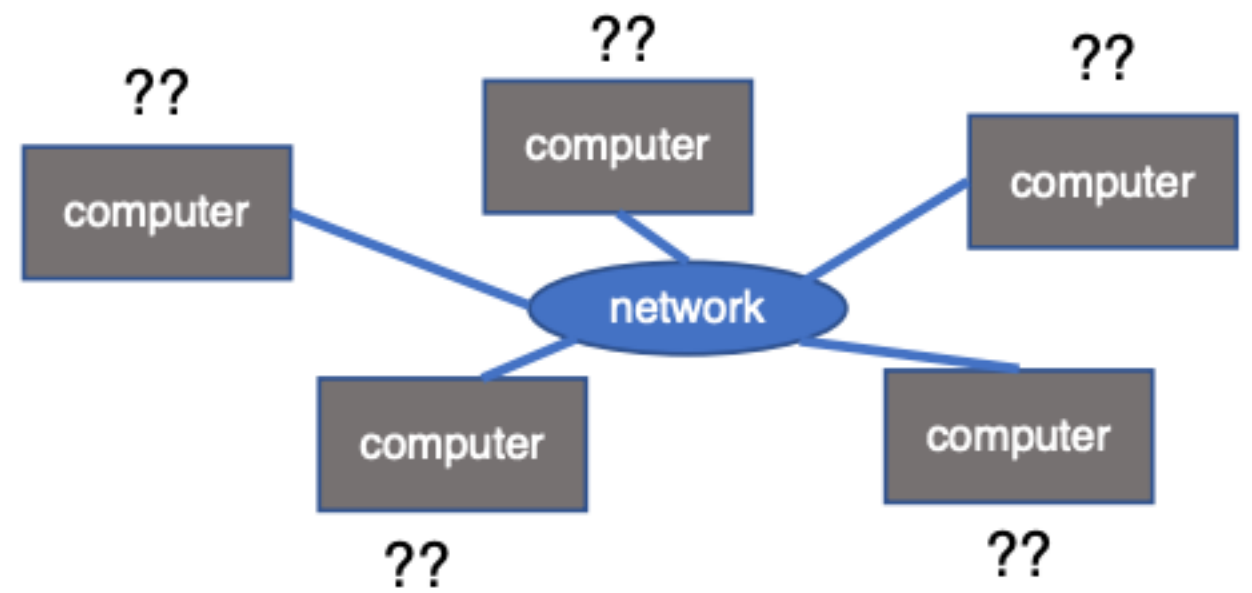


# Clients and Servers

The prevalent model for structuring distributed computation is the client/server paradigm

- ➔ A **server** is a program (or collection of programs) that provide a service (file server, name service, etc.)
  - The server may exist on one or more nodes
  - Often the node is called the server, too, which is confusing
- ➔ A **client** is a program that uses the service
  - A client first binds to the server (locates it and establishes a connection to it)
  - A client then sends requests, with data, to perform actions, and the servers sends responses, also with data

# Naming



How to refer to a node in a distributed system?  
Essentially naming systems in network

- Address processes/ports within system (host, id) pair
- Physical network address (Ethernet address)
- Network address (Internet IP address)
- Domain Name Service (DNS) provides resolution of canonical names to network address