**Graded Assignment on Docker**

**1)Pull any image from the docker hub, creates its container, and execute it showing the output.**

**Docker:** Docker is an open-source platform that enables developers to build, deploy, run, update and manage containerized applications.

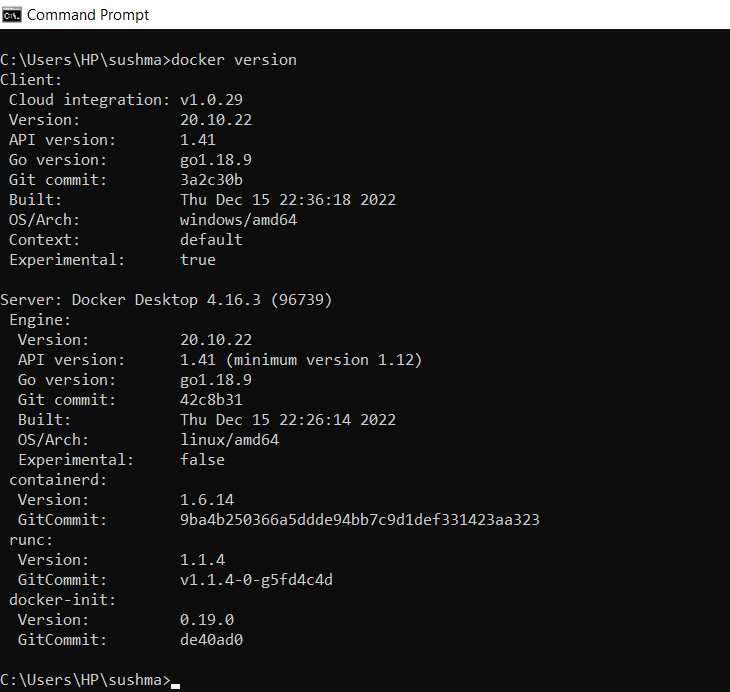
**Docker Image:**

* A Docker image is a file used to execute the container in the docker.
* It is also used to store snapshots.
* It has represented as the sedd that has files to be executed.

**Container:** A Docker container is a packaged collection of all the apps libraries and dependencies already or files and folders which are in group of pack which are ready to be executed.

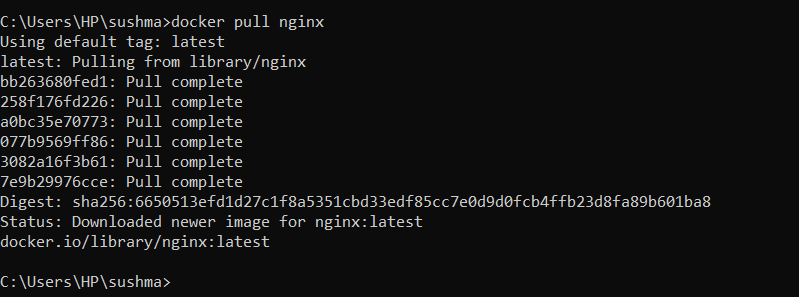
**Docker hub:** Docker hub provided by docker allows developers to store and share container images.

First execute the **docker version** command.

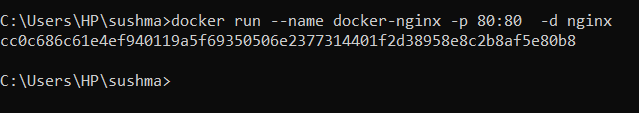
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Using **docker pull image-name** command we can pull the image from the docker hub.

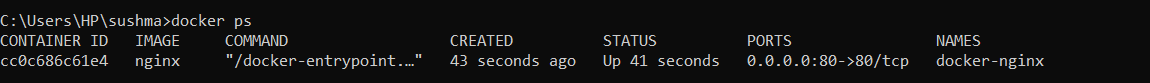
Here we are downloading the image nginx from the docker hub.

