LSP Task 1

Linux Kernel Architecture

Scheduler
Manages process scheduling ensuring fair CPU time allocation and efficient multitasking

Device Drivers
Interface with hardware devices, providing abstract access method for the system.

File system.
Manages data storage file access and organization on various storage devices.

Core Subsystems.
Provide fundamental services like memor management inter process communication and error handling.

Architecture - Dependent code.
Contain low-level code specific to the hardware architecture such as assemble instruction and CPU-specific operation.

Process scheduler: Manages process execution, Allocates CPU time efficiently and fairly.

Memory management → Handles RAM allocation virtual memory and paging.

File system: Organize and handle file storage and access.

Network stack: Facilitates network communication using standard protocol.

Device Deriven: Enable communication between the kernal and hardware devices.