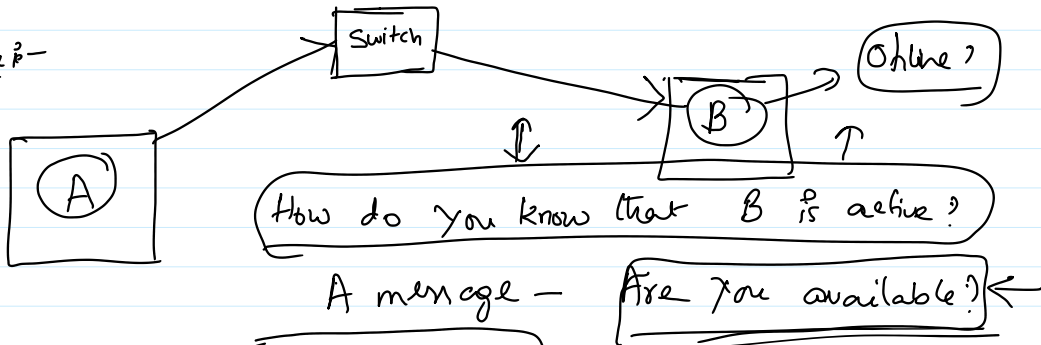


What is ping command? - How is it used?

1) what is troubleshooting? - Network troubleshooting - Identify what's causing the trouble -

Example:-



Let's say you can't

to internet - Trouble

Error messages

ICMP

Network Troubleshooting

← ICMP - Internet Control Message Protocol
Error Messages and Control Messages

Finding the source of the trouble.
causing

→ Let's say you can't connect to the internet - what might be problem?

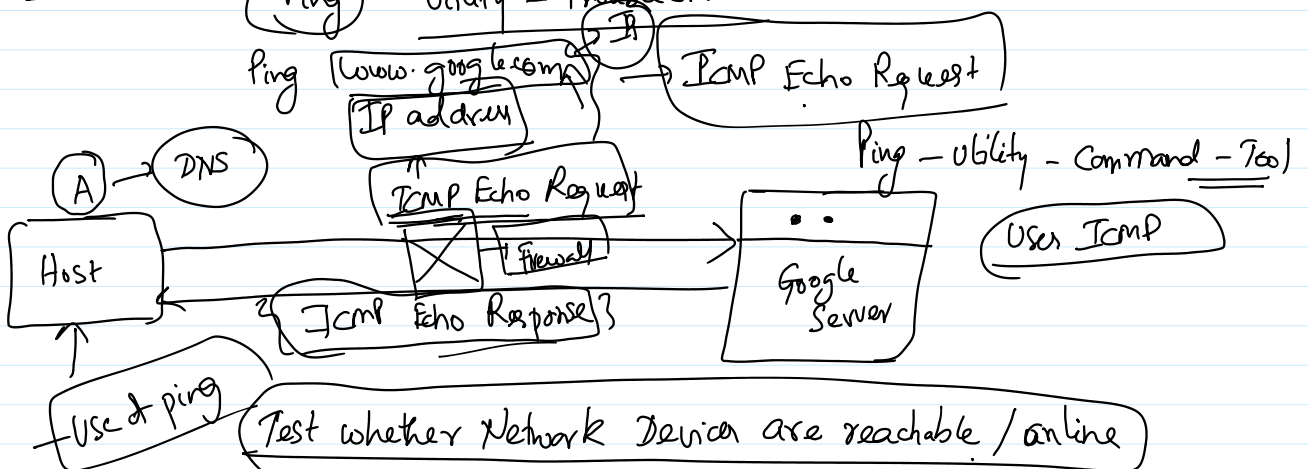
- You can be connected to the network } wifi - No internet Access.

1) Browser - google.com - No internet? - ISP - wi-fi is not working -

2) www.google.com - Can't resolve host - DNS - Configured

Test whether

Ping - Utility - Trouble shoot



4 Echo - ICMP Echo - 4 - [1,2] 4 -

How does ping work - what's the use of ping - what's the protocol involved?

ICMP protocol

ICMP Echo Request → ICMP Echo Reply
ping ↔ pong

ICMP
What's ping?

Utility (as protocol)
Tool (as utility).

Error Messages and Control Message.

Which layer protocol is ICMP? - Network

OSI Layer Protocols

L2 - Link Layer - ARP, Ethernet

L3 - Net Layer - IP, DHCP, ICMP, NTP, IPSEC, P2P, L2E

L4 - Transport Layer - TCP - UDP

App layer - DNS, HTTP, SMTP, HTTPS, FTP, IMAP

* Remember this basic stuff

GAM - 2PM

48ms

48 Round trip time → Latency
8.8.8.8

