Arsany Ashraf

Lab1

1. ipconfig
   1. ipconfig

   2. ipconfig /all

2. configure ip address

1. manually
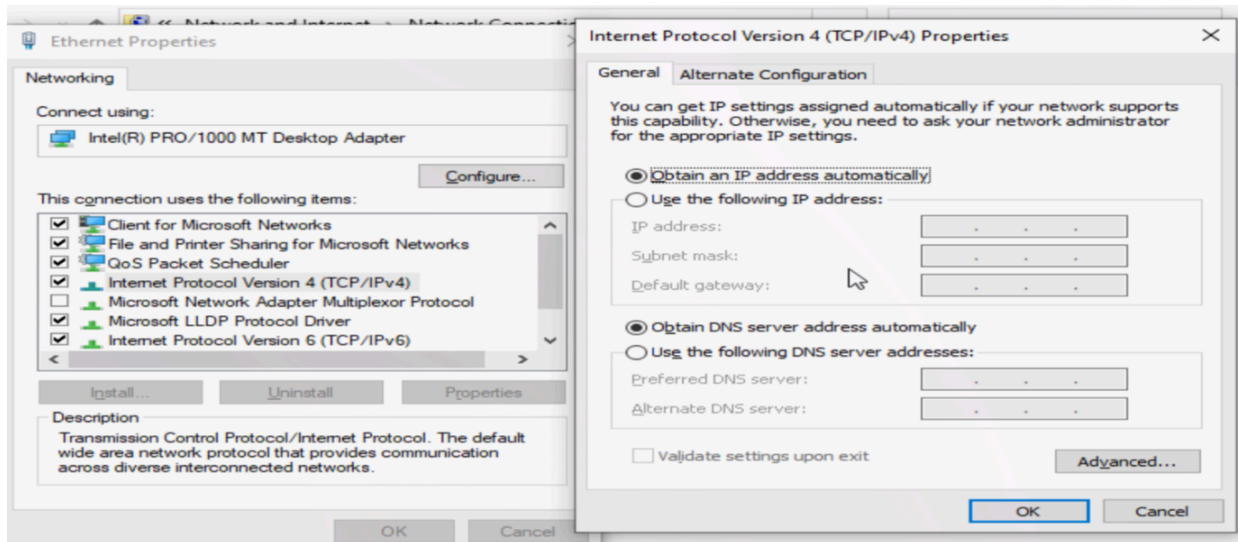
2. automatic & alternative
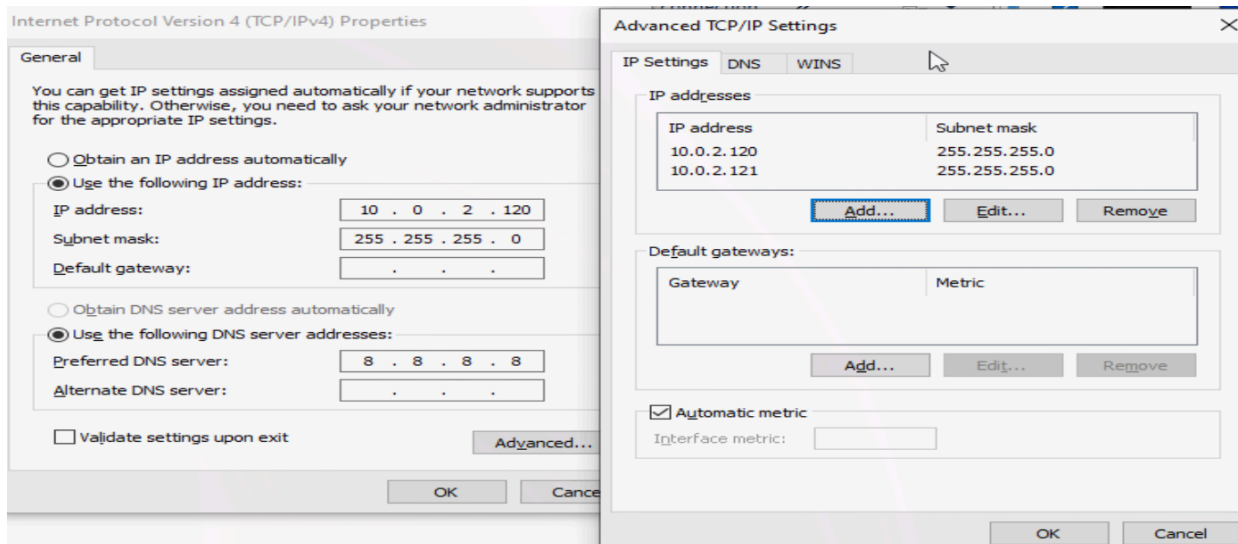
3. Real Ip address

