

**Name :-** Laxmi Swami

**Task :-** Create an ec2 instance connect it using git-bash download docker and fetch various commands.

Fetch the command

- yum install docker
- systemctl start docker
- systemctl enable docker
- systemctl status docker
- docker -v = version check
- docker pull tome
- docker run - -name mytomee -d -p 6767:8080 imageid
- docker images
- docker container ps -a

```
root@ip-172-31-31-51:~
ls419@LAXMI MINGW64 ~
$ cd Downloads/
ls419@LAXMI MINGW64 ~/Downloads
$ ssh -i "my-key.pem" ec2-user@ec2-3-89-139-209.compute-1.amazonaws.com
The authenticity of host 'ec2-3-89-139-209.compute-1.amazonaws.com (3.89.139.209)' can't be established.
ED25519 key fingerprint is SHA256:CAWLD+IBQhUQAneSOY110bpbhFL40uV5hXDGtgQzRVA.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-3-89-139-209.compute-1.amazonaws.com' (ED25519) to the list of known hosts.

#####
#               Amazon Linux 2023
#               https://aws.amazon.com/linux/amazon-linux-2023
#####

[ec2-user@ip-172-31-31-51 ~]$ ls
[ec2-user@ip-172-31-31-51 ~]$
[ec2-user@ip-172-31-31-51 ~]$ sudo su -
[root@ip-172-31-31-51 ~]# ls
[root@ip-172-31-31-51 ~]# yum install docker -y
Amazon Linux 2023 kernel Livepatch repository                               171 kB/s | 18 kB   00:00
Dependencies resolved.
=====
Package                                Architecture      Version                                Repository        Size
-----
Installing:
docker                                x86_64            25.0.8-1.amzn2023.0.5                 amazonlinux        46 M
Installing dependencies:
container-selinux                     noarch            3:2.233.0-1.amzn2023                  amazonlinux        55 k
containerd                            x86_64            2.0.5-1.amzn2023.0.2                 amazonlinux        26 M
iptables-libs                         x86_64            1.8.8-3.amzn2023.0.2                 amazonlinux        401 k
iptables-nft                          x86_64            1.8.8-3.amzn2023.0.2                 amazonlinux        183 k
libcgroup                             x86_64            3.0-1.amzn2023.0.1                   amazonlinux        75 k
libnetfilter_conntrack                x86_64            1.0.8-2.amzn2023.0.2                 amazonlinux        58 k
libnetfilterlink                     x86_64            1.0.1-19.amzn2023.0.2                amazonlinux        30 k
libnftnl                             x86_64            1.2.2-2.amzn2023.0.2                 amazonlinux        84 k
pigz                                  x86_64            2.5-1.amzn2023.0.3                   amazonlinux        83 k
runc                                   x86_64            1.2.6-1.amzn2023.0.1                 amazonlinux        3.7 M
```

```
root@ip-172-31-31-51:~#
[root@ip-172-31-31-51 ~]#
[root@ip-172-31-31-51 ~]#
[root@ip-172-31-31-51 ~]#
[root@ip-172-31-31-51 ~]#
[root@ip-172-31-31-51 ~]#
[root@ip-172-31-31-51 ~]#
[root@ip-172-31-31-51 ~]# docker -v
Docker version 25.0.8, build 0bab007
[root@ip-172-31-31-51 ~]# docker images
Cannot connect to the Docker daemon at unix:///var/run/docker.sock. Is the docker daemon running?
[root@ip-172-31-31-51 ~]# docker container

Usage: docker container COMMAND

Manage containers

Commands:
  attach      Attach local standard input, output, and error streams to a running container
  commit      Create a new image from a container's changes
  cp          Copy files/folders between a container and the local filesystem
  create      Create a new container
