OS HW2

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- 4.2

  When a page fault happens in a kernel thread, another kernel thread can be switched in to use the interleaving time in a useful manner.

- 4.4

  No, because the OS deals with only one process and won't schedule the different threads of the process on separate processors.

- 4.13
  - (a)

    Some of the processors would remain idle since the scheduler maps only kernel threads to processors and not user-level threads to processors
  - (b)

    It is possible that all of the processors might be utilized simultaneously. However, when a kernel thread blocks inside the kernel, the corresponding processor would remain idle.
  - (c)

    A blocked kernel thread could be swapped out in favor of another kernel thread that is ready to execute, thereby increasing the utilization of the multiprocessor system.

- 5.6
- 5.8
- 5.10

  Priority, because process with smaller priority may never be executed.

- 5.15
  - FCFS

    Discriminate against short processes because if it arrives after long processes, it will have to wait a long time until the long ones finish executing.

  - RR

    Treats all processes equally, short processes can be finished earlier since they take less time to execute.

- Multilevel feedback queues
  Discriminating favorably toward short jobs.

- 6.4
- 6.10
- 6.11