

## ASSIGNMENT-3

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### *PROGRAM FOR TRAFFIC LIGHT*

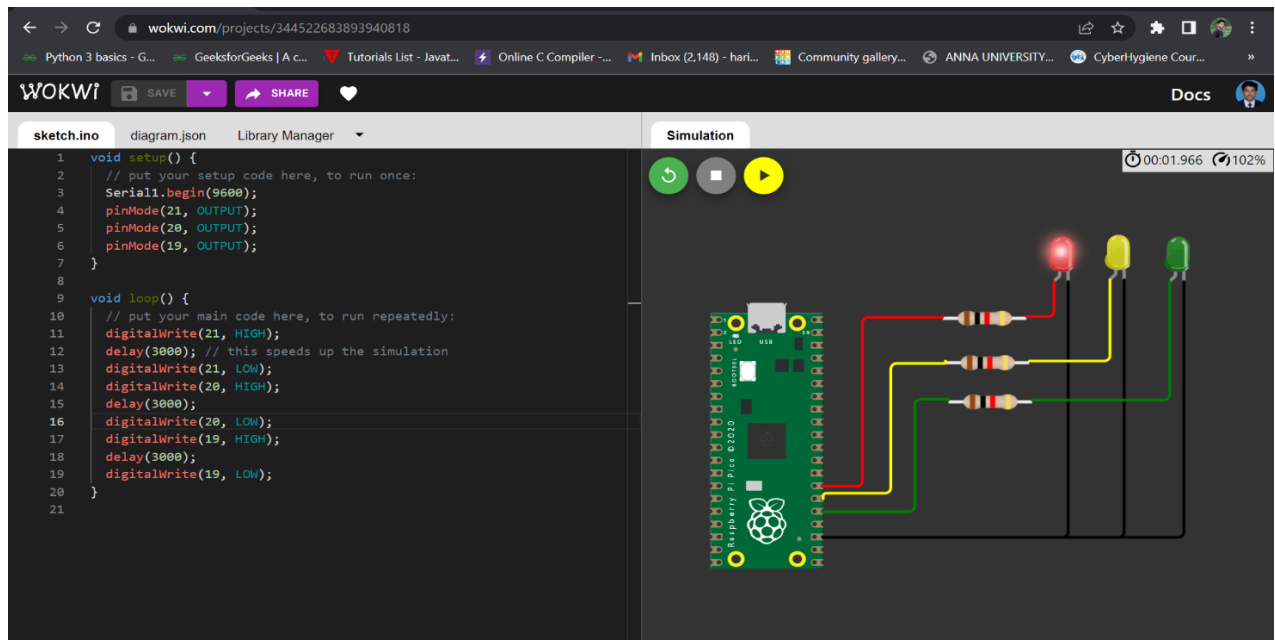
Python Code:

```
void setup() {  
  // put your setup code here, to run once:  
  Serial1.begin(9600);  
  pinMode(21, OUTPUT);  
  pinMode(20, OUTPUT);  
  pinMode(19, OUTPUT);  
}  
  
void loop() {  
  // put your main code here, to run repeatedly:  
  digitalWrite(21, HIGH);  
  delay(3000); // this speeds up the simulation  
  digitalWrite(21, LOW);  
  digitalWrite(20, HIGH);  
  delay(3000);  
  digitalWrite(20, LOW);  
  digitalWrite(19, HIGH);  
  delay(3000);  
  digitalWrite(19, LOW);  
}
```

