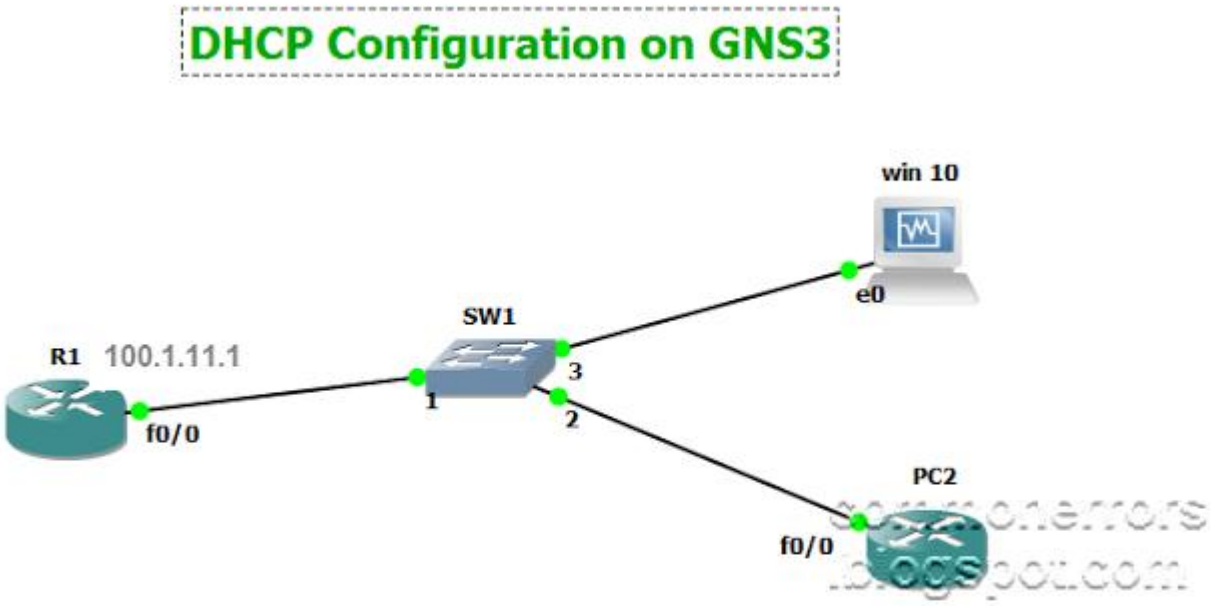
LAB: Assignment 12

Objective: Configure a DHCP on Cisco Router Using GNS.

Instructions: The instructor is required to discuss the following questions with the students.
Students are required to make solution and check connectivity using PING command.

Q1. Cisco DHCP Configuration | How to assign automatic IP address from Cisco Router:

Create the following lab with a router (DHCP Server) and two DHCP clients which will obtain the IP address automatically from DHCP server. These DHCP clients include a router (which is configured like a PC) and a Host machine.



Following configuration are required for making the Router as DHCP server.

DHCP server (R1) Configuration:
R1#**enable**
R1#**Configure t**
R1 config)#**ip dhcp pool ipranges**
R1(dhcp-config)# **network 100.1.11.0 255.255.255.0**
R1(dhcp-config)#**dns server 100.1.11.1**
R1(dhcp-config)#**default-router 100.1.11.1**
R1(dhcp-config)#**lease 10** (this command will set the IP lease for 10 day

How to exclude the IP addresses from DHCP range

R1(dhcp-config)#**ip dhcp excluded-addresses 100.1.11.20 100.1.11.31**

Following are the configuration required on router which will act as DHCP client.

PC2 Configuration:
PC2#**enable**
PC2#**Configure t**
PC21#**no ip routing**
PC2#**inf f0/0**
PC2#**ip address dhcp**
PC2#**no shutdown**

How to test DHCP configurations:

On DHCP server use the following command for confirming DHCP configurations

show ip dhcp binding
Following will be the output in our case.