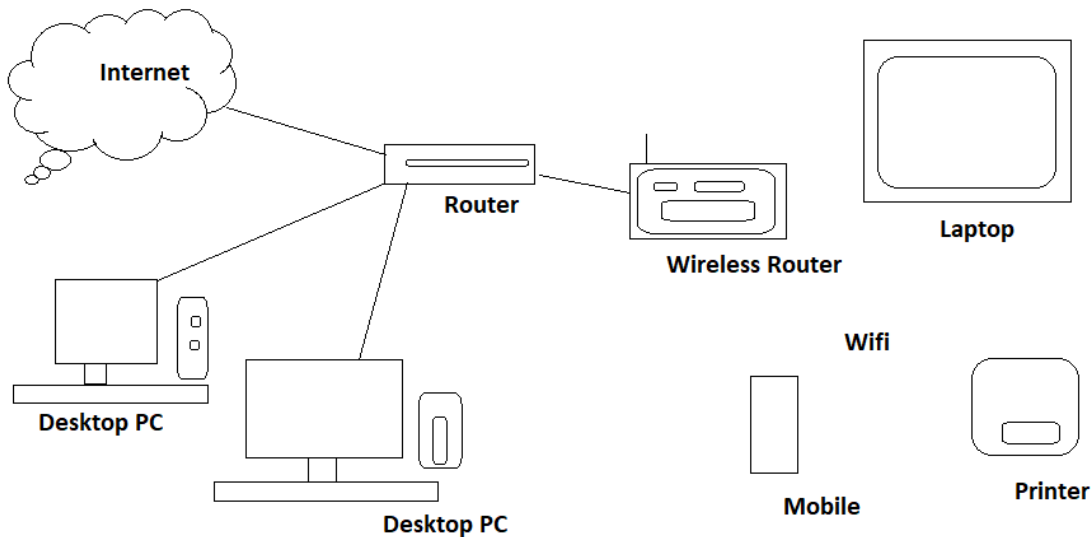


Assignment 1: Draw your Home Network Topology and explain how you are accessing the Any(College lab , office lab) Lab environment.



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.

Let's delve into real-world applications for both parallel computing and networked systems:

1. Parallel Computing:

Application: Image and Video Processing

Explanation: Image and video processing tasks, such as image recognition, video encoding, and real-time video processing, require significant computational power. Parallel computing is used to distribute these tasks across multiple processing units or cores simultaneously.

Importance: In fields like computer vision, surveillance, medical imaging, and entertainment, parallel computing accelerates the processing of large amounts of visual data. For instance, in medical imaging, parallel computing expedites the analysis of MRI or CT scans, aiding in faster

diagnoses. In entertainment, it enables real-time rendering of high-definition graphics and special effects in video games and movies.

2. Networked Systems:

Application: Online Social Networks

Explanation: Online social networks, such as Facebook, Twitter, and LinkedIn, rely on networked systems to connect millions of users worldwide. These systems comprise servers, databases, and communication protocols that facilitate sharing, commenting, liking, and other interactions among users.

Importance: Networked systems play a pivotal role in enabling seamless communication and collaboration among users on social media platforms. They allow users to connect with friends, share updates, discover content, and engage in discussions in real-time. Additionally, networked systems support features like personalized recommendations, targeted advertising, and content moderation, enhancing user experience and platform monetization.