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12 Points Possible



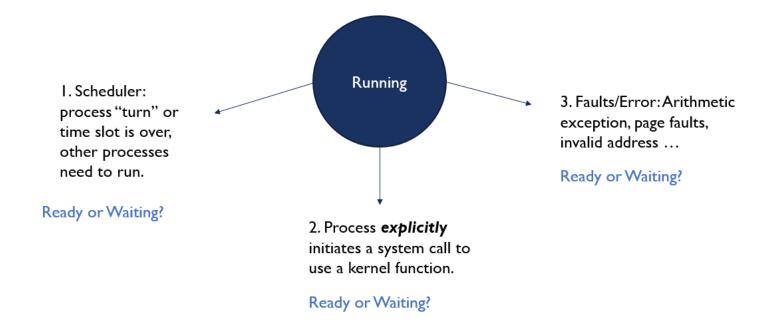
Unlimited Attempts Allowed

∨ Details

Q1: Think of and list a couple of approaches that we can use to pass parameters from programs to the kernel.

Q2: What could be the advantages of using multiple processes for a single program?

Q3: Which of these events would result in a process in the ready state and which would result in a waiting state?



Answer 1:

There are three possible approaches that we can use to pass parameters from programs to the kernel:

- a. saving inside the registers
- **b.** creating a data structure like table
- c. pushing to the stack

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Answer 2:

There are some advantages of using multiple processes for a single program:

a. efficiency: Let's say a program is waiting for user input in one process. We can use another process to keep the program going so that it is not halted.

b. reliability: If a program uses multiple processes (for example, process A, B and C) and one process (process B) suddenly crashes, it does not mean the entire program will crash. Because it still has other processes working just fine, the program will not crash. So, it is good/reliable to use multiple processes.

Answer 3:

Here are the states:

- 1. Scheduler: **Ready** (process "turn" is over, so it is ready for other processes that need to run)
- 2. Process (explicit): **Waiting** (wait until the system call returns)
- 3. Faults/Error: Waiting (as there is an error/exception, it has to wait)

New Attempt