

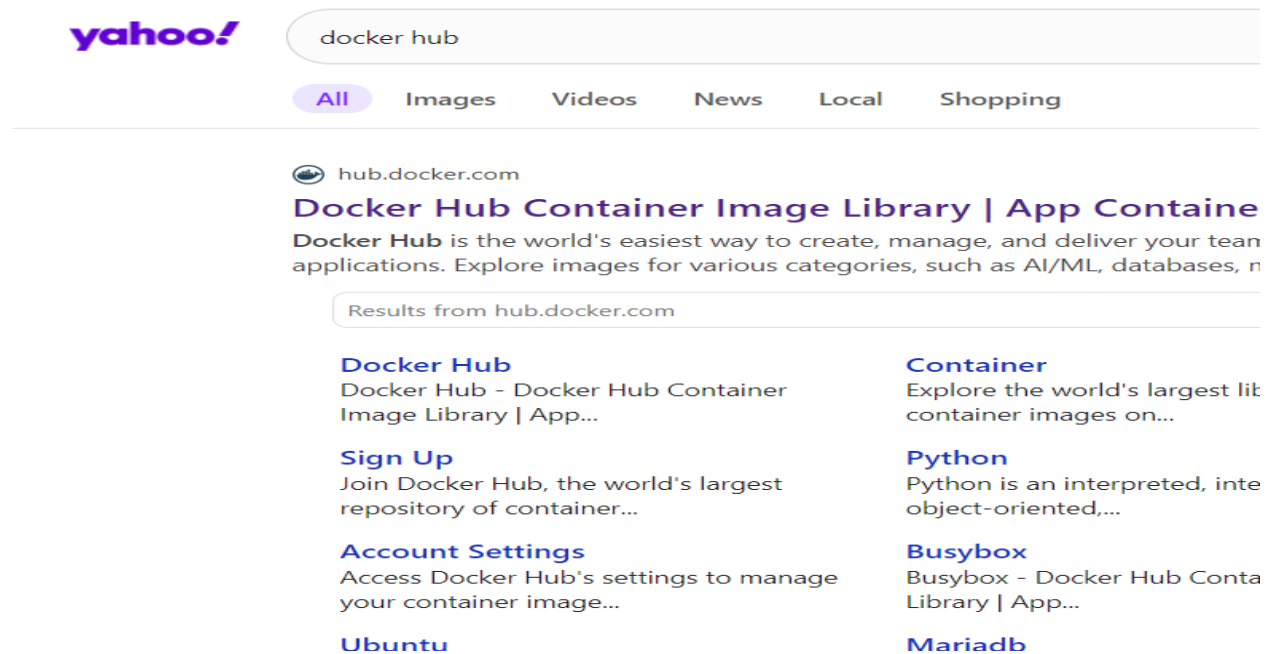
Date :- 22/07/24

Assignment – 1

Docker Assignment

Docker hub create and login

Step 1 : - Open google and search docker hub and click on docker hub container image library .



The screenshot shows a Yahoo! search interface. The search bar contains the text "docker hub". Below the search bar, there are tabs for "All", "Images", "Videos", "News", "Local", and "Shopping". The "All" tab is selected. The search results are from "hub.docker.com". The main result is titled "Docker Hub Container Image Library | App Containe" and describes Docker Hub as the world's easiest way to create, manage, and deliver applications. Below this, there are several links: "Results from hub.docker.com", "Docker Hub", "Sign Up", "Account Settings", "Ubuntu", "Container", "Python", "Busybox", and "Mariadb".

**yahoo!** docker hub

All Images Videos News Local Shopping

hub.docker.com

### Docker Hub Container Image Library | App Containe

Docker Hub is the world's easiest way to create, manage, and deliver your team applications. Explore images for various categories, such as AI/ML, databases, n

Results from hub.docker.com

- Docker Hub**  
Docker Hub - Docker Hub Container Image Library | App...
- Sign Up**  
Join Docker Hub, the world's largest repository of container...
- Account Settings**  
Access Docker Hub's settings to manage your container image...
- Ubuntu**
- Container**  
Explore the world's largest list of container images on...
- Python**  
Python is an interpreted, interactive, object-oriented,...
- Busybox**  
Busybox - Docker Hub Container Image Library | App...
- Mariadb**

Step 2 :- And create a sign up and create a login



# Create your username

Continue with your Google account or [choose another](#).



