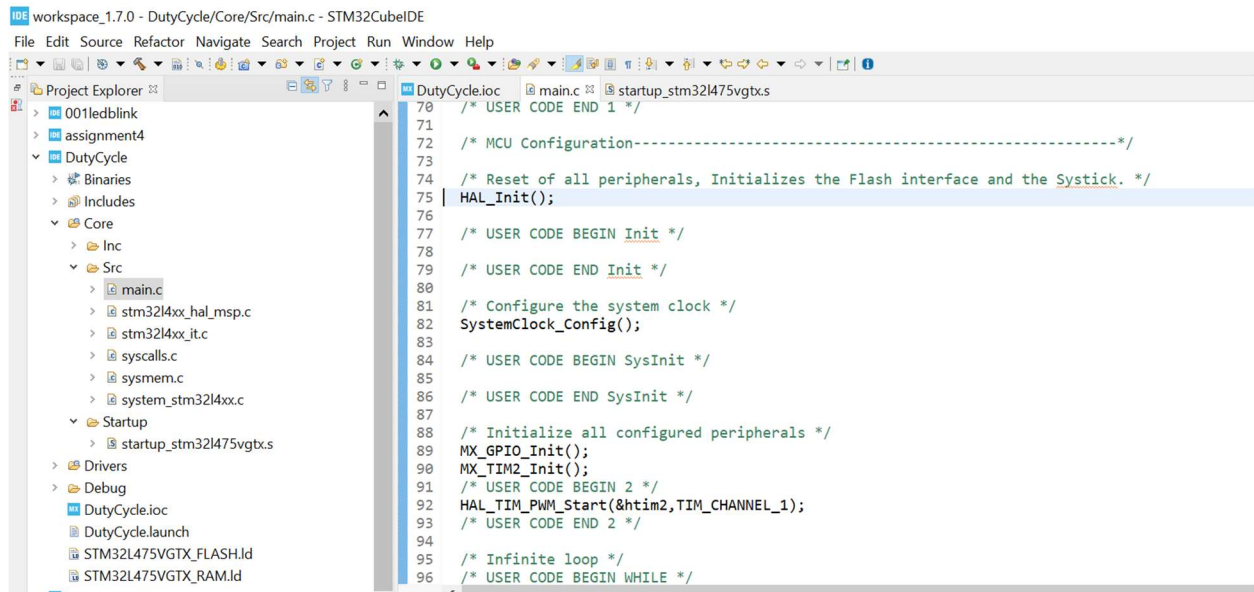


## MCU Assignment-3

Generate a duty cycle of 40% on Timer 1 (TIM1) and verify it with logic analyzer

Code:

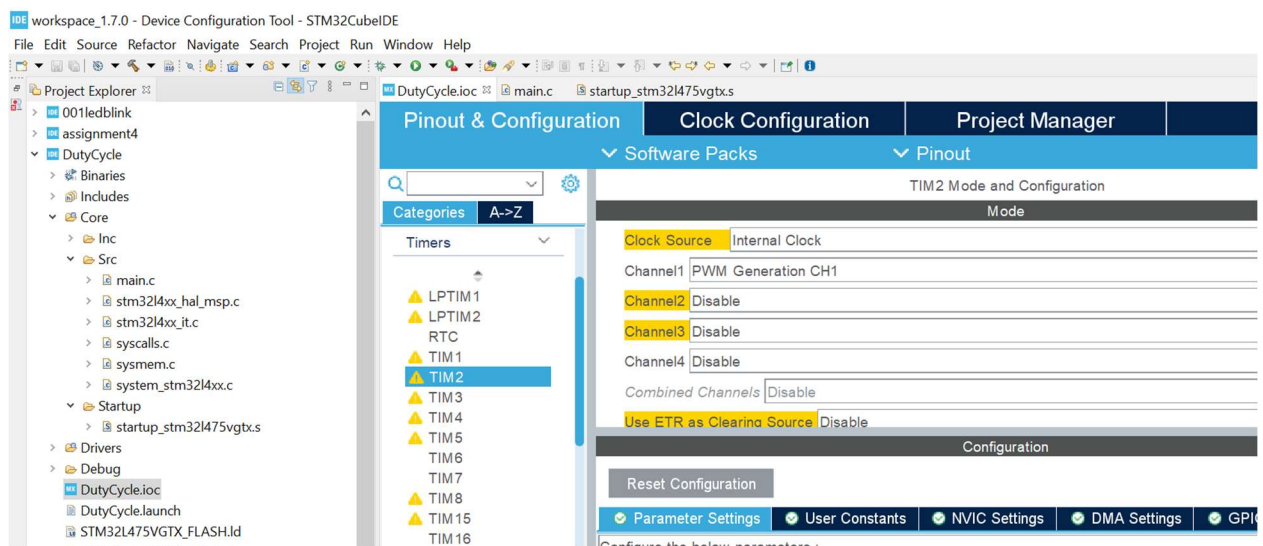


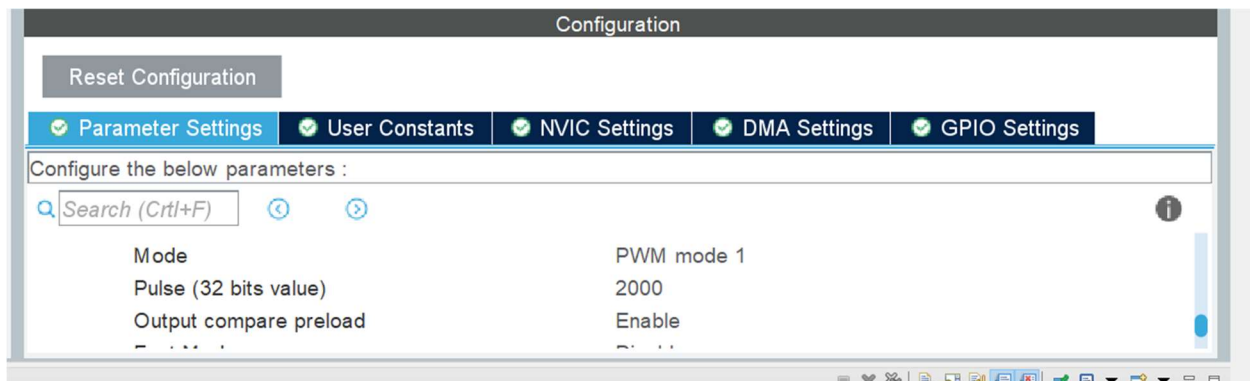
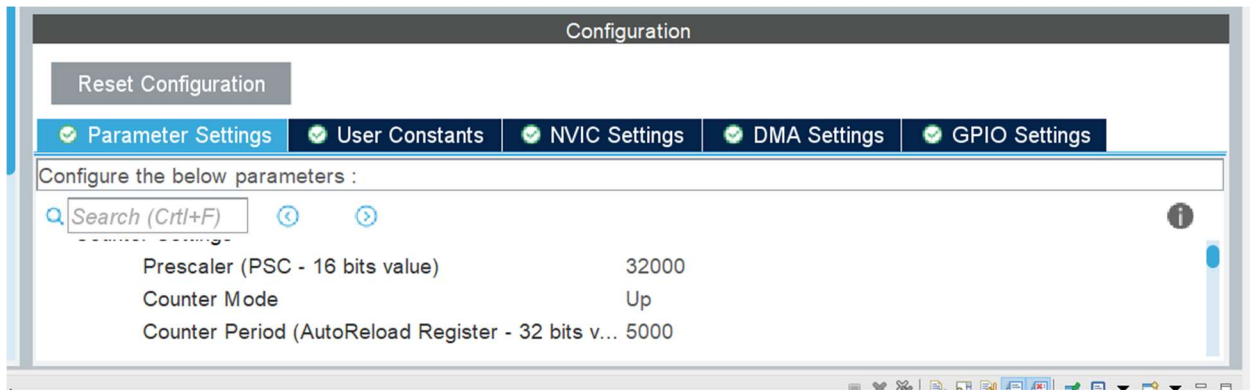
```
workspace_1.7.0 - DutyCycle/Core/Src/main.c - STM32CubeIDE
File Edit Source Refactor Navigate Search Project Run Window Help

Project Explorer
> 001ledblink
> assignment4
> DutyCycle
  > Binaries
  > Includes
  > Core
    > Inc
    > Src
      > main.c
      > stm32l4xx_hal_msp.c
      > stm32l4xx_it.c
      > syscalls.c
      > systemem.c
      > system_stm32l4xx.c
    > Startup
      > startup_stm32l475vgbx.s
  > Drivers
  > Debug
    > DutyCycle.ioc
    > DutyCycle.launch
    > STM32L475VGTX_FLASH.ld
    > STM32L475VGTX_RAM.ld

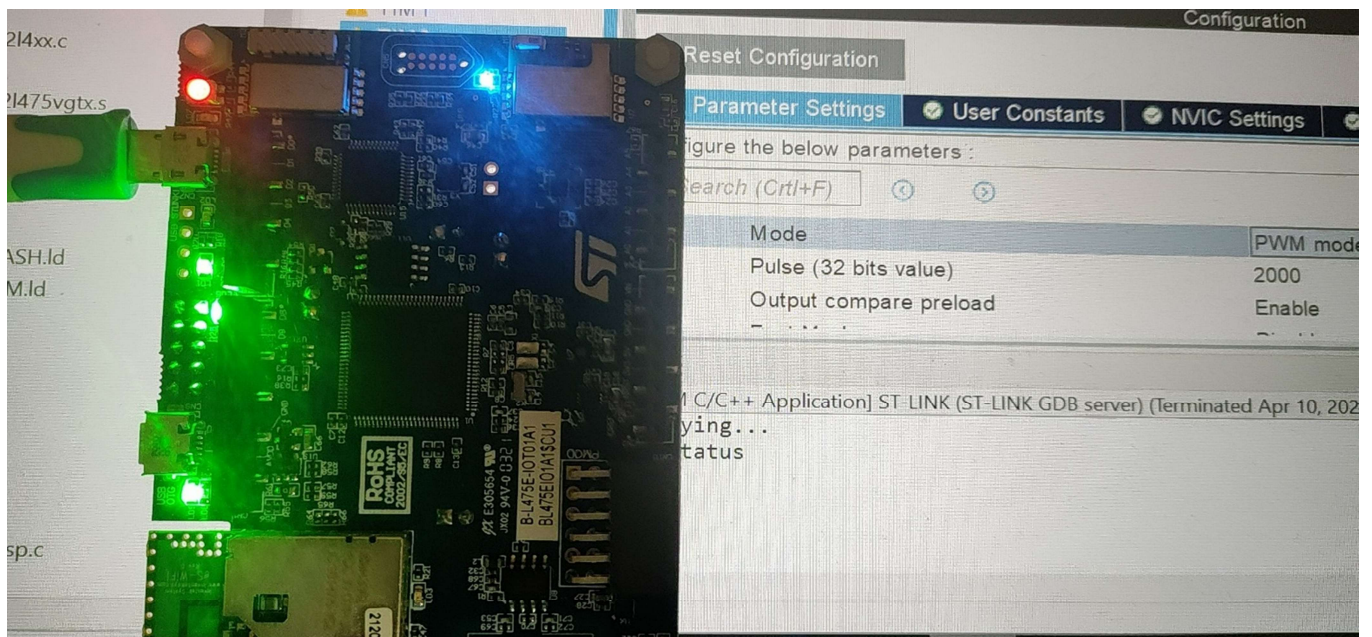
DutyCycle.ioc
main.c
startup_stm32l475vgbx.s

70 /* USER CODE END 1 */
71
72 /* MCU Configuration-----*/
73
74 /* Reset of all peripherals, Initializes the Flash interface and the Systick. */
75 HAL_Init();
76
77 /* USER CODE BEGIN Init */
78
79 /* USER CODE END Init */
80
81 /* Configure the system clock */
82 SystemClock_Config();
83
84 /* USER CODE BEGIN SysInit */
85
86 /* USER CODE END SysInit */
87
88 /* Initialize all configured peripherals */
89 MX_GPIO_Init();
90 MX_TIM2_Init();
91 /* USER CODE BEGIN 2 */
92 HAL_TIM_PWM_Start(&htim2,TIM_CHANNEL_1);
93 /* USER CODE END 2 */
94
95 /* Infinite loop */
96 /* USER CODE BEGIN WHILE */
```





**OUTPUT :**



**Video Link:**

**<https://drive.google.com/file/d/1mHA9DJJ3bQOHIGV08M4Vvw4GV6oYAh6/view?usp=sharing>**