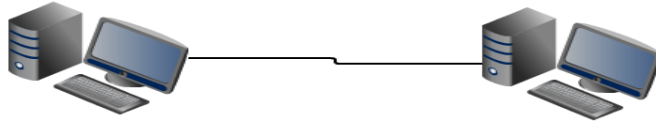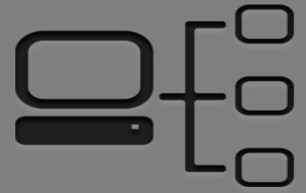# Network Protocols

- Computers communicate with each other with network protocols.

- Protocols are rules governing how machines exchange data and enable effective communication.

- Some Everyday Examples

  - When you call somebody, you pickup the phone, ensure there is a dial tone, and if there is, you dial the number.

  - When you drive your car, you follow obey the rules of the road.

Protocols Continued

- **Physical Protocols**: describes the medium (wiring), the connections (RJ-45 port), and the signal (voltage level on a wire).

- **Logical Protocols**: software controlling how and when data is sent and received to computers, supporting physical protocols.

- Computer networks depend on many different types of protocols in order to work properly.

- Example Common TCP/IP Suite of Protocols:
    - Web Communication: HTTP
    - E-mail: POP3, SMTP, IMAP
    - File Transfers: FTP