LAB MANUAL 03

Computer Network

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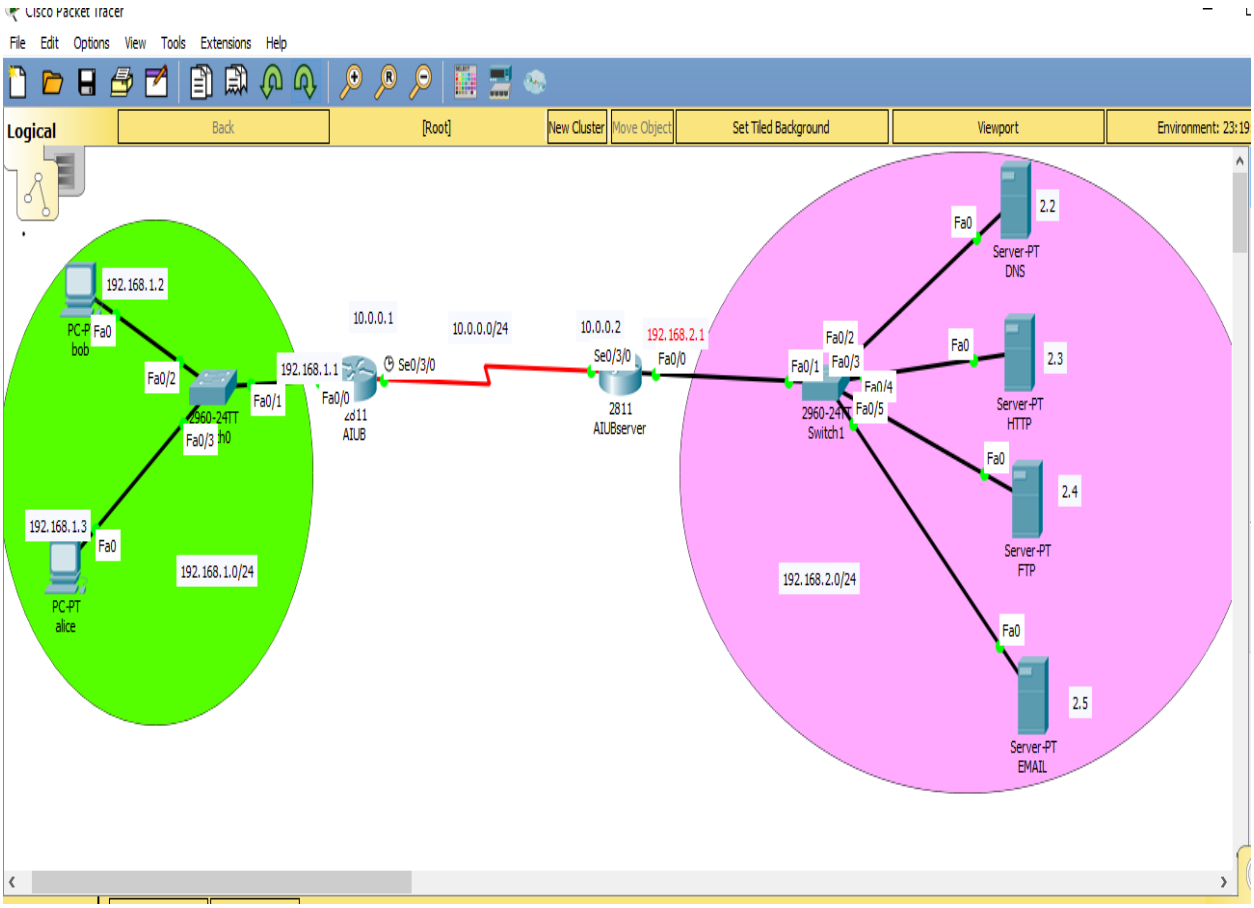
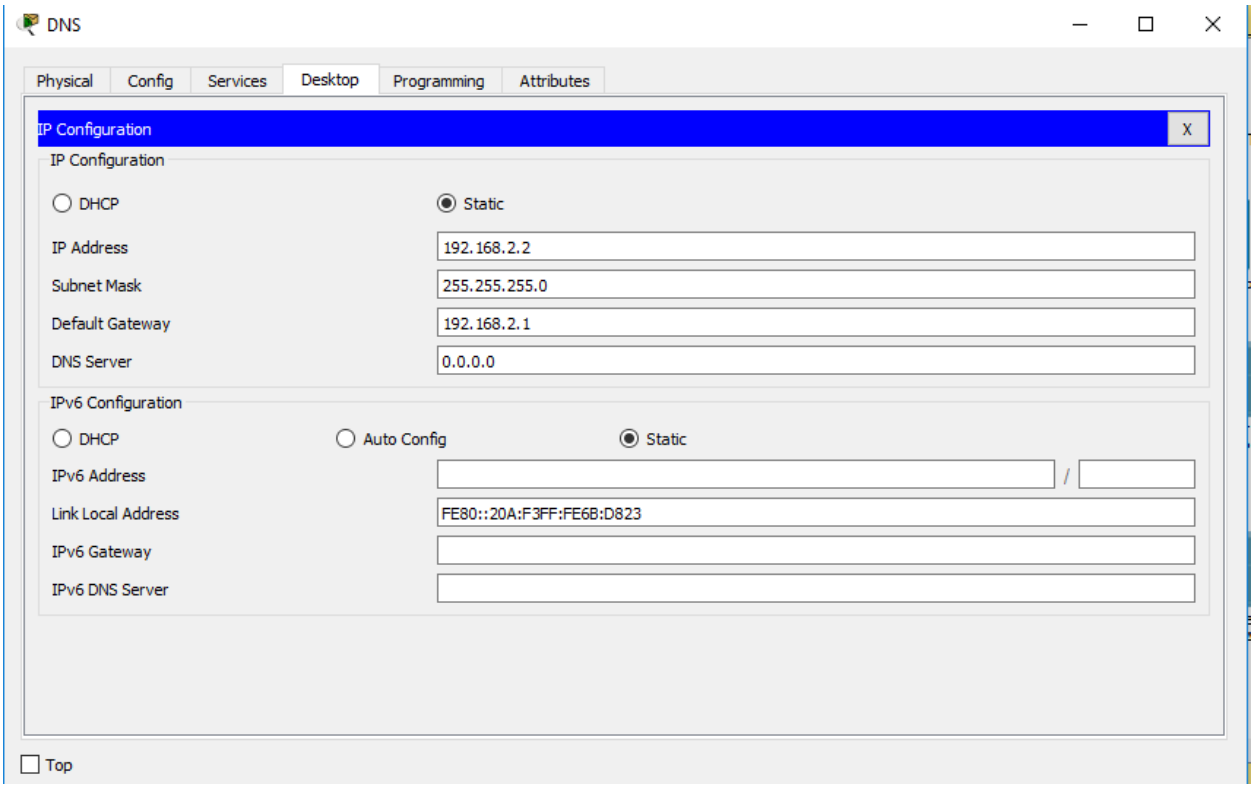


Draw the topology and according to this picture. Take four servers DNS, HTTP,FTP, EMAIL

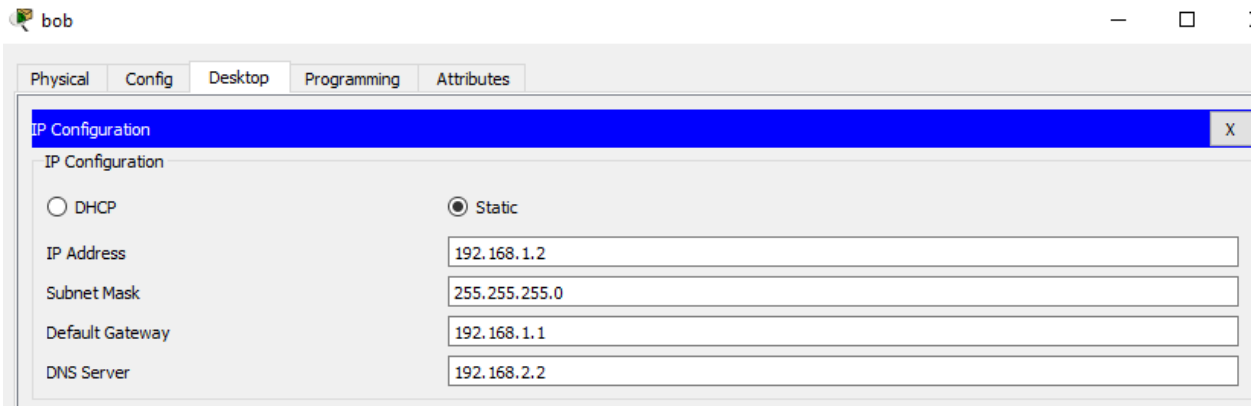
In this manual, we will see server connection.

