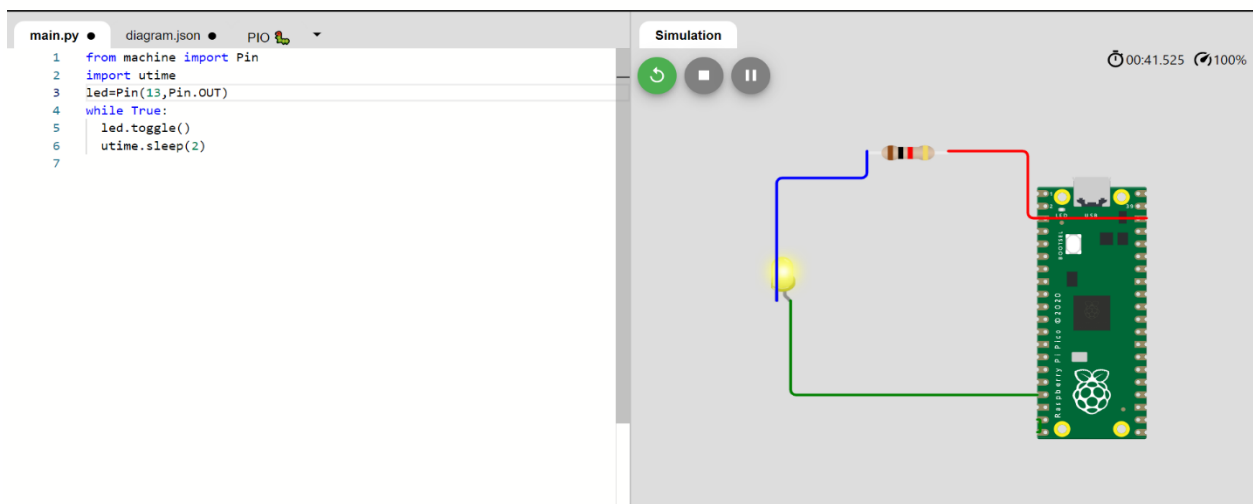


ASSIGNMENT-3

1.LED

```
from machine import Pin
import utime
led=Pin(13,Pin.OUT)
while True:
    led.toggle()
    utime.sleep(1)
```

OUTPUT:

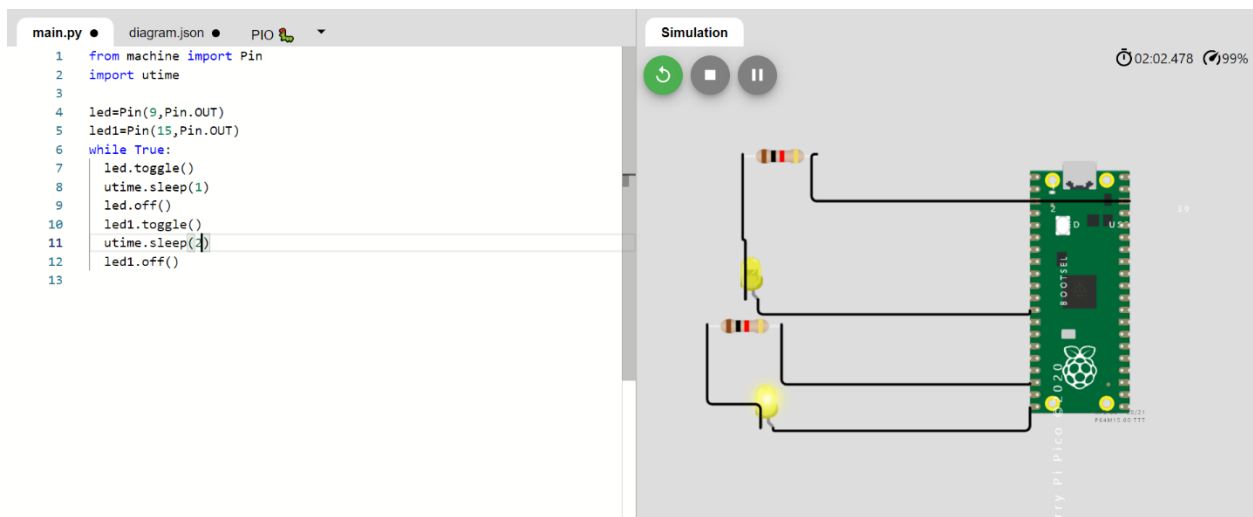
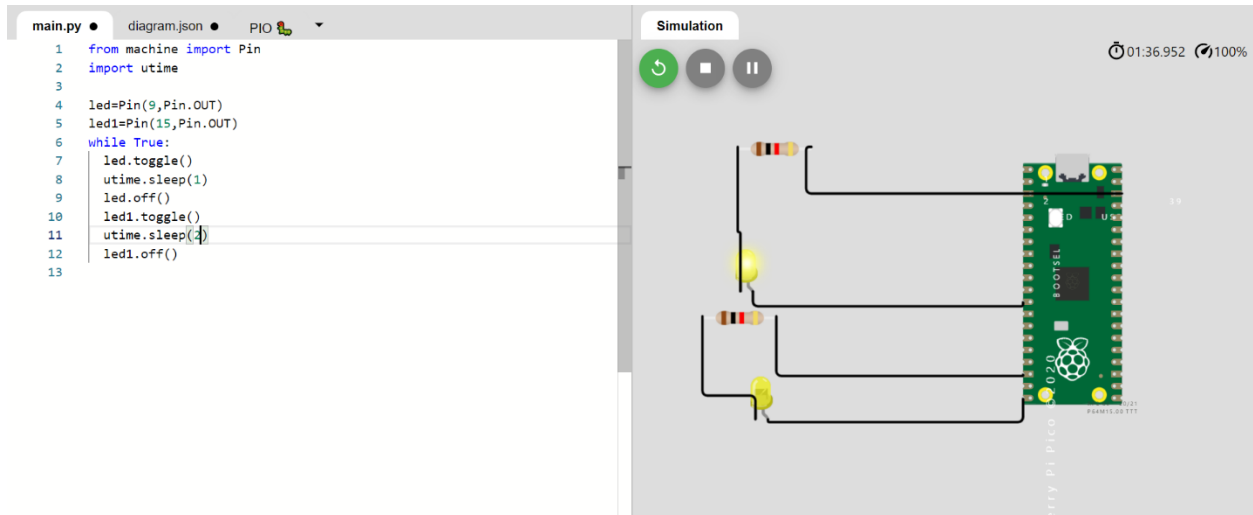


