

## ASSIGNMENT -2

Name: Sharwari Daware

Shift2 Track2

Code:

Main code:

```
int flag=0;
int state;
int loop=1;

int prev;
while (1)
{
    /* USER CODE END WHILE */

    /* USER CODE BEGIN 3 */

    prev=state;
    state=HAL_GPIO_ReadPin(button_GPIO_Port, button_Pin);
    if(state==0 && prev==1){
        flag=flag+1;
        if(flag==1){

            for(int i=0;i<10;i++){
                HAL_GPIO_WritePin(led_GPIO_Port, led_Pin,
GPIO_PIN_SET);

                HAL_Delay(1000);
                HAL_GPIO_WritePin(led_GPIO_Port, led_Pin,
GPIO_PIN_RESET);

                HAL_Delay(1000);
            }

        }

        if(flag==2){

            for(int i=0;i<10;i++){

                HAL_GPIO_WritePin(led2_GPIO_Port,
led2_Pin, GPIO_PIN_SET);

                HAL_Delay(1000);
                HAL_GPIO_WritePin(led2_GPIO_Port,
led2_Pin, GPIO_PIN_RESET);

                HAL_Delay(1000);
```

```

        }

    }

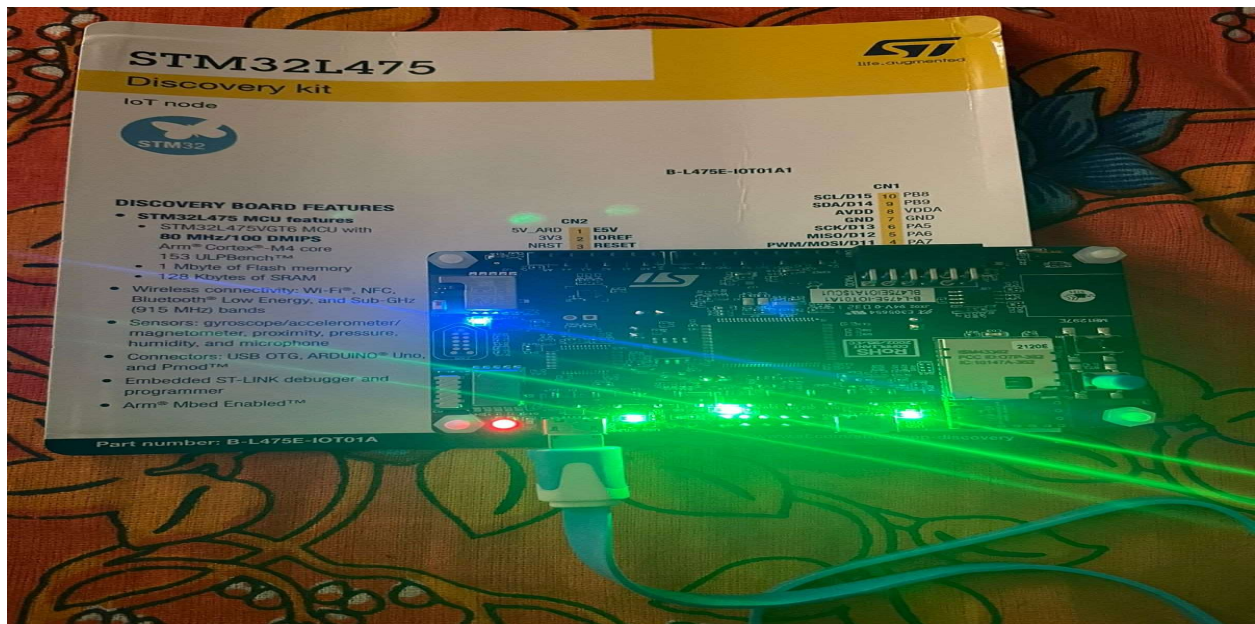
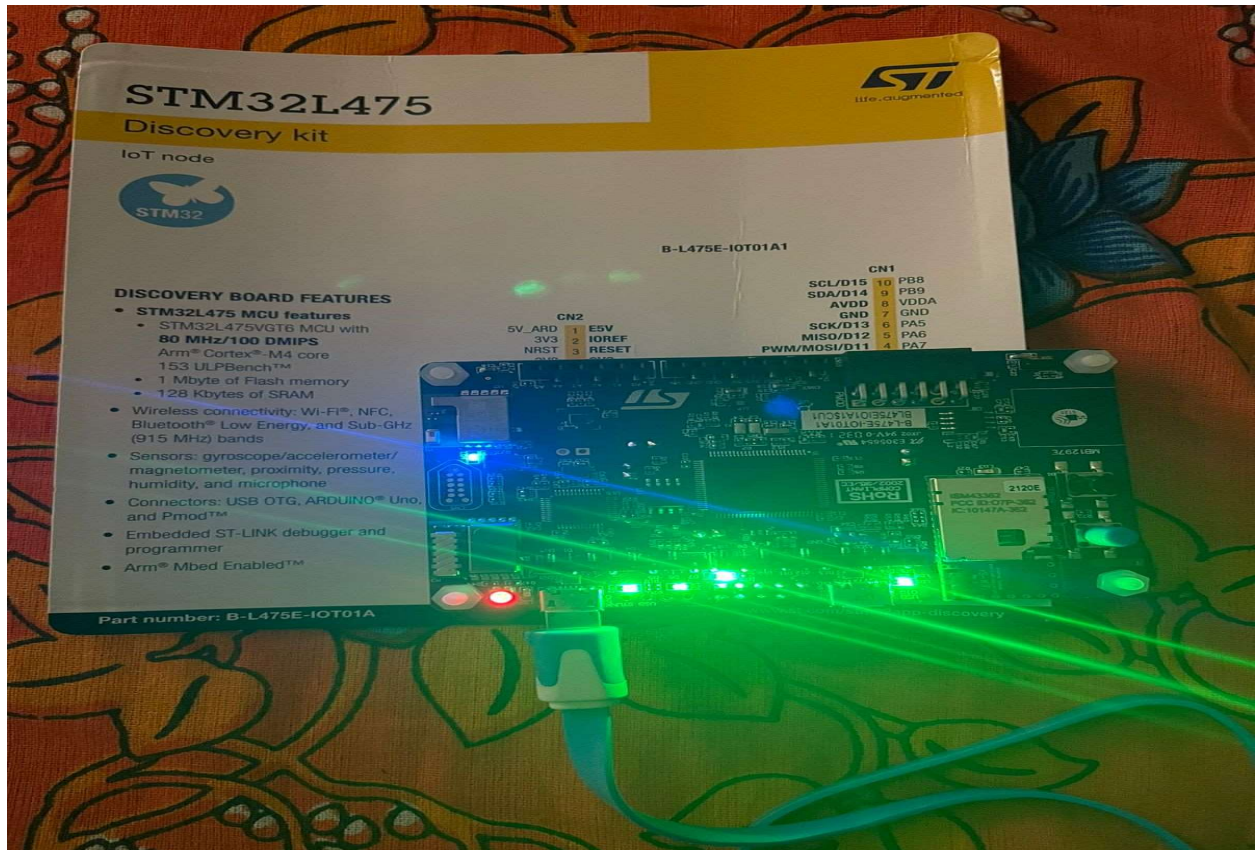
    if(flag==3){
        HAL_GPIO_WritePin(led_GPIO_Port, led_Pin,
