

1.Pull an image from docker hub and run it in docker playground

The screenshot shows the Docker Playground interface. On the left, there's a sidebar with a clock showing 03:57:33, a 'CLOSE SESSION' button, and a list of instances. The main area displays the instance details for 'cds6jom0_cds6jrm0qau000ahdr2g'. The IP is 192.168.0.8. The memory usage is 1.17% (46.68MiB / 3.906GiB) and CPU usage is 0.75%. The SSH command is 'ssh ip172-18-0-8-cds6jom0qau000ahdr20@direct.labs.play-with-d'. Below this, there's a terminal window showing the command 'docker pull hello-world' being executed. The output shows the image being pulled from Docker Hub and the container being created.

```
##### WARNING!!!! #####
# This is a sandbox environment. Using personal credentials #
# is HIGHLY discouraged. Any consequences of doing so are #
# completely the user's responsibilities. #
# The FWD team. #
#####
(node1) (local) root@192.168.0.8 ~
$ docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:faa03e786c97f07ef34423fccceec2398ec8a5759259f94d99078f264e9d7af
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest
(node1) (local) root@192.168.0.8 ~
$
```

The screenshot shows the Docker Playground interface. On the left, there's a sidebar with a clock showing 03:55:30, a 'CLOSE SESSION' button, and a list of instances. The main area displays the instance details for 'cds6jom0_cds6jrm0qau000ahdr2g'. The IP is 192.168.0.8. The memory usage is 1.23% (49.07MiB / 3.906GiB) and CPU usage is 0.48%. The SSH command is 'ssh ip172-18-0-8-cds6jom0qau000ahdr20@direct.labs.play-with-d'. Below this, there's a terminal window showing the command 'docker run hello-world' being executed. The output shows the container running and the 'Hello from Docker!' message being displayed. It also includes instructions on how to run a more complex container like Ubuntu.

```
$ docker run hello-world

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
   (amd64)
3. The Docker daemon created a new container from that image which runs the
   executable that produces the output you are currently reading.
4. The Docker daemon streamed that output to the Docker client, which sent it
   to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/

For more examples and ideas, visit:
https://docs.docker.com/get-started/
(node1) (local) root@192.168.0.8 ~
$
```

