create 5 users, named user\_1 through user 5 and also a user called CEO and set the IP address if the server to 192.168.1.1

1) install and configure DHCP. Set IP pool from 192.168.1.100 to 192.168.1.200

* Add a filter to the pool so that MAC address AA:AA:AA:AA:AA:AA is blocked and no IP address is given to that MAC address
* reserve IP address 192.168.1.150 to MAC address BB:BB:BB:BB:BB:BB
* make another pool having IP pool from 192.168.2.100 to 192.168.2.200 and exclude IP address 192.168.2.150 from the range

2) Install and configure active directory. (use the same domain name used while configuring DHCP)

3) Configure a simple forward lookup DNS service, make it so that "this server maintains the zone", give any zone name (same as the domain name used while configuring DHCP and active directory), make it so that it allows only secure dynamic update and turn off forward queries.

* add a mx record (mail.<your domain name>.com)
* add 2 cname records (test.<your domain name>.com and test2.<your domain name>.com)
* add one A record (www.<your domain name>.com)
* add another A record (<yourdomain name>.com)
* add a cname record (ftp.<your domain name>.com)
* ping each record and see if you get a reply
* allow zone transfer only from the server in nameserver
* make sure "disable recursion" is configured
* make sure "secure dns cache against name pollution" is configured
* make dns active directory integrated
* change refresh interval to 20 mins
* debug log everything
* configure so that CEO has full control over DNS

3)Install and configure IIS

* make a web site for your domain (www.<your domain name>.com)
* make 2 more website for the 2 cname and put in 2 folders test1 and test2 (test.<your domain name>.com and test2.<your domain name>.com)
* Create new folder in test1 and test2 and add some documents in each of the new folders that you created.
* enable directory hopping for the website made for cname .
* make sure it asks for the user name and password when accessing the website for cname.

4) Install and configure SMTP server with the following properties:

* configure integrated windows authentication to access the mail server.
* configure outbound security to integrated windows authentication
* allow connection control to IP addresses 192.168.1.10, 192.168.1.11, 192.168.1.12 and the server itself
* allow only the server to relay through the mail server.
* allow max connection= 100
* turn on logging
* grant operator permissions to CEO only
* perform reverse dns lookup on incoming mails
* make sure the mail server is running using nslookup command

6) Install and configure Remote desktop services with the following properties:

* max monitors per sessions = 10
* max connections = 10
* always ask for password
* use client provided authentication
* end connection after 15 idle minutes
* disable audio and video recording
* only users 1, 2 and CEO can access the server. Configure so that users 1 and 2 can only logon and logoff and CEO can do everything.
* use SSL TLSv1.0 for server authentication and keep encryption high
* Once configured RDP to the server from accounts user1 and CEO

7) Install an ftp server

* Create a folder called FTP in the C:\user\public directory
* Create 2 groups FTP\_admin and FTP\_users
* Add CEO to FTP\_admin group and add users 1 through 5 to FTP\_users group.
* Configure a FTP site with name (ftp.<your domainname>.com)
* Allow FTP\_admin read and write access and allow only read access to the FTP\_users group.
* Make sure SSL is used.