Semester	T.E. Semester VI – EXTC Engineering
Subject	Computer Communication Network (CCN)
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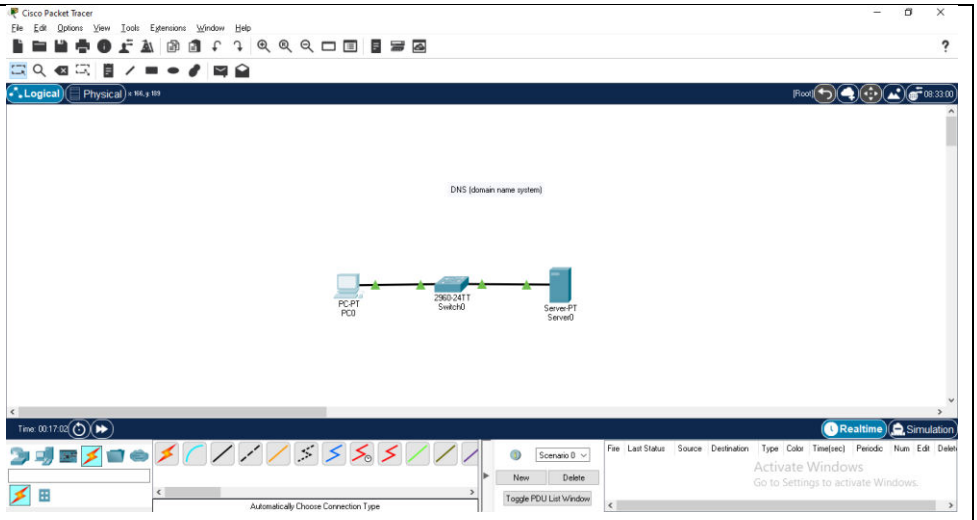
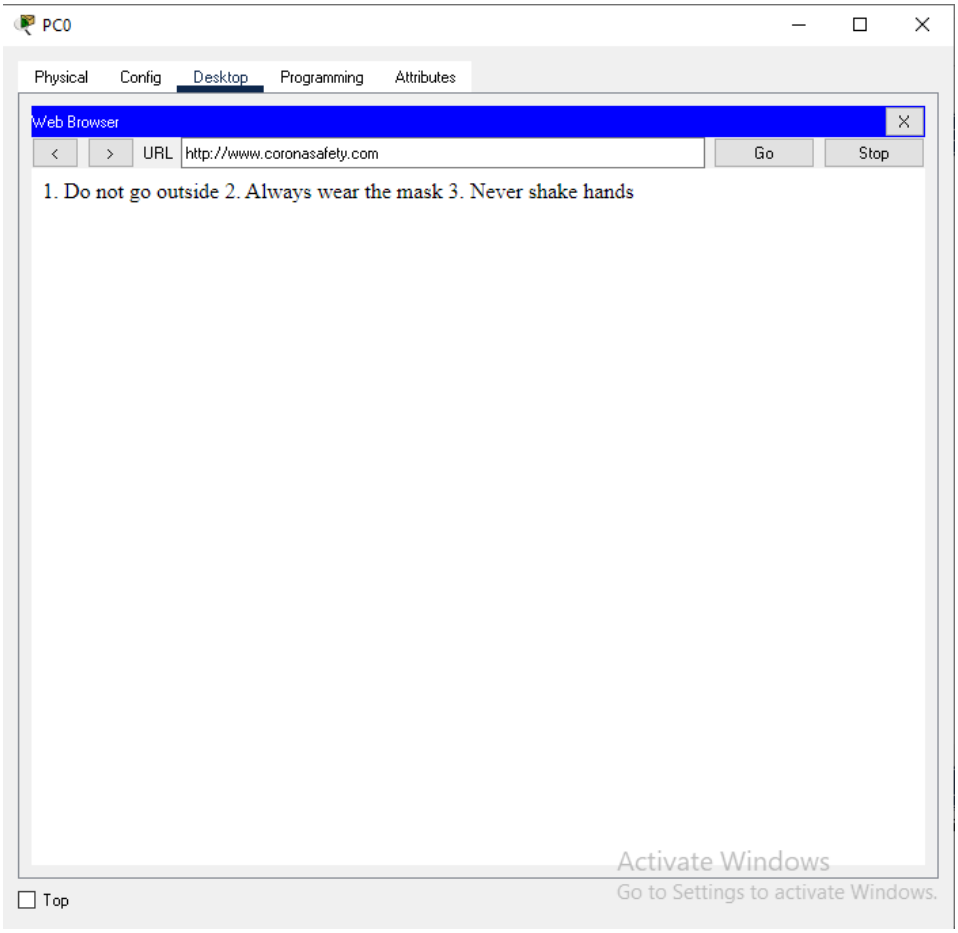
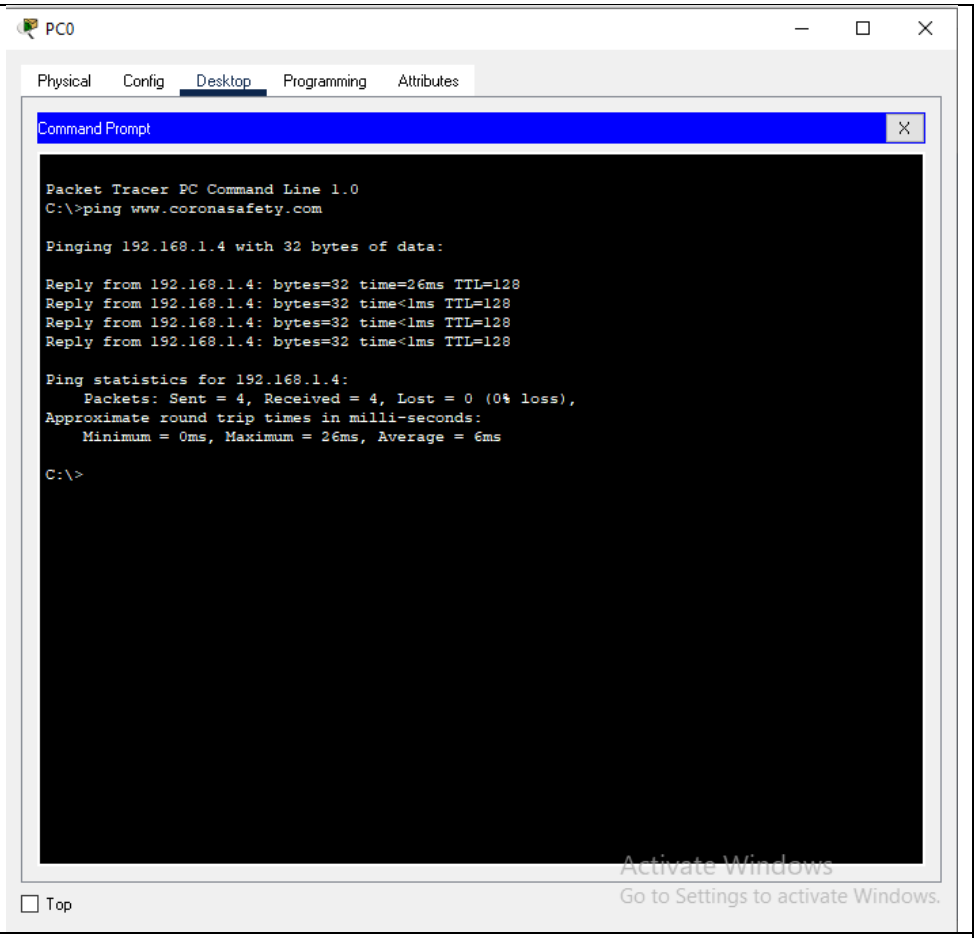
Experiment Number	10	
Experiment Title	Implementation of Domain Name Server(DNS) using Cisco packet Tracer	
Aim	To set up and configure a network using Cisco packet Tracer	
Resources / Apparatus Required	Hardware: Internet Connected PC	Software: Cisco Packet Tracer
Theory:	DNS is a client/server application program used to help other application programs. DNS is used to map a host name in the application layer to an IP address in the network layer. The Domain Name System (DNS) is a central part of the internet, providing a way to match names (a website you're seeking) to numbers (the address for the website). Anything connected to the internet - laptops, tablets, mobile phones, websites - has an Internet Protocol (IP) address made up of numbers. DNS syncs up domain names with IP addresses enabling humans to use memorable domain names while computers on the internet can use IP addresses.	
Procedure :	1. Open cisco packet tracer. 2. Select the required end devices such as PC, switch and server from the end devices and Network devices 3. Connect Network using automatic connections 4. Configure the end devices(PC's) and server using the suitable IP addresses and DNS 6 Observe that the entire network has turned from red to green 7. Click on the server and then services and make the DNS service ON. Give the name and the address of the website. 8.Go to the utility of HTTP and type the required matter in the code section and save the changes made. 9. Go to the PC and click on web services.Using the Ping command reach out to the website created 10.Confirm the successful reply from the website created	
Screenshots of the Output(Response)	**Network with PC,Switch ,Server with connections active**	



