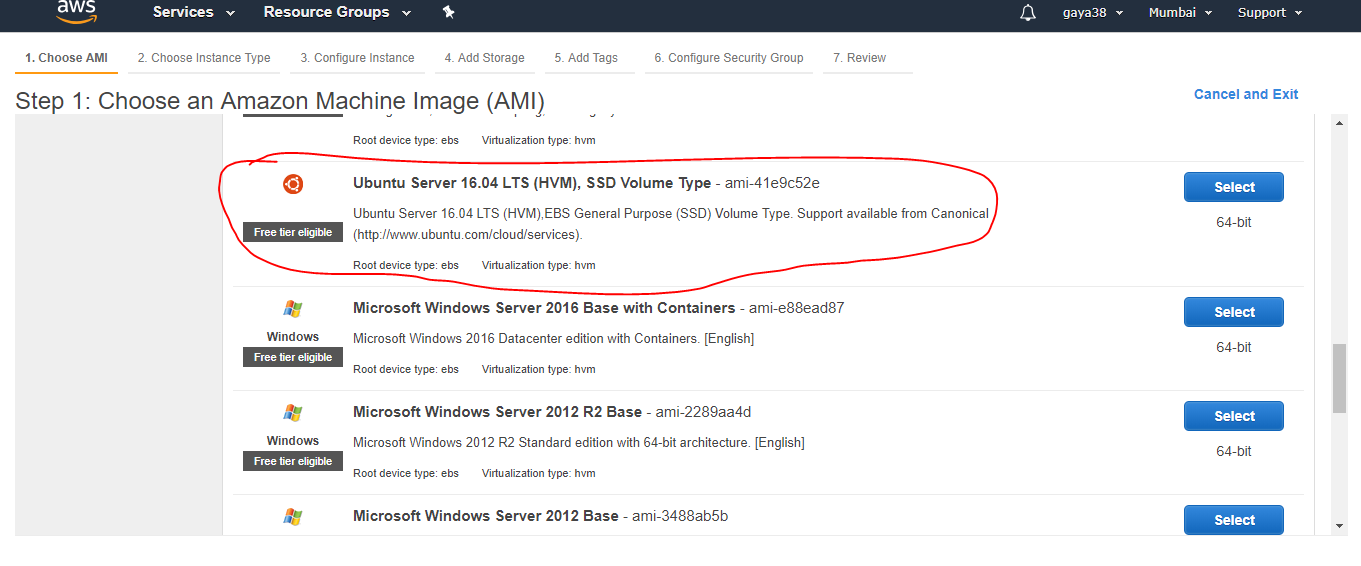
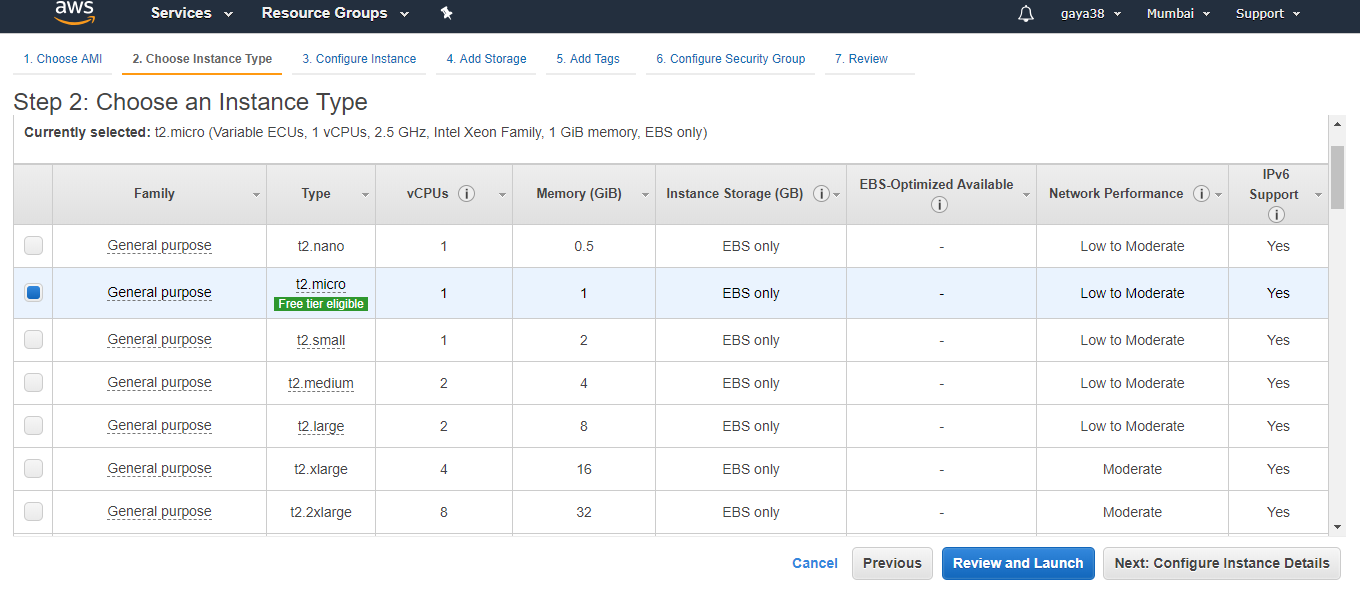
**Problem Statement**

Docker is an open platform for developers and sysadmins to build, ship, and run distributed applications. The engineer need to learn the below topics and experiment the same.

