Docker commands can be executed in command prompt

Container is the running environment for an image

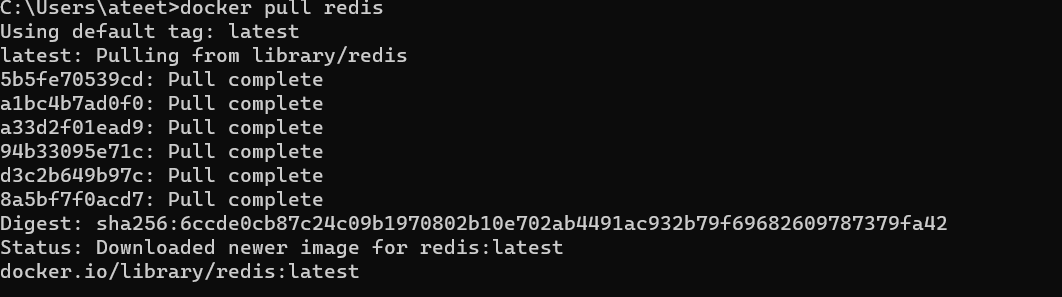
Container contains

* Application image : postgres , redis , mongo , etc
* Container has a port binded to it which allows it to talk to the application running inside it
* Container has a virtual file system

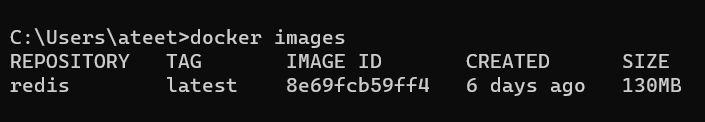
***Download a docker image***

docker pull {{image\_name}}

example – docker pull redis



***Check for list of docker images***

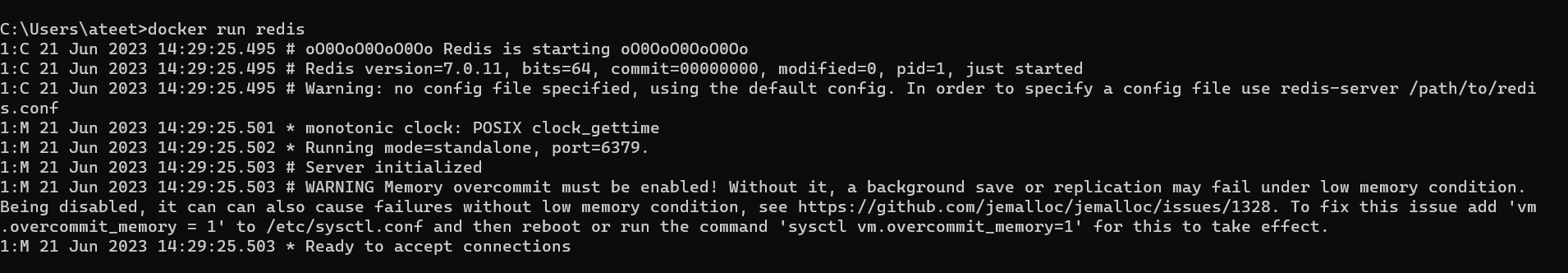
 docker images

The tag shows the version of the image downloaded

***To start running an image***

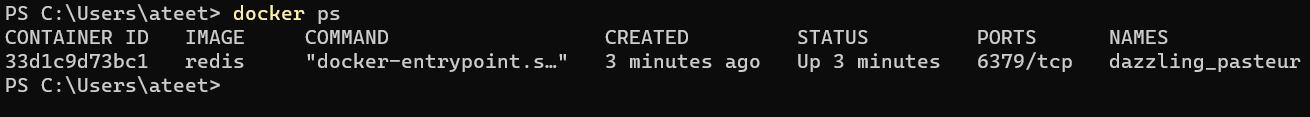
docker run {{image\_name}}

example – docker run redis



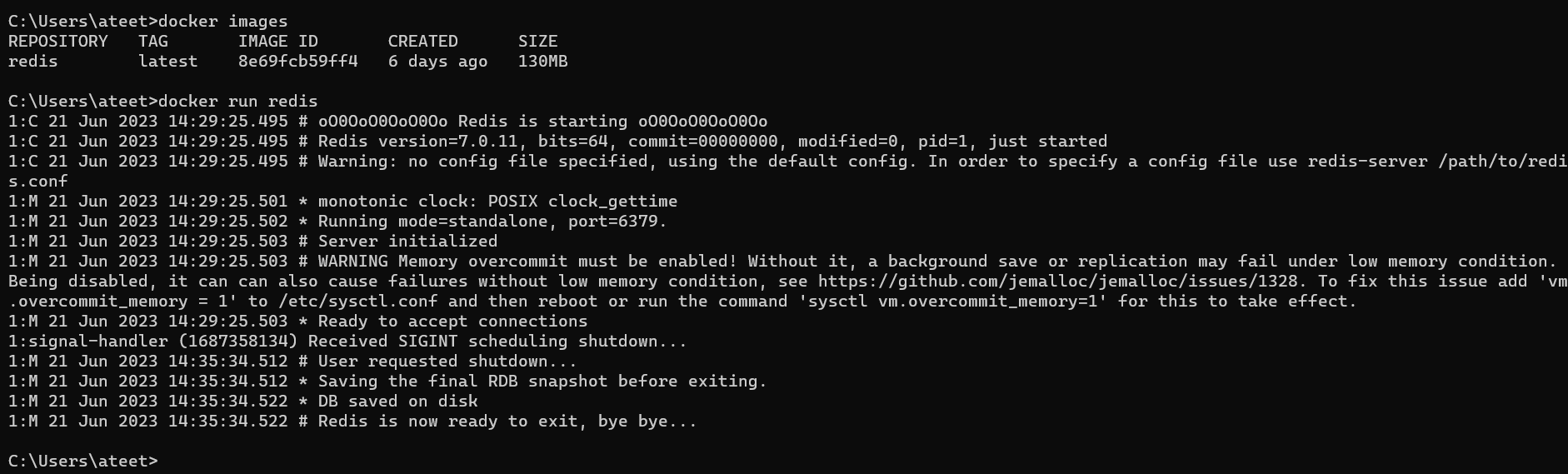
Once an image is running the environment in which the image is running is called a container

To see list of the containers that are running currently

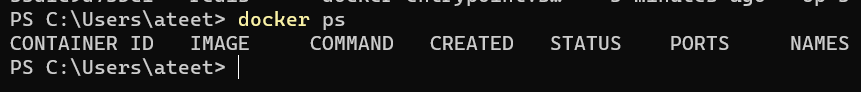
 docker ps

***Stop a running image / container***

Just ctrl + C on the keyboard



Observe the change in timestamp in the screenshot which means the container/image was stopped running from the keyboard by ctrl + C

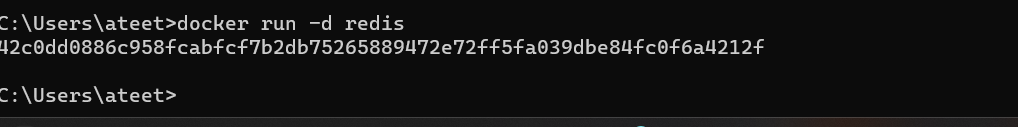


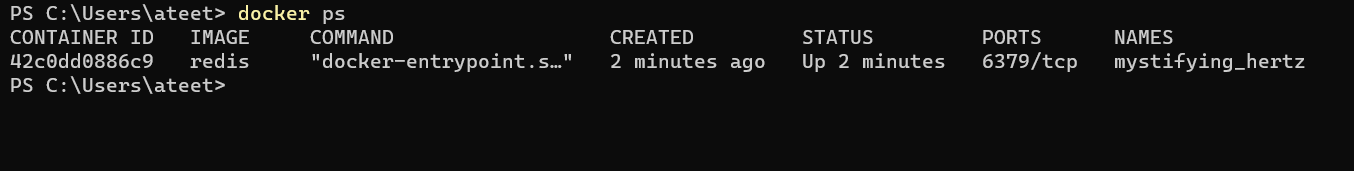
No more running controllers after the running redis container was stopped

***Run a container in detached mode***

docker run -d {{image\_name}}

example – docker run -d redis

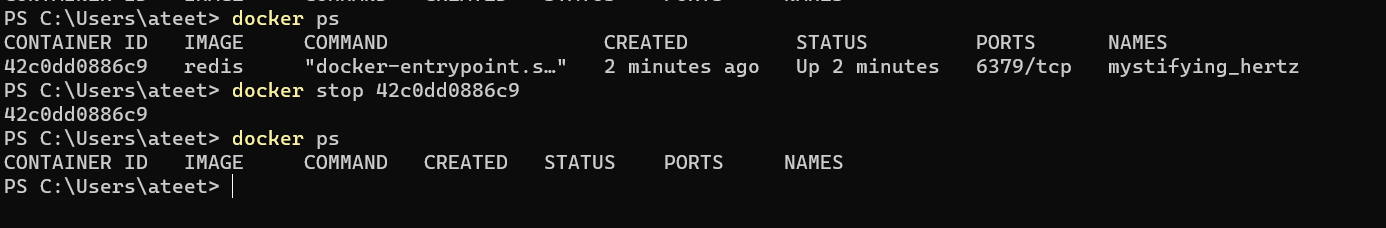




***To stop a container***

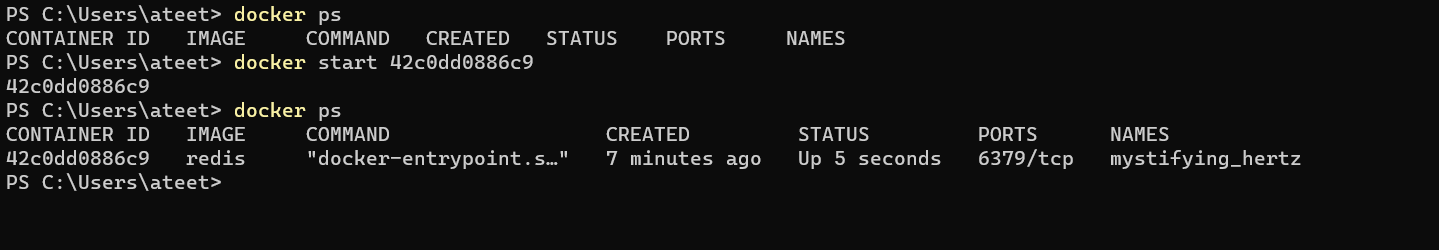
docker stop {{id of container}}

example - docker stop 42c0dd0886c9



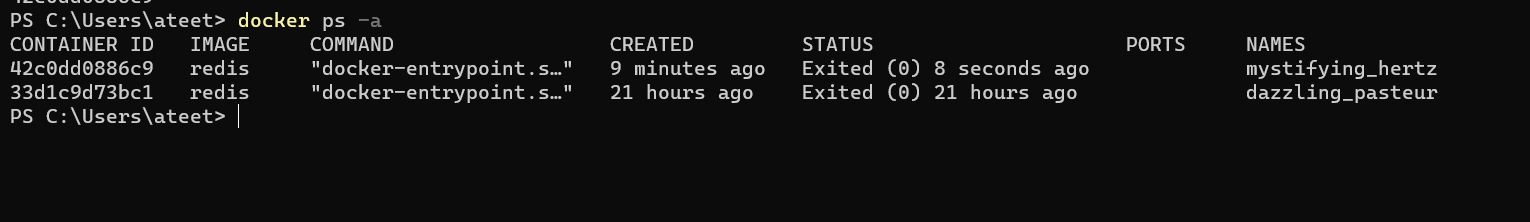
***To start a stopped container***

docker start {{id of container}}

example - docker start 42c0dd0886c9

***To check list of containers that are currently running as well as stopped*** (like history of containers that were started or are running)