  diff        Inspect changes to files or directories on a container's filesystem
  exec        Execute a command in a running container
  export      Export a container's filesystem as a tar archive
  inspect     Display detailed information on one or more containers
  kill        Kill one or more running containers
  logs        Fetch the logs of a container
  ls          List containers
  pause       Pause all processes within one or more containers
  port        List port mappings or a specific mapping for the container
  prune       Remove all stopped containers
  rename      Rename a container
  restart     Restart one or more containers
  rm          Remove one or more containers
  run         Create and run a new container from an image
  start       Start one or more stopped containers
  stats       Display a live stream of container(s) resource usage statistics
  stop        Stop one or more running containers
  top         Display the running processes of a container
  unpause     Unpause all processes within one or more containers
  update      Update configuration of one or more containers
  wait        Block until one or more containers stop, then print their exit codes
```

```
root@ip-172-31-31-51:~#
update      Update configuration of one or more containers
wait        Block until one or more containers stop, then print their exit codes

Run 'docker container COMMAND --help' for more information on a command.
[root@ip-172-31-31-51 ~]#
[root@ip-172-31-31-51 ~]# docker container ls -a
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
[root@ip-172-31-31-51 ~]# docker container ps
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
[root@ip-172-31-31-51 ~]# docker ls
docker: 'ls' is not a docker command.
See 'docker --help'
[root@ip-172-31-31-51 ~]# docker image ls
REPOSITORY    TAG       IMAGE ID   CREATED   SIZE
[root@ip-172-31-31-51 ~]# docker pull toomee
Using default tag: latest
latest: Pulling from library/tomee
32f112e3802c: Pull complete
5f7b2271b86b: Pull complete
138f724688fd: Pull complete
10103f9c9741: Pull complete
cd9c703bfa7f: Pull complete
ea7dd6b53138: Pull complete
4f4fb700ef54: Pull complete
b39261f4114a: Pull complete
f973abb35ede: Pull complete
731c4a6ad768: Pull complete
Digest: sha256:1bc1658cb582571368b985e4c983cd024d0a3bc8d2cad2a4c6d0fe1235855570
Status: Downloaded newer image for toomee:latest
docker.io/library/tomee:latest
[root@ip-172-31-31-51 ~]# docker container ps
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
[root@ip-172-31-31-51 ~]# docker container ps -a
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
[root@ip-172-31-31-51 ~]# docker run toomee
23-Jul-2025 05:16:59.974 INFO [main] java.lang.reflect.Method.invoke Server version name: Apache Tomcat (TomEE)/10.1.42 (10.1.0)
23-Jul-2025 05:16:59.975 INFO [main] java.lang.reflect.Method.invoke Server built: Jun 5 2025 22:35:46 UTC
23-Jul-2025 05:16:59.975 INFO [main] java.lang.reflect.Method.invoke Server version number: 10.1.42.0
23-Jul-2025 05:16:59.975 INFO [main] java.lang.reflect.Method.invoke OS Name: Linux
23-Jul-2025 05:16:59.975 INFO [main] java.lang.reflect.Method.invoke OS Version: 6.1.141-165.249.amzn2023.x86_64
23-Jul-2025 05:16:59.975 INFO [main] java.lang.reflect.Method.invoke Architecture: amd64
23-Jul-2025 05:16:59.975 INFO [main] java.lang.reflect.Method.invoke Java Home: /opt/java/openjdk
23-Jul-2025 05:16:59.975 INFO [main] java.lang.reflect.Method.invoke JVM Version: 21.0.7+6-LTS
23-Jul-2025 05:16:59.976 INFO [main] java.lang.reflect.Method.invoke JVM Vendor: Eclipse Adoptium
```

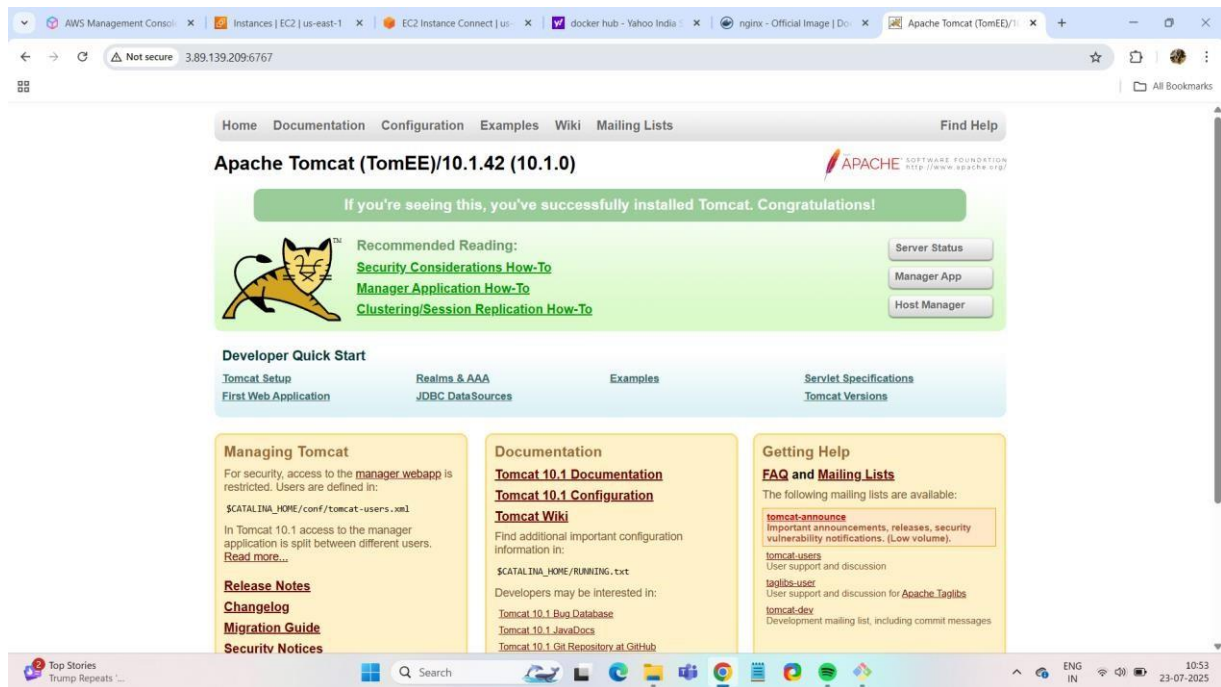
```
root@ip-172-31-31-51:~#
138f724658fd: Pull complete
10103ffcc9741: Pull complete
cd9c703bfa7f: Pull complete
ea7dddb53138: Pull complete
4f4fb700ef54: Pull complete
b39261f4114a: Pull complete
f973abb35ede: Pull complete
731c4a6ad768: Pull complete
Digest: sha256:1bc1658cb582571368b985e4c983cd024d0a3bc8d2cad2a4c6d0fe1235855570
Status: Downloaded newer image for tomeet:latest
docker.io/library/tomeet:latest
[root@ip-172-31-31-51 ~]# docker container ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS        NAMES
[root@ip-172-31-31-51 ~]# docker container ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS        NAMES
[root@ip-172-31-31-51 ~]# docker run tomeet
23-Jul-2025 05:16:59.974 INFO [main] java.lang.reflect.Method.invoke Server version name: Apache Tomcat (TomEE)/10.1.42 (10.1.0)
23-Jul-2025 05:16:59.975 INFO [main] java.lang.reflect.Method.invoke Server built: Jun 5 2025 22:35:46 UTC
23-Jul-2025 05:16:59.975 INFO [main] java.lang.reflect.Method.invoke Server version number: 10.1.42.0
23-Jul-2025 05:16:59.975 INFO [main] java.lang.reflect.Method.invoke OS Name: Linux
23-Jul-2025 05:16:59.975 INFO [main] java.lang.reflect.Method.invoke OS Version: 6.1.141-165.249.amzn2023.x86_64
23-Jul-2025 05:16:59.975 INFO [main] java.lang.reflect.Method.invoke Architecture: amd64
23-Jul-2025 05:16:59.975 INFO [main] java.lang.reflect.Method.invoke Java Home: /opt/java/openjdk
23-Jul-2025 05:16:59.975 INFO [main] java.lang.reflect.Method.invoke JVM Version: 21.0.7+6-LTS
23-Jul-2025 05:16:59.976 INFO [main] java.lang.reflect.Method.invoke JVM Vendor: Eclipse Adoptium
23-Jul-2025 05:16:59.976 INFO [main] java.lang.reflect.Method.invoke CATALINA_BASE: /usr/local/tomeet
23-Jul-2025 05:16:59.976 INFO [main] java.lang.reflect.Method.invoke CATALINA_HOME: /usr/local/tomeet
23-Jul-2025 05:16:59.988 INFO [main] java.lang.reflect.Method.invoke Command line argument: -Djava.util.logging.config.file=/usr/local/tomeet/conf/logging.prop
23-Jul-2025 05:16:59.988 INFO [main] java.lang.reflect.Method.invoke Command line argument: -Djava.util.logging.manager=org.apache.juli.ClassLoaderLogManager
23-Jul-2025 05:16:59.989 INFO [main] java.lang.reflect.Method.invoke Command line argument: -Djavaagent:/usr/local/tomeet/lib/openjib-javaagent.jar
23-Jul-2025 05:16:59.989 INFO [main] java.lang.reflect.Method.invoke Command line argument: -Djdk.tls.ephemeralDHKeySize=2048
23-Jul-2025 05:16:59.989 INFO [main] java.lang.reflect.Method.invoke Command line argument: -Djava.protocol.handler.pkgs=org.apache.catalina.webresources
23-Jul-2025 05:16:59.989 INFO [main] java.lang.reflect.Method.invoke Command line argument: -Dsun.io.useCanonCaches=false
23-Jul-2025 05:16:59.989 INFO [main] java.lang.reflect.Method.invoke Command line argument: -Dorg.apache.catalina.security.SecurityListener.UMASK=0027
23-Jul-2025 05:16:59.989 INFO [main] java.lang.reflect.Method.invoke Command line argument: --add-opens=java.base/java.lang=ALL-UNNAMED
23-Jul-2025 05:16:59.989 INFO [main] java.lang.reflect.Method.invoke Command line argument: --add-opens=java.base/java.lang.reflect=ALL-UNNAMED
23-Jul-2025 05:16:59.989 INFO [main] java.lang.reflect.Method.invoke Command line argument: --add-opens=java.base/java.io=ALL-UNNAMED
