QUEUE

↳ a kernel object that can pass information between tasks
  ↳ ensures no overwrites occur from other tasks

↳ uses a first in, first out (FIFO) system

Concepts

Queue: a simple FIFO system with atomic reads & writes

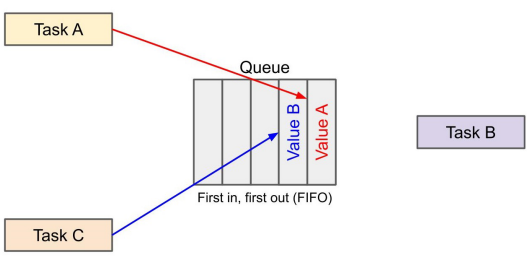
→ atomic operations: cannot be interrupted by other tasks when it is executed
  ↳ ∴ another task cannot overwrite our data

Example:

① writes some data to queue & no other task can interrupt Task A

② Task B can write other data to queue when task A is done

∴ Task B's data will appear after Task A's (FIFO system)



- can use xQueueSend() function to send a piece of data to a queue → all of the data is copied to the queue automatically because in FreeRTOS, info is copied to queue by value, & not by reference