

ASSIGNMENT 4

Project Name	Skill / Job Recommender Application
Maximum Marks	2 Marks
Team ID	PNT2022TMID36881

Output:

Pull image in docker:

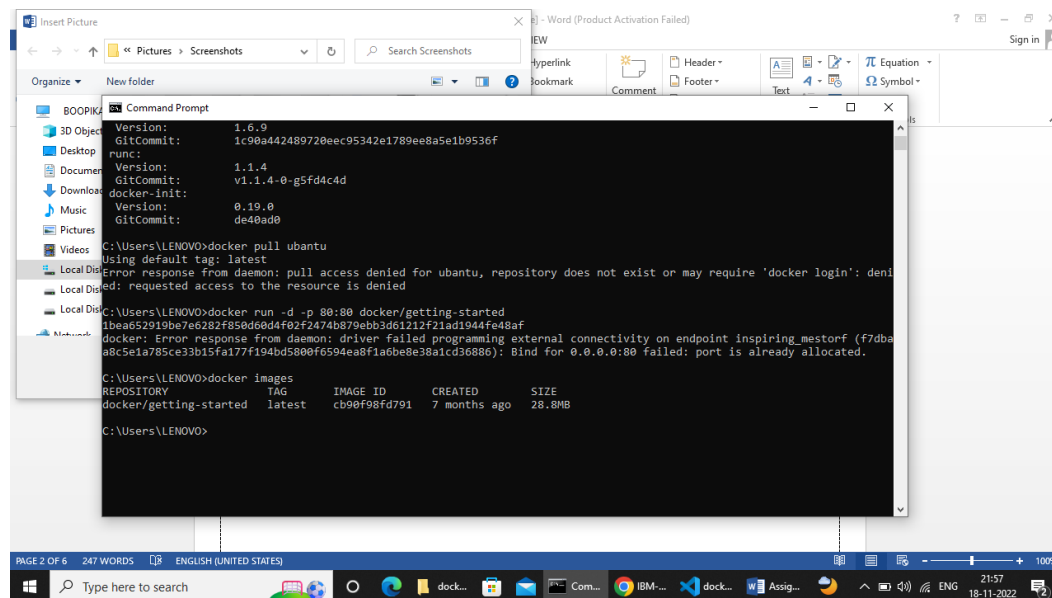
```
Select Command Prompt
Microsoft Windows [Version 10.0.19044.2251]
(c) Microsoft Corporation. All rights reserved.

C:\Users\LENOVO>docker run -d -p 80:80 docker/getting-started
Unable to find image 'docker/getting-started:latest' locally
latest: Pulling from docker/getting-started
df9b9388f04a: Pull complete
5867cba5fcbcd: Pull complete
4b639e65cb3b: Pull complete
861ed9e2b976: Pull complete
bc19f3e8eeb1: Pull complete
4071be97c256: Pull complete
70b586f1a54b: Pull complete
9c9732f525d6: Pull complete
Digest: sha256:b558be874169471bd4e65bd6eac8c303b271a7ee8553ba47481b73b2bf597aae
Status: Downloaded newer image for docker/getting-started:latest
14a53be070cc39008c137fb144b8be1bf28bb99ceb64ba5c2de31262e9c897b4

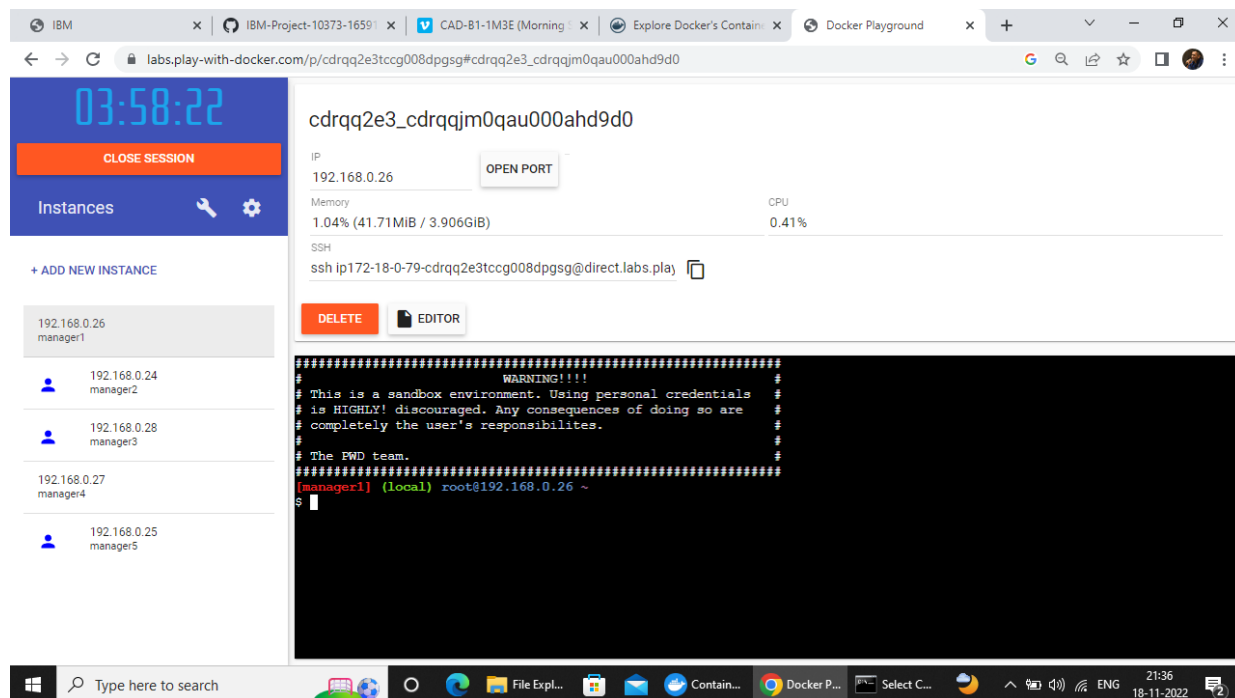
C:\Users\LENOVO>docker version
Client:
 Cloud integration: v1.0.29
 Version: 20.10.21
 API version: 1.41
 Go version: go1.18.7
 Git commit: baeda1f
 Built: Tue Oct 25 18:08:16 2022
 OS/Arch: windows/amd64
 Context: default
 Experimental: true

Server: Docker Desktop 4.14.1 (91661)
Engine:
 Version: 20.10.21
 API version: 1.41 (minimum version 1.12)
 Go version: go1.18.7
 Git commit: 3056208
 Built: Tue Oct 25 18:08:19 2022
 OS/Arch: linux/amd64
 Experimental: false
 containerd:
 Version: 1.6.9
```

