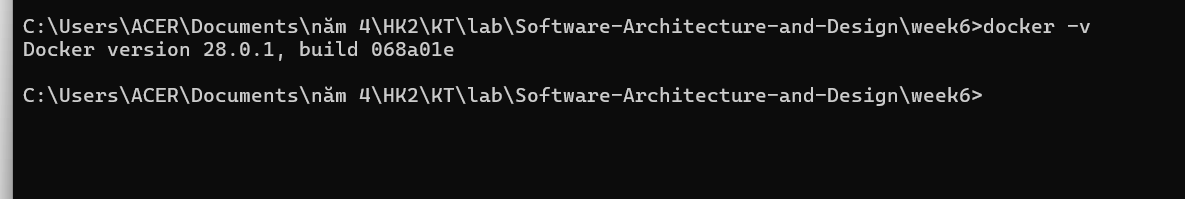
Ngô Văn Toàn – 21077971

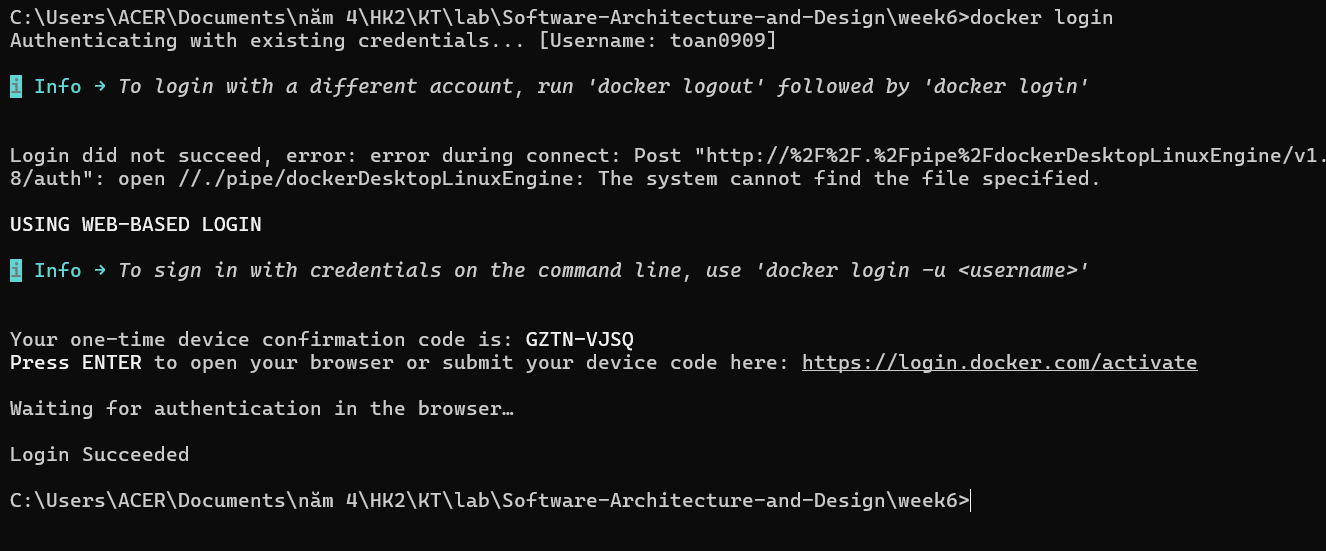
Week6: Thao tác với docker

**Phần 1: Các lệnh cơ bản thao tác với Docker**

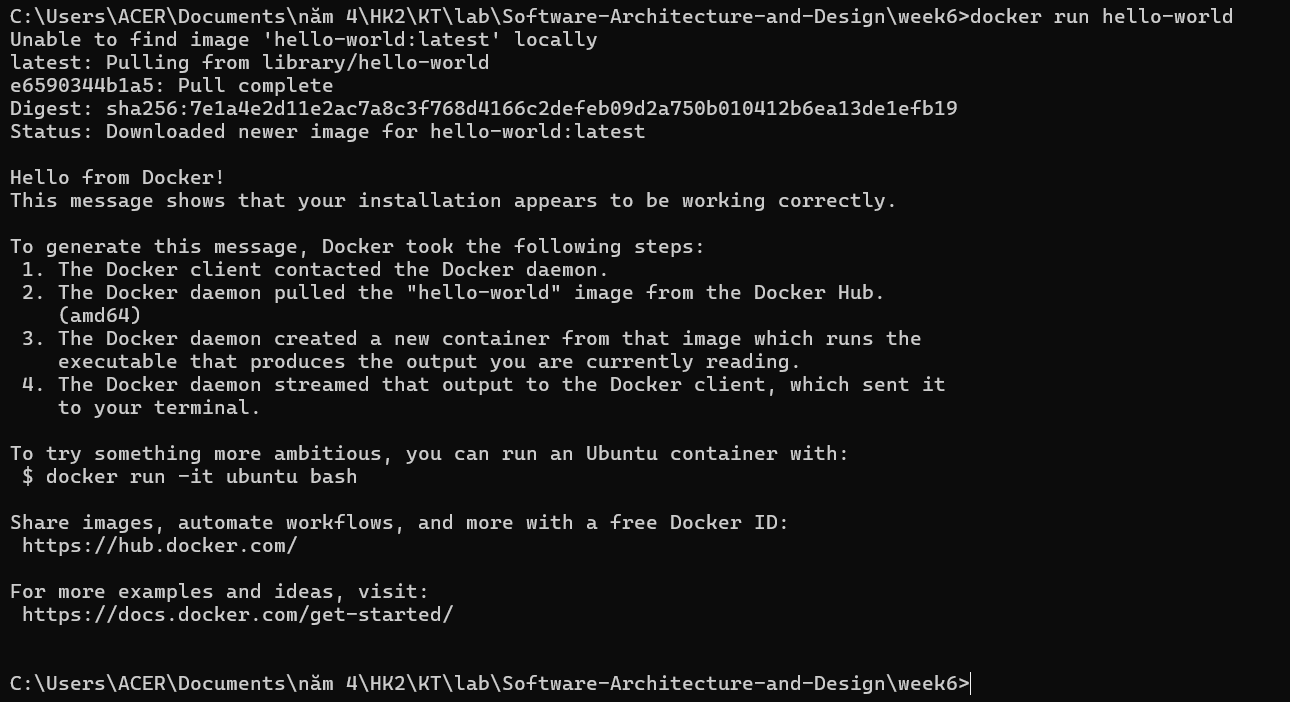
1. docker –v: Phiên bản docker đang dùng



