Intro to Docker:

What is Docker?

Docker is an open-source platform that allows for developing, running, testing, and deploying applications in an isolated environment called a container.

What is it?
Docker is an open platform for developing, shipping, and running applications.
What Does it do?

- *Docker Virtualizes the Operating System.*
- *Docker allows you to create containers that are like micro computers that are lightweight and fast.*
- *They are also isolated/separated from other containers, so that if one falters; it won't affect the others.*

Why Docker?

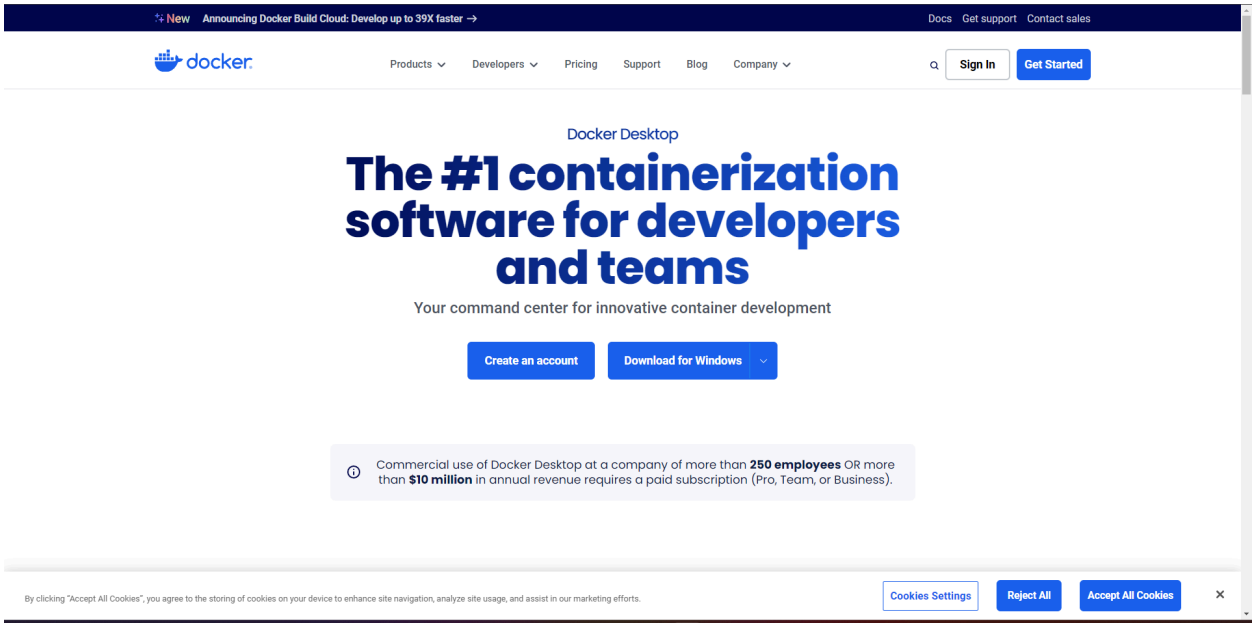
Benefits of Using Docker

1. **Consistency and Portability:** Docker containers provide a consistent and portable environment that ensures applications run the same way across different platforms and environments.
2. **Isolation and Security:** Docker containers isolate applications and their dependencies, reducing the risk of conflicts and vulnerabilities.
3. **Scalability and Resource Efficiency:** Docker allows for easy scaling of applications by quickly creating and deploying multiple containers, while also optimizing resource usage.
4. **Fast and Reliable Deployment:** Docker enables fast and reliable deployment of applications, with the ability to roll back to previous versions if needed.
5. **Collaboration and Reproducibility:** Docker simplifies collaboration among development teams and ensures that applications can be reproduced exactly as they were during development and testing.

