ASSIGNMENT 4

Database connection

Date	02 November 2022
Student Name	Barath S
Student Roll no	621319104009
Maximum Marks	2 Marks

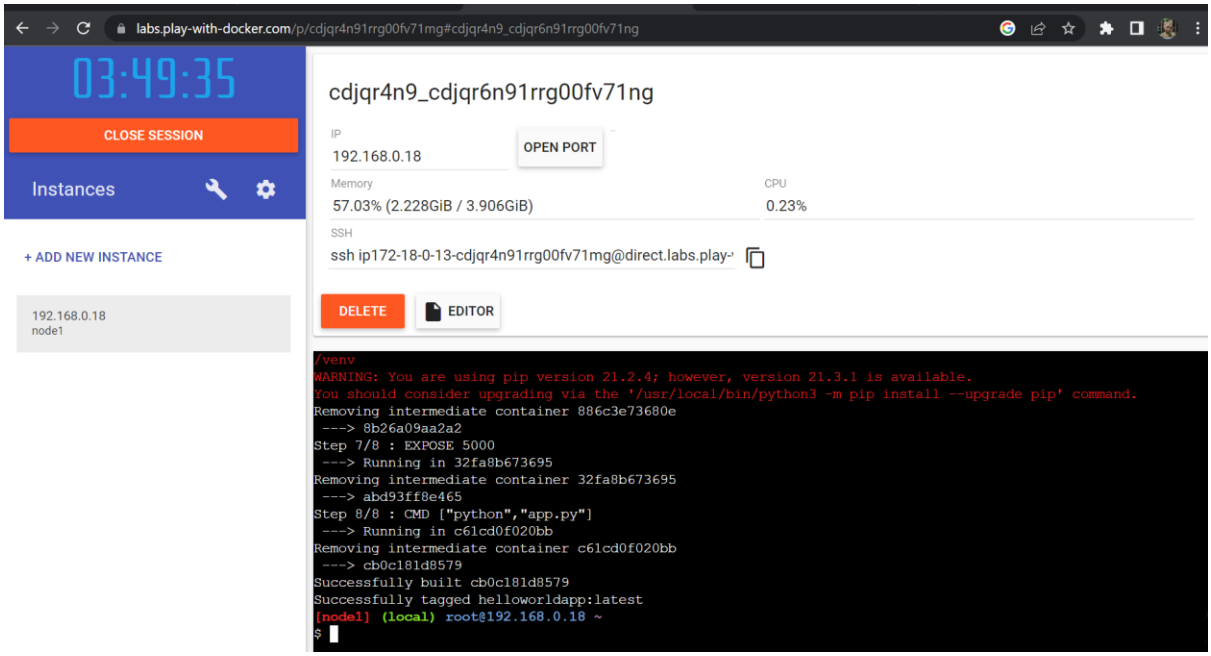
1.Pull an Image from docker hub and run it in docker playground.

