



## EXPERIMENT – 1.1

### BLINK LED ON nRF dev Board

#### What will you learn from this module:

Blink led using nRF development kit.

#### Requirements:

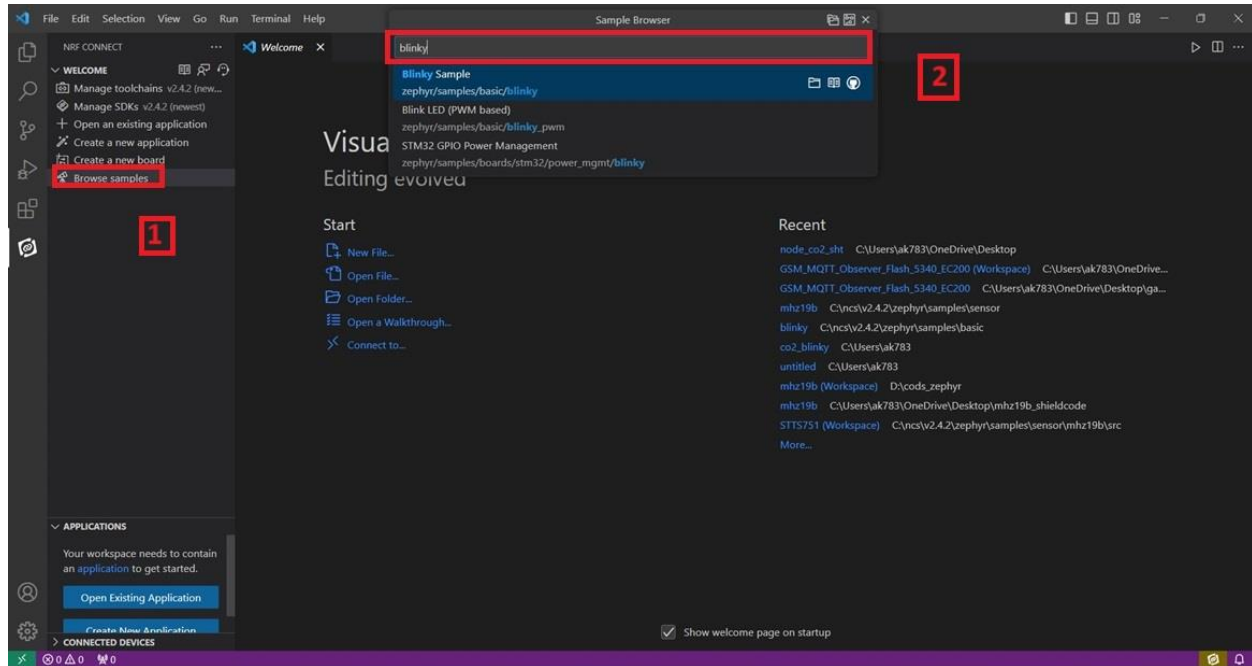
- nRF connect desktop software.
- nRF Command line tools.
- Visual studio code.
- USB cable.
- nRF 52832 board.

