

ASSIGNMENT 1

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

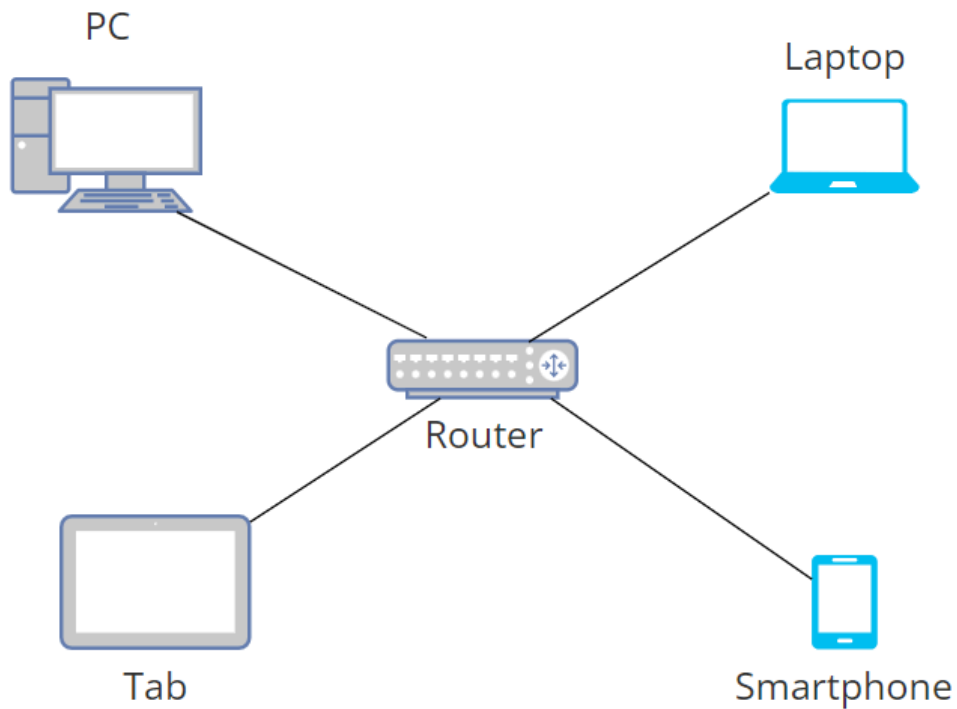


Fig:- My Home Network Using Star Topology

How i am accessing RPS Lab:

1. I type url of RPS Lab in browser and press enter
2. Browser looks up ip address for RPS Lab domain
3. Browser initiates TCP connection with the server
4. Browser sends HTTP request to the server
5. Server processes the request and sends back a response
6. Browser renders RPS Lab to me

ASSIGNMENT 2

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.

Example of a real-world application that integrates parallel computing and networked systems is online multiplayer gaming.

Parallel Computing:

- In online multiplayer games, parallel computing is used to process the game logic and graphics rendering.
- The game server employs parallel computing techniques to handle multiple players' actions simultaneously, such as movement, interactions, and combat.
- Additionally, parallel processing is utilized for real-time physics simulations and AI computations within the game environment.

Networked Systems:

- Networked systems enable communication and interaction between players located in different geographical locations.
- Players connect to the game server via the internet, forming a networked environment where they can compete or cooperate with each other in real-time.
- Network protocols ensure that player actions are synchronized across all connected clients, maintaining a consistent gaming experience for everyone involved.