

## Explanation of IT Roles

### PC Repair Technician

- **What they do:** They diagnose and fix problems with personal computers and laptops (hardware or software).
- **Why important:** They extend the life of devices and save money for individuals and companies.
- **Example:** Replacing a broken hard drive, fixing overheating issues, or reinstalling Windows.

### Database Administrator (DBA)

- **What they do:** They manage and secure databases where important information is stored (customer data, medical records, financial info).
- **Why important:** Without DBAs, data could be lost, corrupted, or hacked.
- **Example:** A DBA ensures that the university's student registration system is always available and safe.

### Network Administrator

- **What they do:** They manage and monitor the computer network (routers, switches, firewalls, wireless access points).
- **Why important:** They make sure everyone in the company has secure internet and network access without interruptions.
- **Example:** A network admin ensures the office Wi-Fi, email system, and VPN work reliably.

### Server Administrator

- **What they do:** They set up, configure, and maintain servers (powerful computers that provide services like email, file storage, or websites).
- **Why important:** Servers are the backbone of IT infrastructure—without them, no centralized apps or services would run.
- **Example:** Managing a web server for an e-commerce site or a file server for company documents.

### Cable Installer

- **What they do:** They set up the physical network cables (like fiber optics, ethernet cables, and connectors) that connect computers, servers, and devices.
- **Why important:** Without proper cabling, no internet or network communication would happen.
- **Example:** When a new office is built, the cable installer runs cables in walls, ceilings, and connects them to switches/routers.

## Data Analyst

- **What they do:** They collect, clean, and study data to find useful information for decision-making.
- **Why important:** Organizations use their reports to improve sales, healthcare, education, or security.
- **Example:** A data analyst in a hospital might analyze patient records to see which diseases are most common.

## Helpdesk Support

- **What they do:** They are the first people you call when you have computer or network problems. They provide technical support (by phone, chat, or in person).
- **Why important:** They keep the organization running smoothly by solving issues quickly.
- **Example:** Fixing login problems, software errors, or printer issues for staff.

## Programmer

- **What they do:** They write, test, and maintain software code that tells a computer what to do.
- **Why important:** Every app, website, and system needs a programmer behind it.
- **Example:** A programmer builds an online banking app or a school management system.