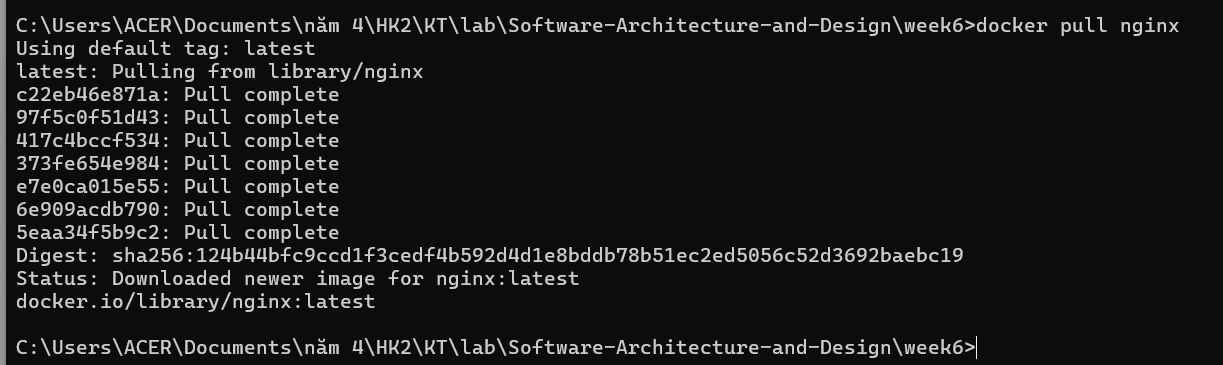
2. docker login



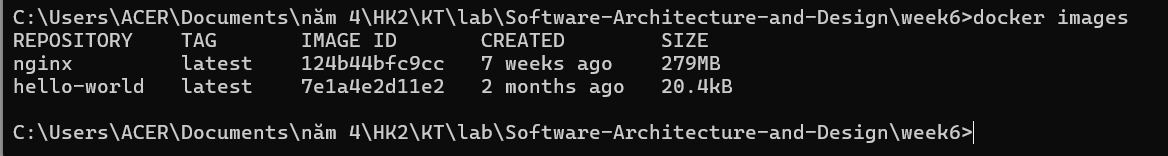
3. docker run hello-world

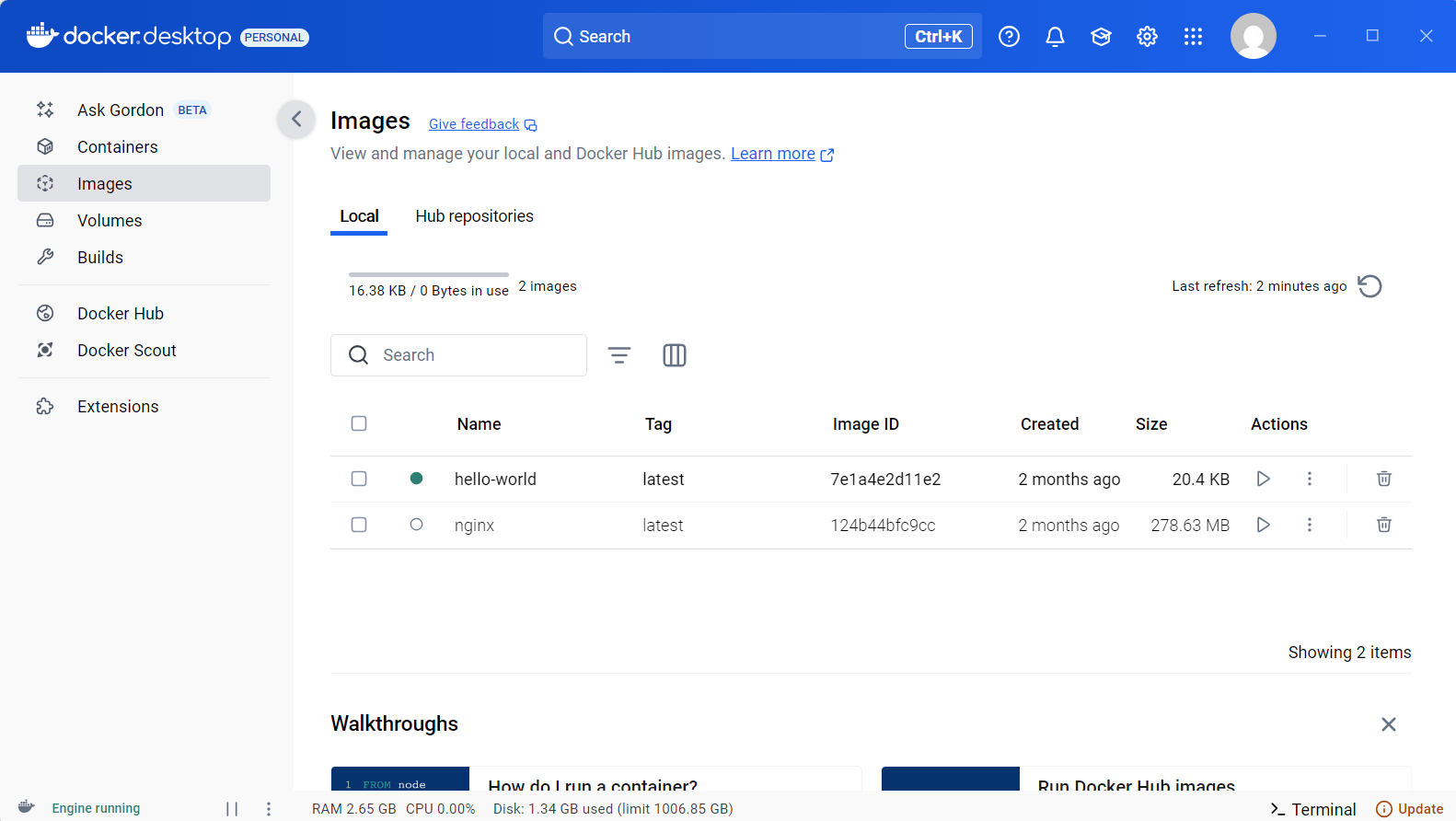


4. docker pull nginx

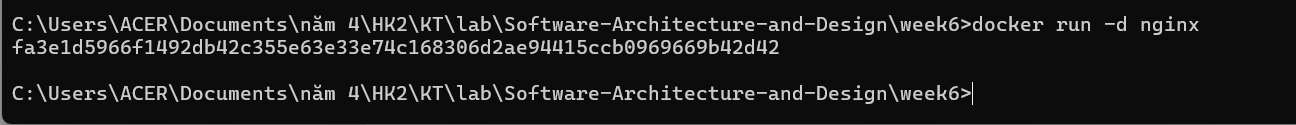


5. docker images

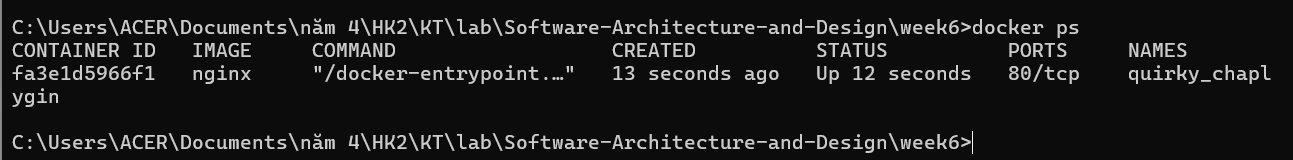




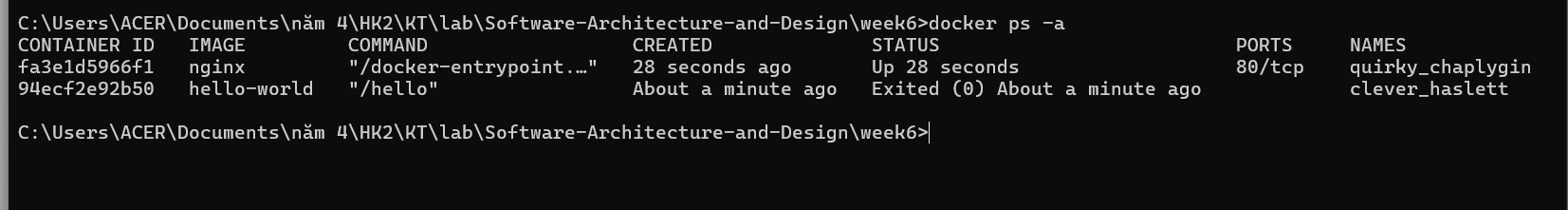
6. docker run -d nginx



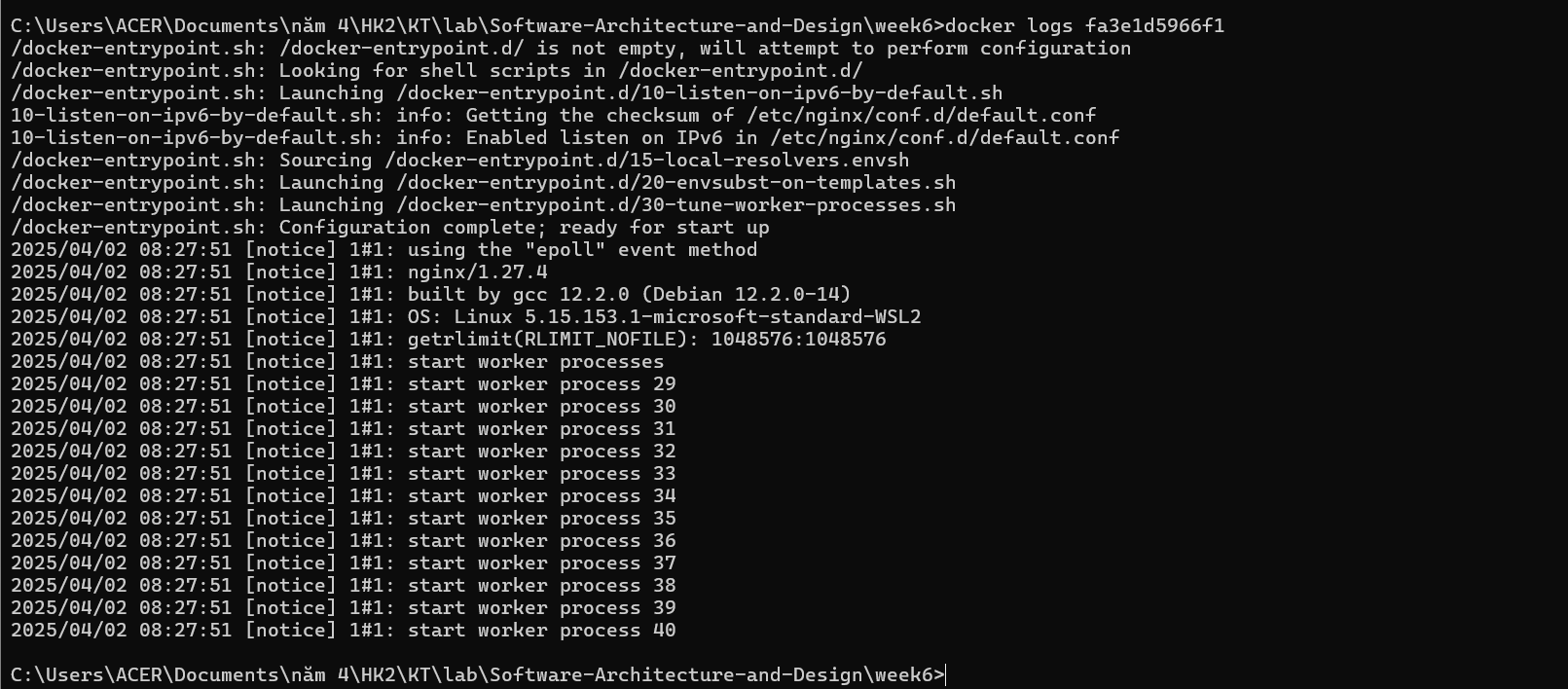
7. docker ps



8. docker ps -a

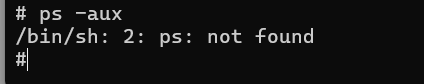


9. docker logs <Id\_container>

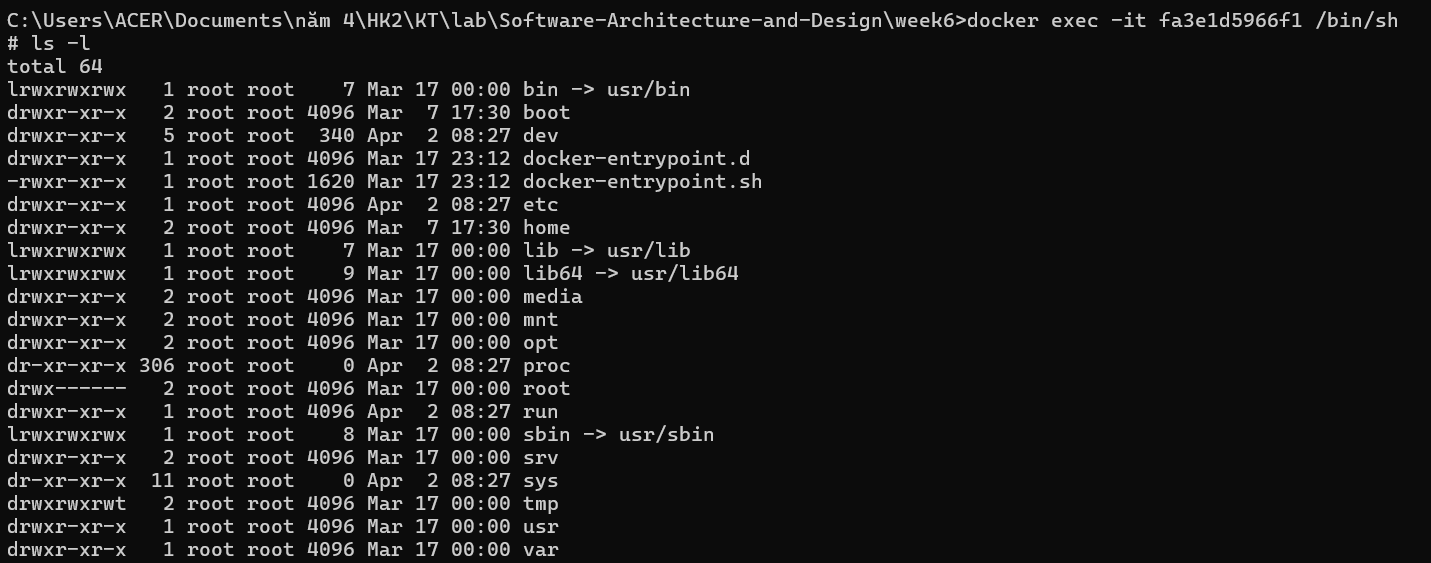


10. docker exec –it 8a87af9c60b5 /bin/sh

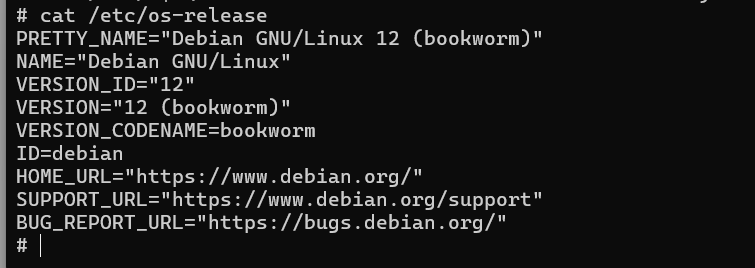
chạy lệnh ps aux: để xem các container đang chạy



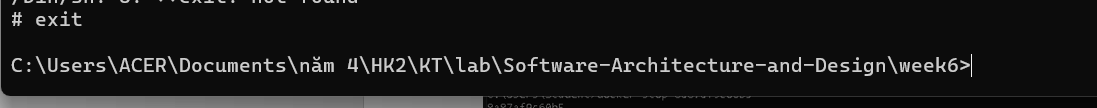
Ls –l: để xem các thư mục trong container



