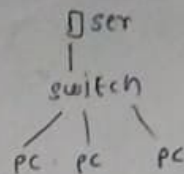


## exp 1. LAN

- 1) add 3 pc, 1 switch (2960), 1 server
- 2) connect 3 pc to switch and switch to server
- 3) give IP address to each pc as
  - 10.0.0.1
  - 10.0.0.2
  - 10.0.0.3



and the to the server 10.0.0.100.

- 4) check in pc command prompt ping 10.0.0.2 on PC1  
ping 10.0.0.3 on PC1  
and also for server ping 10.0.0.100 on PC1.
- 5) on pc3 go to web browser.  
https://10.0.0.100 to check server

## exp 2

- 1) open command prompt
  - a) ping www.wikipedia.org
  - b) ip config
  - c) hostname
  - d) netstat
  - e) route print
  - f) tracert wikipedia.org
  - g) nslookup wikipedia.org
  - h) arp -a

## exp 3 RIP

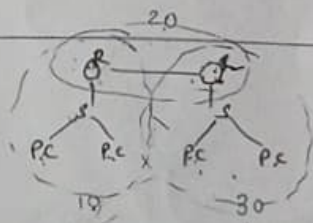
- 1) 4 pc, 2 switch (2960-24), 2 Router (1841)
- 2) connect all them from down to upwards.
- 3) configure pc as

desktop  
↓  
IP config

PC 0	10.0.0.1
PC 1	10.0.0.2
PC 2	30.0.0.1
PC 3	30.0.0.2

Router 0  $\begin{cases} 10.0.0.3 \text{ (Default gateway)} \\ 20.0.0.1 \end{cases}$

Router 2  $\begin{cases} 30.0.0.3 \text{ (Default gateway)} \\ 20.0.0.2 \end{cases}$



- 4) Router 0 → config → fast ethernet 0 IP → 10.0.0.3  
fast ethernet 1 IP → 20.0.0.1

Turn ON port status.

Router 1 → config → fast ethernet 0 IP → 30.0.0.3  
fast ethernet 1 IP → 20.0.0.2

check msg are send successfully

send msg from PC0 to PC1 &

PC2 to PC3 check successful.

7) Router 0

config → static

Network → 30.0.0.0

mask →

Next hop → 20.0.0.2

Router 1

Network → 10.0.0.0

Next hop → 20.0.0.1

8) check msg are sending

from PC0 to PC2 or

PC1 to PC3

9) Router 0

config → RIP

add network 10.0.0.0

20.0.0.0

Router 1

add network 20.0.0.0

30.0.0.0

Net

Add

EXP-4.

1) 3 PC, 1 switch (2960-24), 1 router (1841)

2) connect all them down to upwards.

3) open CLI command in Router

4) enter enable

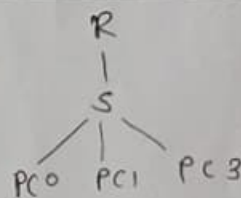
configure terminal

interface fast ethernet 0/0

ip address 192.168.1.1 255.255.255.0

no shutdown

exit



5) DHCP sat command's run karyche ahet.

CLI command in Router, continue varchadh.

Router (config) # ip dhcp pool DYP

network 192.168.1.0, 255.255.255.0

default-router 192.168.1.1

~~dns~~ dns-server <DNS IP>

ip dhcp excluded-address 192.168.1.1

end

write memory // save your configuration

open PC0 → ip config (Desktop) → DHCP

Do to all PC's.

make DHCP

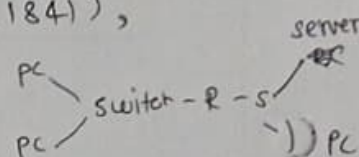
- 1) send msg from any PC to router.  
(successful).

### Exp. 5. FTP

10.0.0.1 20.1  
10.0.0.2 20.3  
20.2

- 1) Take 3 PC, 2 switches (2460-24TT), 1 Router (1841),

1 Server



- 2) connect all devices.

- 3) Assign IP address to each device.

PC0 → 10.0.0.2 } Default gateway → 10.0.0.1  
PC1 → 10.0.0.3 }

Server → 20.0.0.2 } Default gateway → 20.0.0.1  
PC2 → 20.0.0.3 }

- 3) Router

fast ethernet 0/0 → 10.0.0.1 } Turn on port status  
fast ethernet 0/1 → 20.0.0.1 }

- 4) server → services → FTP

make username & password

Turn on → write, read, delete, rename, list  
and then ADD.

