CSC 327 Systems Programming

Quiz 1

1 What are the three main purposes of an operating system?

2 What are the main differences between operating systems for mainframe computers and personal computers?

3 What is the main difficulty that a programmer must overcome in writing an operating system for a real-time environment?

4 How does the distinction between kernel mode and user mode function as a rudimentary form of protection (security) system?

5 Which of the following instructions should be privileged?
   a. Set value of timer.
   b. Read the clock.
   c. Clear memory.
   d. Issue a trap instruction.
   e. Turn off interrupts.
   f. Modify entries in device-status table.
   g. Switch from user to kernel mode.
   h. Access I/O device.

6 What three important characteristics of UNIX during its early development helped popularize it?