3. Ping

1. ping default gateway

```
C:\Users\miles>ping 10.0.2.2

Pinging 10.0.2.2 with 32 bytes of data:
Reply from 10.0.2.2: bytes=32 time<1ms TTL=255
Reply from 10.0.2.2: bytes=32 time<1ms TTL=255
Reply from 10.0.2.2: bytes=32 time<1ms TTL=255
Reply from 10.0.2.2: bytes=32 time<1ms TTL=255

Ping statistics for 10.0.2.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```
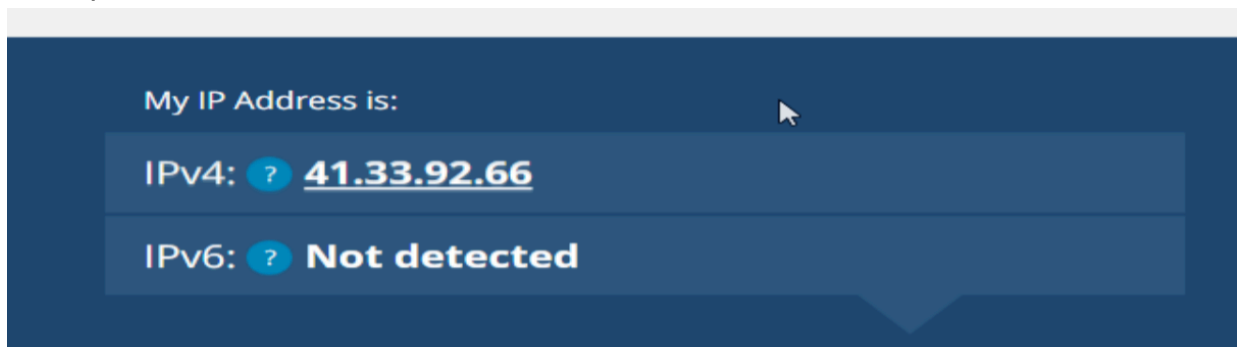
2. ping Google.com + size + number of packets

```
C:\Users\miles>ping google.com -l 1000 -n 7

Pinging google.com [142.250.201.14] with 1000 bytes of data:
Reply from 142.250.201.14: bytes=1000 time=42ms TTL=255
Reply from 142.250.201.14: bytes=1000 time=44ms TTL=255
Reply from 142.250.201.14: bytes=1000 time=44ms TTL=255
Reply from 142.250.201.14: bytes=1000 time=44ms TTL=255
Reply from 142.250.201.14: bytes=1000 time=44ms TTL=255
Reply from 142.250.201.14: bytes=1000 time=44ms TTL=255
Reply from 142.250.201.14: bytes=1000 time=42ms TTL=255

Ping statistics for 142.250.201.14:
    Packets: Sent = 7, Received = 7, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 42ms, Maximum = 44ms, Average = 43ms
```

4. getMac

```
C:\Users\miles>getmac

Physical Address      Transport Name
===================   ============================================================
08-00-27-FF-62-1D     \Device\Tcpip_{B71B2DC8-0A0D-4D7A-ACED-4A702623C732}

C:\Users\miles>_
```

5. Arp table

1. Arp -a

```
C:\Users\miles>arp -a

Interface: 10.0.2.15 --- 0xc
  Internet Address        Physical Address      Type
  10.0.2.2                52-55-0a-00-02-02     dynamic
  10.0.2.3                52-55-0a-00-02-03     dynamic
  10.0.2.255              ff-ff-ff-ff-ff-ff     static
  224.0.0.22              01-00-5e-00-00-16     static
  224.0.0.251             01-00-5e-00-00-fb     static
  224.0.0.252             01-00-5e-00-00-fc     static
  239.255.255.250         01-00-5e-7f-ff-fa     static
  255.255.255.255         ff-ff-ff-ff-ff-ff     static
```

2. Arp -d >> Arp -a

