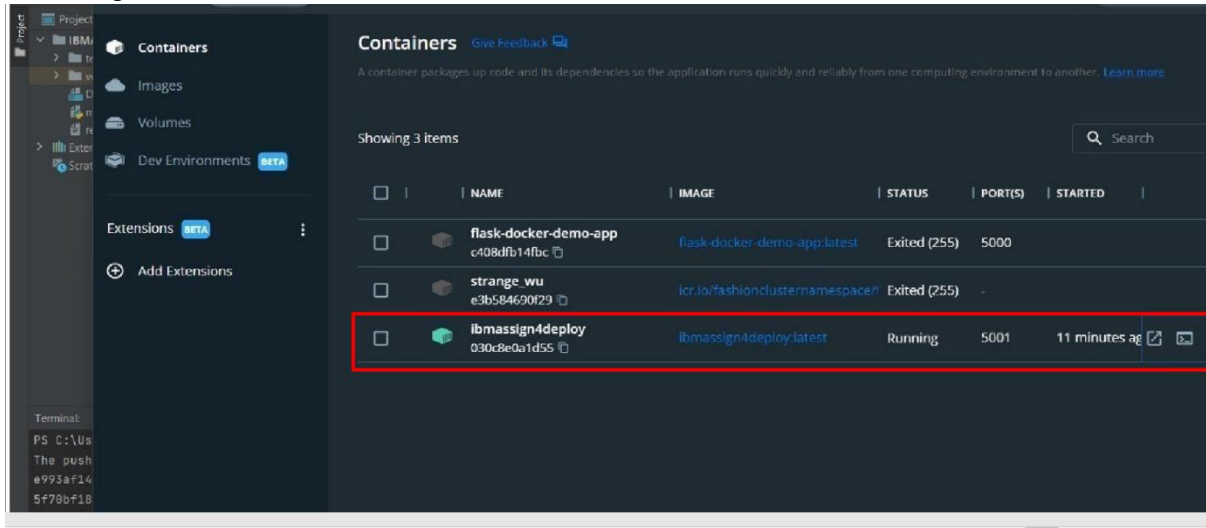


## ASSIGNMENT 4

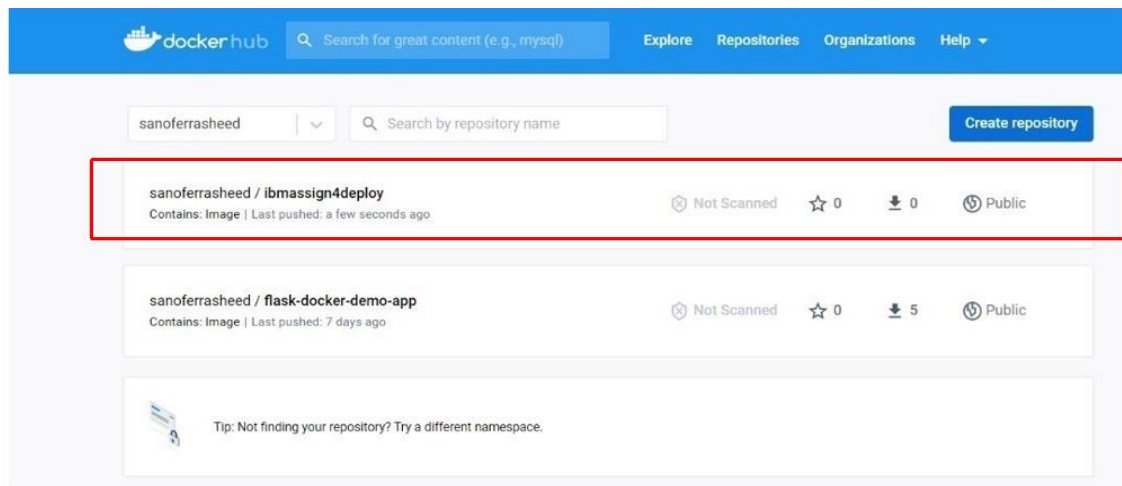
### CLOUD APPLICATION DEVELOPMENT

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

The image is built.



Here image name is ibmassign4deploy. Thus it is pushed in docker hub.



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

Dockerfile:

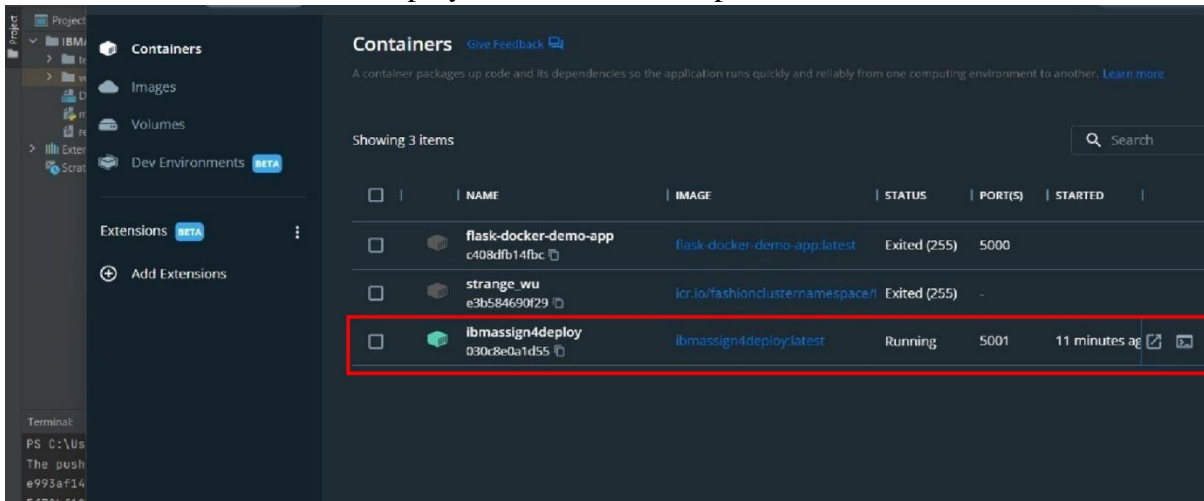
```
FROM python:3.6
COPY . /app
WORKDIR /app
```

```

RUN pip install -r requirements.txt
EXPOSE 5001
ENTRYPOINT [ "python" ]
CMD [ "main.py" ]

```

Thus docker file created and deployed in docker desktop.



3. Create a IBM container registry and deploy hello world app.

Container registry created using

```

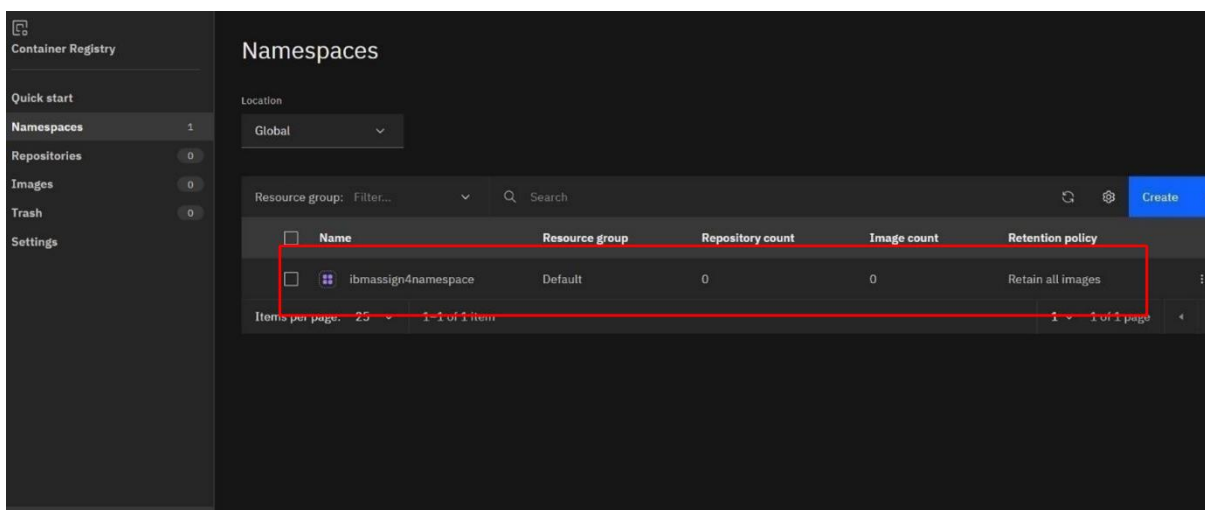
> docker tag sanoferrasheed/ibmassign4deploy:latest
icr.io/ibmassign4namespace/ibmassign4repo:latest

