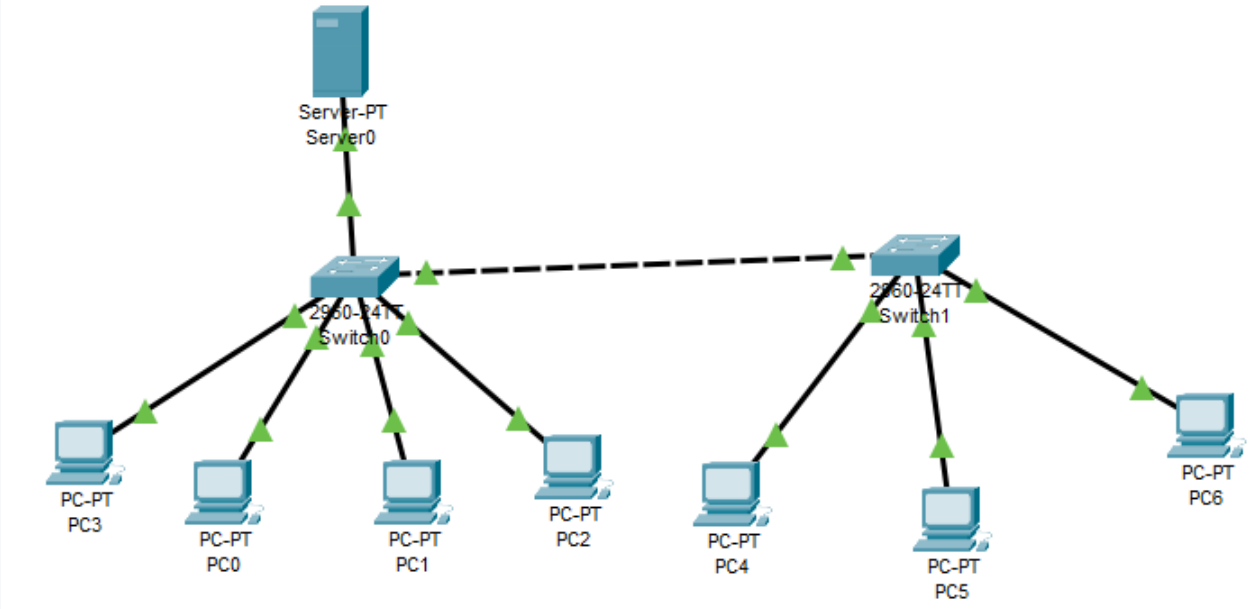
Networking Lab - 5

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.

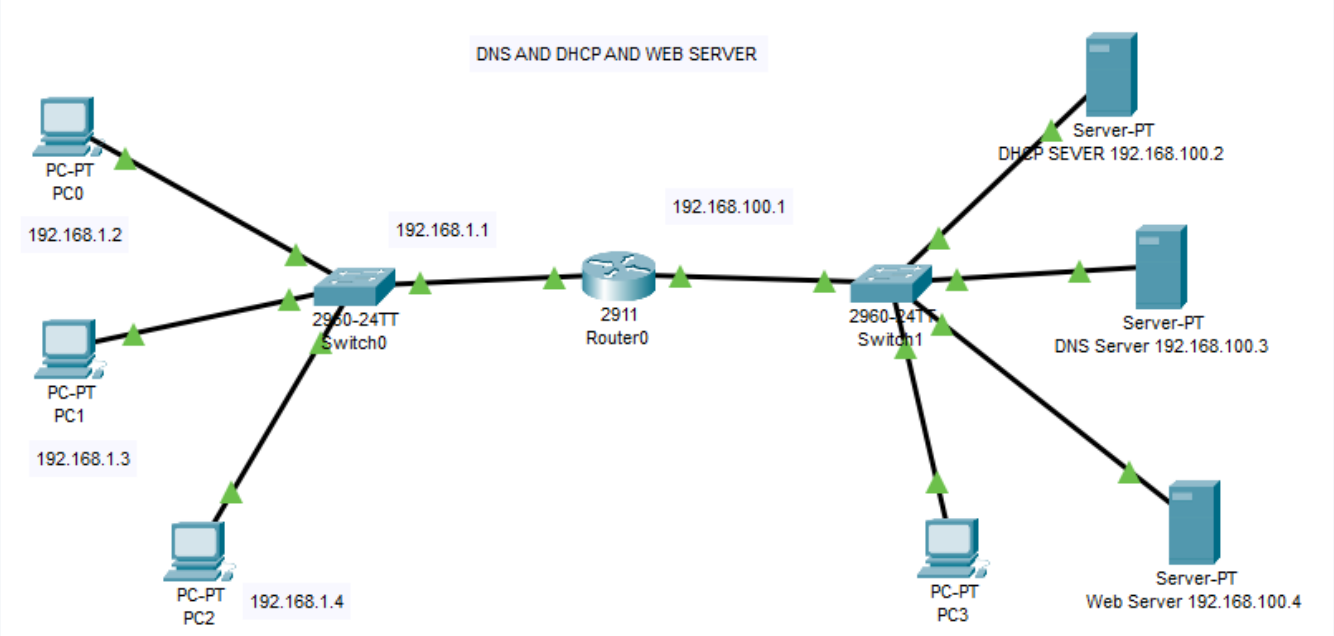
Ans.



