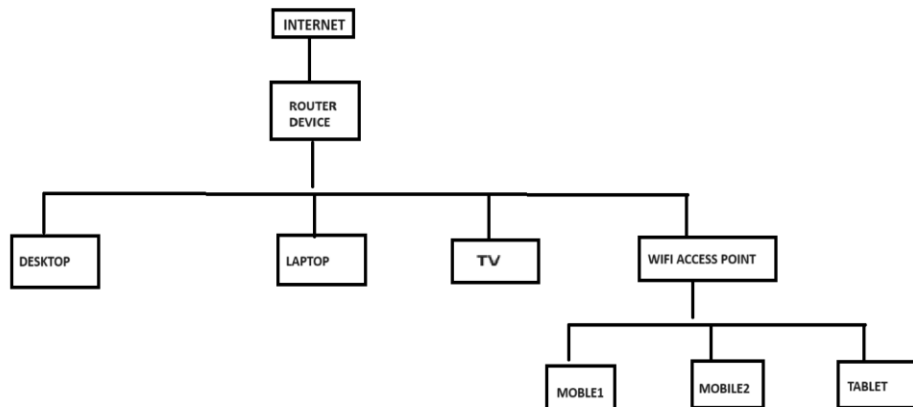


Diagram:-



Explanation of Accessing RPS Lab Environment

1. Modem/Router Combo Device:
 - This device connects to the internet provided by the ISP (Internet Service Provider) and routes traffic to various devices in the home network. It may include both wired (Ethernet) and wireless (WiFi) connections.
2. Wired Connections:
 - Devices such as a Desktop PC or Laptop might be connected directly to the router via Ethernet cables. This provides a stable and fast connection, ideal for tasks requiring high bandwidth or low latency.
3. Wireless Connections:
 - Other devices, like laptops, smartphones, and tablets, connect to the network via WiFi through a WiFi Access Point, which can be built into the router or a separate device.

Accessing the RPS Lab Environment:

1. Establish Internet Connection:
 - Ensure that the device (e.g., Desktop PC or Laptop) is connected to the home network, which has internet access through the Modem/Router.
2. Remote Access Software:
 - Use remote access software (such as SSH for command line access, VPN for secure access, or Remote Desktop Protocol for GUI access) to connect to the RPS lab environment.
3. Authentication:
 - Enter the required credentials (username and password, SSH keys, etc.) to authenticate access to the RPS lab environment.
4. Secure Connection:
 - If using a VPN, first establish a VPN connection to the RPS lab's network to ensure all data transmitted is secure.
5. Access RPS Resources:

- Once authenticated and connected, you can interact with the RPS lab environment as if you were physically present, running commands, transferring files, and using resources as needed.

Example Scenario:

1. Using SSH to Access a Remote Server:
 - On your Desktop PC or Laptop, open a terminal.
 - Type the command: `ssh username@RPS_lab_IP_address`.
 - Enter the password or use an SSH key to authenticate.
 - You are now connected to the RPS lab environment and can start working.
2. Using VPN and RDP:
 - First, launch the VPN client and connect to the RPS lab's VPN server.
 - Once the VPN connection is established, open the Remote Desktop client.
 - Enter the IP address of the RPS lab machine and your login credentials.
 - You will now have GUI access to the RPS lab environment.