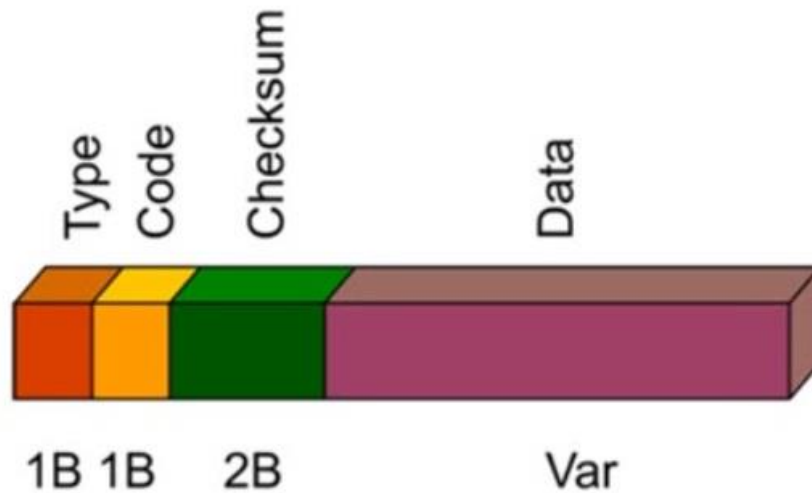


## Network Layer Protocols

### ICMP ( Internet control Message protocol)

The primary function of ICMP is to report errors of various types.

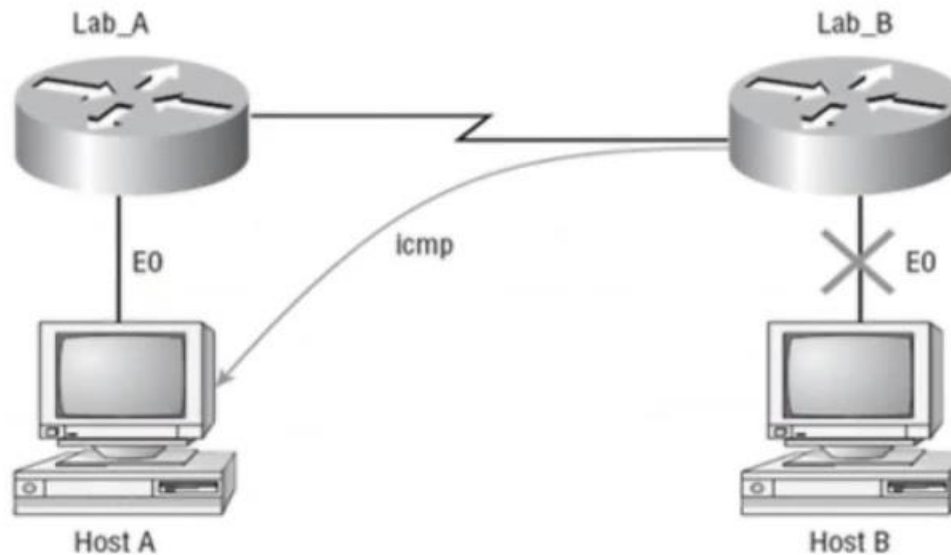


## Network Layer Protocols

### ICMP ( Internet control Message protocol)

#### ICMP Error Message

E0 on Lab B is down. Host A is trying to communicate to Host B. What happens?



## Network Layer Protocols

### ICMP ( Internet control Message protocol)

#### ICMP Error Message

##### ICMP Error Messaging Functions

Type	Code	Function
3	0	Net Unreachable
3	1	Host Unreachable
3	2	Protocol Unreachable
3	3	Port Unreachable
3	4	Fragmentation Needed And Don't Fragment Was Set
3	5	Source Route Failed
3	6	Destination Network Unknown
3	7	Destination Host Unknown
3	8	Source Host Isolated
3	9	Communication With Destination Network Is Administratively Prohibited
3	10	Communication With Destination Host Is Administratively Prohibited
3	11	Destination Network Unreachable For Type Of Service
3	12	Destination Host Unreachable For Type Of Service

## Network Layer Protocols

### ICMP ( Internet control Message protocol)

#### ICMP Error Message

4	0	Source Quench
5	0	Redirect Datagram For The Network (Or Subnet)
5	1	Redirect Datagram For The Host
5	2	Redirect Datagram For The Type Of Service And Network
5	3	Redirect Datagram For The Type Of Service And Host
11	0	Time To Live Exceeded In Transit
11	1	Fragment Reassembly Time Exceeded
12	0	Pointer Indicates The Error
12	1	Missing A Required Option
12	2	Bad Length
31	0	Datagram Conversion Error
32	0	Mobile Host Redirect

## Network Layer Protocols

### ICMP ( Internet control Message protocol)

#### ICMP Query Message

##### ICMP Query Functions

Type	Code	Function
0	0	Echo Reply
8	0	Echo Request
9	0	Router Advertisement
10	0	Router Solicitation
13	0	Timestamp
14	0	Timestamp Reply
15	0	Information Request
16	0	Information Reply
17	0	Address Mask Request
18	0	Address Mask Reply
30	0	Traceroute
33	0	IPv6 Where-Are-You
34	0	IPv6 I-Am-Here
35	0	Mobile Registration Request
36	0	Mobile Registration Reply