#### Prerequisites:

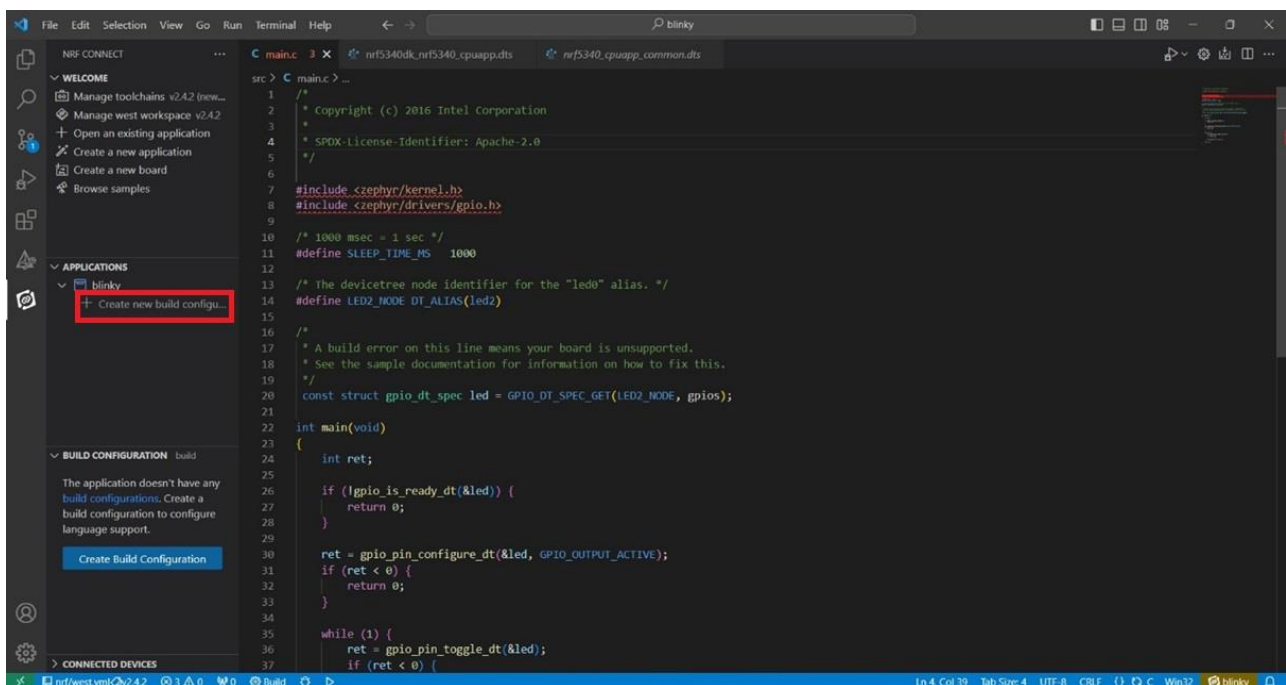
- Basic knowledge of C/C++
- Basic knowledge of communication protocol.
- Basic project setup.

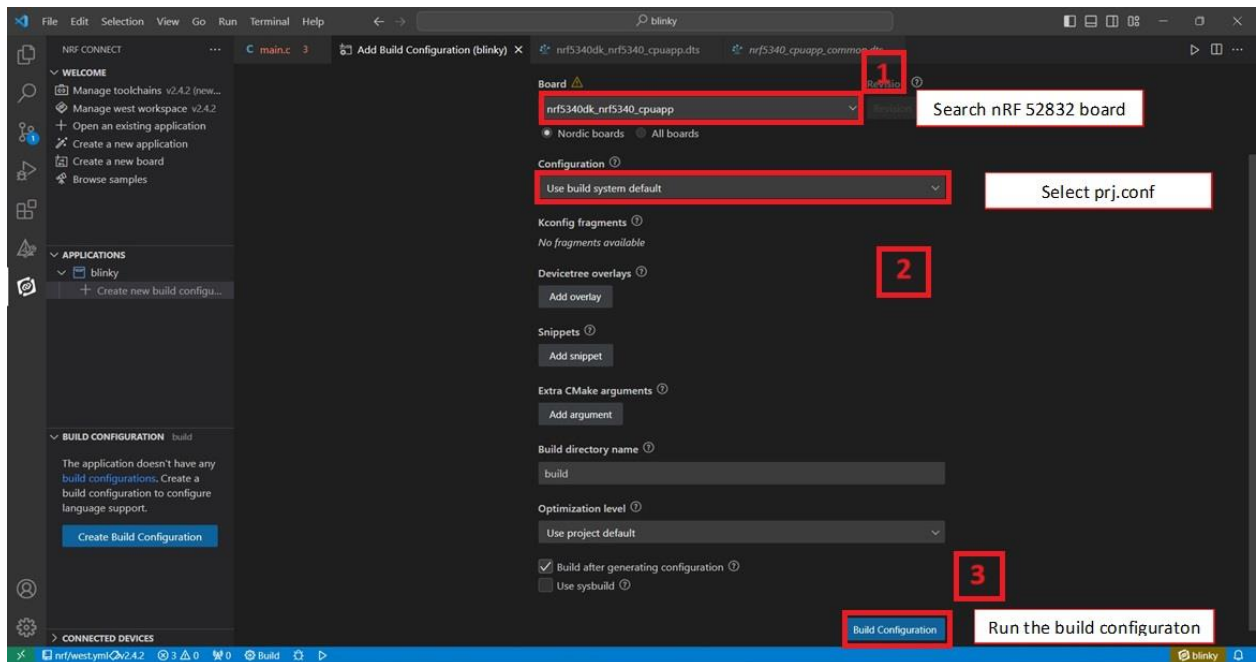
# Setup and Configuration:

- Open VS Code and go to browse sample and search BLINKY.

