

## \* Creating Hub and Switch topology :-

- When we connect one source { from hub } and destination { from switch }, packet received at hub from source is transferred to other connected device while the packet received at switch is transferred only to destination .

Because,

Hub is a broadcasting device, it transmits the data received to all outgoing ports .

While,

Switch processes the data received, store it and depending on the destination address, it transmits data only to that address rather than sending it to all outgoing ports .

## \* Configure router and send ping message .

- To check whether packet has been received at destination end, we make use of ping command . This shows us how much data has been sent, what is total round trip time .

RTT . { time to live } .

↓

time taken by packet

at every node it gets reduced to travel from source to destination and back . packet transferred is stopped . to source .

i.e. it makes sure that

packet doesn't stay for long in trip .



- there are total 8 interfaces : 4 for each PC and 4 for router.
- to use ping, we need to configure router first, through terminal. and also we need to assign different default gateway to the end devices.

⇒ Procedure :-

- i) Router is connected with copper cross wire to two end-devices.
- ii) IP address and default gateway addresses are configured for each device.
- iii) Router's config terminal is accessed & connection b/w device & router is established through gateway addresses. using command line interface.
- iv) using terminals on computer, we can ping other computers using IP address.