Part 01:

Steps taken to create an AWS Account (Since I already have an AWS Account setup previously, I will just mention the steps which are required to be taken to create an AWS Account)

1. Specify a username and email address.
2. Define the purpose you will be using the AWS account for (i.e. Personal or Business).
3. Configure the Type of Support you will need (in our case it is the basic AWS Support).
4. Provide Payment Card Confirmation.
5. Verify your contact information with an OTP send on the provided number.
6. Account Creation Successful.
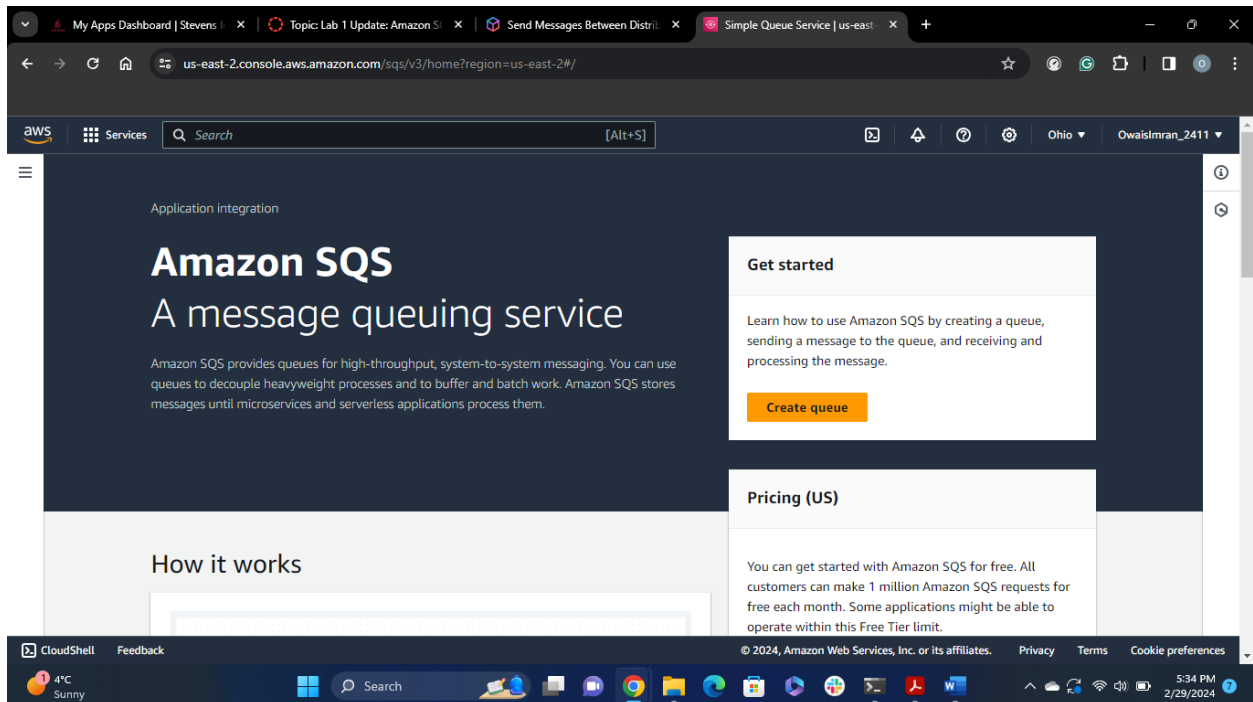
AWS SQS Queue Creation:

Figure 1: Enter the AWS SQS Queue Service from AWS Management Console and Click on Create Queue
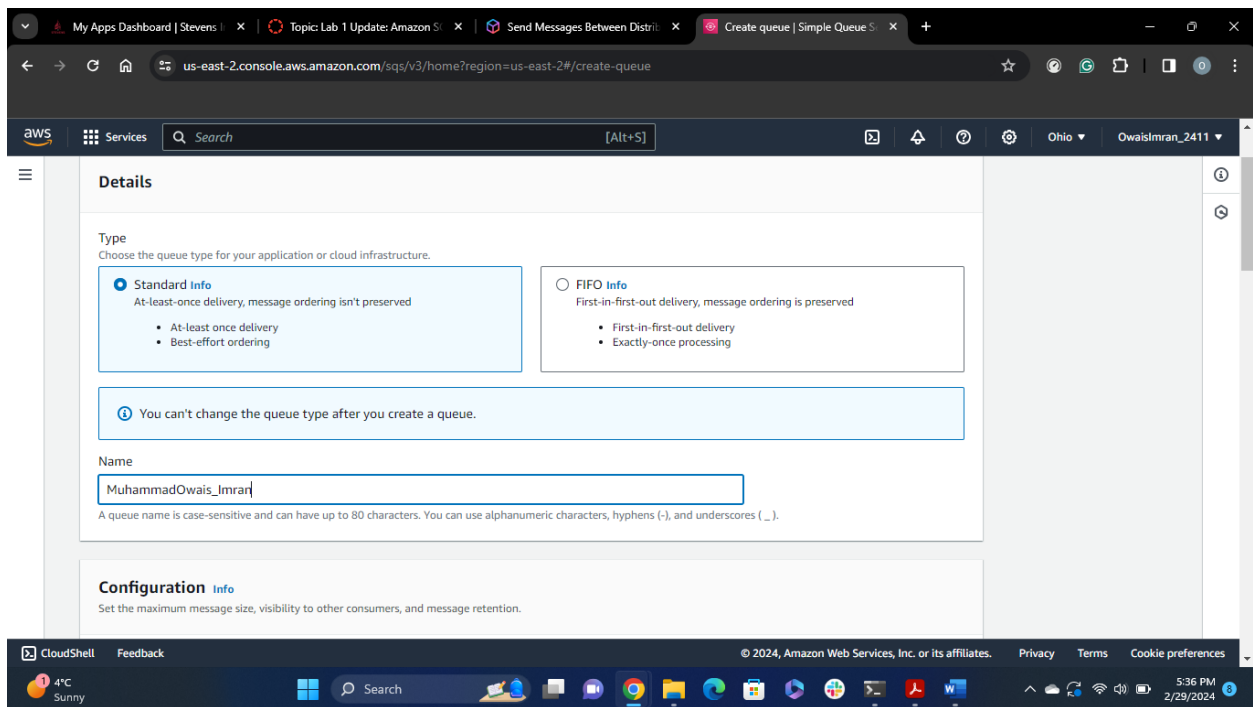
