

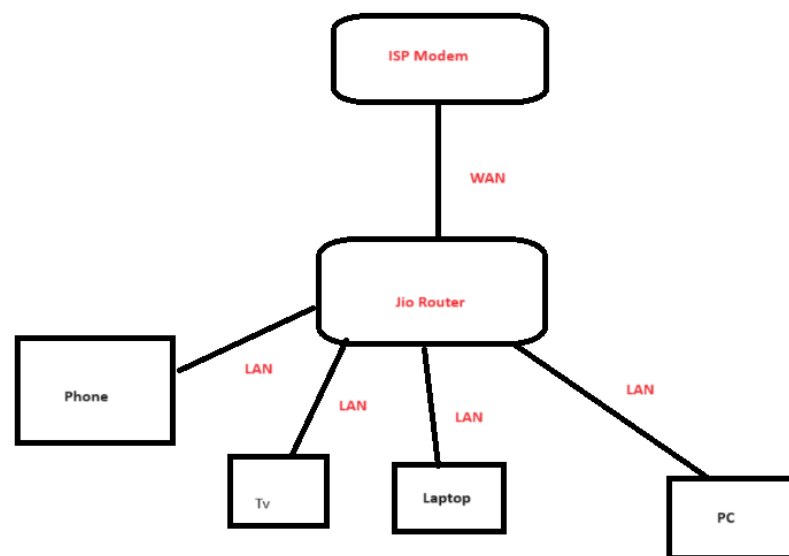
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Batch: CPPE_Java Full Stack

Assignment 1

Q. Draw your Home Network Topology and explain how you are accessing the RPS Lab environment.

Answer: -



Q Explain how you are accessing the RPS Lab environment.

Ensure Network Access:

First, I verify that I have network access to the RPS Lab environment. This might involve connecting to a VPN or ensuring my IP address is whitelisted by the lab's network.

Obtain Credentials:

I secure the necessary login credentials, which typically include a username and password. These credentials are often provided by the lab administrator.

Access the Lab Environment:

Using my credentials, I log in to the RPS Lab environment. This could be through a web portal, SSH client, or another interface specified by the lab.

Navigate the Environment:

Once logged in, I navigate the environment to find the resources or tools I need. This might involve using a command-line interface or a graphical user interface, depending on the setup.

Verify Permissions:

I ensure that I have the necessary permissions to access the specific resources or perform the actions I need within the lab environment. If I encounter any access issues, I contact the lab administrator for assistance.

Perform Desired Actions:

I carry out the tasks I need to perform in the lab, whether that's running experiments, collecting data, or accessing specific applications.

Log Out:

After completing my tasks, I log out of the RPS Lab environment to ensure security and prevent unauthorized access.

Assignment 2

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

Answer: -

Parallel Computing Aspect:

Parallel computing helps in processing large amounts of customer data for tasks like recommendation systems. It allows algorithms to run efficiently by distributing the workload across multiple computing units. For example, recommendation algorithms can analyse customer data simultaneously to suggest relevant products quickly.

Networked Systems Aspect:

Networked systems connect various components of the e-commerce platform, like web servers and databases. They facilitate seamless communication and data exchange between these components. Additionally, they enable real-time inventory management across multiple warehouses, ensuring efficient order fulfilment.

Importance:

Real-Time Processing: Enables faster response times for customer requests and personalized recommendations.

Inventory Management: Ensures efficient stock management and order fulfilment across distributed warehouses.

Scalability: Allows online retailers to handle increased traffic during peak periods effectively.