Step 1: Installing Docker

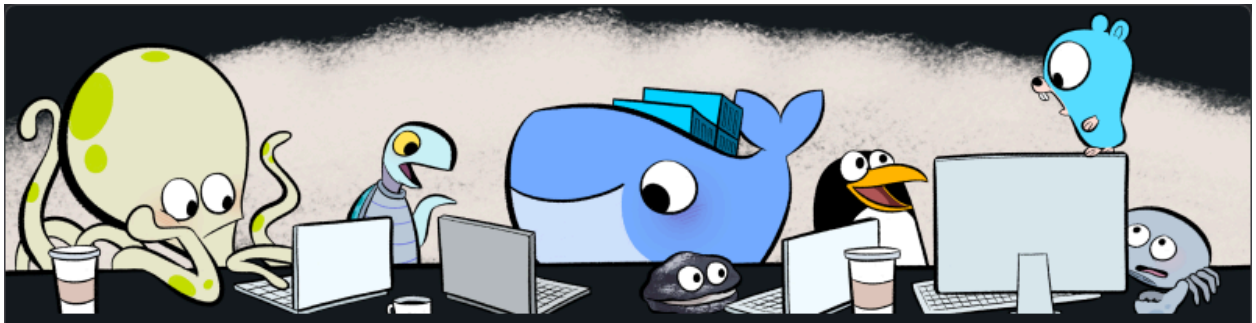
Method 1: Docker Desktop (Windows/Mac)

1. Go to the Docker website: https://www.docker.com/products/docker-desktop.



2. Download Docker Desktop for your operating system (Windows or Mac).
3. Double-click the downloaded installer to begin the installation process.

4. Follow the prompts in the installer to complete the installation.
5. Once installed, Docker Desktop should be running, usually indicated by an icon in the system tray or menu bar.



Docker Subscription Service Agreement

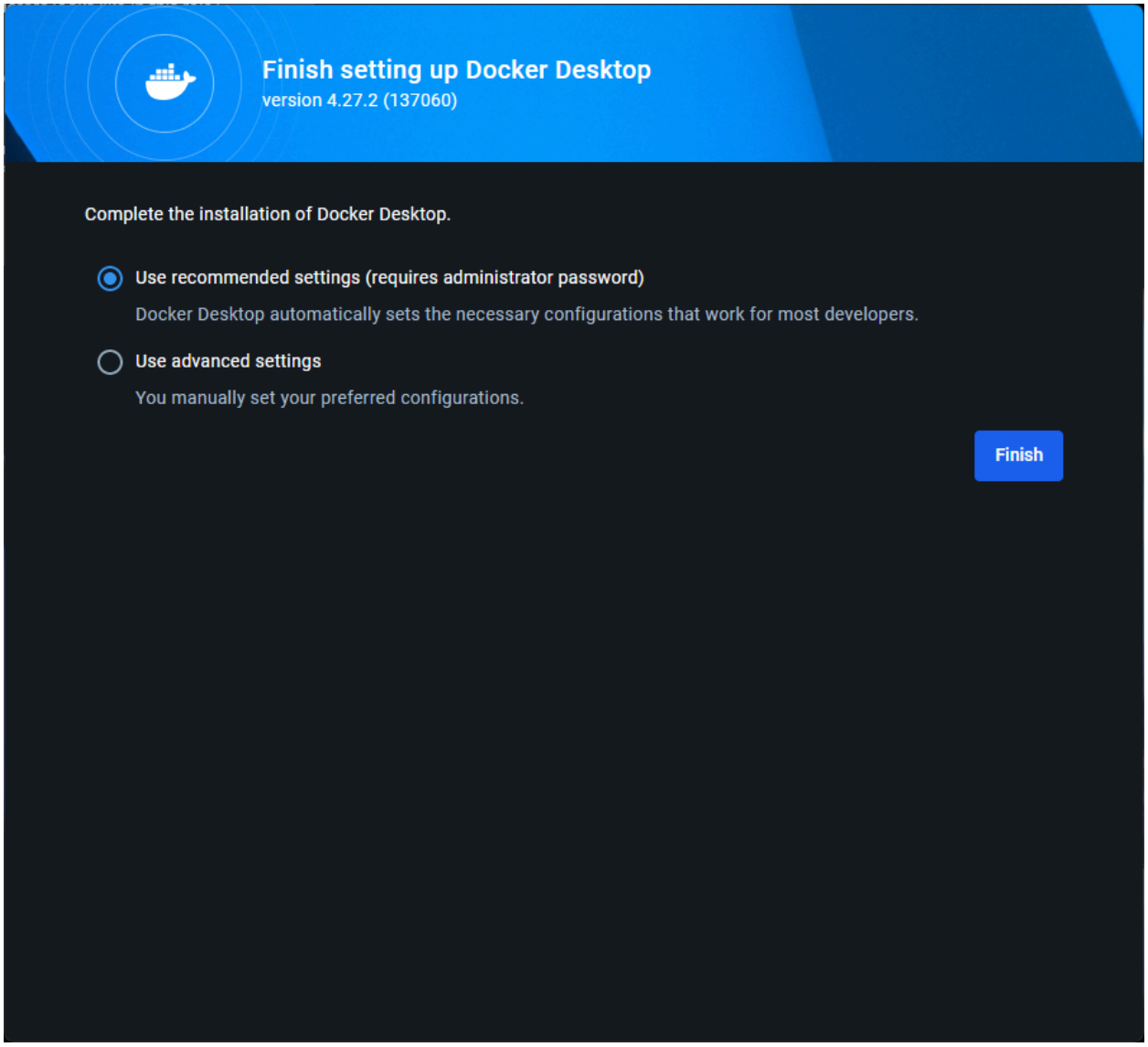
By selecting **accept**, you agree to the Subscription Service Agreement, the Docker Data Processing Agreement, and the Data Privacy Policy.

