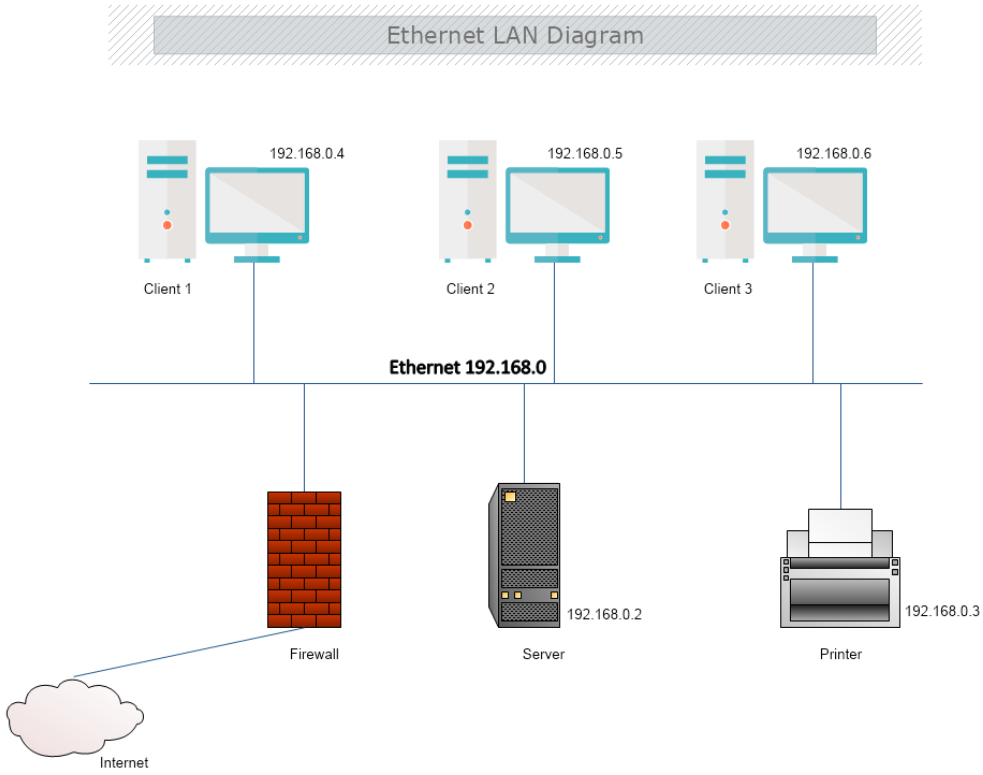
Assignment – 03

LOCAL AREA NETWORK DIAGRAM:



At the top of the diagram, there are three computers (labeled Client 1, Client 2, and Client 3). Each computer is connected to a network through Ethernet cables and has its own unique IP address:

Client 1 → 192.168.0.4

Client 2 → 192.168.0.5

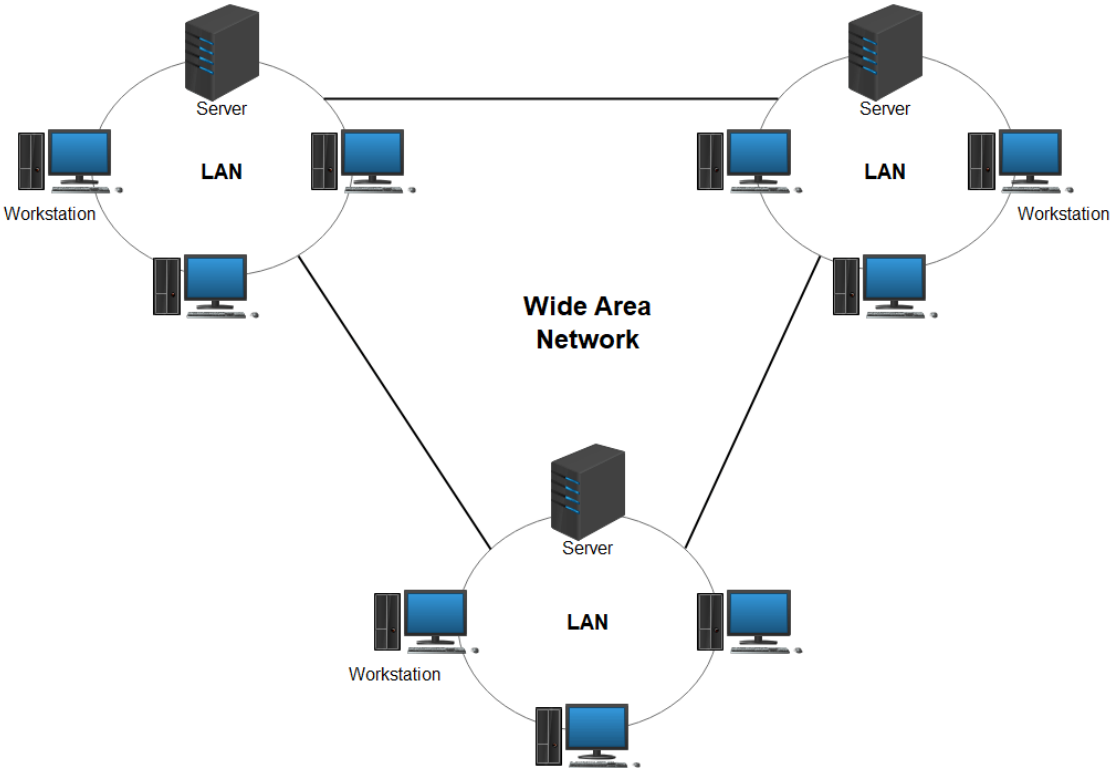
Client 3 → 192.168.0.6

All these computers are part of the same network with the base IP address range 192.168.0.x.In the middle of the diagram is a horizontal line labeled "Ethernet 192.168.0" — this represents the wired LAN that connects all devices.

Connected to this network are:A server (192.168.0.2): This could be used for storing files, running applications, or hosting websites.A printer (192.168.0.3):

All client computers can print documents using this shared printer.A firewall: This acts like a security guard for the network. It checks all incoming and outgoing traffic and protects the network from unwanted access.The firewall connects to the Internet, allowing all devices inside the LAN to safely browse the web, send emails, and more.

WIDE AREA NETWORK DIAGRAM:



Each circle in the diagram represents a LAN, which is a small network of computers and devices (like servers and workstations) in one location—like an office, building, or school. Inside each LAN, all devices are connected to a server that helps manage the network, store data, and run applications.Now, to connect these separate LANs across different places, we use a WAN. The WAN acts like a bridge, linking all the LANs together using the internet or private connections. This makes it possible for computers in one location to share files

and communicate with computers in another location—no matter how far apart they are.