DATE: 25.08.2025
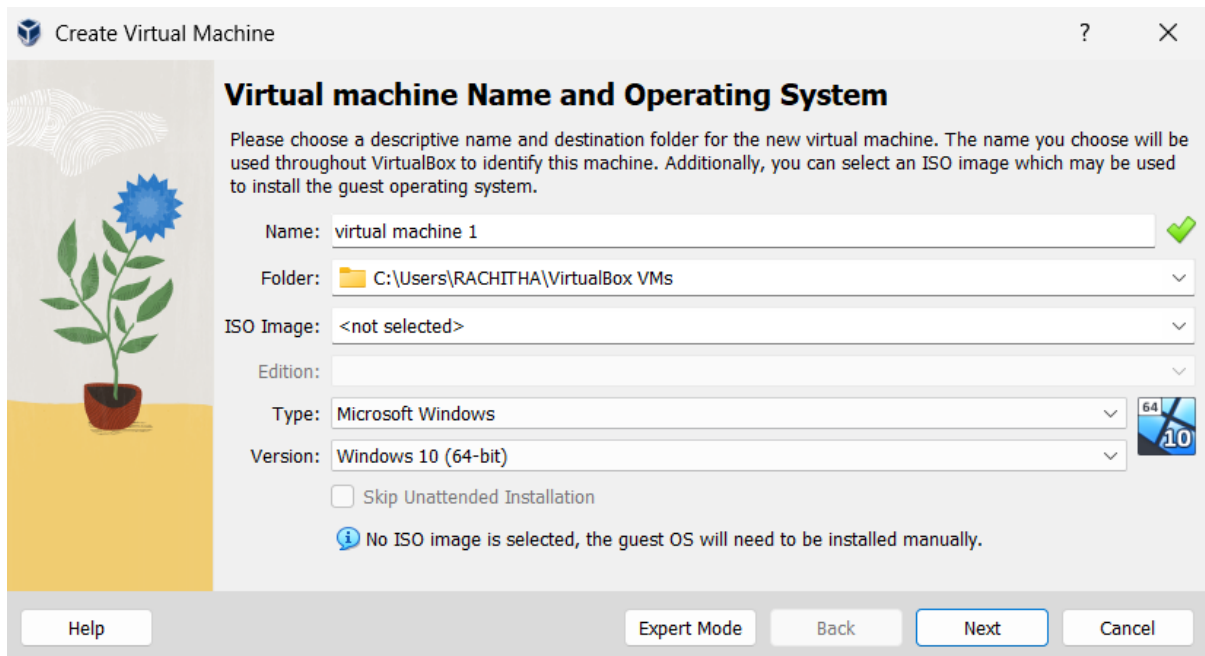
EXPERIMENT – 07 Demonstrate virtualization by Installing Type-2 Hypervisor in your device, create and configure VM image with a Host Operating system (Either Windows/Linux) using virtual box.

Aim: demonstrate virtualization by installing a Type-2 Hypervisor (VirtualBox) and creating/configuring a VM image with a Host Operating System (Windows/Linux).

Procedure:

1. Download and install Oracle VirtualBox on the host system (Type-2 Hypervisor).

2. Launch VirtualBox and click New to create a new virtual machine.

3. Enter the VM name, choose the Operating System type (Windows/Linux), and select version.

4. Allocate required RAM size (e.g., 2 GB).

5. Create a Virtual Hard Disk (VHD/VDI) and allocate desired storage (e.g., 20 GB).

6. Mount the ISO image of the chosen OS (Windows/Linux).

7. Start the VM and proceed with OS installation.

8. Configure basic system settings (username, password, language, network).

9. Verify the successful installation and functionality of the virtual machine.

Output:

Create Virtual Machine

Hardware

You can modify virtual machine's hardware by changing amount of RAM and virtual CPU count. Enabling EFI is also possible.

Base Memory: 2048 MB

4 MB   16384 MB

Processors: 1

1 CPU   12 CPUs

☐ Enable EFI (special OSes only)

Help   Back   Next   Cancel

Create Virtual Machine

Virtual Hard disk

If you wish you can add a virtual hard disk to the new machine. You can either create a new hard disk file or select an existing one. Alternatively you can create a virtual machine without a virtual hard disk.