* Overview of Docker
* Installing the Docker Engine
* Creating our first Docker container
* Building Docker images
* Storing and retrieving Docker images from Docker Hub
* Building containers from images
* Using Docker for sandboxing and testing
* Deploying BroadLeaf Application with Docker

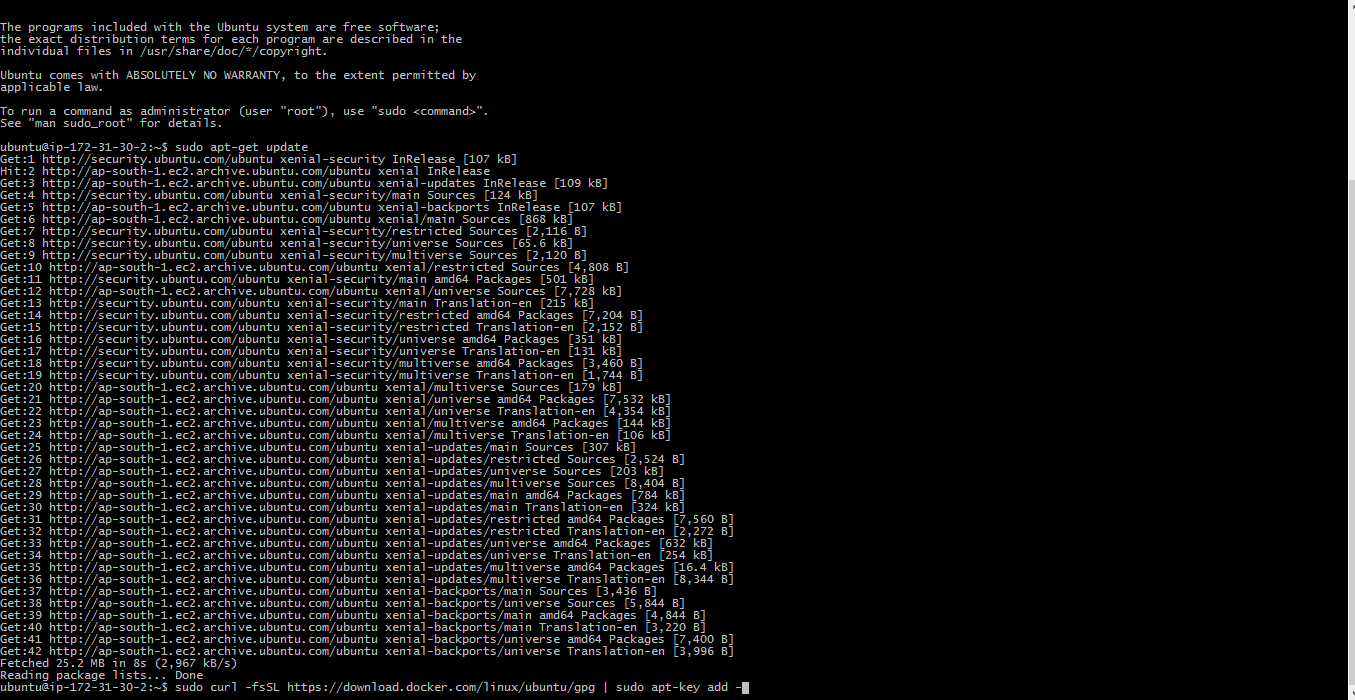
Installing virtual machine in EC2 instances to deploy the Docker engine



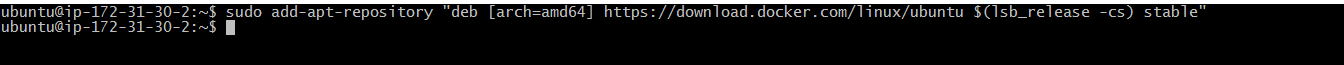


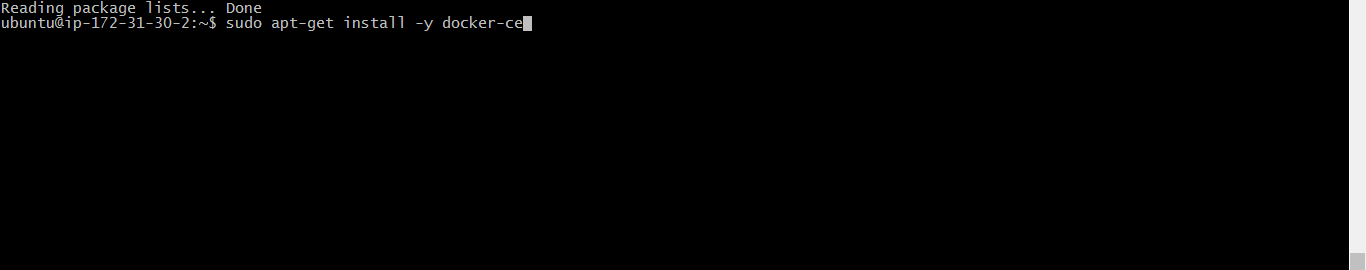
1.Installing the Docker engine in virtual machine

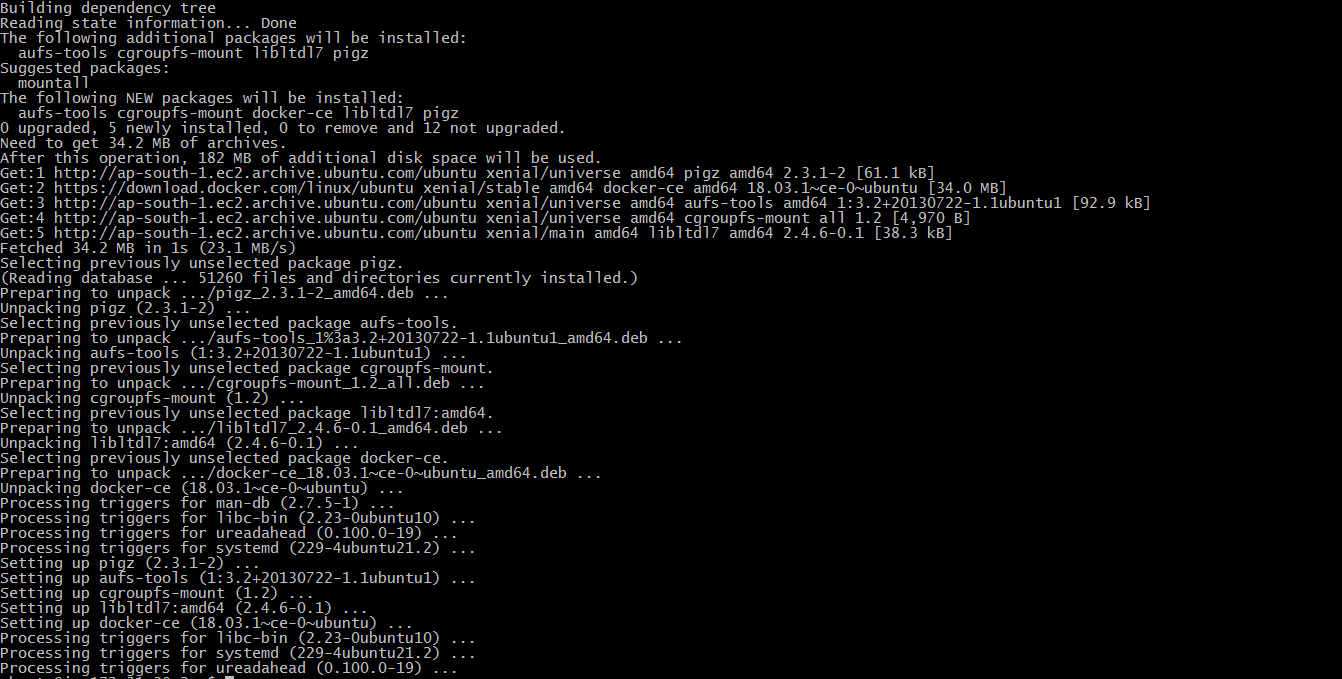
Adding path



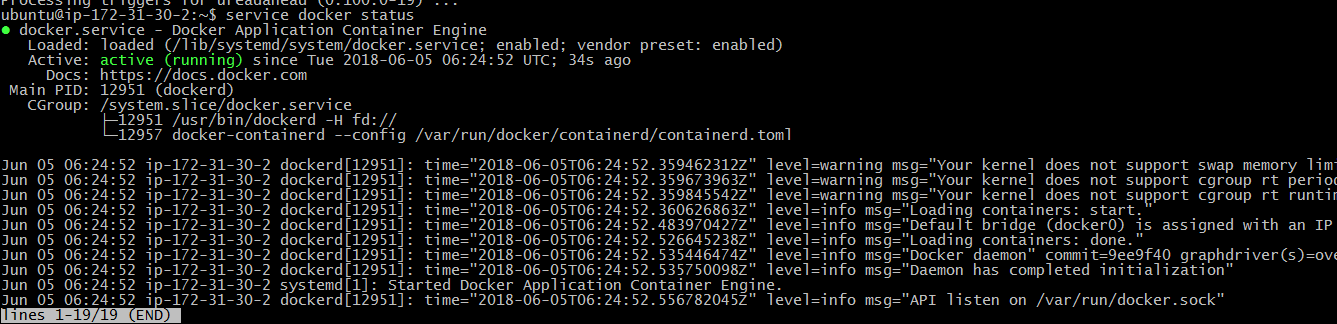
Installing docker







Checking Docker status : it is up and running

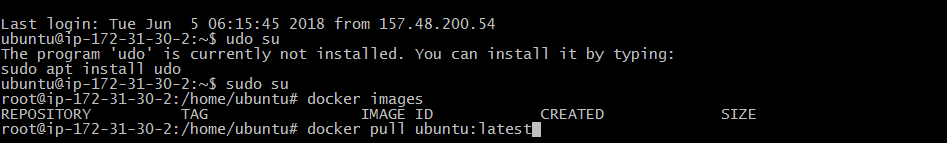


Checking version of Docker

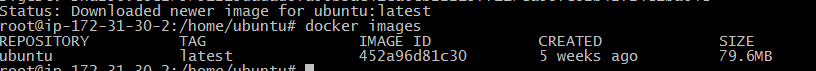


2. Creating First Docker Container

To create the container needs to download the image



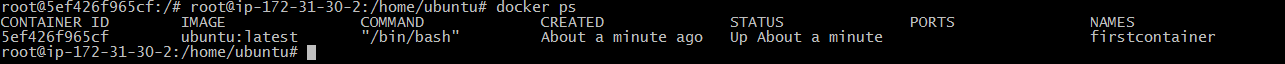
Check for the status



Creating the container from the downloaded image



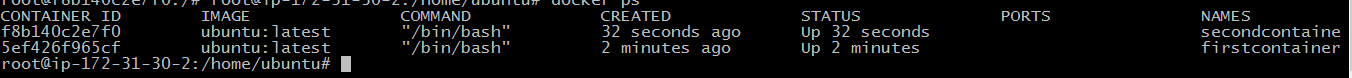
Container list



Second Container

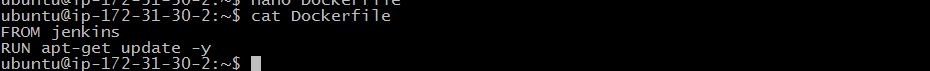


Container list



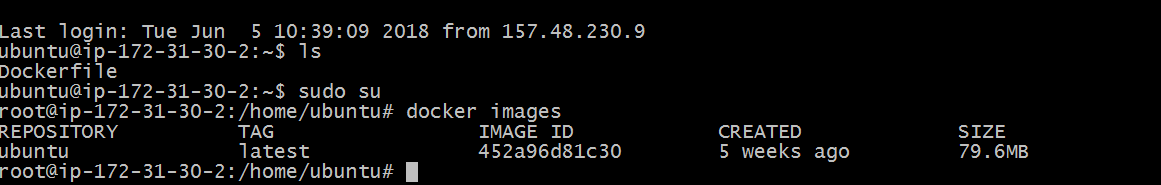
3.Building Docker images