Whenever we write a url address on our browser, the request first goes to DNS server. If he DNS server has the ip address of that http server then it redirects the request to the requested http server and then information is being fetched on your pc.

At first Click the DNS server and configure .

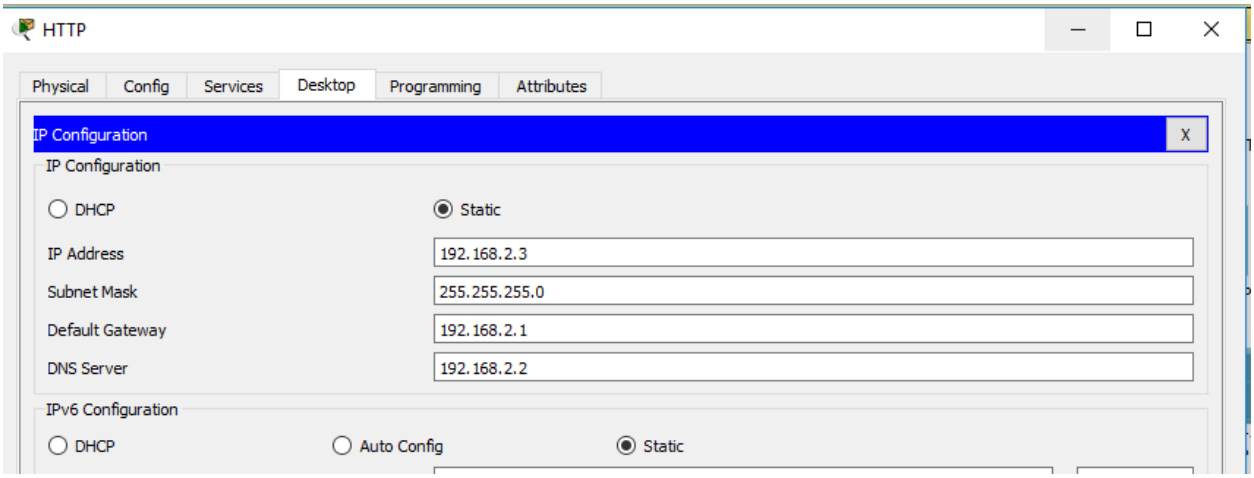


No go back to the PCs and add DNS server ip in the configuration.



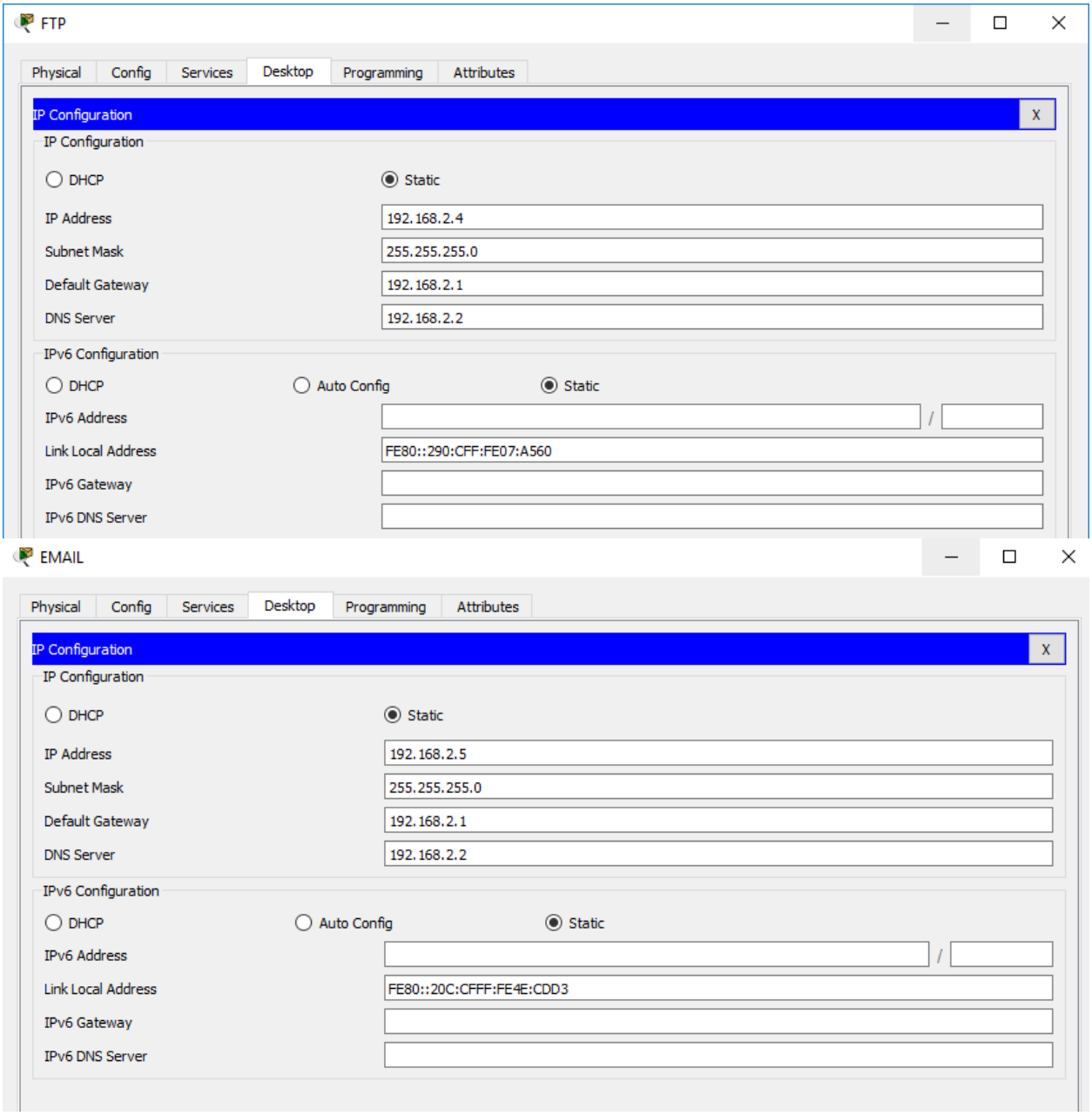
Similarly do in in other PCs.

Then click HTTP server and configure.



