

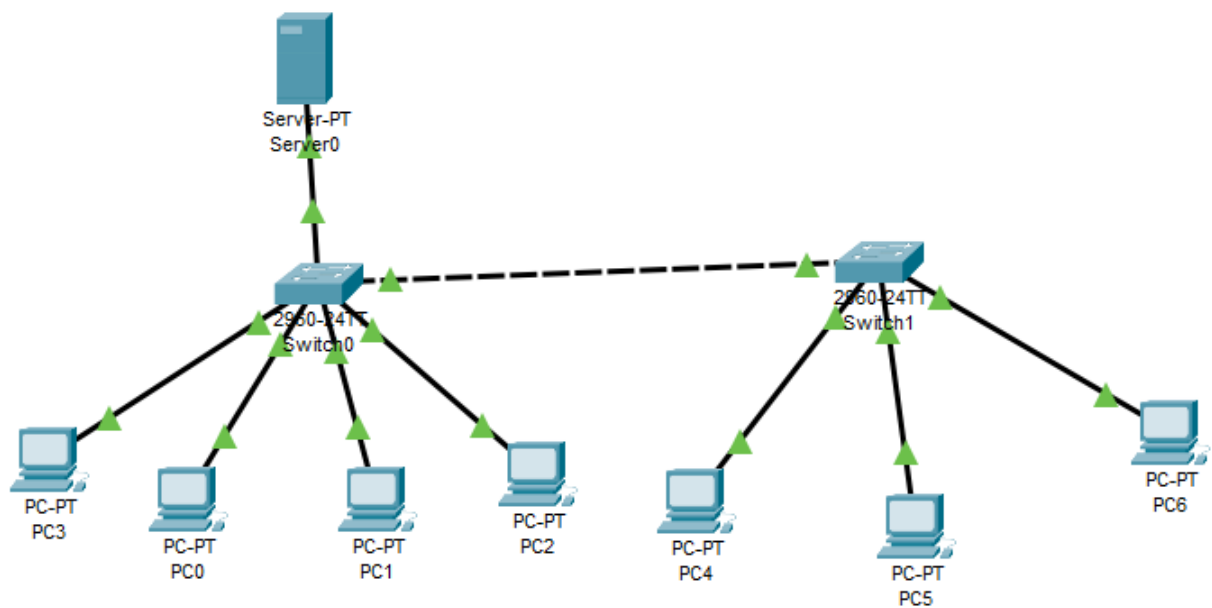
Networking Lab - 5

OBJECTIVE:

1. To assign static IPs to different PCs on a basic LAN.
2. Check IP configuration using IPCONFIG command.
3. Test connectivity using PING or PDUs.

Q1 : – Start the packet tracer file included (Lab-3 Start), and have a look at the configuration.

Ans.



Q2:- The switch has a class C network (192.168.100.0), which is going to be the network being used in this lab.

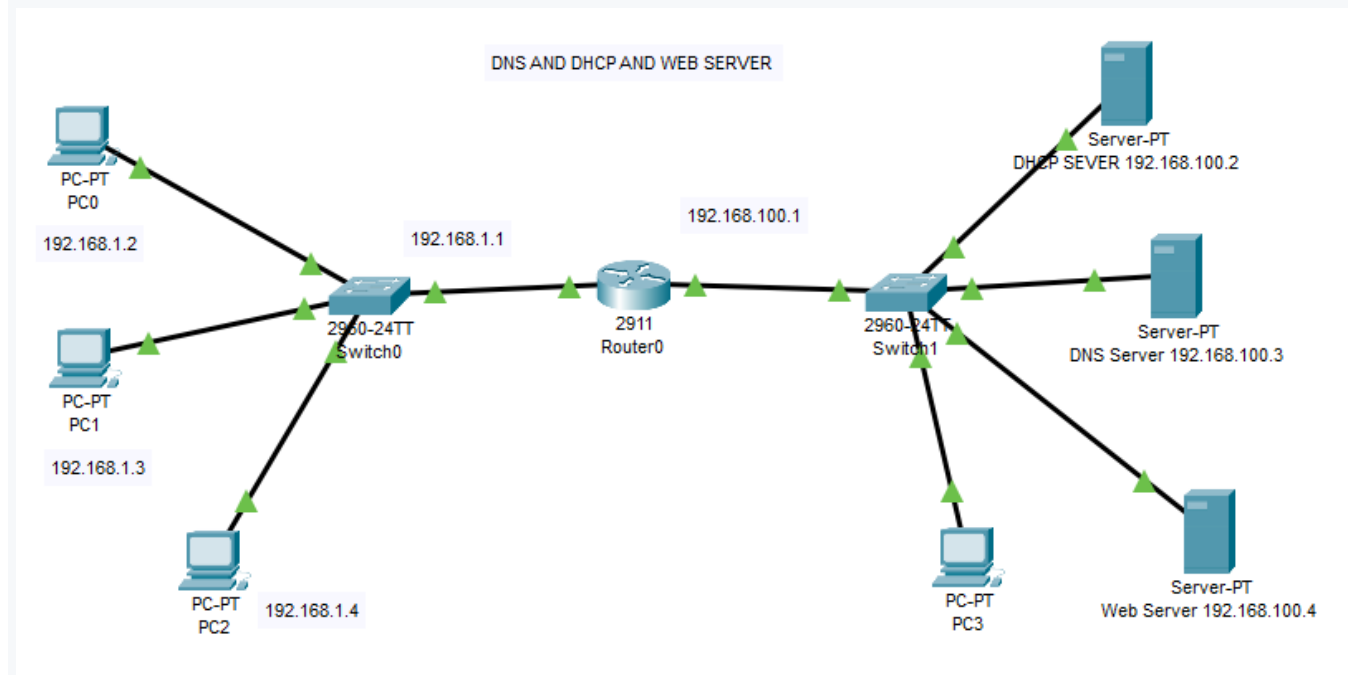
Ans.

Network Id- 192.168.100.0

Host Id- 192.168.100.1/4

Network Id- 192.168.1.1

Host Id- 192.168.1.2/5



DHCP SERVER

SERVICES ^

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

DHCP

Interface **FastEthernet0** Service ☒ On ☐ Off

Pool Name serverPool

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

Start IP Address : 192 168 100 0

Subnet Mask: 255 255 255 0

Maximum Number of Users : 512

TFTP Server: 0.0.0.0

WLC Address: 0.0.0.0

Add

Save

Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool1	192.168....	192.168....	192.168....	255.255....	50	0.0.0.0	0.0.0.0
serverPool2	192.168....	192.168....	192.168....	255.255....	50	0.0.0.0	0.0.0.0
serverPool	0.0.0.0	0.0.0.0	192.168....	255.255....	512	0.0.0.0	0.0.0.0

DNS SERVER

Physical Config **Services** Desktop Programming Attributes

SERVICES ^
HTTP
DHCP
DHCPv6
TFTP
DNS
SYSLOG
AAA
NTP
EMAIL
FTP
IoT
VM Management
Radius EAP

DNS

DNS Service ☒ On ☐ Off

Resource Records

Name Type **A Record** v

Address

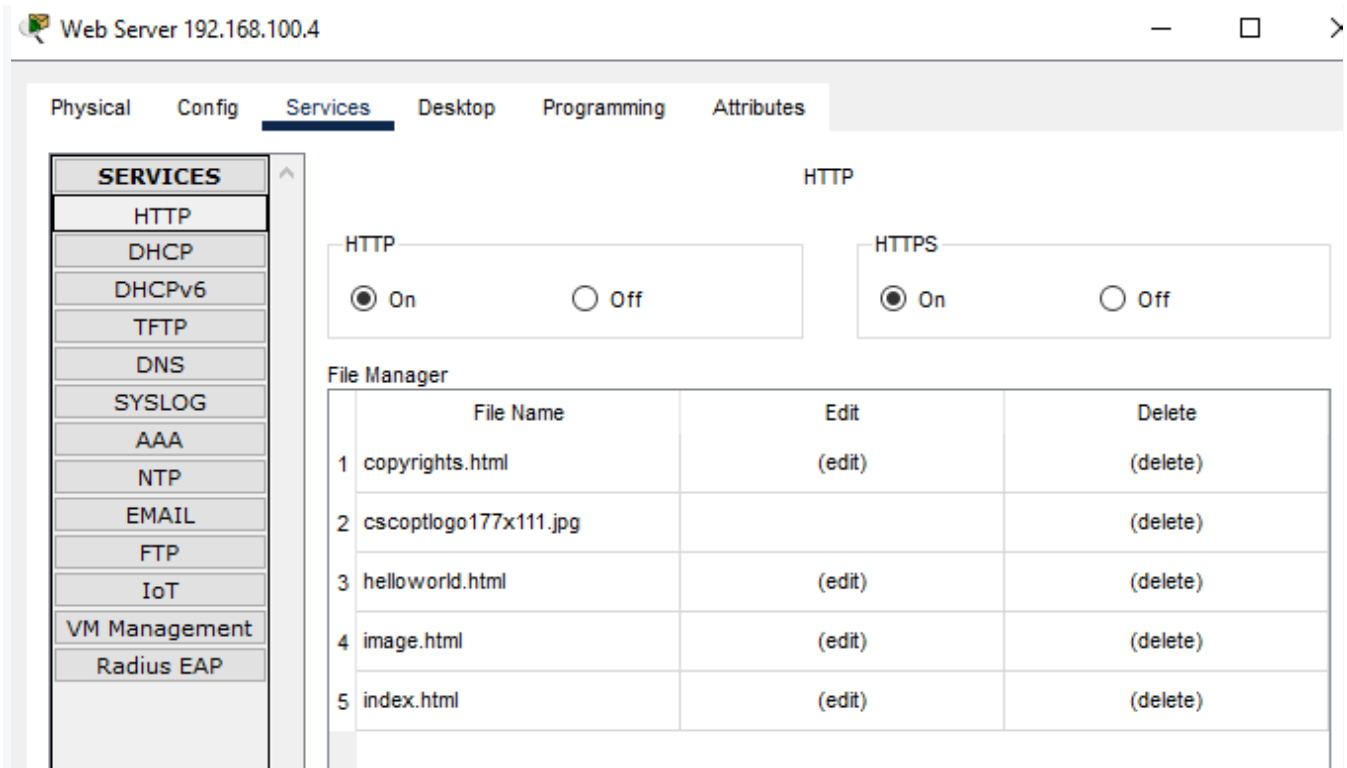
Add

Save

Remove

No.	Name	Type	Detail
0	google.com	A Record	192.168.100.4

Web Server



***** Q3:- Using a CIDR notation of /24, go to each individual PCs and assign them a network with an increment of 10.

Q4:- Go to each desktop and select command prompt.

Ans.