Successful conversion of Domain name to the website which shows the contents of the website



Successful reachability of the website using Ping Command



Conclusion:

In this practical, we learned how to implement a DNS using Cisco packet tracer. We even created a sample website on this server with a proper URL (http://www.coronasafety.com), and we successfully pinged this website too.

Post Lab Questions:

1. What is DNS?
2.What are the extensions used for educational websites,government websites and commercial website?.Give real life example of each address

DNS = Domain Name System

The Domain Name System (DNS) is a hierarchical and decentralized naming system for computers, services, or other resources connected to the internet or a private network. It associated various information with domain names assigned to each of the participating entities. Most prominently, it translates more readily memorized domain names to the numerical IP addresses needed for locating and identifying computer services and devices with the underlying network protocols. By providing a worldwide, distributed directory service, the Domain Name System has been an essential component of the functionality of the internet since 1985.

The internet maintains two principle namespaces, the domain name hierarchy and the IP (internet protocol) address space. The domain name system maintains the domain name hierarchy and provides translation between it and the address space. Internet name servers and a communication protocol implement the domain name system. A DNS name server is a server that stores the DNS records for a domain; a DNS name server responds with answers to the queries against its database.

	Source: https://en.wikipedia.org/wiki/Domain_Name_System **Top-level domains** Educational websites • .edu • https://www.mit.edu/ https://www.stanford.edu/ Government websites • .gov • https://www.india.gov.in/ https://www.usa.gov/ Commercial websites • .com • https://www.google.com/ https://www.facebook.com/