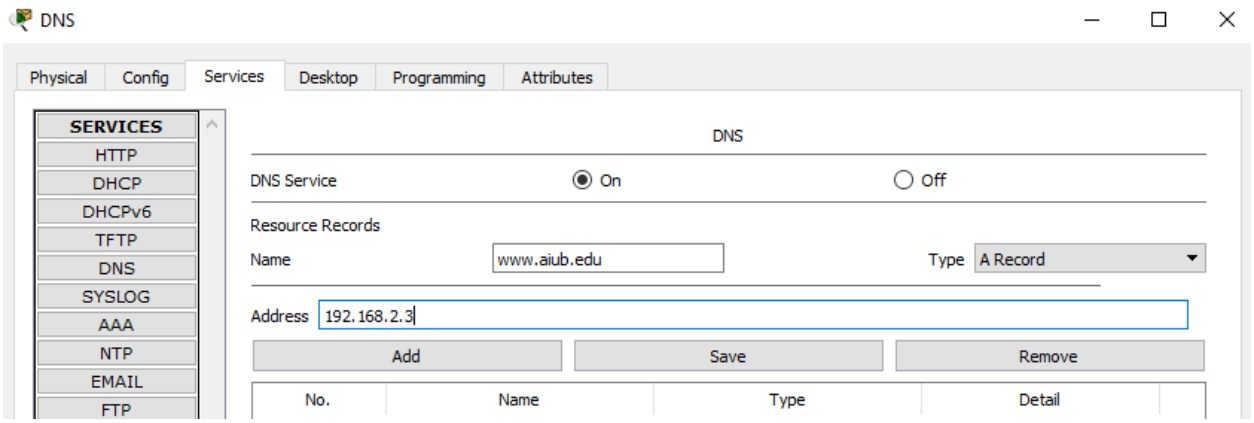
See, Here DNS server ip can not be blank. You will have to put DNS server ip also.

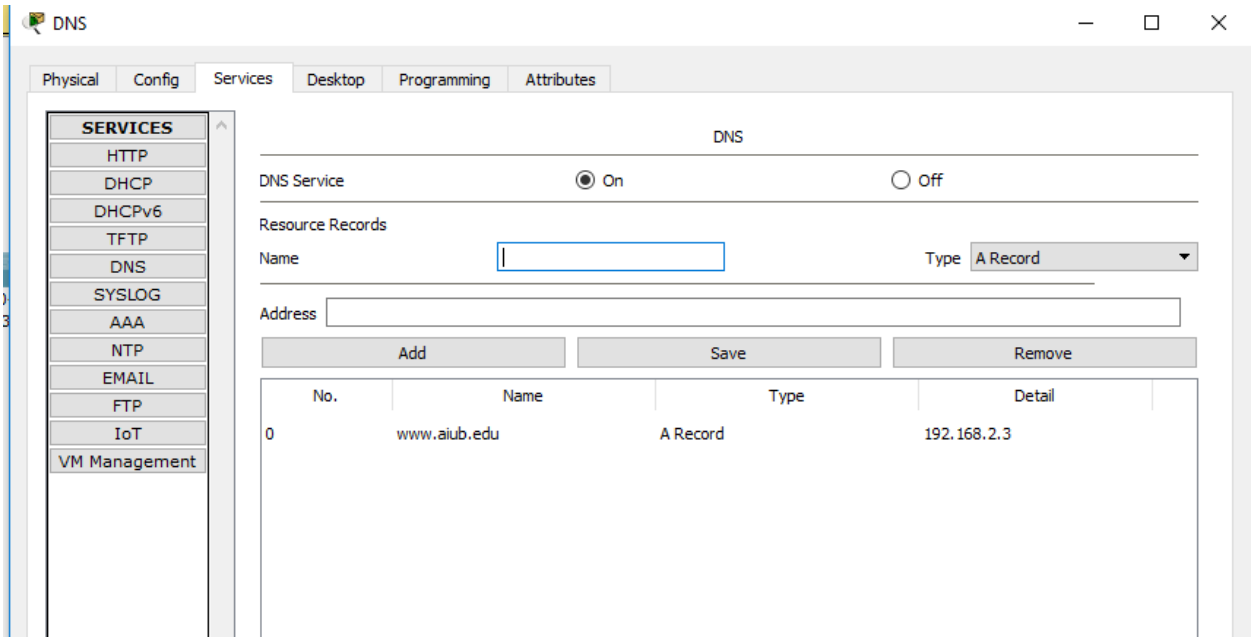
Then Configure FTP server, Email server



Now, Go back to DNS server. Click on the service option. Except DNS , all other service should be off.
In the HTTP service section, write

Username: www.aiub.edu
Address:192.168.2.3
And then click “Add”.
Here the ip address is the http server’s ip address.


DNS
Physical
Config
Services
Desktop
Programming
Attributes
SERVICES
HTTP
DHCP
DHCPv6
TFTP
DNS
SYSLOG
AAA
NTP
EMAIL
FTP
DNS
DNS Service
On
Off
Resource Records
Name
www.aiub.edu
Type
A Record
Address
192.168.2.3
Add
Save
Remove
No.
Name
Type
Detail


