练习1（第1、2章）

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Enter intro/instructions

#1 Points possible: 3

Which of following activities is not what an operating system concerns?

- ○ To manage the computer hardware
- ○ To provide an interface between the user and the system
- ○ To manage system resources
- ◉ To provide users application software

#2 Points possible: 3

In a dual-mode (system mode and user mode) system, which of the following components are not necessary?

- ○ A bit in the hardware to indicate the current mode.
- ○ Privileged instructions.
- ○ Operating system running in the system mode.
- ◉ Some user programs in the system mode.

#3 Points possible: 3

Which of the following system is a multi-user time-sharing system?

- ○ DOS
- ○ OS/2
- ○ Windows XP
- ◉ Linux

#4 Points possible: 3

Operating system is a set of software for managing _____.

- ○ Computer software
- ○ Computer hardware
- ◉ Computer resources
- ○ Application programs

#5 Points possible: 3

This type of program acts as an intermediary between a user of a computer and the computer hardware.

- ◉ operating system
- ○ user thread
- ○ application program
- ○ superuser thread

#6 Points possible: 3

The first program that a computer runs when it is powered up or rebooted is a

- ○ application program
- ○ monitor program
- ○ kernel
- ◉ bootstrap program

#7 Points possible: 3

What is the purpose of system calls?

- ○ System calls allow user-level processes to gain resources from the operating system
- ○ System calls are the standard interface between a user process and a kernel process

◉ System calls allow user-level processes to request services of the operating system

◯ There is no real purpose to system calls

#8 Points possible: 3

Which of the following statement is incorrect?

◯ Monolithic OS is usually difficult to modify

◯ Micro-kernels allow some system services to be implemented just as user programs

◉ Layered OS is more efficient than monolithic OS

◯ Virtual machines improve OS development and testing process

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#9 Points possible: 3

1. ___ is not an advantage that the microkernel structure has compared with the monolithic structure?

◉ to make the system more efficient

◯ no need to modify the kernel in order to add new services

◯ to make the system more secure

◯ to make the system more reliable

#10 Points possible: 3

2. The main disadvantage of the batch system is ___ ?

◯ low CPU utilization

◯ lack of concurrency

◉ lack of interaction

◯ none of the above

#11 Points possible: 3

我们知道，有些CPU指令只能授权给操作系统内核运行,不允许普通用户程序使用。但是在以下操作中,___可以不必具有此种特权。

- ○ 设置定时器的初值
- ◉ 触发trap(系统调用)指令
- ○ 内存单元复位
- ○ 关闭中断允许位

#12 Points possible: 3

为了在通用操作系统管理下的计算机上运行一个程序，需要经历几个步骤。但是,__不一定需要

- ◉ 向操作系统预定运行时间
- ○ 将程序装入内存
- ○ 确定起始地址，并从这个地址开始执行
- ○ 用控制台监控程序执行过程

#13 Points possible: 3

操作系统中提供了一种进程间的通信机制，把一个进程的标准输出与另一个进程的标准输入连接起来，这种机制称为__。

- ○ 重定向
- ◉ 管道
- ○ socket
- ○ 共享内存

#14 Points possible: 3

7. Which is not the service that the operating system should provide?

- ○ I/O operation
- ◉ Game engine
- ○ Inter-Process Communication

○ File-system manipulation

#15 Points possible: 3

6. The first program that a computer runs when it is powered on or rebooted is a ___ ?

○ application program

○ monitor program

○ kernel

◉ bootstrap program

#16 Points possible: 3

5. A system call is ___ ?

○ a user written sub-program

○ a library program in advanced language

○ a command in operating system

◉ an interface provided by OS for user program

#17 Points possible: 3

4. A program can be executed as a process only after it is loaded into ___?

○ hard disk

○ floppy disk

◉ main memory

○ cache

#18 Points possible: 3

3. Which of the following functionalities in an operating system does not need special hardware support?

- ◉ process scheduling
- ○ clock management
- ○ address mapping
- ○ interrupt system