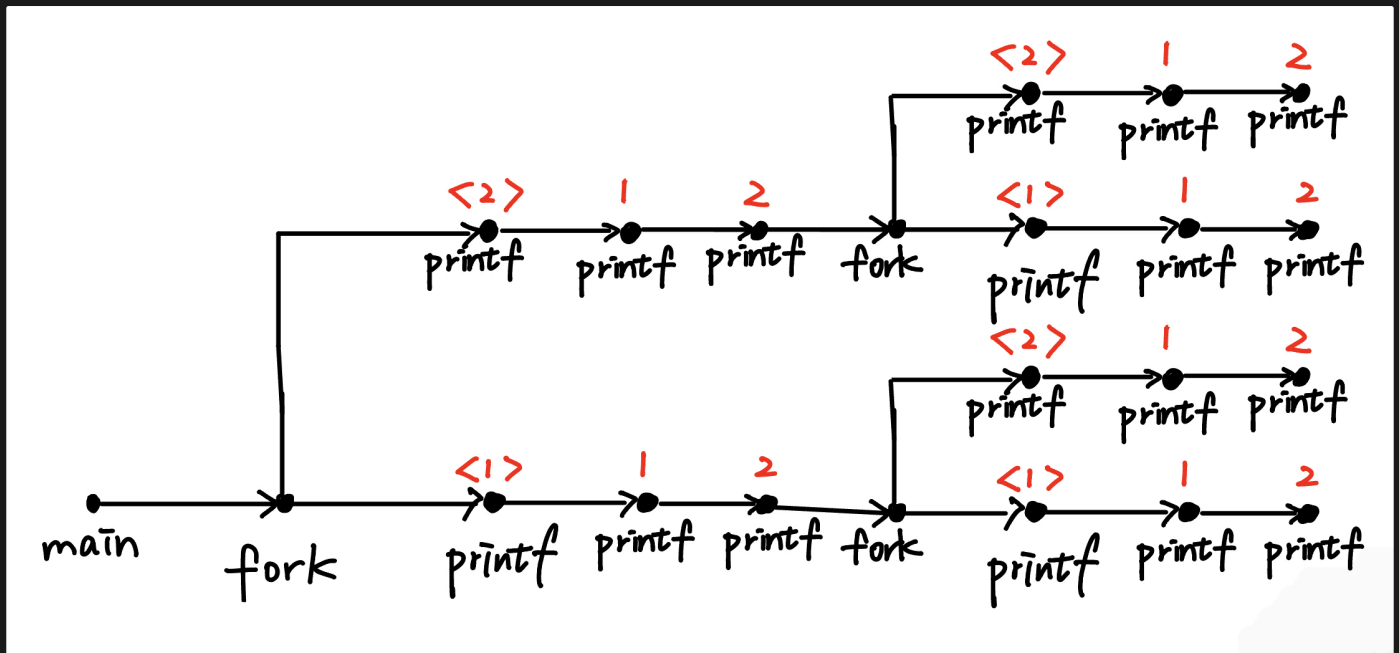


## SAQ1



## SAQ2

- Process A (5-7) and Process B (2-4): No overlap
- Process A (5-7) and Process C (3-6): Overlap (5 - 6)
- Process A (5-7) and Process D (1-8): Overlap (5 - 7)
- Process B (2-4) and Process C (3-6): Overlap (3 - 4)
- Process B (2-4) and Process D (1-8): Overlap (2 - 4)
- Process C (3-6) and Process D (1-8): Overlap (3 - 6)

From the above comparisons, the pairs of processes that are concurrent are:

- A & C
- A & D
- B & C
- B & D
- C & D

## SAQ3

No, init process can't always terminate the process in the system? Reason are as follows:

- **Kernel Processes:** Processes running in kernel space are not managed by init and typically cannot be terminated by any user-space process, including the init process.

- **Zombie Processes:** These are processes that have completed execution but whose parent process has not yet reclaimed their status information. Although these processes have ended, they remain in the process table until their parent process was killed.
- **Processes Managed by the Kernel:** If a process is performing a kernel-level operation (like I/O operations), it may not respond to any termination signals until the operation is complete.