**Chirukuri sushma**

sushmachoudary504@gmail.com

Username

sushma362

Use 4 to 30 letters & digits only.

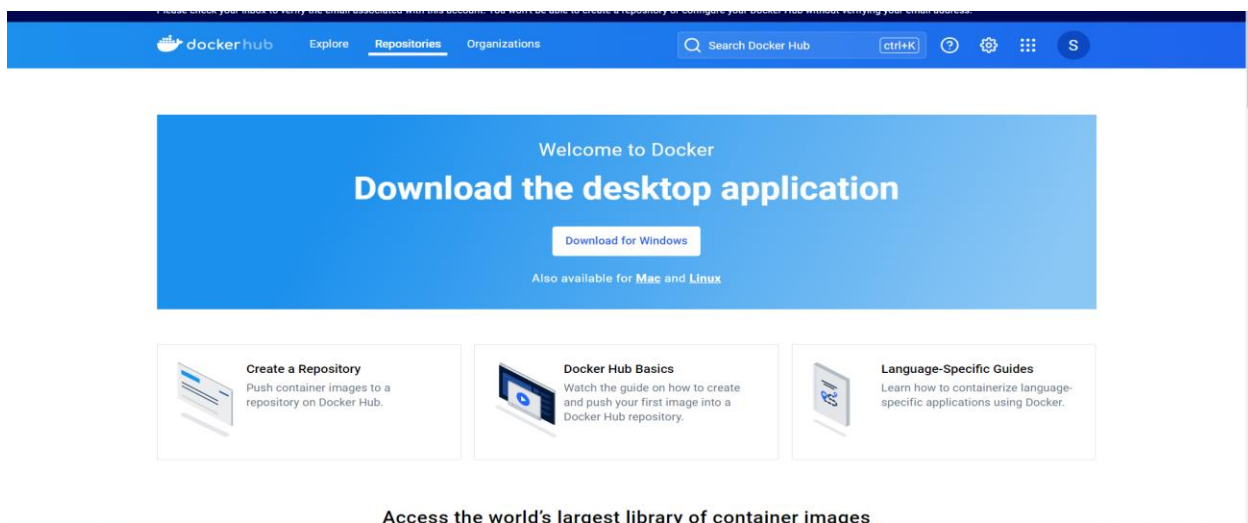


Send me occasional product updates and announcements.

**Sign up**

By creating an account I agree to the [Subscription Service Agreement](#), [Privacy Policy](#), [Data Processing Terms](#).

Step 3 :- it will open docker account and login docker hub account



Step 4 : -- and create a instance and change port number 8080 to 8083. Go to security choose launch wizaed -20 and select edit inbound rules and click on add rule change port number ..

aws

Services

Search

Alerts

Help

Settings

N. Virginia

22

Custom

Search

0.0.0.0/0 X

Description - optional [Info](#)

Inbound rule 2

Delete

Security group rule ID

Type [Info](#)

Protocol [Info](#)

-

Custom TCP

TCP

Port range [Info](#)

Source type [Info](#)

Source [Info](#)

8080 - 8083

Anywhere-IPv4

Search

0.0.0.0/0 X

Description - optional [Info](#)

Add rule

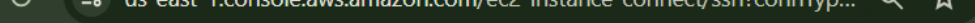
Step 5 :- Connect EC2 instance and download docker to enable this use command :- `yum install docker`  
&& `systemctl enable-now docker`

[illegible]

```
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing      : 1/1
  Installing     : runc-1.1.11-1.amzn2023.0.1.x86_64 1/10
  Installing     : containerd-1.7.11-1.amzn2023.0.1.x86_64 2/10
Running scriptlet: containerd-1.7.11-1.amzn2023.0.1.x86_64 2/10
  Installing     : pigz-2.5-1.amzn2023.0.3.x86_64 3/10
  Installing     : libnftnl-1.2.2-2.amzn2023.0.2.x86_64 4/10
  Installing     : libnftnetlink-1.0.1-19.amzn2023.0.2.x86_64 5/10
  Installing     : libnftfilter_conntrack-1.0.8-2.amzn2023.0.2.x86_64 6/10
  Installing     : iptables-libs-1.8.8-3.amzn2023.0.2.x86_64 7/10
  Installing     : iptables-nft-1.8.8-3.amzn2023.0.2.x86_64 8/10
Running scriptlet: iptables-nft-1.8.8-3.amzn2023.0.2.x86_64 8/10
  Installing     : libcgroupp-3.0-1.amzn2023.0.1.x86_64 9/10
Running scriptlet: docker-25.0.3-1.amzn2023.0.2.x86_64 10/10
  Installing     : docker-25.0.3-1.amzn2023.0.2.x86_64 10/10
Running scriptlet: docker-25.0.3-1.amzn2023.0.2.x86_64 10/10
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket → /usr/lib/systemd/system/docker.socket.

  Verifying      : containerd-1.7.11-1.amzn2023.0.1.x86_64 1/10
  Verifying      : docker-25.0.3-1.amzn2023.0.2.x86_64 2/10
  Verifying      : iptables-libs-1.8.8-3.amzn2023.0.2.x86_64 3/10
  Verifying      : iptables-nft-1.8.8-3.amzn2023.0.2.x86_64 4/10
  Verifying      : libcgroupp-3.0-1.amzn2023.0.1.x86_64 5/10
  Verifying      : libnftfilter_conntrack-1.0.8-2.amzn2023.0.2.x86_64 6/10
  Verifying      : libnftnetlink-1.0.1-19.amzn2023.0.2.x86_64 7/10
  Verifying      : libnftnl-1.2.2-2.amzn2023.0.2.x86_64 8/10
  Verifying      : pigz-2.5-1.amzn2023.0.3.x86_64 9/10
  Verifying      : runc-1.1.11-1.amzn2023.0.1.x86_64 10/10
```

Step 6 :- next install git and maven also the command is :- `yum install git maven -y`

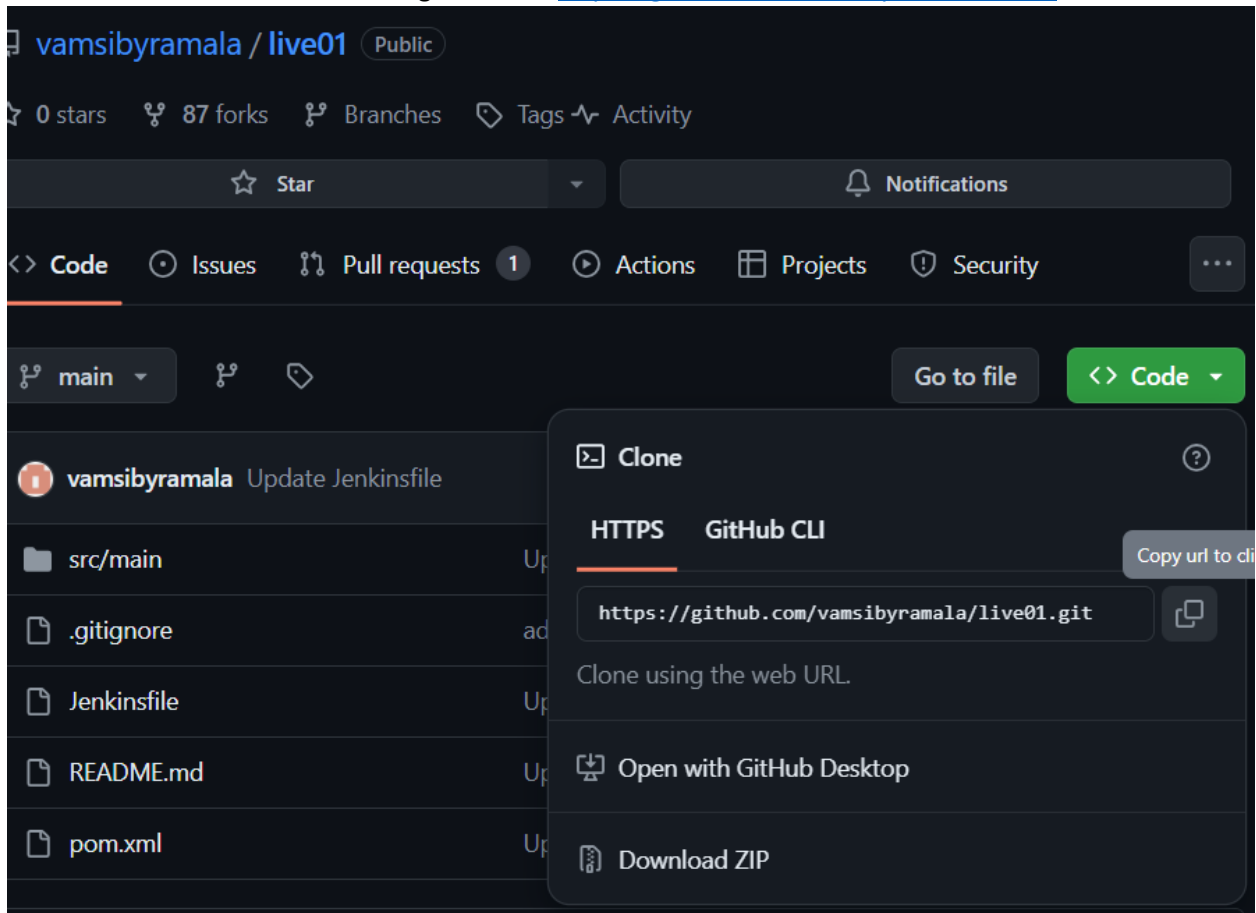


The screenshot shows the AWS Management Console interface. The top navigation bar includes the AWS logo, a 'Services' dropdown, a search bar, and several utility icons (notifications, help, settings). The user's location is 'N. Virginia' and their name is 'sushma'. The main content area displays a terminal window with the command `yum install git maven -y` entered at the prompt `[root@ip-172-31-93-120 ec2-user]#`.