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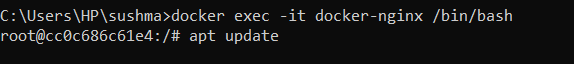
Now, we are creating an container from the downloaded image nginx and expose it on port 80 using the following command executing…

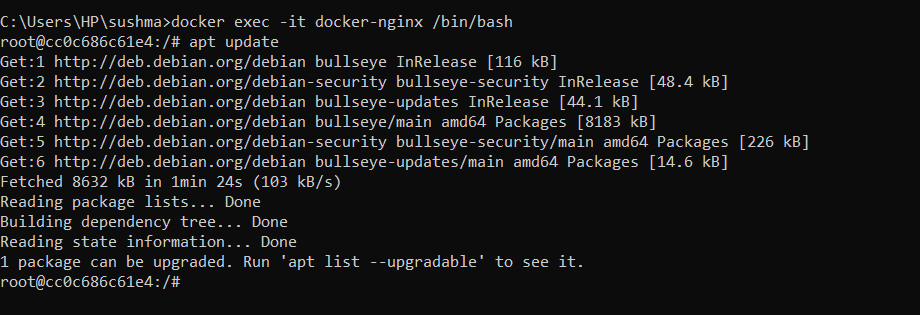
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We can verify the nginx container using **docker ps** command

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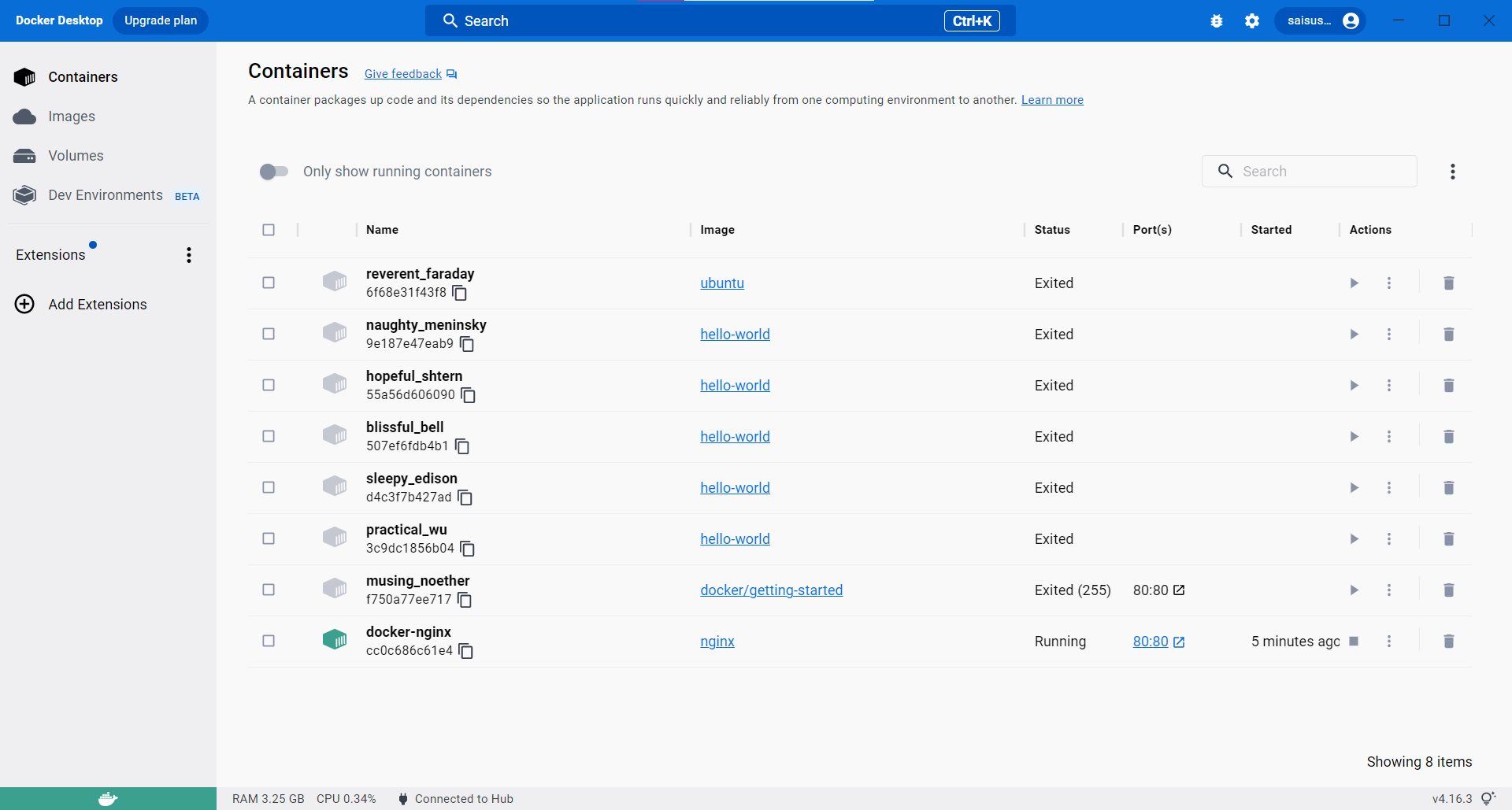
Next, connect to the running container using the following command

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And we connected to the container.

