

Quiz

Sep 25, 2024

Which of the followings is/are true about fork()?

- ☐ A In the parent process, fork() returns 0; in the child process, fork() returns its own pid.
- ☒ B The parent and child process share the same program counter, memory content, and opened files.
- ☐ C A process may have more than one parent processes at the same time.
- ☒ D Fork() alters the parent process by adding one more process to it children process list.

提交

Which of the followings is/are true about exec()?

- ☐ A When exec() returns from the calling process, it will continue executing the next instruction.
- ☐ B Exec() replaces the user-space memory of the process, but keeps the program counter unchanged.
- ☒ C Exec() keeps the PID of the calling process.
- ☐ D Calling exec() to load the same program into the memory is equivalent to not calling exec() at all

提交

Which of the followings is/are true about context switch?

- ☐ A Cooperative scheduling is preemptive.
- ☒ B CPU scheduling may happen when the kernel takes control of the CPU.
- ☒ C During context switch, the system must save the state of the old process and load the saved state for the new process
- ☒ D Context switch cannot be too frequent, otherwise a high performance overhead may occur.

提交

Which of the followings is/are true about `exit()` and `wait()`?

- ☒ A `Exit()` is always invoked when the process terminates
- ☐ B Upon `Exit()`, kernel sends `SIGCHLD` to the parent process only if the parent process already calls `wait()`
- ☒ C `Exit()` performs re-parenting for all the children processes of the terminated process.
- ☒ D A process becomes a zombie process when it is terminated but not yet cleaned up by its parent process

提交

Which of the followings is/are true about re-parenting?

- ☐ A When a process terminates, it is re-parented to "init"
- ☐ B When re-parenting happens to a process, its PID changes.
- ☒ C When re-parenting happens to a process, its children processes are not affected.
- ☒ D When a process terminates, its children processes are re-parented to "init"

提交