Name: Muhammad Shehryaar Khan

Class: BS(CYS)IIIA

Roll#: 200959

Subject: Lab Computer Networks

Assignment 2

Part 1: NETSTAT

Question 1: Using netstat command display the following:

- **All "Executables" involved in creating the connections.**

- **The Fully Qualified Domain names**


```
Administrator: Command Prompt

Microsoft Windows [Version 10.0.16299.1087]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Windows\system32>cd../../

C:\>netstat -f

Active Connections

  Proto  Local Address          Foreign Address        State
  TCP    192.168.1.25:62910     20.197.71.89:https     ESTABLISHED
  TCP    192.168.1.25:64037     a-0001.a-msedge.net:https  ESTABLISHED
  TCP    192.168.1.25:64039     204.79.197.222:https   ESTABLISHED
  TCP    192.168.1.25:64041     bingforbusiness.com:https  ESTABLISHED
  TCP    192.168.1.25:64064     20.140.48.71:https     ESTABLISHED
  TCP    192.168.1.25:64078     13.107.3.254:https     ESTABLISHED
  TCP    192.168.1.25:64080     152.199.19.161:https   ESTABLISHED
  TCP    192.168.1.25:64084     13.107.18.254:https    ESTABLISHED
  TCP    192.168.1.25:64085     13.107.6.254:https     ESTABLISHED
  TCP    192.168.1.25:64091     152.199.19.161:https   ESTABLISHED
  TCP    192.168.1.25:64107     52.109.12.22:https     ESTABLISHED
  TCP    192.168.1.25:64117     52.109.8.19:https      ESTABLISHED
  TCP    192.168.1.25:64123     13.107.136.254:https   ESTABLISHED
  TCP    192.168.1.25:64125     13.107.136.254:https   ESTABLISHED
```

- **Connections specifically for TCP Protocol**


```
Administrator: Command Prompt
C:\>netstat -t

Active Connections

  Proto  Local Address          Foreign Address        State          Offload State

  TCP    127.0.0.1:64226        DESKTOP-QSOB00K:27300  SYN_SENT       InHost
  TCP    192.168.1.25:62910     20.197.71.89:https     ESTABLISHED    InHost
  TCP    192.168.1.25:64037     a-0001:https           TIME_WAIT      InHost
  TCP    192.168.1.25:64107     52.109.12.22:https     TIME_WAIT      InHost
  TCP    192.168.1.25:64117     52.109.8.19:https      TIME_WAIT      InHost
  TCP    192.168.1.25:64123     13.107.136.254:https   ESTABLISHED    InHost
  TCP    192.168.1.25:64125     13.107.136.254:https   ESTABLISHED    InHost
  TCP    192.168.1.25:64185     13.107.3.254:https     ESTABLISHED    InHost
  TCP    192.168.1.25:64186     a-0001:https           ESTABLISHED    InHost
  TCP    192.168.1.25:64187     bingforbusiness:https  ESTABLISHED    InHost
  TCP    192.168.1.25:64188     204.79.197.222:https   ESTABLISHED    InHost
  TCP    192.168.1.25:64194     13.107.6.254:https     ESTABLISHED    InHost
  TCP    192.168.1.25:64196     152.199.19.161:https   ESTABLISHED    InHost
```

