***MODULE – 4 What is troubleshooting..***

1. *What is troubleshooting?*

*Ans ~ Troubleshooting is a systematic process of identifying, diagnosing, and resolving problems or malfunctions in a system, device, process, or piece of equipment.*

1. *Do a practical to change the administrator account forge password.*

*Ans ~ 1. Login to Laravel Forge:*

*Go to https://forge.laravel.com*

*Enter your email & password to sign in.*

*2. Select the Server:*

*Click on the server where you want to change the user password.*

*3. Go to “Users” Tab:*

*On the left sidebar, click “Users”.*

*You’ll see a list of system users (e.g., forge, root, custom users).*

*4. Select the User (e.g., forge):*

*Find the user you want to change the password for.*

*Click “Change Password”.*

*5. Enter New Password:*

*Input the new password.*

*Click “Update” or “Save”.*

*6. Test Access:*

*Use SSH to login with the new password. Or if SSH key authentication is enforced, passwords may not be used for login (SSH key-based login is preferred for Forge-managed servers).*

1. *How do you troubleshoot a computer with no display on screen?*

*Ans~ 1. Check Basic Power & Connections*

*Ensure the Monitor is ON and has power.*

*Check Monitor Cable Connections:*

*Ensure the video cable (HDMI, DisplayPort, VGA, DVI) is properly connected to both the monitor and the computer.*

*Try unplugging and re-plugging the cable.*

*Check Power Supply to PC/Laptop:*

*Is the PC’s power light ON?*

*If it’s a laptop, ensure the battery isn't dead (plug in the charger). 2. Test with Another Monitor or Cable*

*Connect the PC to a different monitor.*

*Use a different cable to rule out a faulty monitor or cable.*

1. *You get the blue screen of death?*

*Ans~ Common Causes of a BSOD:*

*1. Faulty Drivers — Incompatible, outdated, or corrupted drivers.*

*2. Hardware Issues — Failing RAM, Hard Drive, SSD, GPU, PSU, etc.*

*3. Overheating — CPU or GPU overheating.*

*4. Corrupted System Files — Critical Windows files damaged.*

*5. Malware/Viruses — Malicious software corrupting system operations.*

*6. Software Conflicts — Buggy programs (especially system-level tools).*

*7. Faulty Updates — A bad Windows update or driver update.*

*8. Overclocking Instability — Improper CPU/GPU overclocking.*

*(5) Do a practical to repair OS.*

*Ans~ Steps:*

*1. Turn off the Computer.*

*2. Turn it On and Interrupt Boot 3 Times:*

*As soon as Windows starts loading, hold the power button to turn it off.*

*Do this 3 times. On the 4th boot, Windows will enter Automatic Repair Mode.*

*3. Choose an Account & Enter Password (if prompted).*

*4. On Automatic Repair Screen:*

*Click Advanced Options.*

*5. Go to:Troubleshoot > Advanced Options > Startup Repair.*

*6. Select the OS to Repair.*

*Windows will attempt to fix startup problems automatically.*

*7. Restart and Check if the OS boots properly.*

*(6) Do a practical to repair boot file?*

*Ans~ Step 1: Boot into Windows Recovery Environment (WinRE)*

*1. Insert the Windows Installation USB/DVD into the system.*

*2. Restart the computer and enter BIOS/UEFI Settings (commonly by pressing F2, F12, ESC, or DEL).*