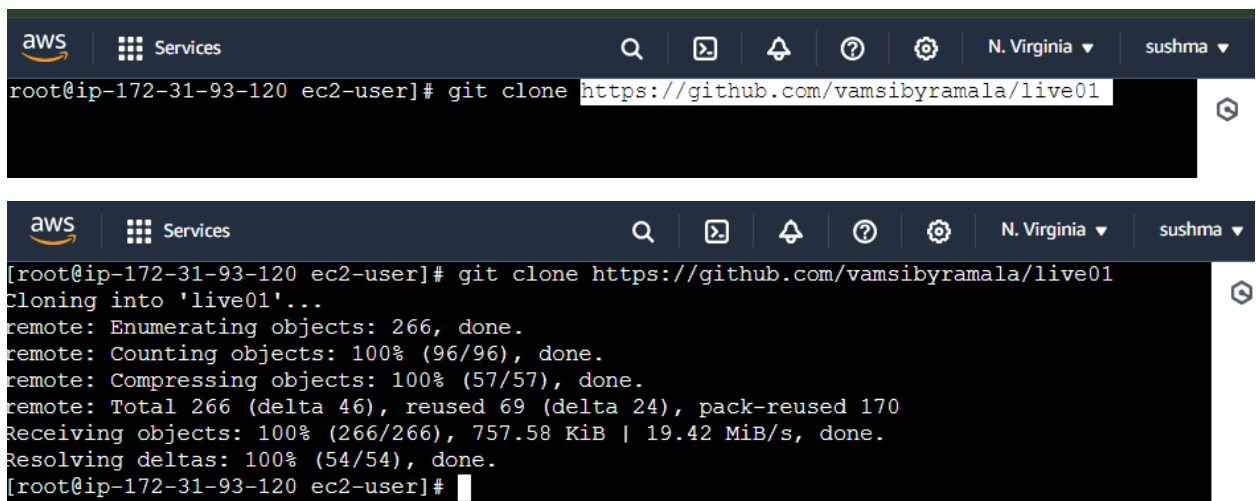
```
libX11-common-1.7.2-3.amzn2023.0.4.noarch
libXau-1.0.9-6.amzn2023.0.2.x86_64
libXext-1.3.4-6.amzn2023.0.2.x86_64
libXrender-0.9.10-14.amzn2023.0.2.x86_64
libbrotli-1.0.9-4.amzn2023.0.2.x86_64
libjpeg-turbo-2.1.4-2.amzn2023.0.5.x86_64
libpng-2:1.6.37-10.amzn2023.0.6.x86_64
libxcb-1.13.1-7.amzn2023.0.2.x86_64
maven-1:3.8.4-3.amzn2023.0.5.noarch
maven-amazon-corretto17-1:3.8.4-3.amzn2023.0.5.noarch
maven-lib-1:3.8.4-3.amzn2023.0.5.noarch
maven-resolver-1:1.7.3-3.amzn2023.0.4.noarch
maven-shared-utils-3.3.4-4.amzn2023.0.3.noarch
maven-wagon-3.4.2-6.amzn2023.0.4.noarch
perl-Error-1:0.17029-5.amzn2023.0.2.noarch
perl-File-Find-1.37-477.amzn2023.0.6.noarch
perl-Git-2.40.1-1.amzn2023.0.3.noarch
perl-TermReadKey-2.38-9.amzn2023.0.2.x86_64
perl-lib-0.65-477.amzn2023.0.6.x86_64
pixmap-0.40.0-3.amzn2023.0.3.x86_64
plexus-cipher-1.8-3.amzn2023.0.3.noarch
plexus-classworlds-2.6.0-10.amzn2023.0.4.noarch
plexus-containers-component-annotations-2.1.0-9.amzn2023.0.4.noarch
plexus-interpolation-1.26-10.amzn2023.0.4.noarch
plexus-sec-dispatcher-2.0-3.amzn2023.0.3.noarch
plexus-utils-3.3.0-9.amzn2023.0.4.noarch
publicsuffix-list-20240212-61.amzn2023.noarch
sisu-1:0.3.4-9.amzn2023.0.4.noarch
slf4j-1.7.32-3.amzn2023.0.4.noarch
xml-common-0.6.3-56.amzn2023.0.2.noarch

complete!
root@ip-172-31-93-120_ec2-user]#
```

Step 7 :- Next open the github account and select the project and open the source code and copy the web URL. I choose the choose using the URL <https://github.com/vamsibyramala/live01>



Step 8 :- next go to amazon linux and we have to run the command : git clone <https://github.com/vamsibyramala/live01>



Step 9 :- We have to run the tomcat server docker command : docker run -d tomcat

And to list the command : docker ps and we have to copy the container ID or name

```
[root@ip-172-31-93-120 ec2-user]# docker run -d tomcat
Unable to find image 'tomcat:latest' locally
latest: Pulling from library/tomcat
9b857f539cb1: Pull complete
0ff50609e3ed: Pull complete
8ec0d02fe661: Pull complete
b0d053b8dd8b: Pull complete
b05b6f2f8269: Pull complete
348c7b20cdd3: Pull complete
4f4fb700ef54: Pull complete
0d211925efa0: Pull complete
Digest: sha256:8b677dabf8609f0870803eef736dfee6dfac113a29cb9e52559e0a227fd7c904
Status: Downloaded newer image for tomcat:latest
7273d31d777245dc0e71bc9835ff82ecf469b7c776c93a8c4c24a6892cf731b9
[root@ip-172-31-93-120 ec2-user]# docker -ps
unknown shorthand flag: 'p' in -ps
See 'docker --help'.

Usage:  docker [OPTIONS] COMMAND

A self-sufficient runtime for containers

Common Commands:
run      Create and run a new container from an image
exec     Execute a command in a running container
ps       List containers
build    Build an image from a Dockerfile
pull     Download an image from a registry
push     Upload an image to a registry
images   List images
login    Log in to a registry
logout   Log out from a registry
search   Search Docker Hub for images
```

