ASSIGNMENT-3
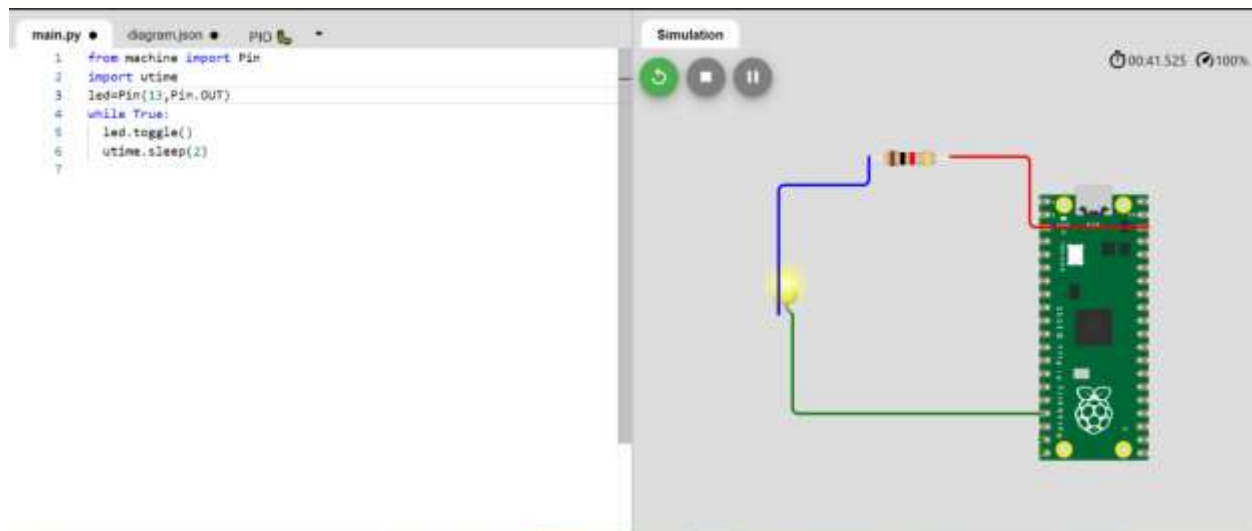
1.LED

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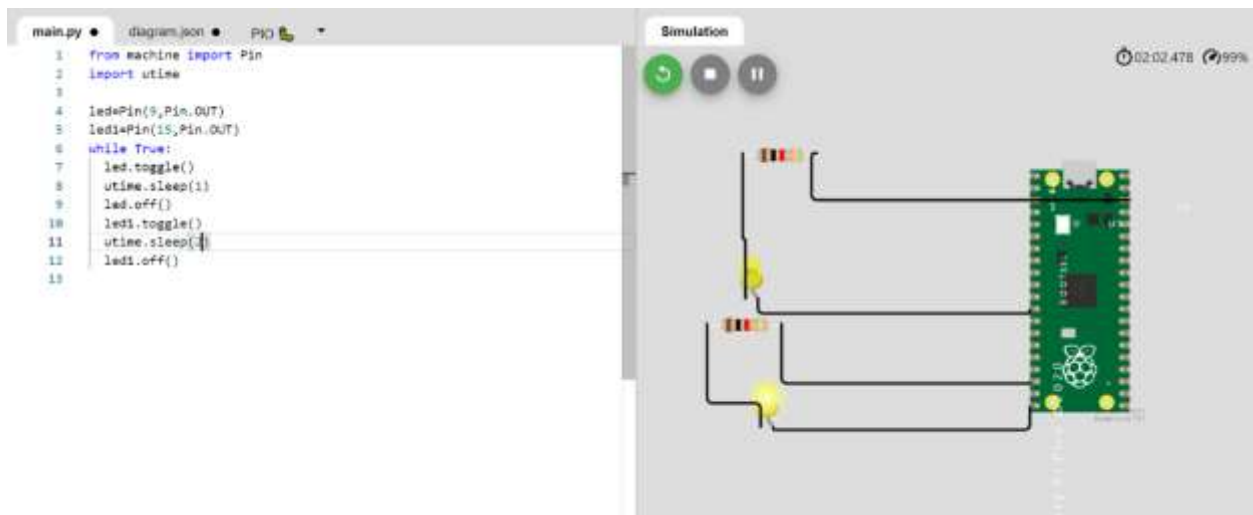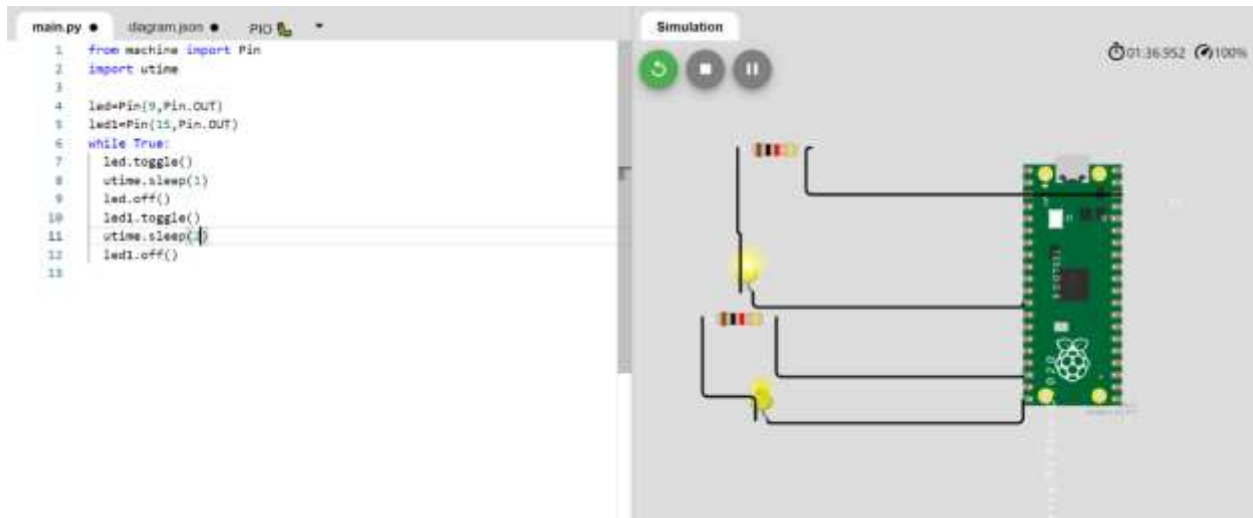
OUTPUT:

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:

```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" ] ]
  ]
}
```
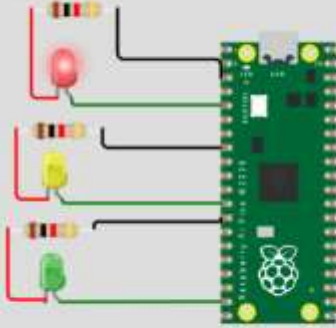
OUTPUT:

Simulation 1

```python
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()
```


00:55.992 99%

Simulation 2

```python
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()
```


00:39.311 99%

Simulation 3

```python
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()
```


