Logical address (IP):

• An IP address of the system is called logical address.

• This address is used by network layer to identify a particular network (source to destination) among the networks.

• This address can be changed by changing the host position on the network. So it is called logical address.

• Example: **192.168.1.1**

Port Address:

- There are many application running on the computer.

- Each application run with a port no.(logically) on the computer.

753
A 16-bit port address represented
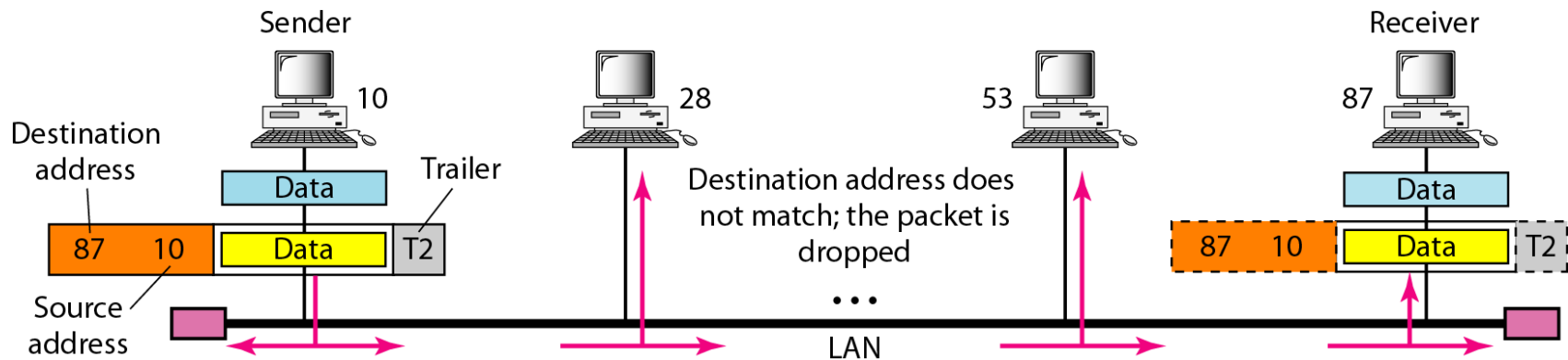**as one single number.**

Specific Address:

- User-friendly addresses

- Examples include the e-mail address (for example, forouzan@fhda.edu) defines

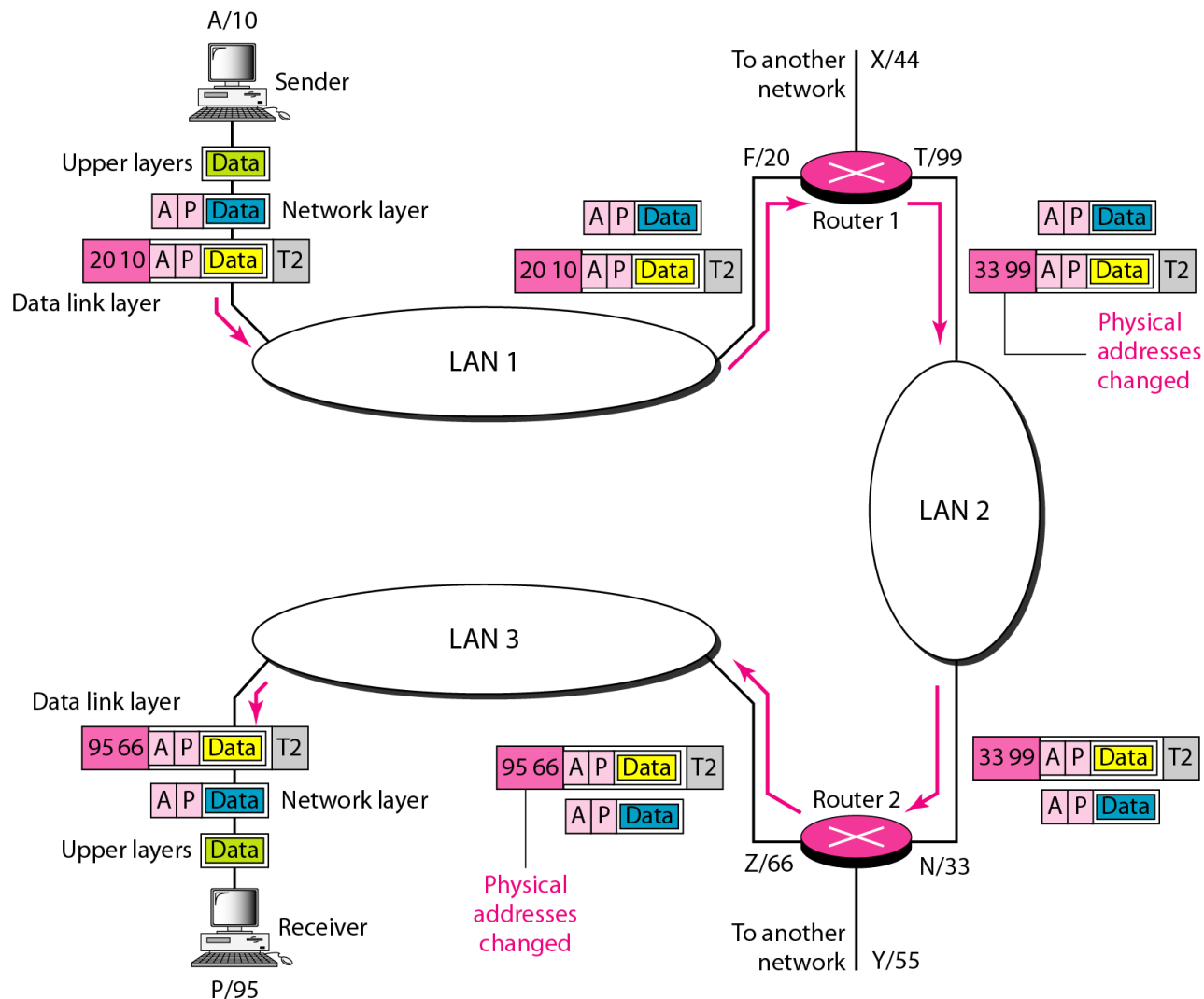the recipient of an e-mail

Example 2.1

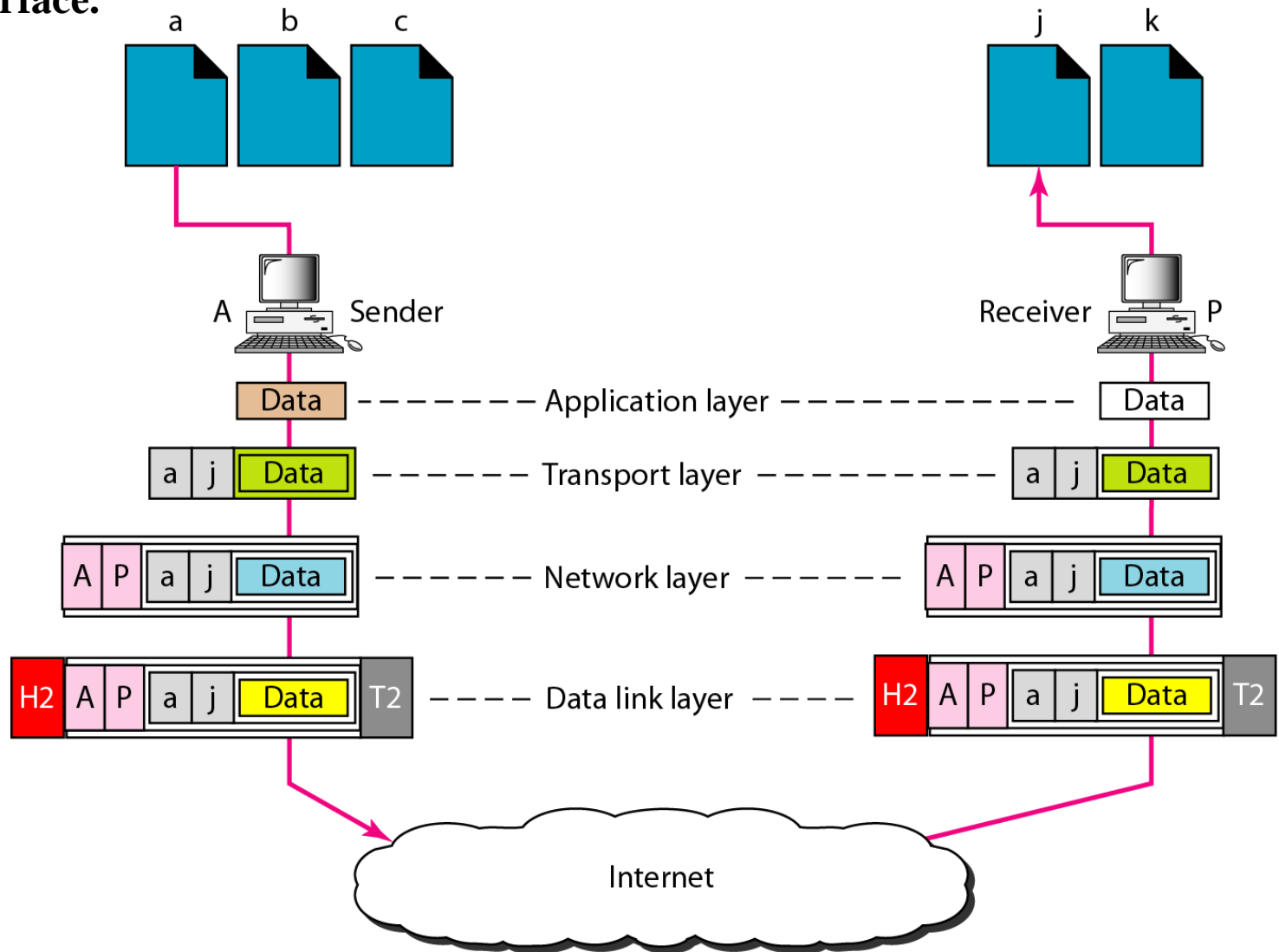**For the network shown below, show the contents of the message for each hop interface.**

Solution:

Example 2.3 :For the network shown below, show the contents of the message for each hop interface.

Example 2.4 :For the network shown below, show the contents of the message for each hop interface.

- **Computer Networks**
- **Al-Mustansiryah University**
- **Elec. Eng. Department College of Engineering**
  Fourth Year Class

Chapter 3

Network Layer: Logical Addressing

3-1   IPv4 ADDRESSES

An IPv4 address is a 32-bit address that uniquely and universally defines the connection of a device (for example, a computer or a router) to the Internet.

An IPv4 address is 32 bits long.

The IPv4 addresses are unique and universal.

The address space of IPv4 is 2^{32} or 4,294,967,295.

3.3