

Unit 1: Operating System Overview

Assignment 1

1. Define the terms **shell** and **system call**. How is it handled? Illustrate a suitable example.
2. What are different **types of operating systems**? Explain each in detail.
3. What is a **system call**? Discuss the process of handling system calls briefly.
4. What is the system call in the OS? What are the different methods to invoke system calls in the OS? Explain different types of system calls in the OS?
5. What is a shell in an operating system? What is the function of a shell ?
6. What is a **virtual machine**? Explain in detail.
7. Explain different **types of kernel structure** in detail with suitable diagrams and advantages and disadvantages.
8. What is **Kernel in OS**? Explain its functionality.
9. What is a **layered Operating System (OS)**? Explain in detail.
10. Explain **microkernels** and **exokernels**.