Name: Khoi Nguyen

Class: ECE 5780

Prelab 2

1. What is the purpose of the NVIC peripheral?
   1. The NVIC’s primary responsibilities are enabling and disabling interrupts, indicating requests waiting for servicing, canceling pending interrupt requests, and establishing how multiple interrupts interact through configurable priorities.
2. What is the difference between interrupt tail-chaining and nesting?
   1. Tail-chaining: if multiple interrupts trigger concurrently or during a handler, they execute one after the other in succession according to the hardware priority.
   2. Nesting: the NVIC allows important interrupts to interrupt lower-priority handlers
3. In what file are the CMSIS libraries that control the NVIC?
   1. It is in the ‘core\_cm0.h’ file
4. What is the purpose of the EXTI peripheral?
   1. The purpose of the EXTI peripheral is to allow non-peripheral sources to trigger interrupts; it may also monitor various internal signals, such as the brownout protection circuitry (low-voltage shutdown).
5. What is the purpose of the SYSCFG pin multiplexers?
   1. The purpose of the SYSCFG pin multiplexers is to deal primarily with signal routing and control data transfer between peripherals and memory, remapping portions of memory, and some high-power communication modes.
6. What file has the defined names for interrupt numbers?
   1. A file ‘stm32f072xb.h’ has the defined names for interrupt numbers.
7. What file has the Vector table implementation?
   1. A file ‘startup\_stm32f072xb.s’ has the Vector table implementation.