Figure 2: Set the name of Queue as MuhammadOwais_Imran and leave the rest of configuration as Default and Click on "Create Queue" Button
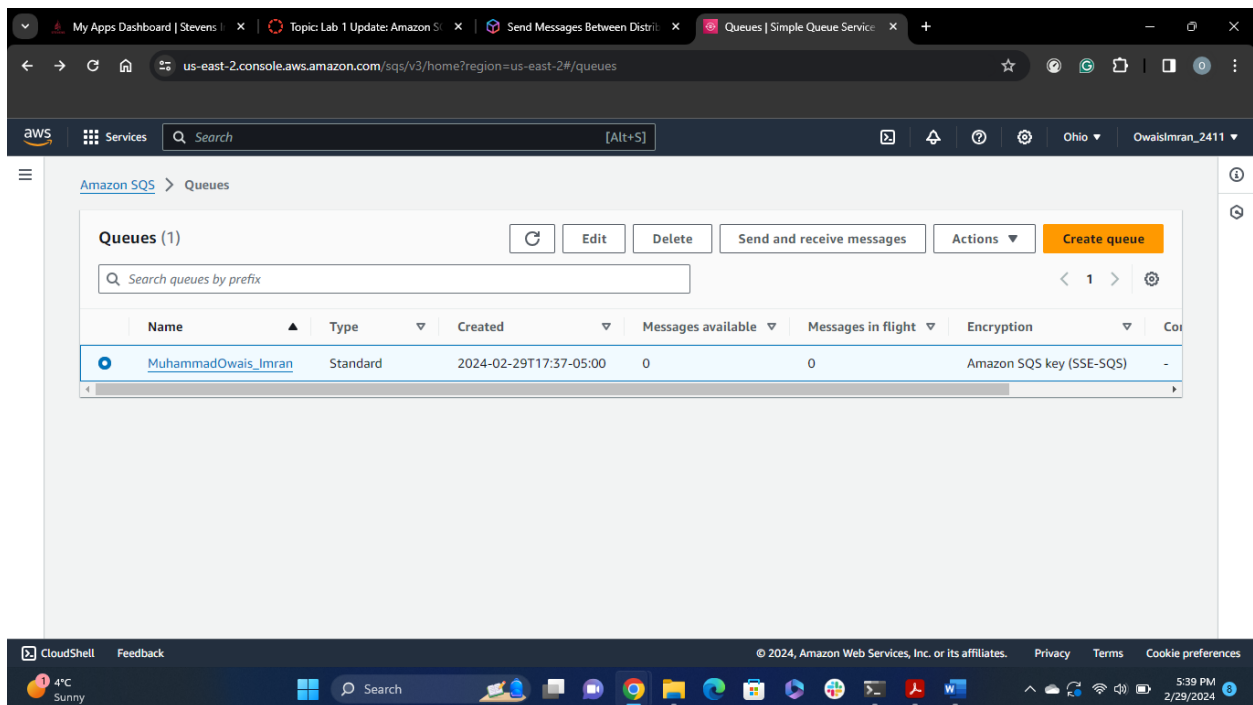