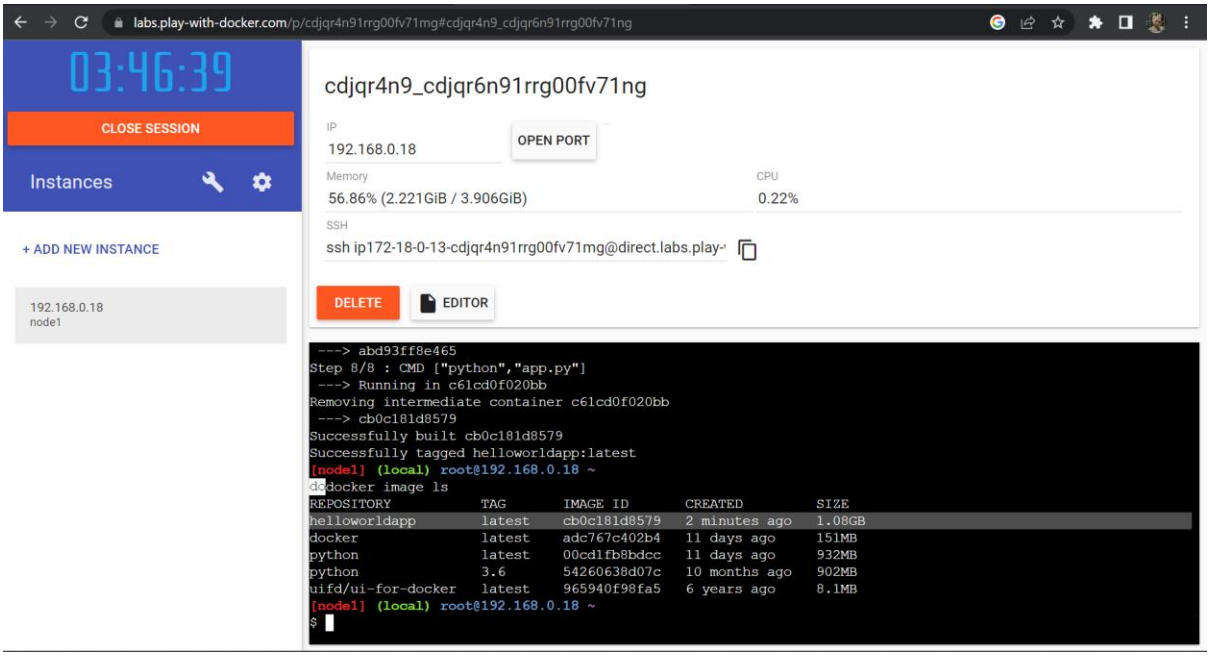
App.py

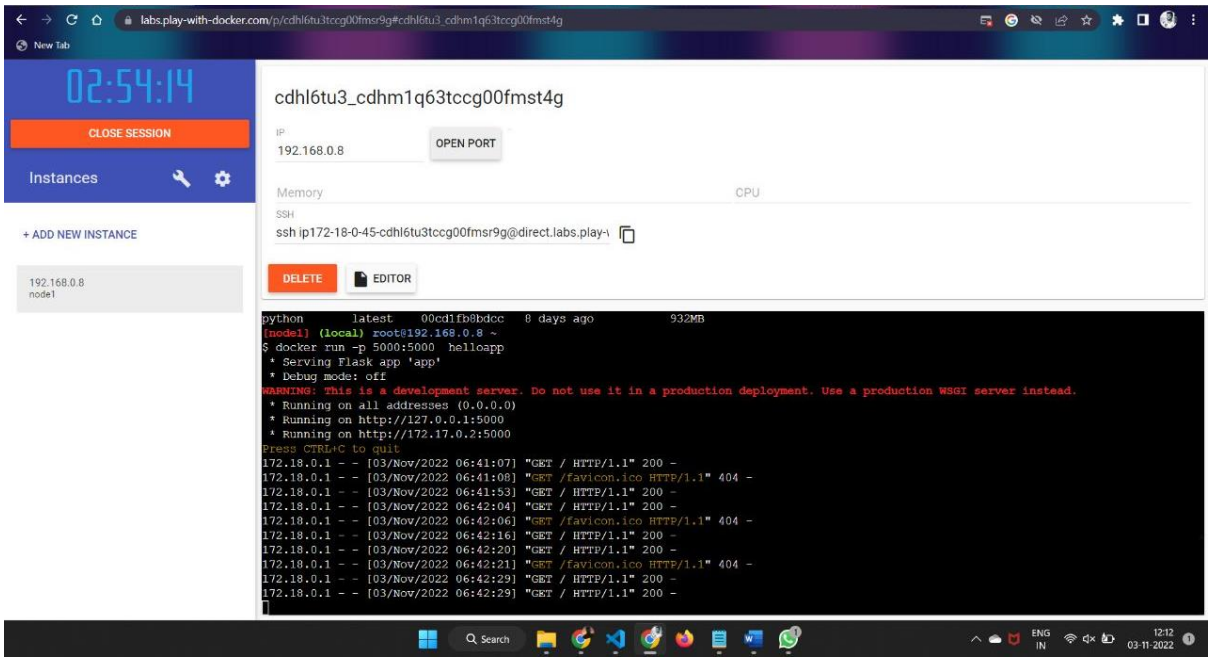
```
from flask import Flask
app=Flask(__name__)
import os
@app.route("/")
def home():
   return "Hello"

if __name__=="__main_":
   port=int(os.environ.get('PORT',5000))
   app.run(host='0.0.0.0',port=port)
```

Docker file

```
FROM python
WORKDIR /app
COPY . .
RUN pip install -r requirement.txt
CMD ["python","app.py"]
EXPOSE 5000
```


labs.play-with-docker.com/p/cdjqr4n91rrg00fv71mg#cdjqr4n9_cdjqr6n91rrg00fv71ng
03:49:35
CLOSE SESSION
Instances
+ ADD NEW INSTANCE
192.168.0.18
node1
cdjqr4n9_cdjqr6n91rrg00fv71ng
IP
192.168.0.18
OPEN PORT
Memory
57.03% (2.228GiB / 3.906GiB)
CPU
0.23%
SSH
ssh ip172-18-0-13-cdjqr4n91rrg00fv71mg@direct.labs.play-
DELETE
EDITOR
/venv
WARNING: You are using pip version 21.2.4; however, version 21.3.1 is available.
You should consider upgrading via the '/usr/local/bin/python3 -m pip install --upgrade pip' command.
Removing intermediate container 886c3e73680e
---> 8b26a09aa2a2
Step 7/8 : EXPOSE 5000
---> Running in 32fa8b673695
Removing intermediate container 32fa8b673695
---> abd93ff8e465
Step 8/8 : CMD ["python","app.py"]
---> Running in c61cd0f020bb
Removing intermediate container c61cd0f020bb
---> cb0c181d8579
Successfully built cb0c181d8579
Successfully tagged helloworldapp:latest
[node1] (local) root@192.168.0.18 ~
$


