

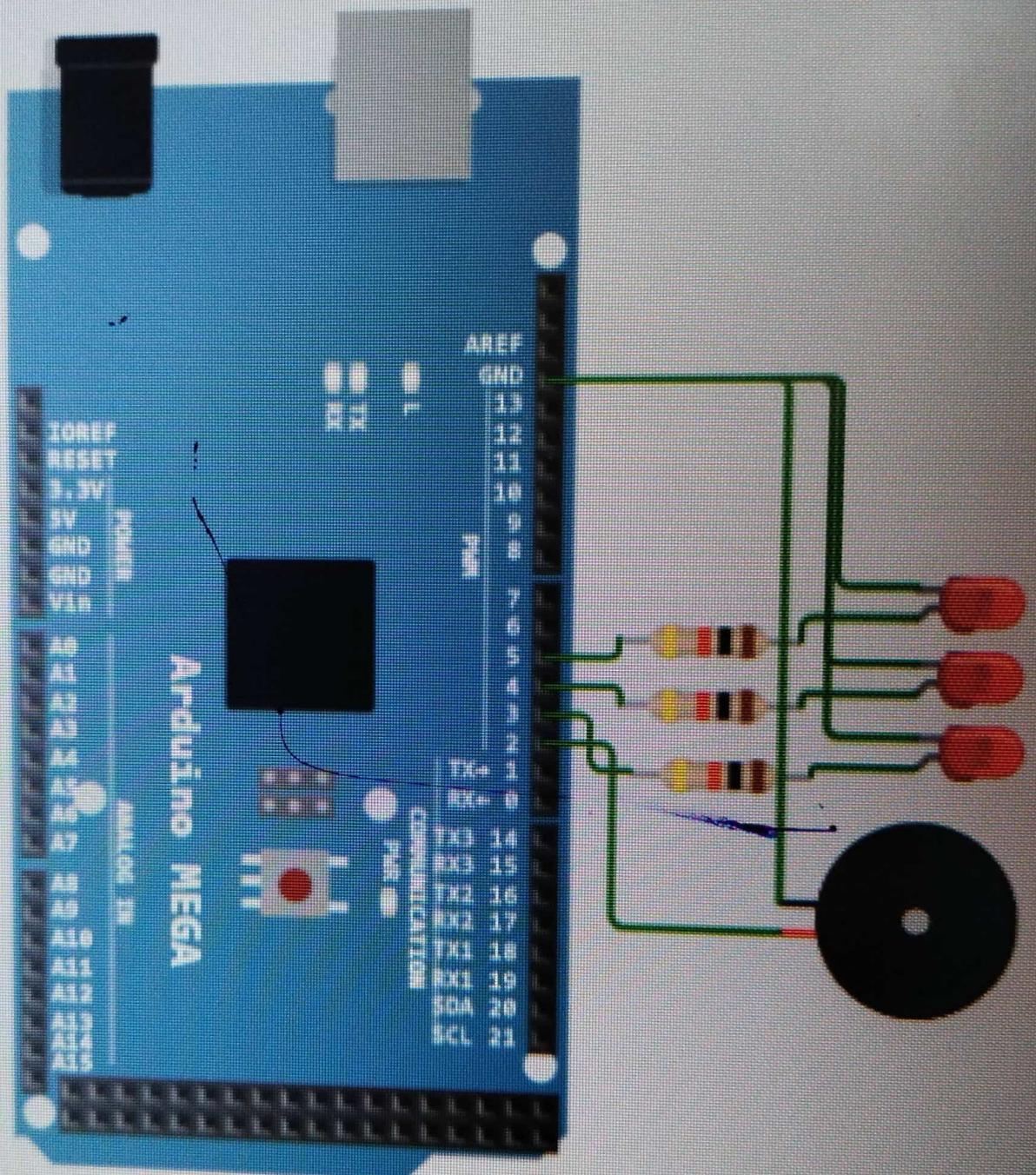
```
1 const int buzzerPin = 2;
2 const int ledPin1 = 3;
3 const int ledPin2 = 4;
4 const int ledPin3 = 5;
5
6 int menuSelection = 0;
7 int ledSpeed = 500;
8 int ledBrightness = 128;
9 int selection = 0;
10 int buzzerState = LOW;
11
12 void setup() {
13     Serial.begin(9600);
14
15     pinMode(buzzerPin, 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 buzzer on/off");
26     Serial.println("2. Increase LED 2 speed");
27     Serial.println("3. Decrease LED 2 speed");
28 }
```

```
27     Serial.println("3. Decrease LED 2 speed");
28     Serial.println("4. Toggle LED 3 brightness");
29     Serial.println();
30     Serial.print("Selection: ");
31 }
32
33 void loop() {
34     int buzzerPinStateLast = digitalRead(buzzerPin);
35     if (Serial.available()) {
36         int inputChar = Serial.parseInt(); ]]
37
38         switch (inputChar) {
39             case 1:
40                 //Serial.println ("1");
41                 //digitalWrite(buzzerPin, !digitalRead(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 }
```

```
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 = 0;
76 if (millis() - lastBlinkTime > ledSpeed) {
77     digitalWrite(ledPin2, !digitalRead(ledPin2));
78     lastBlinkTime = millis();
79 }
80 }
```