DNS
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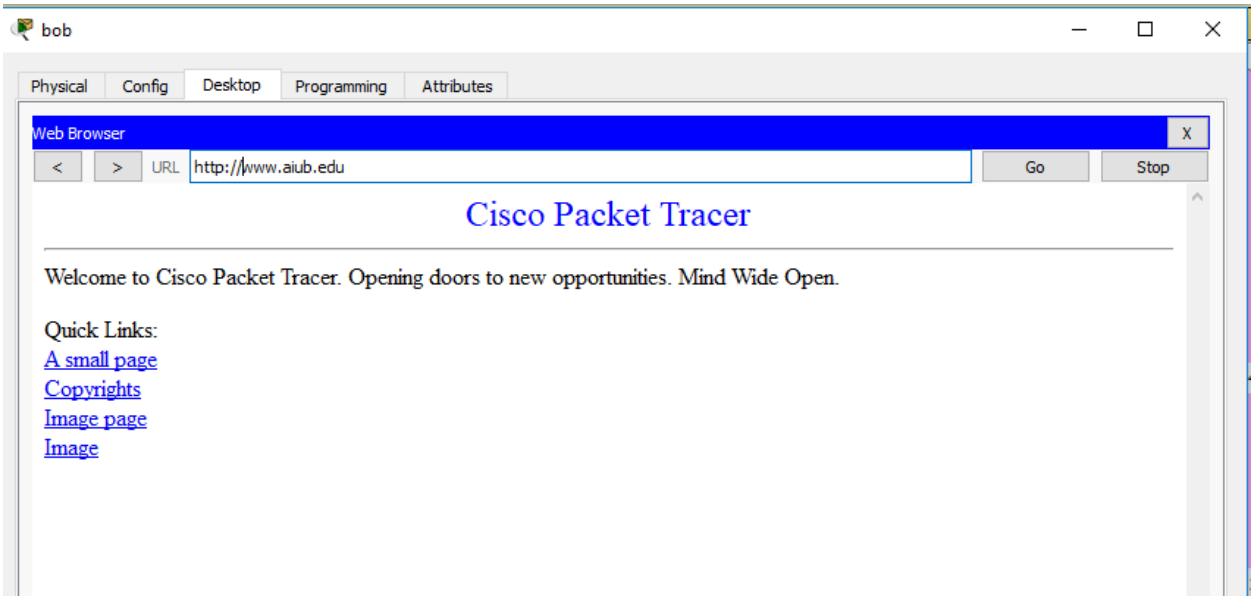
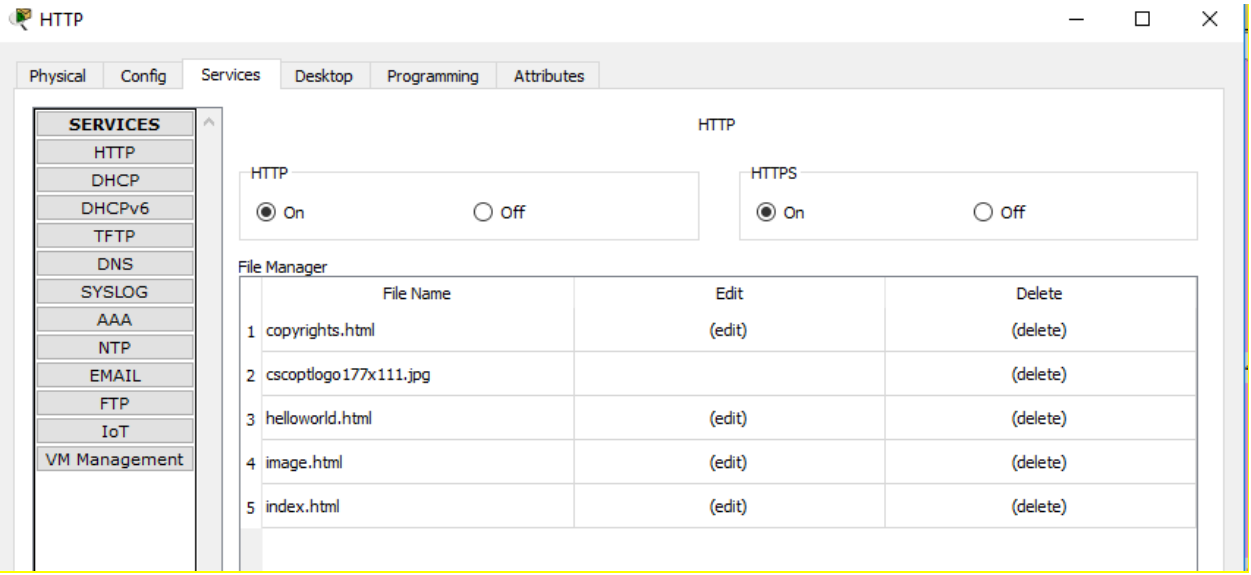
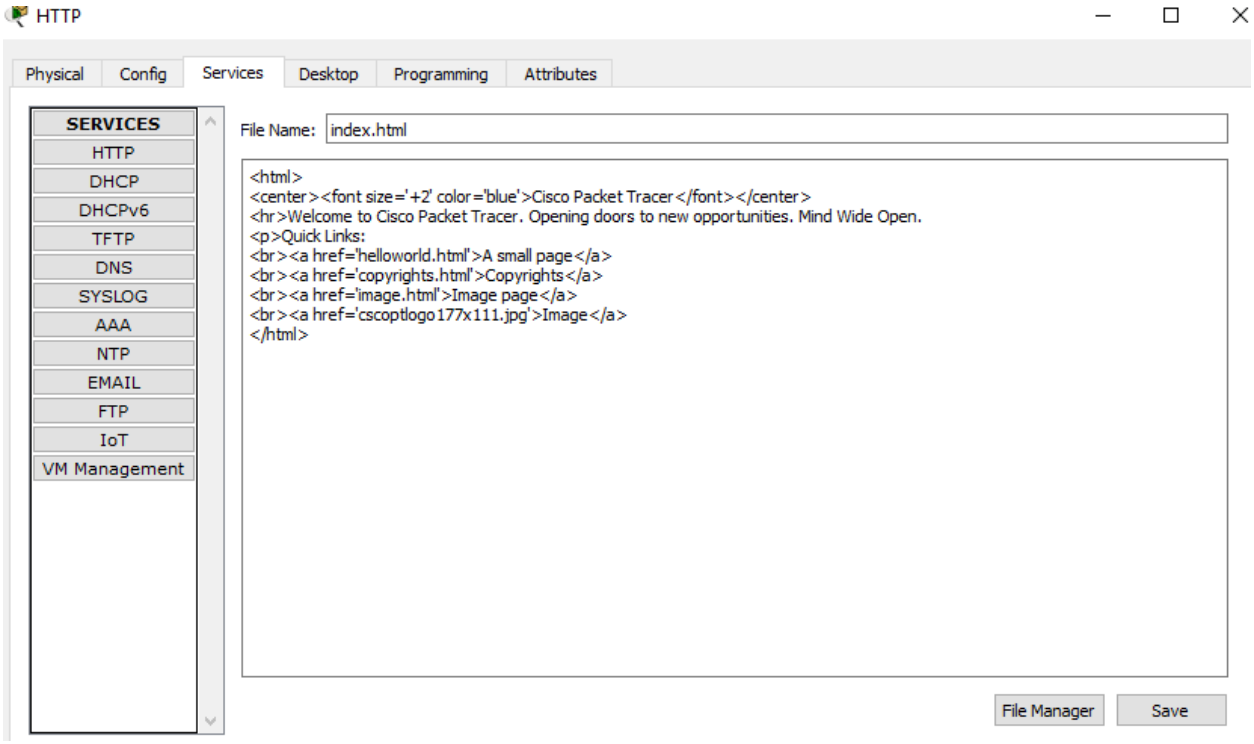
DNS
SYSLOG
AAA
NTP
EMAIL
FTP
IoT
VM Management
DNS
DNS Service
On
Off
Resource Records
Name
Type
A Record
Address
Add
Save
Remove
No.
Name
Type
Detail
0
www.aiub.edu
A Record
192.168.2.3

Now click a PC and open web browser. Type only www.aiub.edu and enter. And you will see the requested page.



The content of this page is written in HTTP server's index.html page.
You can edit that page clicking on "edit" according to your wish and you will see the edited one if you again request for the page.




HTTP
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Config
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Desktop
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Attributes
SERVICES
HTTP
DHCP
DHCPv6
TFTP
DNS
SYSLOG
AAA
NTP
EMAIL
FTP
IoT
VM Management
File Name: index.html
<html>
Cisco Packet Tracer
<hr>Welcome to Cisco Packet Tracer. Opening doors to new opportunities. Mind Wide Open.
<p>Quick Links:

A small page

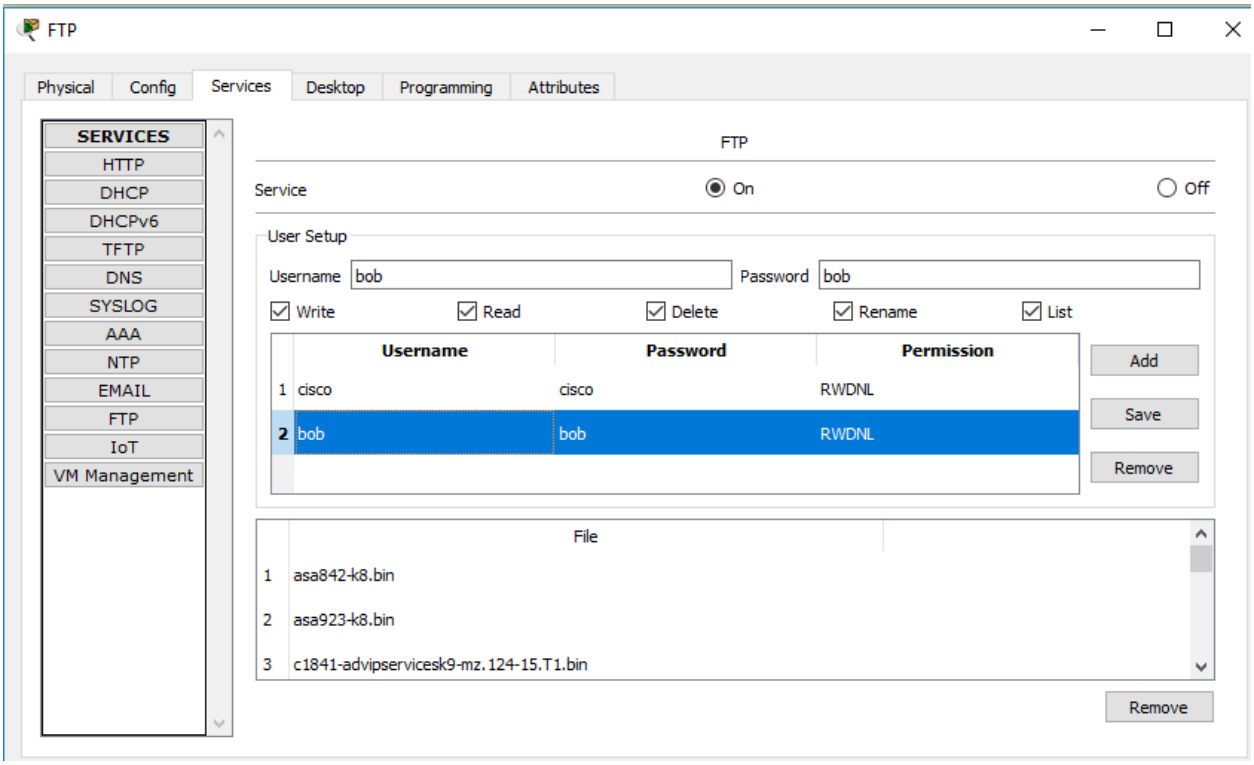
Copyrights

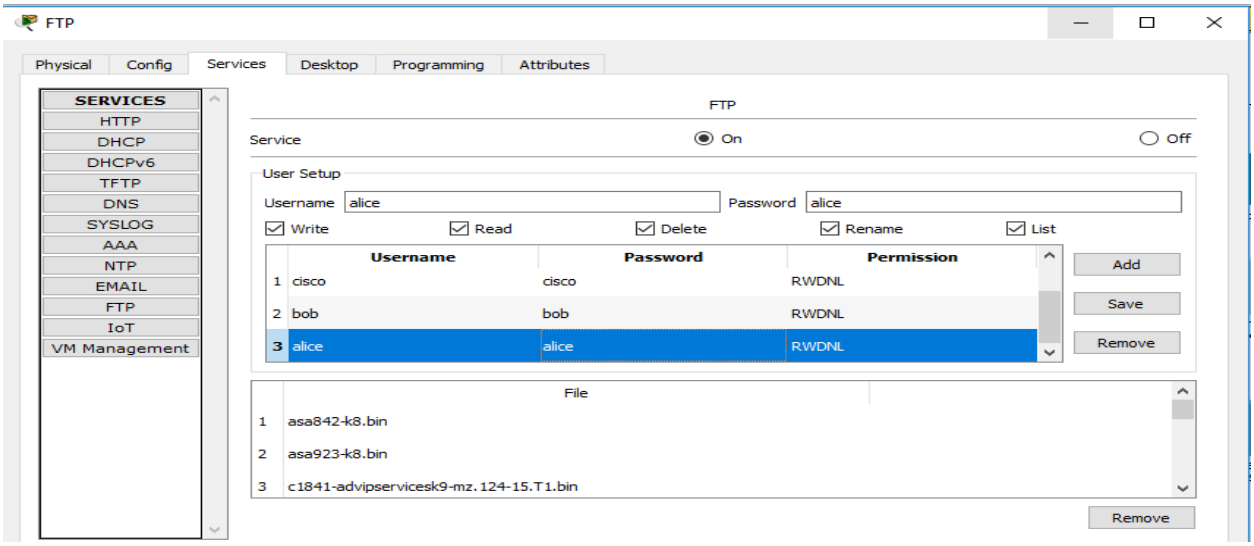
Image page

Image
</html>
File Manager
Save

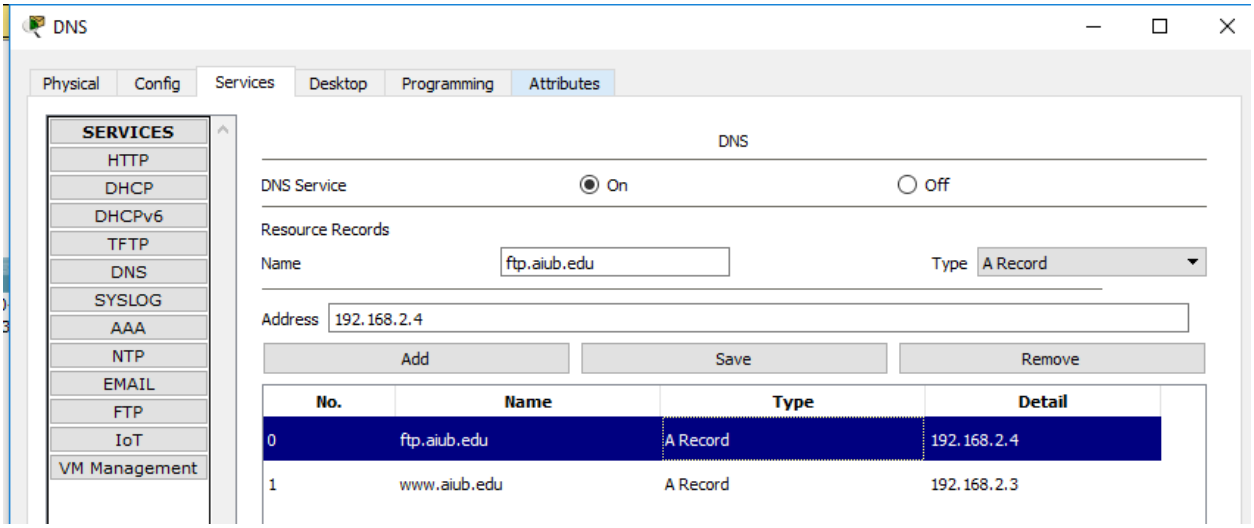
Then click FTP server and open service panel. Then type

Username: bob
Password: bob
Set the privileges of read, write, delete etc. And click “Add”.
Thus you can create users for ftp server.



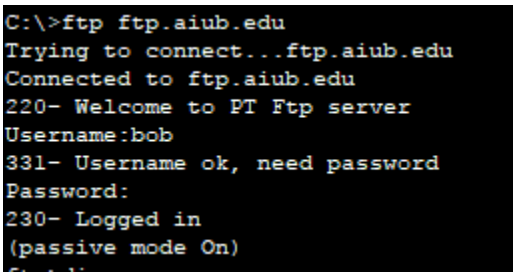


Then Go back to DNS and add another username and address for FTP. FTP address will be the ip address of the ftp server.



Then Open a pc, click command prompt and write

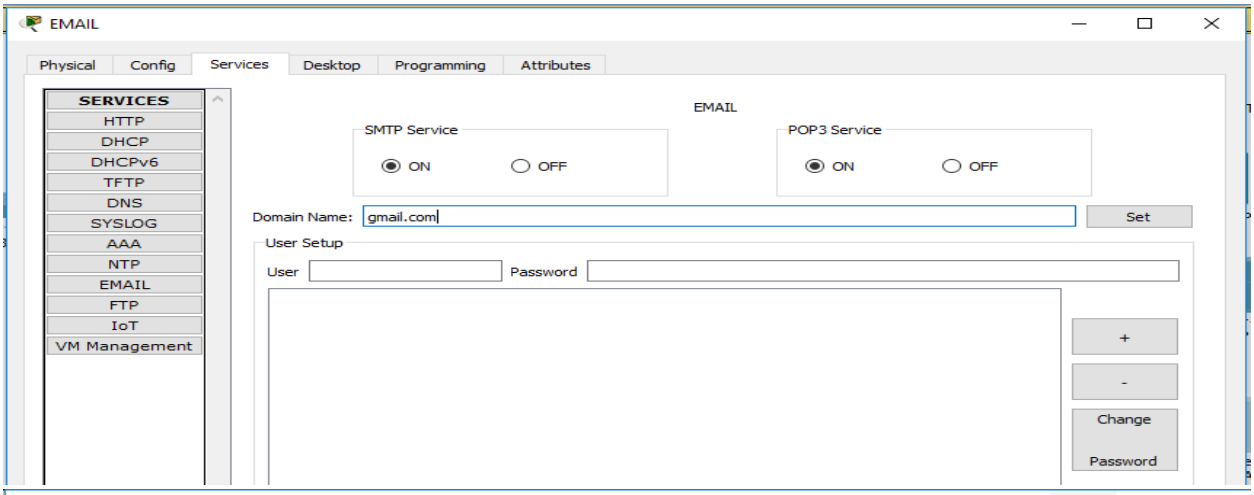
>ftp ftp.aiub.edu
Username: bob
Password:bob