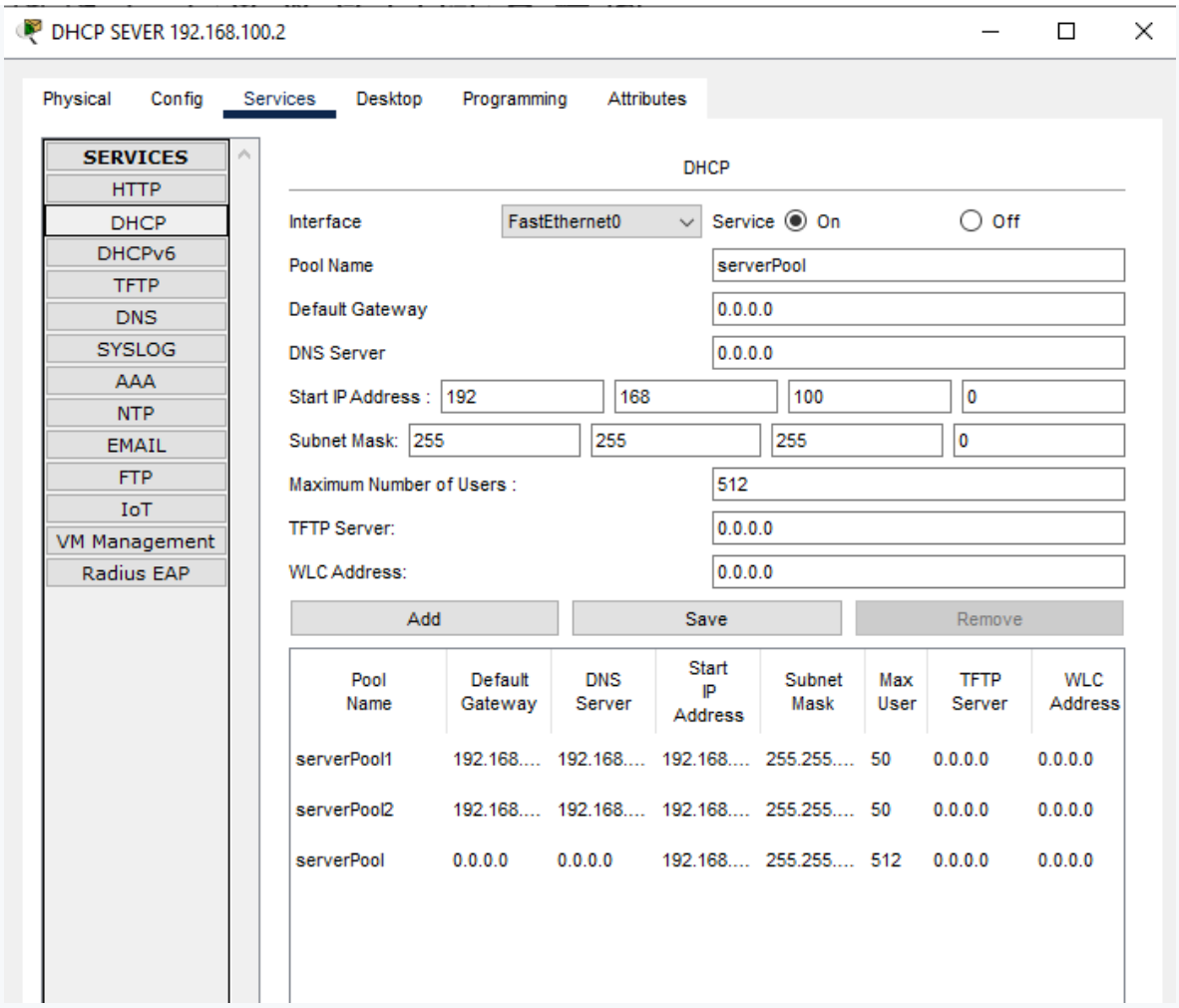
Q2:- The switch has a class C network (192.168.100.0), which is going to be the network being used in this lab.