23-Jul-2025 05:16:59.989 INFO [main] java.lang.reflect.Method.invoke Command line argument: --add-opens=java.base/java.util=ALL-UNNAMED
23-Jul-2025 05:16:59.989 INFO [main] java.lang.reflect.Method.invoke Command line argument: --add-opens=java.base/java.util.concurrent=ALL-UNNAMED
23-Jul-2025 05:16:59.989 INFO [main] java.lang.reflect.Method.invoke Command line argument: --add-opens=java.rmi/sun.rmi.transport=ALL-UNNAMED
23-Jul-2025 05:16:59.989 INFO [main] java.lang.reflect.Method.invoke Command line argument: -Dcatalina.base=/usr/local/tomeet
23-Jul-2025 05:16:59.989 INFO [main] java.lang.reflect.Method.invoke Command line argument: -Dcatalina.home=/usr/local/tomeet
23-Jul-2025 05:16:59.989 INFO [main] java.lang.reflect.Method.invoke Command line argument: -Djava.io.tmpdir=/usr/local/tomeet/temp
```

```
root@ip-172-31-31-51:~#
pause      Pause all processes within one or more containers
port       List port mappings or a specific mapping for the container
prune      Remove all stopped containers
rename     Rename a container
restart    Restart one or more containers
rm         Remove one or more containers
run        Create and run a new container from an image
start      Start one or more stopped containers
stats      Display a live stream of container(s) resource usage statistics
stop       Stop one or more running containers
top        Display the running processes of a container
unpause    Unpause all processes within one or more containers
update     Update configuration of one or more containers
wait       Block until one or more containers stop, then print their exit codes

Run 'docker container COMMAND --help' for more information on a command.
[root@ip-172-31-31-51 ~]# docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
tomeet        latest   eecd6969e40f   3 weeks ago   368MB
[root@ip-172-31-31-51 ~]#
[root@ip-172-31-31-51 ~]#
[root@ip-172-31-31-51 ~]# docker container ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS        NAMES
9b94121086bf   eecd6969e40f   "/_cacert_entrypoint..."   6 minutes ago   Up 6 minutes   0.0.0.0:6767->8080/tcp, :::6767->8080/tcp   mytomcat
1eb6f20c6a5e   tomeet     "/_cacert_entrypoint..."   11 minutes ago   Exited (130) 9 minutes ago                  xenodochial_k
apitisa
[root@ip-172-31-31-51 ~]# ls
[root@ip-172-31-31-51 ~]#
[root@ip-172-31-31-51 ~]#
[root@ip-172-31-31-51 ~]# docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
tomeet        latest   eecd6969e40f   3 weeks ago   368MB
[root@ip-172-31-31-51 ~]#
[root@ip-172-31-31-51 ~]#
[root@ip-172-31-31-51 ~]#
[root@ip-172-31-31-51 ~]# docker run --name -d -p 5656:8080 eecd6969e40f
docker: Error response from daemon: Invalid container name (-d), only [a-zA-Z0-9][a-zA-Z0-9_.-] are allowed.
See 'docker run --help'.
[root@ip-172-31-31-51 ~]# docker run --name d -p 5656:8080 eecd6969e40f
docker: Error response from daemon: Invalid container name (d), only [a-zA-Z0-9][a-zA-Z0-9_.-] are allowed.
See 'docker run --help'.
[root@ip-172-31-31-51 ~]# docker run --name nginxcontainer -d p 5656:8080
Unable to find image 'p:latest' locally
docker: Error response from daemon: pull access denied for p, repository does not exist or may require 'docker login': denied: requested access to the resource is denied
```

Output:





**STEP 6 :-** Similarly I have pulled nginx and when I hit the public Ip of instance it will hit the web page.