Figure 3: From available queue list, select your queue and Click on "Send and Receive Messages"
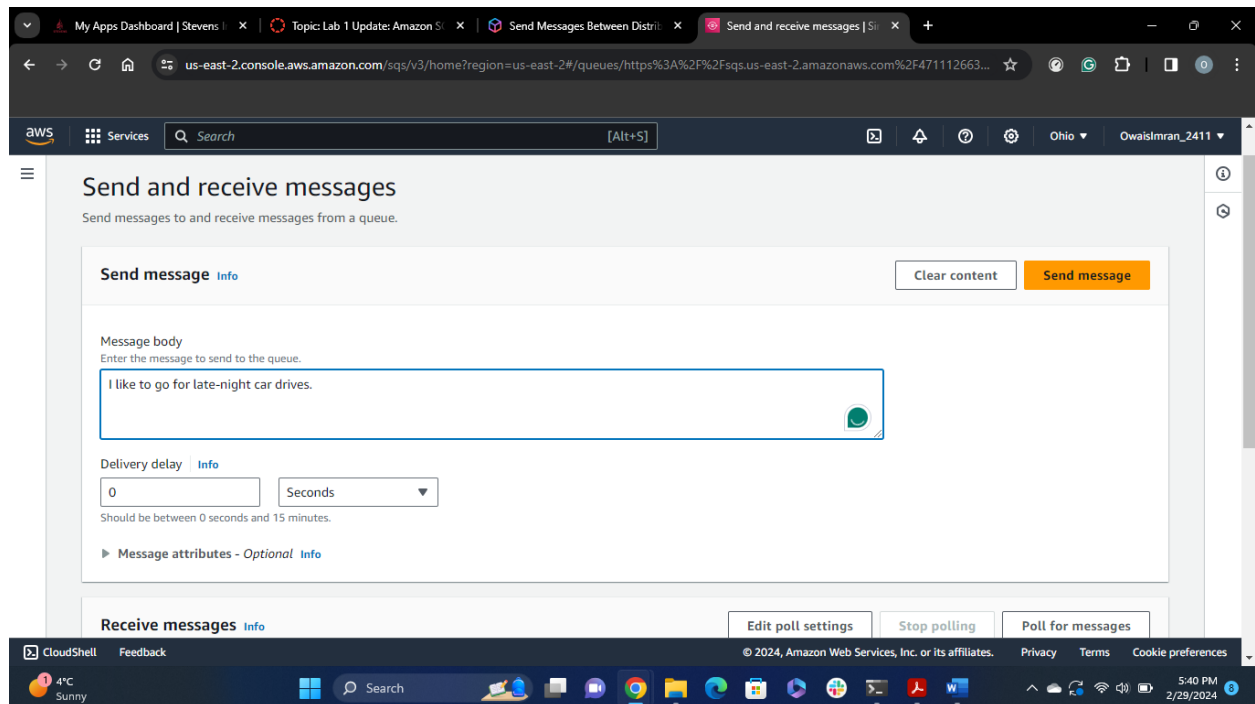
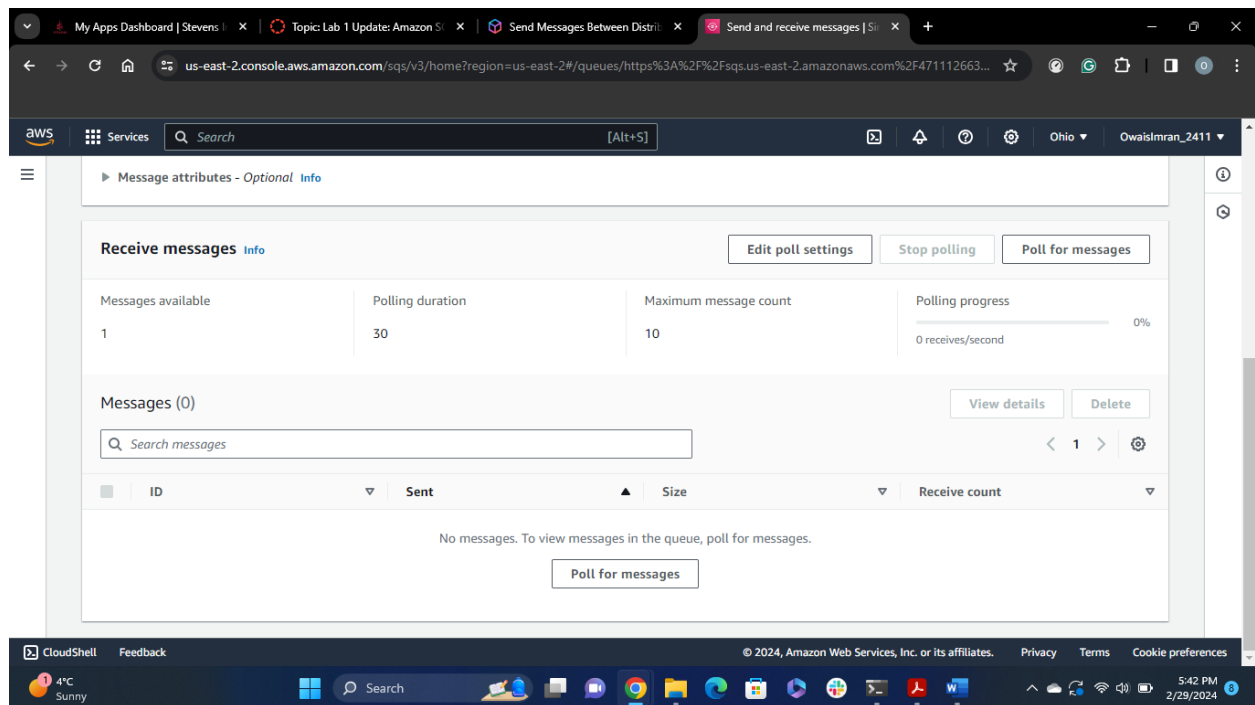Figure 4: Fill in the Message Body field and click on "Send Message" button

