

NAME: DEEPADARSINI K T

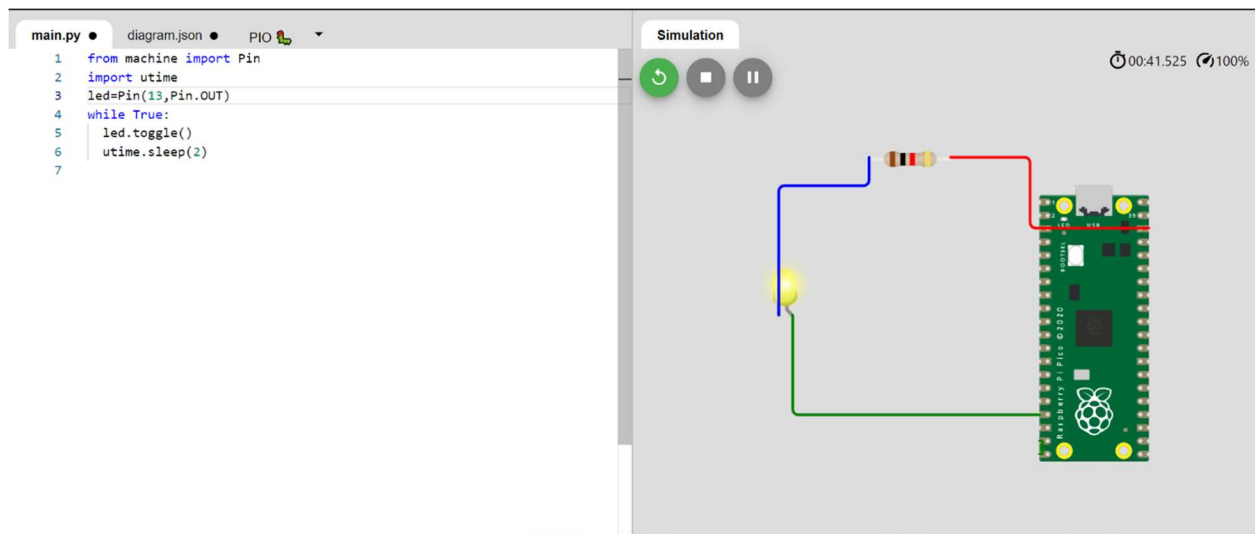
ROLLNO: 727719EUEC029

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

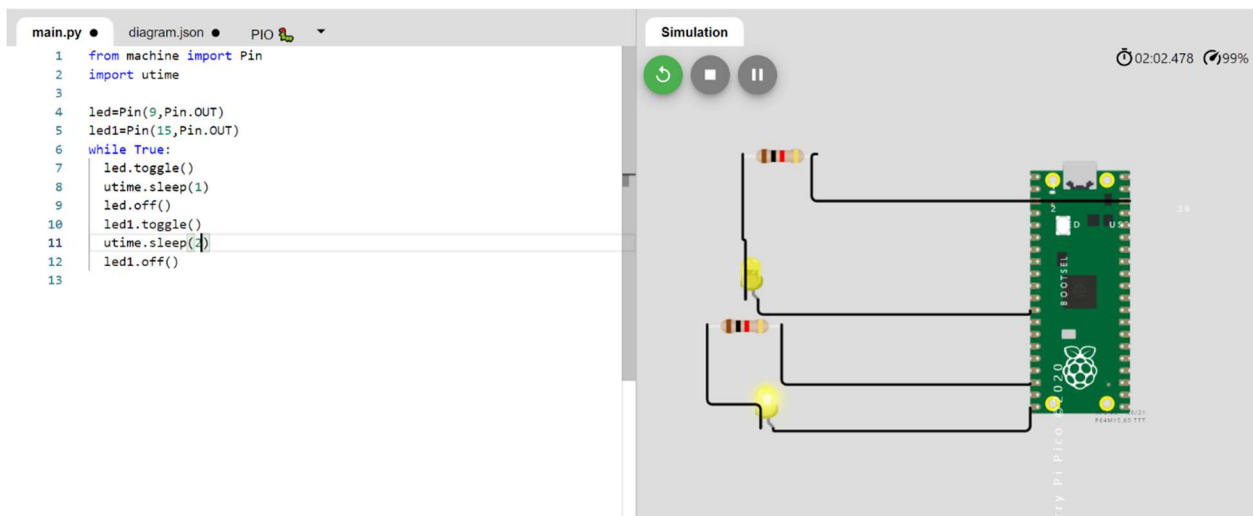
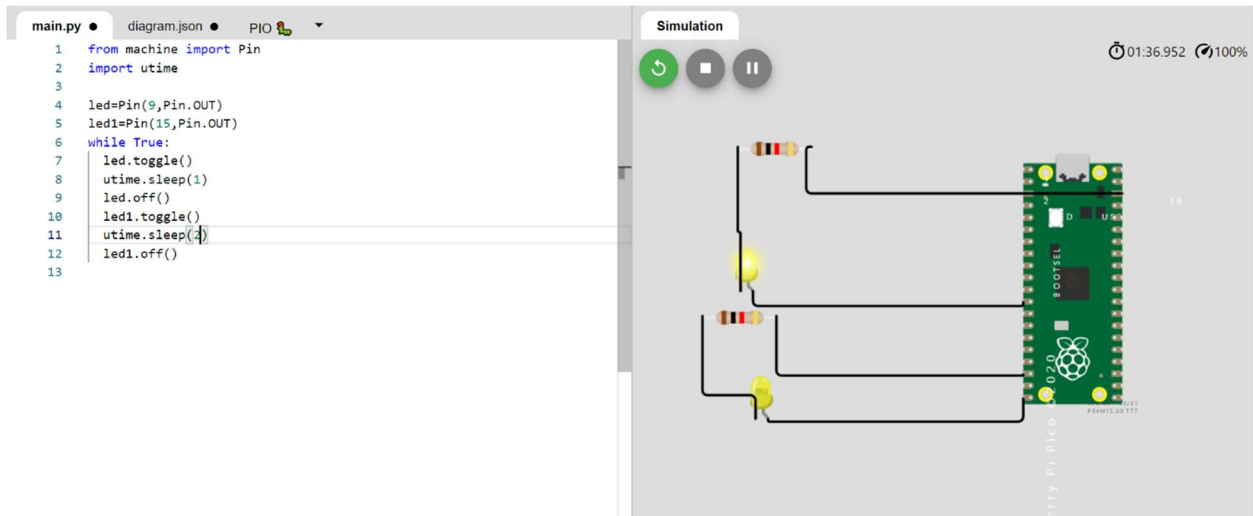
```
from machine import Pin
import utime
led=Pin(9,Pin.OUT)
led1=Pin(15,Pin.OUT)
while True:
```

```

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 :

The image displays three sequential screenshots of a Raspberry Pi Pico Q2020 simulation environment, showing the execution of a Python program that controls three LEDs (red, yellow, and green) in a sequence. Each screenshot includes a code editor on the left and a simulation window on the right.

Code (main.py):

```

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 Window:

- Top Screenshot:** The simulation is running, and the red LED is lit. The timer shows 00:55.992 and 99% completion.
- Middle Screenshot:** The simulation is running, and the yellow LED is lit. The timer shows 00:39.311 and 99% completion.
- Bottom Screenshot:** The simulation is running, and the green LED is lit. The timer shows 01:56.849 and 99% completion.

The simulation window also features a "Simulation" tab with a play button, a stop button, and a pause button. The Raspberry Pi Pico Q2020 board is shown with the three LEDs connected to pins 3, 9, and 14 respectively.