**Aim:** To study packet tracer tool and create network for topology followed in our college.

**Theory:**

**Packet Tracer** is a [cross-platform](https://en.wikipedia.org/wiki/Cross-platform) visual [simulation](https://en.wikipedia.org/wiki/Simulation) tool designed by [Cisco Systems](https://en.wikipedia.org/wiki/Cisco_Systems) that allows users to create [network topologies](https://en.wikipedia.org/wiki/Network_topologies) and imitate modern [computer networks](https://en.wikipedia.org/wiki/Computer_networks). The software allows users to simulate the configuration of Cisco routers and switches using a simulated command line interface. Packet Tracer makes use of a [drag and drop](https://en.wikipedia.org/wiki/Drag_and_drop) user interface, allowing users to add and remove simulated network devices as they see fit. The software is mainly focused towards Certified Cisco Network Associate Academy students as an educational tool for helping them learn fundamental CCNA concepts. Previously students enrolled in a CCNA Academy program could freely download and use the tool free of charge for educational use.

Packet Tracer can be run on Linux and Microsoft Windows. Similar [Android](https://en.wikipedia.org/wiki/Android_(operating_system))and [iOS](https://en.wikipedia.org/wiki/IOS) apps are also available. Packet Tracer allows users to create simulated network topologies by dragging and dropping routers, switches and various other types of network devices. A physical connection between devices is represented by a "cable" item. Packet Tracer supports an array of simulated [Application Layer protocols](https://en.wikipedia.org/wiki/Application_Layer), as well as basic routing with [RIP](https://en.wikipedia.org/wiki/Routing_Information_Protocol), [OSPF](https://en.wikipedia.org/wiki/OSPF), [EIGRP](https://en.wikipedia.org/wiki/EIGRP), [BGP](https://en.wikipedia.org/wiki/BGP), to the extents required by the current [CCNA](https://en.wikipedia.org/wiki/CCNA) curriculum. As of version 5.3, Packet Tracer also supports the [Border Gateway Protocol](https://en.wikipedia.org/wiki/Border_Gateway_Protocol).

In addition to simulating certain aspects of [computer networks](https://en.wikipedia.org/wiki/Computer_networks), Packet Tracer can also be used for collaboration. As of Packet Tracer 5.0, Packet Tracer supports a multi-user system that enables multiple users to connect multiple topologies together over a [computer network](https://en.wikipedia.org/wiki/Computer_network). Packet Tracer also allows instructors to create activities that students have to complete.[[2]](https://en.wikipedia.org/wiki/Packet_Tracer#cite_note-jar-2) Packet Tracer is often used in educational settings as a learning aid. Cisco Systems claims that Packet Tracer is useful for network experimentation.

**Approach:**

For step by step process please refer documents attached.

Signature of Faculty