



# RAMA UNIVERSITY

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## FACULTY OF ENGINEERING & TECHNOLOGY

### BCA-302 Computer Networks

### Lecture-25

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Computer Science & Engineering

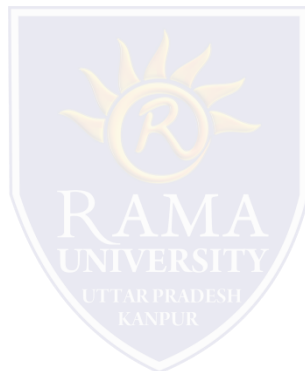
# OUTLINE

➤ **PACKET FRAGMENTATION**

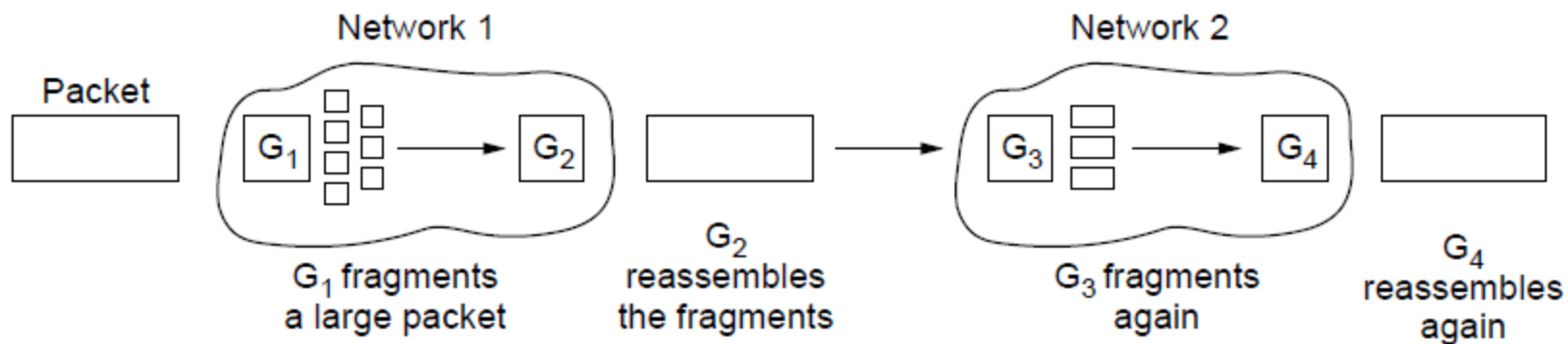
➤ **THE IP VERSION 4 PROTOCOL**

➤ **IP ADDRESSES**

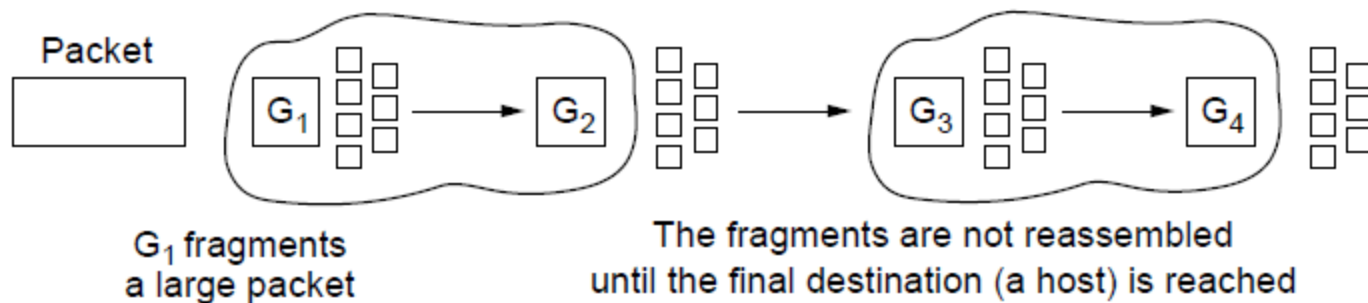
➤ **IP VERSION 6**



# PACKET FRAGMENTATION



(a)



(b)

