**DNS and DHCP configuration**

Aim :- Configuring DHCP within a LAN in a Packet Tracer and Demonstration of WEB server and DNS using Packet Tracer.

Observation:-

* When we create a topology, we usually statically configure ip address of the PC’s. If there was a large number of PC’s in a topology then it would be impossible to assign unique addresses to all of them without a clash.
* DHCP(Dynamic Host Configuration Protocol) is one such protocol that assigns ip address dynamically to the devices that want to connect to the network. There are 4 stages that the DHCP follows, Discover, Offer, Request and Acknowledge (DORA) through which the dynamic assignment of ip addresses is done.
* One more such problem is accessing websites. Humans cannot remember ip addresses of websites that they want to visit, instead a name in natural language would be much easier to remember.
* DNS (Domain Name System) is one such protocol that done just this. DNS maps the natural language names to their ip addresses over web.

Outcome:-

* Learnt how to dynamically configure ip addresses using DHCP.
* Learnt how to configure DNS services for web.