How To Install Docker On RHEL 8 / CENTOS 8/ FEDORA 32

Prerequisites :
- RHEL/CENTOS/FEDORA 64-bit operating system
- A user account with sudo privileges
- Command-line/terminal (ctrl-alt-t or applications menu > accessories > terminal)

Docker is a containerization technology that allows you to quickly build, test and deploy applications as portable, self-sufficient containers that can run virtually anywhere.

Follow these Steps:

```
1.  sudo dnf config-manager --add-repo=https://download.docker.com/linux/centos/docker-ce.repo
2.  sudo dnf repolist -v
3.  sudo dnf install –nobest  docker-ce
4.   sudo dnf install https://download.docker.com/linux/centos/7/x86_64/stable/Packages/containerd.io-1.2.6-3.3.el7.x86_64.rpm
5.  sudo systemctl disable firewalld
6.  sudo systemctl enable --now docker
7.  systemctl is-active docker
8.  systemctl is-enabled docker
9.  curl -L "https://github.com/docker/compose/releases/download/1.23.2/docker-compose-$(uname -s)-$(uname -m)" -o docker-compose
10. sudo dnf install python3-pip
11. pip3.6 install docker-compose --user
```

Docker Command line Interface: -

1. docker [option] [subcommand] [arguments]
2. docker –help

Docker Image: -

A Docker image is made up of a series of filesystem layers representing instructions in the image's Dockerfile that makes up an executable software application. An image is an immutable binary file including the application and all other dependencies such as libraries, binaries, and instructions necessary for running the application.

Search Docker Image: -

To search for an image from the Docker Hub registry, use the `search` subcommand.
For example, to search for an Ubuntu image, you would type:

1. docker search ubuntu

Download Docker Images: -

For example, to download the latest official build of the Ubuntu 18.04 image, you would use the following image pull command:

2. docker pull ubuntu

Image List: -

To list all downloaded images type:

3. docker image ls

Remove an Image: -

If for some reasons, you want to delete an image, you can do that with the `image rm [image_name]` subcommand:

4. docker image rmi ubuntu

Docker Container: -

An instance of an image is called a container. A container represents a runtime for a single application, process, or service. It may not be the most appropriate comparison, but if you are a programmer, you can think of a Docker image as class and Docker container as an instance of a class.
We can start, stop, remove, and manage a container with the `docker container` subcommand.

1. docker container run ubuntu
2. docker container run -it ubuntu /bin/bash
3. docker container ls
4. docker container ls -a
5. docker container rm container_id
6. docker container rm prune -f