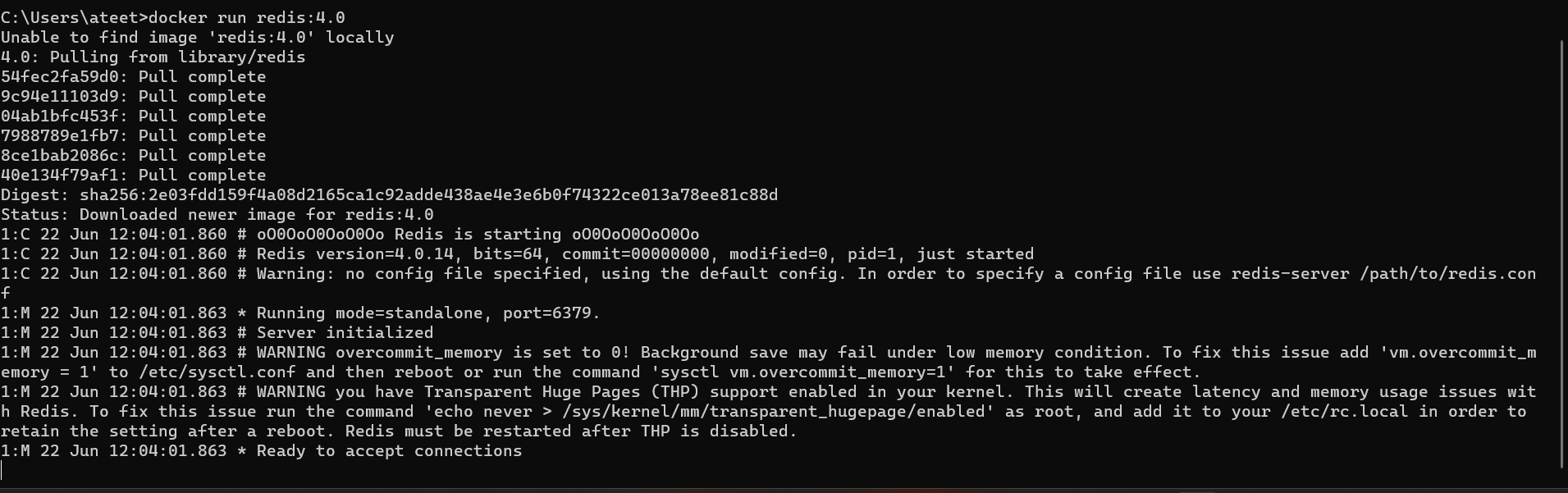
docker ps -a

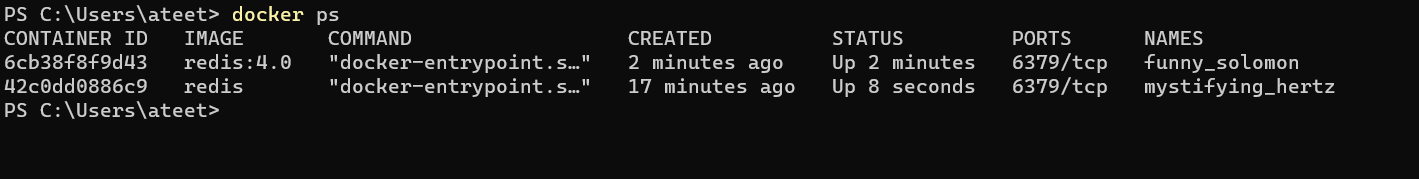


***To download an image of a specific version and run it parallely***

docker run {{image name}}:{{version number}}

example – docker run redis:4.0



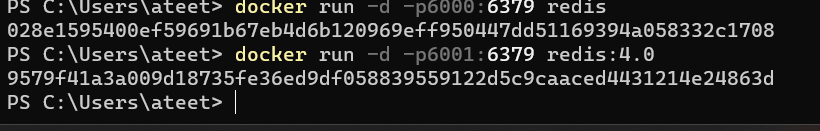


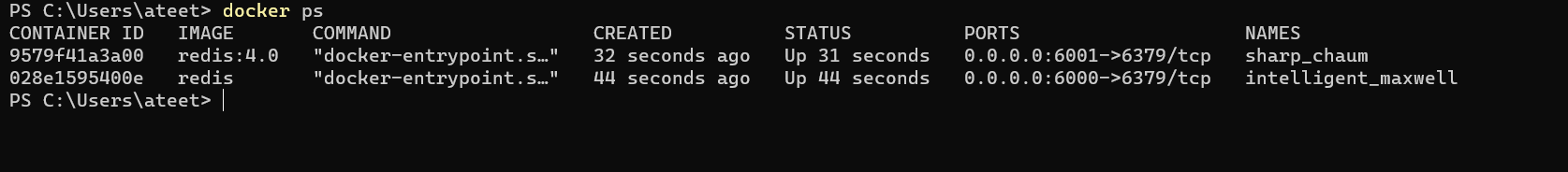
Notice 2 redis images of different versions are running

***Run a docker container from a different host port***

Example from host port 6000 to container port 6379

Example : docker run -p6000:6379 redis

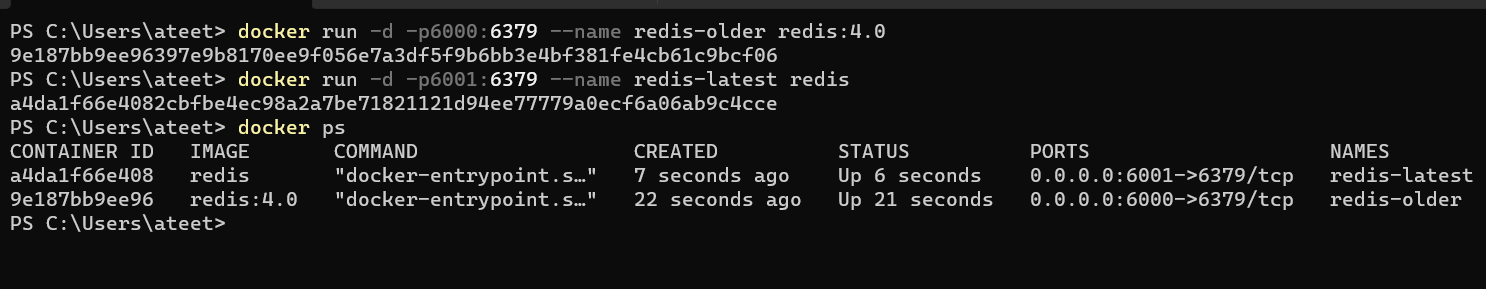




***Name a container with a specific name instead of random***

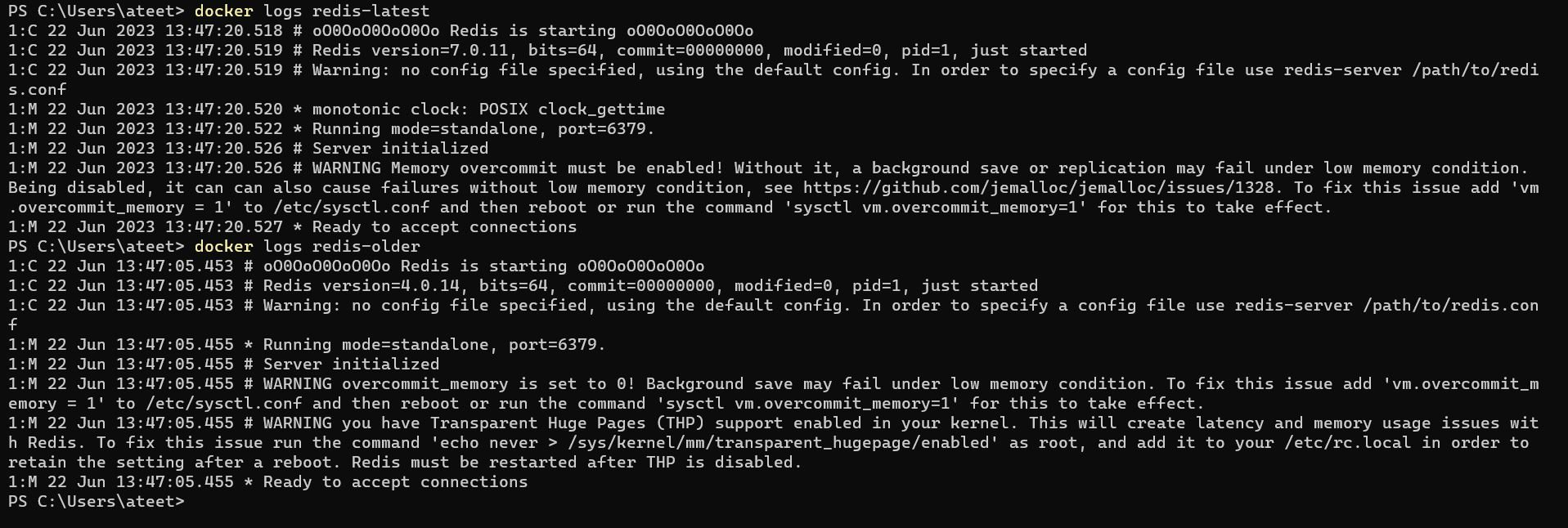
docker run --name {{name of container}} {{image}}

example : docker run -d -p6000:6379 --name redis-older redis:4.0



***Find logs related to a particular container***

docker logs {{container name}}

 example – docker logs redis-latest

***Run a command in a running container and get bit of information such as environment of the container***

docker exec -it {{container id or container name}} /bin/bash

example - docker exec -it a4da1f66e408 /bin/bash