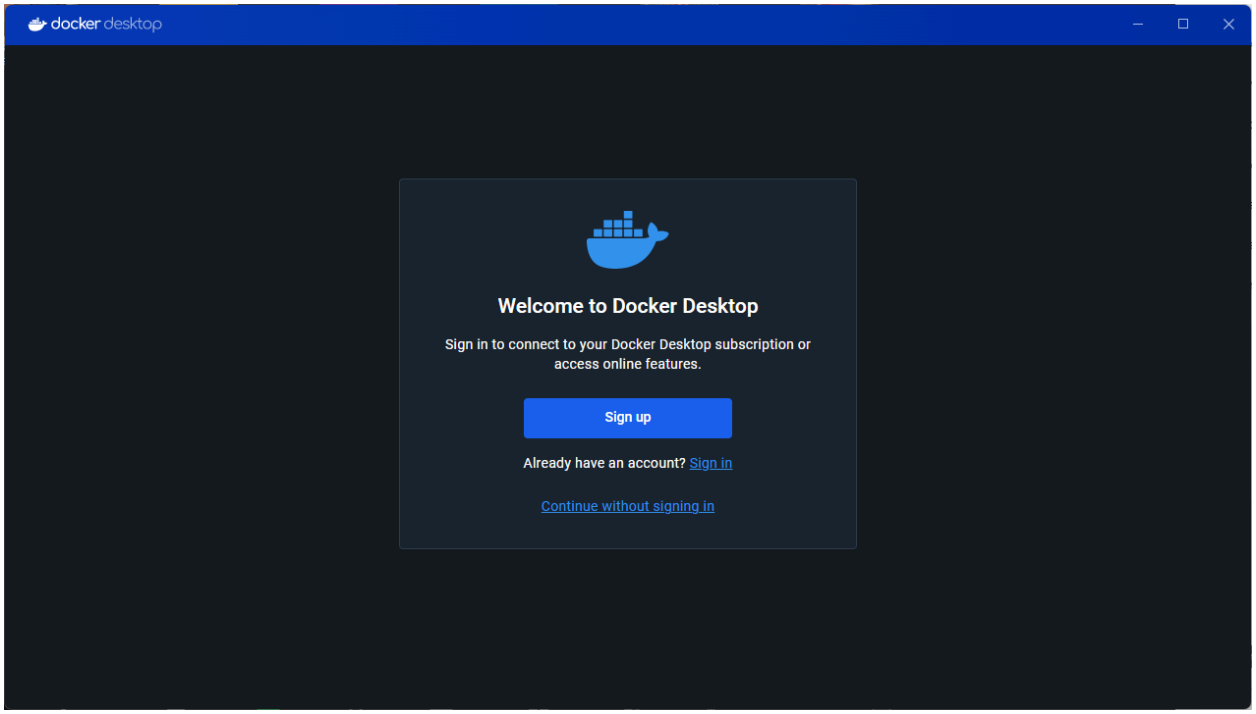
Note: Docker Desktop is free for small businesses (fewer than 250 employees AND less than $10 million in annual revenue), personal use, education, and non-commercial open source projects. Otherwise, it requires a paid subscription for professional use. Paid subscriptions are also required for government entities.
Read the FAQ to learn more.

View Full Terms

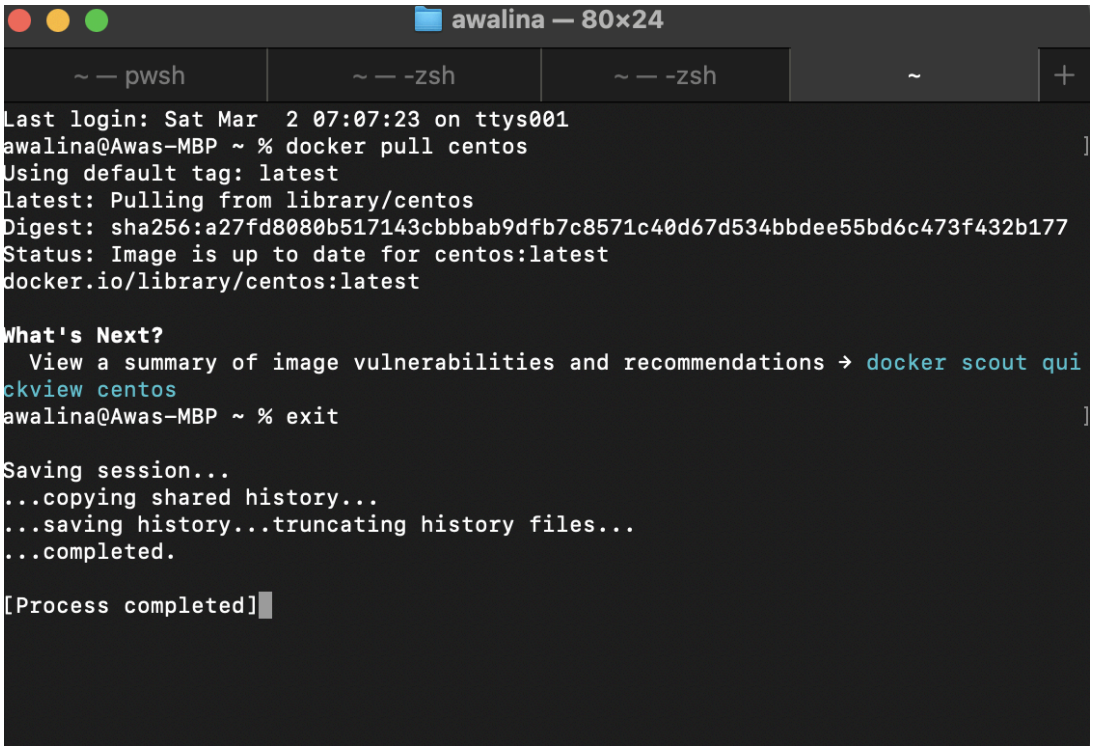
Accept

Close

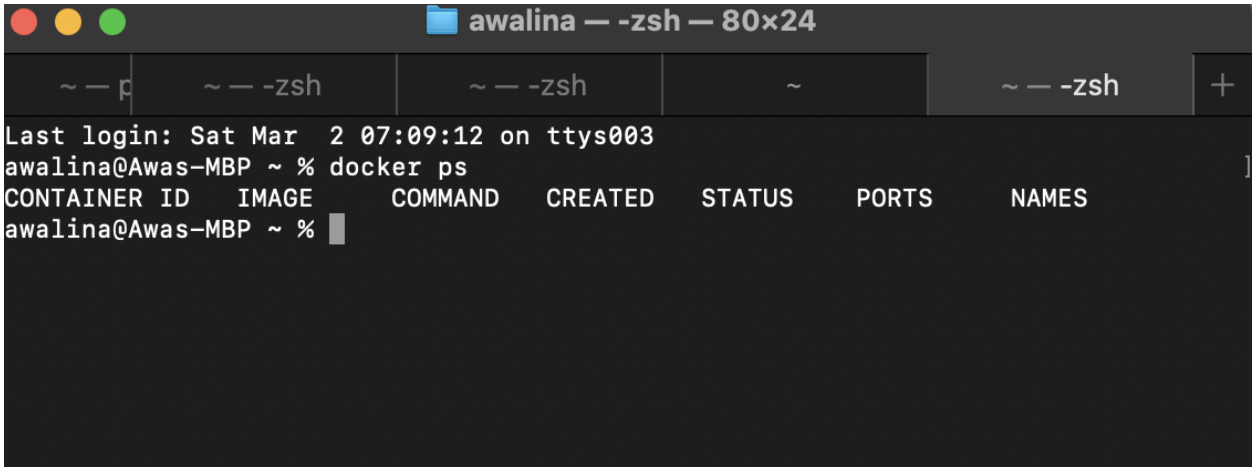

Finish setting up Docker Desktop
version 4.27.2 (137060)
Complete the installation of Docker Desktop.
Use recommended settings (requires administrator password)
Docker Desktop automatically sets the necessary configurations that work for most developers.
Use advanced settings
You manually set your preferred configurations.
Finish