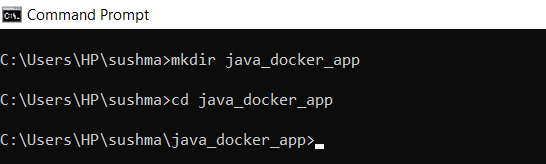
Open docker desktop, to check whether container is created or not.

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**2)Create the basic java application, generate its image with necessary files, and execute it with docker.**

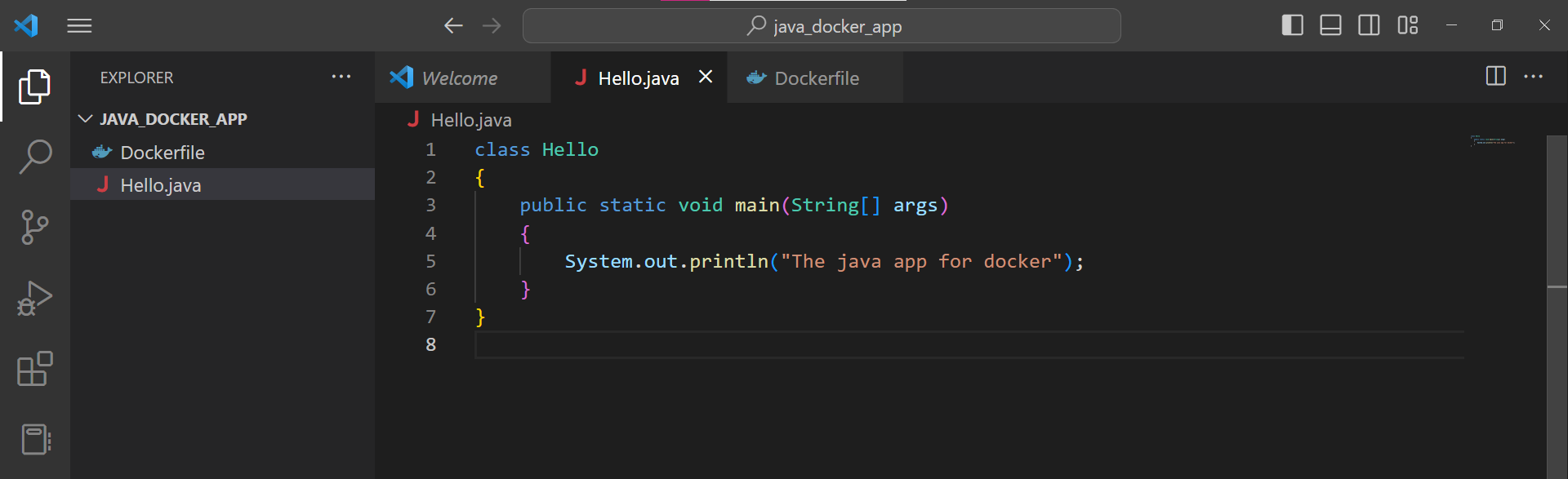
Creating the basic java application.

1.Create a directory for the files to be stored and move to that directory.

