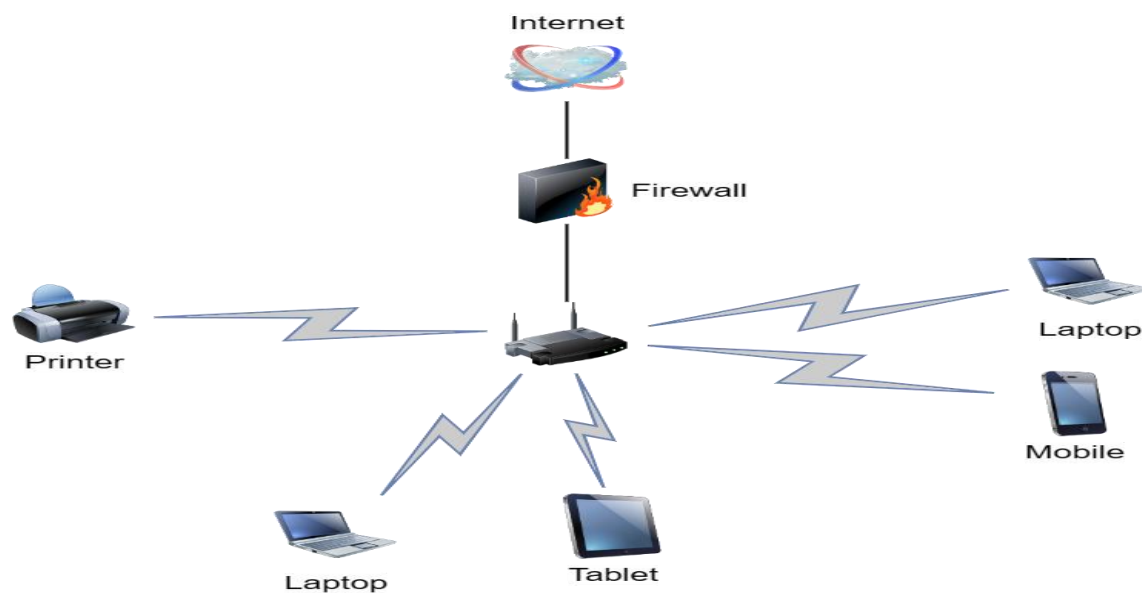


1. Home Network Tropology:



1. **Authentication**: You would likely need to authenticate yourself to gain access to the RPS Lab environment.
2. **Access Control**: Depending on your role and permissions, you may have different levels of access to the RPS Lab environment. Access control mechanisms ensure that users only have access to the resources they are authorized to use.
3. **SSH (Secure Shell) Access**: Alternatively, if the RPS Lab environment is a Linux-based system, you may connect to it using SSH. You'll need an SSH client installed on your local machine to establish a secure connection.
4. **Remote Desktop Connection**: In some cases, you might need to use a remote desktop connection tool such as Remote Desktop Protocol (RDP) or a similar application. This allows you to interact with the RPS Lab environment as if you were physically present at the machine.

5.URL or IP Address: You may need to access the RPS Lab environment through a specific URL or IP address. This information should also be provided to you.

Q2. 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.

A) Real-World Application: Online Food Delivery

Parallel Computing: Imagine a busy online food delivery service. They receive orders from customers all the time. Parallel computing allows them to process many orders simultaneously. Instead of handling one order at a time, they can process multiple orders at once, speeding up delivery times and making customers happier.

Networked Systems: Now, think about how the food delivery service connects with restaurants, delivery drivers, and customers. They use networked systems to communicate. Orders are sent from customers to restaurants, then to drivers, and finally to customers. Networked systems ensure that everyone involved in the process stays connected and informed in real-time.

Importance: Parallel computing and networked systems are important in online food delivery because they make the whole process faster, more efficient, and more reliable. With parallel computing, the service can handle more orders at once, reducing wait times for customers. Networked systems keep everyone in the loop, ensuring smooth coordination between restaurants, drivers, and customers, leading to better service overall.