## DNS

- People prefer to use easy-to-remember names instead of IP addresses
- Domain names are alphanumeric names for IP addresses e.g., svmu.org.in, www.google.com,.
- The domain name system (DNS) is an Internet-wide distributed database that translates between domain names and IP addresses
- DNS is a distributed system used by the TCP/IP application.

- Distributed means the no single site contain all information on the internet.
- Each site maintain its own database inf.
- DNS provide protocol that allows client and server to communicate with each other.
- DNS identifies each host on the internet with unique name.

- .com Commercial Organization
- .edu Educational Institute
- .org Organization
- .net Network
- .gov Government
- .mil Military
- .in India
- .us United State

- Country (two char. i.e. us, in, nz, as, etc.)
  - Top level domain (com, net, org, edu, ..)
  - Second level domain (edu.ugc, gov.in)
- DNS protocols can use either UDP or TCP
  - If UDP, DNS protocol handles retransmission, sequencing, etc.
- Database can be updated dynamically
  - Add/delete/modify of any record
  - Only master can be dynamically updated