```

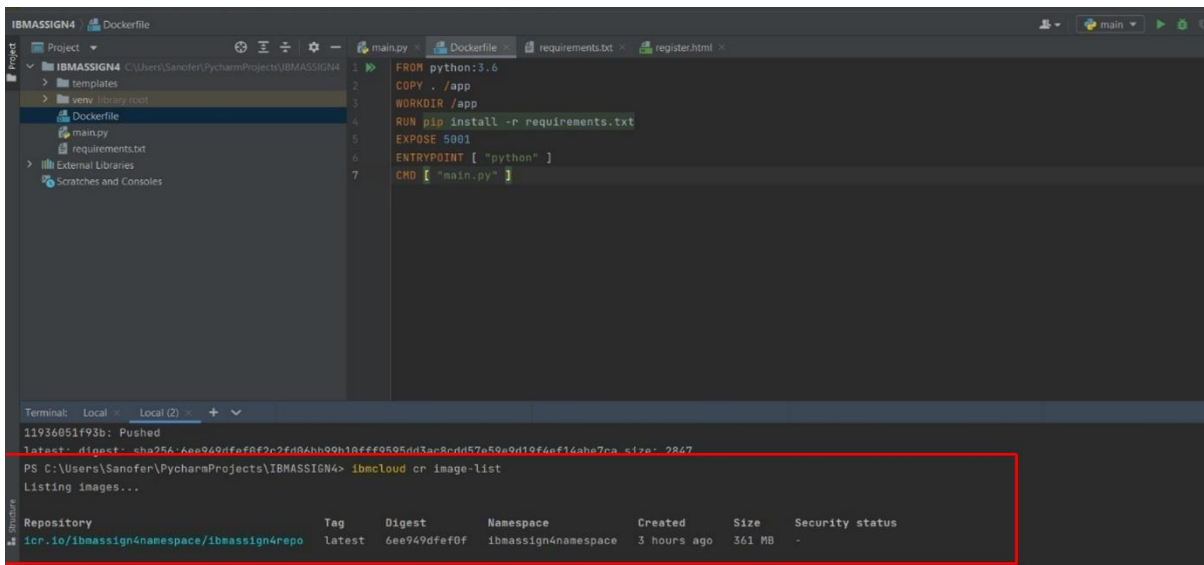
```

> docker push icr.io/ibmassign4namespace/ibmassign4repo:latest

```



Thus, images in container registry are listed



The screenshot shows a code editor with a Dockerfile and a terminal window. The Dockerfile contains the following content:

```
FROM python:3.6
COPY . /app
WORKDIR /app
RUN pip install -r requirements.txt
EXPOSE 5001
ENTRYPOINT [ "python" ]
CMD [ "main.py" ]
```

The terminal window shows the command `ibmcloud cr image-list` and its output, which lists the images in the container registry:

Repository	Tag	Digest	Namespace	Created	Size	Security status
icr.io/ibmassign4namespace/ibmassign4repo	latest	6ee949dfef0f	ibmassign4namespace	3 hours ago	361 MB	-

4.Create a Kubernetes cluster in IBM cloud and deploy hello world image or job portal image and also expose the same app to run in node port.

Thus, Cluster is created.

