

Assignment -1

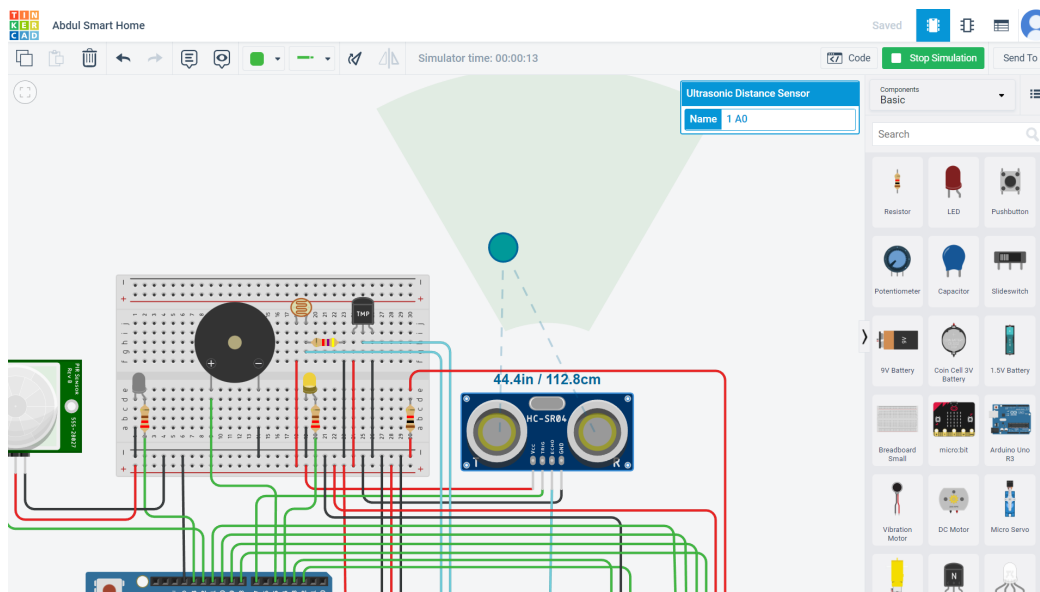
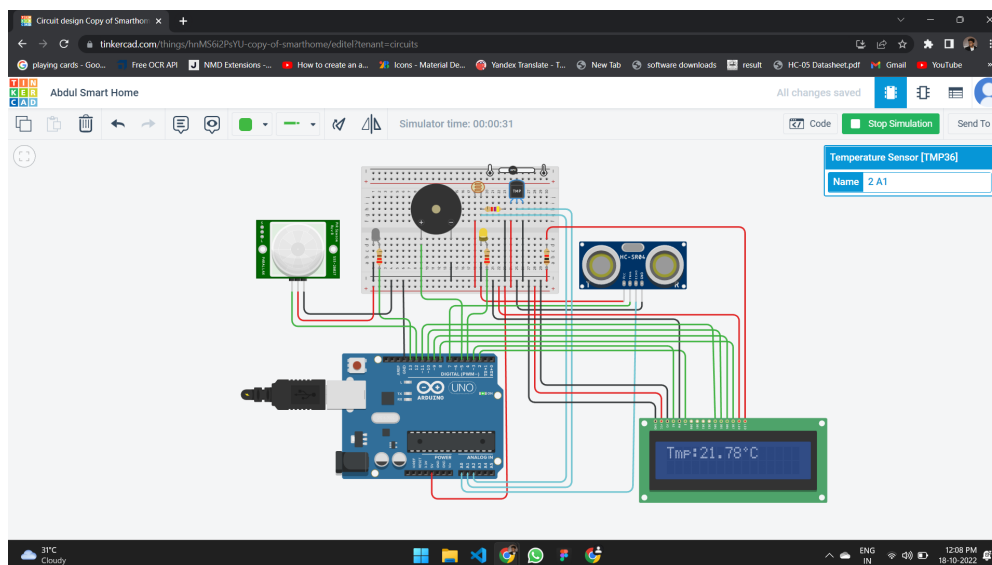
Resume

