Bronson Edralin

EE468 Operating Systems

HW #1

9/10/14

# Textbook Prob 2.15 (1 pt)

*What are the five major activities of an operating system with regard to file management?*

1. File creation and deletion
2. Directory creation and deletion
3. Primitives for file/directory manipulation
4. Mapping files onto secondary storage
5. Backup files up on non-volatile storage media

# Textbook Prob 2.17 (1 pt)

*Would it be possible for the user to develop a new command interpreter using the system-call interface provided by the operating system?*

It reads from user or from file of commands and executes them. This usually happens by turning them into one or more system calls. It is usually not part of the kernel since the command interpreter is subject to changes. A user should be able to develop a new command interpreter using the system-call interface provided by the operating system. Command interpreter allows a user to create and manage processes and also determine ways by which they communicate (such as through pipes and files). As all of this functionality could be accessed by a user-level program using the system calls, so it should be possible for the user to develop a new command-line interpreter.

# Textbook Prob 2.19 (1 pt)

*Why is the separation of mechanism and policy desirable?*

Mechanism and policy is important to provide flexibility to a system. If the interface between mechanism and policy is well defined, the change of policy may affect only a few parameters. On the other hand, if interface between these two is vague or not well defined, it might involve much deeper change to the system. If mechanism is separated carefully from policy, it may be used to help support policy decisions that may be based on priority. So one must be careful with the separation of mechanism and policy.