Protection

Review Questions

Section 17.1

17.1 True or False? Policies determine how something will be done, mechanisms describe what will be done.

Section 17.2

17.2 What principle dictates that programs and users be given just enough privileges to perform their tasks?

Section 17.4

17.3 True or False? The need-to-know principle states that a process needs to know everything in order to perform its task.

17.4 True or False? The user mode/kernel mode paradigm is an example of domain switching.

17.5 True or False? In the UNIX operating system, a domain is associated with a process, not with a specific user.

17.6 What is the name of the bit in a UNIX system that associates each file with an owner and domain?

Section 17.5

17.7 What does each row and column represent in an access matrix?

Section 17.6

17.8 What is the problem when using a global table to represent an access matrix?

Section 17.8

17.9 What is the benefit of using role-based access control?

Section 17.7

17.10 Why is revocation of access rights easy with an access list scheme?

Section 17.10

17.11 Provide two examples of capability-based systems.

Section 17.12

17.12 Give an example of a programming language that provides language-based protection.