Module 4: Troubleshooting and Maintenance

1. What is troubleshooting?
The process of identifying, diagnosing, and resolving problems in a system or device.

2. How do you troubleshoot a computer with no display on screen?
- Check power connections and monitor cable.
- Test with another monitor.
- Verify GPU or RAM is seated properly.
- Clear CMOS by removing the battery.

3. Steps to handle a blue screen of death (BSOD):
- Note the error code on the screen.
- Restart the computer and boot into Safe Mode.
- Update drivers or roll back recent changes.
- Run hardware diagnostics and check for overheating.

4. Basic troubleshooting for a printer:
- Ensure the printer is powered on and connected.
- Check for paper jams or low ink.
- Restart the printer and update drivers.
- Test with another device or cable.

5. Basic troubleshooting for a laptop:
- Check if the battery and charger are functional.
- Perform a hard reset (remove battery, hold power for 30 seconds).
- Boot into BIOS and check hardware status.
- Test with external display and peripherals.

6. Steps to check a laptop that won't start:
- Verify power supply and battery.
- Remove non-essential peripherals.
- Reset the RAM or replace it if faulty.
- Check the motherboard and power button.

7. Practical to disassemble a laptop and replace corrupted RAM:
- Power off the laptop and remove the battery.
- Open the bottom panel using a screwdriver.
- Locate the RAM module, remove it by releasing side clips.
- Insert the new RAM, ensure it clicks in place, and reassemble the laptop.

8. Practical to replace a printer cartridge:
- Open the printer cartridge compartment.
- Remove the old cartridge carefully.
- Unpack the new cartridge and remove any protective tapes.
- Insert the new cartridge into the designated slot until it clicks.
- Close the compartment and perform a test print.