*3. Set the Boot Priority to boot from USB/DVD.*

*4. On the Windows Setup screen, select language and click Next.*

*5. Click on Repair your computer at the bottom-left corner.*

*Step 2: Access Command Prompt*

*1. Select Troubleshoot.*

*2. Then select Advanced Options.*

*3. Click on Command Prompt.*

*Step 3: Repair Boot Configuration Data (BCD)*

*Type the following commands one by one:*

*1. Scan for existing Windows installations and rebuild BCD:*

*bootrec /rebuildbcd*

*It will search for installed Windows systems.*

*Type Y to add installation to boot list.*

*2. Fix the Master Boot Record (MBR):*

*bootrec /fixmbr*

*This will write a new Master Boot Record (useful for MBR-based disks).*

*3. Fix the Boot Sector:*

*bootrec /fixboot*

*This writes a new boot sector to the system partition.*

*Optional Fix: “Access Denied” on /fixboot (UEFI Systems)*

*If /fixboot shows Access Denied, follow these steps:*

*1. Enter Disk Partition Tool:*

*diskpart*

*2. List available disks:*

*list disk*

*3. Select system disk (usually Disk 0):*

*select disk 0*

*4. List partitions:*

*list partition*

*5. Select the EFI partition (100-500MB size):*

*select partition 1*

*6. Assign a drive letter to EFI partition:*

*assign letter=S:*

*7. Exit Diskpart:*

*exit*

*8. Format EFI Partition (Optional if corrupted):*

*format S: /FS:FAT32*

*9. Rebuild Boot Files:*

*bcdboot C:\Windows /s S: /f UEFI*

*Step 4: Restart the System*

*1. Remove the USB/DVD.*

*2. Reboot the system.*

*3. Windows should now load successfully.*

*(7)* DO a practical to recover deleted file?

*Ans ~ Recover Deleted Files from Recycle Bin*

1. *Double-click the Recycle Bin icon on the desktop.*
2. *Search for the deleted file.*
3. *Right-click on the file and select Restore.*
4. *The file will be restored to its original location.*

*•Advanced Recovery (For Permanently Deleted Files)*

*1. Use Deep Scan mode in Recuva (or tools like EaseUS Data Recovery).*

*2. The scan will take longer but will search for deeply buried files.*

*3. Recover files the same way as mentioned above.*

*(8)* Do a practical to recover the formatted file?

*Ans~ Step 1: Scan the Formatted Drive*

*Launch the recovery tool.*

*Select the formatted drive/partition.*

*Choose Deep Scan / Full Scan (this takes longer but is thorough).*

*Step 2: Preview & Recover Files*

*After scanning, the software will show a list of recoverable files.*

*Preview files if possible to verify integrity.*

*Select files/folders you wish to recover.*

*Save recovered files to a different drive (external drive recommended).*

*Step 3: Validate Recovery*

*Open recovered files to check if they're usable.*

*If files are corrupted, try:*

*Another recovery tool.*

*(9)* Do practical to recover data from the os Corrupted file ?

*Ans~ Step 1: Prepare a Bootable USB*

*1. On another working PC:*

*Download Ubuntu ISO (or any Linux Live CD ISO).*

*Use Rufus (Windows) or Etcher (Mac/Linux) to create a bootable USB drive.*

*Step 2: Boot into Live USB*

*1. Insert USB into the corrupted OS machine.*

*2. Enter BIOS/UEFI (usually F2, F12, DEL at boot).*

*3. Boot from USB device.*

*Step 3: Access Files from Corrupted OS Drive*

*1. Once booted into Ubuntu Live:*

*Open Files.*

*You’ll see your internal hard disk/partitions listed.*

*2. Browse through the drive and check if you can access your files.*

*3. Copy files to an external USB drive.*

*(10)* What is the basic troubleshooting for printer?

*Ans~ 1. Check Power & Connections*

*Ensure printer is powered on.*

*Check power cable and USB cable (for wired printers).*

*For Wi-Fi printers, ensure the printer is connected to the correct Wi-Fi network.*

*2. Check for Error Messages on Printer Display*

*Look for specific error codes (like paper jam, low ink, etc.).*

*(11)* • What are the basic troubleshooting for laptop? check the laptop

which is not starting up practical to disassemble the laptop and

change the corrupted ram practical to change the cartridge of the printer?

*Ans~ 1. Check Power Source:*

*Ensure the power adapter is plugged into a working outlet.*

*Test with another known-good adapter if possible.*

*2. Check Battery & Power Adapter:*

*Remove battery (if removable).*

*Plug in charger and try powering on with AC adapter only.*

*Look for LED indicators (charging lights).*

*3. Perform a Hard Reset (Power Drain):*

*Disconnect power adapter & battery.*

*Press & hold Power button for 30 seconds.*

*Reconnect power and try booting up.*

*4. Check Display (Screen Blackout Issues):*

*Shine a flashlight at the screen; if you see a faint image, the backlight/inverter is faulty.*

*Connect to an external monitor (HDMI/VGA) to test.*

*5. Listen for Beep Codes or LED Blinks:*

*If you hear beeps or see LED blink patterns, refer to manufacturer’s beep code chart (indicates hardware failure like RAM, CPU, etc.).*

*6. Check for Loose RAM or Faulty RAM (requires disassembly)*