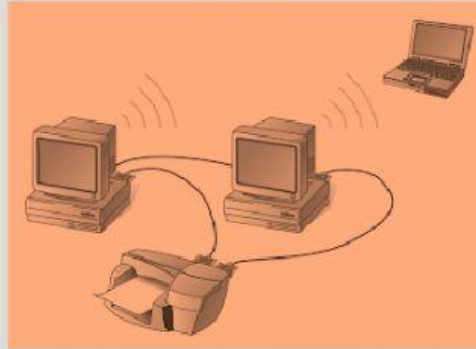


What is a computer network?



A computer network is a set of connected computers. We can create a computer network when two or more nodes are connected. A computer is called as a node in a computer network. Those computers can be connected through wired or wireless connections. We will discuss it later in this lesson. Let's learn basics of computer networks.

Types of network connections

1. Wired

The wired connection is differentiated from the wireless network connection from the physical cables that use for data communication. Let us discuss three common wired transmission mediums



2. Wireless

Wireless communication enables devices to connect remotely to a network without using physical wires. A wireless network uses infrared, Bluetooth,





radio waves to share the information and resources between devices.

Main components of a computer network

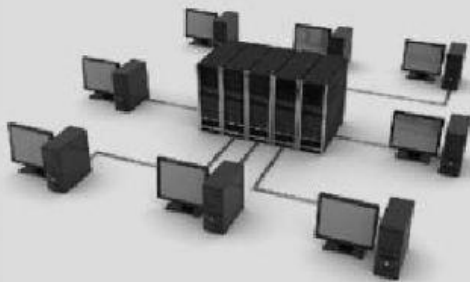
A computer network is made up of several devices. Those components facilitate us to transfer data among the devices in the network. Let us discuss the basic components that you need to set up a network.

Server



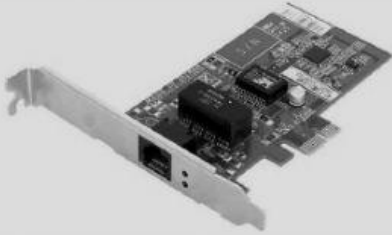
Servers are computers that hold shared files, programs, and the network operating system. Servers provide access to network resources to all the users of the network.

Client



The computers are the clients of the network. It can receive and send data to another computer. The above diagram shows several client computers connected to servers.

Network Interface Card (NIC)



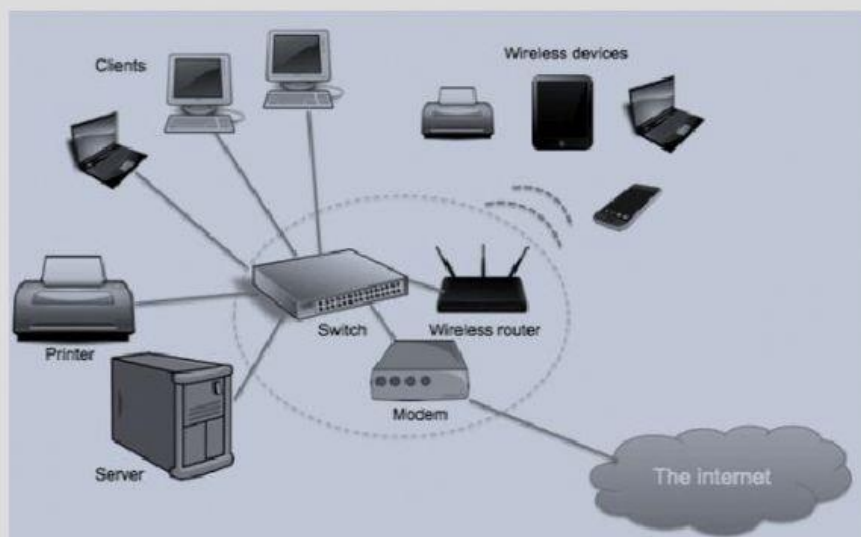
Each computer contains a NIC. Today this card comes with an inbuilt component of the computer motherboard. It is a must to have a NIC to connect to the internet. The main purpose of NIC is to format the data, send the data, and receive the data at the receiving node.

Routers

MODEM

How we connect the devices in a computer network?

The diagram below shows a typical local area network. As you can see in the picture the Server, Clients are connected through the switch. The wireless router allows connecting to the internet. The modem converts the signal into an analog signal.