2.LEB BLINKING:

Main.py

```
from machine import Pin
import utime
led=Pin(9,Pin.OUT)
led1=Pin(15,Pin.OUT)
while True:
    led.toggle()
    utime.sleep(3)
    led.off()
    led1.toggle()
    utime.sleep(3)
    led1.off()
```

OUTPUT:



Traffic Light

Main.py:

```
from machine import Pin
import utime
led=Pin(3,Pin.OUT)
led1=Pin(9,Pin.OUT)
led2=Pin(14,Pin.OUT)
while True:
    led.toggle()
    utime.sleep(3)
    led.off()
```


```
led1.toggle()
utime.sleep(3)
led1.off()
led2.toggle()
utime.sleep(3)
led1.off()
```

diagram.json:

```
{
  "version": 1,
  "author": "Kaneeshka Shanmugam",
  "editor": "wokwi",
  "parts": [
    {
      "type": "wokwi-pi-pico",
      "id": "pico",
      "top": 0,
      "left": 0,
      "attrs": { "env": "micropython-20220117-v1.18" }
    },
    {
      "type": "wokwi-led",
      "id": "led2",
      "top": 73.18,
      "left": -133.31,
      "attrs": { "color": "yellow" }
    },
    {
      "type": "wokwi-led",
      "id": "led3",
      "top": 143.51,
      "left": -134.98,
      "attrs": { "color": "limegreen" }
    },
    {
      "type": "wokwi-resistor",
      "id": "r1",
      "top": -24.49,
      "left": -129.65,
      "attrs": { "value": "1000" }
    },
    {
      "type": "wokwi-resistor",
      "id": "r2",
      "top": 57.85,
```


```
    "left": -139.98,  
    "attrs": { "value": "1000" }  
  },  
  {  
    "type": "wokwi-resistor",  
    "id": "r3",  
    "top": 126.18,  
    "left": -145.65,  
    "attrs": { "value": "1000" }  
  },  
  {  
    "type": "wokwi-led",  
    "id": "led1",  
    "top": 4.18,  
    "left": -126.98,  
    "attrs": { "color": "red" }  
  }  
],  
"connections": [  
  [ "undefined:undefined", "undefined:undefined", null, null ],  
  [ "undefined:undefined", "undefined:undefined", null, null ],  
  [ "led1:A", "pico:GP3", "green", [ "v4.4", "h105" ] ],  
  [ "undefined:undefined", "undefined:undefined", null, null ],  
  [ "undefined:undefined", "undefined:undefined", null, null ],  
  [ "led2:A", "pico:GP9", "green", [ "v2.73", "h108" ] ],  
  [ "undefined:undefined", "undefined:undefined", null, null ],  
  [ "undefined:undefined", "undefined:undefined", null, null ],  
  [ "led3:A", "pico:GP14", "green", [ "v-0.26", "h111" ] ]  
]  
}
```

OUTPUT:


main.py • diagram.json • PIO 

```
1 from machine import Pin
2 import utime
3 led=Pin(3,Pin.OUT)
4 led1=Pin(9,Pin.OUT)
5 led2=Pin(14,Pin.OUT)
6 while True:
7     led.toggle()
8     utime.sleep(3)
9     led.off()
10    led1.toggle()
11    utime.sleep(3)
12    led1.off()
13    led2.toggle()
14    utime.sleep(3)
15    led1.off()
16
```

Simulation

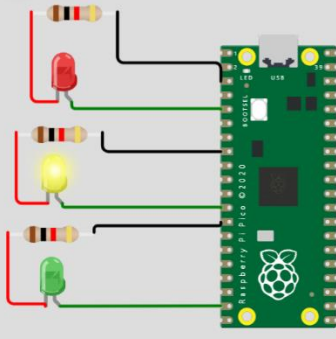


00:55.992 99%


main.py • diagram.json • PIO 

```
1 from machine import Pin
2 import utime
3 led=Pin(3,Pin.OUT)
4 led1=Pin(9,Pin.OUT)
5 led2=Pin(14,Pin.OUT)
6 while True:
7     led.toggle()
8     utime.sleep(3)
9     led.off()
10    led1.toggle()
11    utime.sleep(3)
12    led1.off()
13    led2.toggle()
14    utime.sleep(3)
15    led1.off()
16
```

Simulation




00:39.311 99%

main.py • diagram.json • PIO 

```
1 from machine import Pin
2 import utime
3 led=Pin(3,Pin.OUT)
4 led1=Pin(9,Pin.OUT)
5 led2=Pin(14,Pin.OUT)
6 while True:
7     led.toggle()
8     utime.sleep(4)
9     led.off()
10    led1.toggle()
11    utime.sleep(3)
12    led1.off()
13    led2.toggle()
14    utime.sleep(3)
15    led1.off()
16
```

Simulation



01:56.849 99%