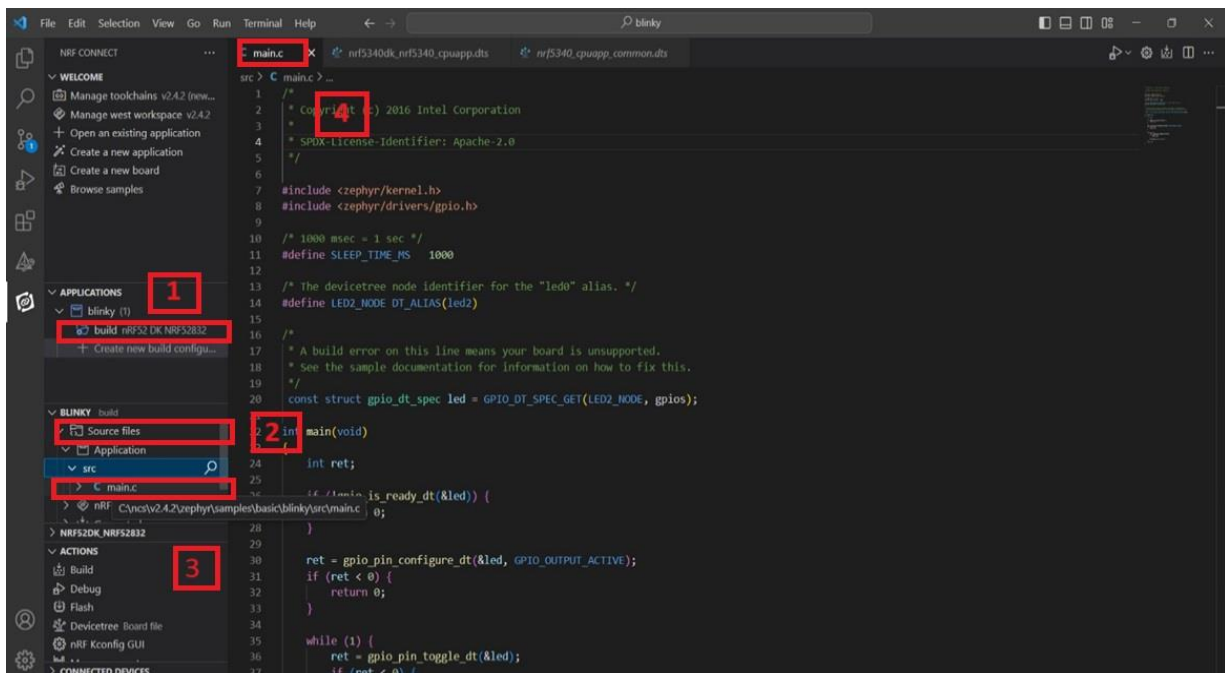


- Click on create new build configuration here you can change the board version, if you are using nRF 52832 then you can change from there for another version like nRF52833 etc.

