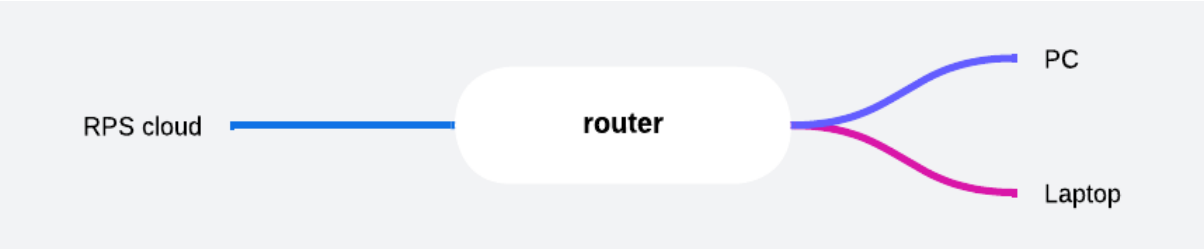
Assignment 1

1.draw home network topology and explain how your accessing the rps lab environment



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

In weather forecasting, parallel computing is used to process vast amounts of data simultaneously, allowing meteorologists to generate forecasts quickly.

It helps crunch a ton of data quickly by splitting tasks among many processors or nodes, making weather predictions faster and more detailed.

Networked systems

Networked systems play a crucial role in weather forecasting by enabling data collection, sharing, and collaboration among weather monitoring stations, satellites, and research institutions worldwide.

These systems connect weather stations, satellites, and research centers, allowing them to share data in real-time and access computing power remotely.

Importance

By using parallel computing and networks, weather forecasts become more accurate and timely. This means better preparation for severe weather events, which can save lives and reduce economic damage.