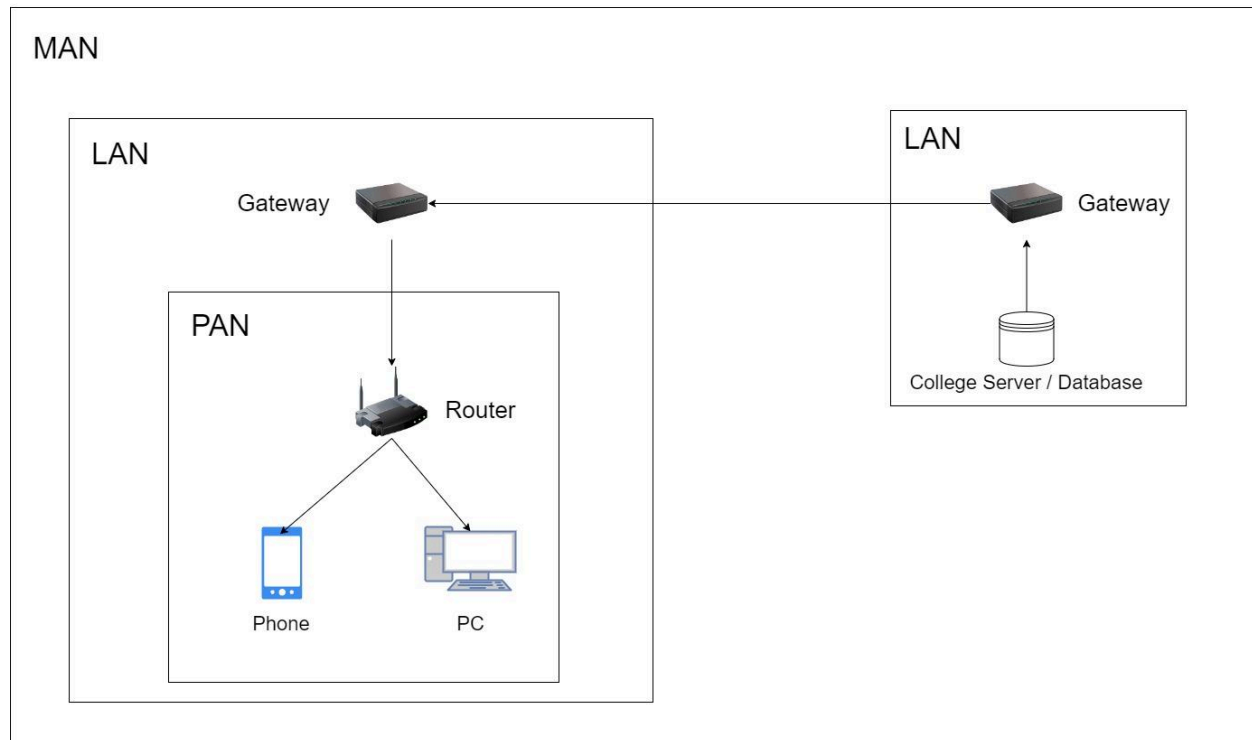# Day 1 Assignment

1. **Draw your Home Network Topology and explain how you are accessing the Any(College lab , office lab) Lab environment.**

## Hybrid Topology
## From Home to College



*figure made using draw.io*

The reason it is hybrid is because the Personal Area Network at my home acts like **star topology** where the router/modem acts as a single point of communication for all the devices for the network.

After that, the LAN of my area and LAN at my college area acts as a **tree topology** where the network is distributed at various hierarchical levels.

Thus, it is a hybrid topology. Hybrid topology by definition is *topology is defined as a network topology that combines two or more different network topologies*.

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 Example :

**Video Editing and Rendering**, big movies nowadays shot at 4k quality with crystal clear sound and realistic computer generated imagery, all of these editing and rendering used to take a lot of time back in the days with normal computing. But with Parallel Computing all these processes are done simultaneously and the final end result can be achieved much faster compared to normal computing.

**Parallel Computing** is *technology which helps in processing multiple things at same time* with the help of dividing the task in such a way that one task does not interfere with another and can be performed at same time.

Networked System Example :

**Cloud Computing**, with the modernisation of networking and cloud systems. Systems like infrastructure, platform and software now can be accessed through the internet. Those systems are distributed over the places but connected through a web of networked systems These help achieve better scalability and good resource sharing.

**Networked system** is a *technology which basically means a web of systems which are connected to each other* in such a way that can share multiple things from software to hardware over the network in a wide area.