

## DAY-2

- Windows .exe
- Batch
- Environmental variable
- Path variable

→ @echo off } save as .Batch  
→ start cmd

→ System 32 - entire OS presents

↓  
ipconfig -

New path with slash \

Windows → System 32.

→ CIDR x Subnetmask  
\* Subnet Calculator.

→ ping 172.1.44.44

↓  
another subnet cannot ping

Windows

→ XAMPP - LI

## LAN

→ same subnet / same IP address

## WAN

→ more than one subnet

→ ping 172.1.44.44 -c 4

→ ping --help

\* switch -c

\* Flag

Linux not stop  
sending packet  
so add count  
of that

Windows - [-n]

→ Ping google.com - Network Connected or  
ping mkec.ac.in Not

\* Same type of devices - Cross over cables

\* Different type of devices - straight Through

\* RJ-45 [CAT-4]

\* 2 Routers - Coaxial or Serial Cable

PC → Config [Half duplex, full duplex]

MAC - Network ~~add~~ device address

NIC - Network Interface Card.

IP address - dynamic

MAC address - only identified through giber

- options - preference - always show port.
- PC - Desktop - terminal (cmd)  
cmd → ping 192.168.1.1

Hub → Communication can be done to all  
→ Transfer data to all.

\* PING uses ICMP

Web page

Switch - Needs MAC

Hub - No destination MAC address.

Switch - Table ARP table

IP address 1 → MAC Address 2

IP address 3 → MAC address 5

Cmd : arp -a

→ Broadcast address - send to all and  
owner is identified &  
send back to switch.

---

→ Connect Router - on → gigabyte

GB 0/0 - IP address - 192.168.1.1

Gateway - which Router is used to  
transfer. (Router IP address)

Subnet