GPIO_PIN_SET);
        HAL_GPIO_WritePin(led2_GPIO_Port, led2_Pin, GPIO_PIN_SET);
    }
    if(flag==4){
        HAL_GPIO_WritePin(led_GPIO_Port, led_Pin,
GPIO_PIN_RESET);
        HAL_GPIO_WritePin(led2_GPIO_Port, led2_Pin,
GPIO_PIN_RESET);
    }
    if(flag==5){
        flag=0;
    }

}

}

```

Output :



# STM32L475

## Discovery kit

IoT node



B-L475E-IOT01A1

### DISCOVERY BOARD FEATURES

- **STM32L475 MCU features**
  - STM32L475VGT6 MCU with **80 MHz/100 DMIPS** Arm® Cortex®-M4 core
  - 153 ULPBench™
  - 1 Mbyte of Flash memory
  - 128 Kbytes of SRAM
- Wireless connectivity: Wi-Fi®, NFC, Bluetooth® Low Energy, and Sub-GHz (915 MHz) bands
- Sensors: gyroscope/accelerometer/magnetometer, proximity, pressure, humidity, and microphone
- Connectors: USB OTG, ARDUINO® Uno and Pmod™
- Embedded ST-LINK debugger and programmer
- Arm® Mbed Enabled™

Part number: B-L475E-IOT01A



CN1

SCL/D15 10 PB8  
SDA/D14 9 PB9  
AVDD 8 VDDA  
GND 7 GND  
SCK/D13 6 PA5  
MISO/D12 5 PA6

CN2

5V\_ARD 1 ES5V  
3V3 2 IOREF  
NBST 3 RESET



www.st.com/stm32app/discovery