Creating Containers:

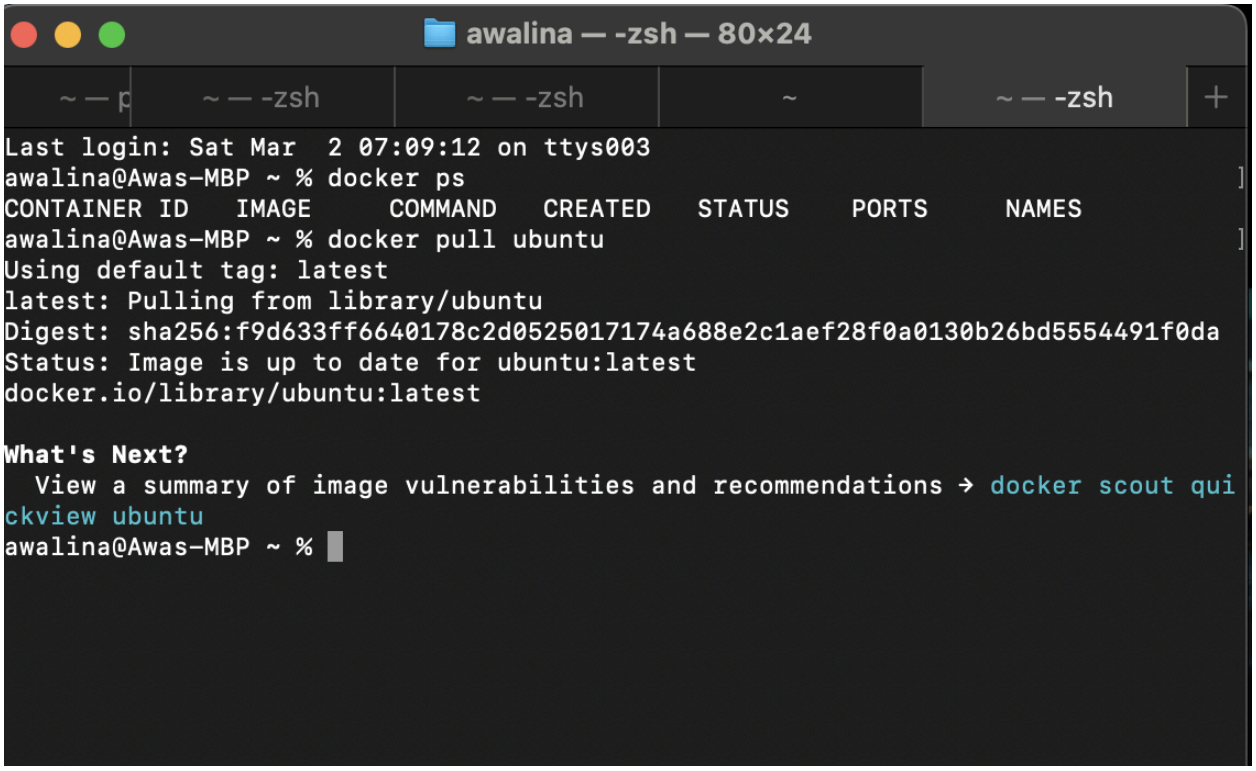
1. Use command: docker pull centos
2. 

- To run the new centos container, use the command: docker run -d -t - -name (create name for container) centos
- If you want to check your containers, use the command: docker ps

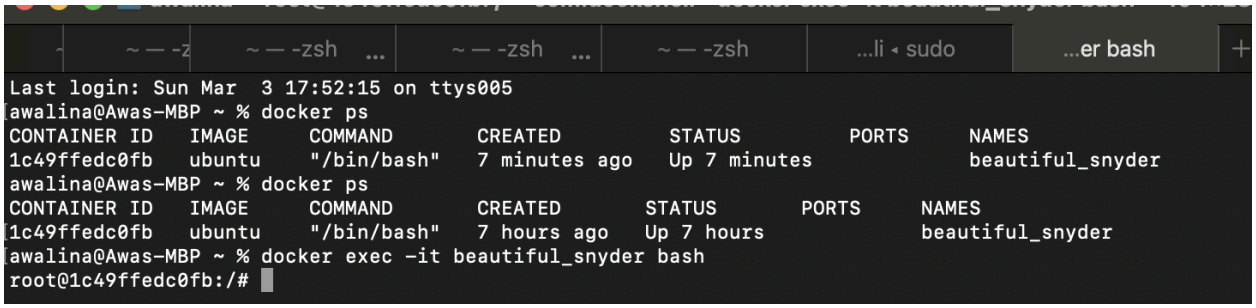


- **You can go into your container with the command: docker exec -it (container_name) bash**

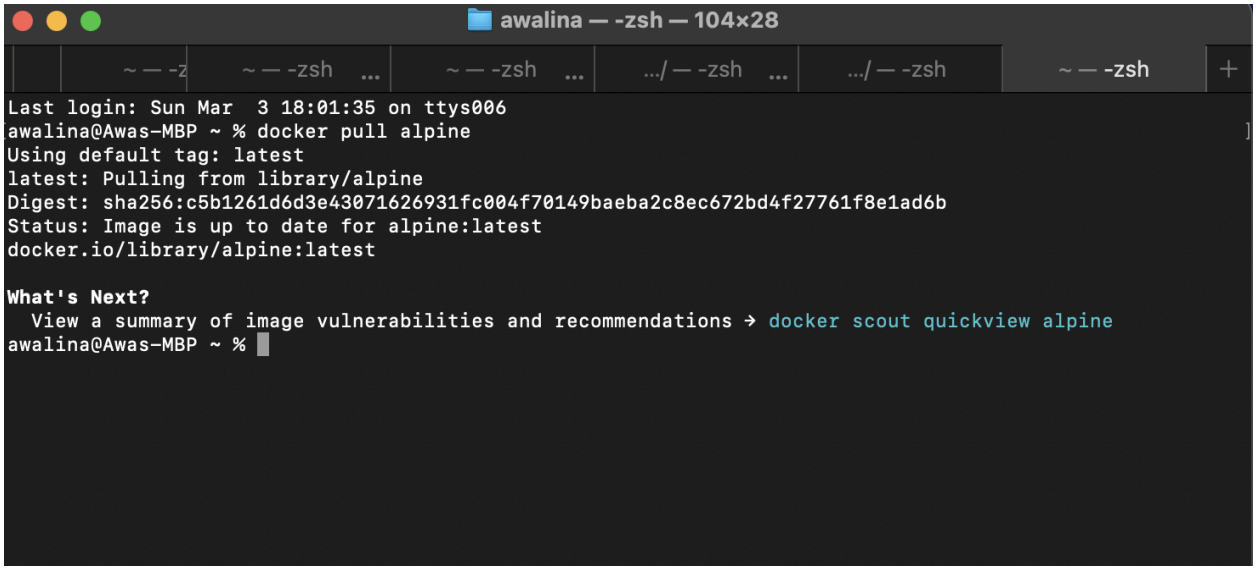
3. Ubuntu srv
    - Use command: docker pull ubuntu