labs.play-with-docker.com/p/cdjqr4n91rrg00fv71mg#cdjqr4n9_cdjqr6n91rrg00fv71ng
03:46:39
CLOSE SESSION
Instances
+ ADD NEW INSTANCE
192.168.0.18
node1
cdjqr4n9_cdjqr6n91rrg00fv71ng
IP
192.168.0.18
OPEN PORT
Memory
56.86% (2.221GiB / 3.906GiB)
CPU
0.22%
SSH
ssh ip172-18-0-13-cdjqr4n91rrg00fv71mg@direct.labs.play-
DELETE
EDITOR
---> abd93ff8e465
Step 8/8 : CMD ["python","app.py"]
---> Running in c61cd0f020bb
Removing intermediate container c61cd0f020bb
---> cb0c181d8579
Successfully built cb0c181d8579
Successfully tagged helloworldapp:latest
[node1] (local) root@192.168.0.18 ~
dodocker image ls
REPOSITORY TAG IMAGE ID CREATED SIZE
helloworldapp latest cb0c181d8579 2 minutes ago 1.08GB
docker latest adc767c402b4 11 days ago 151MB
python latest 00cd1fb8bdcc 11 days ago 932MB
python 3.6 54260638d07c 10 months ago 902MB
uifd/ui-for-docker latest 965940f98fa5 6 years ago 8.1MB
[node1] (local) root@192.168.0.18 ~
$

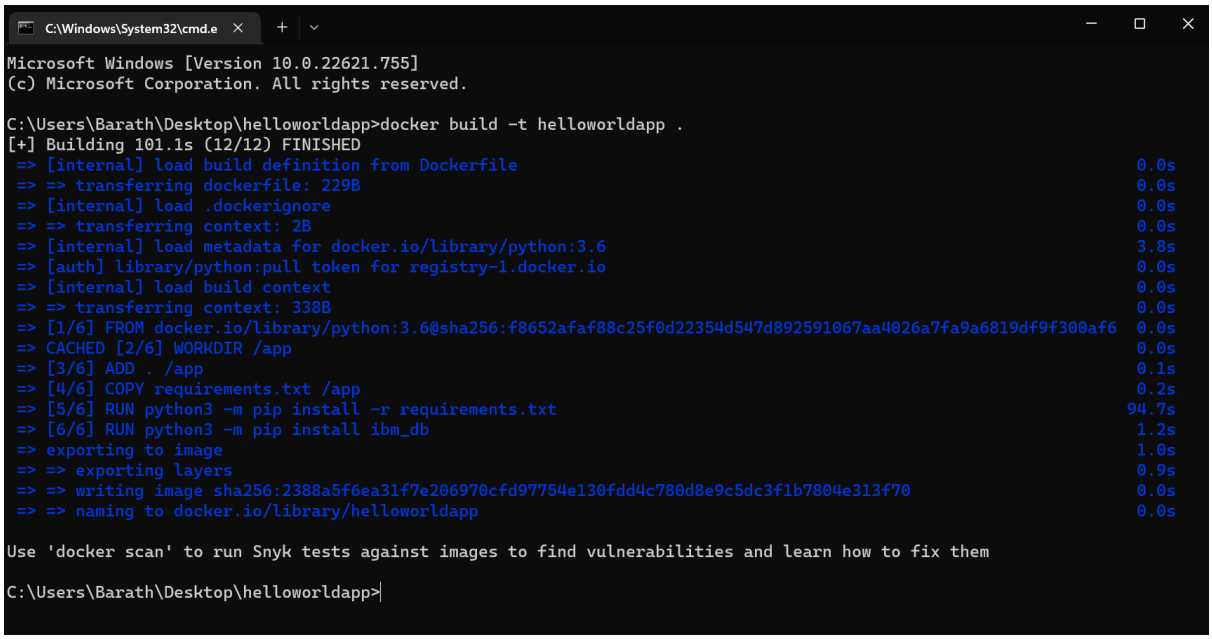

labs.play-with-docker.com/p/cdhl6tu3tccg00fmsr9g#cdhl6tu3_cdhm1q63tccg00fmst4g
New Tab
02:54:14
CLOSE SESSION
Instances
+ ADD NEW INSTANCE
192.168.0.8
node1
cdhl6tu3_cdhm1q63tccg00fmst4g
IP
192.168.0.8
OPEN PORT
Memory
CPU
SSH
ssh ip172-18-0-45-cdhl6tu3tccg00fmsr9g@direct.labs.play-
DELETE
EDITOR
python latest 00cd1fb8bdcc 8 days ago 932MB
[node1] (local) root@192.168.0.8 ~
$ docker run -p 5000:5000 helloapp
* Serving Flask app 'app'
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:5000
* Running on http://172.17.0.2:5000
Press CTRL+C to quit
172.18.0.1 - - [03/Nov/2022 06:41:07] "GET / HTTP/1.1" 200 -
172.18.0.1 - - [03/Nov/2022 06:41:08] "GET /favicon.ico HTTP/1.1" 404 -
172.18.0.1 - - [03/Nov/2022 06:41:53] "GET / HTTP/1.1" 200 -
172.18.0.1 - - [03/Nov/2022 06:42:04] "GET / HTTP/1.1" 200 -
172.18.0.1 - - [03/Nov/2022 06:42:06] "GET /favicon.ico HTTP/1.1" 404 -
172.18.0.1 - - [03/Nov/2022 06:42:16] "GET / HTTP/1.1" 200 -
172.18.0.1 - - [03/Nov/2022 06:42:20] "GET / HTTP/1.1" 200 -
172.18.0.1 - - [03/Nov/2022 06:42:21] "GET /favicon.ico HTTP/1.1" 404 -
172.18.0.1 - - [03/Nov/2022 06:42:29] "GET / HTTP/1.1" 200 -
172.18.0.1 - - [03/Nov/2022 06:42:29] "GET / HTTP/1.1" 200 -
Search
ENG
IN
12:12
03-11-2022

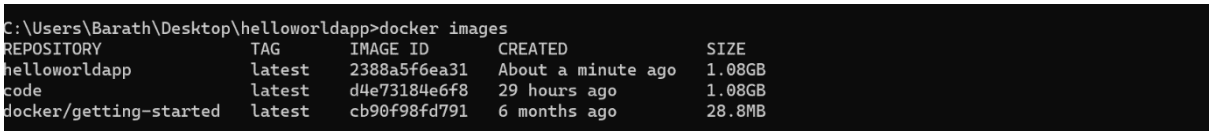
Not secure | ip172-18-0-45-cdhl6tu3tccg00fmsr9g-5000.direct.labs.play-with-docker.com
New Tab

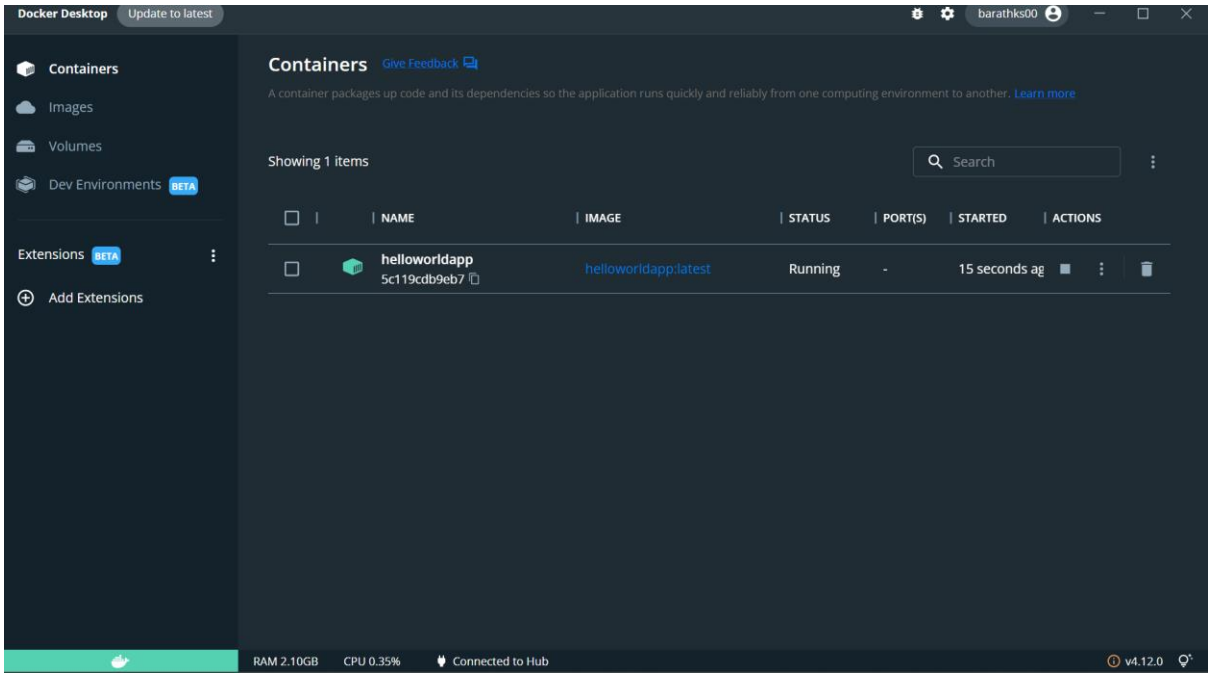
Hello

Search
ENG
IN
12:11
03-11-2022

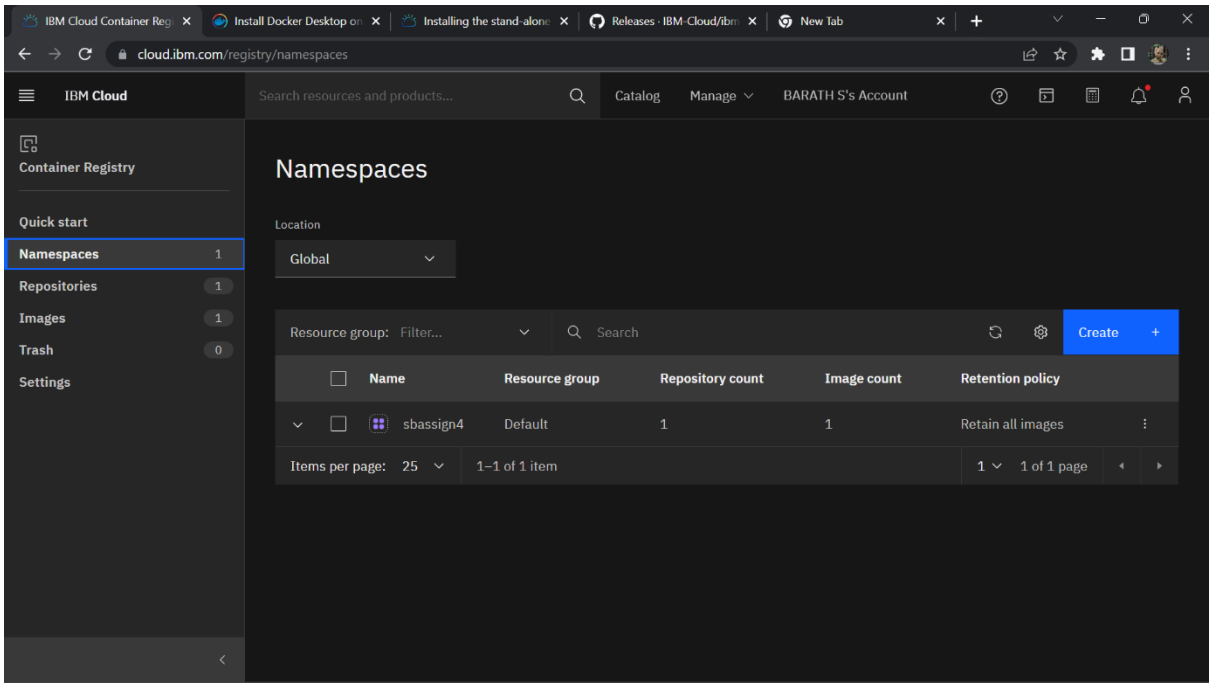
2.Create a docker file for the jobportal application and deploy it in Docker desktop application

