Problem Set 24

CS 411

Due at the beginning of class on the first class day of the following week.
Sections 17.1–12

1. Consider a computer system in which computer games can be played by students only between 10 P.M. and 6 A.M., by faculty members between 5 P.M. and 8 A.M., and by the computer center staff at all times. Suggest a scheme for implementing this policy efficiently.

2. Explain why a capability-based system provides greater flexibility than a ring-protection system in enforcing protection policies.

3. How can systems that implement the principle of least privilege still have protection failures that lead to security violations?