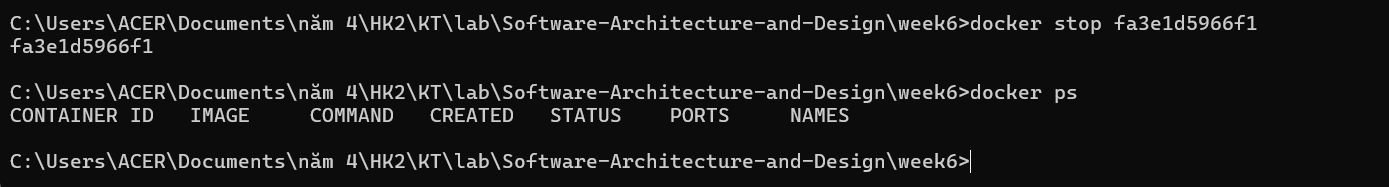
cat /etc/os-release: Kiểm tra phiên bản hệ điều hành trong container



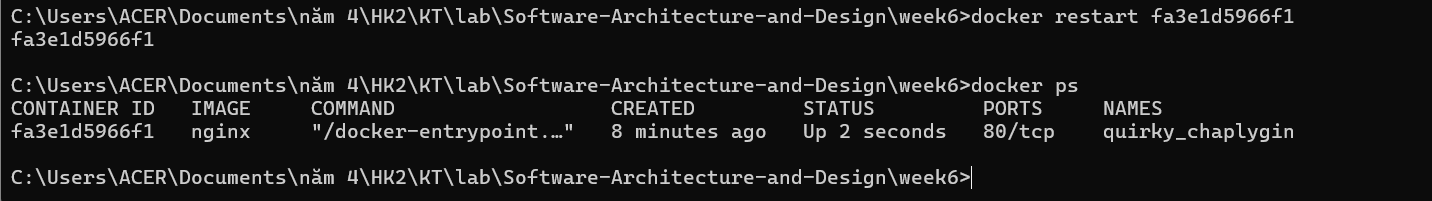
exit: thoát



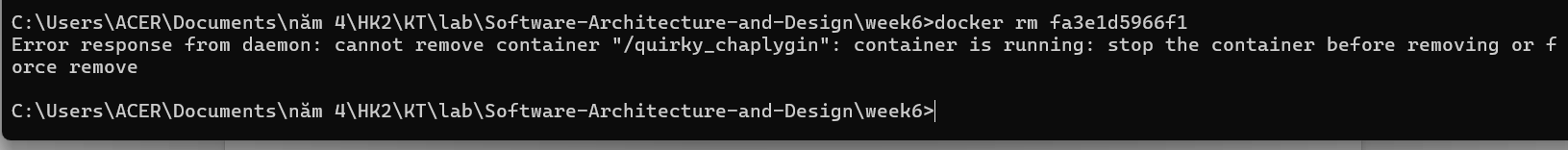
11. docker stop <id\_container>: dừng 1 container đang chạy



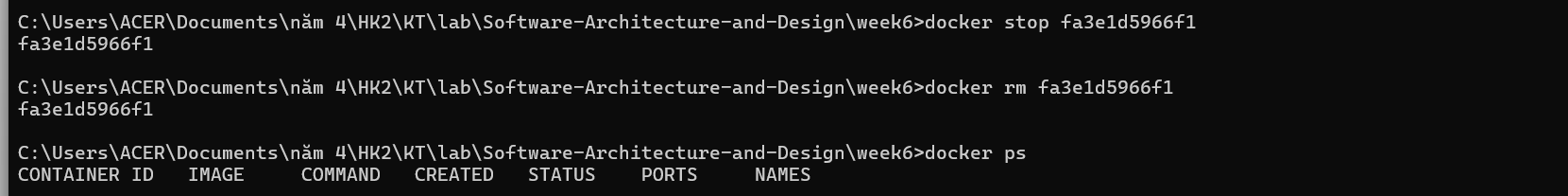
12. docker restart <id\_container>

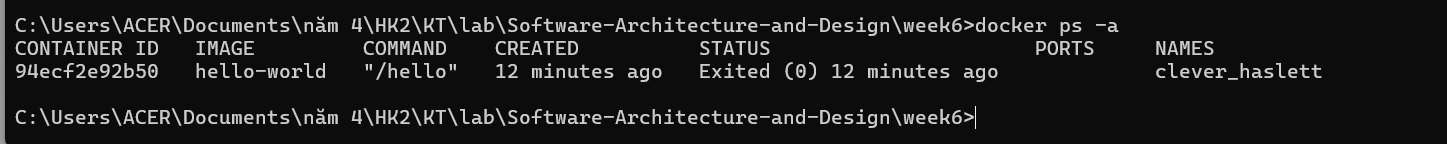


13. docker rm <id\_container>

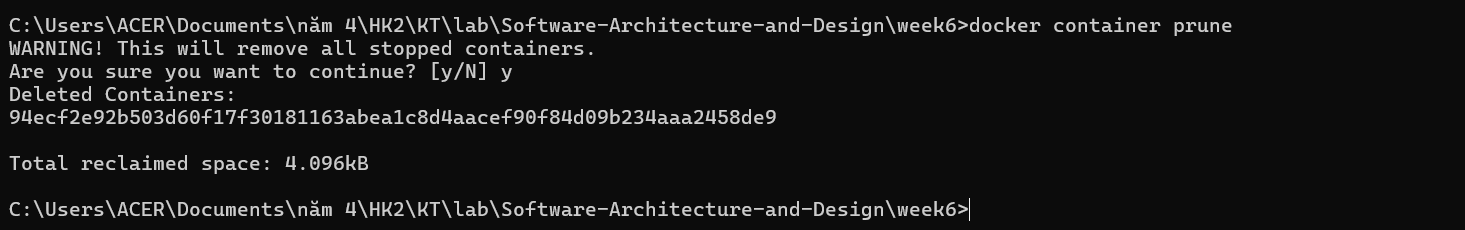


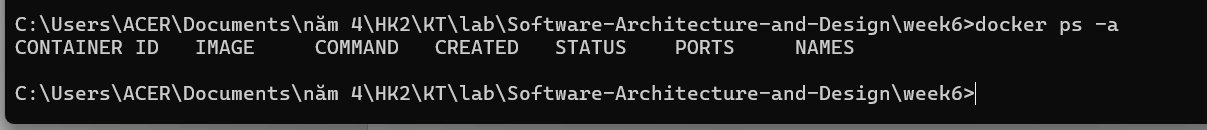
Không thể xóa: thức hiện dừng sau đó chạy lại lệnh xóa





14. docker container prune





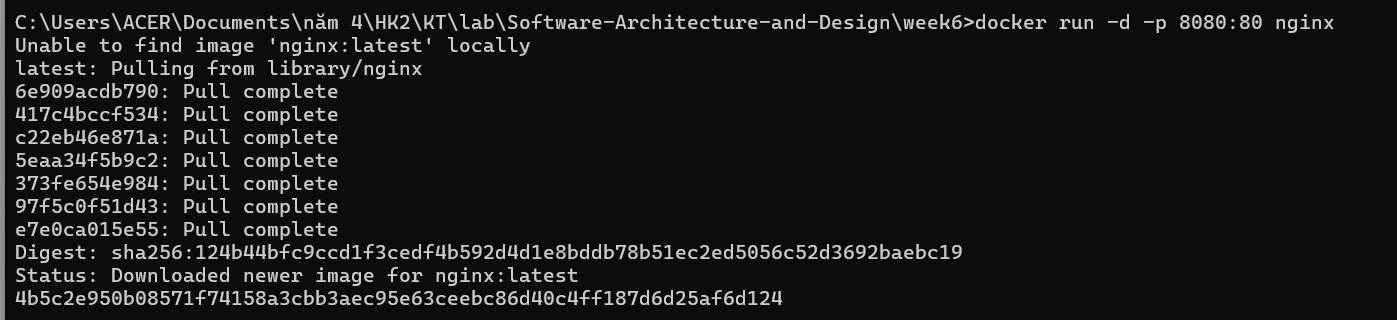
docker rmi <image\_id>

15. docker image prune -a

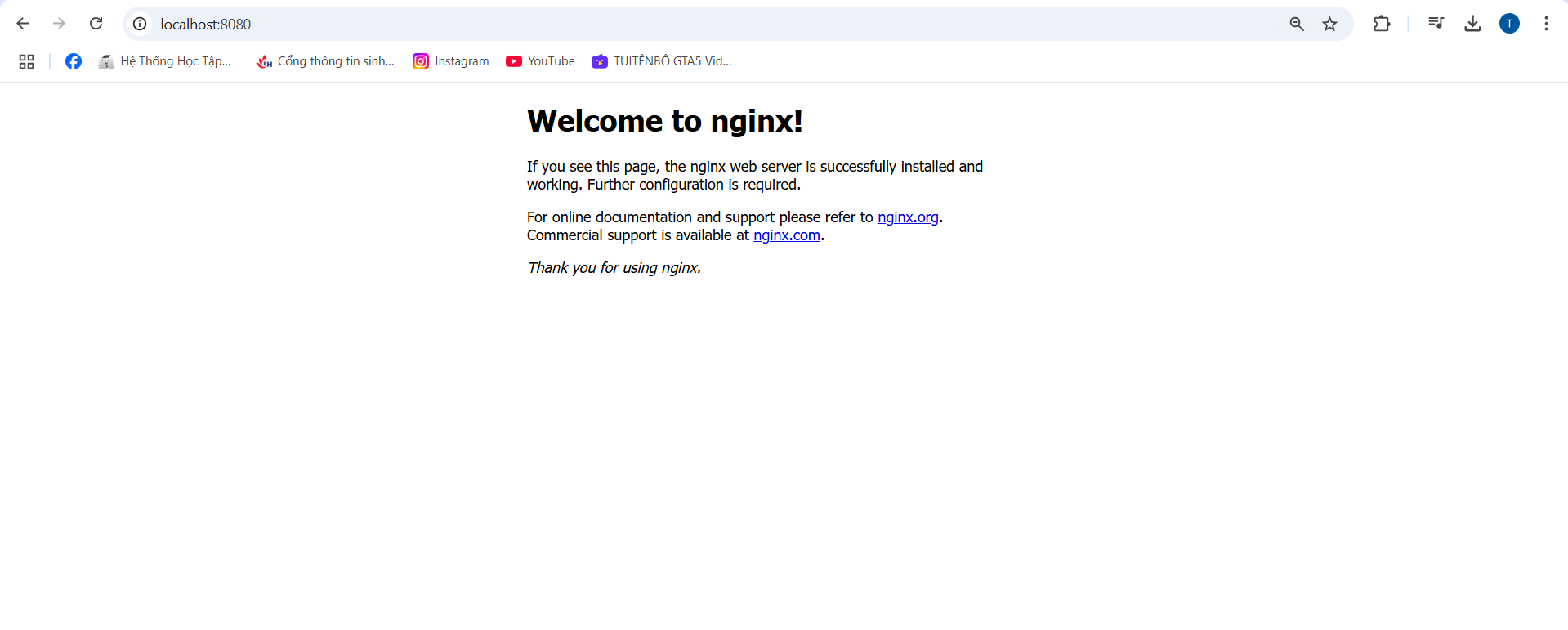


16. docker run -d -p 8080:80 nginx

Chạy container nginx ở chế độ nền và ánh xạ cổng 8080 của máy host vào cổng 80 của container.

