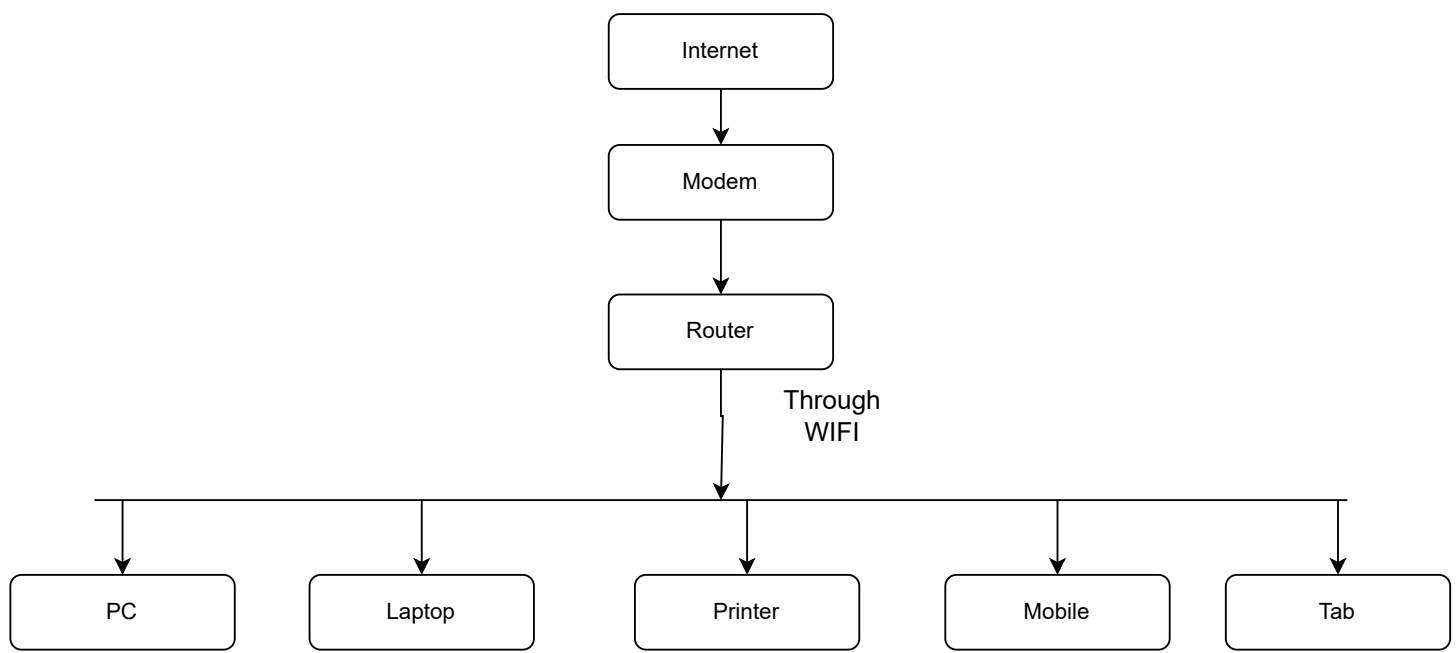


Assignment 1: Draw your Home Network Topology and explain how you are accessing the RPS Lab environment.



Home Network Topology

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.

Parallel computing:

Parallel computing refers to the process of executing several processors an application or computation simultaneously. Generally, it is a kind of computing architecture where the large problems break into independent, smaller, usually similar parts that can be processed in one go. It helps in performing large computations as it divides the large problem between more than one processor.

Benefits: Parallel computing also helps in faster application processing and task resolution by increasing the available computation power of systems.

Importance: There are many reasons to use parallel computing, such as save time and money, provide concurrency, solve larger problems, etc. Furthermore, parallel computing reduces complexity.

A real-life example of this would be people standing in a queue waiting for a movie ticket and there is only a cashier. The cashier is giving tickets one by one to the persons. The complexity of this situation increases when there are 2 queues and only one cashier.

Network System:

Network systems are computational systems that implement connectivity among networks or between a network and an end system. In general, a network system is a system attached to two or more communication links, wired or wireless. A network system executes a set of protocol stacks, one associated with each attached link, and delivers data among appropriate stacks.

Benefits: The benefits of networking include access to job opportunities, professional connections, career advice, new ideas, and valuable information. Networking also helps with personal and business growth, building relationships, and gaining a competitive edge in your industry.

Importance: Resource sharing is the primary uses of networked system. This allows multiple users to access the same resources, which can help to reduce costs and increase efficiency

In the real-life example of Networked System is Mobile phone a Wireless connection into mobile phone network. Personal computer, telephone line and modem or other network connection. The internet that links my computer to other players' computers.