```
C:\Windows\system32>arp -d

C:\Windows\system32>arp -a

Interface: 10.0.2.15 --- 0xc
  Internet Address        Physical Address      Type
  10.0.2.2                52-55-0a-00-02-02     dynamic
  224.0.0.22              01-00-5e-00-00-16     static

C:\Windows\system32>
```

6. Opened Ports

1. netstat -n

```
C:\Windows\system32>netstat -n

Active Connections

  Proto  Local Address          Foreign Address        State
  TCP    10.0.2.15:49676        98.66.133.184:443      ESTABLISHED
  TCP    10.0.2.15:50268        13.107.213.43:443      CLOSE_WAIT
  TCP    10.0.2.15:50299        13.107.213.38:443      CLOSE_WAIT
  TCP    10.0.2.15:50300        150.171.27.11:443      CLOSE_WAIT
  TCP    10.0.2.15:50329        23.196.96.159:80       ESTABLISHED
  TCP    10.0.2.15:50338        184.25.102.83:443      CLOSE_WAIT
  TCP    10.0.2.15:50340        172.66.2.5:80          ESTABLISHED
  TCP    10.0.2.15:50341        204.79.197.203:80      CLOSE_WAIT
  TCP    10.0.2.15:50342        184.25.102.71:443      CLOSE_WAIT
  TCP    10.0.2.15:50343        184.25.102.71:443      CLOSE_WAIT
  TCP    10.0.2.15:50344        184.25.102.71:443      CLOSE_WAIT
  TCP    10.0.2.15:50345        184.25.102.71:443      CLOSE_WAIT
  TCP    10.0.2.15:50346        184.25.102.71:443      CLOSE_WAIT
  TCP    10.0.2.15:50347        23.48.32.71:443        CLOSE_WAIT
  TCP    10.0.2.15:50348        23.48.32.71:443        CLOSE_WAIT
  TCP    10.0.2.15:50349        23.53.1.152:443        CLOSE_WAIT
  TCP    10.0.2.15:50350        23.53.1.152:443        CLOSE_WAIT
  TCP    10.0.2.15:50351        23.48.32.71:443        CLOSE_WAIT
  TCP    10.0.2.15:50352        23.53.1.152:443        CLOSE_WAIT
  TCP    10.0.2.15:50353        23.53.1.163:443        CLOSE_WAIT
  TCP    10.0.2.15:50354        23.53.1.163:443        CLOSE_WAIT
  TCP    10.0.2.15:50355        23.53.1.163:443        CLOSE_WAIT
  TCP    10.0.2.15:50356        23.53.1.163:443        CLOSE_WAIT
  TCP    10.0.2.15:50357        23.53.1.163:443        CLOSE_WAIT
  TCP    10.0.2.15:50358        23.53.1.163:443        CLOSE_WAIT
  TCP    10.0.2.15:50502        23.53.1.134:443        CLOSE_WAIT
  TCP    10.0.2.15:50520        51.8.64.151:443        CLOSE_WAIT
```

2. netstat -a 10.0.2.15