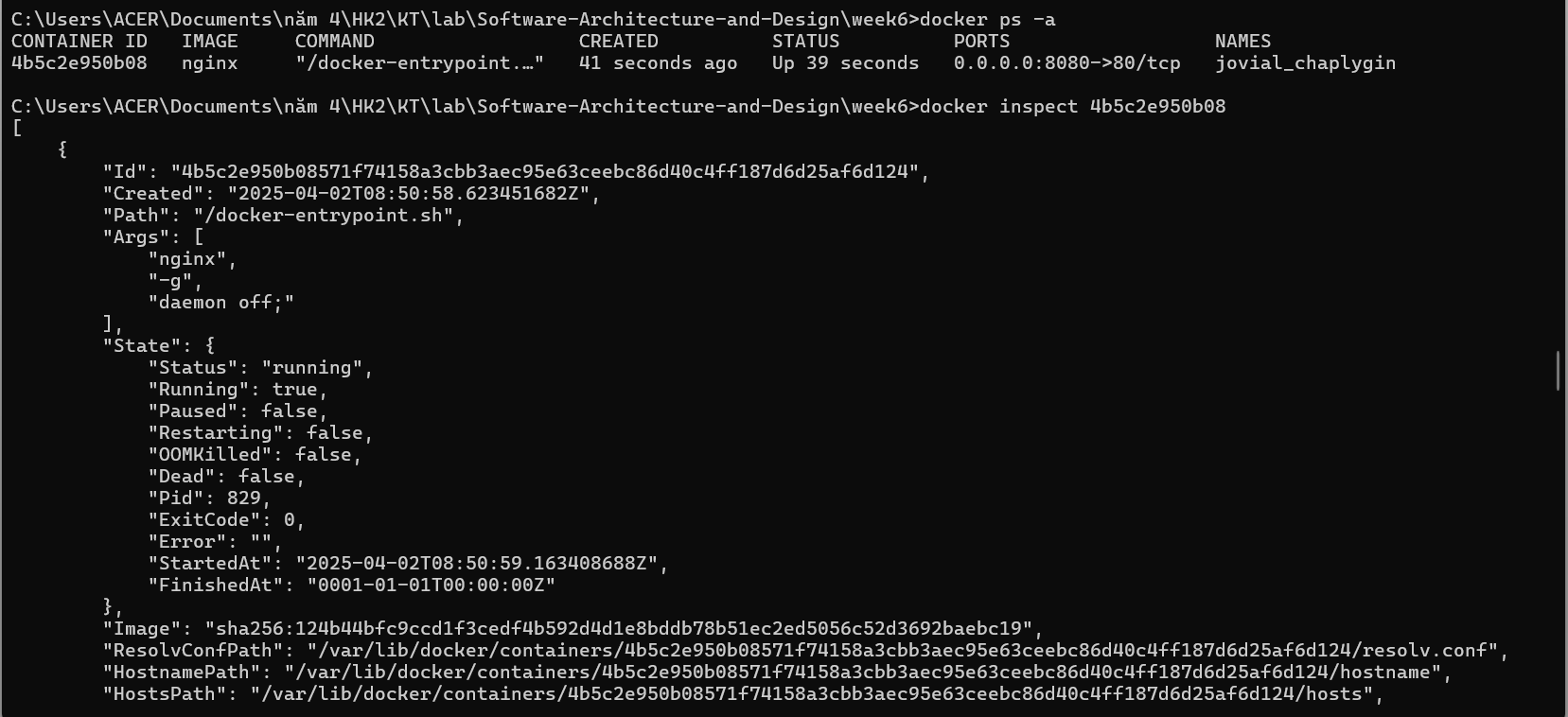


Test



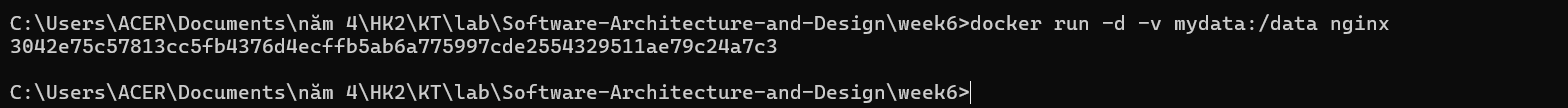
17. docker inspect <container\_id>

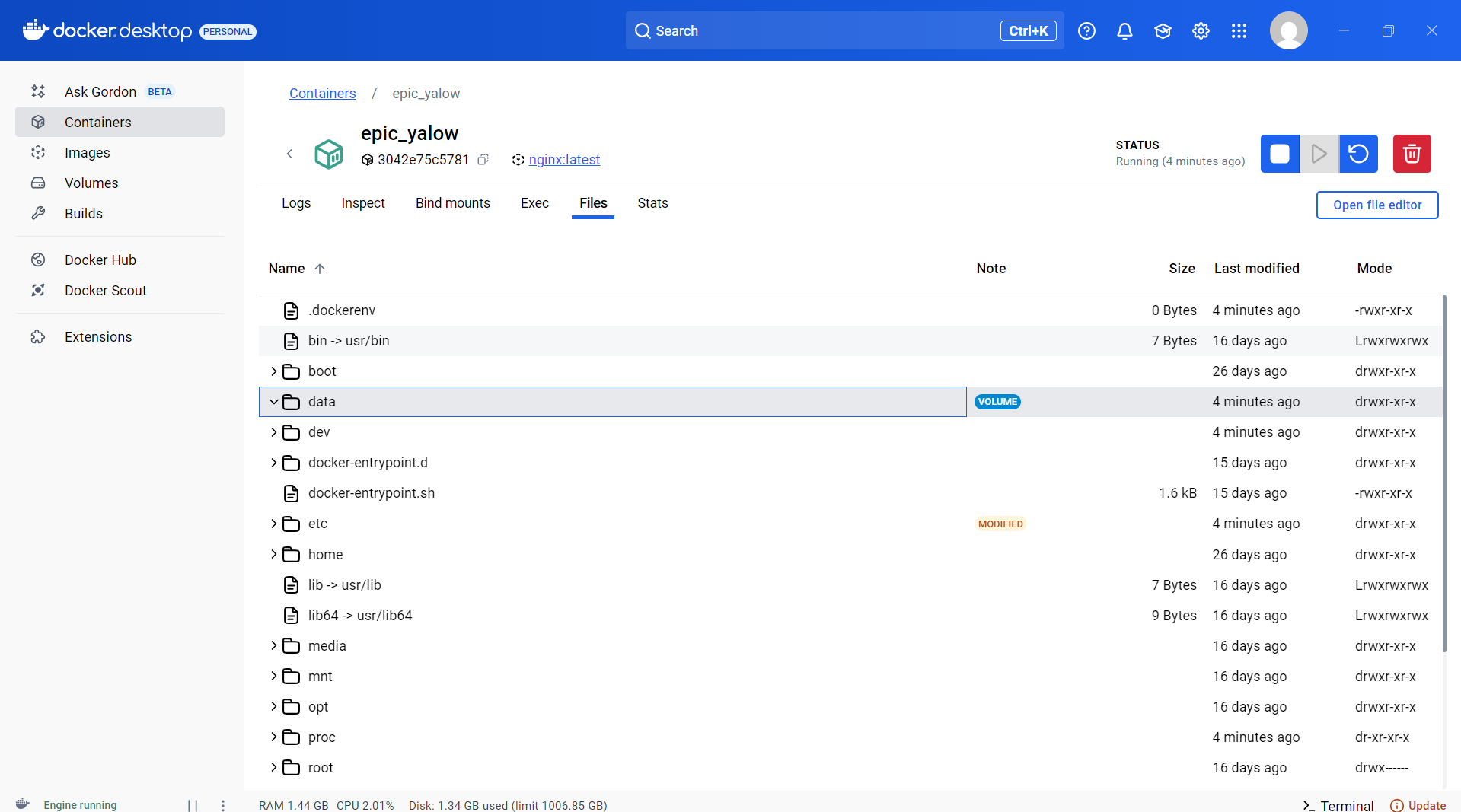
Xem thông tin chi tiết của 1 container



18. docker run -d -v mydata:/data nginx

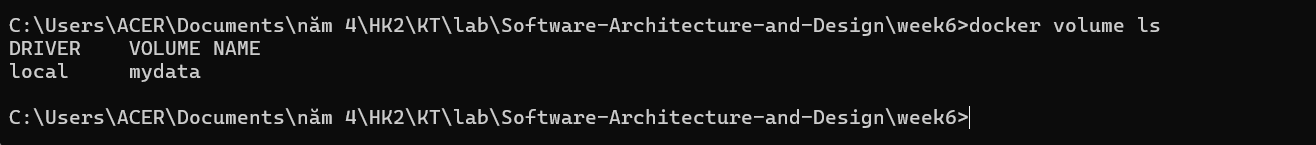
Chạy container nginx và gắn volume mydata vào thư mục /data trong container. (cũng như là tạo folder data trong container nginx ở dạng volume)

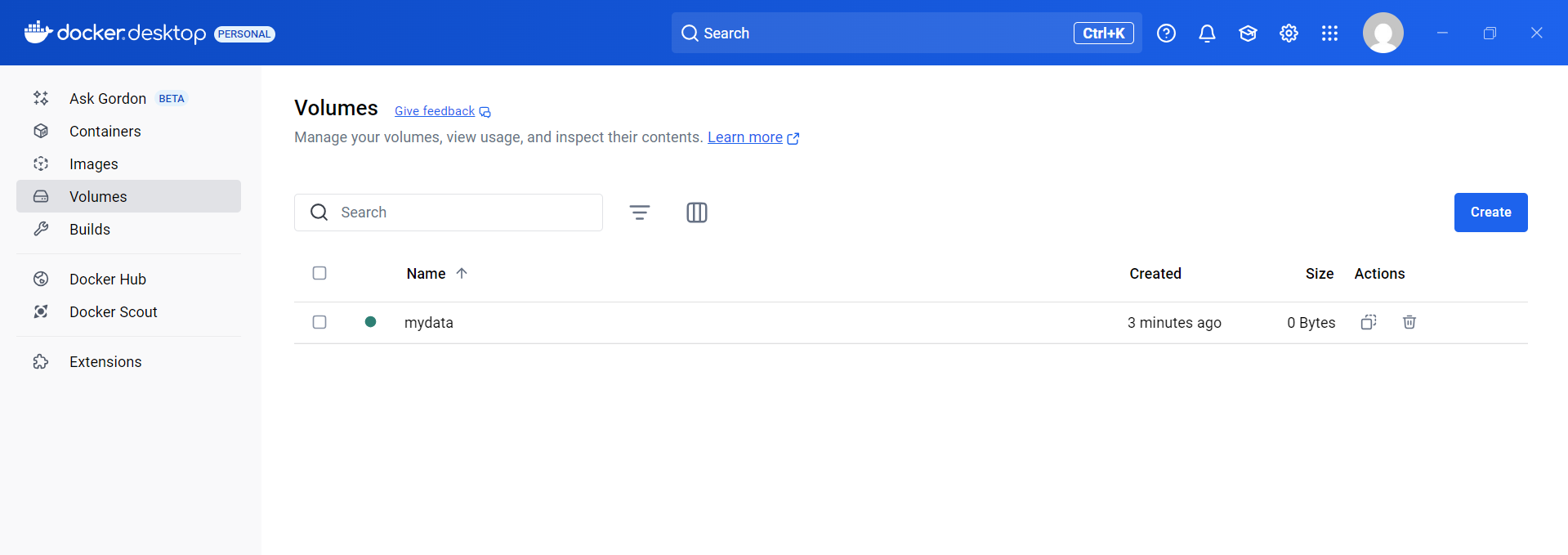




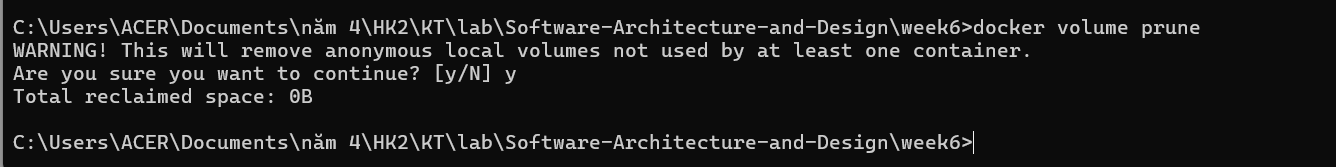
19. docker volume ls

Liệt kê tất cả các volumes.



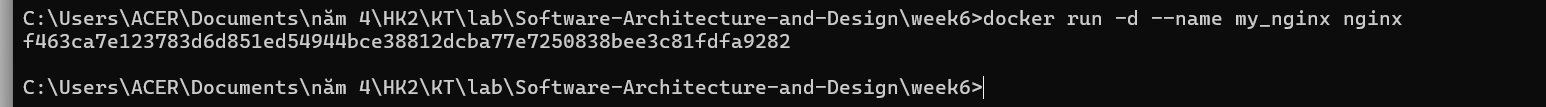


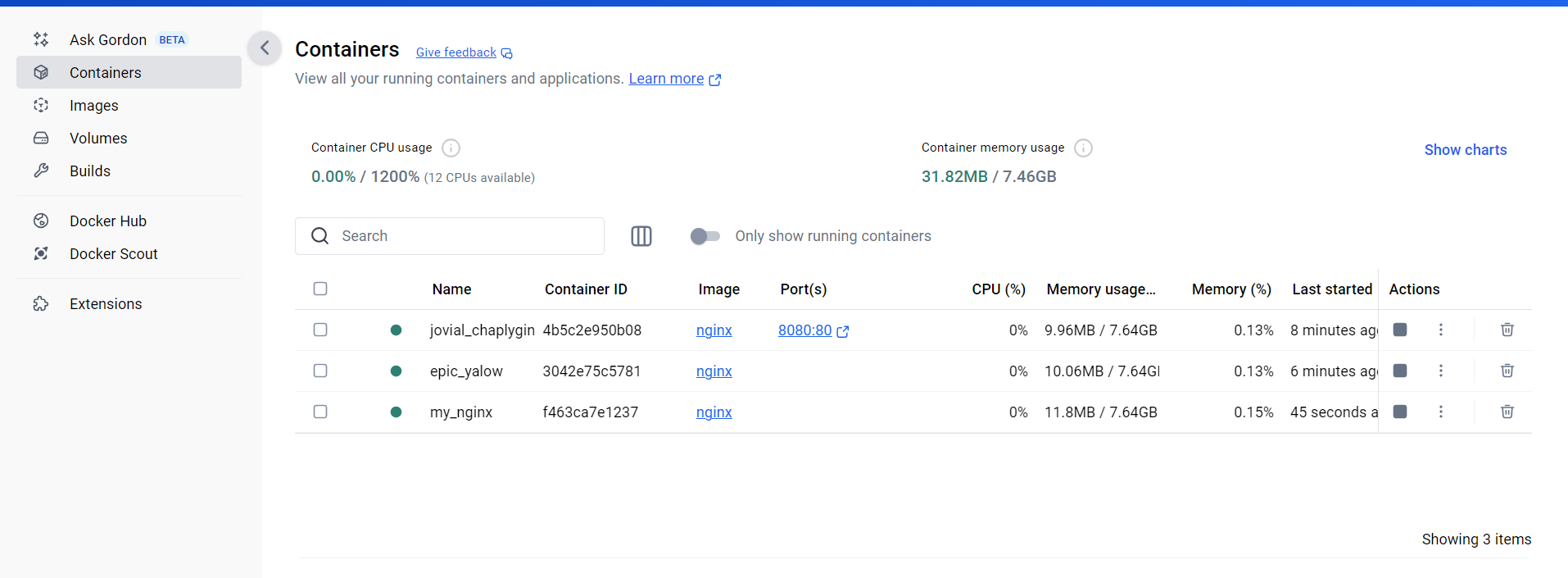
20. docker volume prune: Xóa tất cả volumes không được sử dụng



21. docker run -d --name my\_nginx nginx

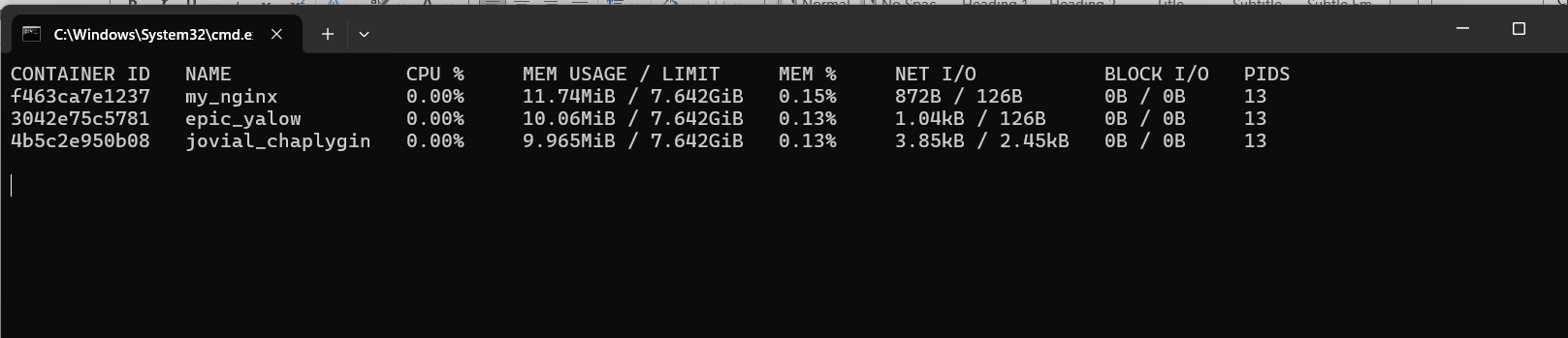
Chạy container với tên my\_nginx





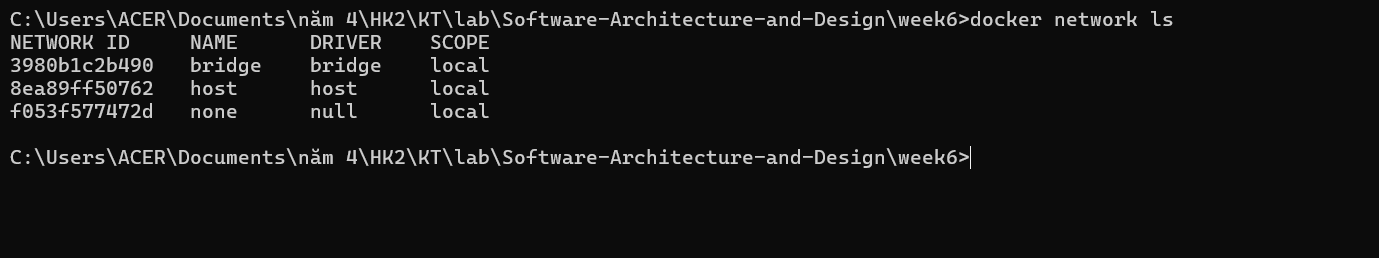
22. docker stats

Hiển thị thông tin thống kê tài nguyên của các container đang chạy



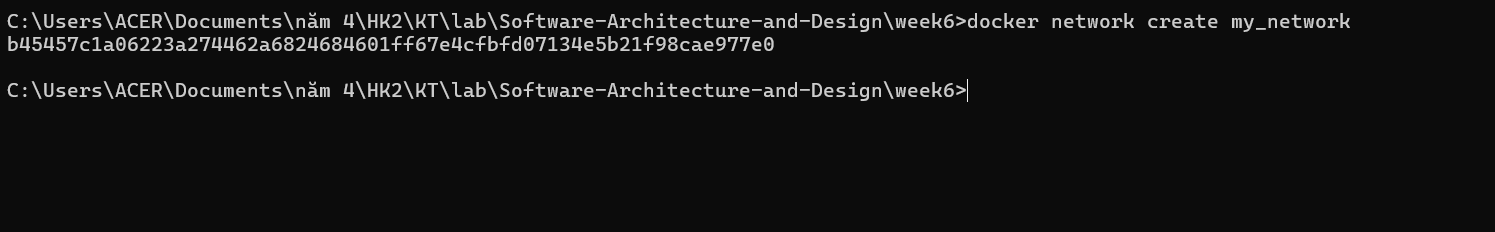
23. docker network ls

Hiển thị tất cả networks trong Docker

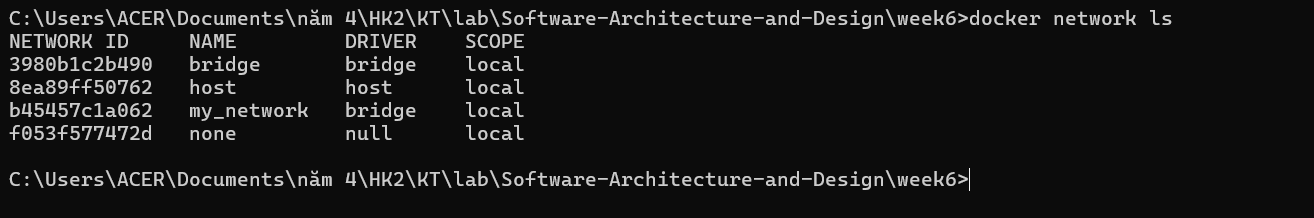


24. docker network create my\_network

Tạo docker network

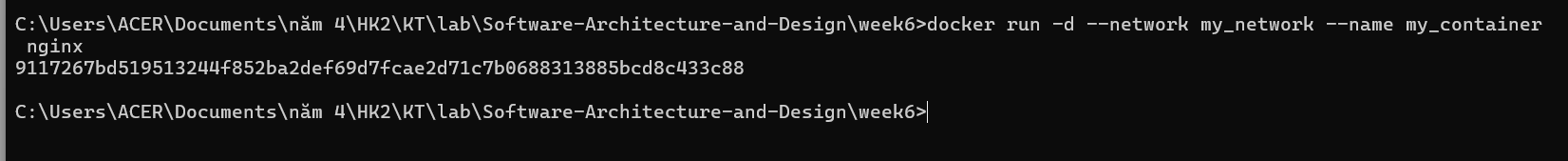


Kiểm tra



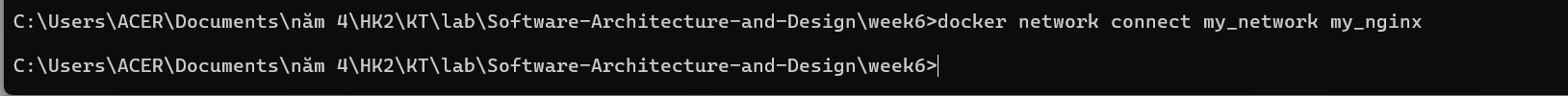
25. docker run -d --network my\_network --name my\_container nginx