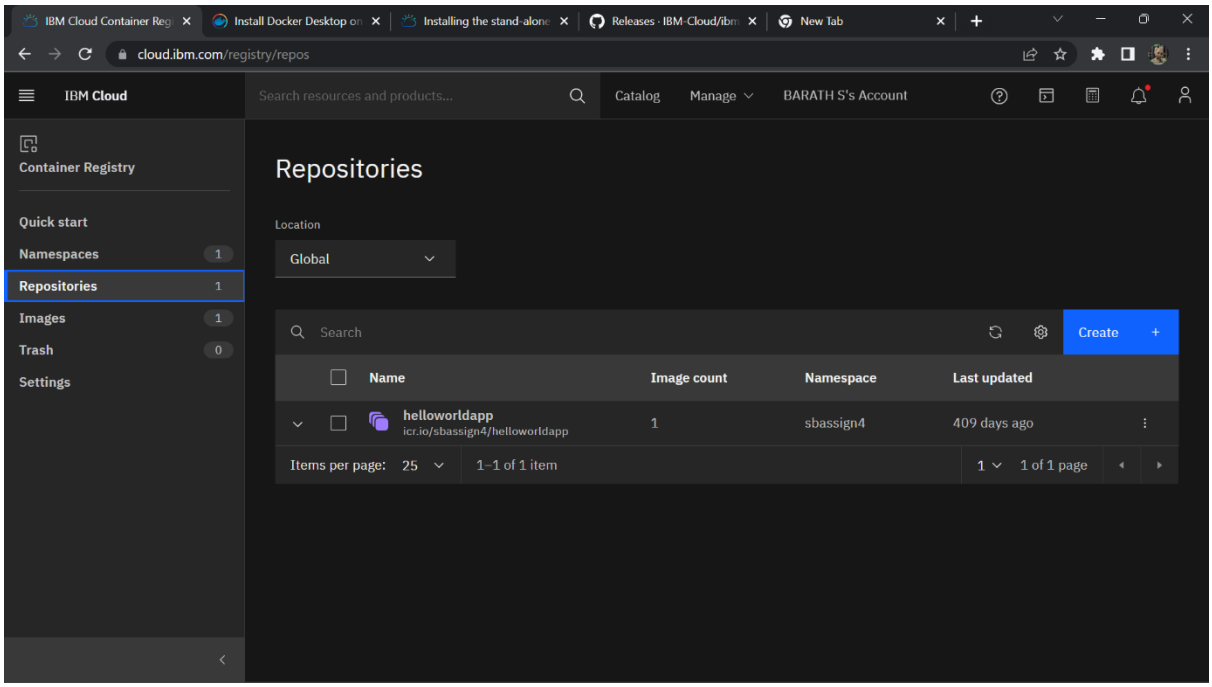


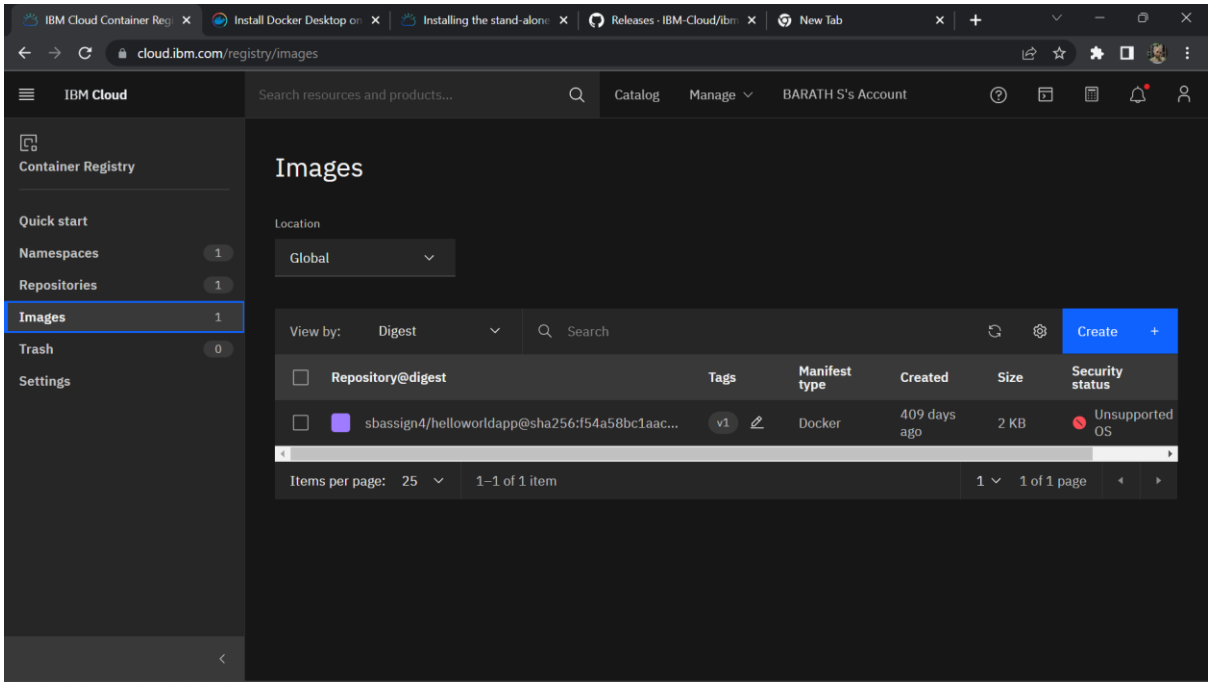




