

## Assignment 6

Task 1 and Task 2 are created with the same priority 1, with pre-emption ON.

```
void Task1(void *delay1)
{
    volatile uint16_t temp1 = *((uint16_t *)delay1);
    for(;;)
    {
        HAL_GPIO_TogglePin(GPIOD, GPIO_PIN_12 | GPIO_PIN_13);
        HAL_Delay(temp1);
    }
}

void Task2(void * delay2)
{
    volatile uint16_t temp2 = *((uint16_t *)delay2);
    for(;;)
    {
        HAL_GPIO_TogglePin(GPIOD, GPIO_PIN_14 | GPIO_PIN_15);
        HAL_Delay(temp2);
    }
}
```

Delays are passed with the help of pv Parameters.

uint16\_t is used to pass the delay in the HAL\_Delay() function.

In the main function, we see the exact numbers of delay.

```
int main(void)
{
    /* USER CODE BEGIN 1 */
    static uint16_t delay1 = 2;
    static uint16_t delay2 = 5;
    /* USER CODE END 1 */
```

In the xTaskCreate() function, the parameters are passed as the address of the delay integers.

```
xTaskCreate(Task1, "Task1", 200, &delay1, 1, NULL);
xTaskCreate(Task2, "Task2", 200, &delay2, 1, NULL);
```

The trace can be seen below.