Date	29 September 2022
Student Name	Abdul Rahman S
Student Roll No	911719104002
Maximum Marks	2 Marks

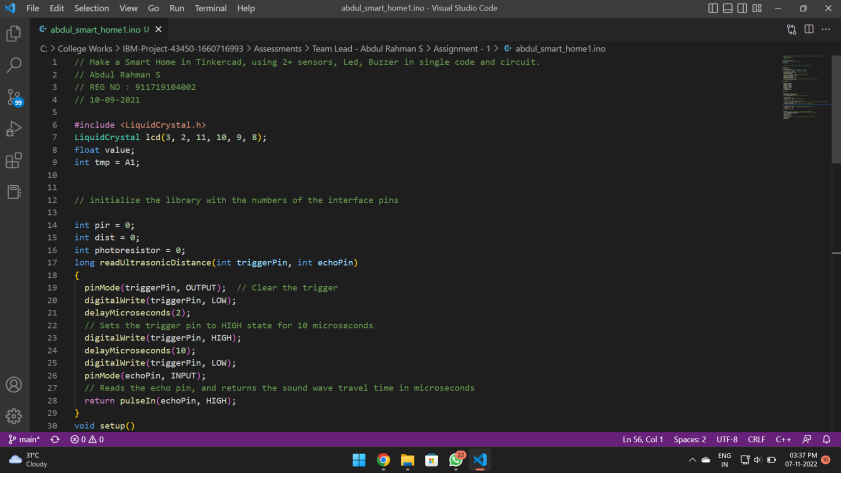
Question-1:

Develop a sample homepage with html, CSS which should include banner, image & description about yourself and contact form.

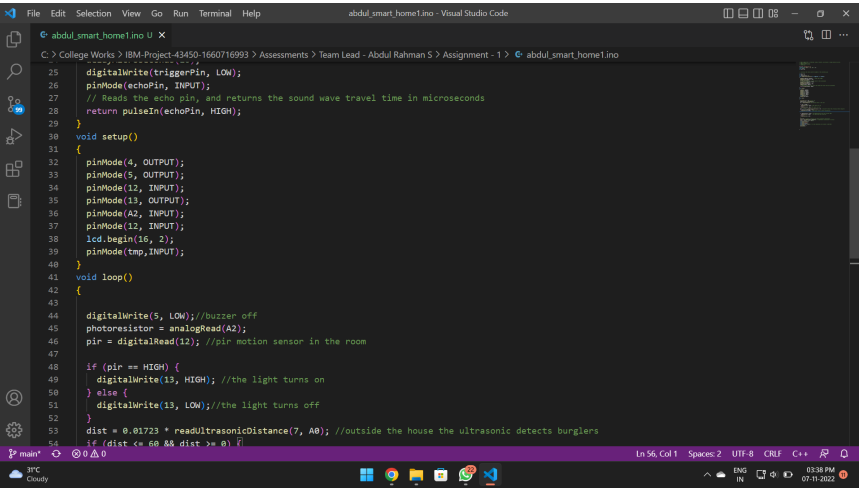
Output :