```
C:\Windows\system32>netstat -n 10.0.2.15       97.203:80       CLOSE_WAIT
   TCP      10.0.2.15:50342      184.25.102.71:443       CLOSE_WAIT
Active Connections 50343         184.25.102.71:443       CLOSE_WAIT
   TCP      10.0.2.15:50344      184.25.102.71:443       CLOSE_WAIT
   Proto   Local Address 45      Foreign Address 43      State  WAIT
   TCP      10.0.2.15:49676      98.66.133.184:443       ESTABLISHED
   TCP      10.0.2.15:50268      13.107.213.43:443       CLOSE_WAIT
   TCP      10.0.2.15:50299      13.107.213.38:443       CLOSE_WAIT
   TCP      10.0.2.15:50300      150.171.27.11:443       CLOSE_WAIT
   TCP      10.0.2.15:50329      23.196.96.159:80        ESTABLISHED
   TCP      10.0.2.15:50338      184.25.102.83:443       CLOSE_WAIT
   TCP      10.0.2.15:50340      172.66.215:80 43        ESTABLISHED
   TCP      10.0.2.15:50341      204.79.197.203:80       CLOSE_WAIT
   TCP      10.0.2.15:50342      184.25.102.71:443       CLOSE_WAIT
   TCP      10.0.2.15:50343      184.25.102.71:443       CLOSE_WAIT
   TCP      10.0.2.15:50344      184.25.102.71:443       CLOSE_WAIT
   TCP      10.0.2.15:50345      184.25.102.71:443       CLOSE_WAIT
   TCP      10.0.2.15:50346      184.25.102.71:443       CLOSE_WAIT
   TCP      10.0.2.15:50347      23.48.32.71:443         CLOSE_WAIT
   TCP      10.0.2.15:50348      23.48.32.71:443         CLOSE_WAIT
   TCP      10.0.2.15:50349      23.53.1.152:443         CLOSE_WAIT
   TCP      10.0.2.15:50350      23.53.1.152:443         CLOSE_WAIT
   TCP      10.0.2.15:50351      23.48.32.71:443         CLOSE_WAIT
   TCP      10.0.2.15:50352      23.53.1.152:443 43      CLOSE WAIT
   TCP      10.0.2.15:50353      23.53.1.163:443         CLOSE_WAIT
   TCP      10.0.2.15:50354      23.53.1.163:443         CLOSE_WAIT
```

7. Domain Name System

```
C:\Windows\system32>nslookup google.com
Server:   UnKnown
Address:   10.0.2.3

Non-authoritative answer:
Name:      google.com
Addresses:   2a00:1450:4006:80e::200e
             142.251.39.174