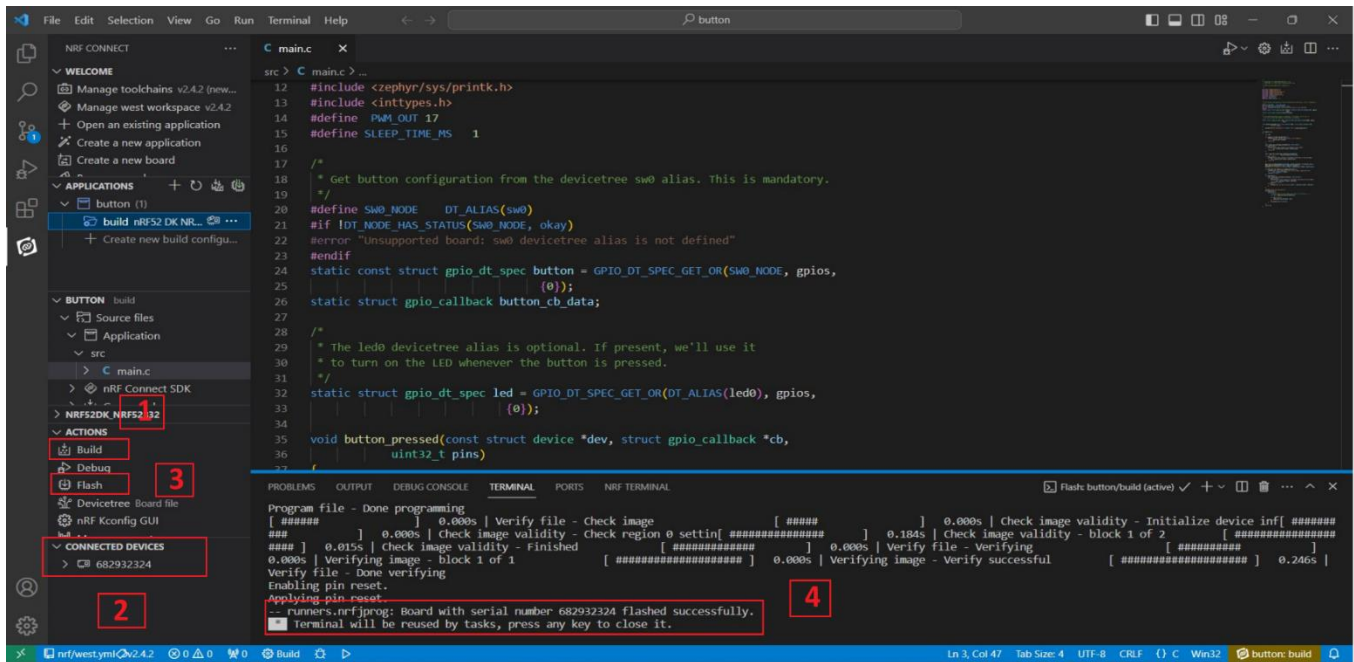




- Go to source file, inside source file > Application > src > main.c .
- click on main.c file and you will see the code will appear on your vs code.



- Run the build configuration again and check the connected device.
- Then flash the code in nRF dev kit.



## ❖ CODE

```
#include <zephyr/kernel.h>
```

```
#include <zephyr/drivers/gpio.h>
```

```
/* 1000 msec = 1 sec */
```

```
#define SLEEP_TIME_MS 1000
```

```
/* The device tree node identifier for the "led0" alias. */
```

```
#define LED2_NODE DT_ALIAS(led2)
```

```

/*
 * A build error on this line means your board is unsupported.
 * See the sample documentation for information on how to fix this.
 */
const struct gpio_dt_spec led = GPIO_DT_SPEC_GET(LED2_NODE, gpios);

int main(void)
{
    int ret;

    if (!gpio_is_ready_dt(&led)) {
        return 0;
    }

    ret = gpio_pin_configure_dt(&led, GPIO_OUTPUT_ACTIVE);

    if (ret < 0) {
        return 0;
    }

    while (1) {
        ret = gpio_pin_toggle_dt(&led);
        if (ret < 0) {
            return 0;
        }

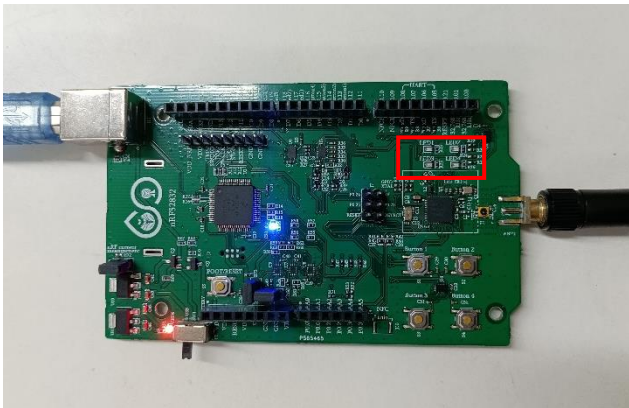
        k_msleep(SLEEP_TIME_MS);
    }

    return 0;
}

```

## ❖ OUTPUT

➤ nRF52832 board Before flash the code



➤ nRF52832 board after flash the code