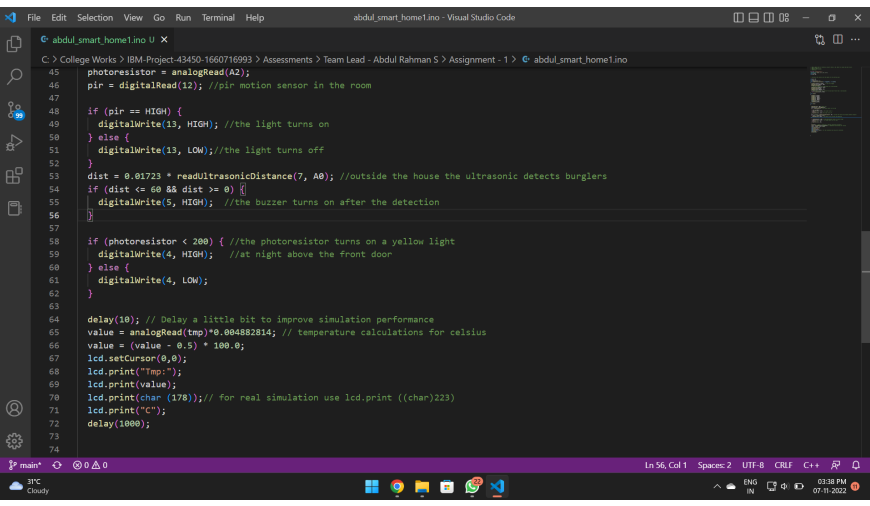
Screenshot :



```
1 // Make a Smart Home in Tinkercad, using 2+ sensors, Led, Buzzer in single code and circuit.
2 // Abdul Rahman S
3 // REG NO : 011719104002
4 // 10-09-2021
5
6 #include <LiquidCrystal.h>
7 LiquidCrystal lcd(3, 2, 11, 10, 9, 8);
8 float value;
9 int tmp = A1;
10
11
12 // initialize the library with the numbers of the interface pins
13
14 int pir = 0;
15 int dist = 0;
16 int photoresistor = 0;
17 long readUltrasonicDistance(int triggerPin, int echoPin)
18 {
19     pinMode(triggerPin, OUTPUT); // Clear the trigger
20     digitalWrite(triggerPin, LOW);
21     delayMicroseconds(2);
22     // Sets the trigger pin to HIGH state for 10 microseconds
23     digitalWrite(triggerPin, HIGH);
24     delayMicroseconds(10);
25     digitalWrite(triggerPin, LOW);
26     pinMode(echoPin, INPUT);
27     // Reads the echo pin, and returns the sound wave travel time in microseconds
28     return pulseIn(echoPin, HIGH);
29 }
30 void setup()
```



```
25     digitalWrite(triggerPin, LOW);
26     pinMode(echoPin, INPUT);
27     // Reads the echo pin, and returns the sound wave travel time in microseconds
28     return pulseIn(echoPin, HIGH);
29 }
30 void setup()
31 {
32     pinMode(4, OUTPUT);
33     pinMode(5, OUTPUT);
34     pinMode(12, INPUT);
35     pinMode(13, OUTPUT);
36     pinMode(A2, INPUT);
37     pinMode(12, INPUT);
38     lcd.begin(16, 2);
39     pinMode(tmp, INPUT);
40 }
41 void loop()
42 {
43
44     digitalWrite(5, LOW); //buzzer off
45     photoresistor = analogRead(A2);
46     pir = digitalRead(12); //pir motion sensor in the room
47
48     if (pir == HIGH) {
49         digitalWrite(13, HIGH); //the light turns on
50     } else {
51         digitalWrite(13, LOW); //the light turns off
52     }
53     dist = 0.01723 * readUltrasonicDistance(7, A0); //outside the house the ultrasonic detects burglars
54     if (dist <= 60 && dist >= 0) {
```



```
45     photoresistor = analogRead(A2);
46     pir = digitalRead(12); //pir motion sensor in the room
47
48     if (pir == HIGH) {
49         digitalWrite(13, HIGH); //the light turns on
50     } else {
51         digitalWrite(13, LOW); //the light turns off
52     }
53     dist = 0.01723 * readUltrasonicDistance(7, A0); //outside the house the ultrasonic detects burglars
54     if (dist <= 60 && dist >= 0) {
55         digitalWrite(5, HIGH); //the buzzer turns on after the detection
56     }
57
58     if (photoresistor < 200) { //the photoresistor turns on a yellow light
59         digitalWrite(4, HIGH); //at night above the front door
60     } else {
61         digitalWrite(4, LOW);
62     }
63
64     delay(10); // Delay a little bit to improve simulation performance
65     value = analogRead(tmp)*0.004882814; // temperature calculations for celsius
66     value = (value - 0.5) * 100.0;
67     lcd.setCursor(0,0);
68     lcd.print("tmp:");
69     lcd.print(value);
70     lcd.print(char(178)); // for real simulation use lcd.print ((char)223)
71     lcd.print("C");
72     delay(1000);
73
74 }
```