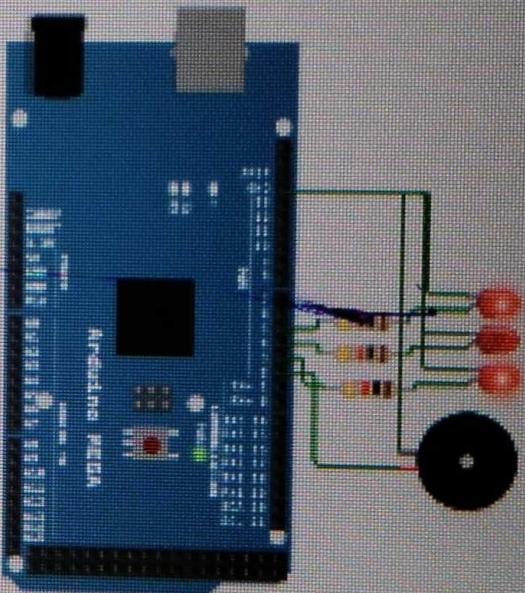
```
78     |     lastBlinkTime = millis();
79     }
80
81     analogWrite(ledPin3, ledBrightness);
82 //Serial.println("MENU:");
83 //Serial.println("1. Toggle buzzer on/off");
84 //Serial.println("2. Increase LED 2 speed");
85 //Serial.println("3. Decrease LED 2 speed");
86 //Serial.println("4. Toggle LED 3 brightness");    [
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, LOW);
97 //if (a == 1)
98 //{
99     //digitalWrite(buzzerPin, HIGH);
100    //digitalWrite(buzzerPin HIGH); attempt no. 3 failed with multiple errors
101 // } else
102 // {
103 //     digitalWrite(buzzerPin, LOW);
104 // }
```

```
93  {
94      buzzerState= (buzzerState) ? LOW : HIGH;
95      digitalWrite(buzzerPin, buzzerState);
96      //int a = digitalWrite(buzzerPin, LOW);
97      //if (a == 1)
98      //{
99          //digitalWrite(buzzerPin, HIGH);
100         //digitalWrite(buzzerPin HIGH); attempt no. 3 failed with multiple errors
101     // } else
102     // {
103     //     digitalWrite(buzzerPin, LOW);
104     // }
105
106 }
107
```



MENU:

1. Toggle buzzer on/off
2. Increase LED 2 speed
3. Decrease LED 2 speed
4. Toggle LED 3 brightness



Selection: