

Assignment 4

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Project Name	Skill/Job Recommender Application

1) Pull an Image from docker hub and run it in docker playground

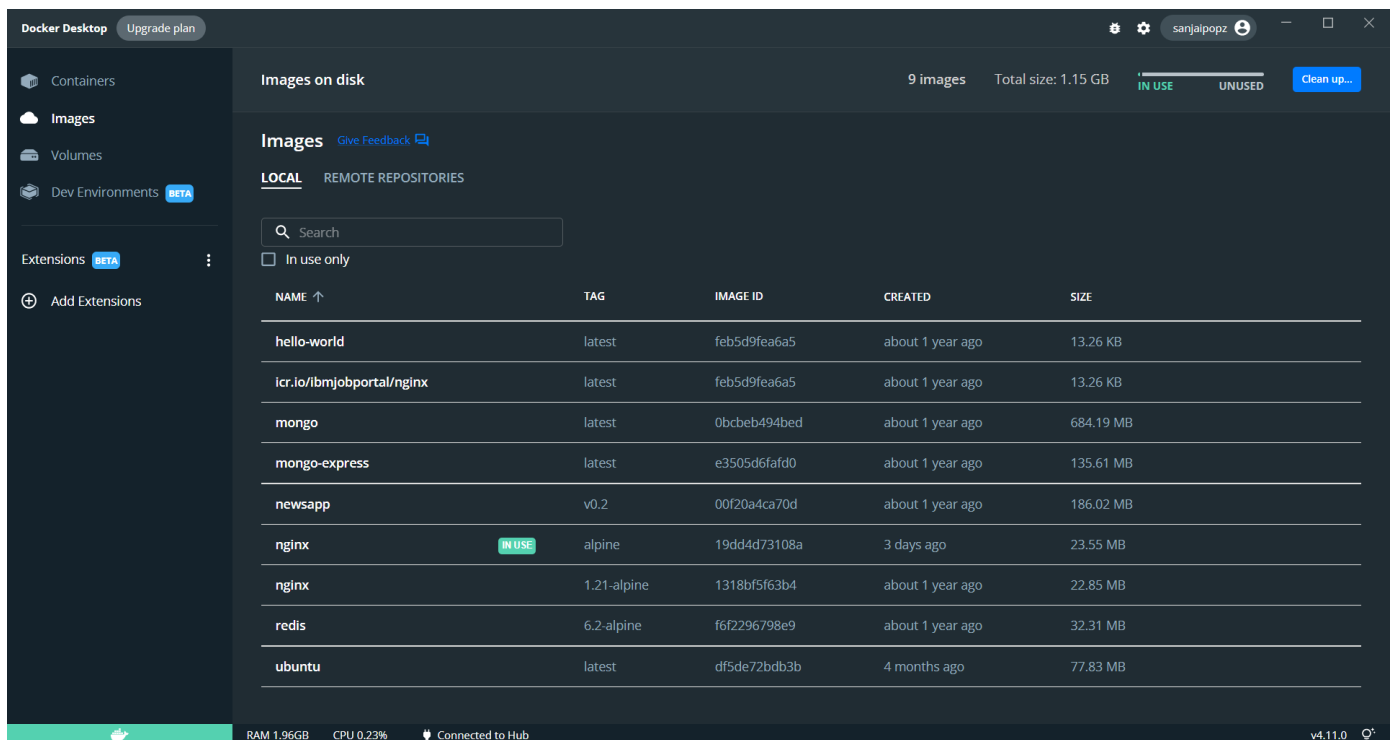
```
C:\Users\sANJAI R>docker images
REPOSITORY          TAG          IMAGE ID       CREATED        SIZE
nginx                alpine       19dd4d73108a   3 days ago    23.5MB
ubuntu              latest       df5de72bdb3b   3 months ago  77.8MB
hello-world         latest       feb5d9fea6a5   13 months ago 13.3kB
icr.io/ibmjobportal/nginx latest       feb5d9fea6a5   13 months ago 13.3kB
newsapp             v0.2        00f20a4ca70d   14 months ago 186MB
mongo-express       latest       e3505d6fafd0   14 months ago 136MB
mongo               latest       0bcbeb494bed   14 months ago 684MB
redis               6.2-alpine  f6f2296798e9   14 months ago 32.3MB
nginx               1.21-alpine 1318bf5f63b4   14 months ago 22.8MB

C:\Users\sANJAI R>docker pull nginx:alpine
alpine: Pulling from library/nginx
Digest: sha256:455c39afebd4d98ef26dd70284aa86e6810b0485af5f4f222b19b89758cabf1e
Status: Image is up to date for nginx:alpine
docker.io/library/nginx:alpine

C:\Users\sANJAI R>|
```

