Tutorial 2:

1.

IRQ0: DMA0\_IRQn – Direct memory access unit 0



IRQ10: SPI0\_IRQn– Serial peripheral interface unit 0



IRQ31: PORTD\_IRQn – Port D interrupt

2(a).

Priorities must be in increasing in the above order

Set NVIC\_IPR2[23:22] to 01 // IRQ10

Set NVIC\_IPR0[7:6] to 10 // IRQ0

Set NVIC\_IPR7[31:30] to 11 // IRQ31

NVIC\_SetPriority(SPI0\_IRQn, 1); // IRQ10

NVIC\_SetPriority(DMA0\_IRQn, 2); // IRQ0

NVIC\_SetPriority(PORTD\_IRQn, 3); // IRQ31

2(b).

Set NVIC\_ISER[13] to 1; // IRQ13

Set NVIC\_ICER[24] to 1; // IRQ24

NVIC\_EnableIRQ(IRQ13);

NVIC\_DisableIRQ(IRQ24);

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<https://www.keil.com/pack/doc/CMSIS/Core/html/regMap_pg.html>

https://developer.arm.com/documentation/ddi0419/c/System-Level-Architecture/System-Address-Map/Nested-Vectored-Interrupt-Controller--NVIC/Interrupt-Set-Enable-Register--NVIC-ISER?lang=en https://developer.arm.com/documentation/ddi0419/c/System-Level-Architecture/System-Address-Map/Nested-Vectored-Interrupt-Controller--NVIC/Interrupt-Clear-Enable-Register--NVIC-ICER?lang=en