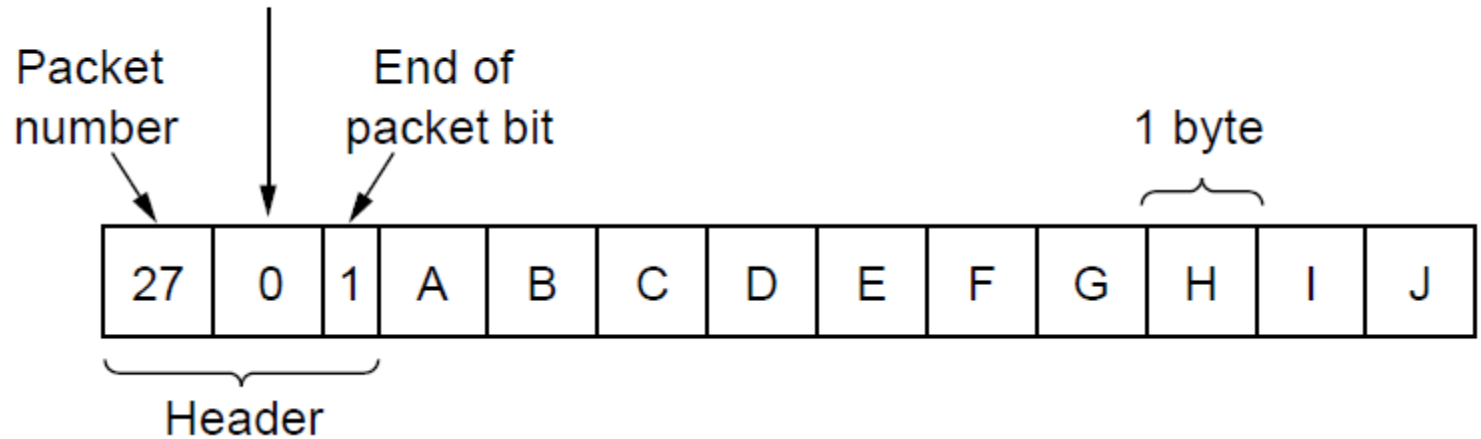
- (a) Transparent fragmentation.
- (b) Non transparent fragmentation

# PACKET FRAGMENTATION

Fragmentation when the elementary data size is 1 byte.

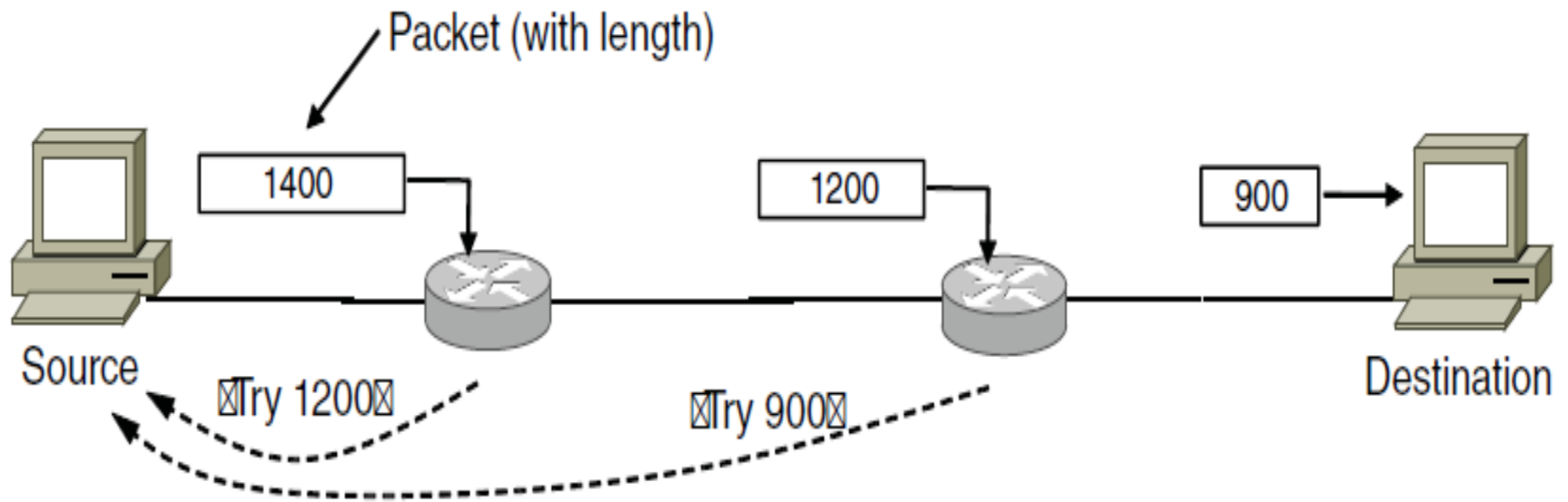
(a) Original packet, containing 10 data bytes.

