Name: ایدا Last name:زمانیان

HW#: 4

1. route Command (windows)
2. What is the route configuration for broadcast IP of local subnet?

route print

Network Destination Netmask Gateway Interface Metric

10.0.2.255 255.255.255.255 On-link 10.0.2.15 281

1. Add a route to 192.168.100.0/26, use local interface and gateway 192.168.200.1

route add 192.168.100.0 mask 255.255.255.192 192.168.200.1 IF 1

OK!

1. Remove the added route

route delete 192.168.100.0

OK!

1. route Command (linux)
2. What is the route configuration for default route of local subnet?

route -n

Destination Gateway Genmask Flags Metric Ref Use Iface

0.0.0.0 172.16.136.1 0.0.0.0 UG 600 0 0 wlp3s0

1. Add a route to 192.168.200.0/24, use gateway 172.16.131.214

route add –net 192.168.200.0 network mask 255.255.255.0 gw 172.16.131.214

–net: Unknown host

1. Remove the added route

route del –net 192.168.200.0 255.255.255.0 172.16.131.214

–net: Unknown host

1. traceroute Command(windows)
   1. Traceroute default gateway :tracert 10.0.2.2

Tracing route to 10.0.2.2 over a maximum of 30 hops

1 <1 ms <1 ms <1 ms 10.0.2.2

Trace complete.

* 1. Traceroute [www.yahoo.com](http://www.yahoo.com/) with 3 hop and 5ms intervals without resolving hostname.

tracert -d -h 3 -w 5 yahoo.com

Tracing route to yahoo.com [98.137.11.164]

over a maximum of 3 hops:

1 <1 ms <1 ms <1 ms 10.0.2.2

2 7 ms 3 ms 19 ms 172.16.132.1

3 4 ms 3 ms 2 ms 192.168.102.2

Trace complete.

1. traceroute Command(linux)
   1. Traceroute default gateway

sudo traceroute -d 172.16.132.1

traceroute to 172.16.132.1 (172.16.132.1), 30 hops max, 60 byte packets

1 172.16.132.1 (172.16.132.1) 4.992 ms 4.901 ms 4.223 ms

* 1. Traceroute [www.google.com](http://www.google.com/) with 5 hop and 8ms intervals without resolving hostname.

sudo traceroute -n -m 3 -w 5 google.com

traceroute to google.com (216.239.38.120), 3 hops max, 60 byte packets

1 172.16.132.1 3.788 ms 5.448 ms 6.318 ms

2 192.168.102.2 8.925 ms 10.894 ms 13.258 ms

3 192.168.69.17 16.339 ms \* \*