Ans.

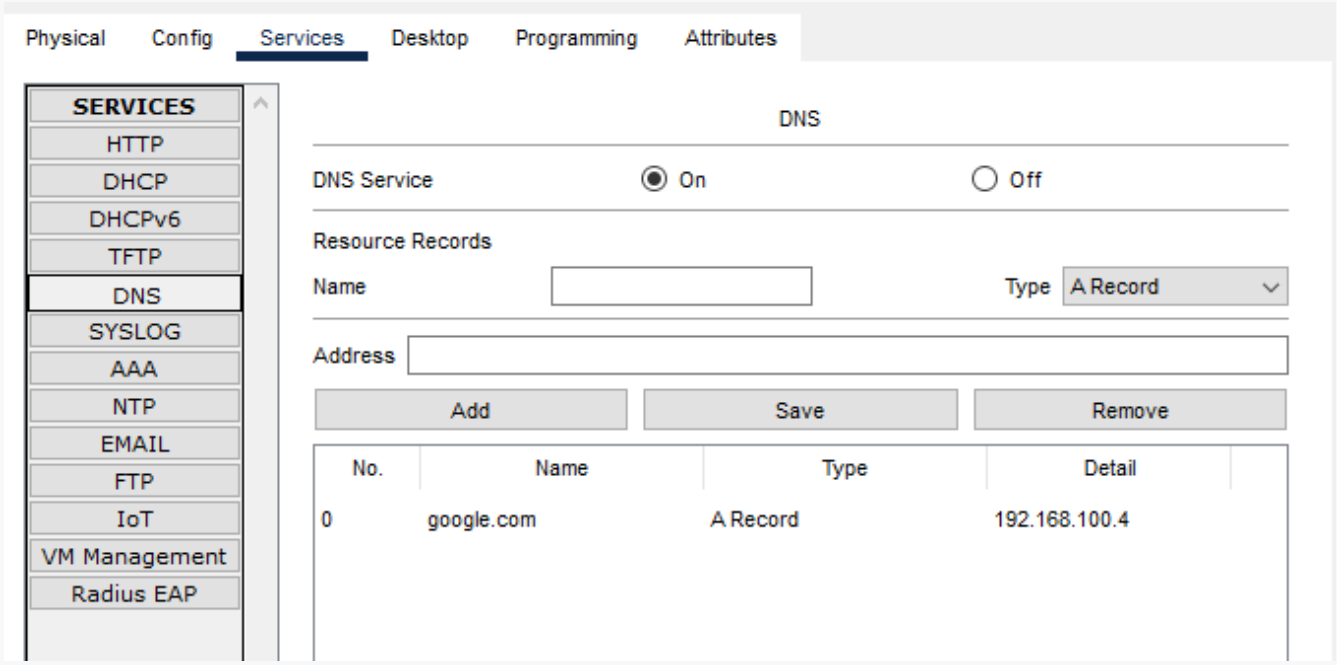
```
Network Id- 192.168.100.0
Host Id- 192.168.100.1/4

Network Id- 192.168.1.1
Host Id- 192.168.1.2/5
```



