

CS105 UNIX Operating Systems

Key Graded Assignment #1: Exploring UNIX/Linux Operating Systems

This assignment supports the following course outcomes:

Explain how to use UNIX/Linux operating systems for a wide range of purposes, including file management, running command line utilities, creating and editing files, and using shells.

Evaluate the best techniques to use for tailoring a UNIX/Linux system to specific user needs.

Identify UNIX-based solutions for implementing common operating system functions.

Compare features of common file editors that are available in the UNIX/Linux environment.

Assess the value of using the command line vs. a graphical interface.

Assignment Overview

In this assignment, you will research and discuss the following questions regarding UNIX/Linux operating systems:

What are UNIX and Linux?

How are UNIX/Linux systems used today?

What are some of the features of common file editors available in UNIX?

What are the advantages and disadvantages of UNIX compared to Windows operating systems?

What is the value of using the command line vs. a graphical interface. Give at least two specific examples of how this might benefit the user.

Identify common operating system functions and discuss the best UNIX/Linux solutions to address the functions. Discuss how these solutions can be tailored to specific user needs. Some examples of such common operating system functions include:

- Device management
- Processor management
- Storage management
- User interface
- Memory management
- Creating a file system
- Copying, deleting, moving files
- Multitasking programs
- Starting the computer
- Interfacing with hardware
- Networking

Deliverables

2-4 page written report (see Content Grading Rubric for specific details)

Grading

The following grading rubrics will be used to evaluate your assignment. Your instructor will provide you with these rubrics along with this assignment handout.

Content Grading Rubric - 80% of assignment grade

Written Report Grading Rubric - 20% of assignment grade

Resources

Course textbook

Various library and Web resources