

Operating- System Structures



Review Questions

Section 2.1

- 2.1 List at least three operating system services that are useful to users.
- 2.2 List at least three operating system functions that maintain efficient operation of the system.

Section 2.2

- 2.3 What are the two different approaches for providing a user interface?

Section 2.3

- 2.4 What is a system call?
- 2.5 What is an API?
- 2.6 What kernel data structure can be used for one technique of passing parameters to system calls?

Section 2.4

- 2.7 List at least three of the major categories of system calls.
- 2.8 A program that has been loaded and executing is called a _____.
- 2.9 What part of the operating system makes the decision with regards to which job will run?

Section 2.5

- 2.10 List at least three of the categories of system programs.
- 2.11 True or False? The view most users see of the operating system is defined by application and system programs rather than system calls.

Section 2.6

- 2.12 What are the two basic goal groups that must be considered when designing an operating system?
- 2.13 What is the difference between policy and mechanism?

Section 2.7

- 2.14 List at least three different ways for structuring an operating system.
- 2.15 List at least two different hybrid operating systems.
- 2.16 What are the two devices that run the iOS operating system?
- 2.17 What technique do microkernels use to communicate between services?
- 2.18 Provide an example of an operating system that uses the simple structure.

Section 2.8

- 2.19 True or False? Performance tuning is a type of debugging.
- 2.20 True or False? DTrace is available for Windows systems.
- 2.21 Name two activities the operating system is responsible for in connection with disk management.
- 2.22 Name at least two activities the operating system is responsible for in connection with disk management.
- 2.23 Of the following 5 forms of storage, rank them from fastest to slowest in terms of access time: (1) main memory, (2) magnetic disk, (3) registers, (4) solid state disk, (5) cache.

Section 2.9

- 2.24 What does the term SYSGEN refer to?

Section 2.10

- 2.25 What is the name of the small piece of code that locates the kernel and loads it into main memory?