Minor Project

Project Name: "Internet of Things Minor Project**"**

Project Description: Write an Arduino program for seven segment display. Simulate in wokwi simulator. (Display numbers from 0 to 9 add delay of 1 second after each number)

My Workwi project:

Downloaded from: **https://wokwi.com/projects/436471027140649985**

Simulate this project on **https://wokwi.com**

Arduino Uno Code:

```
const int segmentPins[] = {2, 3, 4, 5, 6, 7, 8}; // a to g

const byte digits[10][7] = {
  {1,1,1,1,1,1,0}, // 0
  {0,1,1,0,0,0,0}, // 1
  {1,1,0,1,1,0,1}, // 2
  {1,1,1,1,0,0,1}, // 3
  {0,1,1,0,0,1,1}, // 4
  {1,0,1,1,0,1,1}, // 5
  {1,0,1,1,1,1,1}, // 6
  {1,1,1,0,0,0,0}, // 7
  {1,1,1,1,1,1,1}, // 8
  {1,1,1,1,0,1,1}  // 9
};

void setup() {
  for (int i = 0; i < 7; i++) {
    pinMode(segmentPins[i], OUTPUT);
  }
}

void loop() {
  for (int i = 0; i < 10; i++) {
    for (int seg = 0; seg < 7; seg++) {
      digitalWrite(segmentPins[seg], digits[i][seg]);
    }
    delay(1000);
```

```
  }
}
```

Diagram.json:

```
{
  "version": 1,
  "author": "Srinidhi",
  "editor": "wokwi",
  "parts": [
    { "type": "wokwi-arduino-uno", "id": "uno", "top": 0.6, "left": -0.6, "attrs": {} },
    {
      "type": "wokwi-7segment",
      "id": "sevseg1",
      "top": -52.62,
      "left": -110.12,
      "attrs": { "common": "cathode" }
    }
  ],
  "connections": [
    [ "sevseg1:B", "uno:3", "green", [ "v-37.56", "h278.4" ] ],
    [ "sevseg1:A", "uno:2", "green", [ "v-18.36", "h307.2" ] ],
    [ "sevseg1:C", "uno:4", "green", [ "v-67.2", "h278.4" ] ],
    [ "sevseg1:D", "uno:5", "green", [ "v-57.6", "h288" ] ],
    [ "sevseg1:E", "uno:6", "green", [ "v-48", "h288" ] ],
    [ "sevseg1:F", "uno:7", "green", [ "v-66.36", "h259.2" ] ],
    [ "sevseg1:G", "uno:8", "green", [ "v-56.76", "h268.8" ] ],
    [ "sevseg1:COM.1", "uno:GND.1", "green", [ "h0", "v-38.4", "h201.6" ] ],
    [ "sevseg1:COM.2", "uno:GND.2", "green", [ "h0", "v-47.16", "h76.8", "v316.8",
"h182.4" ] ]
  ],
  "dependencies": {}
}
```