- **Connections specifically for UDP Protocol**

```
Administrator: Command Prompt
C:\>netstat -u

Displays protocol statistics and current TCP/IP network connections.

NETSTAT [-a] [-b] [-e] [-f] [-n] [-o] [-p proto] [-r] [-s] [-x] [-t] [interval]

  -a            Displays all connections and listening ports.
  -b            Displays the executable involved in creating each connection or
                listening port. In some cases well-known executables host
                multiple independent components, and in these cases the
                sequence of components involved in creating the connection
                or listening port is displayed. In this case the executable
                name is in [] at the bottom, on top is the component it called,
                and so forth until TCP/IP was reached. Note that this option
                can be time-consuming and will fail unless you have sufficient
                permissions.
  -e            Displays Ethernet statistics. This may be combined with the -s
                option.
  -f            Displays Fully Qualified Domain Names (FQDN) for foreign
                addresses.
  -n            Displays addresses and port numbers in numerical form.
  -o            Displays the owning process ID associated with each connection.
  -p proto      Shows connections for the protocol specified by proto; proto
                may be any of: TCP, UDP, TCPv6, or UDPv6.  If used with the -s
                option to display per-protocol statistics, proto may be any of:
                IP, IPv6, ICMP, ICMPv6, TCP, TCPv6, UDP, or UDPv6.
  -q            Displays all connections, listening ports, and bound
                nonlistening TCP ports. Bound nonlistening ports may or may not
                be associated with an active connection.
  -r            Displays the routing table.
  -s            Displays per-protocol statistics.  By default, statistics are
                shown for IP, IPv6, ICMP, ICMPv6, TCP, TCPv6, UDP, and UDPv6;
                the -p option may be used to specify a subset of the default.
  -t            Displays the current connection offload state.
  -x            Displays NetworkDirect connections, listeners, and shared
                endpoints.
  -y            Displays the TCP connection template for all connections.
                Cannot be combined with the other options.
  interval      Redisplays selected statistics, pausing interval seconds
                between each display.  Press CTRL+C to stop redisplaying
                statistics.  If omitted, netstat will print the current
                configuration information once.
```

- **The routing table**


```
Administrator: Command Prompt

C:\>netstat -r
===========================================================================
Interface List
  4...50 b7 c3 95 93 61 ......Realtek PCIe GBE Family Controller
 12...12 b7 c3 f5 d4 55 ......Microsoft Wi-Fi Direct Virtual Adapter
  2...22 b7 c3 f5 d4 55 ......Microsoft Wi-Fi Direct Virtual Adapter #2
 10...50 b7 c3 f5 d4 55 ......Qualcomm Atheros AR9485WB-EG Wireless Network Adapter
  1...........................Software Loopback Interface 1
 13...00 00 00 00 00 00 00 e0 Microsoft Teredo Tunneling Adapter
===========================================================================

IPv4 Route Table
===========================================================================
Active Routes:
Network Destination        Netmask          Gateway       Interface  Metric
          0.0.0.0          0.0.0.0      192.168.1.1    192.168.1.25     50
        127.0.0.0        255.0.0.0         On-link         127.0.0.1    331
        127.0.0.1  255.255.255.255         On-link         127.0.0.1    331
  127.255.255.255  255.255.255.255         On-link         127.0.0.1    331
      192.168.1.0    255.255.255.0         On-link      192.168.1.25    306
     192.168.1.25  255.255.255.255         On-link      192.168.1.25    306
    192.168.1.255  255.255.255.255         On-link      192.168.1.25    306
        224.0.0.0        240.0.0.0         On-link         127.0.0.1    331
        224.0.0.0        240.0.0.0         On-link      192.168.1.25    306
  255.255.255.255  255.255.255.255         On-link         127.0.0.1    331
  255.255.255.255  255.255.255.255         On-link      192.168.1.25    306
===========================================================================
Persistent Routes:
  None

IPv6 Route Table
===========================================================================
Active Routes:
 If Metric Network Destination      Gateway
  1    331 ::1/128                  On-link
 10    306 fe80::/64                On-link
 10    306 fe80::9ca6:3055:b266:4225/128
                                    On-link
  1    331 ff00::/8                 On-link
 10    306 ff00::/8                 On-link
===========================================================================
```

Part 2: NET USER

Question 2: Using NET USER command perform the following:

- **Create a NEW USER.**

a) **Name format: name{Reg}**
b) **Example: adnan201764**


```
Administrator: Command Prompt

C:\>net user

User accounts for \\DESKTOP-QSOB00K

-------------------------------------------------------------------------------
Administrator              ali                        DefaultAccount
Guest                      Maryem201025               samsung
WDAGUtilityAccount
The command completed successfully.


C:\>net user Shehryaar200959 457 /add
The command completed successfully.


C:\>net user

User accounts for \\DESKTOP-QSOB00K

-------------------------------------------------------------------------------
Administrator              ali                        DefaultAccount
Guest                      Maryem201025               samsung
Shehryaar200959            WDAGUtilityAccount
The command completed successfully.
```

- **Assign the time of 10AM to 3PM for Monday to Wednesday.**
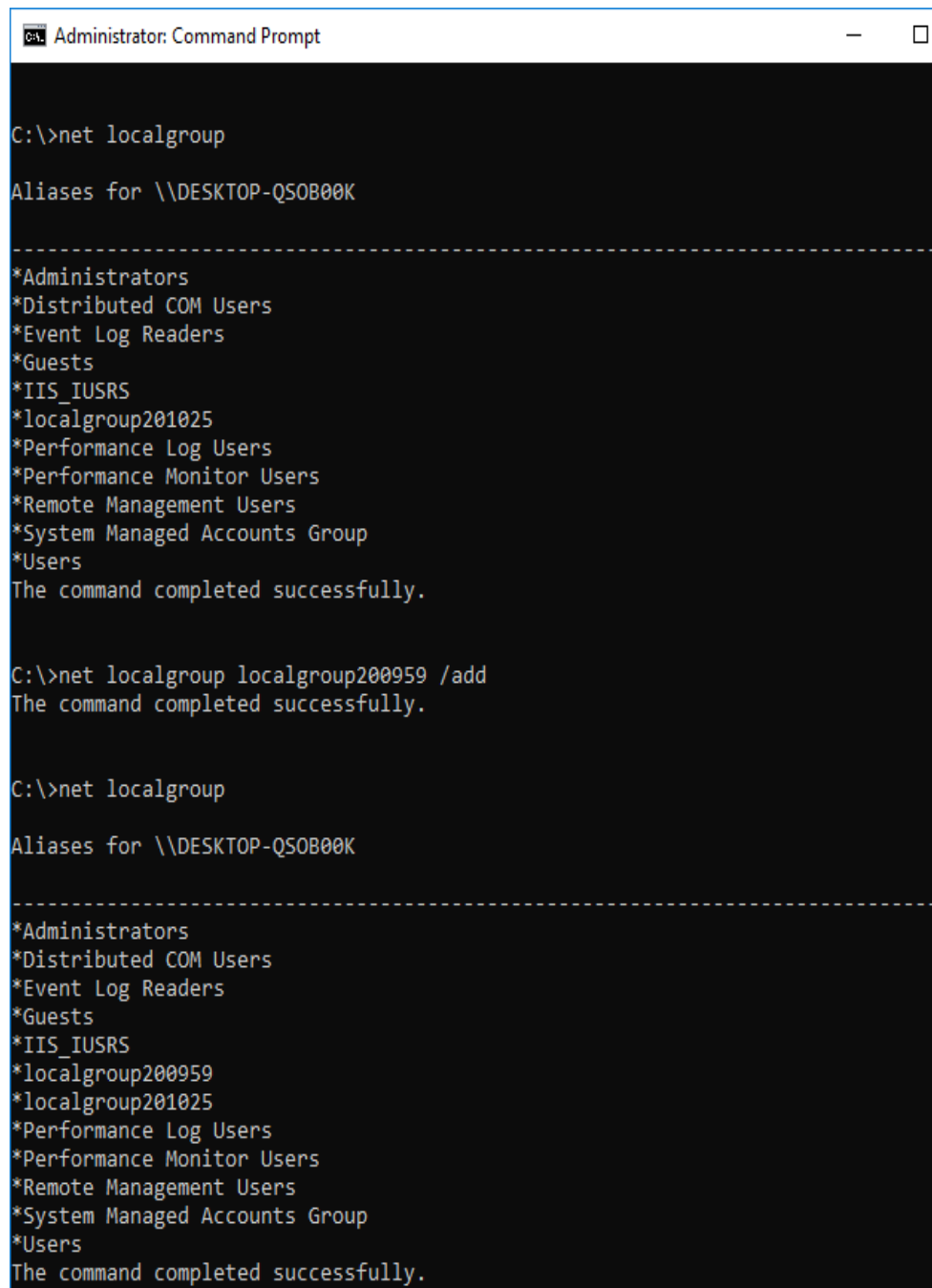


```
Administrator: Command Prompt

C:\>net user

User accounts for \\DESKTOP-QSOB00K

-------------------------------------------------------------------------------
Administrator              ali                        DefaultAccount
Guest                      Maryem201025               samsung
Shehryaar200959            WDAGUtilityAccount
The command completed successfully.


C:\>net user Shehryaar200959 /time:M-W,10AM-3PM
The command completed successfully.
```

