🛠️ Chapter 5: IT Troubleshooting & Problem-Solving

Troubleshooting is the **process of diagnosing and fixing technical issues** with computers, software, and networks. Whether you're a beginner or an IT professional, understanding **systematic troubleshooting** can save time and frustration.

5.1 Identifying Common IT Issues

Computers and networks can develop **various issues** due to software bugs, hardware failures, or configuration errors.

Issue	Symptoms	Possible Causes
Slow Computer	Programs lag, system freezes	Too many background apps, low storage, outdated OS
No Internet Connection	Wi-Fi connected but no access	Router issues, ISP downtime, incorrect network settings
Software Crashes	App closes unexpectedly	Corrupt installation, insufficient RAM, outdated software
Printer Not Working	Printer unresponsive	Driver issues, paper jam, offline mode enabled
Computer Won't Boot	Black screen, no response	Power failure, hardware issue, corrupted OS
Virus/Malware Infection	Pop-ups, slow performance	Downloading untrusted files, lack of antivirus protection

💡 **Pro Tip:**
If a **problem appears suddenly**, ask:
✔ **What was changed before the issue started?**
✔ **Did you install new software, update drivers, or modify system settings?**

5.2 Step-by-Step Troubleshooting Process
🔍 **1. Identify the Problem**

- Gather information: **What is happening? When did it start?**
- Check for error messages and document any recurring issues.

🔄 **2. Restart the Device**

- **90% of IT problems** can be solved by a **simple restart**!
- Restarting clears temporary memory (RAM) and **resets system processes**.