



Faculty of Computers and Information  
Mansoura University

# Modeling and Simulation

Prof. Dr. Hazem El-Bakry

Information Systems Dept.

[elbakry@mans.edu.eg](mailto:elbakry@mans.edu.eg)




# Parts of a CBIS

- Five parts
  - Hardware
  - Software
  - Database
  - Telecommunications
  - Networks



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# Networks

**In addition to these types (LAN & WAN) ,  
the following characteristics are also  
used to categorize different types of  
networks:**

- **Topology**
- **Protocol**
- **Architecture**



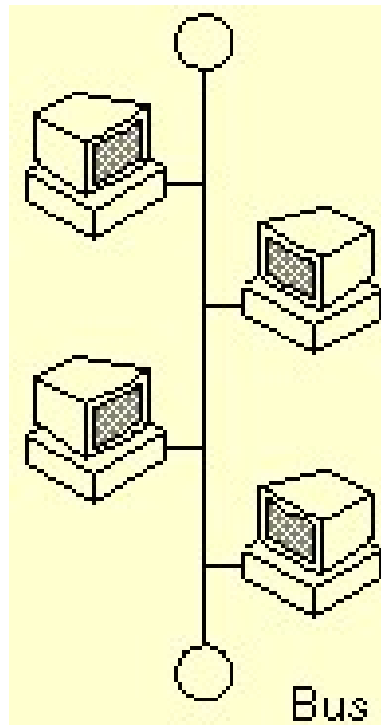
# Networks

## **Topology :**

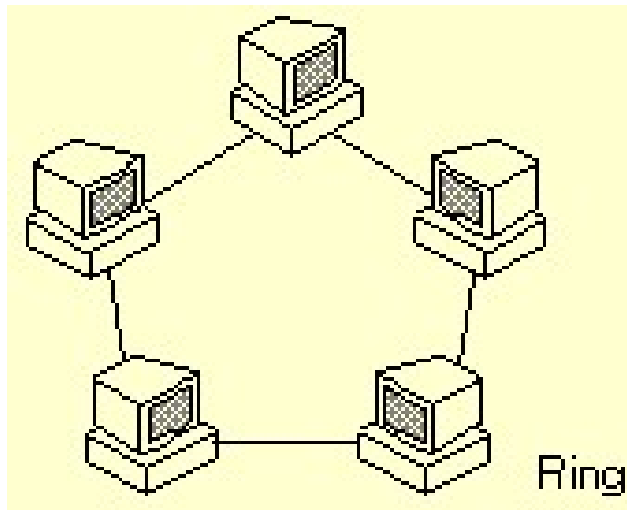
**The geometric arrangement of a computer system. Common topologies include a bus, star, and ring.**



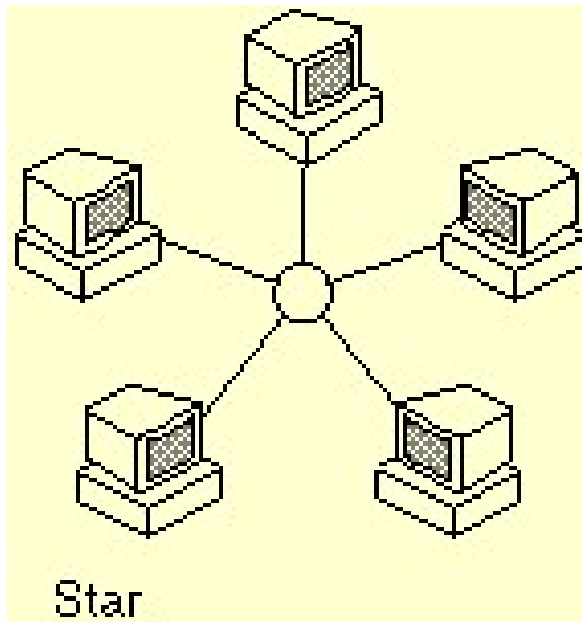
# Networks



# Networks



# Networks





# Networks

**Protocol** : The protocol defines a common set of rules and signals that computers on the network use to communicate. One of the most popular protocols for LANs is called Ethernet. Another popular LAN protocol for PCs is the IBM token-ring network.



# Networks

## Architecture

- **Networks can be broadly classified as using either a peer-to-peer or client/server architecture.**



## Questions

**Q1: \_\_\_\_\_ is the geometric arrangement of a computer system.**

- a) processing**
- b) manipulation**
- c) Topology**
- d) instructions**



## Questions

**Q2: Another popular LAN protocol for PCs is the IBM \_\_\_\_\_ network.**

- a) bus**
- b) software**
- c) Database**
- d) token-ring**



## Questions

**Q3: The \_\_\_\_\_ defines a common set of rules and signals that computers on the network use to communicate.**

- a) business**
- b) decision**
- c) protocol**
- d) None of these**



## Questions

**Q4: Common topologies include**

- \_\_\_\_\_.
- a) WAN**
  - b) LAN**
  - c) WEB**
  - d) bus**



## Questions

**Q5: \_\_\_\_\_ is used to categorize different types of networks:**

- a) WAN**
- b) LAN**
- c) WEB**
- d) Architecture**

