



Microcontroller Course

Assignment 1

Deadline : 1403/08/18

1. Develop a library to handle system initialization and clock configuration for an STM32F103C8 microcontroller. Follow these steps and guidelines:
 - a. Your target device is **STM32F103C8**, download reference manual if you haven't done so already.
 - b. Create your .h file. Define necessary functions and variables. Include at least two functions:
 - one for system initialization(as discussed in class - serial wire debug configuration)
 - one for clock settings that sets the system clock to **48MHz**(consider clock limitations).
 - c. Implement the function definitions in a .c file.
 - d. Write the main program code. Use your library functions to initialize the system and configure the clock.
 - e. You can use Keil as your main IDE or choose any other IDE you prefer. Make sure to include one “.h” file (your library header file) and two “.c” files (one for the library and one for the main C).
 - f. Provide a detailed report about your code.