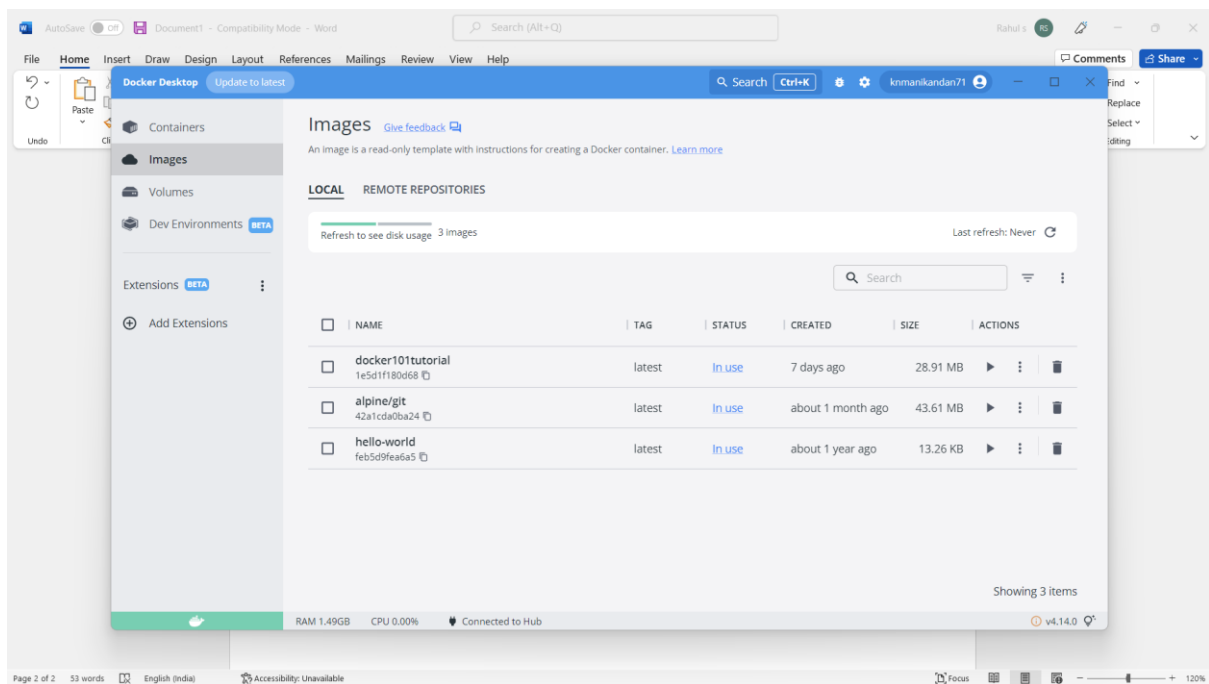
2. Create a docker file for the jobportal application and deploy it in Docker desktop application.

```
FROM
python:3.7
COPY.
/app
WORKDI
R /app

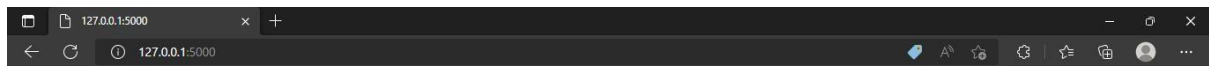
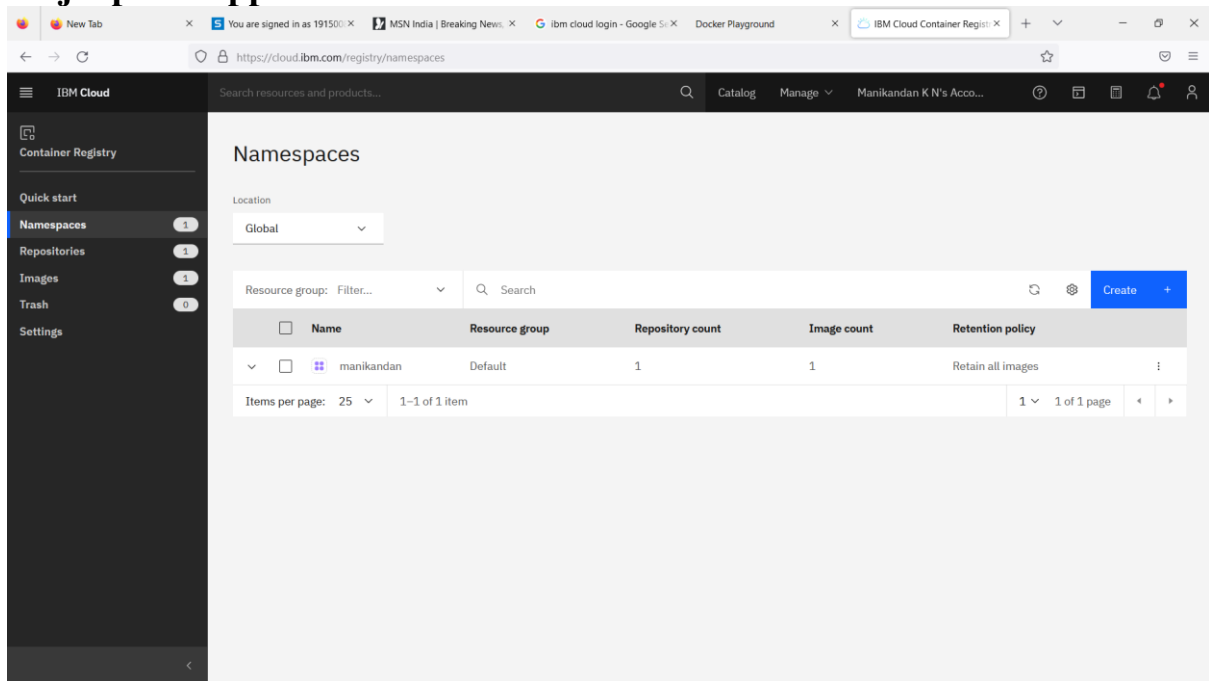
COPY requirements.txt /app

RUN python -m pip install -r
requirements.txtEXPOSE 5001

ENTRYPOINT [
"python" ]CMD [
"app.py" ]
```



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 jobportalimage and also expose the same app to run in nodeport.