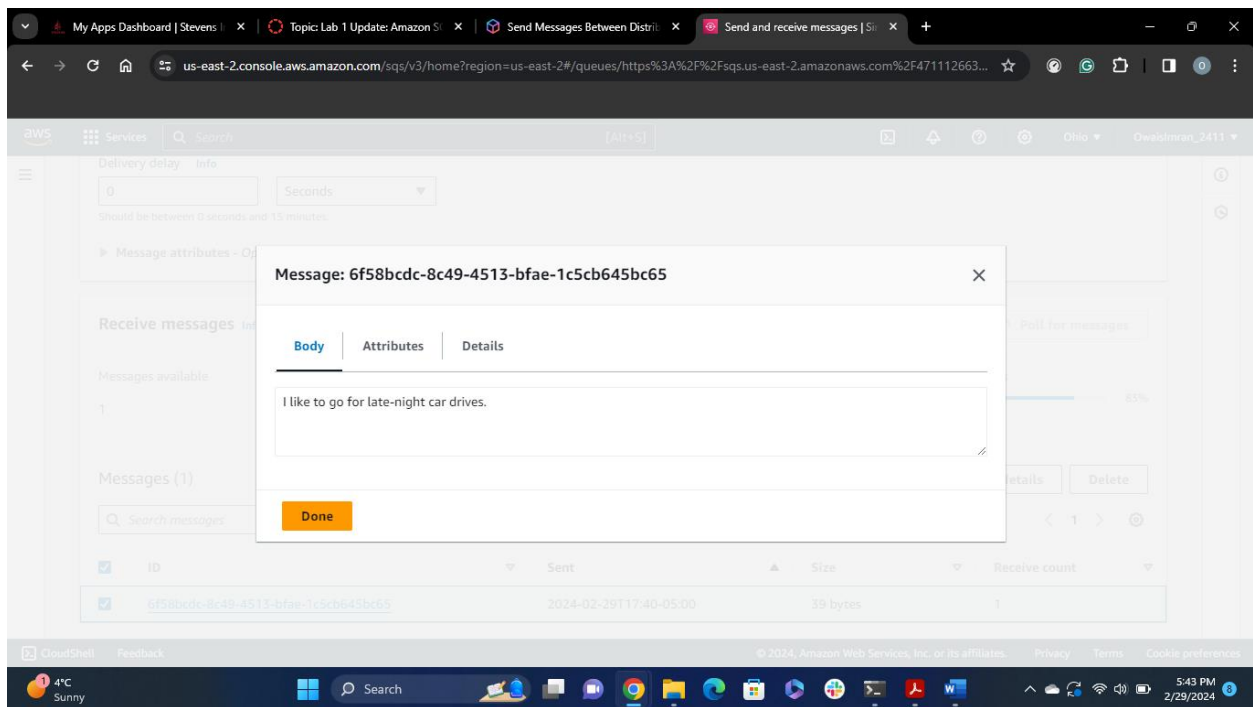Figure 5: To receive the message sent, Click on "Poll for Messages" button.
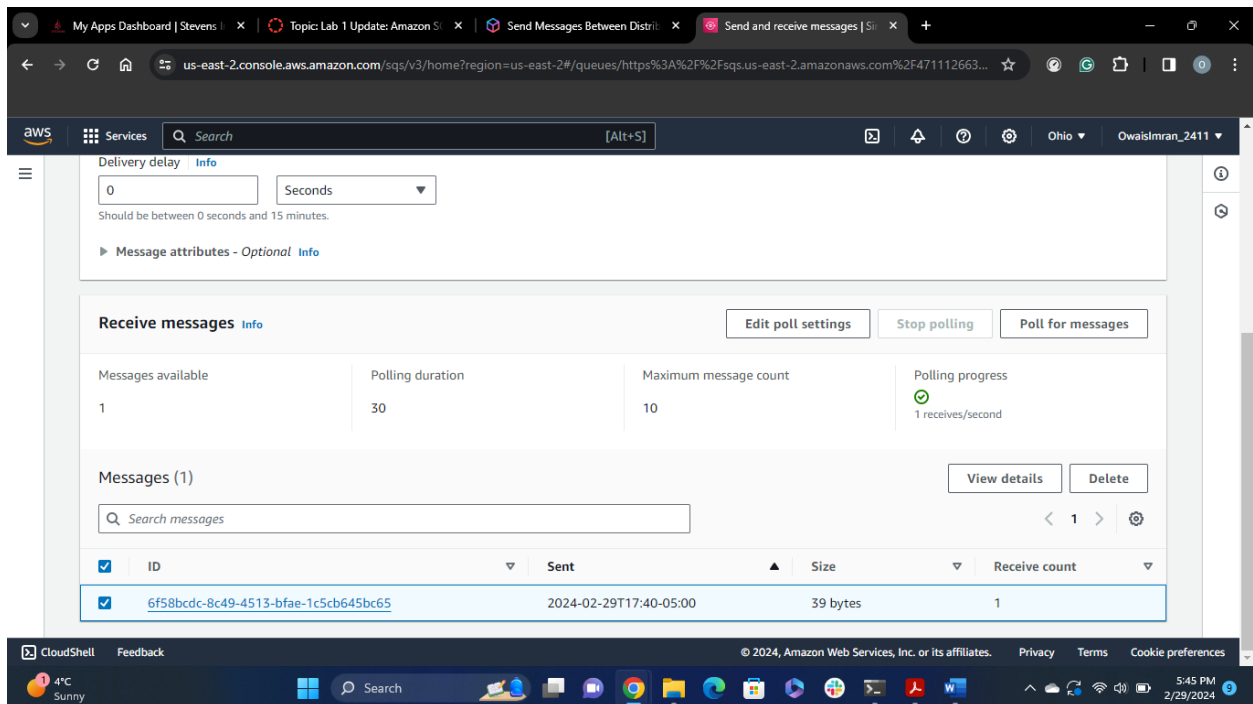
Figure 6: Message Received