Number of the first elementary fragment in this packet



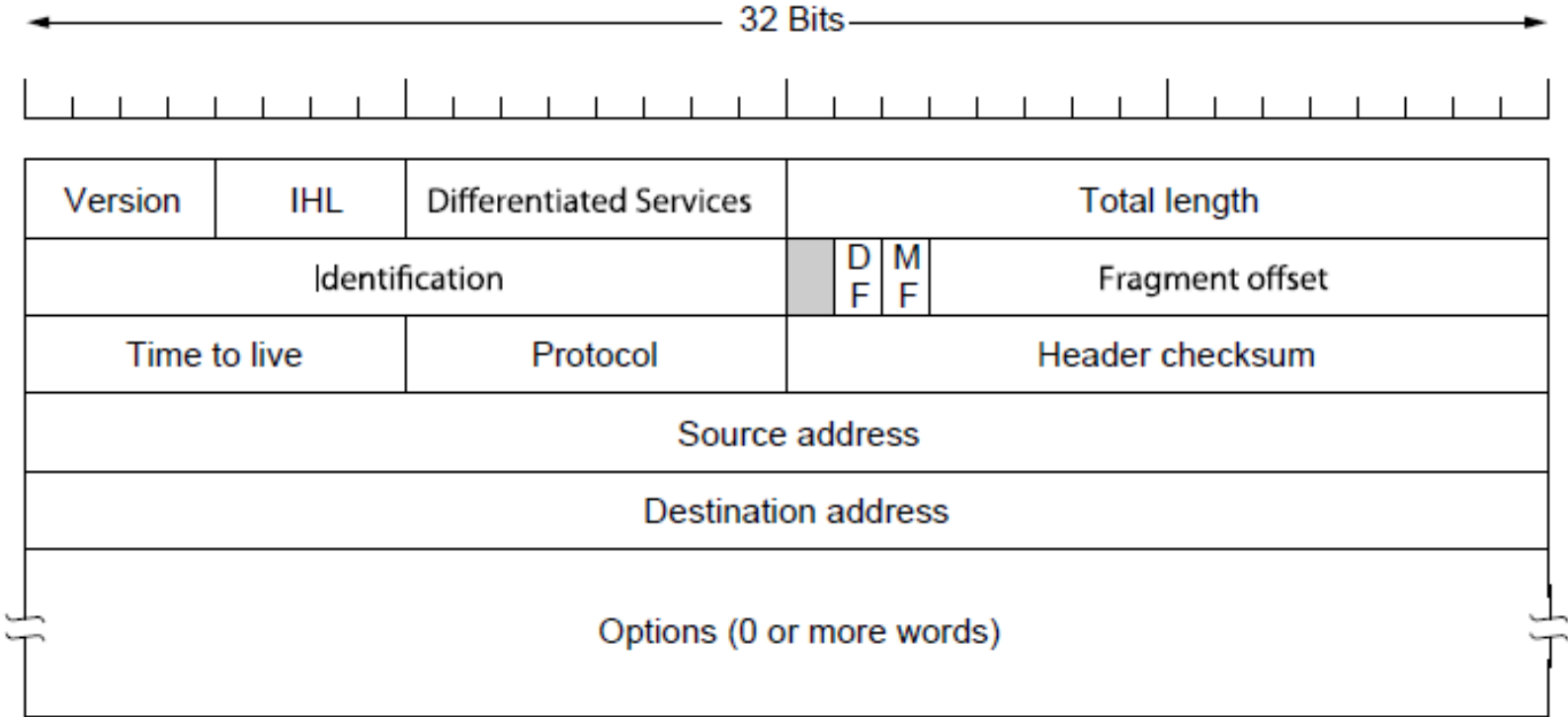
# PACKET FRAGMENTATION

## Path MTU Discovery



