**DNS DOMAIN NAME SYSTEM**

1. Yahoo.com

NO ip address found in its own cache memory

A picture containing text, electronics, screenshot, computer

Description automatically generated

1. **RESOLVER SERVER (Isp)**

Is the ISP internet service provider. It would check its own cache memory. If it does not find it would send it to the next level which is the root server.

A picture containing text, electronics, computer

Description automatically generated

1. ROOT SERVER

* There are 13 sets of root server strategically placed around the world
* Operated by 12 different organizations
* Each set has their own unique I.P address
* Root server would not know the IP address .It knows where to send the resolver where to find ip address
* Would send it to TLD server

A picture containing diagram

Description automatically generated

1. TLD server (Top level domain server)

* Stores the address for top level domains (.com ,.net, .org)
* Would not know the ip address.
* Would direct to the final level Authoritative name server.

Diagram

Description automatically generated

1. ATHOURATIVE NAME SERVER

* Would know everything about the domain
* Would respond with IP address

Diagram

Description automatically generated

Note : Once the resolver receives the ip address it would store it in its local memory