



模块 14

活动：实时系统



活动：实时系统

问题 1

编写C代码，计算P2.7上的输入从0变为1的次数，显示初始化和ISR。

```
void Input_Init(void);
void PORT2_IRQHandler (void);
```

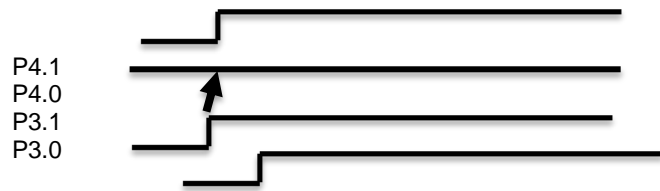
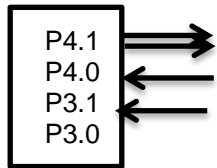


P2.7
这导致计数变为6

问题 2

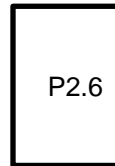
您有两个输入和两个输出。 P4.1和P4.0是输出，最初为低。假设您有两个正向逻辑开关连接到P3.0和P3.1。 如果P3.1的上升沿首先出现，则写入设置P4.1为高电平的软件;如果P3.0的上升沿出现，则将P4.0设置为高电平。在第一次中断之后，解除边沿触发中断，从而不再发生中断。显示初始化和ISR

```
void Input_Init(void);
void PORT3_IRQHandler (void);
```



问题 3

假设您有一个连接到P2.6的负逻辑开关。 您希望计算P2.6上的输入从1变为0的次数。问题是开关弹跳（每次按下开关和每次释放开关时有多个边沿）。你必须使用中断。但是，您可以以任何方式使用中断来解决此问题。弹跳在1ms内完成，按下开关至少100 ms并释放至少100 ms（最大触摸速率为5次触摸/秒）。显示初始化和ISR



问题 4

编写 C 代码，将端口 4 边沿触发中断的优先级设置为 5 级。

问题 5

编写 C 代码，在 NVIC 中启用端口 4 边沿触发中断。

问题 6

编写 C 代码，在NVIC 中启用端口 4边沿触发中断。

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