



SHEET 8

Q1. Write using C, a function to initialize port F pin 4 as digital input with negative edge triggered Interrupt with priority 2 and write the ISR which changes the color of RGB in a cyclic way from 000 to 111 then to 000 again.

Q2. Write using C, a function to initialize SysTick periodic interrupt each 10 ms with priority 1 (assume *system* clock is 80 MHz) and write an ISR which increments a global variable “cnt10ms” by

Q3. Write using C, a main function that calls 3 functions which are task1(), task2(), and task3(). Task1 should run every 10 ms, task 2 should run every 20 ms, and task 3 should run every 30 ms. Assume there is a global variable “cnt10ms” that is initialized by 0 and is incremented by 1 every 10 ms.