Figure 7: Select the Message and Click on Delete button to delete the message from the Queue.

Part 02:

After launching an EC2 instance with the following config:

- Instance type: t2.micro
- Volume: 8GB gp2
- RSA Based Keypair
- Default Security Group
- Amazon AMI

The following commands were executed on the ec2 instance:

1. ```uname -a``` - the command shows the entire system information, which includes the instance type and architecture, OS, Timestamp of system launch, public ipv4 address, and other kernel and system information;
   Output:
   ```
   Linux ip-172-31-16-47.us-east-2.compute.internal 6.1.77-99.164.amzn2023.x86_64 #1 SMP PREEMPT DYNAMIC Tue Feb 13 19:20:28 UTC 2024 x86_64 x86_64 x86_64 GNU/Linux
   ```

2. ```whoami``` - the command shows the associated user profile with the system.
   Output:
   ```
   ec2-user
   ```

3. ```df -h``` - the command shows the file system disk usage information, -h flag is used to present the information in human readable format.
   Output:
   ```
   Filesystem      Size  Used Avail Use% Mounted on
   devtmpfs        4.0M     0  4.0M   0% /dev
   tmpfs           475M     0  475M   0% /dev/shm
   tmpfs           190M  2.9M  188M   2% /run
   /dev/xvda1      8.0G  1.6G  6.5G  19% /
   tmpfs           475M     0  475M   0% /tmp
   /dev/xvda128     10M  1.3M  8.7M  13% /boot/efi
   tmpfs            95M     0   95M   0% /run/user/1000
   ```

4. ```ifconfig -a```- the command is used to configure/display all available network interfaces on the system, with all information like loop back address, ipv4 network address, ipv6 network address, and all necessary network level information.

Output:

```
enX0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 9001
        inet 172.31.16.47  netmask 255.255.240.0  broadcast 172.31.31.255
        inet6 fe80::47e:93ff:fe07:8f3b  prefixlen 64  scopeid 0x20<link>
        ether 06:7e:93:07:8f:3b  txqueuelen 1000  (Ethernet)
        RX packets 18879  bytes 26494397 (25.2 MiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 1875  bytes 178624 (174.4 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
        inet6 ::1  prefixlen 128  scopeid 0x10<host>
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 12  bytes 1020 (1020.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 12  bytes 1020 (1020.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

5. ```netstat``` - the command shows all the network connection, route tables, interface statistics, masquerade connections, and multicast addresses.

    Output (it is truncated)

```
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address          Foreign Address         State
tcp        0    252 ip-172-31-16-47.us-:ssh c-73-29-51-70.hsd:64308 ESTABLISHED
tcp        0      0 ip-172-31-16-47.u:33018 instance-data.us-e:http TIME_WAIT
Active UNIX domain sockets (w/o servers)
Proto RefCnt Flags       Type       State         I-Node   Path
unix  3      [ ]         DGRAM      CONNECTED     14159
unix  3      [ ]         STREAM     CONNECTED     18522
unix  3      [ ]         STREAM     CONNECTED     18428
unix  3      [ ]         STREAM     CONNECTED     16241    /run/dbus/system_bus_socket
unix  3      [ ]         STREAM     CONNECTED     16170    /var/lib/sss/pipes/private/sbus-monitor
unix  3      [ ]         STREAM     CONNECTED     16002
unix  2      [ ]         DGRAM                    18591    /run/user/1000/systemd/notify
unix  3      [ ]         STREAM     CONNECTED     15866    /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED     16020
unix  3      [ ]         STREAM     CONNECTED     15986
unix  3      [ ]         STREAM     CONNECTED     14093
unix  3      [ ]         STREAM     CONNECTED     16030    /run/dbus/system_bus_socket
unix  3      [ ]         STREAM     CONNECTED     14272
unix  2      [ ]         DGRAM      CONNECTED     14417
unix  3      [ ]         DGRAM      CONNECTED     12367    /run/systemd/notify
unix  3      [ ]         STREAM     CONNECTED     16076
unix  3      [ ]         STREAM     CONNECTED     19593    /var/lib/sss/pipes/nss
unix  3      [ ]         DGRAM      CONNECTED     16063
unix  7      [ ]         DGRAM      CONNECTED     12383    /run/systemd/journal/dev-log
unix  2      [ ]         DGRAM      CONNECTED     18559
unix  14     [ ]         DGRAM      CONNECTED     12385    /run/systemd/journal/socket
unix  3      [ ]         STREAM     CONNECTED     15842
unix  3      [ ]         STREAM     CONNECTED     15977    /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED     16153    /var/lib/sss/pipes/private/sbus-monitor
unix  2      [ ]         DGRAM                    15985    /run/systemd/home/notify
unix  2      [ ]         DGRAM      CONNECTED     15984
unix  2      [ ]         STREAM     CONNECTED     18547
```