*MODULE – 2*   **Installation And Maintenance Of Hardware And It’s Components.**

**{1} What is user management?**

**Ans`~ User management** is the administrative process of managing users in a system, application, or network. It includes:

* Creating and deleting user accounts
* Assigning roles and permissions
* Controlling access to resources
* Managing passwords and authentication
* Monitoring user activity

{2 } Where can we access the user management?

Ans` ~ We can access the user management in windows, you can access local user management through the “computer management ” console or by using the command “lusrmgr.ms”

(3) Why is user management needed?

Ans` ~ User management is essential for controlling who can access a system, what they can do, and how they interact with resources. Here’s why it’s needed:

🔐 1. Security:

Prevents unauthorized access.

Ensures only trusted users can access sensitive data.

Allows enforcing password policies, multi-factor authentication, etc.

👥 2. Access Control:

Users can be given roles (e.g., admin, guest, editor).

Controls permissions: who can read, write, delete, or modify files and settings.

(5) Do a practical to create a user from user management?

Ans `~1. Open Settings:

Press Windows + I.

2. Go to Accounts

Click Accounts > Family & other users.

3. Add a New User

Under “Other users”, click Add account.

Choose:

“Add a family member” for Microsoft accounts.

Or “Add someone else to this PC” for a local user.

(6) Do a practical to change the password of the administrator from the user

Management What is file folder permission?---sharing and ntfs What is the

Use of file and folder permission?

Ans`~Open Computer Management

Press Windows + X > choose Computer Management.

Or search for “Computer Management” in Start.

2. Go to Local Users and Groups

Expand Local Users and Groups > Click Users.

3. Right-click the Administrator Account

Choose Set Password > Click Proceed.

4. Enter the New Password

Type the new password twice > click OK.

1. NTFS Permissions (Security tab)

Apply to files and folders on NTFS-formatted drives.

Control Read, Write, Modify, Full Control, etc.

Apply to local and network users.

🔹 B. Sharing Permissions (Sharing tab)

Apply when files/folders are shared over the network.

Control who can access them via network.

Basic levels: Read, Change, Full Control.

🔐 Security

Prevents unauthorized users from deleting, editing, or reading sensitive data.

👥 Multi-User Control

Each user/group can have specific access — e.g., HR has access to payroll, but not IT folders.

📊 Data Integrity

Reduces risk of accidental changes or deletion.

🌐 Controlled Sharing

Share files over the network safely, only with intended users.

(7)Write down the steps to give a folder read only permission?

Ans`~ ✅ Step 1: Right-Click the Folder

Locate the folder you want to protect.

Right-click it and select Properties.

✅ Step 2: Go to the Security Tab

In the folder properties window, click the Security tab.

This shows a list of users and groups who have access.

✅ Step 3: Click “Edit”

Click the Edit button to change permissions.

If prompted by UAC (User Account Control), click Yes.

✅ Step 4: Select or Add a User/Group

If the user/group is listed, click on their name.

If not, click Add:

Type the user or group name (e.g., John, Users) and click Check Names, then OK.

✅ Step 5: Set to Read-Only

In the Permissions section, check only:

✅ Allow next to Read & execute

✅ Allow next to List folder contents

✅ Allow next to Read

Make sure all other boxes (especially Write, Modify, Full control) are unchecked.

✅ Step 6: Apply and Close

Click Apply, then OK.

Click OK again to close the folder properties.

(8)Write a step to give a file only admin permission?

Ans`~ ✅ Step 1: Right-Click the File

Locate the file you want to protect.

Right-click the file and select Properties.

✅ Step 2: Open the Security Tab

In the Properties window, go to the Security tab.

Click Edit to change permissions (admin rights required).

✅ Step 3: Remove Other Users

In the “Group or user names” list:

Select all users/groups except Administrators.

Click Remove.

✅ Step 4: Ensure Administrators Have Full Control

Select Administrators.

In the permissions area below, make sure the Allow box next to Full control is checked.

✅ Step 5: Apply and Close

Click Apply, then OK to save.

Click OK again to close the Properties window.

(9) Do a practical to change the ownership of the folder and the sub folders in it ?

Ans`~ 🔹 Step 1: Right-Click the Folder

Right-click the folder you want to take ownership of.

Select Properties.

🔹 Step 2: Go to the Security Tab

Click the Security tab.

Click Advanced at the bottom.

🔹 Step 3: Click “Change” Next to Owner

In the Advanced Security Settings window, you’ll see the Owner field at the top.

Click the Change link next to the current owner.

🔹 Step 4: Enter the New Owner

In the “Enter the object name to select” box, type the user account or Administrators.

Example: Administrators or YourUserName

Click Check Names to validate > Click OK.

🔹 Step 5: Replace Owner on Subcontainers and Objects

Check the box:

✅ Replace owner on subcontainers and objects

This ensures the change applies to all subfolders and files.

🔹 Step 6: Apply and Confirm

Click Apply > Click OK on any confirmation dialogs.

Click OK again to close all windows

(10) What is OS?

Ans `~ The OS is the bridge between the user and the hardware. It lets you run programs, save files, browse the web, and use devices like printers or USB drives.

(11) What are the types of OS ?

Ans`~Desktop OS Windows, macOS, Linux (Ubuntu)

• Mobile OS Android, iOS

• Server OS Windows Server, Red Hat, Ubuntu Server

• Embedded OS Found in devices like routers, ATMs, smart TVs.

(12) Do a practical to create bootable pen drive for kali linux and install os ?

Ans`~ 1. Boot from USB

Restart your computer.

Press the boot menu key (usually F12, ESC, or DEL) and select the USB drive.

2. Choose Install Option

Select Graphical Install or Install (based on preference).

3. Choose Language, Location, and Keyboard

Follow the prompts to set these.

