LAB - 1

LAN : A series of computers linked together to form a network in a circumscribed location.

WAN : A computer network that connects smaller networks that is not tied to a single location.

Ethernet : A system for connecting no. of computers systems to form a LAN with protocols to control the passing of information between systems

IP Address : A unique string of characters that identify each computer using the internet protocol to communicate over a network

Hub : It is a node that broadcasts data to every computer or ethernet based device that is connected to it.

Switch : It connects devices in a network to each other enabling them to talk by exchanging data packets.

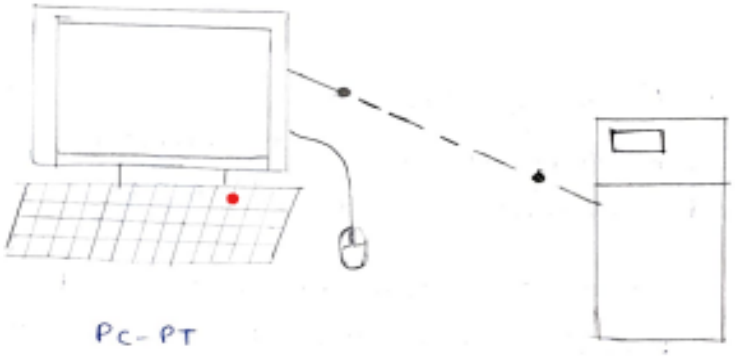
Server : It is a computer program or device that provides a service to another computer program in its user known as client

End device : Are either the source or destination of data transmitted over the network.

NODE : The connection point among network device such as routers, pointers or switches that can receive & send data from one end point to another.

Packet Tracket:

1) Add Pc and Server from end devices
2) Connect them with copper cross over.
3) Set Pc Ethernet IP address as 10.0.0.1 and DNS Server Address as 10.0.0.2
4) Set Server Ethernet IP address as 10.0.0.2
5) Services → DNS → name : www.first.com
   Address : 10.0.0.2
   Add



Pc-PT
Client
10.0.0.1

Server-PT
Web Server
10.0.0.2

Observation Output -

1) Click on Pc in real time → desktop
   → command prompt.

Command :

ping 10.0.0.2

Pinging 10.0.0.2 with 32 bytes of data

Reply from 10.0.0.2 : bytes = 32 time = 0ms TTL: 128

Reply from 10.0.0.2 : bytes = 32 time = 0ms TTL = 128

Reply from 10.0.0.1 : bytes = 32 time = 0ms TTL = 128

Reply from 10.0.0.2 : bytes = 32 time = 0ms TTL = 128

Ping statistics for 10.0.0.2 : packets : Sent = 4,

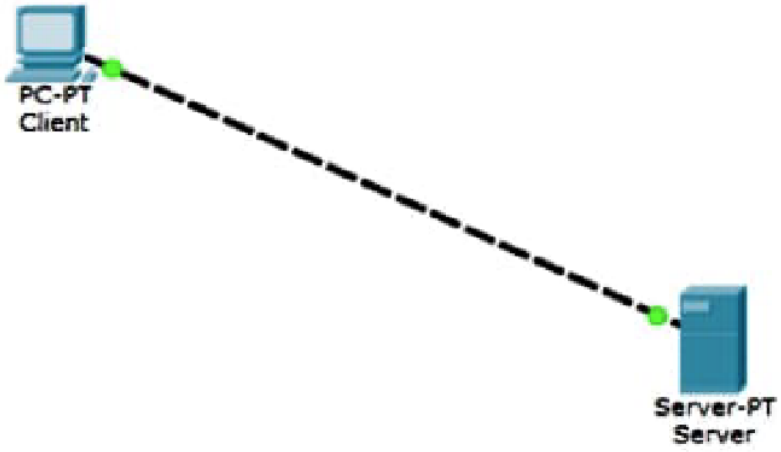
Recieved = 4, lost = 0 (0% loss)

Approximate round trip times in milliseconds :

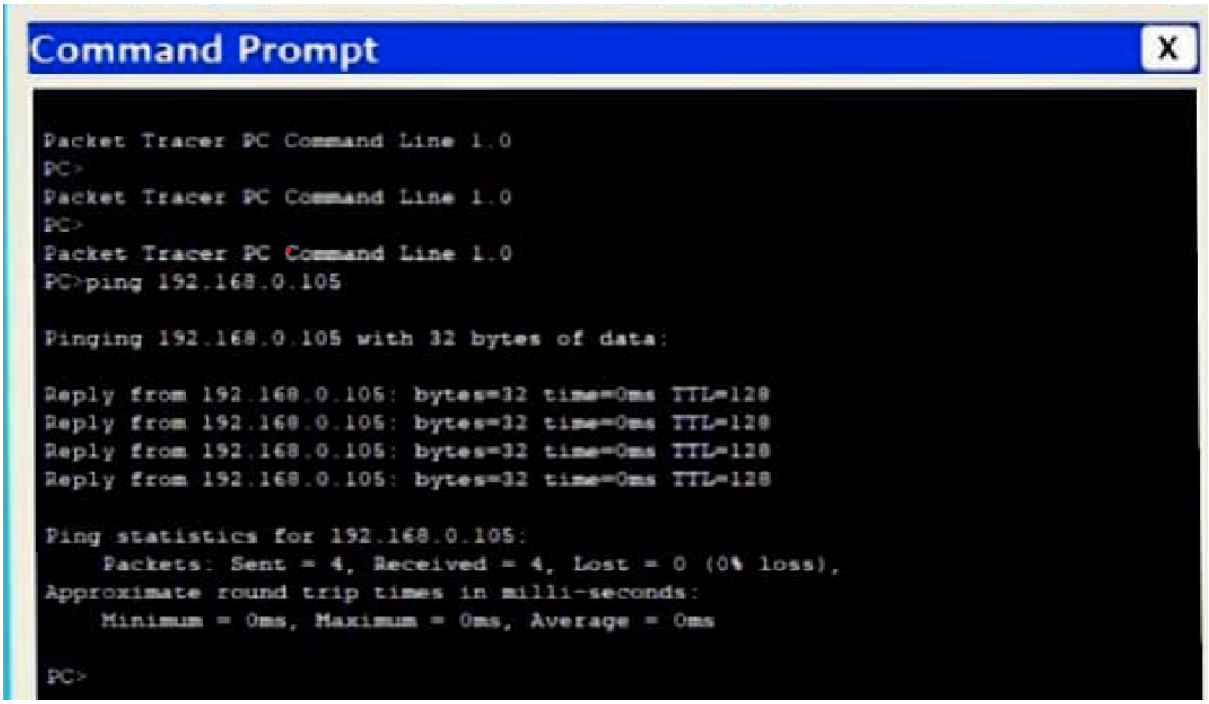
minimum = 0ms, Maximum = 0ms, Average = 0ms

16/6

TOPOLOGY :



OUTPUT :


Command Prompt
X
Packet Tracer PC Command Line 1.0
PC>
Packet Tracer PC Command Line 1.0
PC>
Packet Tracer PC Command Line 1.0
PC>ping 192.168.0.105
Pinging 192.168.0.105 with 32 bytes of data:
Reply from 192.168.0.105: bytes=32 time=0ms TTL=128
Reply from 192.168.0.105: bytes=32 time=0ms TTL=128
Reply from 192.168.0.105: bytes=32 time=0ms TTL=128
Reply from 192.168.0.105: bytes=32 time=0ms TTL=128
Ping statistics for 192.168.0.105:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
PC>