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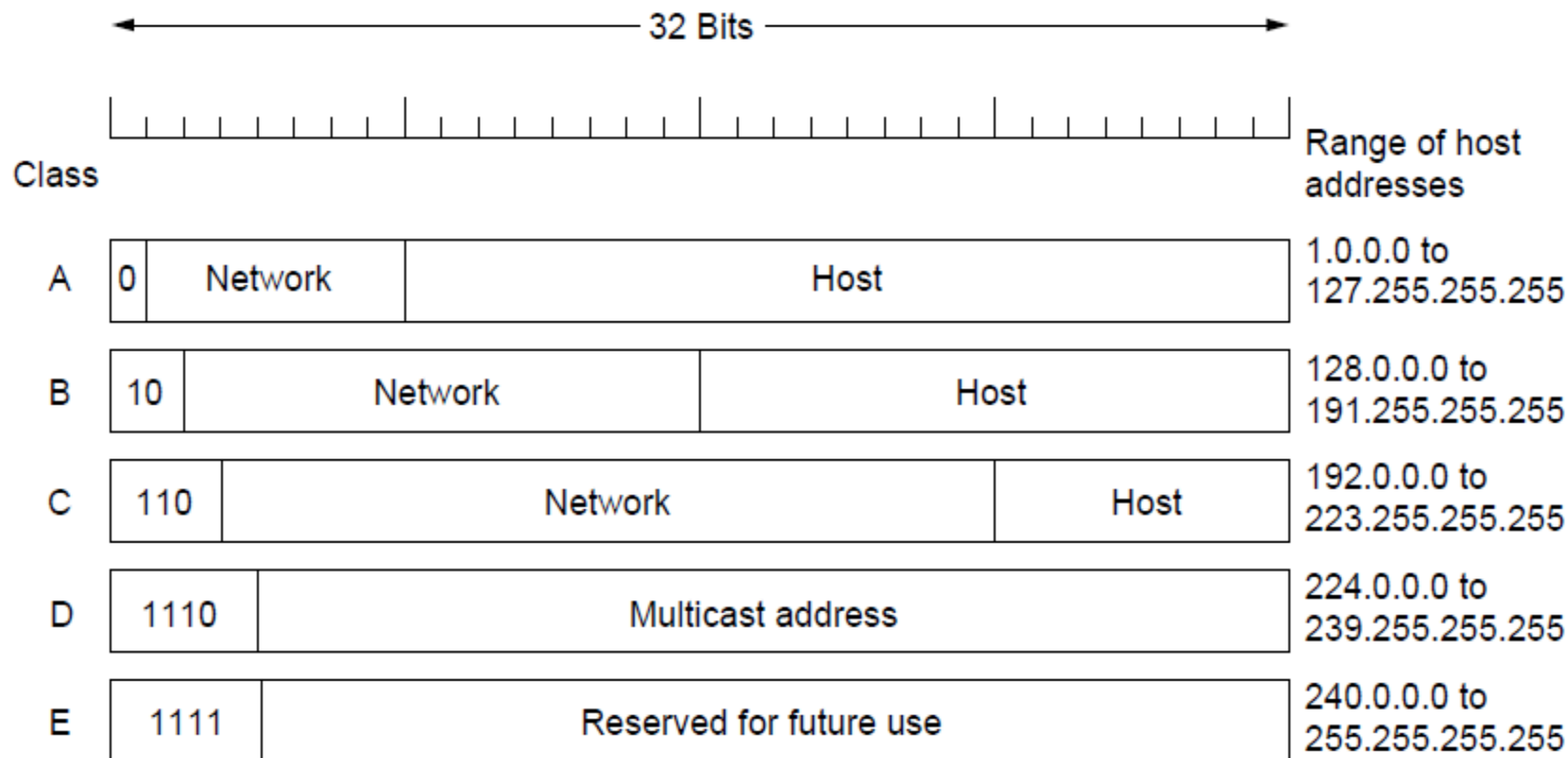
# The IP Version 4 Protocol



The IPv4 (Internet Protocol) header.