Created Docker file to build an image

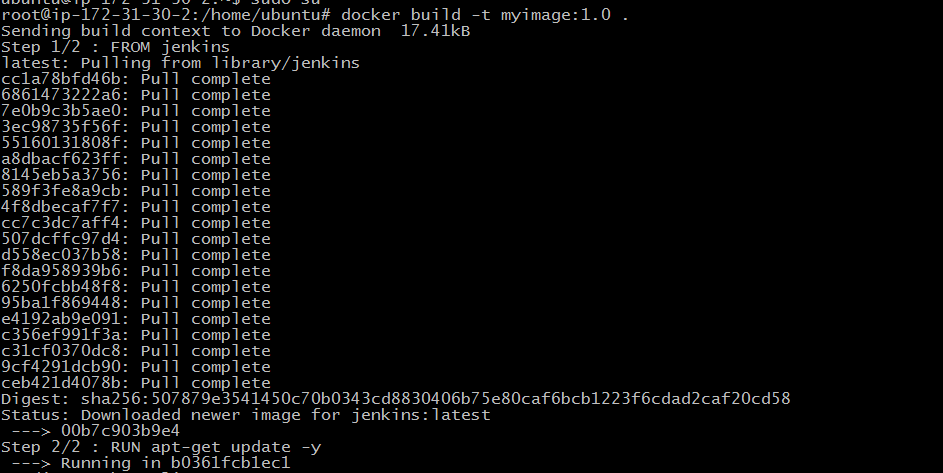


Created an image by using docker build command

Before run the command



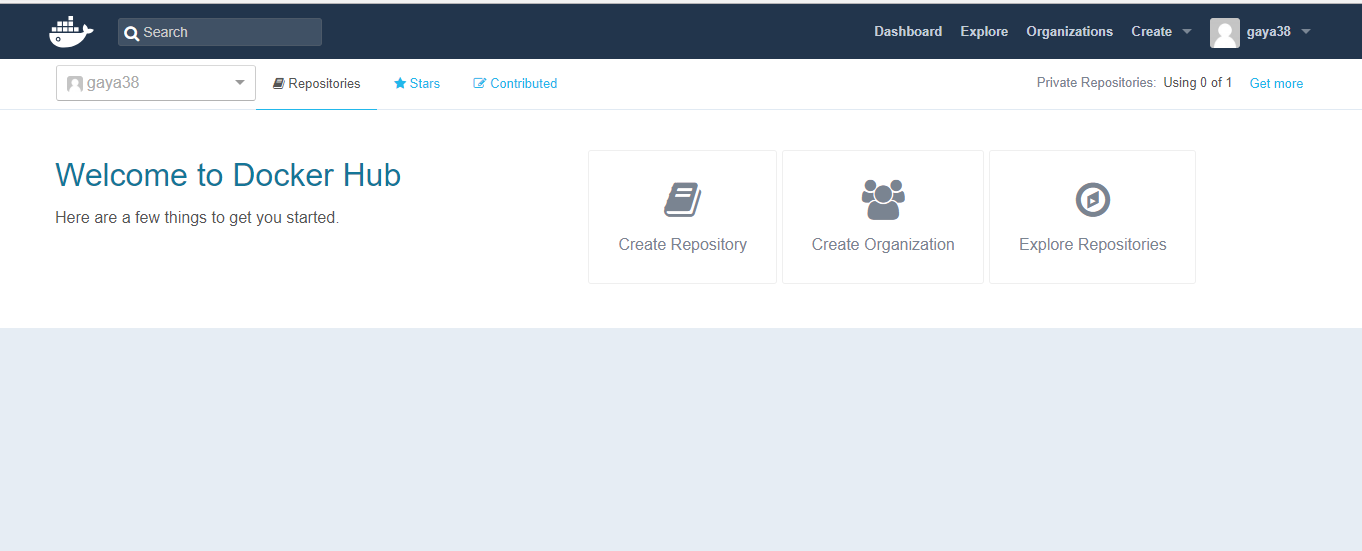
After run the command



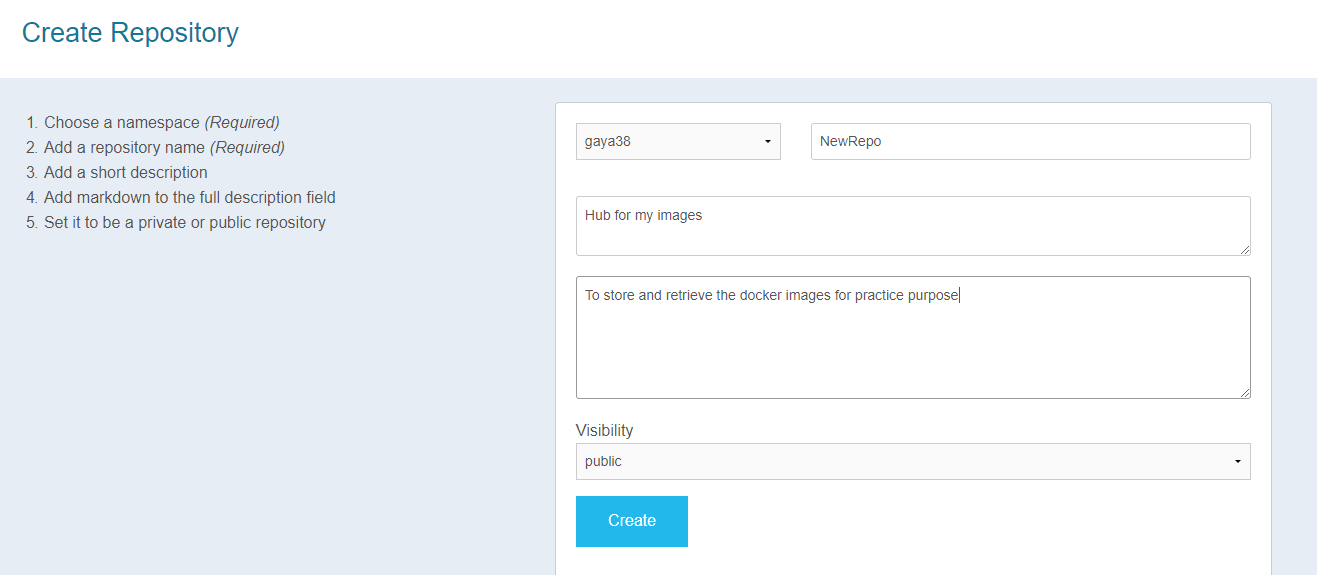


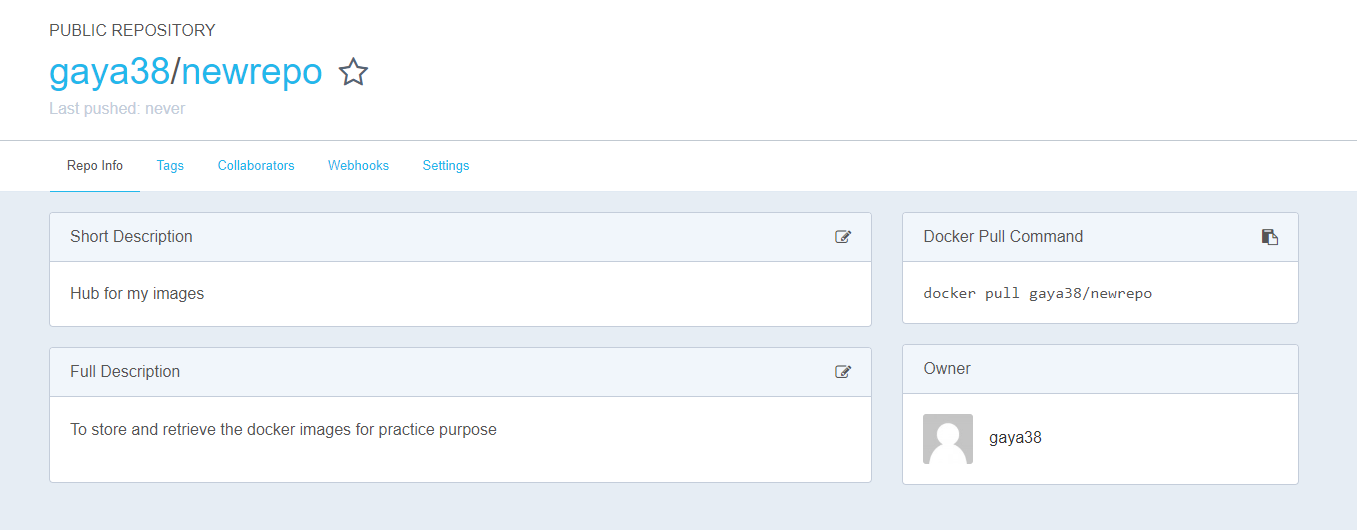
4. Storing and retrieving Docker images from Docker Hub