- **Create New localgroup:**

  a) **Name format: localgroup{Reg}**
  b) **Example: localgroup201764**

```
Administrator: Command Prompt                              —    □

C:\>net localgroup

Aliases for \\DESKTOP-QSOB00K

-------------------------------------------------------------------
*Administrators
*Distributed COM Users
*Event Log Readers
*Guests
*IIS_IUSRS
*localgroup201025
*Performance Log Users
*Performance Monitor Users
*Remote Management Users
*System Managed Accounts Group
*Users
The command completed successfully.


C:\>net localgroup localgroup200959 /add
The command completed successfully.


C:\>net localgroup

Aliases for \\DESKTOP-QSOB00K

-------------------------------------------------------------------
*Administrators
*Distributed COM Users
*Event Log Readers
*Guests
*IIS_IUSRS
*localgroup200959
*localgroup201025
*Performance Log Users
*Performance Monitor Users
*Remote Management Users
*System Managed Accounts Group
*Users
The command completed successfully.
```

- **Add User to the newly created localgroup**

```
The command completed successfully.


C:\>net localgroup localgroup200959 Shehryaar200959 /add
The command completed successfully.
```

- **Display/View the information about the User**

```
C:\>net user Shehryaar200959
User name                    Shehryaar200959
Full Name
Comment
User's comment
Country/region code          000 (System Default)
Account active               Yes
Account expires              Never

Password last set            10/31/2021 6:19:46 AM
Password expires             12/12/2021 6:19:46 AM
Password changeable          10/31/2021 6:19:46 AM
Password required            Yes
User may change password     Yes

Workstations allowed         All
Logon script
User profile
Home directory
Last logon                   Never

Logon hours allowed          Monday 10:00:00 AM - 3:00:00 PM
                             Tuesday 10:00:00 AM - 3:00:00 PM
                             Wednesday 10:00:00 AM - 3:00:00 PM

Local Group Memberships      *localgroup200959      *Users
Global Group memberships     *None
The command completed successfully.
```

Part 3: NET SHARE

Question 3: Using NET USER command perform the following:

- **Create a directory:**

  a) **Name format: name{Reg}**
  b) **Example: name201764**

```
C:\>mkdir Shehryaar200959

C:\>cd Shehryaar200959

C:\Shehryaar200959>
```

- **Create a NEW SHARE for this directory.**

  a) **Name format: sharename{Reg}**

  b) **Example: sharename201764**

```
C:\Shehryaar200959>net share shareShehryaar200959=C:\Shehryaar200959 /grant:everyone,FULL
shareShehryaar200959 was shared successfully.
```

```
C:\Shehryaar200959>net share shareShehryaar200959
Share name           shareShehryaar200959
Path                 C:\Shehryaar200959
Remark
Maximum users        No limit
Users
Caching              Manual caching of documents
Permission           Everyone, FULL

The command completed successfully.
```