4. Configure Network

Set hostname (e.g., kali), and domain if needed (or leave blank).

5. Set Up User Account

Create a root or regular user account and password.

6. Partition Disks

Choose one:

Guided – use entire disk (for clean install)

Manual (for dual boot or custom setup)

Select your hard drive and confirm formatting.

7. Install System

Wait while files are copied and base system is installed.

8. Install GRUB Bootloader

Choose Yes to install GRUB to the master boot record.

Select the correct disk (e.g., /dev/sda).

9. Finish Installation

Remove USB when prompted and reboot.

(13) Do a practical to create a bootable pen drive for windows 10 and install os

Do pen drive for creating a pen drive for mac os Big sur with unibeast?

Ans`~ 💻 Steps to Install Windows 10

1. Boot from USB

Restart computer > Enter boot menu (usually F12, F9, ESC).

Select the USB drive.

1. Windows Setup

Choose language, time, and keyboard.

Click Install Now.

1. Enter Product Key

Enter key or click “I don’t have a product key” (for trial install).

1. Choose Edition (if needed)

Select Windows 10 Home or Pro based on your license.

1. Partition Disk

Choose the drive (delete existing partitions if doing a clean install).

Click Next.

1. Wait for Installation

System will copy files and restart multiple times.

1. Setup Windows

Create a user account, set preferences.

🔧 Steps to Create Bootable macOS Big Sur USB

🔹 Step 1: Download macOS Big Sur

On a Mac, open App Store and search macOS Big Sur.

Click Get. It will appear in /Applications as Install macOS Big Sur.app.

🔹 Step 2: Format USB Drive

1. Open Disk Utility
2. Select USB > Click Erase

Name: USB

Format: Mac OS Extended (Journaled)

Scheme: GUID Partition Map

Click Erase

🔹 Step 3: Run UniBeast

1. Download UniBeast for Big Sur from tonymacx86.com
2. Open UniBeast and follow the wizard:

Choose the USB drive.

Select macOS Big Sur installer.

Choose bootloader options (UEFI/Legacy).

Complete process (takes ~20–40 min).

✅ Now your USB is bootable for macOS Big Sur installation.

💻 To Install macOS Big Sur on PC (Hackintosh):

1. Boot your PC into the USB (change BIOS settings: AHCI, disable Secure Boot).
2. Use Clover (or OpenCore) bootloader to start macOS installer.
3. Follow setup wizard, partition drive (APFS, GUID), and install.
4. After installation, boot into macOS via USB again and install MultiBeast or OpenCore to configure drivers.

(14) What is clean install?

Ans `~ 🧼 Wipes Everything Deletes all files, apps, and settings on the drive.

🔁 Fresh OS Copy Installs a brand-new copy of Windows, macOS, Linux, etc.

🐞 Fixes Issues Helps fix problems like viruses, crashes, or slow performance.

🔧 Custom Setup Lets you set up partitions, user accounts, and drivers from scratch.

📌 When to Do a Clean Install:

You’re replacing an old OS (e.g. upgrading from Windows 7 to Windows 10).

The system is corrupted or infected with malware.

You’re installing on a new or formatted hard drive.

You want the best performance with no leftover junk.

🛠️ Examples:

On Windows:

Boot from Windows 10 USB > Delete existing partitions > Install on unallocated space.

On macOS:

Erase disk using Disk Utility > Reinstall macOS using Recovery or USB.

(15) What is upgrade installation?

Ans `~ 🔄 Keeps Files & Apps All your documents, apps, and settings are preserved.

📥 New OS Version Replaces the old OS with a newer version (e.g. Windows 10 → Windows 11).

⚙️ Faster Process Quicker than a clean install, no reinstallation of apps needed.

📌 When to Use an Upgrade Installation:

You want to move to a newer OS version without losing data.

You’re eligible for a free OS upgrade (e.g., Windows 10 → 11).

You don’t want to reinstall apps or reconfigure settings.

🛠️ Example Scenarios:

🔹 Windows:

Running the Windows 11 Setup.exe from Windows 10 and choosing “Keep files and apps”.

🔹 macOS:

Installing macOS Ventura over Monterey via the App Store — your data remains untouched.

(16) Do a practical to upgrade from windows 8 to windows 10?

Ans `~ ✅ What You Need:

A computer running Windows 8 or 8.1.

A stable internet connection.

At least 20 GB free disk space.

Your Windows 8 product key (in most cases, this is detected automatically).

Optional: External drive or cloud for backup.

🔧 Step-by-Step Upgrade Process:

🔹 Step 1: Backup Your Data (Recommended)

Use an external drive, OneDrive, or Google Drive.

Even though the upgrade keeps your files, it’s smart to back them up.

🔹 Step 2: Download Windows 10 Media Creation Tool

1. Go to the official Microsoft website:

👉 <https://www.microsoft.com/software-download/windows10>

1. Click “Download tool now”.

🔹 Step 3: Run Media Creation Tool

1. Open the tool (MediaCreationTool.exe).
2. Accept the license agreement.
3. Select “Upgrade this PC now”, then click Next.

🔹 Step 4: Download and Prepare Windows 10

The tool will download the Windows 10 files (this may take a while).

It will check for compatibility and prepare the system.

🔹 Step 5: Choose What to Keep

You’ll see 3 options:

✅ Keep personal files and apps

🔄 Keep personal files only

🧹 Nothing (clean install)

👉 Choose “Keep personal files and apps” if you want an upgrade without data loss.

🔹 Step 6: Begin the Installation

Click Install.

Your PC will restart several times during the upgrade.

This can take 30–90 minutes depending on your system.

🔹 Step 7: Complete Setup

Once done, follow the setup screens.

You’ll be asked to sign in, adjust settings, and confirm your region/timezone.