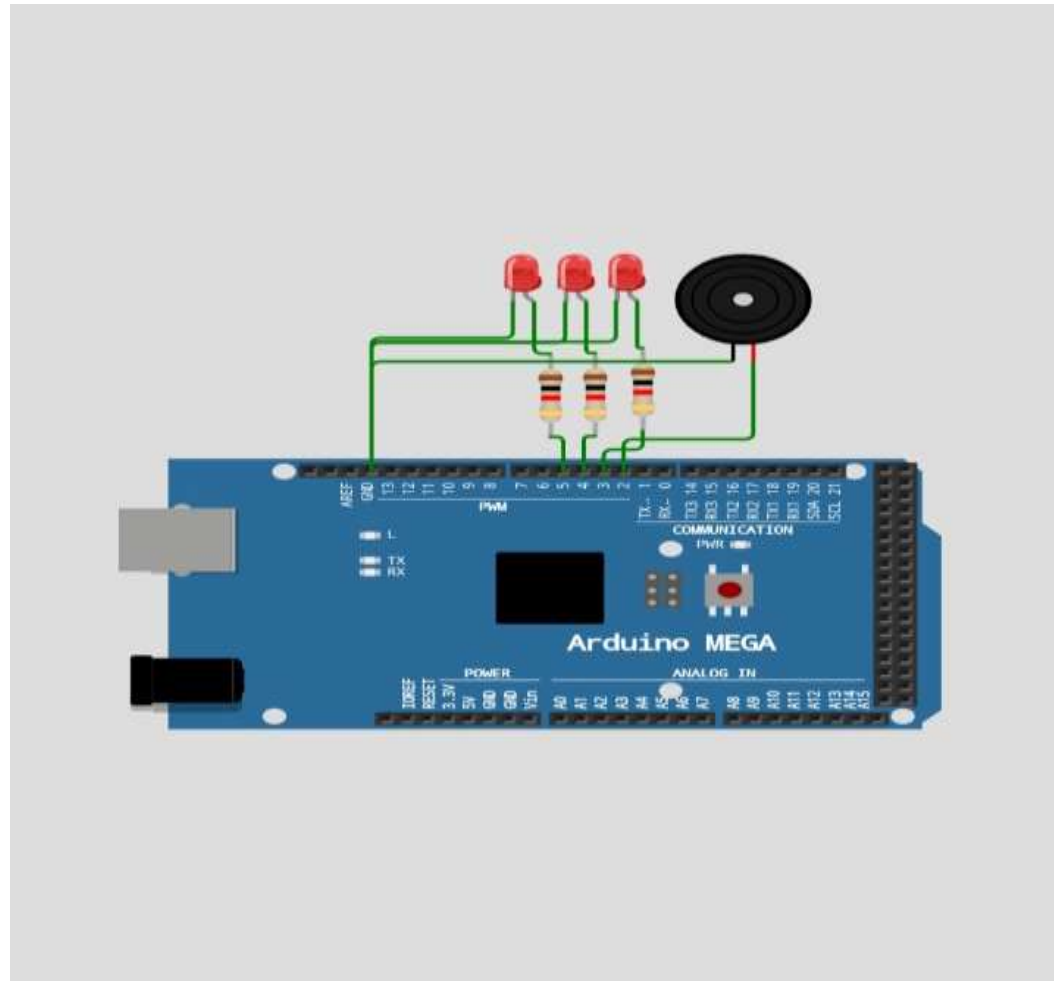


# ASSIGNMENT - 1

K.PREETHI  
ECE – III YEAR

Build a smart home in wok wi with minimum 2 sensor, led, buzzer.



```
1  const int buzzerPin = 2;
2  const int ledPin1 = 3;
3  const int ledPin2 = 4;
4  const int ledPin3 = 5;
5
6  int menuSelection = 0;
7  int ledSpeed = 500;
8  int ledBrightness = 128;
9  int selection = 0;
10 int buzzerState = LOW;
11
12 void setup() {
13     Serial.begin(9600);
14
15     pinMode(buzzerPin, OUTPUT);
16     pinMode(ledPin1, OUTPUT);
17     pinMode(ledPin2, OUTPUT);
18     pinMode(ledPin3, OUTPUT);
19
20     digitalWrite(buzzerPin, LOW);
21     digitalWrite(ledPin1, LOW);
22     digitalWrite(ledPin2, LOW);
23     digitalWrite(ledPin3, LOW);
24     Serial.println("MENU:");
25     Serial.println("1. Toggle buzz");
26     Serial.println("2. Increase LE");
27     Serial.println("3. Decrease LE");
28     Serial.println("4. Toggle LED");
29     Serial.println();
30     Serial.print("Selection: ");
31 }
32
```

```
32
33 void loop() {
34     int buzzerPinStateLast = digit
35     if (Serial.available()) {
36         int inputChar = Serial.parse
37
38         switch (inputChar) {
39             case 1:
40                 //Serial.println ("1");
41                 //digitalWrite(buzzerPin,
42                 ToggleBuzzer();
43                 selection = 0;
44                 break;
45             case 2:
46                 Serial.println("case 2");
47                 ledSpeed -= 50;
48                 if (ledSpeed < 50) {
49                     ledSpeed = 50;
50                 }
51                 break;
52             case 3:
53                 Serial.println("case 3");
54                 ledSpeed += 50;
55                 if (ledSpeed > 1000) {
56                     ledSpeed = 1000;
57                 }
58                 break;
59             case 4:
60                 Serial.println("case 4");
61                 if (ledBrightness == 0)
62                     ledBrightness = 128;
63                 } else {
```

```

64         ledBrightness = 0;
65     }
66     break;
67     default:
68     break;
69 }
70 }
71
72 digitalWrite(ledPin1, !digitalRead(ledPin1));
73 delay(500);
74
75 static unsigned long lastBlinkTime;
76 if (millis() - lastBlinkTime > 1000)
77 {
78     digitalWrite(ledPin2, !digitalRead(ledPin2));
79     lastBlinkTime = millis();
80 }
81 analogWrite(ledPin3, ledBrightness);
82 //Serial.println("MENU:");
83 //Serial.println("1. Toggle buzzer");
84 //Serial.println("2. Increase LED brightness");
85 //Serial.println("3. Decrease LED brightness");
86 //Serial.println("4. Toggle LED");
87 //Serial.println();
88 //Serial.print("Selection: ");
89 //delay (5000)
90
91
92 void ToggleBuzzer ()
93 {
94     buzzerState= (buzzerState) ? LOW : HIGH;
95     digitalWrite(buzzerPin, buzzerState);

```

```
96      //int a = digitalWrite(buzzerPin, HIGH);
97      //if (a == 1)
98      //{
99      |    //digitalWrite(buzzerPin, HIGH);
100     |    //digitalWrite(buzzerPin, HIGH);
101    // } else
102    // {
103    //     digitalWrite(buzzerPin, LOW);
104    // }
105
106
```