01:56.849 99%

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:
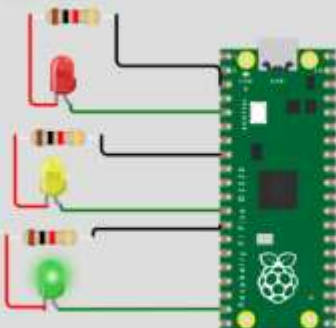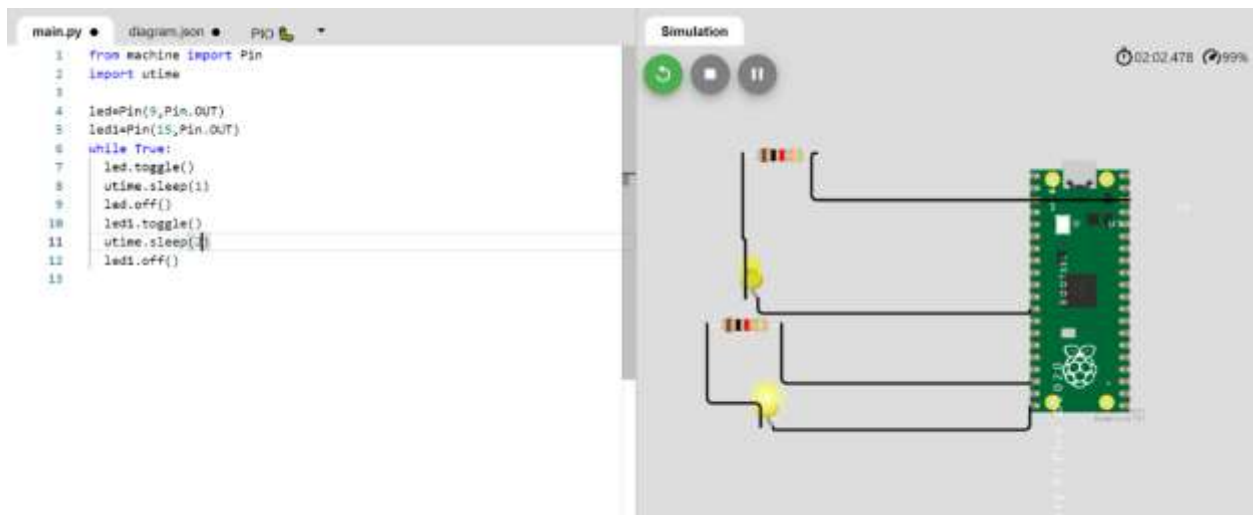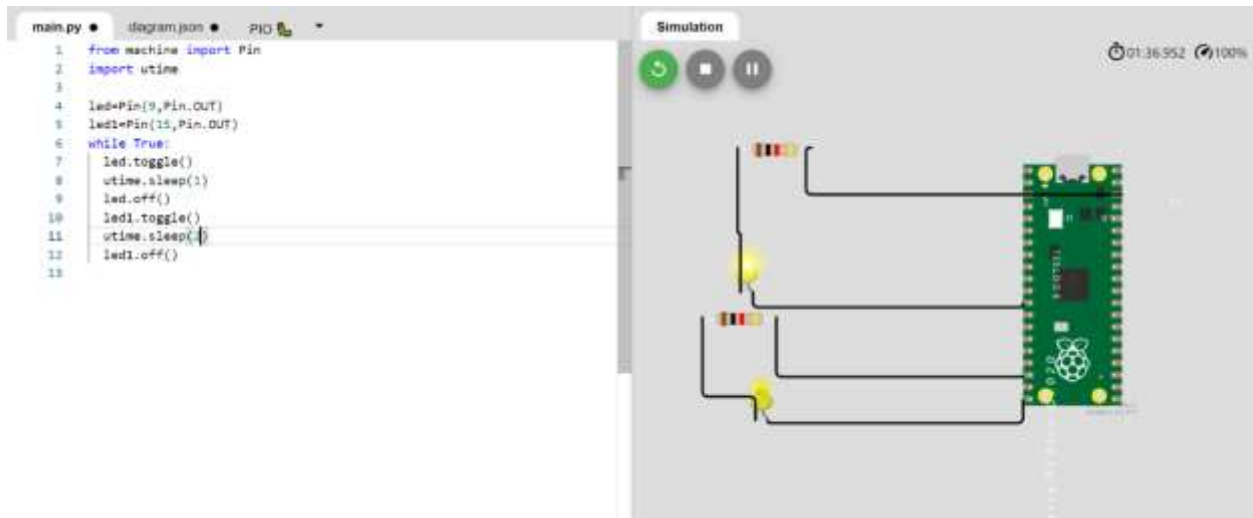
```json
{
  "version": 1,
  "author": "Kaneeshka Shanmugam",
  "editor": "wokwi",
  "parts": [
    {
      "type": "wokwi-pi-pico",
      "id": "pico",
      "top": 0,
      "left": 0,
      "attrs": { "env": "micropython-20220117-v1.18" }
    },
    {
      "type": "wokwi-led",
      "id": "led2",
      "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" ] ]
  ]
}
```
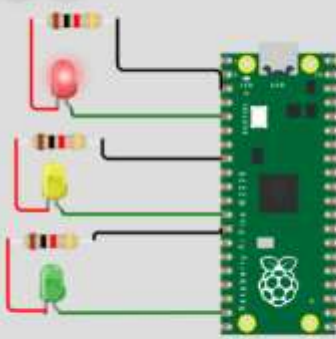
OUTPUT:

Screenshot 1

```
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
```
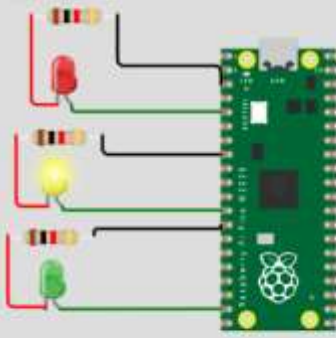
Simulation

00:55.992 99%
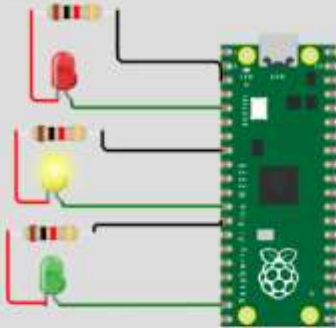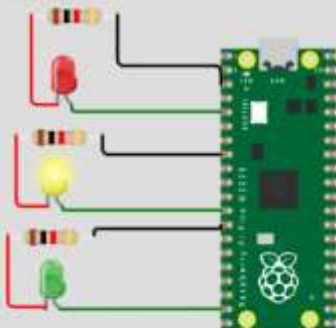
Screenshot 2

```
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
```
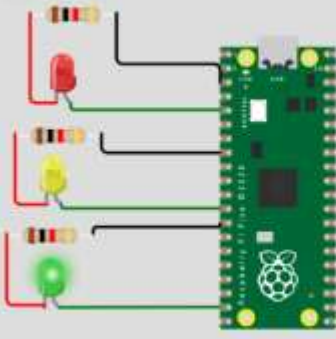
Simulation

00:39.311 99%

Screenshot 3

```
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
```
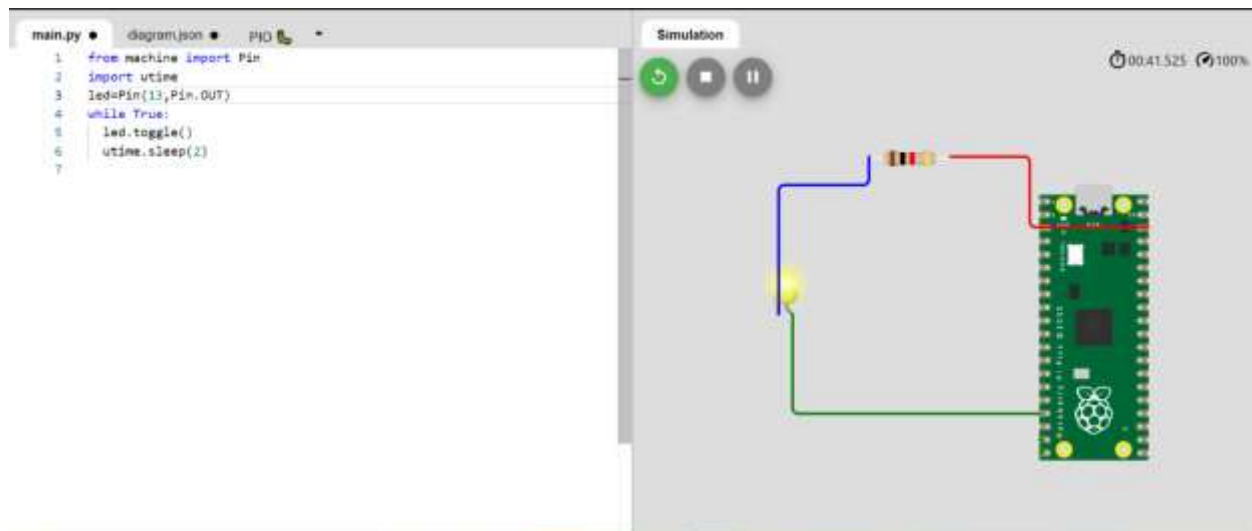
Simulation

