Docker commands

1. docker --version:

Displays the installed Docker version.

2. docker run [OPTIONS] IMAGE [COMMAND] [ARG...]:

Runs a command in a new container based on the provided image.
OPTIONS can include various flags like -d (detached mode), -p (port mapping), -v (volume mounting), etc.
IMAGE is the Docker image to use for the container.
COMMAND is the command to run inside the container.
ARG is any additional argument to pass to the command.

3. docker build [OPTIONS] PATH | URL | -:

Builds a Docker image from a Dockerfile and a context (usually a directory containing the Dockerfile).
OPTIONS can include flags like -t to tag the resulting image.

4. docker pull [OPTIONS] NAME[:TAG|@DIGEST]:

Pulls an image or a repository from a registry.
NAME[:TAG] specifies the image name and an optional tag.
@DIGEST can be used instead of a tag to pull a specific image digest.

5. docker push [OPTIONS] NAME[:TAG]:

Pushes an image or a repository to a registry.

6. docker ps [OPTIONS]:

Lists containers.
OPTIONS can include flags like -a (all containers), -q (only display container IDs), etc.

7. docker exec [OPTIONS] CONTAINER COMMAND [ARG...]:

Runs a command in a running container.
OPTIONS can include flags like -i (interactive mode), -t (pseudo-TTY), etc.

8. docker stop [OPTIONS] CONTAINER [CONTAINER...]:

Stops one or more running containers.
OPTIONS can include flags like -t to specify a timeout.

9. docker rm [OPTIONS] CONTAINER [CONTAINER...]:

Removes one or more containers.
OPTIONS can include flags like -f to force removal.

10. docker rmi [OPTIONS] IMAGE [IMAGE...]:

Removes one or more images.
OPTIONS can include flags like -f to force removal.

11. docker images [OPTIONS] [REPOSITORY[:TAG]]:

Lists images.
OPTIONS can include flags like -a (show all images), -q (only display image IDs), etc.

12. docker inspect [OPTIONS] NAME|ID [NAME|ID...]:

Displays detailed information on one or more containers, images, networks, or volumes.

13. docker-compose [OPTIONS] [COMMAND] [ARGS...]:

Manages multi-container Docker applications.
Common commands include up (starts services), down (stops and removes containers), build (builds or rebuilds services), etc.

14. docker network [OPTIONS] COMMAND [ARGS...]:

Manages Docker networks.
COMMAND can be create, connect, disconnect, ls (list), inspect, rm (remove), etc.
Docker networks allow containers to communicate with each other.

15. docker volume [OPTIONS] COMMAND [ARGS...]:

Manages Docker volumes.
COMMAND can be create, ls (list), inspect, rm (remove), etc.
Docker volumes provide persistent storage for containers.

16. docker login [OPTIONS] [SERVER]:

Logs in to a Docker registry.
SERVER is the registry server URL.
Options may include --username and --password-stdin.

17. docker logout [SERVER]:

Logs out from a Docker registry.
SERVER is the registry server URL.

18. docker start [OPTIONS] CONTAINER [CONTAINER...]:

Starts one or more stopped containers.
Options can include flags like -a (attach STDOUT/STDERR) and -i (attach STDIN).

19. docker restart [OPTIONS] CONTAINER [CONTAINER...]:

Restarts one or more containers.
Options are similar to docker start.

20. docker pause CONTAINER [CONTAINER...]:

Pauses one or more running containers, suspending their processes.

21. docker unpause CONTAINER [CONTAINER...]:

Unpauses one or more paused containers, allowing their processes to continue.

22. docker logs [OPTIONS] CONTAINER:

Fetches the logs of a container.
Options can include flags like --follow (follow log output), --since (show logs since a specific timestamp), etc.

23. docker cp [OPTIONS] CONTAINER:SRC_PATH DEST_PATH or docker cp [OPTIONS] SRC_PATH CONTAINER:DEST_PATH:

Copies files/folders between a container and the local filesystem.
OPTIONS can include flags like -a (archive mode) for preserving file attributes.

24. docker tag SOURCE_IMAGE[:TAG] TARGET_IMAGE[:TAG]:

Creates a tag TARGET_IMAGE that refers to SOURCE_IMAGE.
Useful for tagging images before pushing them to a registry.

25. docker system [OPTIONS] COMMAND [ARGS...]:

Manages Docker system resources.
COMMAND can be df (display system usage), prune (remove unused data), info (display system-wide information), etc.

26. docker events [OPTIONS]:

Get real-time events from the server.
Options can include flags like --since (show events created since a specific timestamp), --until (show events created until a specific timestamp), etc.

27. docker save [OPTIONS] IMAGE [IMAGE...] -o FILE and docker load [OPTIONS] -i FILE:

docker save saves one or more images to a tar archive.
docker load loads an image from a tar archive.
Useful for transferring Docker images between hosts.

28. docker swarm [OPTIONS] COMMAND [ARGS...]:

Manages a Docker Swarm, a native clustering and orchestration tool for Docker containers.
Commands include init (initializes a swarm), join (joins a node to a swarm), leave (leaves the swarm), deploy (deploys a service), inspect (displays detailed information about the swarm), etc.

29. docker stats [OPTIONS] [CONTAINER...]:

Displays a live stream of container resource usage statistics (CPU, memory, network, disk I/O).
OPTIONS can include flags like --format (output formatting), etc.

30. docker system [OPTIONS] COMMAND [ARGS...]:

Manages Docker system resources such as containers, images, volumes, networks, etc.
Commands include prune (removes unused data), df (displays disk usage), info (displays system-wide information), etc.

31. docker rename [OPTIONS] CONTAINER NEW_NAME:

Renames an existing container.
OPTIONS typically include flags like --help to display usage information.
CONTAINER is the ID or name of the container you want to rename.

NEW_NAME is the new name you want to assign to the container.

32. docker top [OPTIONS] CONTAINER [ps OPTIONS]:

Displays the running processes of a container.
OPTIONS can include flags like --help to display usage information.
CONTAINER is the ID or name of the container you want to inspect.
ps OPTIONS are options passed to the ps command inside the container.

33. docker create [OPTIONS] IMAGE [COMMAND] [ARG...]:

Creates a new container from the specified image but does not start it.
OPTIONS can include various flags like -v for volume mounting, -p for port mapping, etc.
IMAGE is the Docker image to use for creating the container.
COMMAND is the command to run inside the container.
ARG is any additional argument to pass to the command.