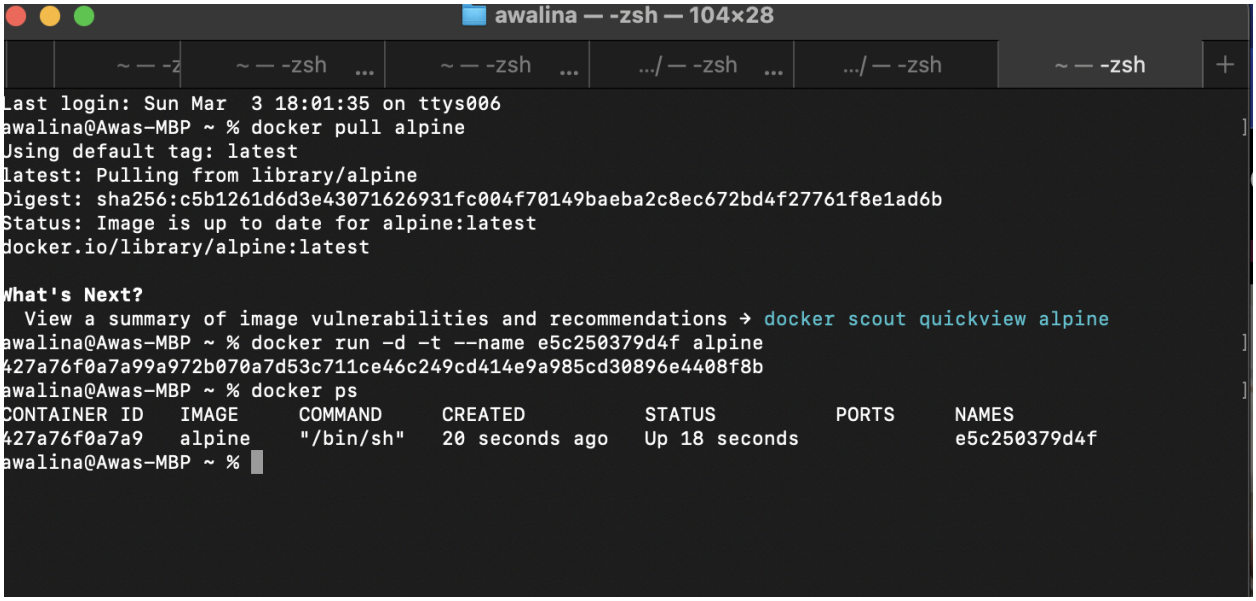
- **To run the new centos container, use the command: docker run -d -t - -name (container_name) ubuntu**
- If you want to check your containers, use the command: docker ps
- You can go into your container with the command: docker exec -it (container_name) bash



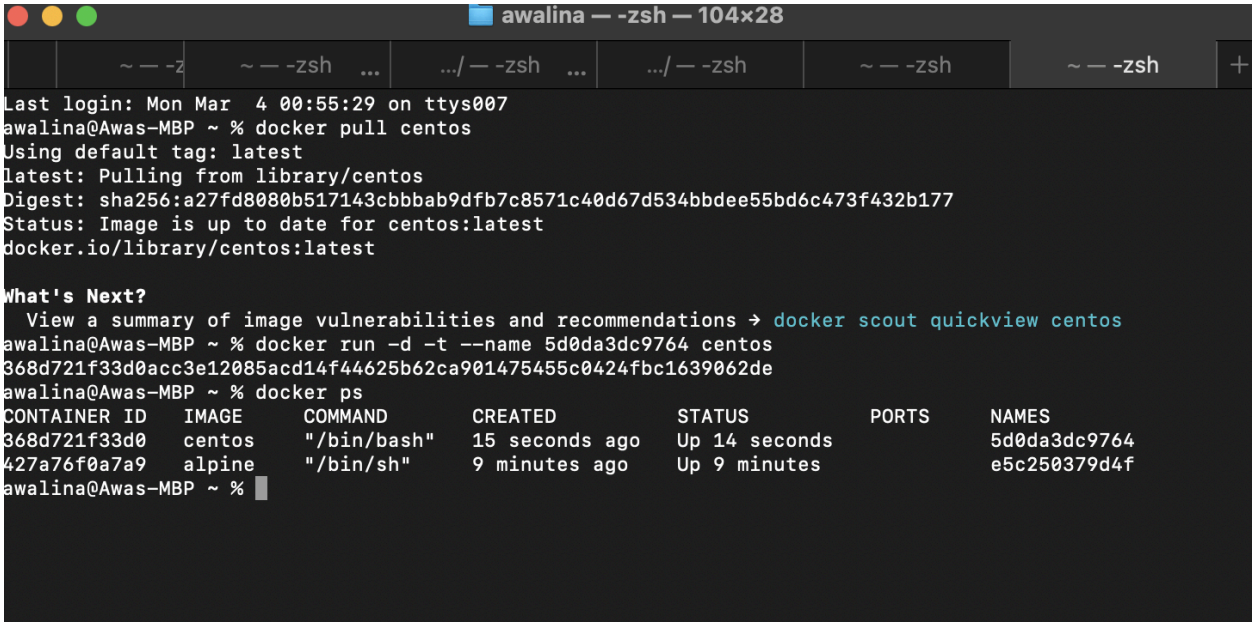
4. Linux(Alpine)
    - Use command: docker pull alpine



- To run the new centos container, use the command: docker run -d -t - -name (container_name) alpine
- If you want to check your containers, use the command: docker ps



- You can go into your container with the command: docker exec -it (container_name) sh



5. Running Containers