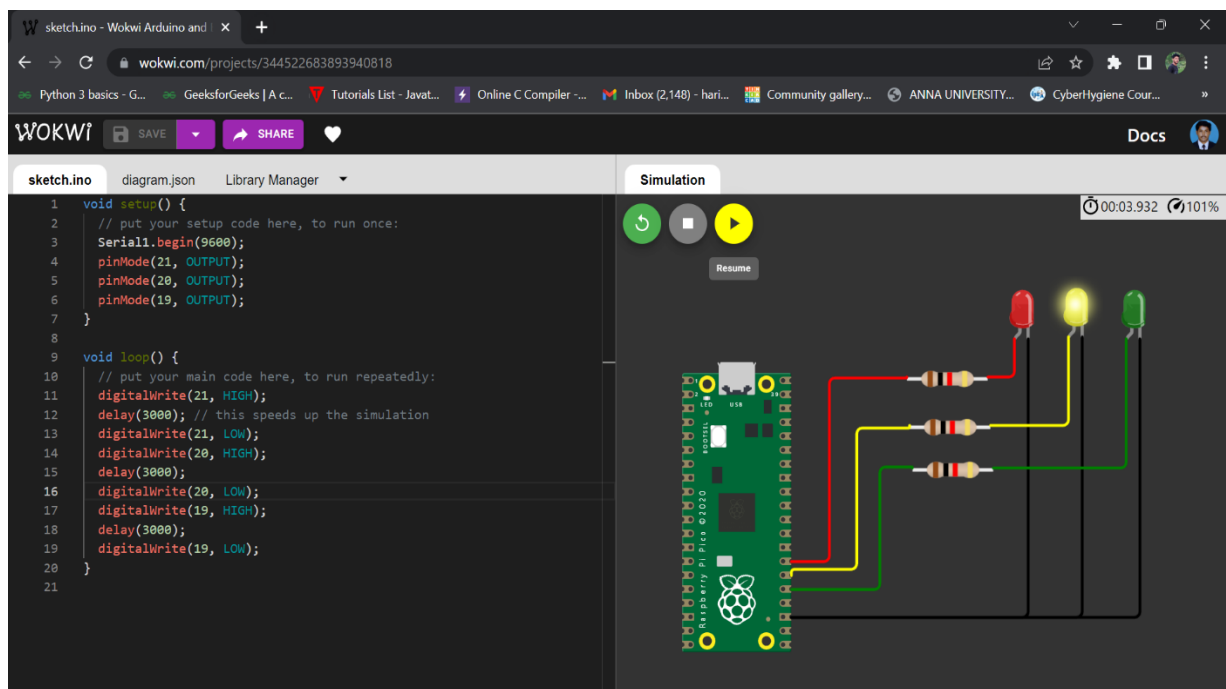
## OUTPUT:

### Traffic Lights For Raspberry Pi

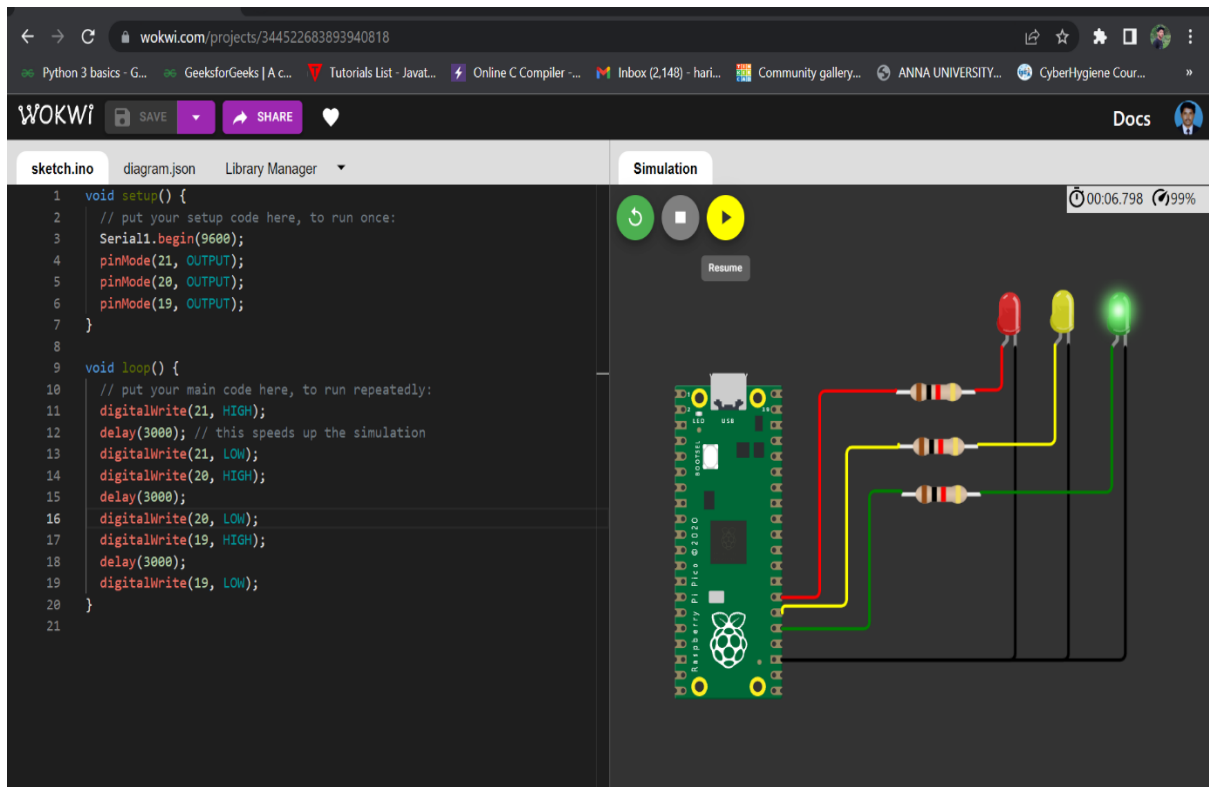
#### Blinking Red Light:



#### Blinking Yellow Light:



#### Blinking Green Light:



## BLINKING LED:

### PROGRAM FOR BLINKING LED:

#### Python code:

```
void setup() {
  // put your setup code here, to run once:
  Serial.begin(9600);
  pinMode(22, OUTPUT);
}

void loop() {
  // put your main code here, to run repeatedly:
  digitalWrite(22, HIGH);
  Serial.println("LED ON");
  delay(2000);
  digitalWrite(22, LOW);
  Serial.println("LED OFF");
  delay(2000);
}
```

#### Output:

#### Blinking LED For Raspberry pi:

WOKWI

Python 3 basics - G... GeeksforGeeks | A c... Tutorials List - Javat... Online C Compiler -... Inbox (2,148) - hari... Community gallery... ANNA UNIVERSITY... CyberHygiene Cour...

SAVE SHARE

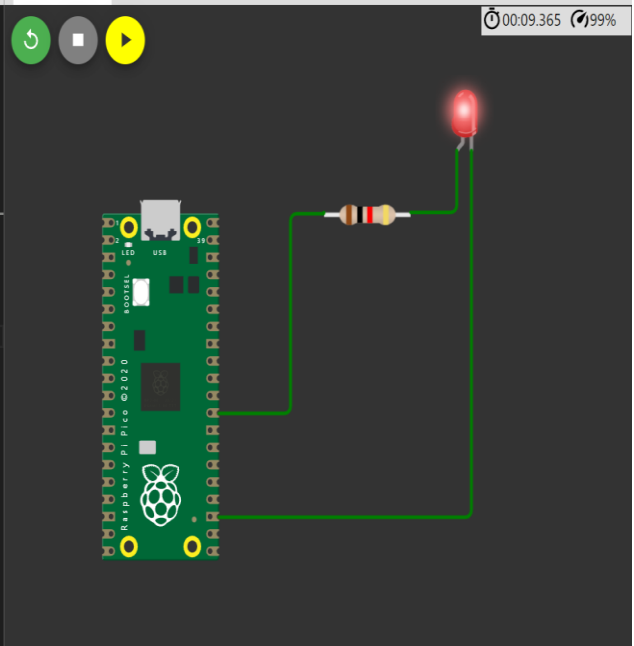
Docs

sketch.ino diagram.json Library Manager

```
1 void setup() {
2   // put your setup code here, to run once:
3   Serial.begin(9600);
4   pinMode(22, OUTPUT);
5 }
6
7 void loop() {
8   // put your main code here, to run repeatedly:
9   digitalWrite(22, HIGH);
10  Serial.println("LED ON");
11  delay(2000);
12  digitalWrite(22, LOW);
13  Serial.println("LED OFF");
14  delay(2000);
15 }
16
```

Simulation

00:09.365 99%



The image shows a web-based IDE for Wokwi, a platform for simulating electronics projects. The interface is split into two main sections. On the left, there is a code editor for 'sketch.ino' containing C++ code for a Raspberry Pi Pico. The code defines a 'setup' function to initialize a serial connection at 9600 baud and set pin 22 as an output. The 'loop' function turns the LED on (HIGH) for 2 seconds, prints 'LED ON' to the serial monitor, turns it off (LOW) for 2 seconds, and prints 'LED OFF'. On the right, there is a 'Simulation' window showing a 3D model of a Raspberry Pi Pico board. A red LED is connected to pin 22. The LED is currently lit, indicating the simulation is running and the code is executing. Above the simulation window are control buttons for running, pausing, and stopping the simulation, along with a timer showing 00:09.365 and a 99% completion status.