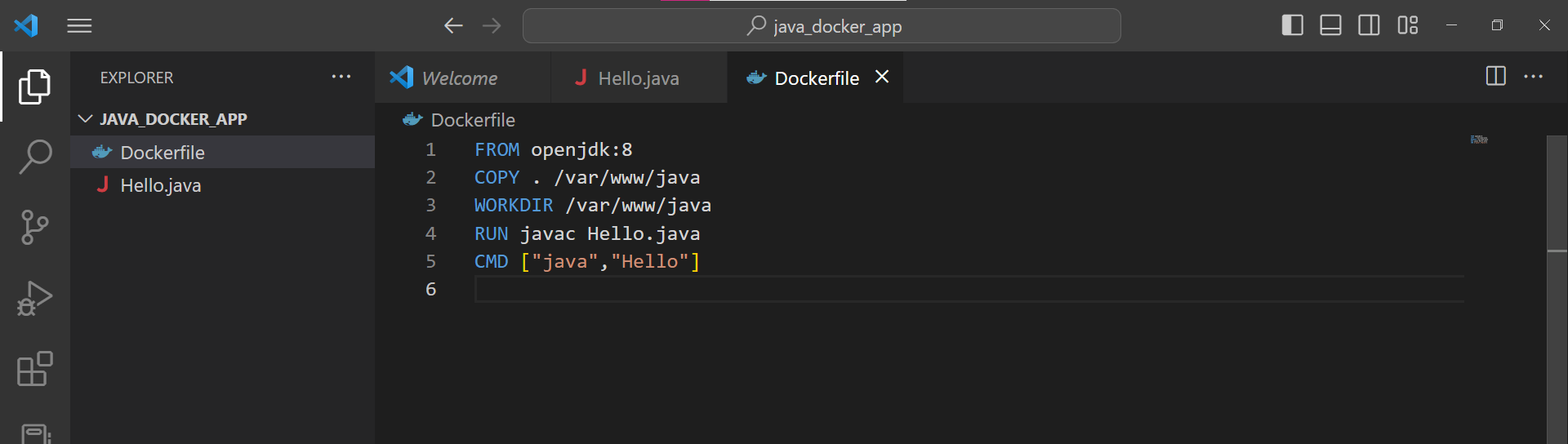
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2.Create a java file and save it as Hello.java

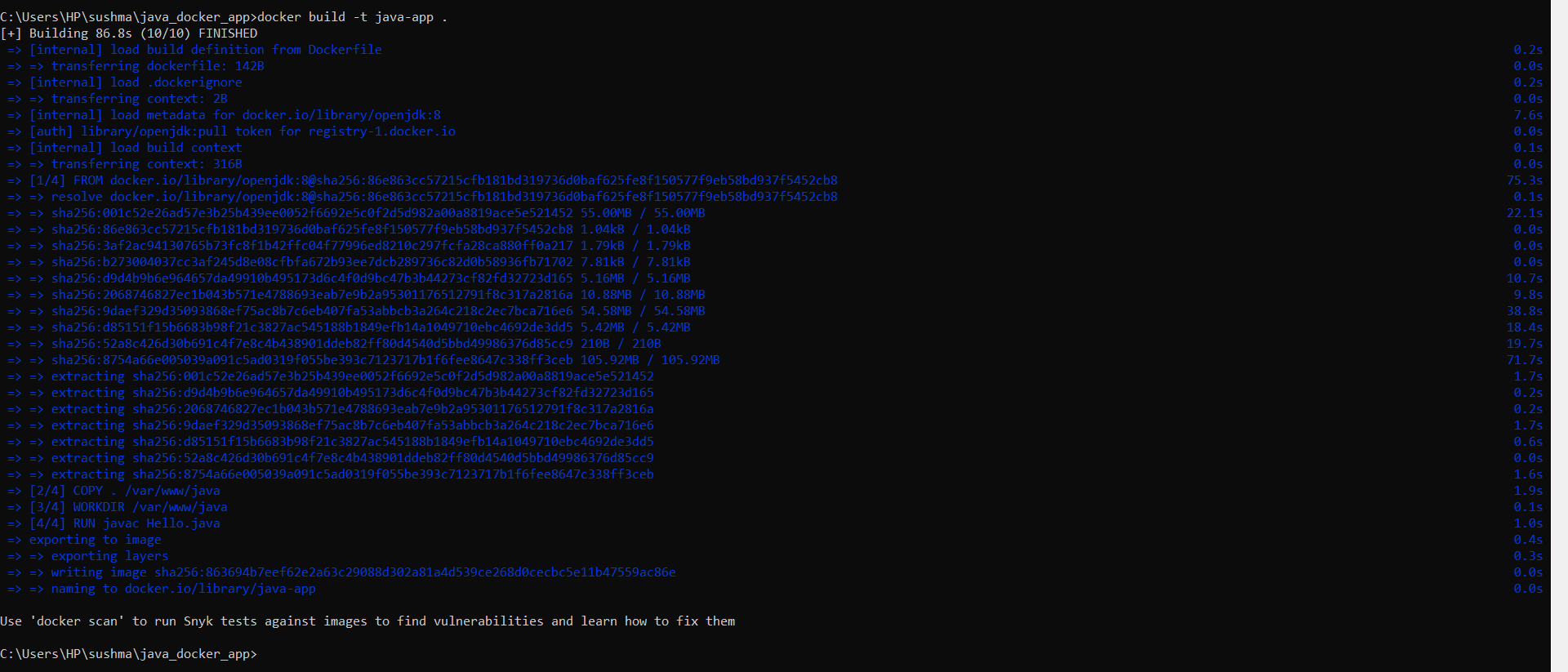
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3.Create a Dockerfile