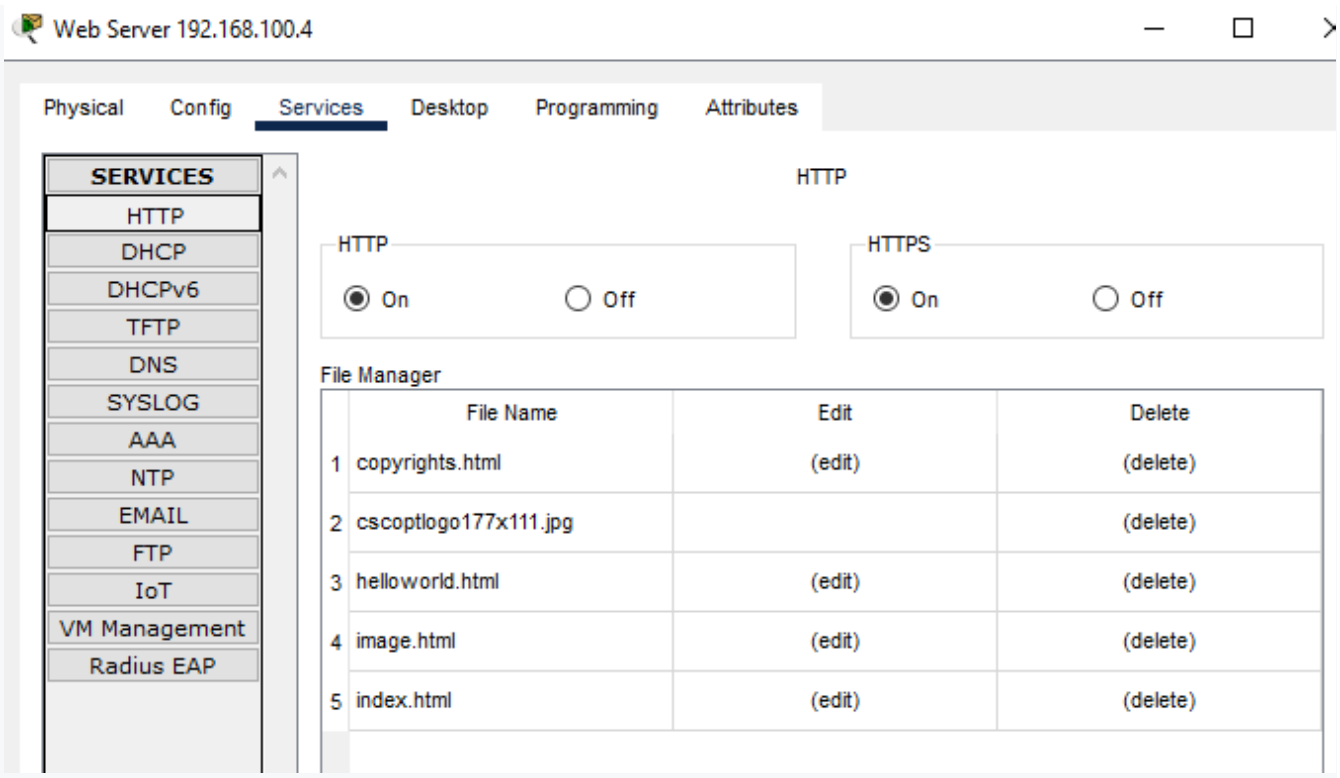
DHCP SERVER


DHCP SEVER 192.168.100.2
Physical
Config
Services
Desktop
Programming
Attributes
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

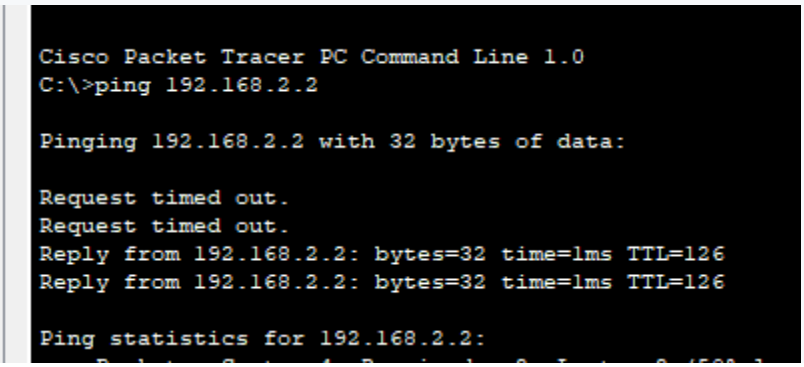


Web Server



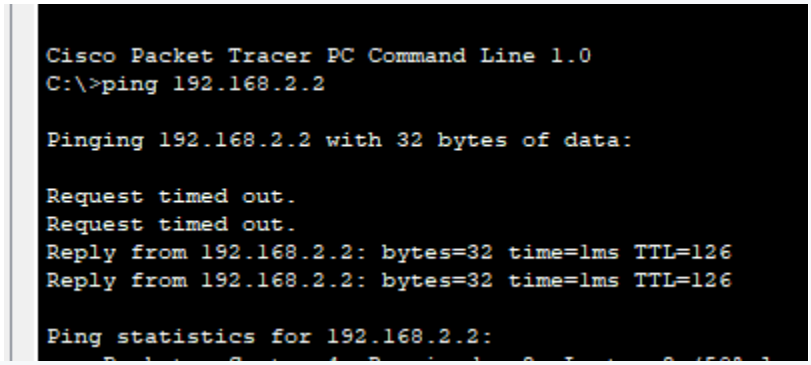
***** Q3:- Using a CIDR notation of /24, go to each individual PCs and assign them a network with an increment of 10.

