Day 70

Topic: Kali Linux Installation & Setup

Objective: To set up a penetration testing lab environment using Kali Linux and Virtualization.

Theoretical Concepts:
We discussed the importance of isolated environments (Sandboxes) for ethical hacking. Virtualization allows us to run Kali Linux (the attacker machine) and target machines (like Metasploitable) on a single physical computer without risk. We reviewed the system requirements and the difference between Type 1 and Type 2 Hypervisors.

Practical Work:
We installed Oracle VirtualBox and created a new Virtual Machine. We mounted the Kali Linux ISO and proceeded with the graphical installation. We partitioned the virtual disk, set up the root user, and installed the GRUB bootloader. Post-installation, we installed "Guest Additions" for full-screen resolution and shared clipboard functionality.

Tools Used: VirtualBox, Kali Linux ISO.

Outcome: A fully functional, isolated offensive security lab ready for future practicals.