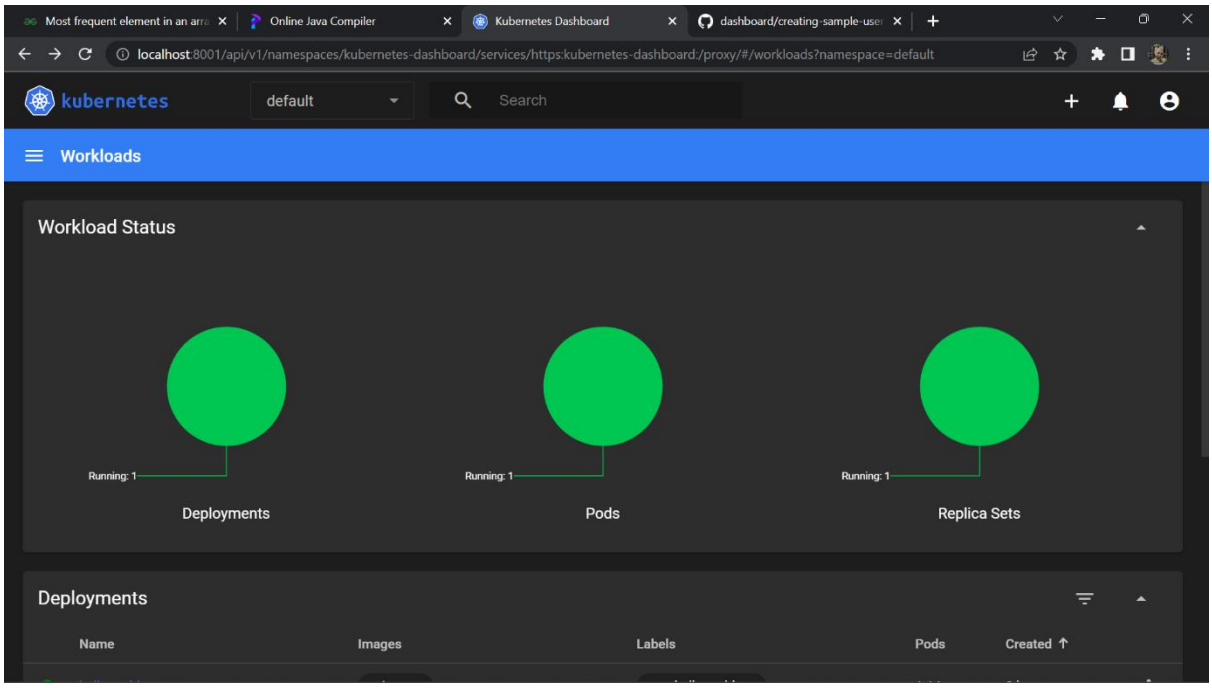
3.Create a IBM container registry and deploy helloworld app or jobportalapp.