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.2.2

Pinging 192.168.2.2 with 32 bytes of data:

Request timed out.
Request timed out.
Reply from 192.168.2.2: bytes=32 time=1ms TTL=126
Reply from 192.168.2.2: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.2.2:
    Packets: Sent = 4, Received = 2, Lost = 2 (50% loss),
    Approximate round trip times in milliseconds:
```

Q5 :- Type "ipconfig" and verify the ip addresses on respective PCs.

Ans:-

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.2.2

Pinging 192.168.2.2 with 32 bytes of data:

Request timed out.
Request timed out.
Reply from 192.168.2.2: bytes=32 time=1ms TTL=126
Reply from 192.168.2.2: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.2.2:
```

Q6:- To test the connectivity, go to any one of the PC's command prompt, and ping other PCs

Ans:-

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.2.2

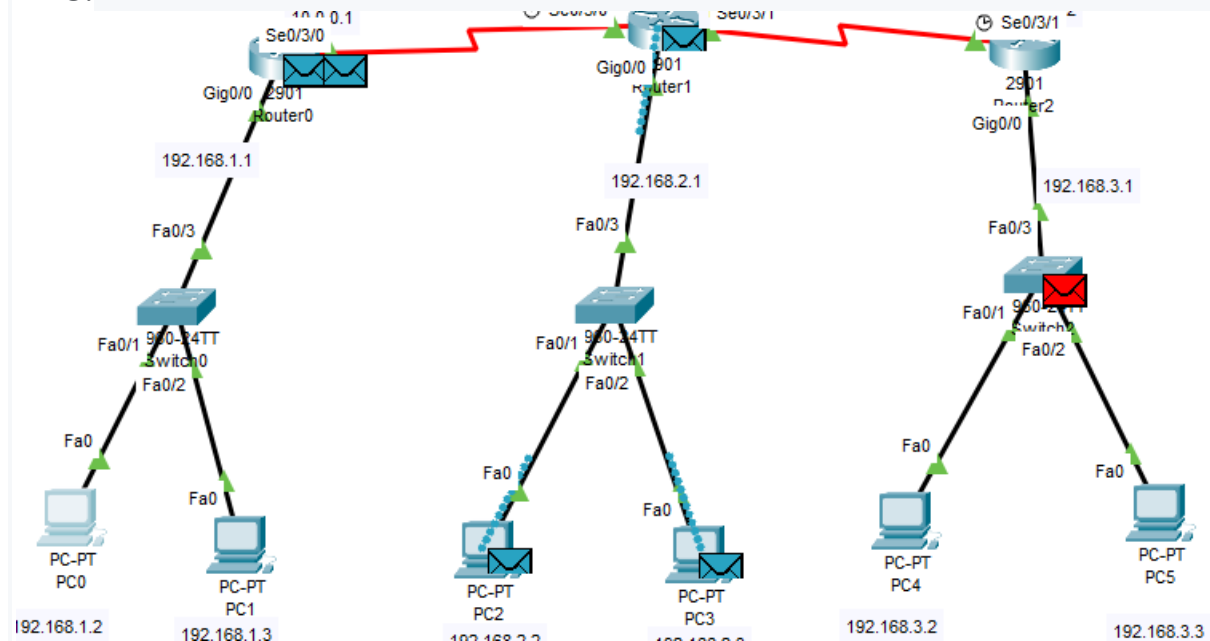
Pinging 192.168.2.2 with 32 bytes of data:

Request timed out.
Request timed out.
Reply from 192.168.2.2: bytes=32 time=1ms TTL=126
Reply from 192.168.2.2: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.2.2:
```

Q7:- Another way is going to simulation mode, and add a simple PDU

Ans.



Q8:- Hit forward button to have a visualisation of packet flowing from PC to switch and forward.

Ans.