Attach the appropriate answer

Allows for direct and efficient communication between the computers in the network and

Main objective of computer networking

Command Line Interface

An interconnected group of people, items or systems

Bluetooth

Is used as a medium in computer

Used to send messages in the network

Network

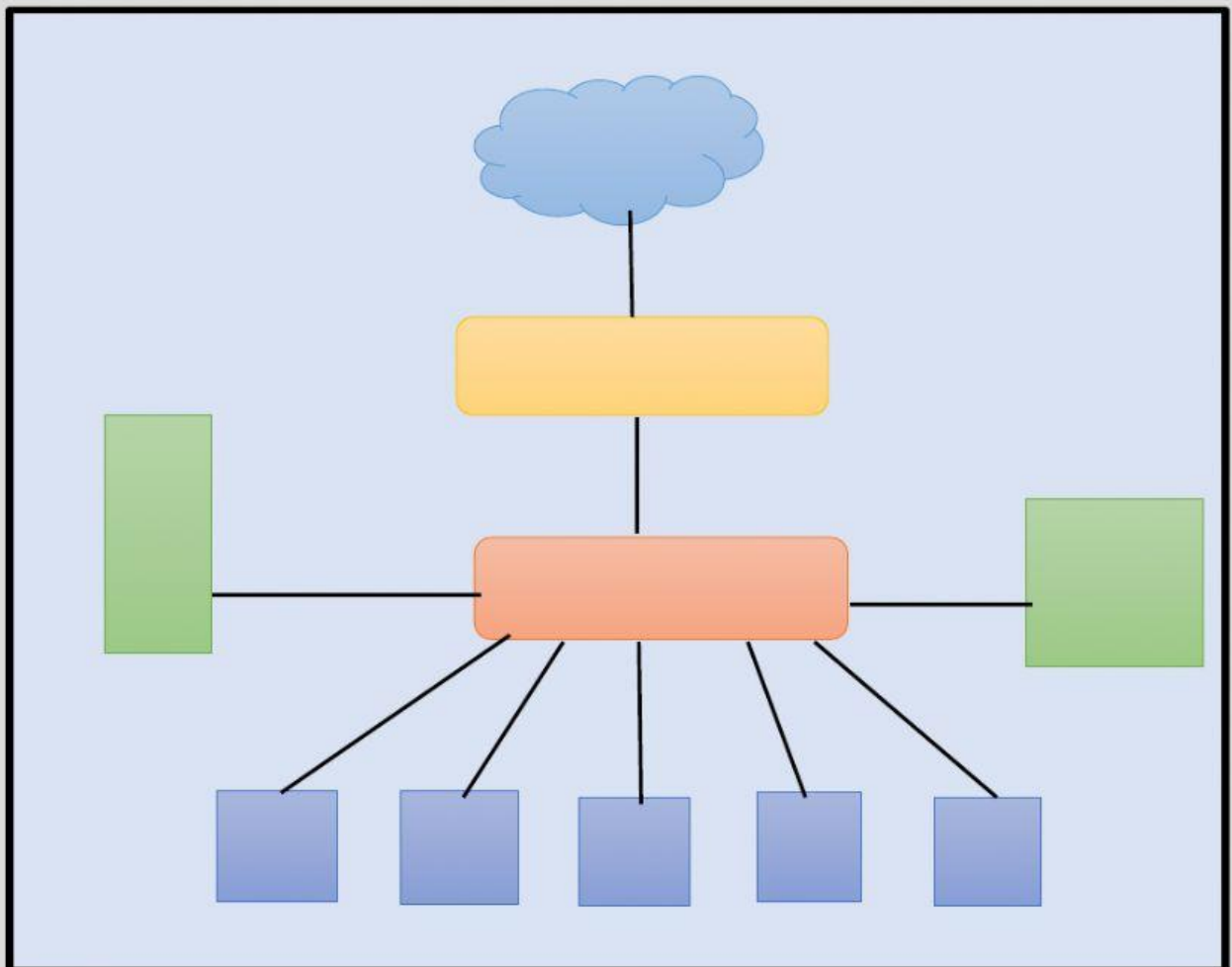
Switch

Used for wireless connection between

Communication

Twisted pair cable

Given below is a block diagram of a computer network showing how the computer and the devices are connected. The table below indicates the details of the connected hardware. Select the appropriate answer



Devices connected	Code
A few computers	C1, C2 ,C3
Switch	S
Router	R
Printer	P
Internet	I
Server	SVR