The Programing Phase Documentation.

Using only the UART Cable we can power and program the Blue Pill.

We need two software to do so:

1. STM32CUBEPROGRAMER.
2. STM32CUBEIDE.

The STM32CUBEIDE is the actually editor.

STM32CUBEPROGRAMER is used to actually connect the STM in the blue pill to the computer.

It takes the program script in the format of (**.bin**) and downloads the script to the STM.

Keep in mind the position of the BOOT0 when downloading to the STM. In the case on downloading, it should be HIGH i.e., should be equal to 1. And already RESET.

To do subtask(1):

Use

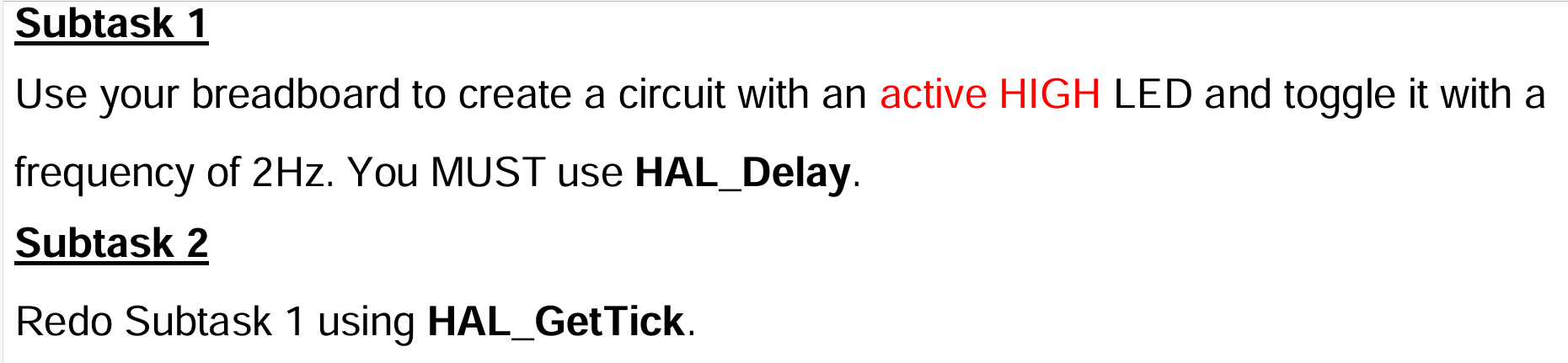
HAL\_GPIO\_TogglePin(GPIOA, GPIO\_PIN\_no);

This tells the MCU to be TOGGLE pin PA(no)

Then we use

HAL\_Delay(ms);

To do subtask (2):



HAL\_GetTick()

This function takes no input argument.

It outputs the time in ms taken since the start of the program

**The premise of usage in the task**:

We can take a variable to store the value of the time elapsed.

Then we make a condition that as long as the current time elapsed and prerecorded time elapsed (the time value stored in the variable) have a difference less than 500ms don’t do anything:

But if the difference exceeds 500ms then:

1. Update the time value stored to the current.
2. Toggle the LED.

The code snippet:

