**Assignment-4**

**Create 3 tasks for LED blinking and prepare a report with comparison of 3 timer interrupt based LED blinking. Analysis report should have:**

**1. Screenshort for both implementations**

**2. Time taken for execution in both implementations**

**3. Memory related information in both cases.**

**Code for Rtos-**

A screenshot of a computer

Description automatically generated with medium confidence

Graphical user interface, text, application

Description automatically generated

**Configuration for RTOS:**

Graphical user interface

Description automatically generated with medium confidence

**Memory related information for Rtos tasks-**

Graphical user interface, application

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**Code for timer interrupt-**

**void** **HAL\_TIM\_PeriodElapsedCallback**(TIM\_HandleTypeDef \*htim)

{

**if**(htim->Instance==TIM2){

HAL\_GPIO\_WritePin(led1\_GPIO\_Port, led1\_Pin,*GPIO\_PIN\_SET*);

HAL\_Delay(1000);

HAL\_GPIO\_WritePin(led1\_GPIO\_Port, led1\_Pin,*GPIO\_PIN\_RESET*);

HAL\_Delay(1000);

}

**if**(htim->Instance==TIM3){

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**(htim->Instance==TIM4){

HAL\_GPIO\_WritePin(led3\_GPIO\_Port, led3\_Pin,*GPIO\_PIN\_SET*);

HAL\_Delay(1000);

HAL\_GPIO\_WritePin(led3\_GPIO\_Port, led3\_Pin,*GPIO\_PIN\_RESET*);

HAL\_Delay(1000);

}

**else**{

\_\_NOP()}}

**Configuration for timers-**

Graphical user interface, text, application

Description automatically generated

**Memory related information for timer interrupt-**

Graphical user interface, text, application

Description automatically generated