C:\Windows\system32>nslookup 8.8.8.8
Server:   UnKnown
Address:   10.0.2.3

Name:      dns.google
Address:   8.8.8.8
```
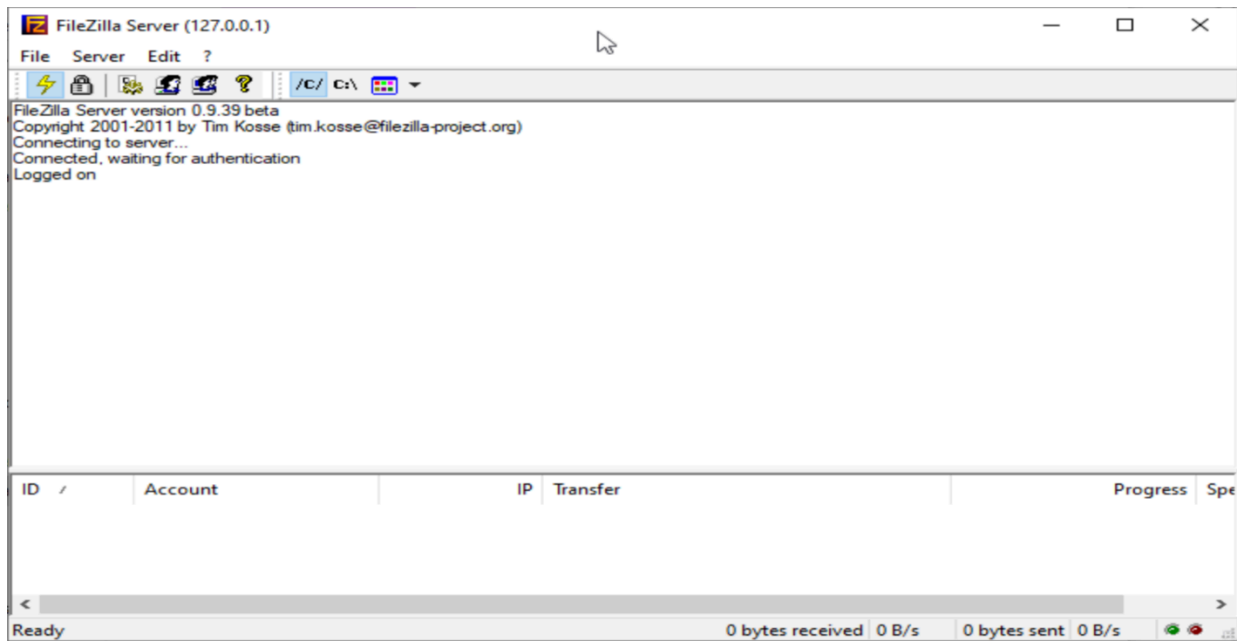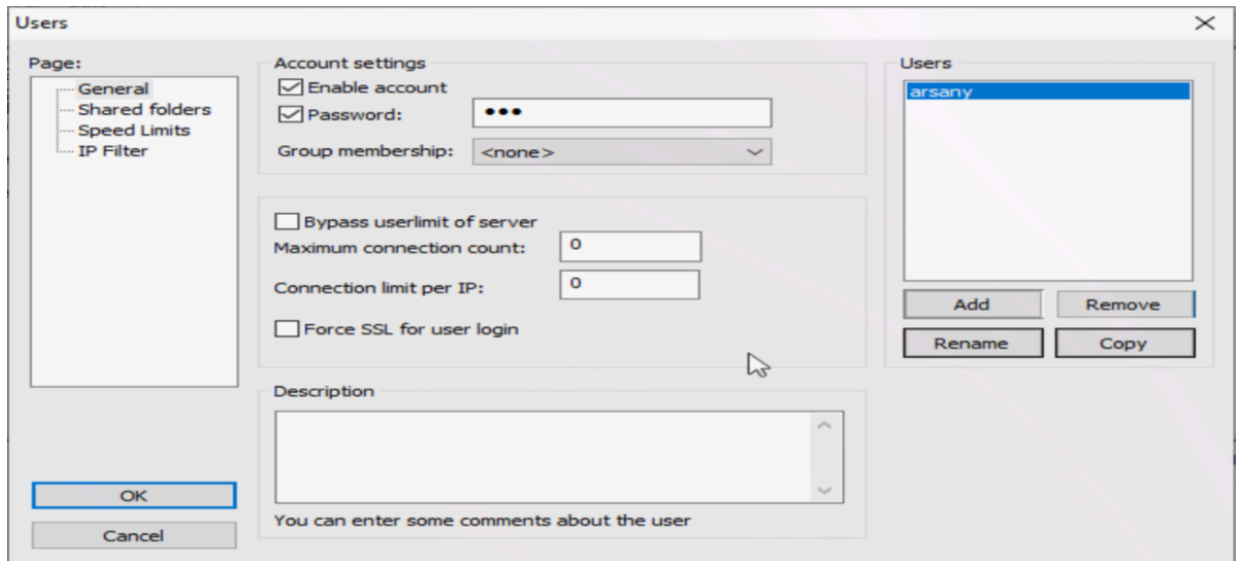
8. File Zilla Server