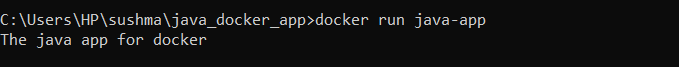


4.Let’s create an image named **java-app** using the following command

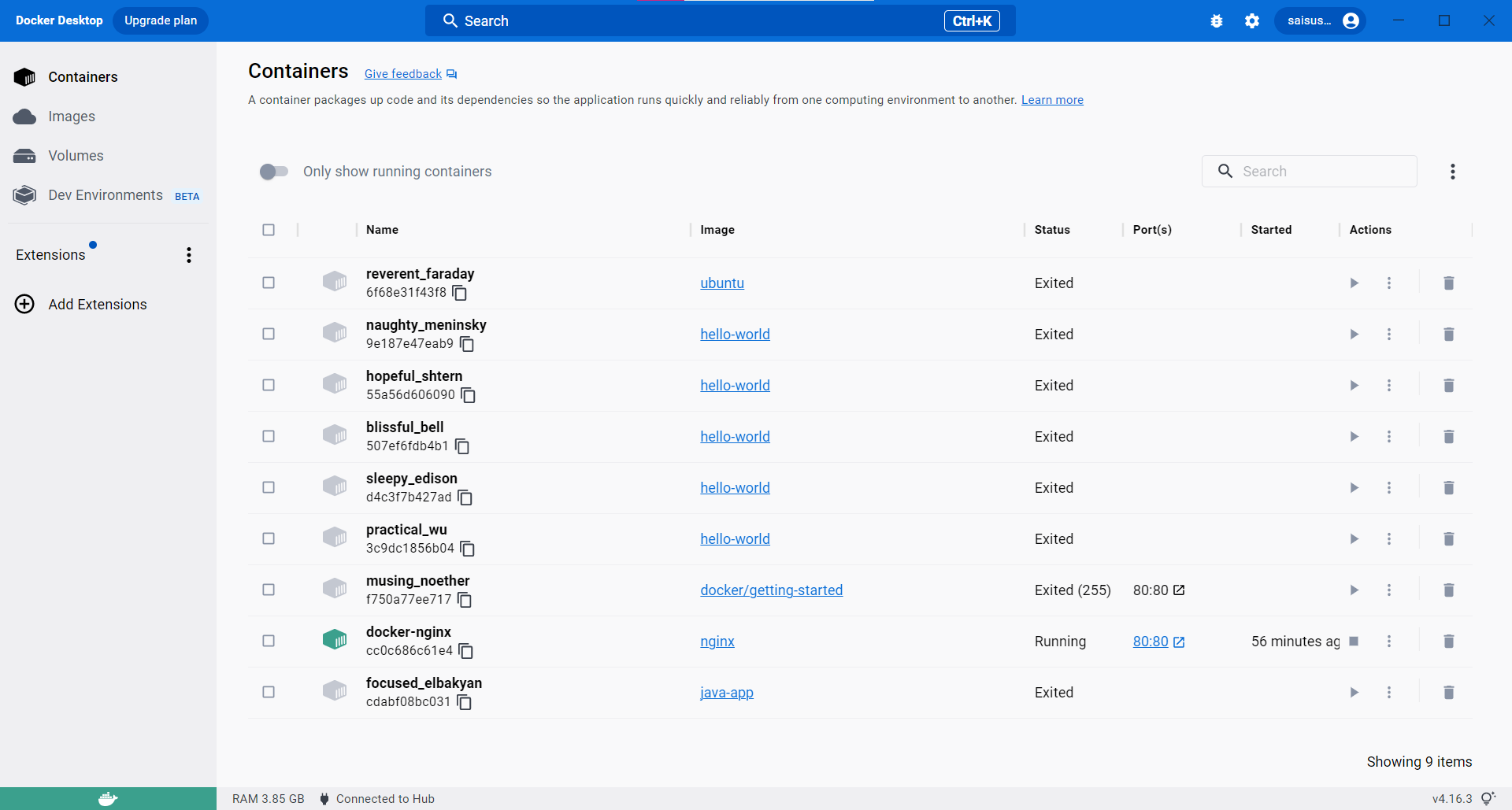
**Docker build -t java-app**

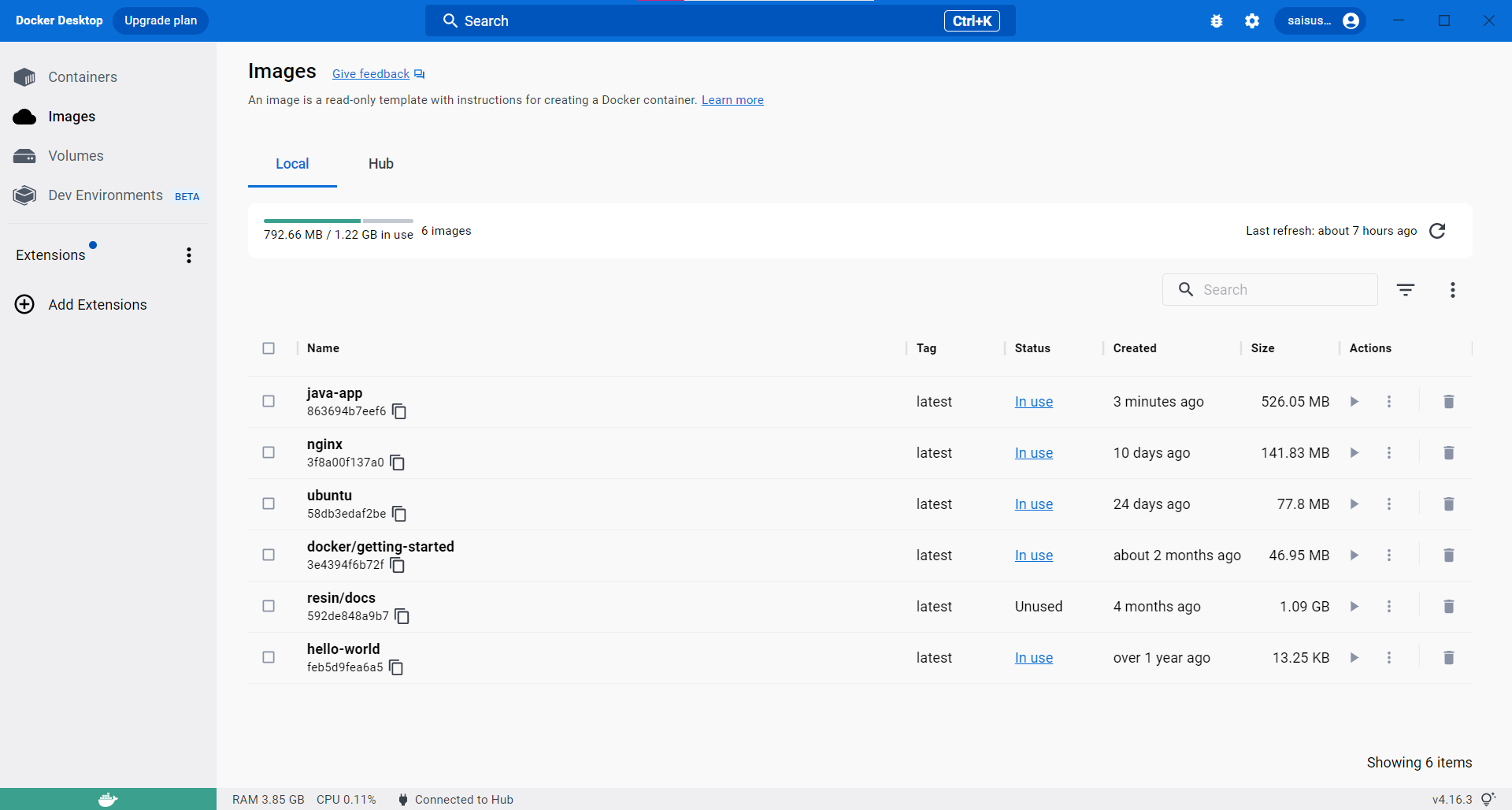
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5.After building the image, we run docker

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6.Open **Docker Desktop**, and you can see the java application is running.

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