

CA - NETWORK

Name - Tauheed Khan
Reg No: 2141011029

Q) Identify a real world application for both parallel computing and networked system. Explain how these technologies are used and why these are important in that context.

→ Real-world application
for parallel
computing

- ★ Smartphone: Smartphones rely on parallel processing to accomplish their tasks faster and more efficiently.
- ★ Laptop Computers: Today's most powerful laptops, Macbooks, Chromebooks and ThinkPads use chips with multiple processing cores a foundation of parallelism.
- ★ IOT → The Internet of Things (IOT) relies on data that is collected from sensors which are connected to the internet. Once that data has been collected, parallel computing is required to analyze it for insights and help complex systems such as power plants, dams and traffic systems function.
- ★ Super Computers - It relies so heavily on parallel computing that are often called parallel computers.

Real-world application of networked system

- * Email and Instant Messaging Network are the foundation for sending and receiving email and instant messaging.
- * Video Conferencing: Facilitates real-time video and audio communication for meeting and collaboration.
- * File Sharing: Allows users to share documents, presentations and other files with others over the network.
- * Web Browsing: Enables access to information and services on the internet through web browsers.
- * Network Monitoring: Monitoring networking traffic and device health to detect potential security threats and performance issues.
- * Health Care: Networked systems are crucial for patient monitoring, medical device connectivity, and secure data storage in hospitals and healthcare facilities.