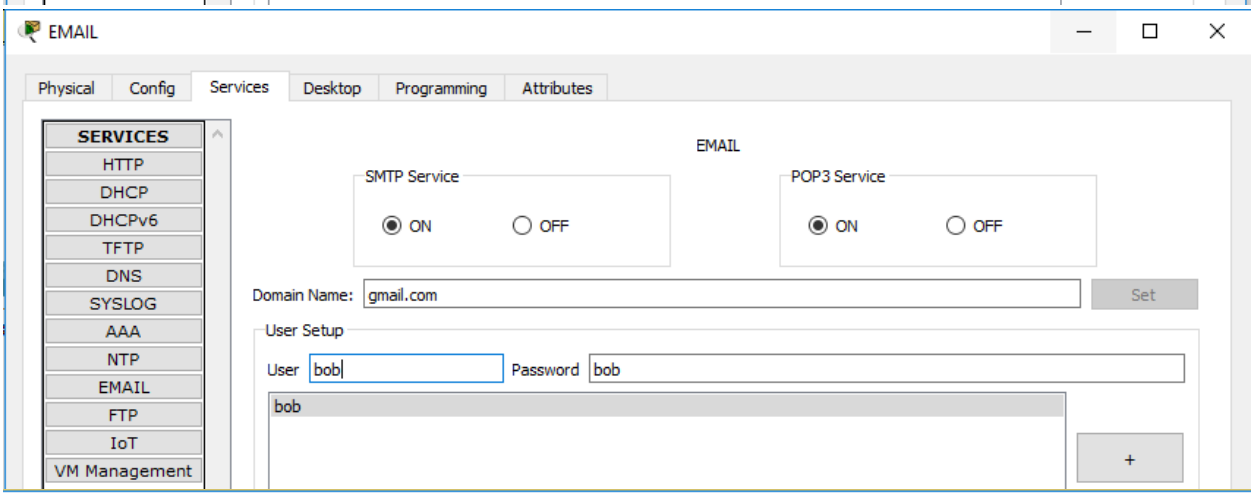


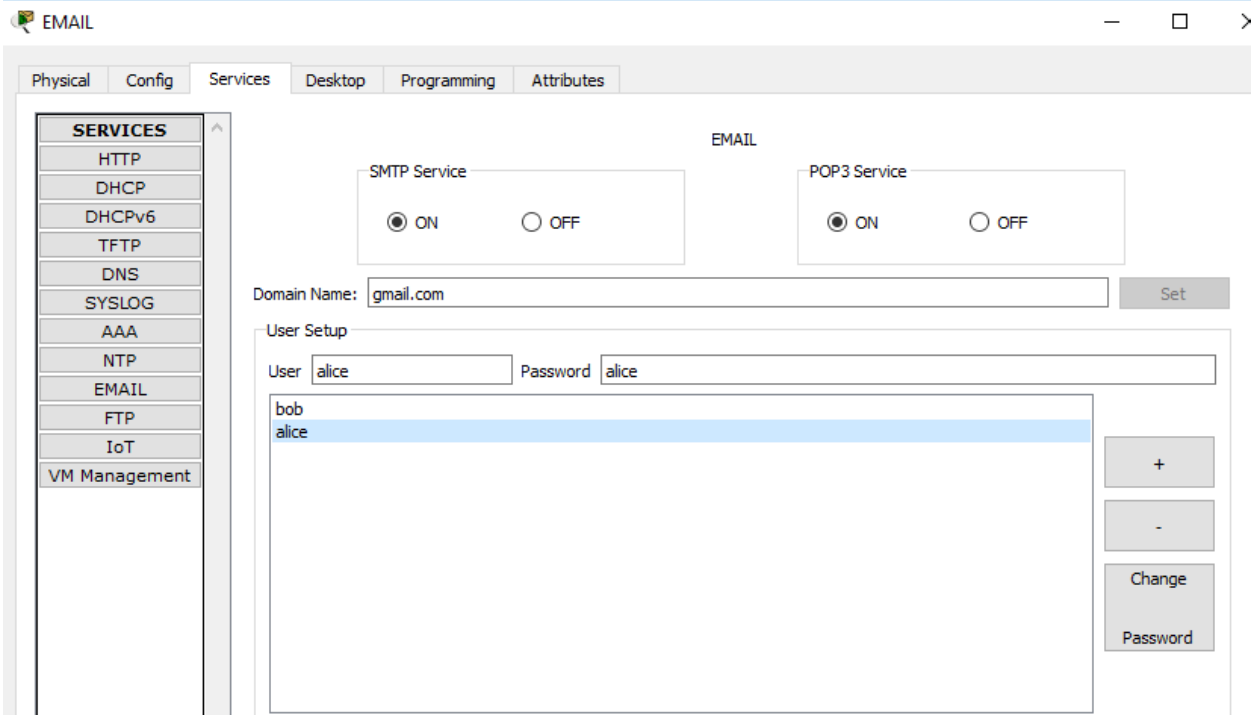
Logging in, You can access the files on that local server.
Some commands for ftp:
ftp> dir (to see the list of files)
ftp> get filename.txt (any existing filename to download)
ftp> put filename.txt (click on a pc, open text editor in the desktop option. Write something and save by ctrl+s and set a file name and save. Then to upload it write the command put)
ftp> rename old filename new filename (example: rename filename.txt newfile.txt)
ftp>delete filename.txt

Now, Click on email server. And go to the service option. Except email, all services should be turned off.
Then put Domain Name: gmail.com (as your wish)
N.B: Keep it in mind, after giving domain name , you must have to click SET . Otherwise it won't work.

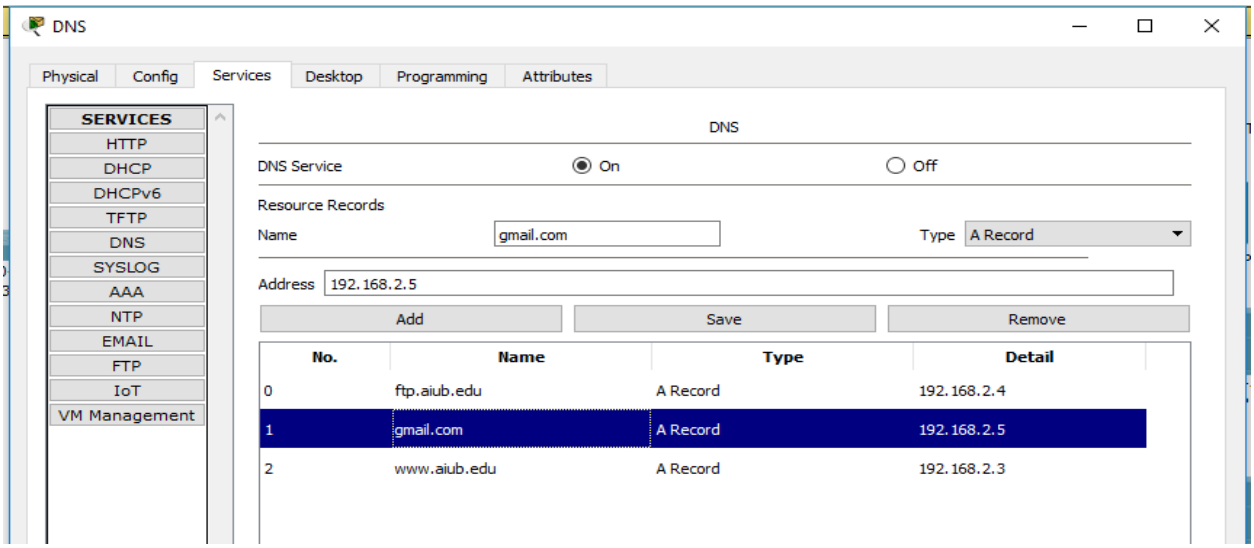
Then create users- bob and alice or whatever you wish. Click the + button to add any user in this list.