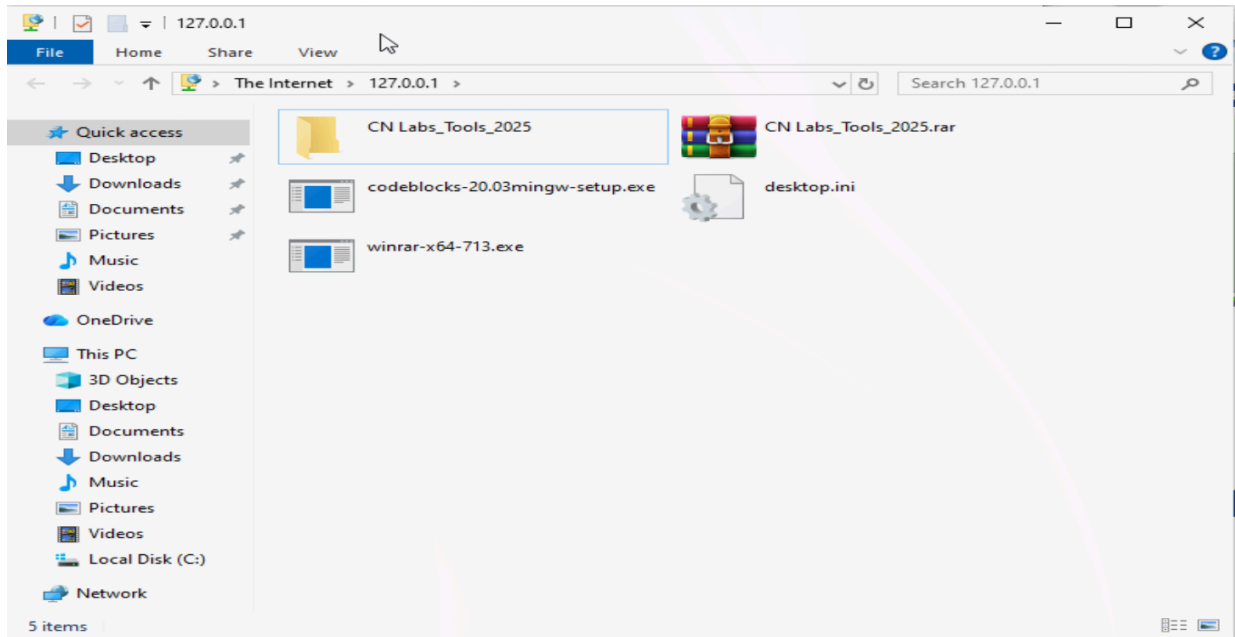1. Server

2. Add Users

9. File Zilla Client

1. File explorer client
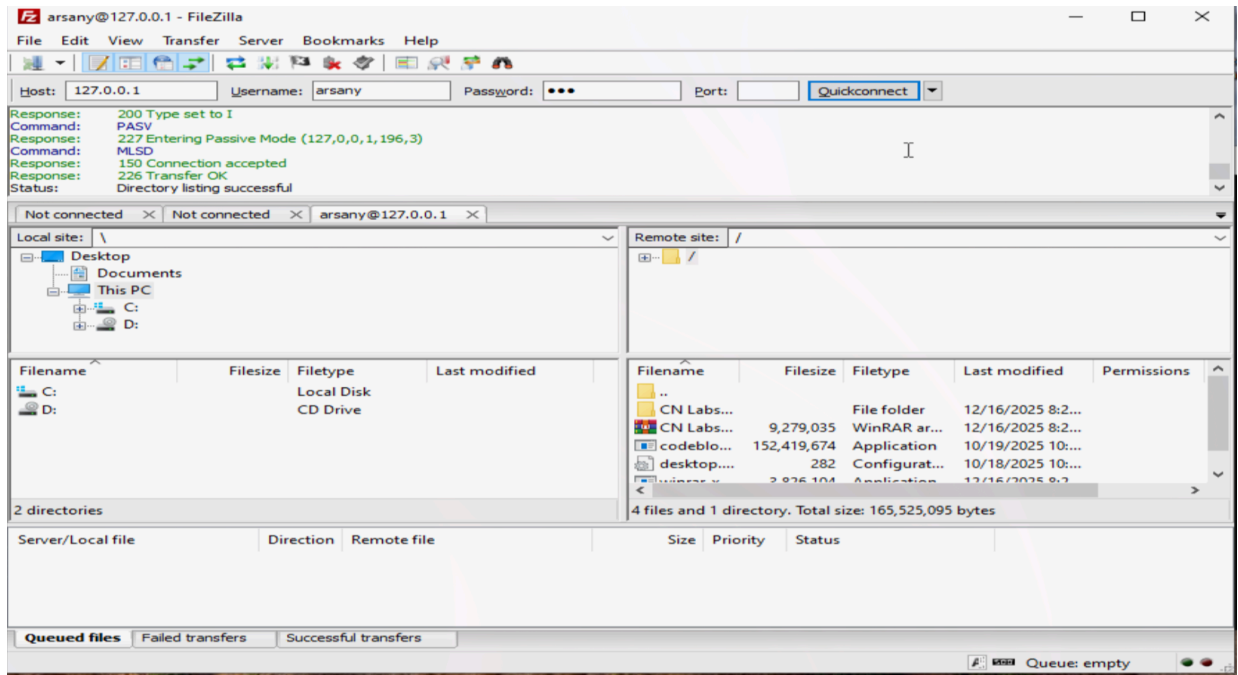

2. Ftp from cmd

3. Filezilla Client

10. Remote Desktop Connection

1. This test was with on my friend's machine : Omar