Login into Docker hub

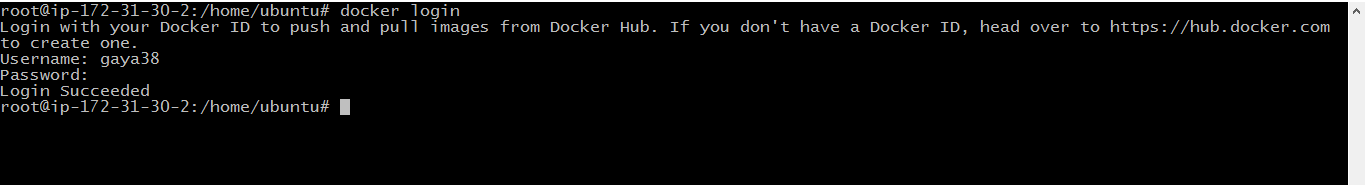


Creating Repository in Docker hub

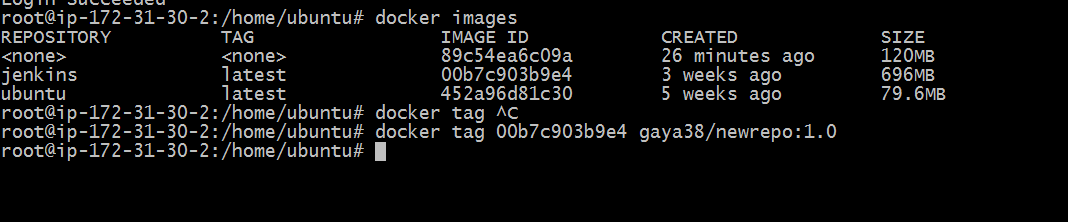




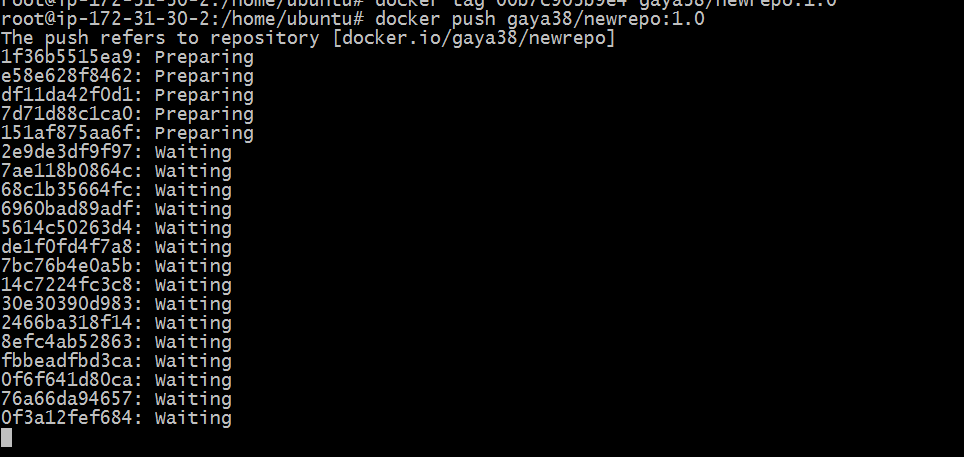
Log in to the Docker hub



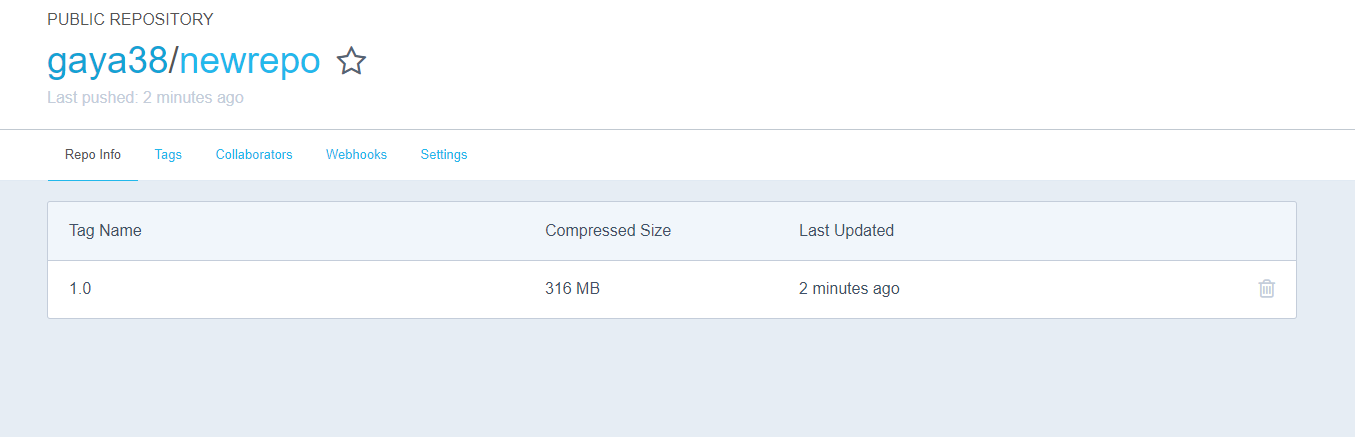
Tag the image



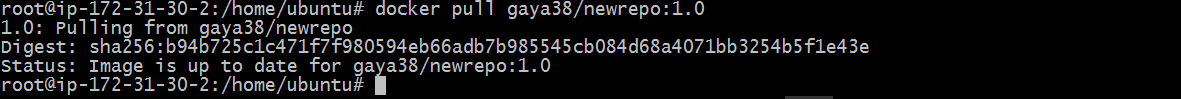
Pushing to Docker hub

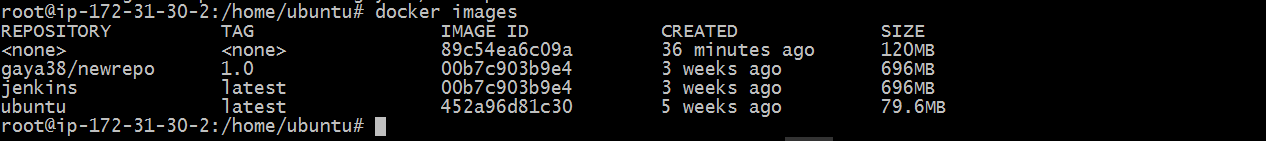