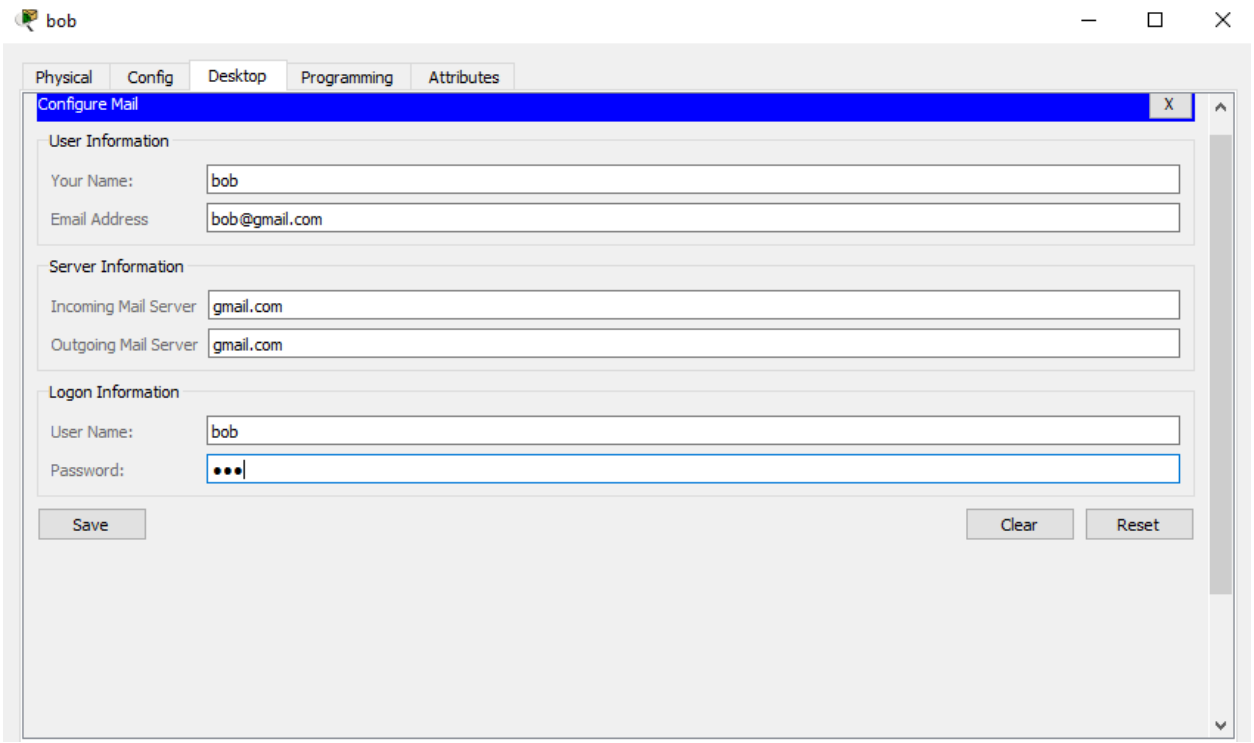


Now again Go back to DNS server and add email server to the list. Add domain name in the username and address would be the ip address of email server.
Username: gmail.com
Address: 192.168.2.5



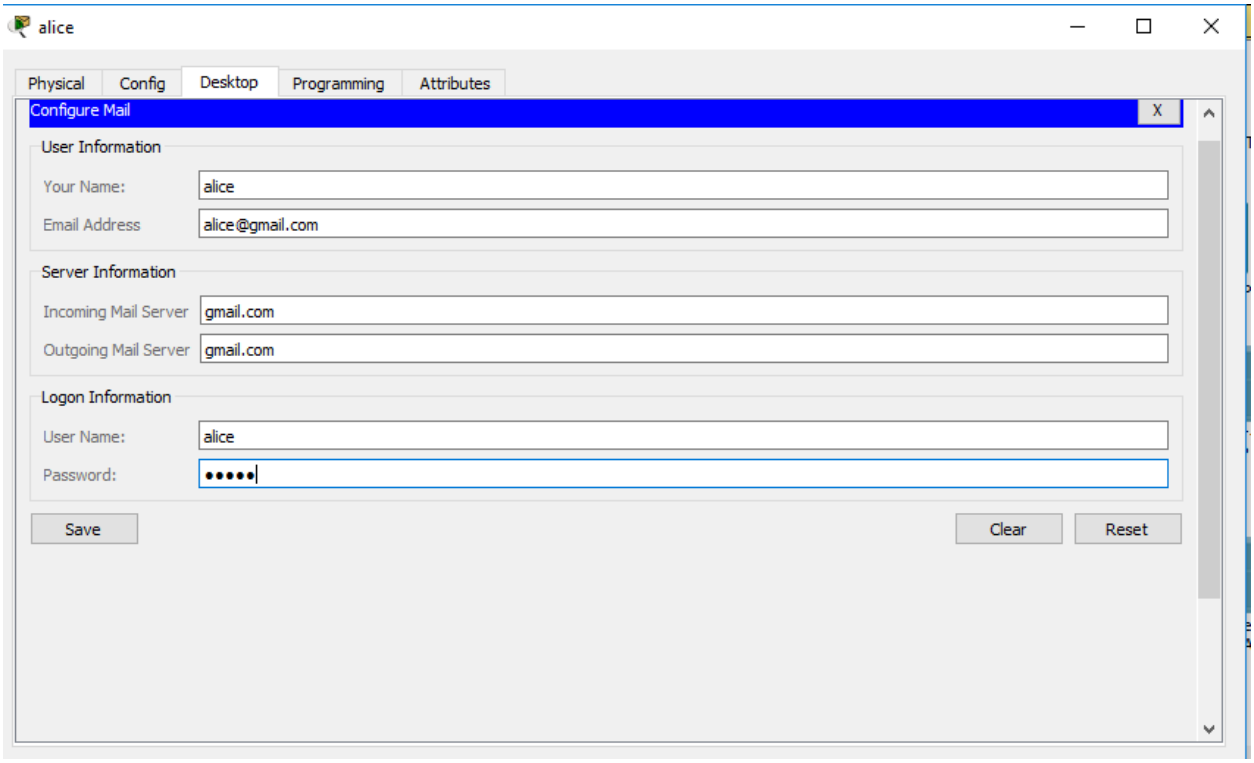
To check if email works-

Click a PC , rename it bob. Then in bob's PC , open email from the desktop option.
Fill up the blanks like this picture below:



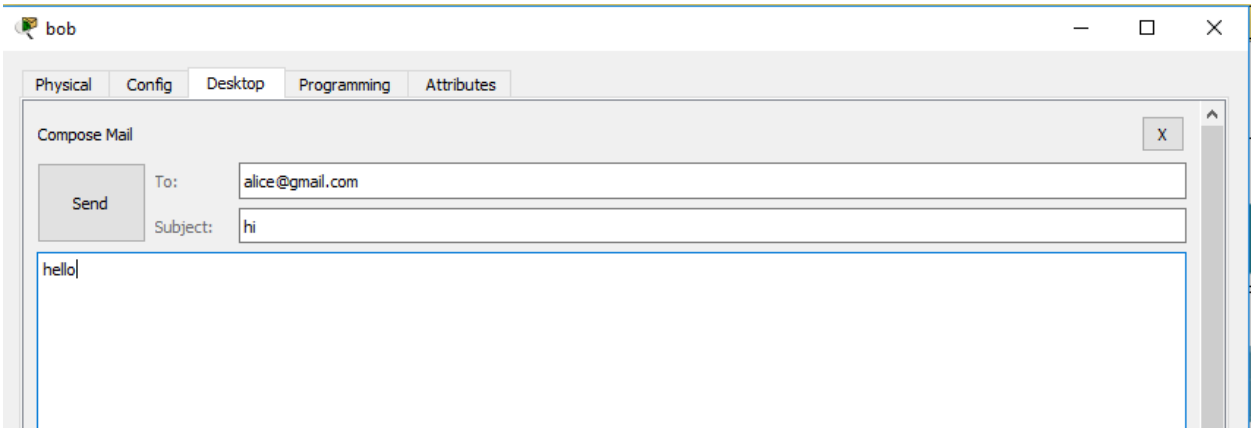
Don’t Forget to click “Save”.

