1. What is docker?

Docker is an open platform for developing, shipping, and running applications. Docker enables you to separate your applications from your infrastructure so you.

2. what is difference between vm's and docker?

Hypervisors(VM's), guestos(VM's), libraries sharable (docker), more resources(docker)

3. what is dockerfile?

- > Plain Text file
- > That contains different command to build a Image
- (FROM, MAINTAINER, RUN, CMD, LABEL, EXPOSE, ENV, ADD, COPY, ENTRYPOINT, VOLUME, USER, WORKDIR)

https://kapeli.com/cheat_sheets/Dockerfile.docset/Contents/Resources/Documents/index

4. what is difference between the kill and stop?

The **docker stop** command stops the container gracefully and provides a safe way out. If a **docker stop** command fails to terminate a process within the specified timeout, the Docker issues a kill command implicitly and immediately.

5. what is difference between and ADD and COPY commands in a dockerfile?

copying of local files into the container

- Add (download Tar file and unzip it)
- > Add (use to download remote sources)
- > CoPy (use to multistage dockerfile)

6. what is difference between CMD and ENTRYPOINT?

- > Both are used to Execution time or Run time.
- > CMD can override Parameter during Run time
- If multiple CMD's are there only latest One will execute(Last one)
- 7. which is the base image you will prefer your docker file? Alpine(size 5MB)
- 8. how login a running container \rightarrow docker ps
- 9. how to check live logs in docker containers?
 - → docker logs --tail 5 container_name_or_ID
- 10. how to check no. of containers running your machine? --> docker ps
- 11. how to check stop and running containers? \rightarrow docker ps -a
- 12. what is port forwarding ? -p 8181:9090
- 13. How to run a container in background? \rightarrow docker run -d <Img/tag>
- 14. what is first line in a dockerfile? \rightarrow ARG,FROM

 baseImg>
- 15. what are the commands have you used in your docker file?

FROM RUN CMD ENTRYPOINT label workdir COPY ADD EXPOSE VOLUME ENV ARG HEALTHCHECK

- 15. what is label in dockerfile? → Label <meta@data>
- 16. what is docker tag command?
- → <Image Names> docker build -t <t name>, docker tag

17. How you store data persistently? volumes
[docker volume create <volumeName>]
2types: /var/lib/docker/volumes/
Bind mounts may be stored anywhere on the host system.
tmpfs mounts are stored in the host system's memory only

- 18. have you worked on docker volumes? -v hostmachie/path:container/data/path
- 19. what is docker network? types of networks?

There are three common Docker network types - bridge networks, used within a single host, overlay networks, for multi-host communication, and macvlan networks which are used to connect Docker containers directly to host network interfaces.

- 20. I have a one web application is running on one container and database is running in one container how you communicate these two containers? -> --link, properties files,[database-info]
- 21. where you are store docker images?--> ecr, nexus, docker Hub
- 22. how to run multiple containers at a time? \rightarrow docker compose
- 23. what is difference between exec and attach? →
 The docker exec command runs a new command in a running container. execute the below command after restarting container nodeapi.

```
// start the container
docker start nodeapi// execute the exec command
docker exec -it nodeapi bash
```

once attached, you can do all the cli commands like you can check the node version, run the bundle file, exit etc..

Docker attach

This command to attach your terminal's standard input, output, and error (or any combination of the three) to a running container using the container's ID or name. attach the running container with the following command. you need to press enter once execute this command, docker is waiting for your input.

docker attach nodeapi

24. what is save and load commands in docker?

docker commit

Create a new image from a container's changes