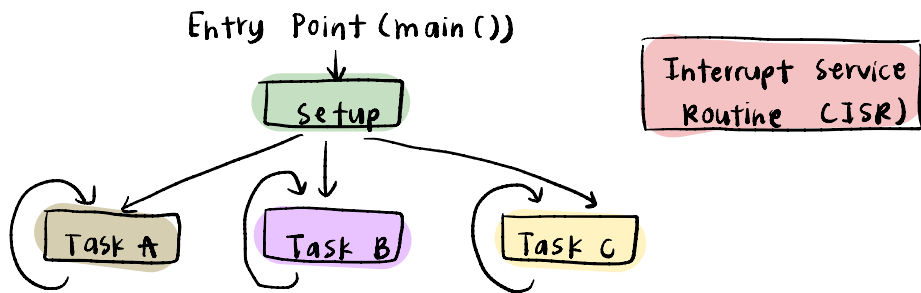


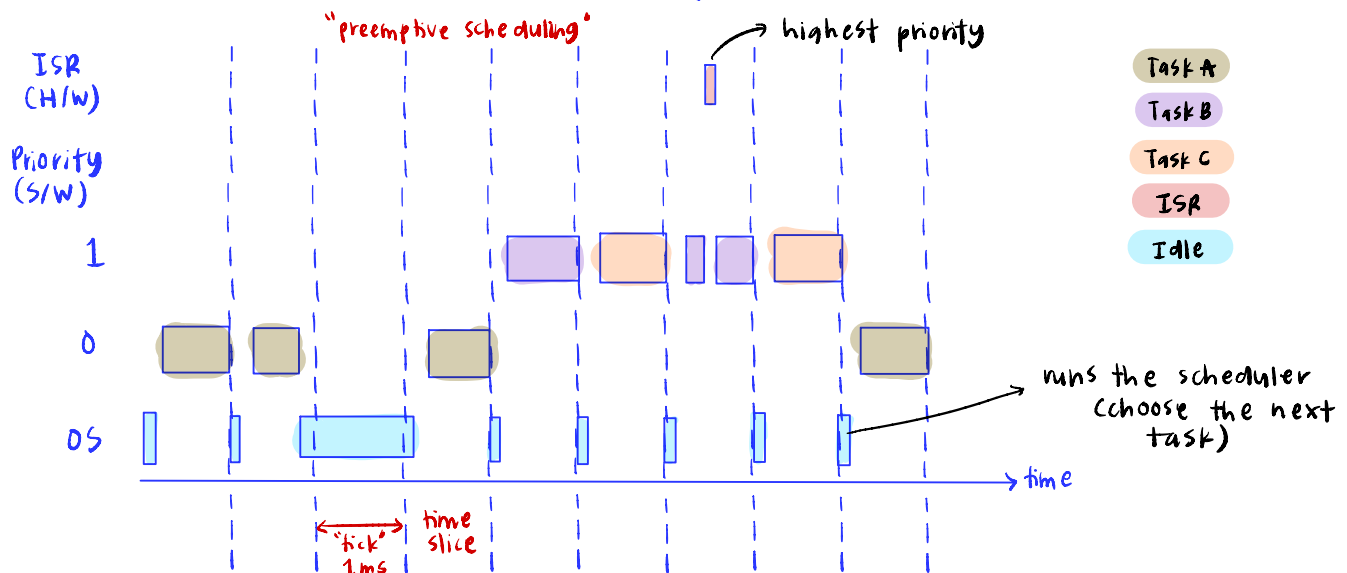
# TASK SCHEDULING (week 4)

## CONCEPTS



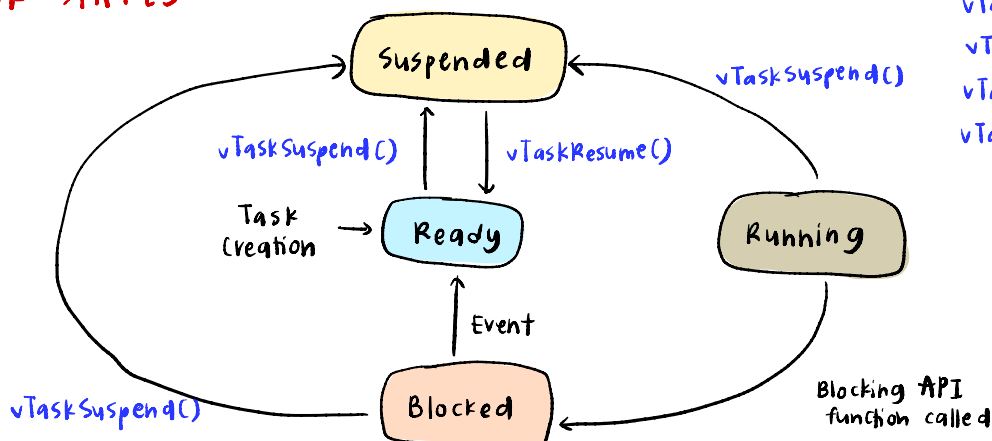
- Each task runs concurrently in its own while loop
- Independent ISRs can be set up to preempt the tasks to execute some code.  
[hardware timer overflows, pin state change, new communication on a bus.]
- In single-core system, the CPU divide the tasks into time slices.

↳ the scheduler



- A hardware timer is configured to create an interrupt every 1 ms.
- Task with ↑↑ priority is chosen to run
- Same priority task executed in round-robin fashion
- If a task with higher priority than the currently running task is Ready, it will immediately run.

## TASK STATES



- `vTaskPrioritySet()` → set priority
- `vTaskSuspend()` → sleep
- `vTaskDelay()` → wait / blocked
- `vTaskResume()` → ready