- 5) In PC0 → command prompt → ping 10.0.0.3  
ping 20.0.0.2  
ping 20.0.0.3

all PC & server  
to check  
whether they  
are connected  
successfully.

- 6) create text file in PC2

PC2 → Desktop → text Editor → save → Filename.txt



C2 → Desktop → command prompt

> dir

// see there is filename.txt file present. (to check directory)

> ftp 20.0.0.2

enter username & password

// to connect PC 2 to server.

> dir

// all files present ~~will~~ will be in server.

> put filename.txt

// transfer file to server

> dir

// to check file went to the server.

✶ // first file should be filename.txt.

8) PC0 → desktop → command prompt

> dir

// no file present like filename.txt.

> ftp 20.0.0.2

// connect to server

> dir

// file present.

> get filename.txt

// to copy file to PC0.

> quit

// exit ftp.

> dir

// to check that file present after quit.

9) PC1 → desktop → command prompt

> ftp 20.0.0.2

// connect to server.

// so that the packet

will move from

[AND TURN ON SIMULATION]

PC1 → server.

Exp. 6

```
include <stdio.h>
```

```
int main() {
```

```
int incoming, outgoing, buck-size, n, store = 0;
```

```
printf("Enter bucket size, outgoing, and no. of  
inputs: ");
```

```
scanf("%d %d %d", &buck-size, &outgoing,  
&n);
```

```
while (n != 0) {
```

```
printf("Enter the incoming packet size:");
```

```
scanf("%d", &incoming);
```

```
printf("Incoming packet size %d\n", incoming);
```

```
if (incoming <= (buck-size - store)) {
```

```
store += incoming;
```

```
printf("Bucket buffer size %d out of  
%d\n", store, buck-size);
```

```
} else {
```

```
printf("Dropped %d no. of packets\n",  
incoming - (buck-size - store));
```

```
printf("Bucket buffer size %d out of  
%d\n", store, buck-size);
```

```
store = buck-size;
```

```
}
```

```
store = store - outgoing;
```

```
printf("After outgoing %d packets left out of  
%d in buffer\n", store, buck-size);
```

```
n--;
```

```
}
```

```
}
```

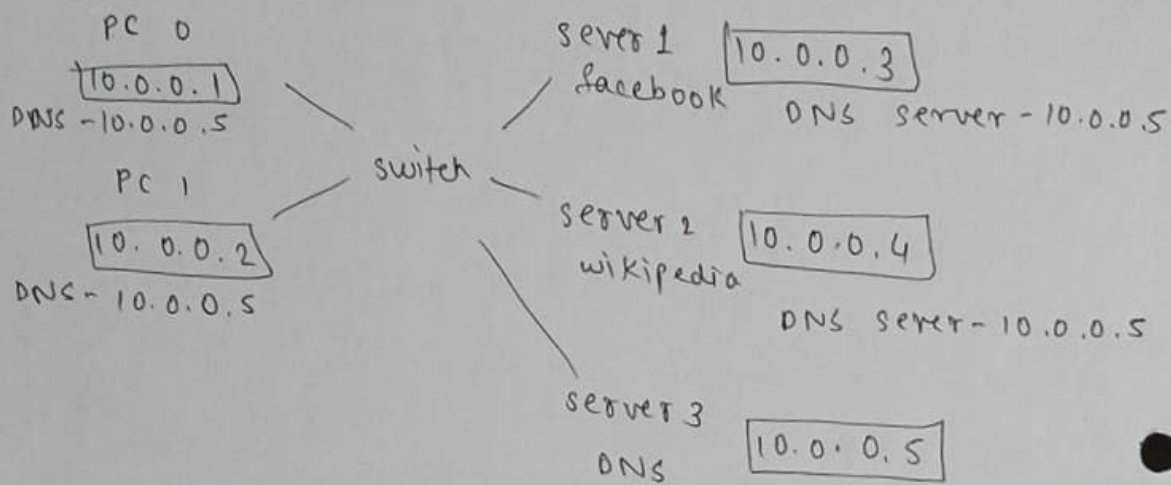
```
100 10 1  
100
```

## Exp. 7

1) Take 2 PC, 1 switch, 3 servers  
(2960-24TT)

2) connect all

3) Assign IP to all devices.



3) Go to wikipedia → services → HTTP  
index.html → edit → save.

4) DNS server → services → DNS → enter Name (DYP)  
Address - (of wikipedia)  
10.0.0.4

5) PC 0 → web browser → enter name (DYP)  
(website will be displayed)

OR

enter IP of wikipedia (10.0.0.4)