08/31/22. N/W Topology:-

→ Bus Topology.

→ Switch — Links and nodes.

MAC (Media Access Control) Address:-

→ Address Resolution Protocol (ARP).
     · ARP Request.
     · ARP Response.
→ No protection against someone lying to impersonate another device.

09/07/22. How Switches Learn:-

→ If the switch recieves an incoming message, but the outgoing service is

Link Integrity Test (LIT):- whenever an

Ethernet port is idle, it sends a 100-200 nS Pulse every 16 mS called (LIT).

Ethernet Auto Negotiation:- when two Ports

hear each other (LIT) for the first time, they enter autonegotiation.

→ A Switch knows something is plugged into it

by doing the above checks.

→ How does a switch know which MAC address is connected to each port?
- It keeps an internal switch table mapping MAC address to ports.
- when an ethernet frame comes in from the port, the switch reads the SRC address.

- Switch table entries eventually time out.
- If the switch gets a frame where the DST is unknown, it broadcasts the msg everywhere like a hub would.
- If the switch's buffer is full, it drops the packets.