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Embedded systems Prelab 2

1. The Nested Vectored Interrupt Controller (NVIC) peripheral is the primary device for enabling and disabling interrupts.
2. The difference between interrupt tail-chaining and nesting is for very simple embedded systems if multiple interrupts trigger concurrently the built in hardware will execute them one after another even if a higher priority interrupt is ordered to be run last. Interrupt nesting is a more complex operation and allows the NVIC to interrupt lower priority interrupt handlers. It does this in a similar method to how an interrupt pauses an embedded system main program.
3. The Cortex Microcontroller Software interface standard (CMSIS) library is located in the core\_cm0.h file.
4. The purpose of the Extended Interrupts and Events Controller (EXTI) allows non-peripheral sources to trigger interrupts. It typically generates interrupts from the GPIO pins of the device.
5. The System Configuration Controller (SYSCFG) peripheral controls multiplexers which are able to multiplex external interrupts across the 16 pins using the EXTI and the SYSCFG handles the system processing.
6. The file that has a defined name for interrupt files is in stm32f072xb.h file.
7. The file with vector table implementation is located in the startup\_stm32f072xb.s file.