

1. What is the difference between container and image?

answer: An image serves as a lightweight, independent package containing all the necessary components to execute a piece of software, including the application code and dependencies. Conversely, a container is a live instance derived from an image, enabling the execution of the software contained within the image. In essence, an image is akin to a blueprint used to develop software, whereas a container is the operational form of that image.

2. How many containers can be created from one image?

answer: There is no restriction on the number of containers that can be created from a single image. Each container operates independently, allowing for the creation of an unlimited number of containers from one image.

3. For which purpose the flag -p is used in the command 'docker run'?

answer: The -p flag in the 'docker run' command is used to make a container's network ports accessible to the host system. This flag can be utilized multiple times to expose several ports.

4. How to run a container, in such a way that it sees the content of some directory on host machine, but cannot change it?

answer: To run a container that can view but not modify the contents of a directory on the host machine, use the --read-only flag in the docker run command. This will mount the host directory as read-only within the container.