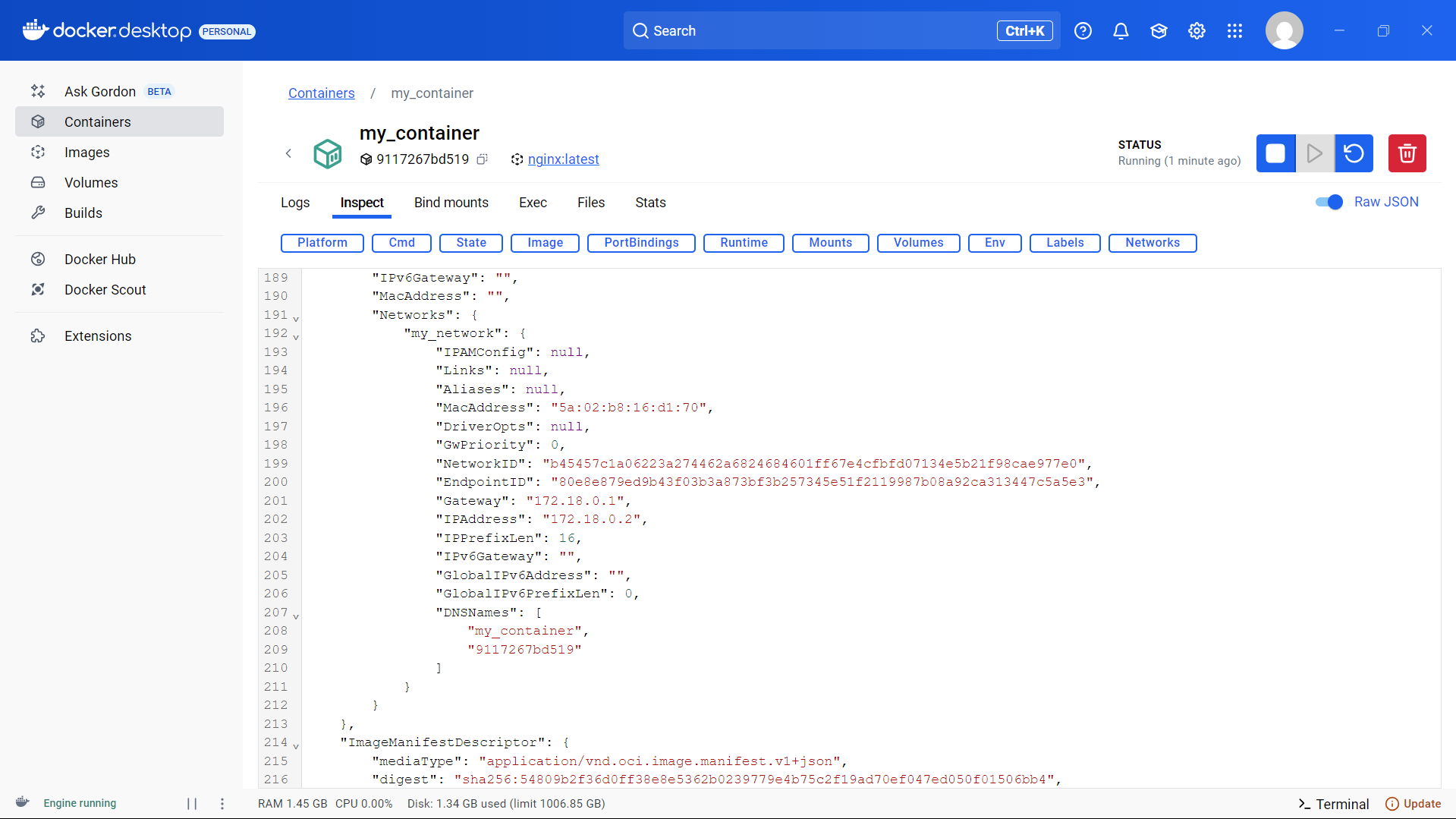
Chạy container nginx và kết nối vào network my\_network



26. docker network connect my\_network my\_nginx

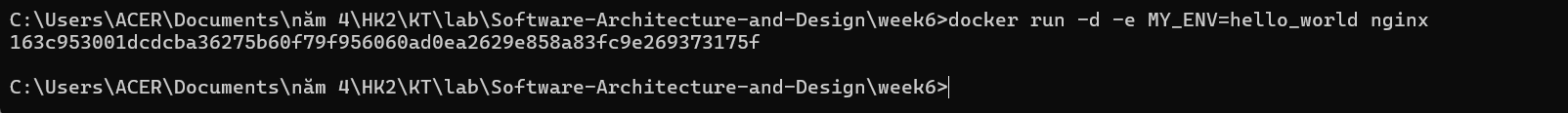
Chạy container nginx và kết nối nó vào network my\_network

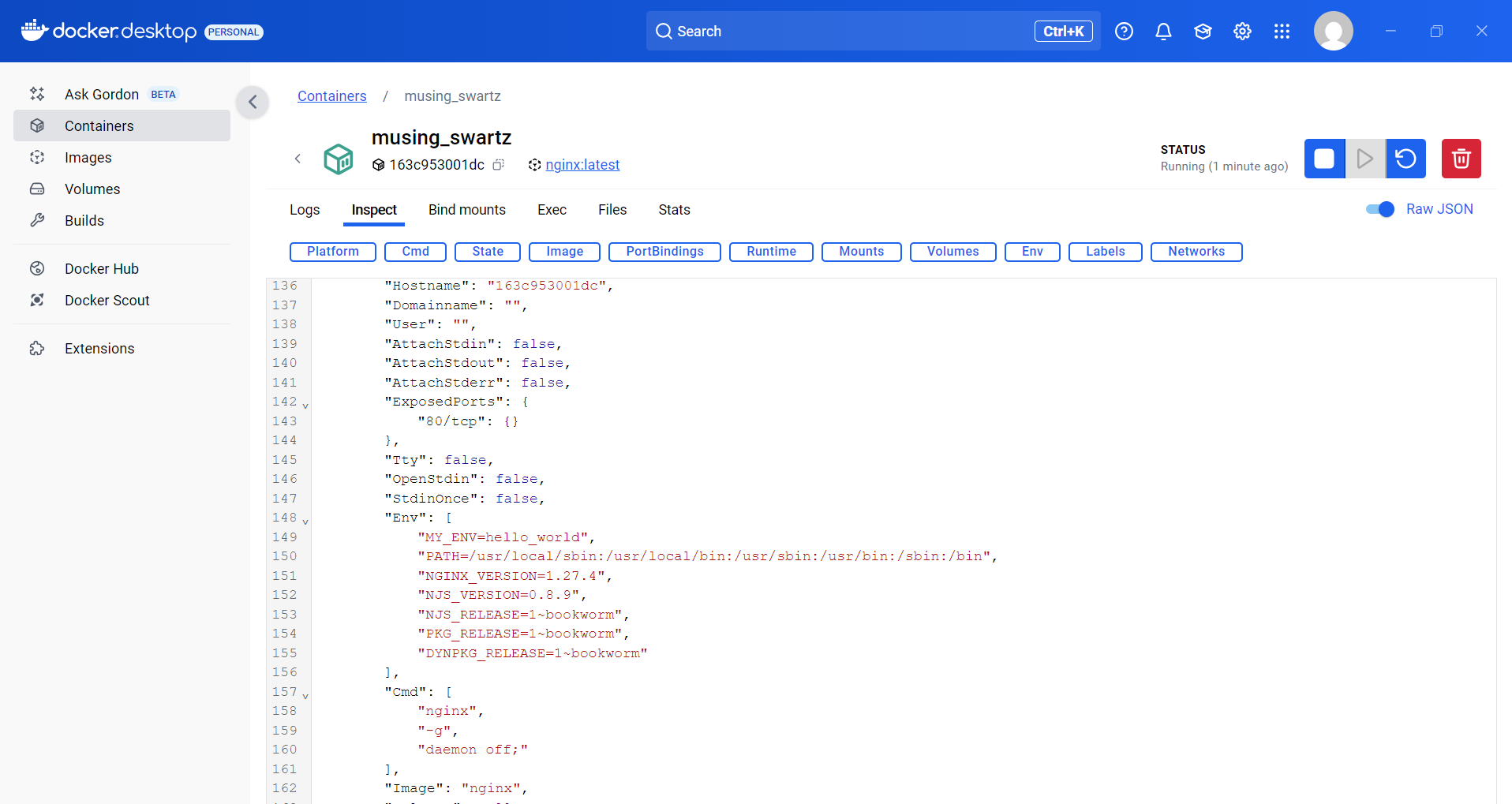




27. docker run -d -e MY\_ENV=hello\_world nginx

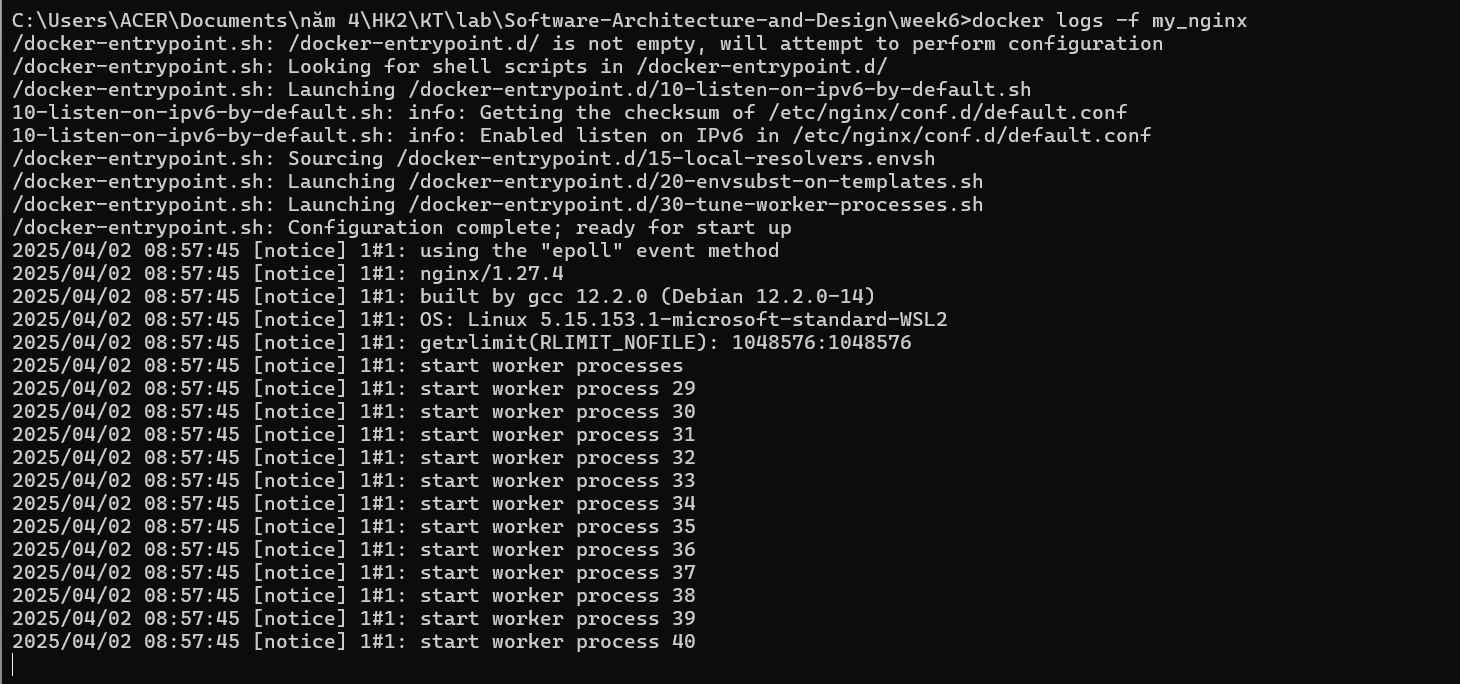
Chạy container nginx với biến môi trường MY\_ENV có giá trị hello\_world





