操作系统原理

Homework 3

计算机 92 班

K3

3.1

Describe the differences among short-term, medium-term, and long-term scheduling.

The scheduler is a module of an OS which selects next jobs to be run. *Long-term scheduling* is on the highest level.

- The long-term scheduler, or a job scheduler selects processes from where spooled processed are kept for later execution and admits them into the ready queue.
- The medium-term scheduler temporarily transfer processes from the main memory onto secondary memory, or vice versa.
- The short-term scheduler selects which process from the ready queue to be run next, which is performed the most frequently.

3.2

Describe the actions taken by a kernel to context-switch between processes.

Current process context (including registers, PC, stack, accounting info and memory allocation, most of which stored in the PCB) are saved and the context of another process are to be loaded.

References

- 1. https://secure.wikimedia.org/wikipedia/en/wiki/Scheduling_(computing)
- 2. http://web.engr.oregonstate.edu/~pancake/cs411/hw2sol.s99.html