Run Docker:



Docker Playground:



Container Registry:

The screenshot shows the IBM Cloud 'Resource list' page. The browser tabs include 'IBM', 'IBM-Project-10514-16591', 'IBM Watson Service Page', 'PDF to Word Converter', and 'Resource list - IBM Cloud'. The URL is 'cloud.ibm.com/resources'. The page header has a search bar and navigation links for 'Catalog', 'Manage', and 'Majnu p's Account'. A sidebar on the left lists various resource categories: Compute (0), Containers (1), Networking (0), Storage (1+), AI / Machine Learning (1+), Analytics (0), Blockchain (0), Databases (0), Developer tools (0), and Logging and monitoring (0). The main table displays a single resource: 'majnu' in the 'Default' group, located in 'Frankfurt', using the 'Kubernetes Service' product, with a status of 'Normal'. A 'Create resource' button is in the top right.

Name	Group	Location	Product	Status	Tags
majnu	Default	Frankfurt	Kubernetes Service	Normal	-

The screenshot shows the IBM Cloud 'Kubernetes clusters/cdqv3v9f05cs516njeb0/overview' page. The browser tabs include 'IBM', 'IBM-Project-10514-16591', 'IBM Watson Service Page', 'PDF to Word Converter', and 'majnu - IBM Cloud'. The URL is 'cloud.ibm.com/kubernetes/clusters/cdqv3v9f05cs516njeb0/overview'. The page header shows the cluster name 'majnu' with a 'Normal' status and an 'Expires in 29 days' warning. A 'Kubernetes dashboard' button is available. The left sidebar has links for 'Overview', 'Worker nodes', 'Worker pools', and 'DevOps' (marked as 'New'). The main content area features a 'Details' section with the following information: Cluster ID 'cdqv3v9f05cs516njeb0', Version '1.24.8_1544', Infrastructure 'Classic', Zones 'Milan 01', Created '11/17/2022, 2:04 PM', Resource group 'Default', and an 'Image security enforcement' button set to 'Enable'. Summary cards show 'Node status: 1 of 1 Normal', 'Add-on status: 0 of 0 Normal', 'Master status: Normal', and 'Ingress status: Healthy'.

Node status	Add-on status	Master status	Ingress status
1 of 1 Normal	0 of 0 Normal	Normal	Healthy

Cluster ID	Version	Infrastructure	Zones
cdqv3v9f05cs516njeb0	1.24.8_1544	Classic	Milan 01

Created	Resource group	Image security enforcement
11/17/2022, 2:04 PM	Default	Enable

← → ⌂ ⚠ Not secure | 172.17.0.3:5000 < ⚙
Templates was Created successfully Welcomee
hai

KUBERNETES:

dashboard-adminuser.yaml

apiVersion: v1

kind:

ServiceAccount

metadata:

name: admin-user

namespace: kubernetes-dashboard

apiVersion: v1

kind: Secret

metadata:

name: admin-user-token

namespace: kubernetes-

dashboard annotations:

kubernetes.io/service-account.name: admin-
user type: kubernetes.io/service-account-token

apiVersion:

rbac.authorization.k8s.io/v1 kind:

ClusterRoleBinding

metadata:

name: admin-

user roleRef:

apiGroup: rbac.authorization.k8s.io

kind: ClusterRole

name: cluster-

admin subjects:

- kind: ServiceAccount

name: admin-user

namespace: kubernetes-dashboard

Flask-deployment.yaml

apiVersion: apps/v1

kind: Deployment

metadata:

name: flask-app

spec:

replicas: 3

selector:

matchLabels:

app: flask-app

template:

metadata:

labels:

app: flask-app

spec:

containers:

- name: flask-app-
container

image: flask-app-testing

imagePullPolicy: Never

ports:

- containerPort: 5000

protocol: TCP

Flask_ingress.yaml:

apiVersion: networking.k8s.io/v1

kind: Ingress

metadata:

name: flask-app-ingress

annotations:

kubernetes.io/ingress.class:

nginx

nginx.ingress.kubernetes.io/ssl-redirect: "false"

spec:

ingressClassName:

nginx rules:

- http:

paths:

- backend:

service:

name: flask-app-

service port:

number:
5000 path: /
pathType:
Prefix

Flask_service.yaml:

apiVersion: v1
kind: Service
metadata:
 name: flask-app-service
spec:
 type:
 ClusterIP
 ports:
 - port: 5000
 selector:
 app: flask-app