◉ Create a Virtual Hard Disk Now

Disk Size: 50.00 GB

4.00 MB   2.00 TB

☐ Pre-allocate Full Size

○ Use an Existing Virtual Hard Disk File
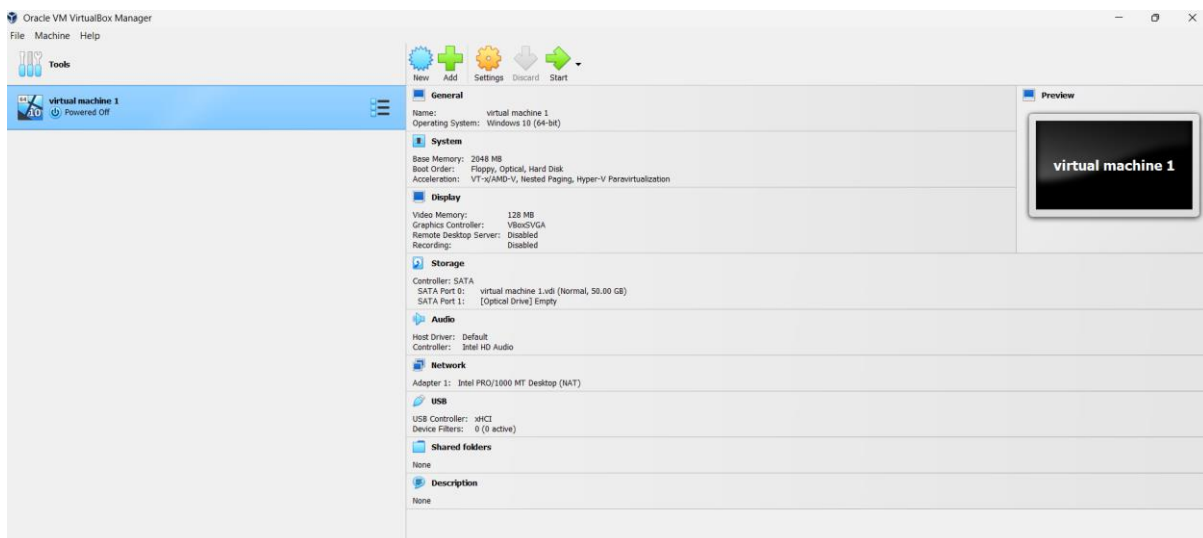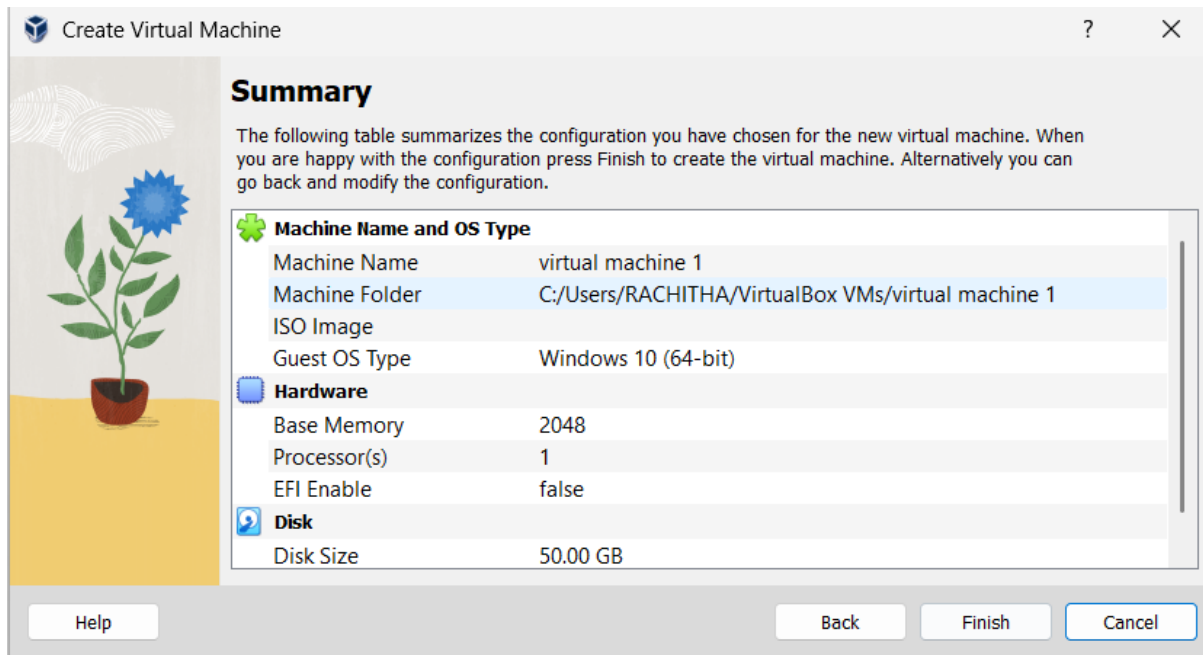
Empty

○ Do Not Add a Virtual Hard Disk

Help   Back   Next   Cancel

Result:

Virtualization was successfully demonstrated by installing VirtualBox (Type-2 Hypervisor), creating a VM, and configuring it with the chosen Host Operating System.