Uploaded into my Docker hub



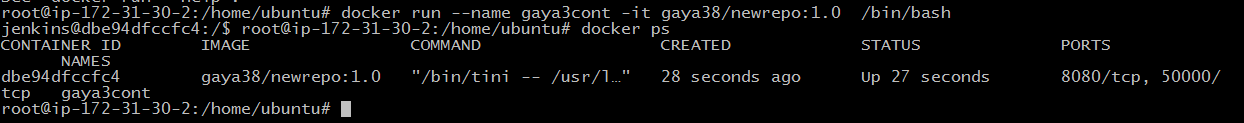
Pulling from Docker hub





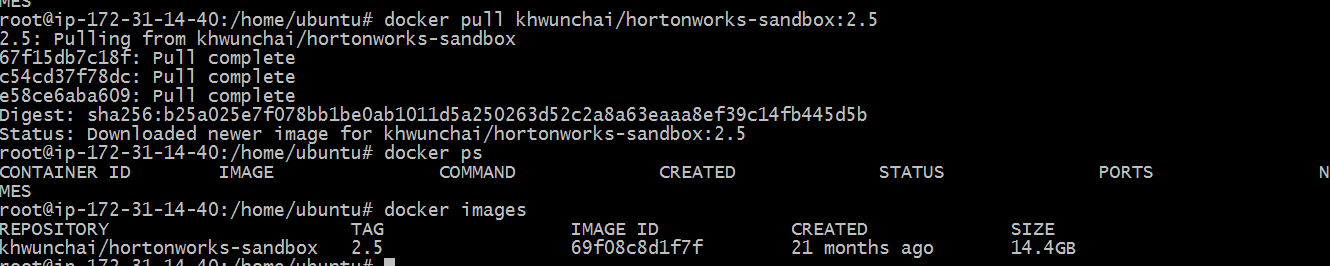
5. Building Containers from Images



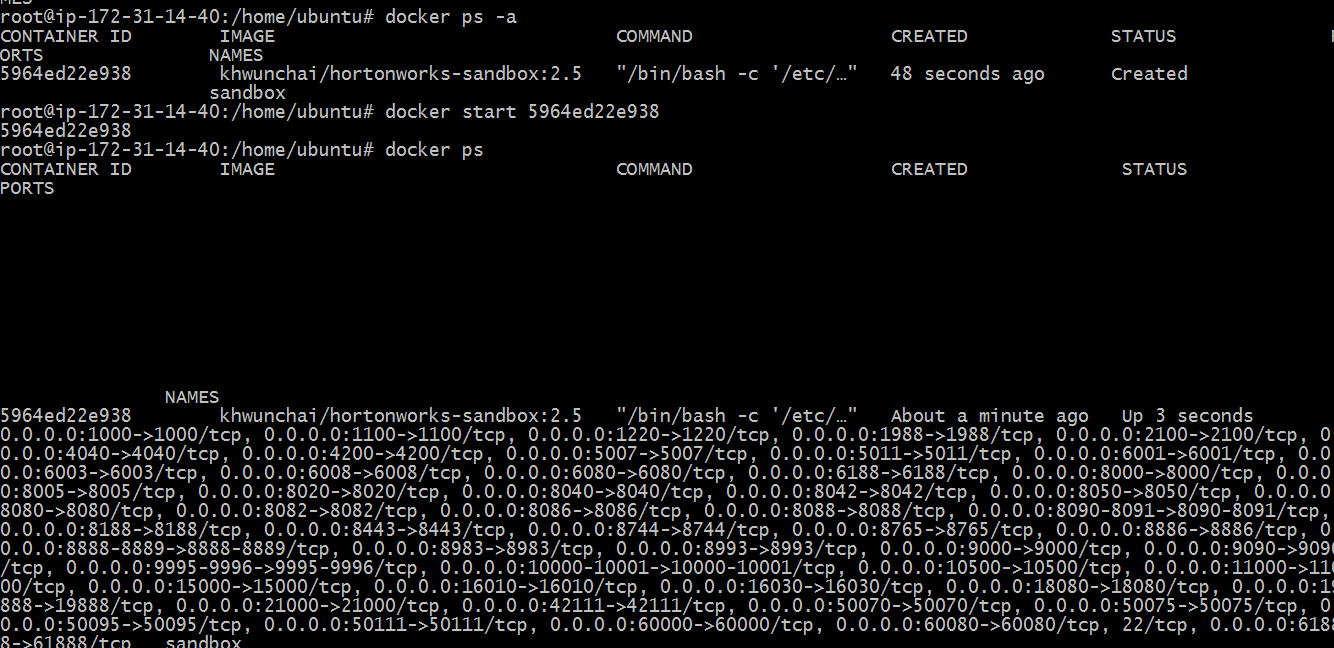


6. Using Docker for sandboxing and testing

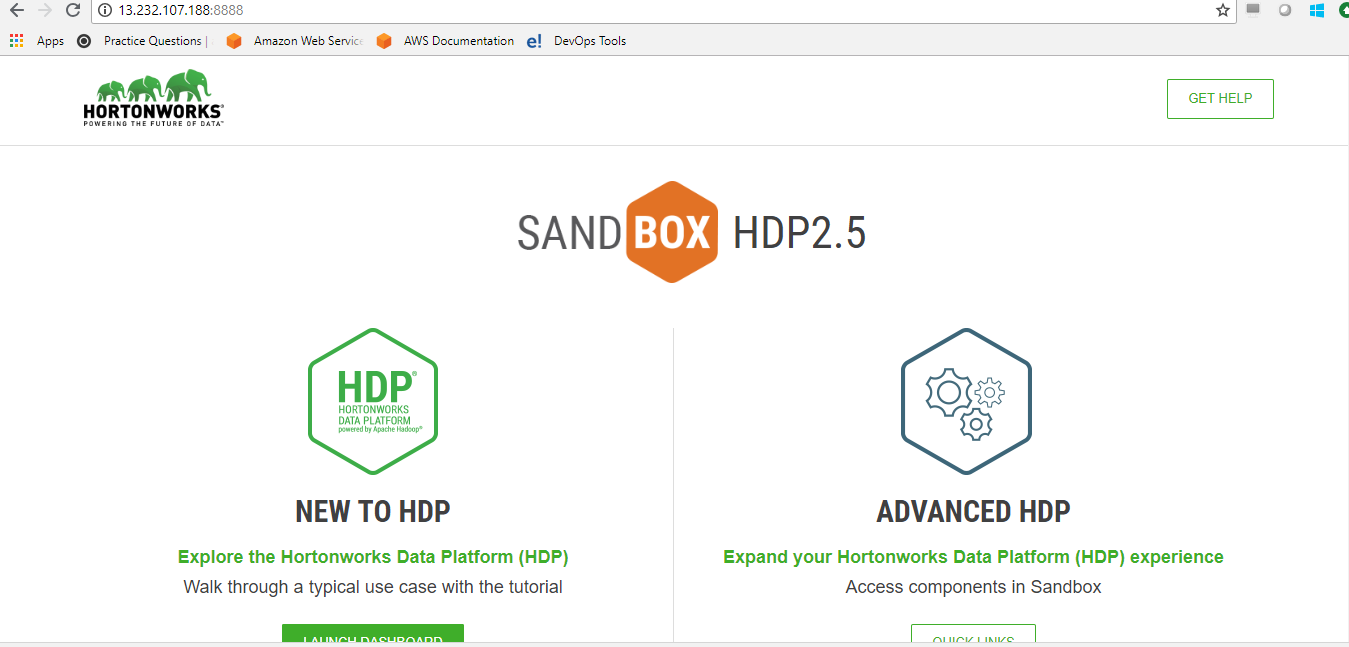
Pulling Docker image from docker hub