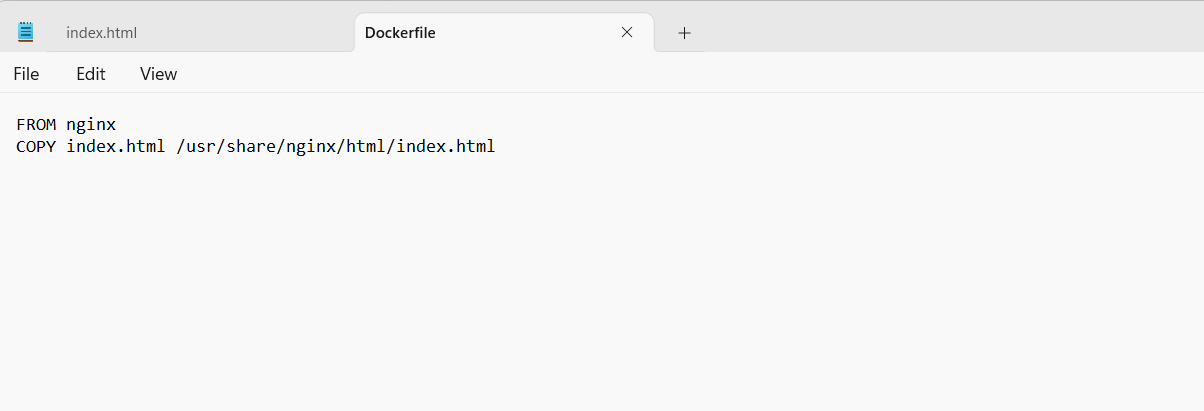
28. docker logs -f my\_nginx

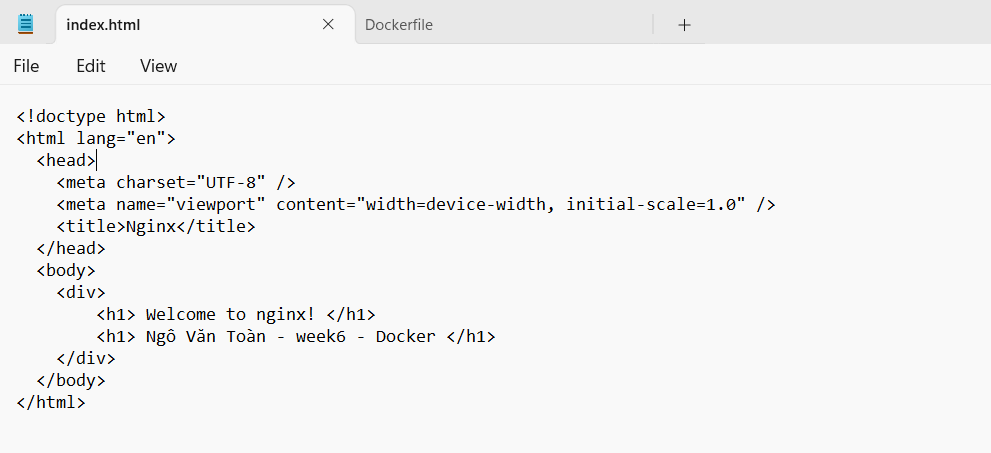
Xem logs của container với thoi gian thực



29. FROM nginx

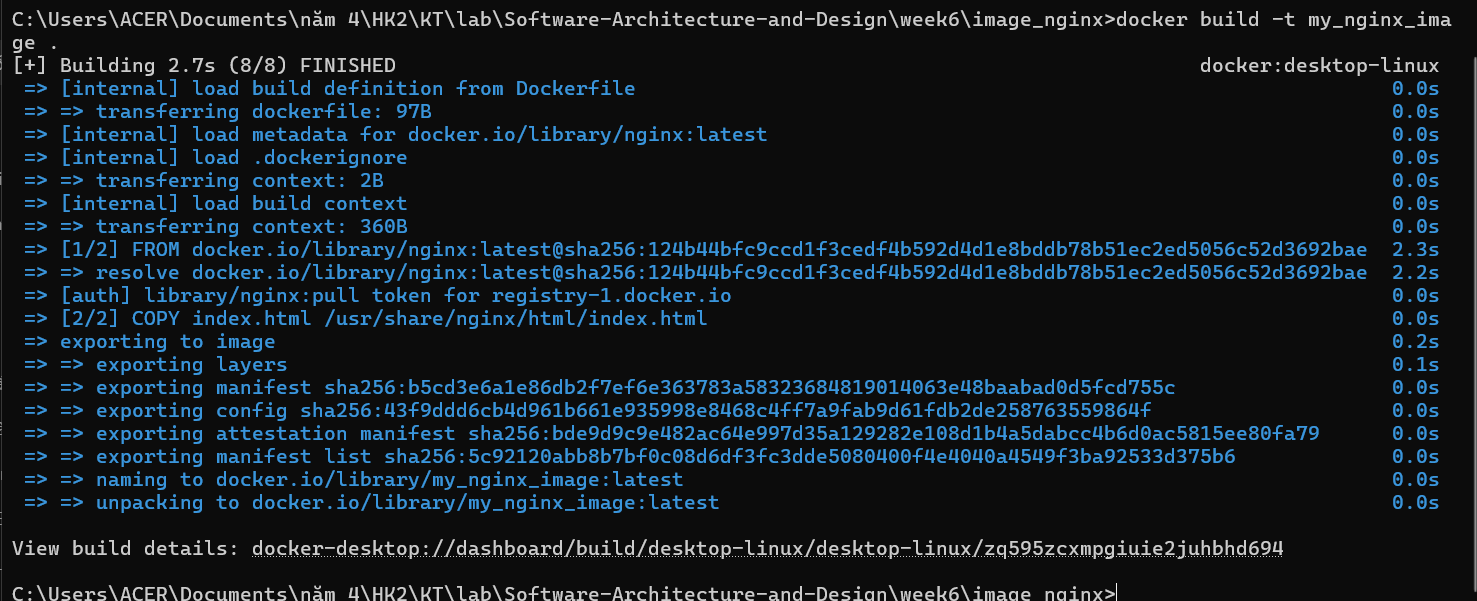
30. COPY index.html /usr/share/nginx/html/index.html





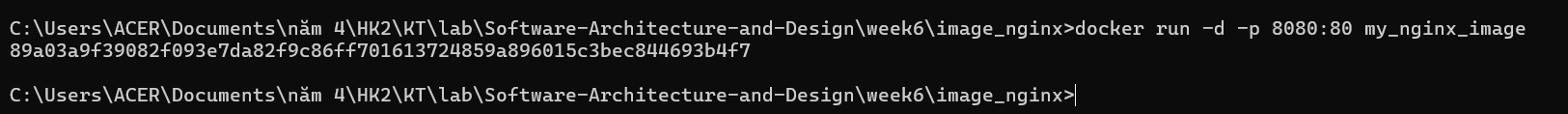
31. docker build -t my\_nginx\_image .

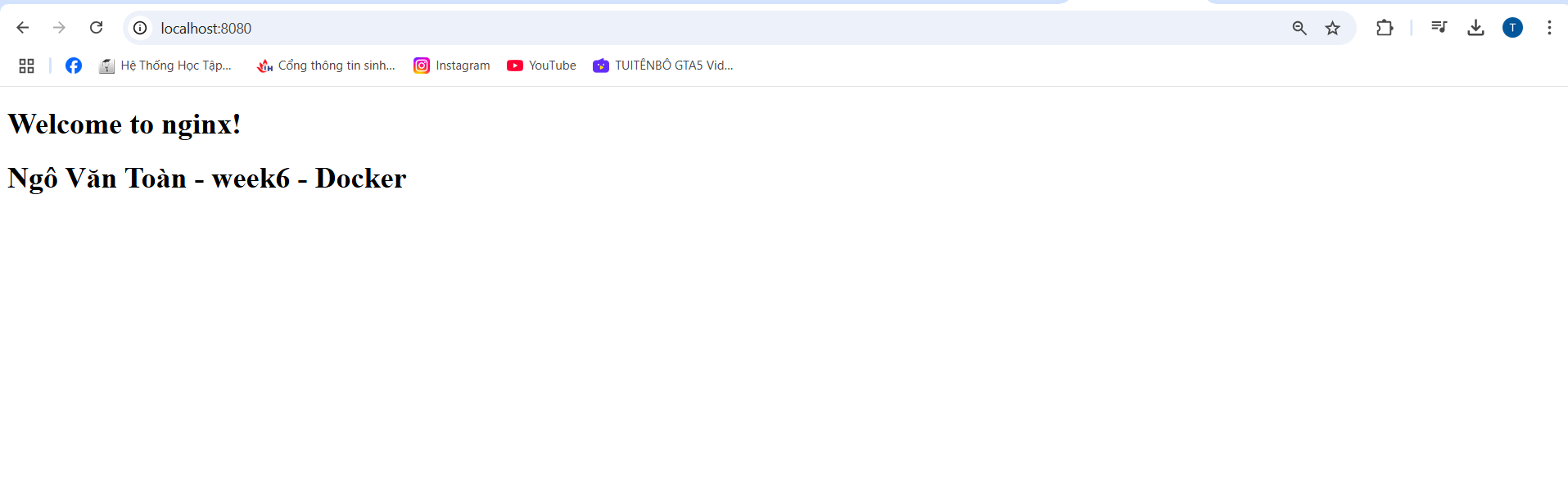
Build image từ Dockerfile với tên my\_nginx\_image.



32. docker run -d -p 8080:80 my\_nginx\_image

Chạy container từ image my\_nginx\_image và ánh xạ cổng 8080 của máy host vào cổng 80 của container.