Then open another PC named Alice and like bob’s PC, configure the email section.

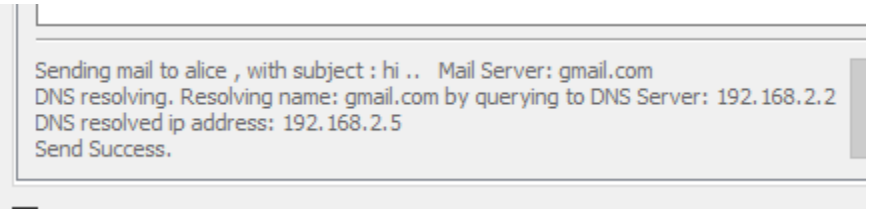


Save it.

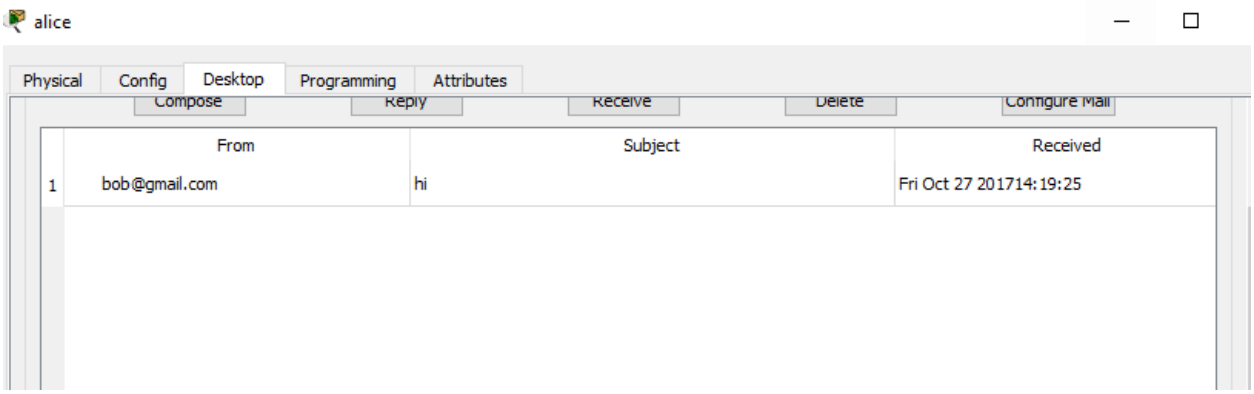
Then try sending mail from alice to bob or bob to alice.



To see the status of the sent mail, scroll down after clicking Send.



You can check from alice's PC clicking Receive that whether the mail has been received or not.



Router Configuration LOG:

Fri Oct 27 13:03:28 2017 Router0 Router>en
Fri Oct 27 13:03:40 2017 Router0 Router#conf t
Fri Oct 27 13:03:46 2017 Router0 Router(config)#hostname AIUB
Fri Oct 27 13:06:04 2017 Router0 AIUB(config)#int f0/0
Fri Oct 27 13:06:15 2017 Router0 AIUB(config-if)#ip address 192.168.1.1 255.255.255.0
Fri Oct 27 13:06:21 2017 Router0 AIUB(config-if)#no shut
Fri Oct 27 13:06:25 2017 Router0 AIUB(config-if)#exit
Fri Oct 27 13:17:24 2017 Router0 AIUB>en
Fri Oct 27 13:17:29 2017 Router0 AIUB#conf t
Fri Oct 27 13:17:48 2017 Router0 AIUB(config)#int serial 0/3/0
Fri Oct 27 13:18:10 2017 Router0 AIUB(config-if)#ip address 10.0.0.1 255.255.255.0
Fri Oct 27 13:18:16 2017 Router0 AIUB(config-if)#bandwidth 64000
Fri Oct 27 13:18:22 2017 Router0 AIUB(config-if)#clock rate 64000
Fri Oct 27 13:18:26 2017 Router0 AIUB(config-if)#no shut
Fri Oct 27 13:18:32 2017 Router0 AIUB(config-if)#exit
Fri Oct 27 13:18:46 2017 Router0 AIUB(config)#enable password cisco
Fri Oct 27 13:18:53 2017 Router0 AIUB(config)#line console 0
Fri Oct 27 13:19:02 2017 Router0 AIUB(config-line)#password 123
Fri Oct 27 13:19:05 2017 Router0 AIUB(config-line)#login
Fri Oct 27 13:19:08 2017 Router0 AIUB(config-line)#exit
Fri Oct 27 13:19:22 2017 Router1 Router>en
Fri Oct 27 13:19:25 2017 Router1 Router#conf t
Fri Oct 27 13:19:36 2017 Router1 Router(config)#hostname AIUBserver
Fri Oct 27 13:40:16 2017 Router1 AIUBserver>en
Fri Oct 27 13:40:19 2017 Router1 AIUBserver#conf t
Fri Oct 27 13:40:28 2017 Router1 AIUBserver(config)#int f0/0

Fri Oct 27 13:40:48 2017 Router1 AIUBserver(config-if)#ip address 192.168.2.1 255.255.255.0
Fri Oct 27 13:40:54 2017 Router1 AIUBserver(config-if)#no shut
Fri Oct 27 13:40:57 2017 Router1 AIUBserver(config-if)#exit
Fri Oct 27 13:41:05 2017 Router1 AIUBserver(config)#int serial 0/3/0
Fri Oct 27 13:41:28 2017 Router1 AIUBserver(config-if)#ip address 10.0.0.2 255.255.255.0
Fri Oct 27 13:41:48 2017 Router1 AIUBserver(config-if)#no shut
Fri Oct 27 13:41:53 2017 Router1 AIUBserver(config-if)#exit
Fri Oct 27 13:42:20 2017 Router1 AIUBserver(config)#enable password cisco
Fri Oct 27 13:42:30 2017 Router1 AIUBserver(config)#line console 0
Fri Oct 27 13:42:36 2017 Router1 AIUBserver(config-line)#password 123
Fri Oct 27 13:42:38 2017 Router1 AIUBserver(config-line)#login
Fri Oct 27 13:42:49 2017 Router1 AIUBserver(config-line)#exit
Fri Oct 27 13:42:51 2017 Router1 AIUBserver(config)#exit
Fri Oct 27 13:42:52 2017 Router1 AIUBserver#conf t
Fri Oct 27 13:42:55 2017 Router1 AIUBserver(config)#exit
Fri Oct 27 13:43:02 2017 Router1 AIUBserver#exit
Fri Oct 27 13:43:15 2017 Router0 AIUB>en
Fri Oct 27 13:43:21 2017 Router0 AIUB#conf t
Fri Oct 27 13:43:42 2017 Router0 AIUB(config)#ip route 192.168.2.0 255.255.255.0 10.0.0.2
Fri Oct 27 14:01:43 2017 AIUB AIUB>en
Fri Oct 27 14:01:48 2017 AIUB AIUB#conf t
Fri Oct 27 14:02:09 2017 AIUB AIUB(config)#ip route 192.168.2.0 255.255.255.0 10.0.0.2
Fri Oct 27 14:02:20 2017 AIUBserver AIUBserver>en
Fri Oct 27 14:02:28 2017 AIUBserver AIUBserver#conf t
Fri Oct 27 14:02:56 2017 AIUBserver AIUBserver(config)#ip route 192.168.1.0 255.255.255.0 10.0.0.1