01:56.849 99%

ASSIGNMENT-3

1.LED

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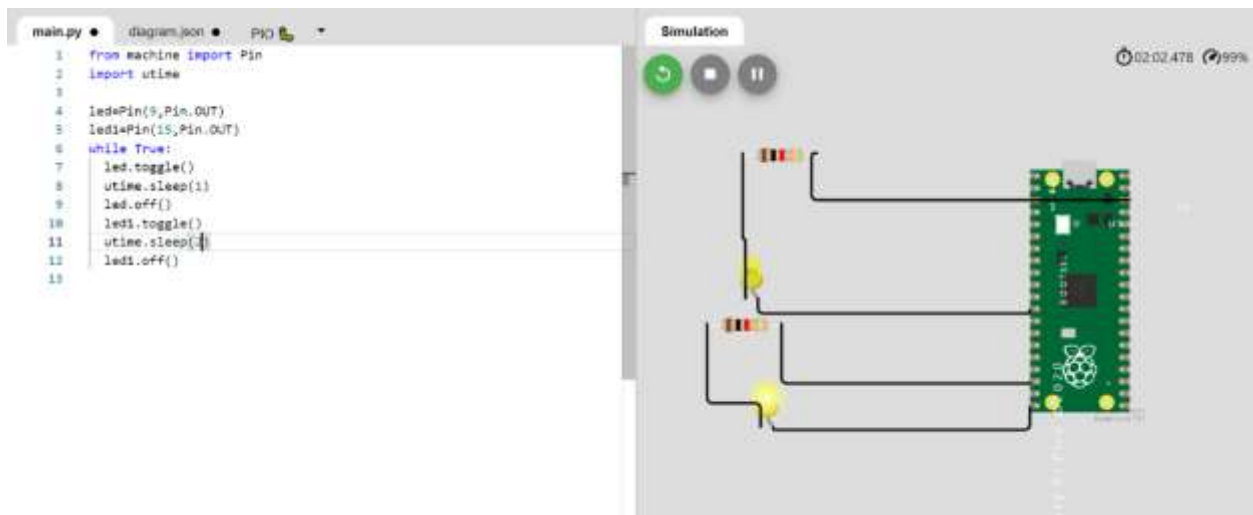
OUTPUT:

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()
```

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

diagram.json:

```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,
```

```json
    "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" ] ]
  ]
 }
```
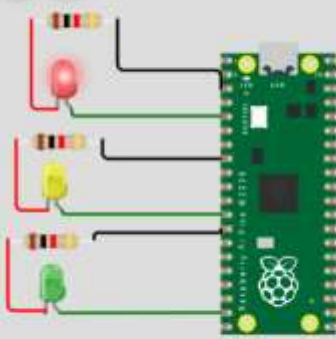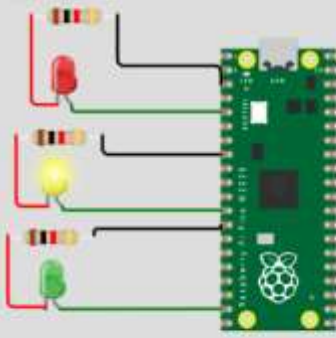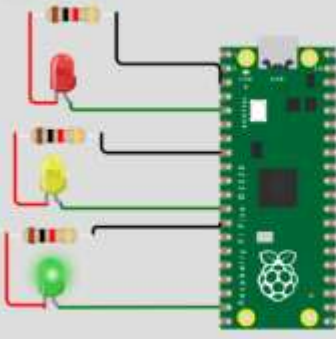
OUTPUT:

Screenshot 1

main.py ● diagram.json ● PIO ▾