Step 10 :- next we have to run the command `docker exec -it container ID bash` and after tomcat server command :- `docker run -dp 8080:8083 tomcat` and next ls webapps , we have to ls the commands and we have to go back `cd ../webapps.dist/`, again we have to ls the commands and now we have to copy the public IP address and search in google with Ip address and port number ..

```
Run 'docker COMMAND --help' for more information on a command.
For more help on how to use Docker, head to https://docs.docker.com/go/guides/

[root@ip-172-31-93-120 ec2-user]# docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED          STATUS          PORTS
7273d31d7772   tomcat    "catalina.sh run"        About a minute ago   Up About a minute   80
80/tcp        agitated_knuth
[root@ip-172-31-93-120 ec2-user]# docker rm -f 7273d31d7772
7273d31d7772
[root@ip-172-31-93-120 ec2-user]# docker run -d -p 8080:8080 tomcat
0d49c0a6904205f1279aefedac12c86d52bbled9f65e205ed2a4f6ce5fbfc5b1
[root@ip-172-31-93-120 ec2-user]# docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED          STATUS          PORTS
0d49c0a69042   tomcat    "catalina.sh run"        12 seconds ago   Up 12 seconds   0.0.0.0:80
80->8080/tcp, :::8080->8080/tcp   exciting_haslett
[root@ip-172-31-93-120 ec2-user]# ls
live01
[root@ip-172-31-93-120 ec2-user]# docker exec -it 0d49c0a69042 bash
root@0d49c0a69042:/usr/local/tomcat# ls
bin          CONTRIBUTING.md  README.md      temp         work
BUILDING.txt  lib             native-jni-lib  RELEASE-NOTES webapps
conf         LICENSE         NOTICE        RUNNING.txt   webapps.dist
root@0d49c0a69042:/usr/local/tomcat# cd webapps
root@0d49c0a69042:/usr/local/tomcat/webapps# ls
root@0d49c0a69042:/usr/local/tomcat/webapps# cd ../webapps.dist/
root@0d49c0a69042:/usr/local/tomcat/webapps.dist# ls
docs  examples  host-manager  manager  ROOT
root@0d49c0a69042:/usr/local/tomcat/webapps.dist# cp -r * ../webapps/
root@0d49c0a69042:/usr/local/tomcat/webapps.dist# docker ps
```

Step 11 . here is the public IP address 3.93.172.116 : 8080 port number paste this in google we will get tomcat server page ..

```
0d49c0a6904205f1279aefedac12c86d52bbled9f65e205ed2a4f6ce5fbfc5b1
```


i-01301bb7cc5a901bd (Docker)

PublicIPs: 3.93.172.116    PrivateIPs: 172.31.93.120


← → ↻ ⚠ Not secure 3.93.172.116:8080 ☆ S

Home Documentation Configuration Examples Wiki Mailing Lists Find Help

## Apache Tomcat/10.1.26

 **APACHE** SOFTWARE FOUNDATION  
<http://www.apache.org/>

If you're seeing this, you've successfully installed Tomcat.  
Congratulations!



**Recommended Reading:**

- [Security Considerations How-To](#)
- [Manager Application How-To](#)
- [Clustering/Session Replication How-To](#)

Server Status  
Manager App  
Host Manager

### Developer Quick Start

<a href="#">Tomcat Setup</a>	<a href="#">Realms &amp; AAA</a>	<a href="#">Examples</a>	<a href="#">Servlet Specifications</a>
<a href="#">First Web Application</a>	<a href="#">JDBC DataSources</a>		<a href="#">Tomcat Versions</a>