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Hcl week 10

1. Slow Performance

Possible Causes: Too many startup programs, low memory, malware, outdated software, or fragmented disk.

Steps to Fix:

1. Check CPU and memory usage — open **Task Manager (Ctrl + Shift + Esc)**.
2. End unnecessary background processes.
3. Run **Disk Cleanup** and delete temporary files.
4. Scan for viruses or malware using **Windows Defender** or **Malwarebytes**.
5. Update software, drivers, and Windows.
6. Defragment hard drive (HDD only).
7. Consider upgrading RAM or switching to SSD.

Key Tools: Task Manager, Disk Cleanup, Windows Security, Resource Monitor.

2.NO BOOT

Possible Causes: Power failure, corrupted OS, hardware issue, BIOS misconfiguration.

Steps to Fix:

1. Check power supply and cables.
2. Remove all external devices (USBs, drives).
3. Boot into **Safe Mode** or **BIOS**.
4. Use **Startup Repair** or **System Restore** from Windows Recovery Environment.
5. Reinstall Windows if necessary.

Key Tools: BIOS/UEFI, Windows Recovery Environment, Bootable USB installer.

3. Application Crash or Not Responding

Possible Causes: Software bugs, outdated app, corrupted files, low memory.

Steps to Fix:

1. Close app via **Task Manager** and reopen.
2. Update or reinstall the application.
3. Check **Event Viewer** for error logs.
4. Clear app cache or temporary files.
5. Run **Compatibility Troubleshooter** if it's an older app.

Key Tools: Task Manager, Event Viewer, Control Panel → Programs.

4. No Internet Connection

Possible Causes: Router issue, incorrect IP settings, driver issues, or ISP outage.

Steps to Fix:

1. Restart PC and router.
2. Run **Network Troubleshooter**.
3. Check Wi-Fi or Ethernet cable connection.
4. Flush DNS and reset TCP/IP stack.
5. Reinstall or update network adapter driver.

Key Tools: Command Prompt, Network Troubleshooter, Device Manager.

5. Blue Screen (BSOD)

Possible Causes: Faulty drivers, hardware failure, corrupted system files.

Steps to Fix:

1. Note down the **error code** (e.g., “IRQL_NOT_LESS_OR_EQUAL”).
2. Boot in **Safe Mode**.
3. Update or roll back recent drivers.
4. Run **System File Checker** and **DISM**.
5. Check RAM and hard drive for errors.
6. Use **System Restore** if issue started recently.

Key Tools: Event Viewer, Device Manager, Memory Diagnostic Tool.

Procedure

1. Setting up the Virtual Machine:

I created a Windows 10 virtual machine using **Oracle VirtualBox**. Before making any changes, I took a **snapshot** of the system to ensure I could restore it later if necessary.

2. Breaking the Boot Process:

Inside the virtual machine, I opened **Command Prompt as Administrator** and went to the System32 folder by typing:

After restarting the computer, Windows displayed an error message saying that it could not start because a required file was missing.

3. • Entering the Windows Recovery Environment:

I inserted the **Windows installation ISO** and booted from it. On the installation screen, I clicked **Repair your computer** → **Troubleshoot** → **Advanced Options**, which opened the **Windows Recovery Environment**.

