

Network Topology for Class-Lab:

# **Identify Devices**:

Make a list of all the devices in your network setup, including the internet connection, main server, proxy server, router, and PCs.

### IP Addresses:

Find out the IP addresses assigned to each device. You can usually find this information in the settings or configuration interface of each device

## **Physical Connections:**

Physically trace the connections between devices. For example, identify which devices are directly connected to the router, which devices are connected to switches or hubs, and how they are interconnected.

### Logical Topology:

Determine the logical topology of your network. This includes understanding how data flows between devices, how devices communicate with each other, and any network segmentation or V-LANs that may be in place.

### Que 2. Parallel Processing and NetWork Systems.

#### Answer:-

#### 1. Parallel Processing:

- The real world example for the most common it's an Google- Search. Web-based search engine that allows users to search for information across the internet.
- Parallel processing techniques are used to distribute this indexing workload across multiple servers or clusters. Each server can process a subset of web pages simultaneously, allowing google content quickly and efficiently.
  - From this searching speed of the google increase efficiently.

### 2. Network Systems:

- The real time example of Network-Systems is Google-Map.
- Route Planning and Navigation: When a user requests directions or navigation instructions in Google Maps, their device sends a request to Google's servers with their starting point, destination, and preferred mode of transportation. Network systems process this request, calculate the optimal route based on real-time traffic data and other factors, and send the route information back to the user's device.