Docker & Docker Compose Cheat-Sheet

1. Basic Docker Commands :

These commands help you get started with Docker. Use them to verify installations, explore Docker environments, and manage images and containers.

Command	Description
docker --version	Check the installed Docker version.
docker info	Display detailed information about the Docker environment.
docker images	List all Docker images on the local machine.
docker pull <image_name>	Download an image from Docker Hub.
docker run <image_name>	Create and start a container from an image.
docker ps	Show all currently running containers.

2. Container Management :

These commands allow you to manage Docker containers. Start, stop, inspect, and remove containers with ease.

Command	Description
docker ps -a	List all containers, including stopped ones.
docker start <container_id>	Start a stopped container.
docker stop <container_id>	Stop a running container.
docker rm <container_id>	Remove a stopped container.
docker logs <container_id>	View logs of a container.

3. Docker Images :

These commands focus on managing Docker images, from building custom images to removing unused ones.

Command	Description
docker build -t <image_name>:<tag> .	Build a Docker image from a Dockerfile.
docker rmi <image_id>	Remove an image by its ID.
docker tag <image_id> <repo_name>:<tag>	Tag an image for pushing to a repository.

4. Networking :

Use these commands to manage Docker networks, connect containers, and inspect configurations.

Command	Description
docker network ls	List all Docker networks.
docker network create <network_name>	Create a new Docker network.
docker network inspect <network_name>	Inspect a specific Docker network.

5. Docker Compose :

Docker Compose commands simplify multi-container applications. Define, start, and stop services using a single configuration file.

Command	Description
docker-compose –version/ docker compose –version	Check the installed Docker Compose version.
docker-compose up/ docker compose up	Start all services defined in the `docker-compose.yml`.
docker-compose down/ docker compose down	Stop and remove all containers defined in `docker-compose.yml`.
docker-compose logs/ docker compose logs	View logs for all services.

6. Troubleshooting :

These commands are handy for debugging issues with Docker containers, networks, and resources.

Command	Description
docker inspect <container_id>	Display detailed information about a container.
docker exec -it <container_id> bash	Open a shell session in a running container.
docker system prune	Clean up unused Docker objects (images, containers, networks).