**Phần 2: Thao tác với Dockerfile**

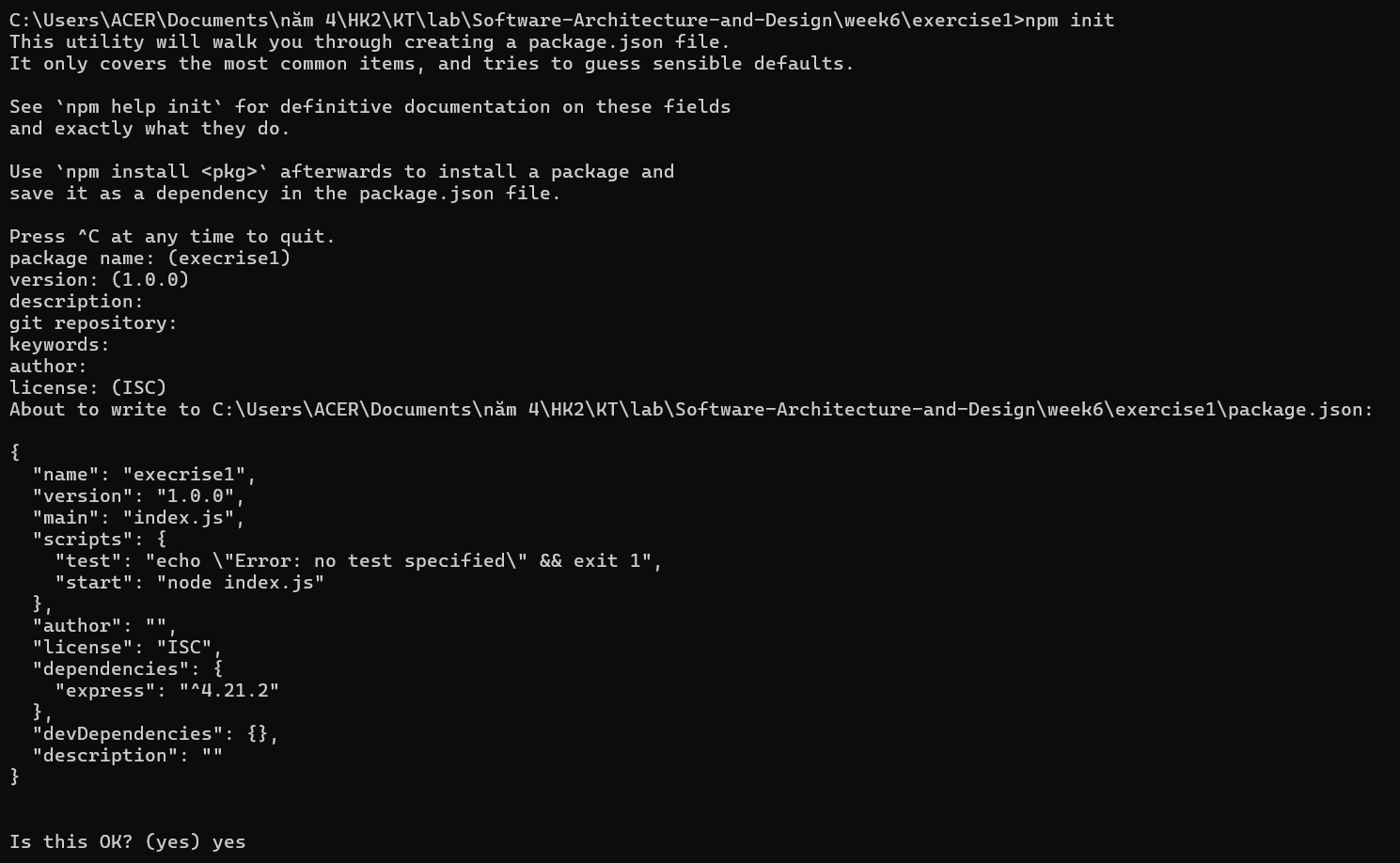
Bài 1: Tạo Dockerfile chạy một ứng dụng Node.js đơn giản

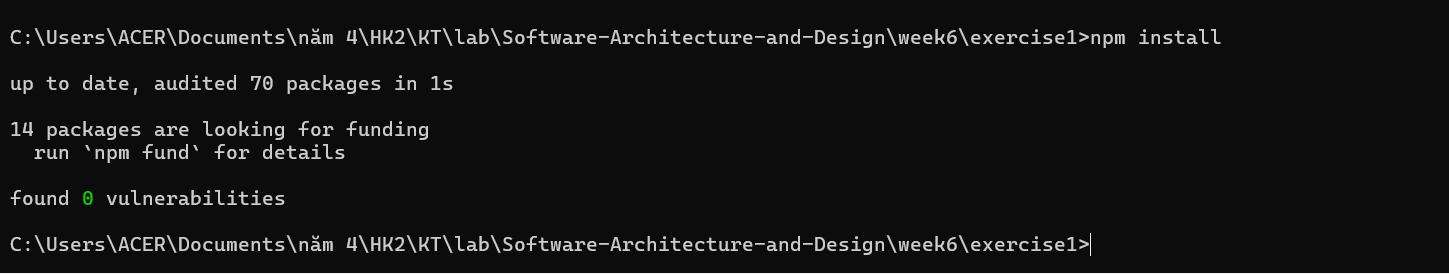
Yêu cầu:

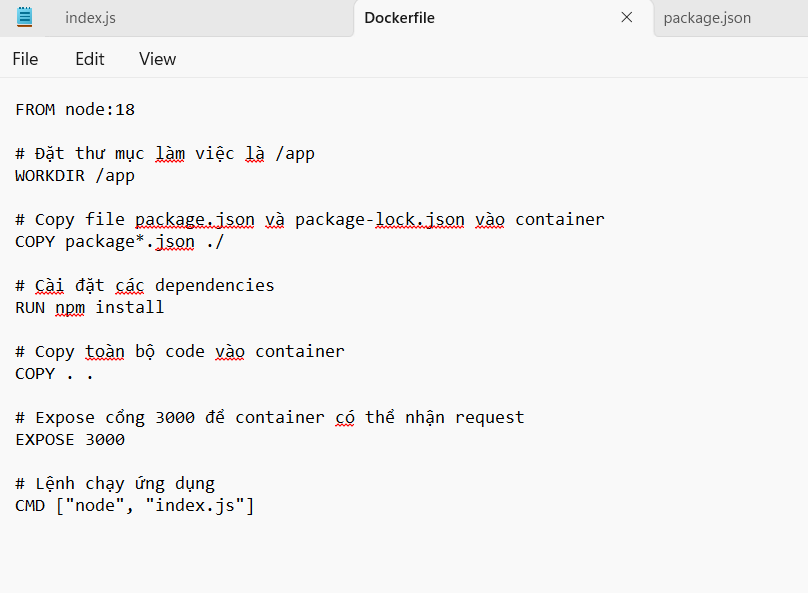
Viết Dockerfile để chạy một ứng dụng Node.js hiển thị "Hello, Docker!" trên cổng 3000.

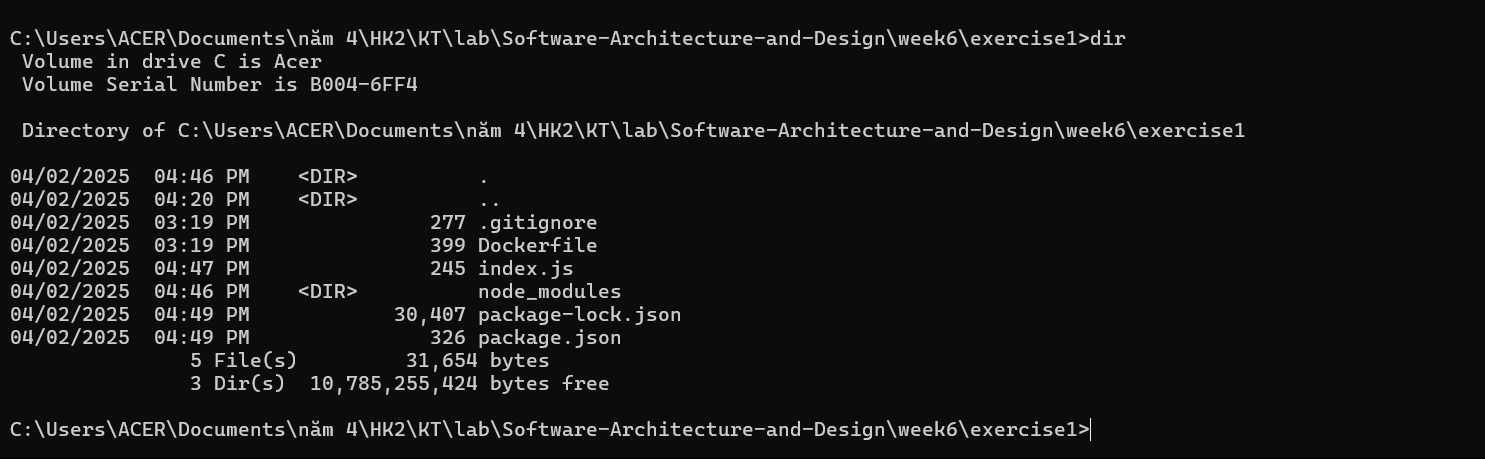
Sử dụng node:18 làm base image.

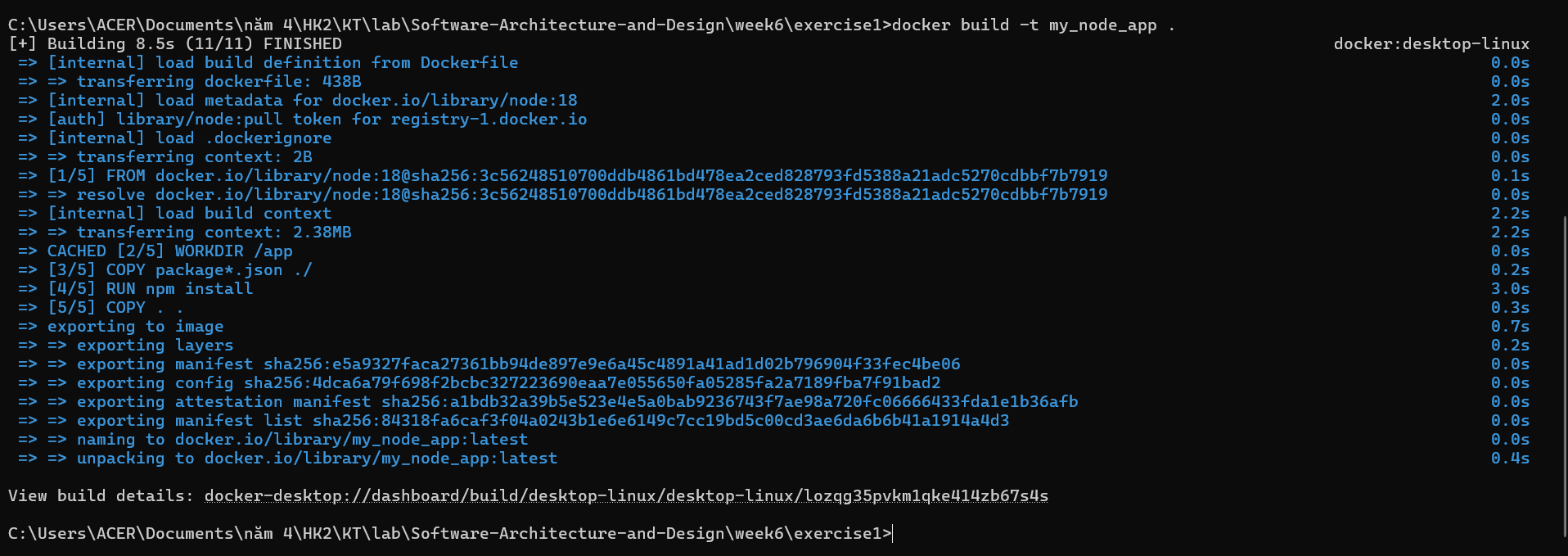
Tạo thư mục và package.json project



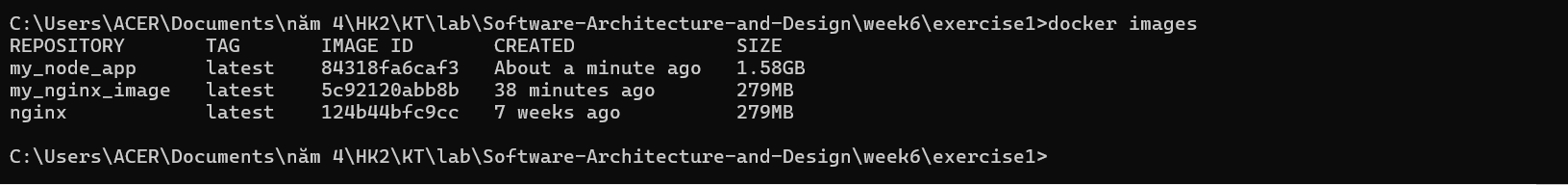




Build: docker build -t my\_node\_app .



Kiểm tra image đã tồn tại chưa



Chạy: docker run -d -p 3000:3000 my\_node\_app

