ASSIGNMENT -4

Code for rtos tasks:

A screenshot of a computer

Description automatically generated with medium confidence

Graphical user interface, text, application

Description automatically generated

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 RTOS:

Graphical user interface

Description automatically generated with medium confidence

Configuration for timers:

Graphical user interface, text, application

Description automatically generated

Memory related information for rtos tasks:

Graphical user interface, application

Description automatically generated

Memory related information for timer interrupt:

Graphical user interface, text, application

Description automatically generated

Output video drive link:

https://drive.google.com/file/d/167PkPPnGK-TMCXHY90PZjZXVL9btuv7N/view?usp=drivesdk