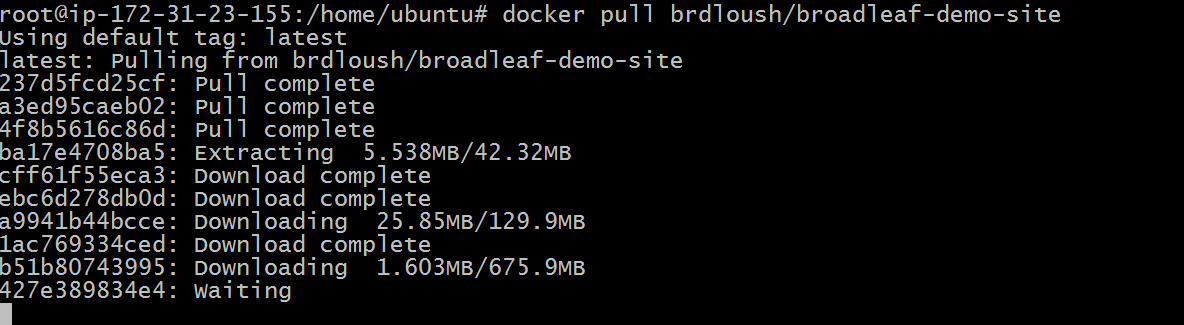
Container in Docker

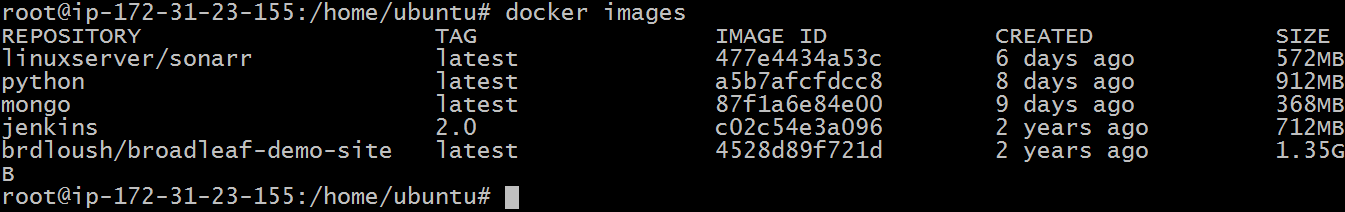


Opening sandbox in host

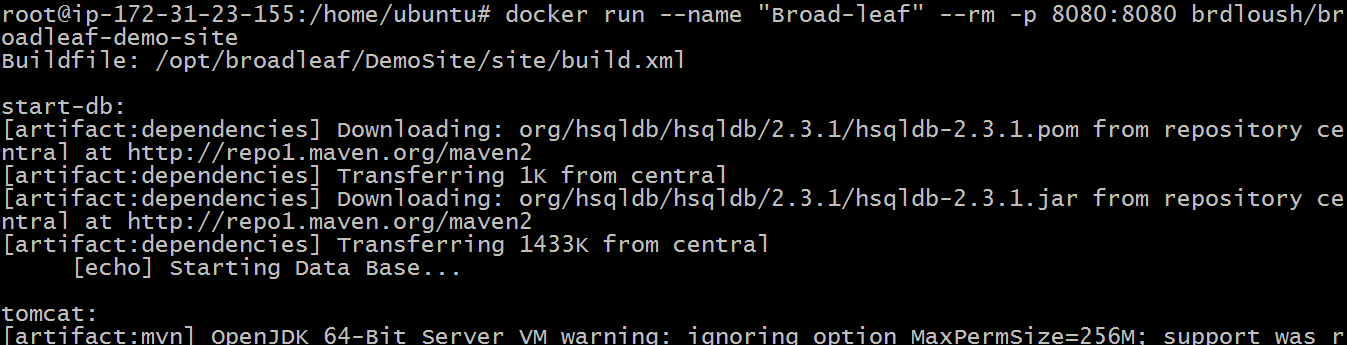


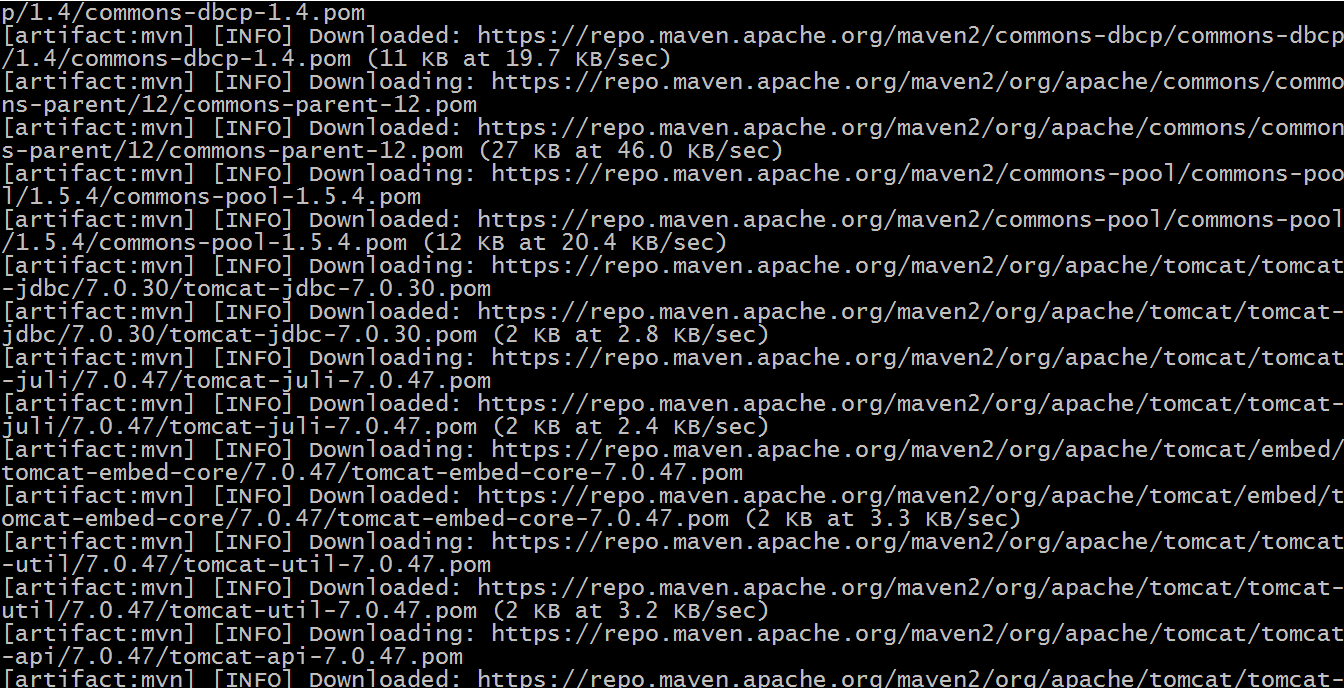
7.Deploying Broad Leaf Application



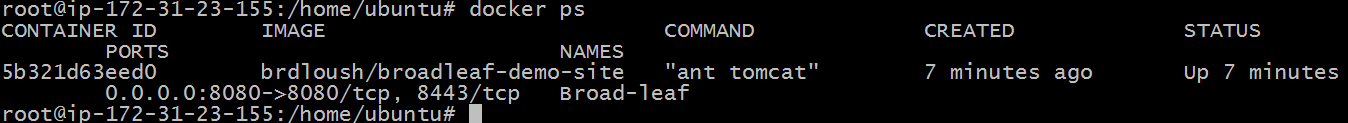


Running a container





Docker container:



Broad-leaf application on port:8080