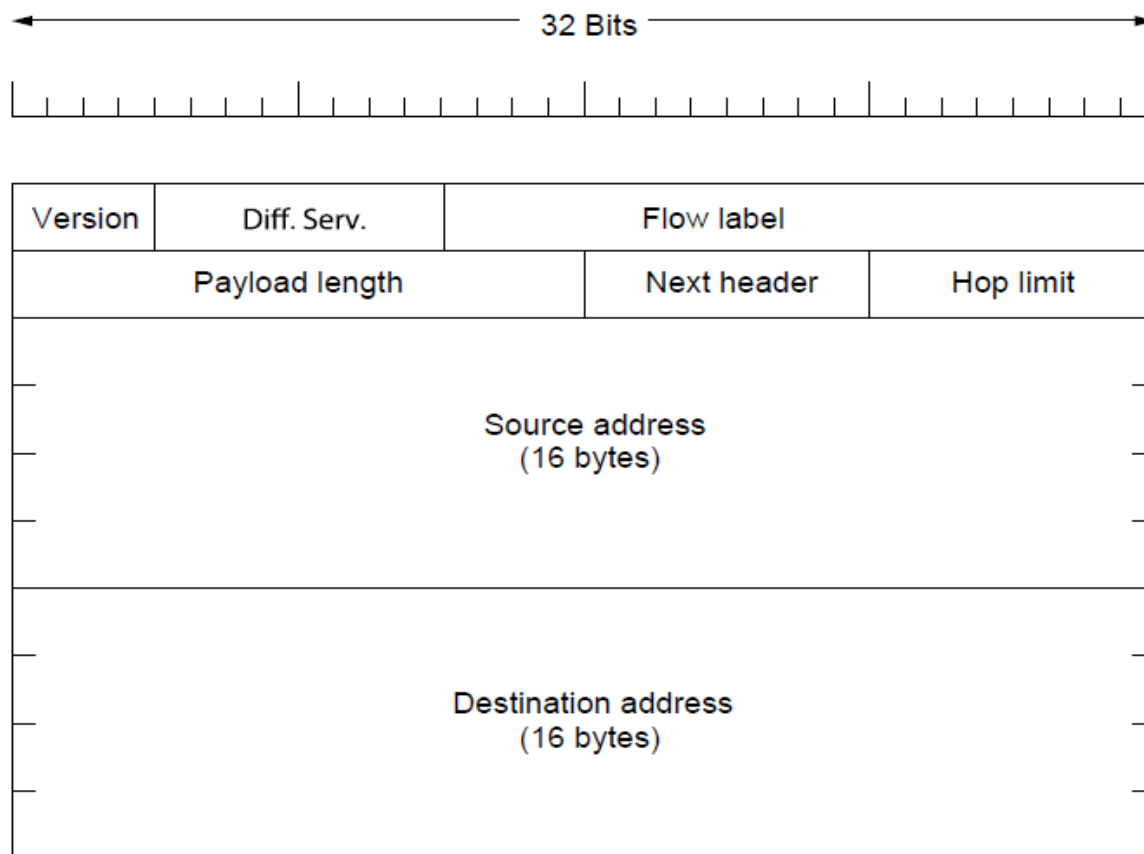
# IP ADDRESSES

## IP address formats



# IP VERSION 6

## IP address V6 Header





# Multiple Choice Question

## MUTIPLE CHOICE QUESTIONS:

Sr no	Question	Option A	Option B	OptionC	OptionD
1	In a network, If P is the only packet being transmitted and there was no earlier transmission, which of the following delays could be zero?	Propagation delay	Queuing delay	Transmission delay	Processing delay
2	Firewalls are often configured to block _____	UDP traffic	TCP traffic	Sensitive traffic	Best-effort traffic
3	Ethernet frame consists of _____	MAC address	IP address	Default mask	Network address
4	What is start frame delimiter (SF) in ethernet frame?	10101010	10101011	0	11111111
5	MAC address is of _____	24 bits	36 bits	42 bits	48 bits

# REFERENCES

- <http://www.engppt.com/2009/12/networking-fourzan-ppt-slides.html>

