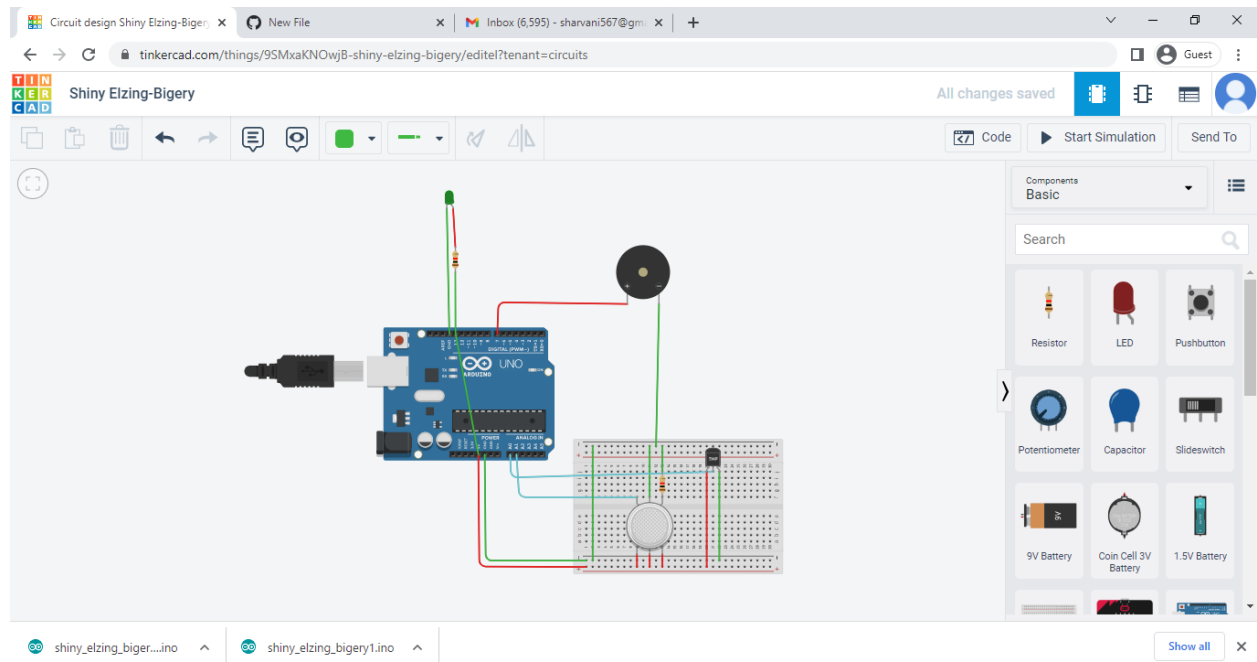


Assignment -1

Home automation using sensors

Assignment Date	19 September 2022
Student Name	Sharvani G Hegde
Student Roll Number	410819106004
Maximum Marks	2 Marks



Circuit design Shiny Elzing-Bigery | New File | Inbox (6,595) - sharvani567@gmail.com | tinkercad.com/things/9SMxaKNOwjB-shiny-elzing-bigery/edit?tenant=circuits

Shiny Elzing-Bigery | All changes saved | Simulator time: 00:00:33

Code | Stop Simulation | Send To

1 (Arduino Uno R3)

```

1
2
3 float temp;
4
5 float vout;
6
7 float vout1;
8
9 int LED = 13;
10
11 int gasSensor;
12
13 int piezo = 7;
14
15 void setup()
16 {

```

Serial Monitor

in DegreeC=	-50.00	GasSensor=	153
in DegreeC=	-50.00	GasSensor=	153
in DegreeC=	-50.00	GasSensor=	153
in DegreeC=	-50.00	GasSensor=	153
in DegreeC=	-50.00	GasSensor=	153
in DegreeC=	-50.00	GasSensor=	153
in DegreeC=	-50.00	GasSensor=	153
in DegreeC=	-50.00	GasSensor=	153

Send | Clear | Show all

shiny_elzing_biger...ino | shiny_elzing_bigery1.ino

Circuit design Shiny Elzing-Bigery | New File | Inbox (6,595) - sharvani567@gmail.com | tinkercad.com/things/9SMxaKNOwjB-shiny-elzing-bigery/edit?tenant=circuits

Shiny Elzing-Bigery | All changes saved | Simulator time: 00:01:05

Code | Stop Simulation | Send To

1 (Arduino Uno R3)

Gas Sensor

Name 2

```

53 {
54 digitalWrite(piezo, LOW);
55 }
56 Serial.print ("in DegreeC= ");
57
58 Serial.print (" ");
59 Serial.print (temp);
60
61 Serial.print ("\n");
62
63 Serial.print ("GasSensor= ");
64
65 Serial.print (" ");
66
67 Serial.print (gasSensor);
68

```

Serial Monitor

in DegreeC=	-50.00	GasSensor=	153
in DegreeC=	-50.00	GasSensor=	153
in DegreeC=	-50.00	GasSensor=	153
in DegreeC=	-50.00	GasSensor=	153
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in DegreeC=	-50.00	GasSensor=	153
in D			

Send | Clear | Show all

shiny_elzing_biger...ino | shiny_elzing_bigery1.ino

float temp;

float vout;

float vout1;

```
int LED = 13;
```

```
int gasSensor;
```

```
int piezo = 7;
```

```
void setup()
```

```
{
```

```
pinMode (A0, INPUT);
```

```
pinMode (A1, INPUT);
```

```
pinMode (LED, OUTPUT);
```

```
pinMode (piezo, OUTPUT);
```

```
Serial.begin(9600);
```

```
}
```

```
void loop()
```

```
{
```

```
vout=analogRead (A1);
```

```
yout1=(vout/1023)*5000;
```

```
temp=(vout1-500)/10;
```

```
gasSensor=analogRead (A0);
```

```
if (temp>=80)
```

```
{
```

```
digitalWrite(LED, HIGH);  
}  
else  
{  
digitalWrite(LED, LOW);  
}  
if (gasSensor>=100)  
{  
digitalWrite(piezo, HIGH);  
}  
else  
{  
digitalWrite(piezo, LOW);  
}  
Serial.print ("in DegreeC= ");  
  
Serial.print(" ");  
Serial.print (temp);  
  
Serial.print("\t");  
  
Serial.print ("GasSensor= ");  
  
Serial.print(" ");  
  
Serial.print (gasSensor);  
  
Serial.println();
```

```
delay(1000);
```

```
}
```