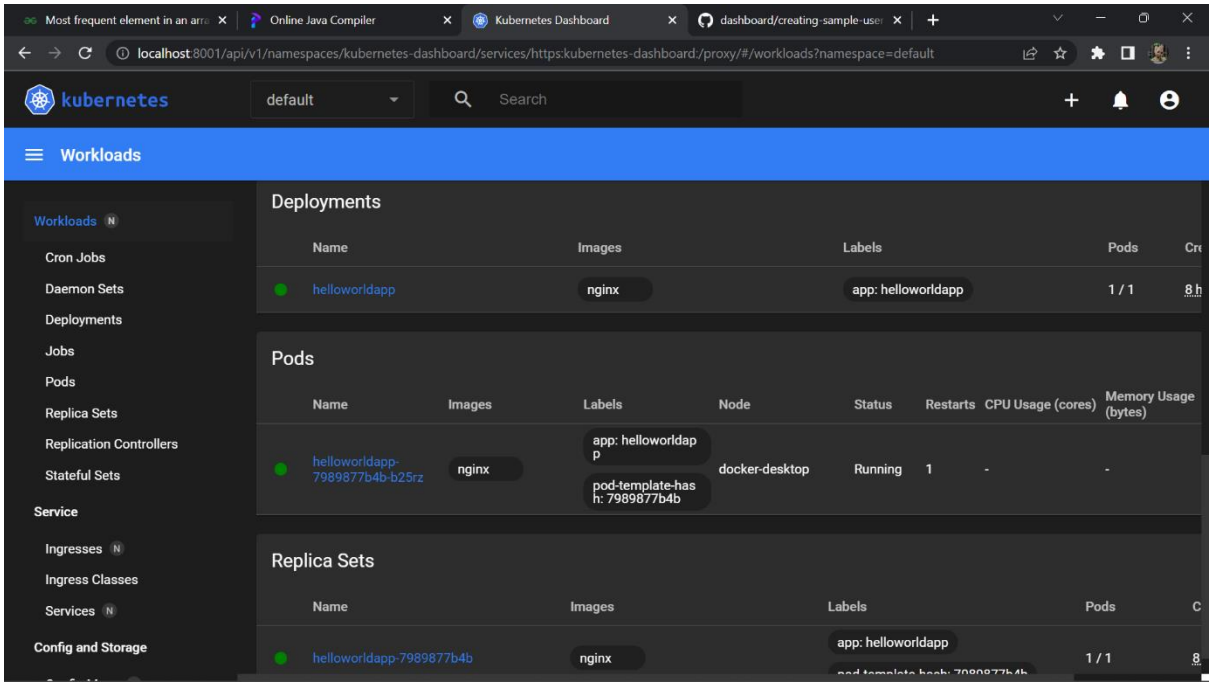


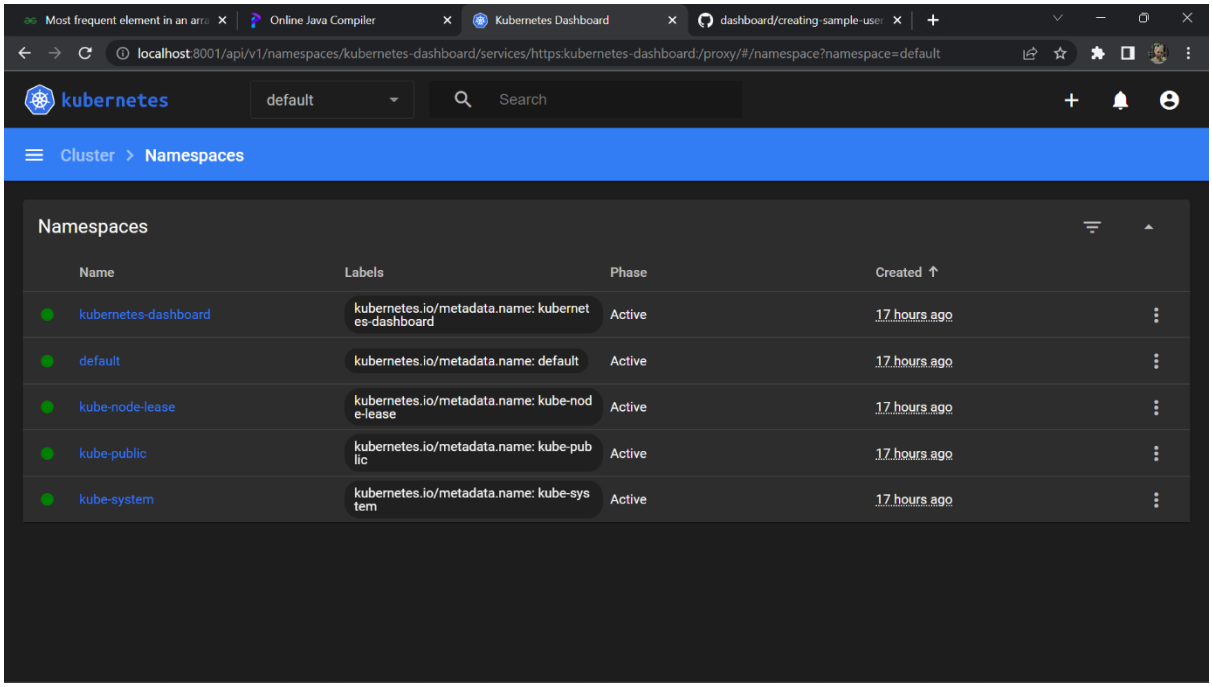




4.Create a Kubernetes cluster in IBM cloud and deploy helloworld image or jobportal image and also expose the same app to run in nodeport




Most frequent element in an arra
Online Java Compiler
Kubernetes Dashboard
dashboard/creating-sample-user
localhost:8001/api/v1/namespaces/kubernetes-dashboard/services/https:kubernetes-dashboard:/proxy/#/workloads?namespace=default
kubernetes
default
Search
Workloads
Workloads
Cron Jobs
Daemon Sets
Deployments
Jobs
Pods
Replica Sets
Replication Controllers
Stateful Sets
Service
Ingresses
Ingress Classes
Services
Config and Storage
Deployments
Name
Images
Labels
Pods
helloworldapp
nginx
app: helloworldapp
1 / 1
Pods
Name
Images
Labels
Node
Status
Restarts
CPU Usage (cores)
Memory Usage (bytes)
helloworldapp-7989877b4b-b25rz
nginx
app: helloworldapp
pod-template-hash: 7989877b4b
docker-desktop
Running
1
Replica Sets
Name
Images
Labels
Pods
helloworldapp-7989877b4b
nginx
app: helloworldapp
1 / 1


Most frequent element in an arra
Online Java Compiler
Kubernetes Dashboard
dashboard/creating-sample-user
localhost:8001/api/v1/namespaces/kubernetes-dashboard/services/https:kubernetes-dashboard:/proxy/#/namespace?namespace=default
kubernetes
default
Search
Cluster
Namespaces
Namespaces
Name
Labels
Phase
Created
kubernetes-dashboard
kubernetes.io/metadata.name: kubernetes-dashboard
Active
17 hours ago
default
kubernetes.io/metadata.name: default
Active
17 hours ago
kube-node-lease
kubernetes.io/metadata.name: kube-node-lease
Active
17 hours ago
kube-public
kubernetes.io/metadata.name: kube-public
Active
17 hours ago
kube-system
kubernetes.io/metadata.name: kube-system
Active
17 hours ago