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



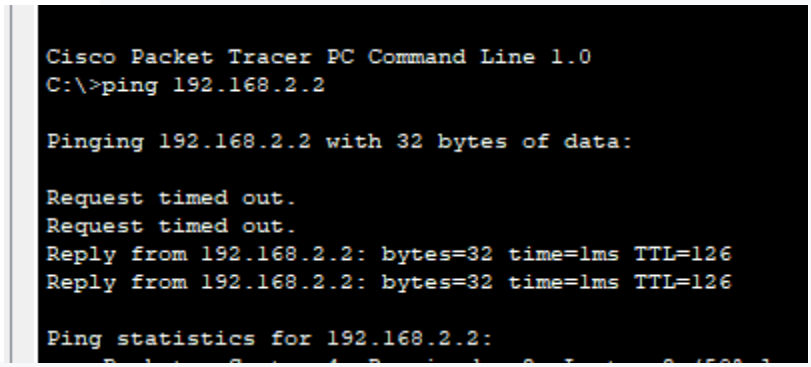
Q5 : – Type “ipconfig” and verify the ip addresses on respective PCs.

Ans:-



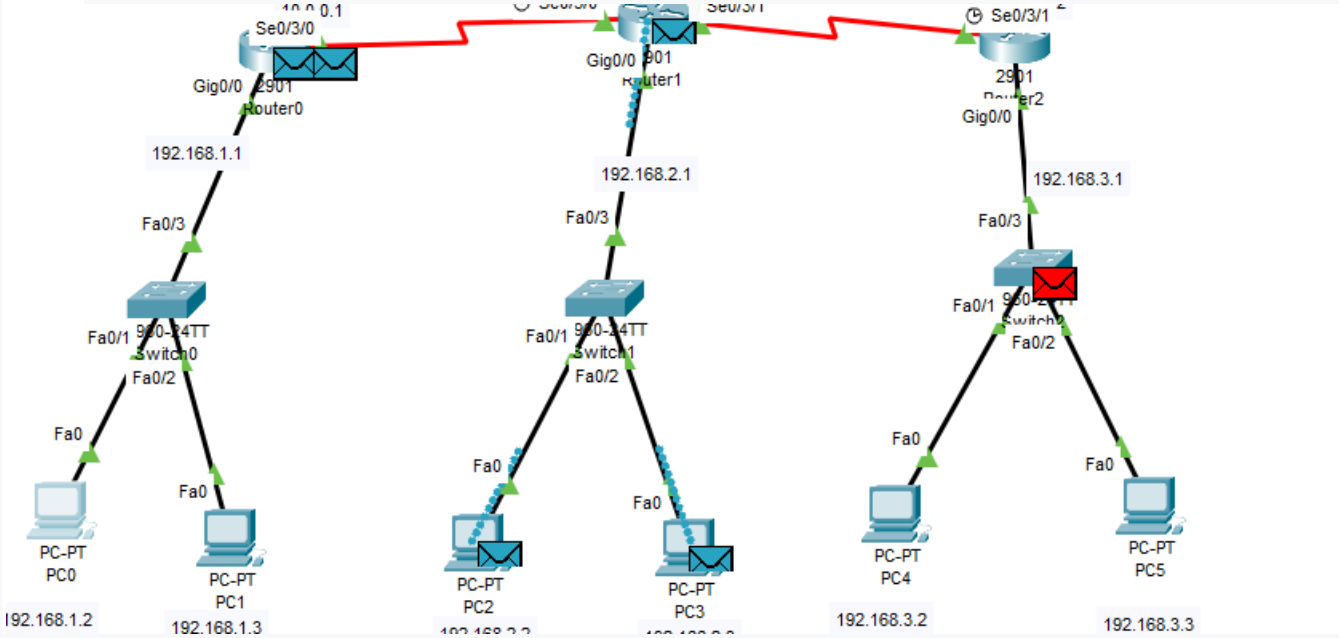
Q6:- To test the connectivity, go to any one of the PC’s command prompt, and ping other PCs

Ans:-



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.