Question

1. What is Hypervisor?
2. What is the difference between type 1 and type 2 Hypervisor?
3. What is containerization?
4. What is Virtualization?
5. What is the difference between virtualization and containerization?
6. What is Docker and why Docker?
7. Any idea why a lot of companies are using docker?
8. What are some pros of docker that you are aware of?
9. What is a docker client?
10. What is a docker host?
11. What is a Docker Hub?
12. What is a Docker image registry?
13. What is the difference between the public and private registry?
14. What is docker-machine?
15. Can you please work me through Docker Architecture?
16. What docker images?
17. What is Docker Swarm?
18. What is a DockerFile?
19. What is the purpose of Docker Compose?
20. Are you aware of a Docker Trusted Registry? if yes, what is a Docker Trusted Registry?
21. What are the basic requirements for docker to run on any system?
22. Can you tell the differences between a docker Image and a layer?
23. Describe the lifecycle of the Docker container
24. Can you tell me the approach to login into the docker registry?
25. What is the difference between docker pull and docker run?
26. What command can you run to export a docker image as an archive?
27. What command can be run to import a pre-exported Docker image into another Docker host?
28. What is the docker command that lists the status of all docker containers?
29. Under what circumstances will you lose data stored in a container?
    1. When the container died
    2. ?
30. Can a paused container be removed from Docker?
    1. No! you must first stop the container
31. Can you tell the difference between CMD and ENTRYPOINT?
    1. You can’t overwrite ENTRYPOINT
32. Can you tell me what are the purposes of docker --rm, rmi, run, pull, start, and stop?
33. What is a base image in docker?
    1. Pre-built package used as reference to create a container
34. If you have permission denied while trying to run docker commands, what can be the problem?
    1. Maybe a default user was set into the Dockerfile used to create the container?
35. What is the proper way to install docker?
    1. Depends on OS. But first update the your package manager and install docker
36. List the most commonly used instructions in Dockerfile that you are aware of and their purposes
    1. FROM
    2. RUN
    3. CMD
    4. ENTRYPOINT
    5. COPY
    6. ADD
    7. WORKDIR
    8. ENV
    9. ARG
37. What is the best way of deleting a container?
    1. Stopping before deleting
38. How many containers you can run in docker and what are the factors influencing this limit?
    1. Only one
    2. You can’t use the FROM command twice into the Dockerfile

How will you ensure that container 1 runs before container 2 while using docker-compose?

Specify with the command “depends\_on” what depends on what

If you wish to use a base image and make modifications or personalize it, how do you do that?

1. [https://phoenixnap.com/kb/how-to-commit-changes-to-docker-image](https://phoenixnap.com/kb/how-to-commit-changes-to-docker-image%20)
   1. pull the image
   2. run container in it-mode base on this image
   3. make adjustments (e.g. install packages)
   4. exit from container + docker commit [containerId] [new\_name]
   5. docker images
   6. Now you can tag and push your new image into your dockerhub repo
2. How do you create a docker container from an image?How do you list all the running containers?Explain various Docker Basic Commands that you are aware ofSuppose you have 3 containers running and out of these, you wish to access one of them. How do you access a running container?How to delete an image from the local storage system?How to build a Dockerfile?How to build a Dockerfile if the name is not Dockerfile?How to build a Dockerfile if the name is not Dockerfile and it is not in your current working directory?Do you know why Docker system prune is used? What does it do?What is port forwarding in Docker?What is the difference between free port forwarding and bind port forwarding?What is the difference between a registry and a repository?What are the advantages of AWS ECR compared to the Docker registry?How can you access your application that is running in Docker?Is there a way to ident