



SEM 2 2022/2023 (A221)

MTN 3023

Computer Networking

LAB REPORT NO: 1 /~~2~~/~~3~~/~~4~~

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MTN3023 Computer Networking

LAB SHEET 1:

BASIC WINDOWS NETWORKING COMMAND/UTILITY

Prepared by:

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Objectives:

1. Demonstrate the use of command prompt in Windows environment.
2. Introduce four (4) basic command/utility related to Computer Network in Windows environment.

General Instruction

Students will examine a couple of useful network related utilities that are run using the windows command prompt environment. Students are required to print screen all related output and include it in the lab report. Students need to answer Lab 1 exercise (Google form quiz) to complete the lab task.

List of Commands:

ipconfig, ping, netstat and tracert

Lab instructions:

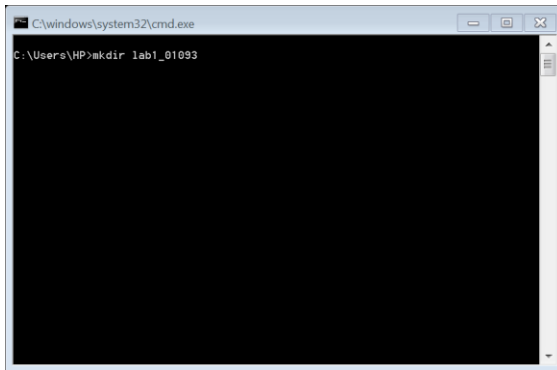
- ✓ Please ensure that your laptop/computer has a good and stable internet access

1. In windows OS, run the **cmd** command.

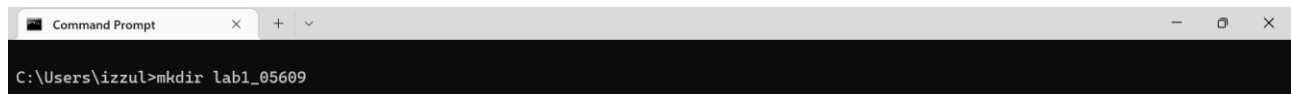
*refer: <https://www.ionos.com/digitalguide/server/known-how/windows-cmd-commands/>

2. In the command prompt environment, create new directory name **lab1_<your matric number - last five digits>**

Comamnd: ***mkdir Lab1_01093*** and press <enter>

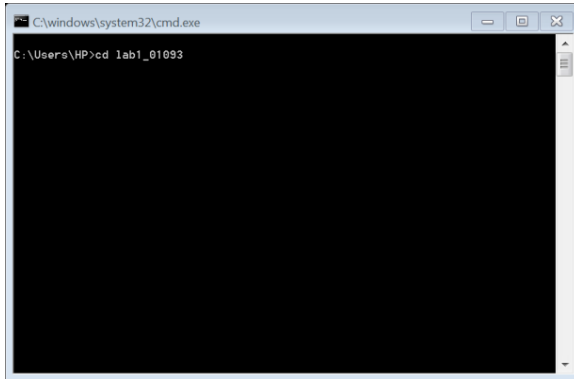


Answer:



3. Go to the created directory.

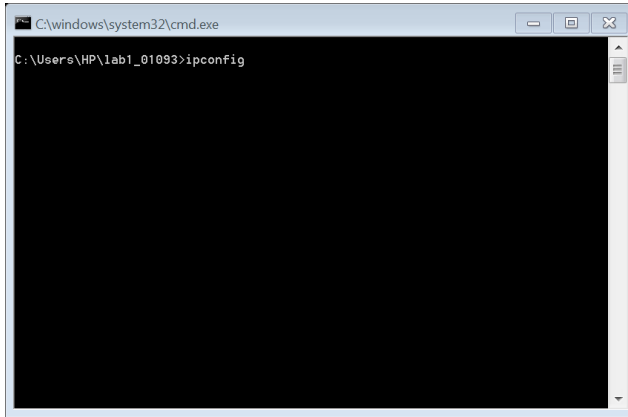
Command: *cd Lab1_01093* and press <enter>



Answer:

```
C:\Users\izzul>cd Lab1_05609
```

4. In the directory prompt execute the following steps:
 - i. Type **ipconfig /all** and press <enter> key
 - ii. screen shot the output and save
 - iii. Type **cls** and press <enter> key



Answer:

```
Command Prompt
C:\Users\izzul\lab1_05609>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet 2:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Unknown adapter Local Area Connection:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 1:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 2:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Wi-Fi:

    Connection-specific DNS Suffix  . : upsi.local
    Link-local IPv6 Address . . . . . : fe80::9d42:5c98:bec3:aece%5
    IPv4 Address. . . . . : 10.48.49.245
    Subnet Mask . . . . . : 255.255.248.0
    Default Gateway . . . . . : 10.48.48.254

C:\Users\izzul\lab1_05609>
```

5. In the directory prompt execute the following steps:
 - i. Type **ping www.upsi.edu.my** and press <enter> key
 - ii. screen shot the output and save
 - iii. Type **cls** and press <enter> key

Answer:

```
Command Prompt
C:\Users\izzul\lab1_05609>ping www.upsi.edu.my

Pinging www.upsi.edu.my [103.228.53.122] with 32 bytes of data:
Reply from 103.228.53.122: bytes=32 time=396ms TTL=54
Reply from 103.228.53.122: bytes=32 time=386ms TTL=54
Request timed out.
Reply from 103.228.53.122: bytes=32 time=350ms TTL=54

Ping statistics for 103.228.53.122:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 350ms, Maximum = 396ms, Average = 377ms

C:\Users\izzul\lab1_05609>
```

6. In the directory prompt execute the following steps:
 - i. Type **tracert www.upsi.edu.my** and press <enter> key
 - ii. screen shot the output and save
 - iii. Type **cls** and press <enter> key

Answer:

```
Command Prompt
C:\Users\izzul\lab1_05609>tracert www.upsi.edu.my

Tracing route to www.upsi.edu.my [103.228.53.122]
over a maximum of 30 hops:

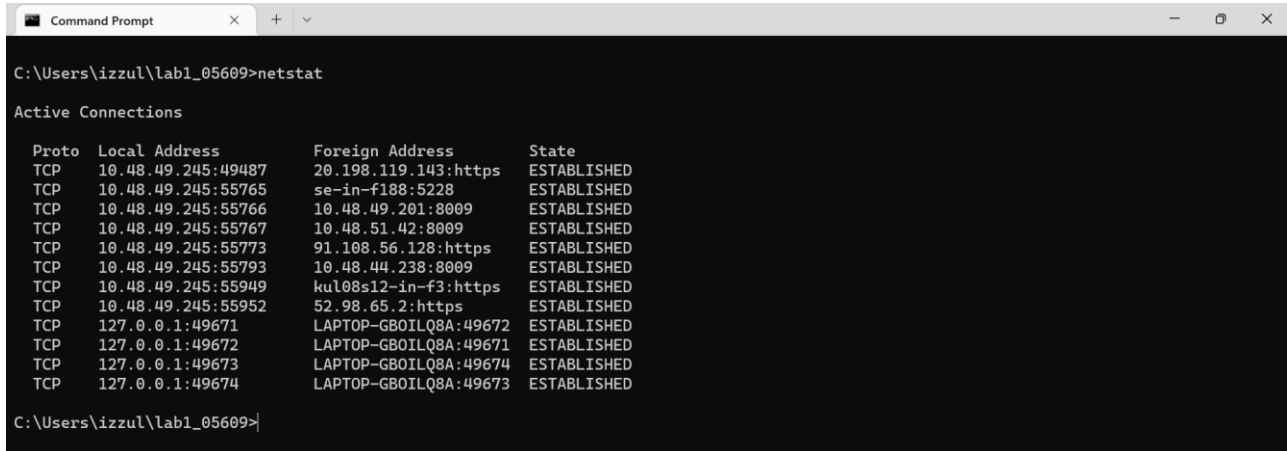
  1  7 ms  4 ms  2 ms  10.48.48.254
  2  3 ms  3 ms  3 ms  10.250.3.237
  3  4 ms  2 ms  6 ms  10.250.3.213
  4  5 ms  4 ms  7 ms  10.250.3.5
  5  2 ms  23 ms  3 ms  10.250.1.10
  6  3 ms  3 ms  4 ms  ghost5.upsi.edu.my [10.99.2.1]
  7  4 ms  2 ms  2 ms  fc-rtr.upsi.edu.my [202.45.133.1]
  8  15 ms  14 ms  15 ms  203.201.184.89
  9  24 ms  41 ms  34 ms  the-gigabit.myix.my [218.100.44.193]
 10  36 ms  81 ms  136 ms  103.228.52.170
 11 385 ms 383 ms 392 ms  muar.alirandigital.com [103.228.53.122]

Trace complete.

C:\Users\izzul\lab1_05609>
```

7. In the directory prompt execute the following steps:
- iv. Type *netstat* and press <enter> key
 - v. screen shot the output and save
 - vi. Type *cls* and press <enter> key

Answer:



```
C:\Users\izzul\lab1_05609>netstat

Active Connections

Proto Local Address           Foreign Address         State
TCP    10.48.49.245:49487       20.198.119.143:https    ESTABLISHED
TCP    10.48.49.245:55765       se-in-f188:5228        ESTABLISHED
TCP    10.48.49.245:55766       10.48.49.201:8009       ESTABLISHED
TCP    10.48.49.245:55767       10.48.51.42:8009        ESTABLISHED
TCP    10.48.49.245:55773       91.108.56.128:https     ESTABLISHED
TCP    10.48.49.245:55793       10.48.44.238:8009       ESTABLISHED
TCP    10.48.49.245:55949       kul08s12-in-f3:https    ESTABLISHED
TCP    10.48.49.245:55952       52.98.65.2:https        ESTABLISHED
TCP    127.0.0.1:49671          LAPTOP-GB0ILQ8A:49672   ESTABLISHED
TCP    127.0.0.1:49672          LAPTOP-GB0ILQ8A:49671   ESTABLISHED
TCP    127.0.0.1:49673          LAPTOP-GB0ILQ8A:49674   ESTABLISHED
TCP    127.0.0.1:49674          LAPTOP-GB0ILQ8A:49673   ESTABLISHED

C:\Users\izzul\lab1_05609>
```

8. Answer lab 1 exercise:
(<https://forms.gle/yQZ3JVKrF4aHfaDt5>)

9. Submit Lab Report via MyGuru.

End of Lab 1