```python
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()
```

00:55.992 99%

Screenshot 2

main.py ● diagram.json ● PIO ▾

```python
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()
```

00:39.311 99%

Screenshot 3

main.py ● diagram.json ● PIO ▾

```python
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()
```
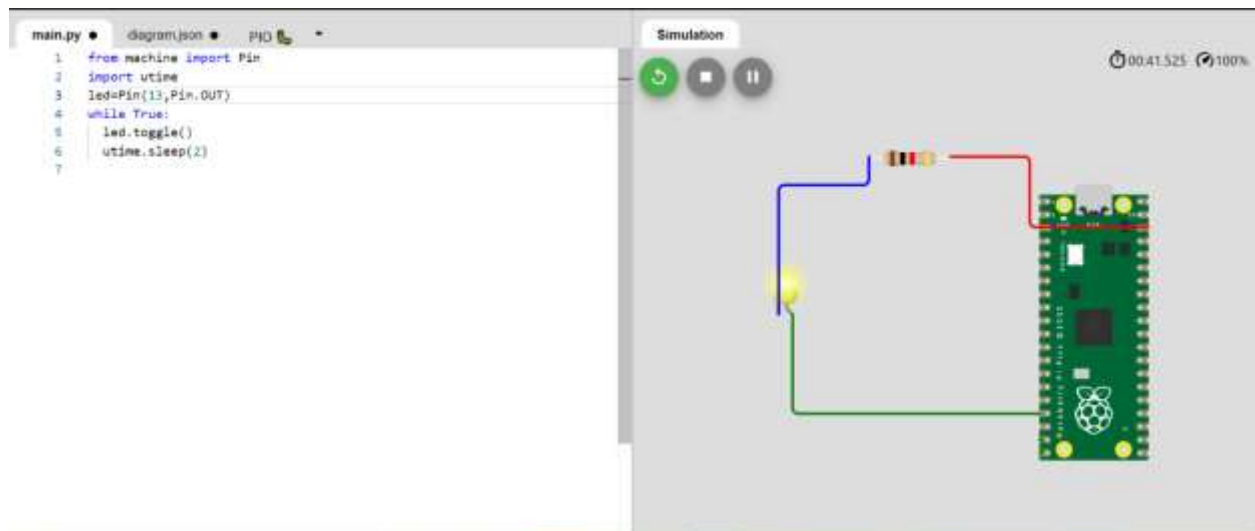
01:56.849 99%

ASSIGNMENT-3

1.LED

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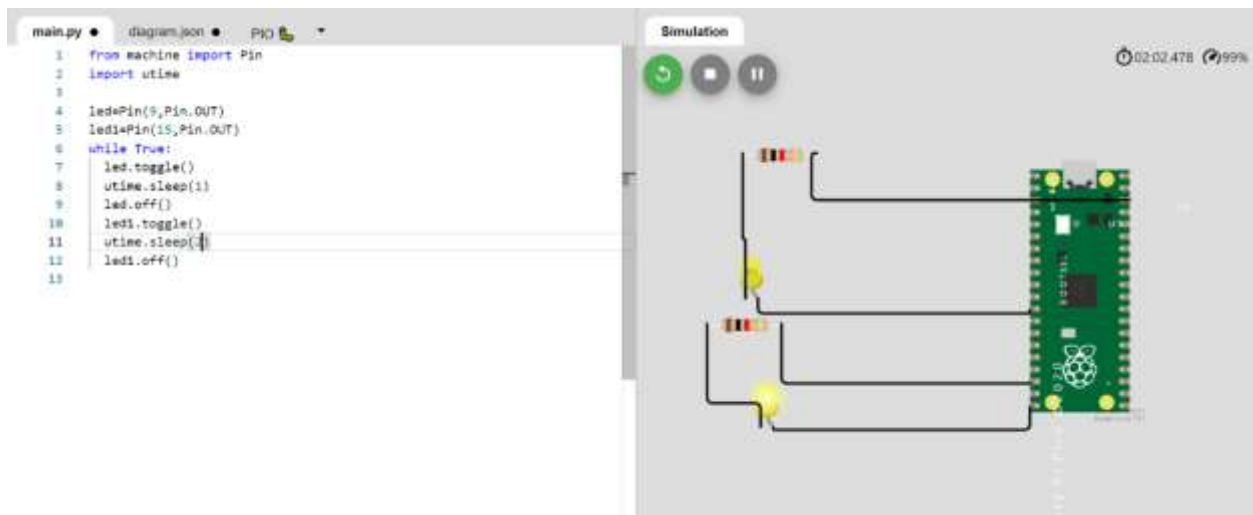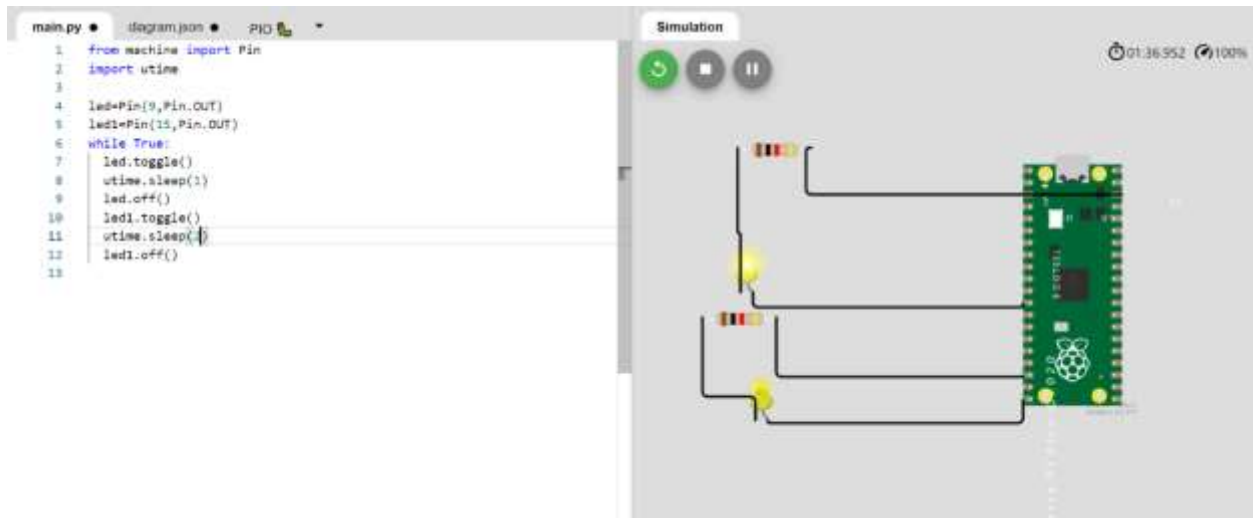
OUTPUT:

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:

```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,
```
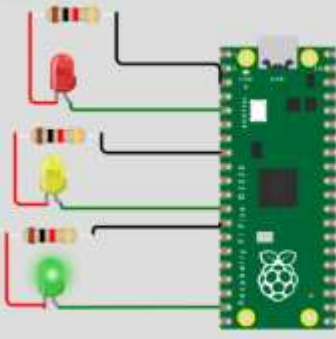
```
    "attrs": { "value": "1000" }
   },
   {
    "type": "wokwi-resistor",
    "id": "r3",
    "top": 126.18,
    "left": -145.65,
    "attrs": { "value": "1000" }
   },
   {
    "type": "wokwi-led",
    "id": "led1",
    "top": 4.18,
    "left": -126.98,
    "attrs": { "color": "red" }
   }
  ],
  "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" ] ]
  ]
}
```
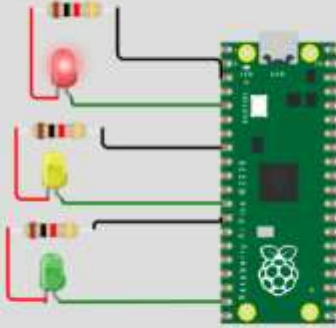
OUTPUT:

```python
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()
```



```python
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()
```



```python
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()
```