

VIT-AP UNIVERSITY, ANDHRA PRADESH

Lab Sheet I : Basic Commands in Windows/Linux

Academic year: 2020-2021

Semester: Winter

Faculty Name: Dr. HUSSAIN SYED

Student name: Hariprasad K K

Branch/ Class: B.Tech/M.Tech

Date:

School: SCOPE

Reg. no.: 19BCE7079

Explore each command with its options. Paste your screenshot for each question.

Example

1. ipconfig
2. tracert www.vitap.ac.in
3. ping
4. tracert
5. arp
6. netstat
7. nbtstat
8. ipconfig
9. nslookup

(OR)

Linux:

1. ifconfig
2. ip
3. tracepath
4. traceroute
5. nslookup

VIT-AP UNIVERSITY, ANDHRA PRADESH

Lab Sheet I : Basic Commands in Windows/Linux

Academic year: 2020-2021

Semester: Winter

Faculty Name: Dr. HUSSAIN SYED

Student name: Hariprasad K K

Branch/ Class: B.Tech/M.Tech

Date:

School: SCOPE

Reg. no.: 19BCE7079

6.ping

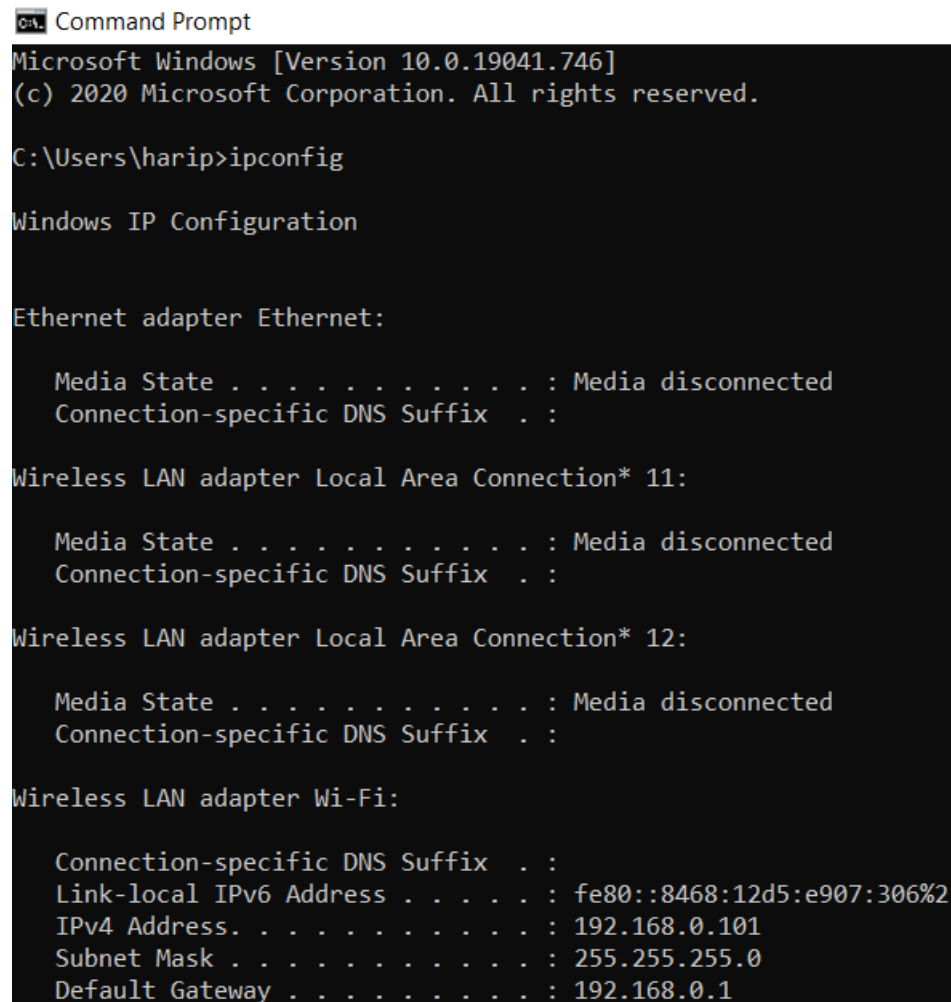
7.netstat

8.dig

9.route

ANSWERS AND SCREENSHOTS:

1.ipconfig



```
Command Prompt
Microsoft Windows [Version 10.0.19041.746]
(c) 2020 Microsoft Corporation. All rights reserved.

C:\Users\harip>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

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

Wireless LAN adapter Local Area Connection* 11:

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

Wireless LAN adapter Local Area Connection* 12:

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

Wireless LAN adapter Wi-Fi:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::8468:12d5:e907:306%2
    IPv4 Address. . . . . : 192.168.0.101
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.0.1
```

2.tracert www.vitap.ac.in

VIT-AP UNIVERSITY, ANDHRA PRADESH

Lab Sheet I : Basic Commands in Windows/Linux

Academic year: 2020-2021

Semester: Winter

Faculty Name: Dr. HUSSAIN SYED

Student name: Hariprasad K K

Branch/ Class: B.Tech/M.Tech

Date:

School: SCOPE

Reg. no.: 19BCE7079

```
C:\Users\harip>tracert www.vitap.ac.in
```

```
Tracing route to vitap.ac.in [67.222.140.114]  
over a maximum of 30 hops:
```

1	2 ms	1 ms	1 ms	192.168.0.1
2	3 ms	2 ms	3 ms	210.16.84.42
3	6 ms	5 ms	5 ms	210.16.85.41
4	7 ms	5 ms	5 ms	210.16.84.249
5	6 ms	6 ms	4 ms	182.74.149.37
6	233 ms	233 ms	229 ms	182.79.141.37
7	*	*	*	Request timed out.
8	*	*	*	Request timed out.
9	235 ms	232 ms	234 ms	182.79.224.124
10	152 ms	151 ms	156 ms	116.119.57.183
11	247 ms	247 ms	247 ms	182.79.245.6
12	309 ms	251 ms	252 ms	nyiix1.voxel.net [198.32.160.128]
13	247 ms	247 ms	248 ms	bbr2.ae7.nym007.pnap.net [64.95.158.74]
14	283 ms	284 ms	285 ms	bbr1.ae102.dal.pnap.net [64.95.158.173]
15	283 ms	283 ms	284 ms	bbr2.ae7.dal006.pnap.net [64.95.158.202]
16	283 ms	293 ms	286 ms	core2.be-5.inapvox-26.dal006.pnap.net [64.95.158.241]
17	261 ms	261 ms	260 ms	border5.ae1-bbnet1.dal006.pnap.net [216.52.191.44]
18	280 ms	281 ms	281 ms	dalin1-3.edge1.ext1.dal.pnap.net [64.95.182.142]
19	275 ms	272 ms	273 ms	170.75.240.26
20	274 ms	272 ms	282 ms	ailsh2.auroinfotech.com [67.222.140.114]

```
Trace complete.
```

3.ping

VIT-AP UNIVERSITY, ANDHRA PRADESH

Lab Sheet I : Basic Commands in Windows/Linux

Academic year: 2020-2021

Semester: Winter

Faculty Name: Dr. HUSSAIN SYED

Student name: Hariprasad K K

Branch/ Class: B.Tech/M.Tech

Date:

School: SCOPE

Reg. no.: 19BCE7079

```
C:\Users\harip>ping
```

```
Usage: ping [-t] [-a] [-n count] [-l size] [-f] [-i TTL] [-v TOS]
          [-r count] [-s count] [[-j host-list] | [-k host-list]]
          [-w timeout] [-R] [-S srcaddr] [-c compartment] [-p]
          [-4] [-6] target_name
```

Options:

-t	Ping the specified host until stopped. To see statistics and continue - type Control-Break; To stop - type Control-C.
-a	Resolve addresses to hostnames.
-n count	Number of echo requests to send.
-l size	Send buffer size.
-f	Set Don't Fragment flag in packet (IPv4-only).
-i TTL	Time To Live.
-v TOS	Type Of Service (IPv4-only. This setting has been deprecated and has no effect on the type of service field in the IP Header).
-r count	Record route for count hops (IPv4-only).
-s count	Timestamp for count hops (IPv4-only).
-j host-list	Loose source route along host-list (IPv4-only).
-k host-list	Strict source route along host-list (IPv4-only).
-w timeout	Timeout in milliseconds to wait for each reply.
-R	Use routing header to test reverse route also (IPv6-only). Per RFC 5095 the use of this routing header has been deprecated. Some systems may drop echo requests if this header is used.
-S srcaddr	Source address to use.
-c compartment	Routing compartment identifier.
-p	Ping a Hyper-V Network Virtualization provider address.
-4	Force using IPv4.
-6	Force using IPv6.

4.tracert

5. arp

VIT-AP UNIVERSITY, ANDHRA PRADESH

Lab Sheet I : Basic Commands in Windows/Linux

Academic year: 2020-2021

Semester: Winter

Faculty Name: Dr. HUSSAIN SYED

Student name: Hariprasad K K

Branch/ Class: B.Tech/M.Tech

Date:

School: SCOPE

Reg. no.: 19BCE7079

```
C:\Users\harip>arp
```

Displays and modifies the IP-to-Physical address translation tables used by address resolution protocol (ARP).

```
ARP -s inet_addr eth_addr [if_addr]
```

```
ARP -d inet_addr [if_addr]
```

```
ARP -a [inet_addr] [-N if_addr] [-v]
```

-a Displays current ARP entries by interrogating the current protocol data. If inet_addr is specified, the IP and Physical addresses for only the specified computer are displayed. If more than one network interface uses ARP, entries for each ARP table are displayed.

-g Same as -a.

-v Displays current ARP entries in verbose mode. All invalid entries and entries on the loop-back interface will be shown.

inet_addr Specifies an internet address.

-N if_addr Displays the ARP entries for the network interface specified by if_addr.

-d Deletes the host specified by inet_addr. inet_addr may be wildcarded with * to delete all hosts.

-s Adds the host and associates the Internet address inet_addr with the Physical address eth_addr. The Physical address is given as 6 hexadecimal bytes separated by hyphens. The entry is permanent.

eth_addr Specifies a physical address.

if_addr If present, this specifies the Internet address of the interface whose address translation table should be modified. If not present, the first applicable interface will be used.

Example:

```
> arp -s 157.55.85.212 00-aa-00-62-c6-09 .... Adds a static entry.
```

```
> arp -a .... Displays the arp table.
```

6.netstat

VIT-AP UNIVERSITY, ANDHRA PRADESH

Lab Sheet I : Basic Commands in Windows/Linux

Academic year: 2020-2021

Semester: Winter

Faculty Name: Dr. HUSSAIN SYED

Student name: Hariprasad K K

Branch/ Class: B.Tech/M.Tech

Date:

School: SCOPE

Reg. no.: 19BCE7079

```
C:\Users\harip>netstat
```

Active Connections

Proto	Local Address	Foreign Address	State
TCP	127.0.0.1:9012	DESKTOP-E3GK42K:54244	ESTABLISHED
TCP	127.0.0.1:54244	DESKTOP-E3GK42K:9012	ESTABLISHED
TCP	192.168.0.101:61429	52.114.40.53:https	ESTABLISHED
TCP	192.168.0.101:61437	hosted:http	ESTABLISHED
TCP	192.168.0.101:61477	40.119.211.203:https	ESTABLISHED
TCP	192.168.0.101:61546	40.119.211.203:https	ESTABLISHED
TCP	192.168.0.101:61637	74.125.24.188:5228	ESTABLISHED
TCP	192.168.0.101:61638	74.125.24.188:5228	ESTABLISHED
TCP	192.168.0.101:61639	52.114.14.223:https	ESTABLISHED
TCP	192.168.0.101:61640	149.154.171.236:https	ESTABLISHED
TCP	192.168.0.101:61681	52.111.244.0:https	ESTABLISHED
TCP	192.168.0.101:61683	52.114.15.54:https	ESTABLISHED
TCP	192.168.0.101:62061	149.154.171.236:https	ESTABLISHED
TCP	192.168.0.101:62121	117.18.232.200:https	ESTABLISHED
TCP	192.168.0.101:62130	a104-115-93-162:http	TIME_WAIT
TCP	192.168.0.101:62136	192.168.31.45:ms-do	SYN_SENT
TCP	192.168.0.101:62137	192.168.0.102:ms-do	SYN_SENT
TCP	192.168.0.101:62138	maa05s06-in-f14:https	ESTABLISHED
TCP	192.168.0.101:62139	52.143.84.45:https	ESTABLISHED
TCP	192.168.0.101:62140	maa05s06-in-f14:https	ESTABLISHED
TCP	192.168.0.101:62141	52.114.6.175:https	ESTABLISHED
TCP	[::1]:1521	DESKTOP-E3GK42K:55650	ESTABLISHED
TCP	[::1]:55650	DESKTOP-E3GK42K:1521	ESTABLISHED

9.nslookup

VIT-AP UNIVERSITY, ANDHRA PRADESH

Lab Sheet I : Basic Commands in Windows/Linux

Academic year: 2020-2021

Semester: Winter

Faculty Name: Dr. HUSSAIN SYED

Student name: Hariprasad K K

Branch/ Class: B.Tech/M.Tech

Date:

School: SCOPE

Reg. no.: 19BCE7079

```
C:\Users\harip>nslookup
Default Server:  UnKnown
Address:  192.168.0.1

> www.google.com
Server:  UnKnown
Address:  192.168.0.1

Non-authoritative answer:
Name:     www.google.com
Addresses: 2404:6800:4007:804::2004
          142.250.67.68

> www.flipkart.com
Server:  UnKnown
Address:  192.168.0.1

Non-authoritative answer:
Name:     flipkart.com
Address:  163.53.76.86
Aliases:  www.flipkart.com

> www.microsoft.com
Server:  UnKnown
Address:  192.168.0.1

Non-authoritative answer:
Name:     e13678.dscb.akamaiedge.net
Addresses: 2600:140f:3:899::356e
          2600:140f:3:8a3::356e
          2600:140f:3:8ac::356e
          2600:140f:3:8a2::356e
          2600:140f:3:89a::356e
          23.210.77.221
Aliases:  www.microsoft.com
          www.microsoft.com-c-3.edgekey.net
          www.microsoft.com-c-3.edgekey.net.globalredir.akadns.net
```

VIT-AP UNIVERSITY, ANDHRA PRADESH

Lab Sheet I : Basic Commands in Windows/Linux

Academic year: 2020-2021

Semester: Winter

Faculty Name: Dr. HUSSAIN SYED

Student name: Hariprasad K K

Branch/ Class: B.Tech/M.Tech

Date:

School: SCOPE

Reg. no.: 19BCE7079

```
> www.swiggy.com
Server: UnKnown
Address: 192.168.0.1

Non-authoritative answer:
Name: d24ihjgp0p8rdb.cloudfront.net
Addresses: 2600:9000:2075:e000:2:daa1:63c0:93a1
           2600:9000:2075:e400:2:daa1:63c0:93a1
           2600:9000:2075:f800:2:daa1:63c0:93a1
           2600:9000:2075:8c00:2:daa1:63c0:93a1
           2600:9000:2075:be00:2:daa1:63c0:93a1
           2600:9000:2075:3a00:2:daa1:63c0:93a1
           2600:9000:2075:4200:2:daa1:63c0:93a1
           2600:9000:2075:b000:2:daa1:63c0:93a1
           13.33.171.59
           13.33.171.127
           13.33.171.92
           13.33.171.25
Aliases: www.swiggy.com

> exit
```

3.tracert

```
C:\Users\harip>tracert

Usage: tracert [-d] [-h maximum_hops] [-j host-list] [-w timeout]
              [-R] [-S srcaddr] [-4] [-6] target_name

Options:
    -d                Do not resolve addresses to hostnames.
    -h maximum_hops  Maximum number of hops to search for target.
    -j host-list      Loose source route along host-list (IPv4-only).
    -w timeout        Wait timeout milliseconds for each reply.
    -R                Trace round-trip path (IPv6-only).
    -S srcaddr        Source address to use (IPv6-only).
    -4                Force using IPv4.
    -6                Force using IPv6.
```

THANK YOU..!