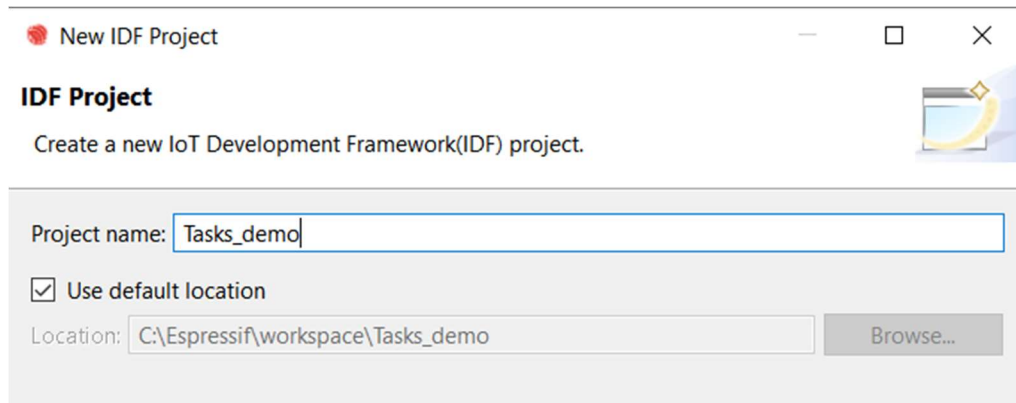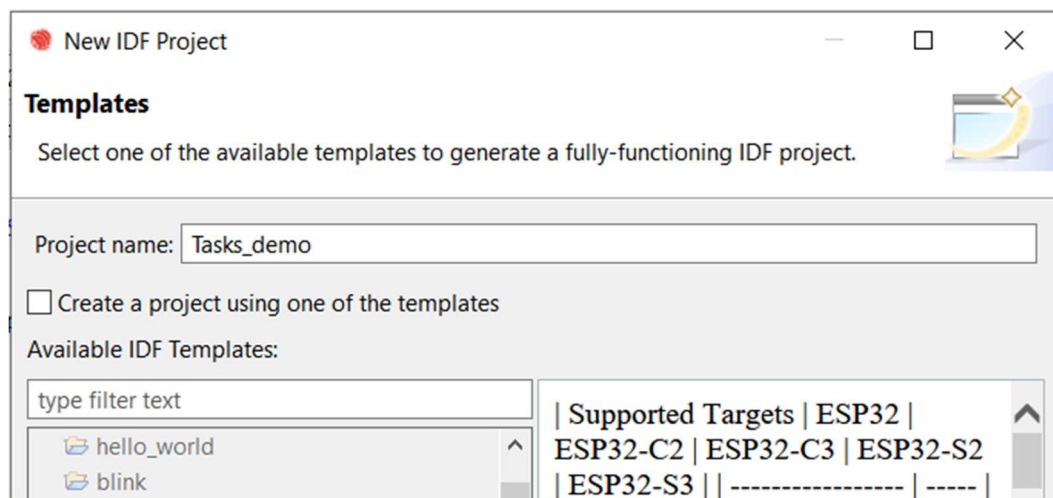# FreeRTOS tasks on the ESP32

Create ESP-IDF project in Eclipse

- Create a new Espressif IDF Project: menu *File -> New -> Espressif IDF Project.*

- Enter a project name, click *Next*

- On the next window leave *the Create a project using one of the templates* unchecked and click on finish. New project with simple application code example will be created.

- Change program code in the *main.c* file

```c
#include <stdio.h>

#include "freertos/FreeRTOS.h"
#include "freertos/task.h"

void vTask1function(void* pvParameters)
{
        uint16_t count = 0;
    for(;;)
    {
        count++;
         printf("This is Task 1\n");
```
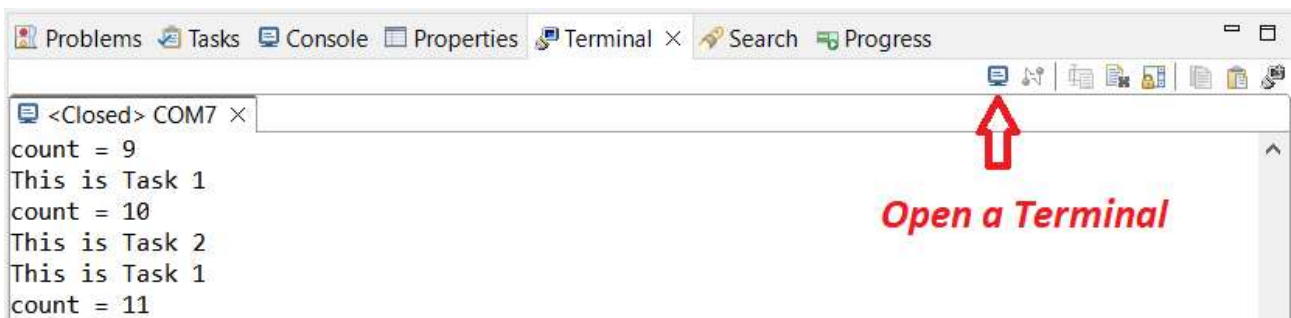
```c
        printf("count = %d\n", count);
        vTaskDelay(1000/ portTICK_PERIOD_MS);
    }
}

void vTask2function(void* pvParameters)
{
    for(;;)
    {
        printf("This is Task 2\n");
        vTaskDelay(2000/ portTICK_PERIOD_MS);
    }
}


void app_main(void)
{
    xTaskCreate(vTask1function, "TASK 1", 1024*2, NULL, 1, NULL );
    xTaskCreate(vTask2function, "TASK 2", 1024*2, NULL, 1, NULL );
}
```
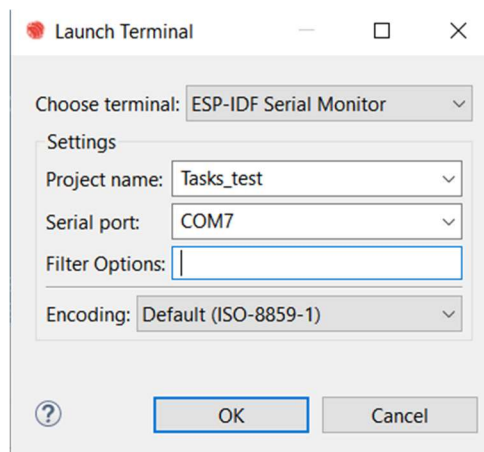
- Build the project and upload to the ESP32

- Open terminal window *Window -> Show View -> Terminal* . In the opened window, select "*Open a Terminal*" icon.

- In the dialog window select terminal type, project and port.

P.s. MCU will restart and execute program from the beginning.
Or use another 3rd party terminal client, e.g. Hercules. In this case terminal only shows messages from serial port.