2) Create a docker file for the jobportal application and deploy it in Docker desktop application

```
1 FROM python:3.8-bluster
2
3 WORKDIR /app
4
5 COPY requirements.txt /app/
6 RUN pip install -r requirements.py
7 COPY hello.txt ./app/
8 RUN cp .env .env
9 EXPOSE 5000
10 RUN chmod +x entrypoint.sh
11
12 CMD ["sh", "entrypoint.sh"]
```

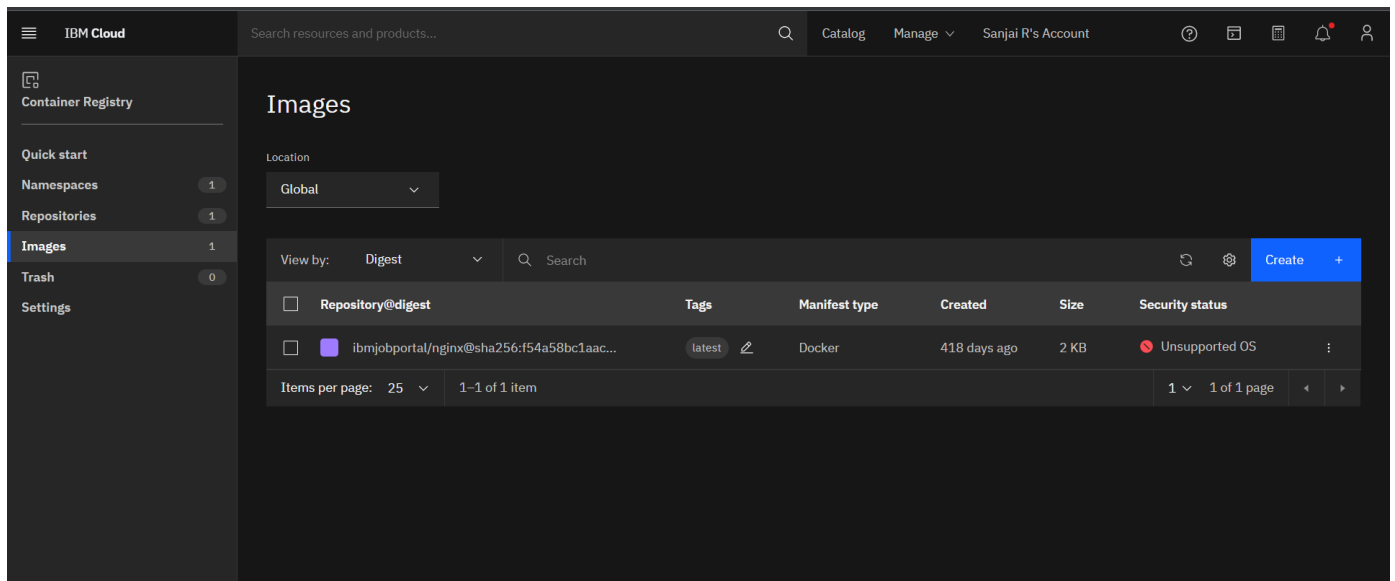


The screenshot shows the Docker Desktop application interface. On the left is a sidebar with navigation options: Containers, Images, Volumes, Dev Environments (marked BETA), Extensions (marked BETA), and Add Extensions. The main panel is titled 'Images on disk' and shows a list of 9 images with a total size of 1.15 GB. A progress bar indicates that some images are 'IN USE' and others are 'UNUSED'. Below this, there is a search bar and a checkbox for 'In use only'. The main content is a table of Docker images.

NAME ↑	TAG	IMAGE ID	CREATED	SIZE
hello-world	latest	feb5d9fea6a5	about 1 year ago	13.26 KB
icr.io/lbmjobportal/nginx	latest	feb5d9fea6a5	about 1 year ago	13.26 KB
mongo	latest	0bcbeb494bed	about 1 year ago	684.19 MB
mongo-express	latest	e3505d6fafd0	about 1 year ago	135.61 MB
newsapp	v0.2	00f20a4ca70d	about 1 year ago	186.02 MB
nginx	IN USE	19dd4d73108a	3 days ago	23.55 MB
nginx	1.21-alpine	1318bf5f63b4	about 1 year ago	22.85 MB
redis	6.2-alpine	f6f2296798e9	about 1 year ago	32.31 MB
ubuntu	latest	df5de72bdb3b	4 months ago	77.83 MB

At the bottom of the interface, system statistics are displayed: RAM 1.96GB, CPU 0.23%, and a status 'Connected to Hub'. The version 'v4.11.0' is shown in the bottom right corner.

3) Create a IBM container registry and deploy helloworld app or jobportalapp



4) Create a Kubernetes cluster in IBM cloud and deploy helloworld image or jobportal image and also expose the same app to run in nodeport.

