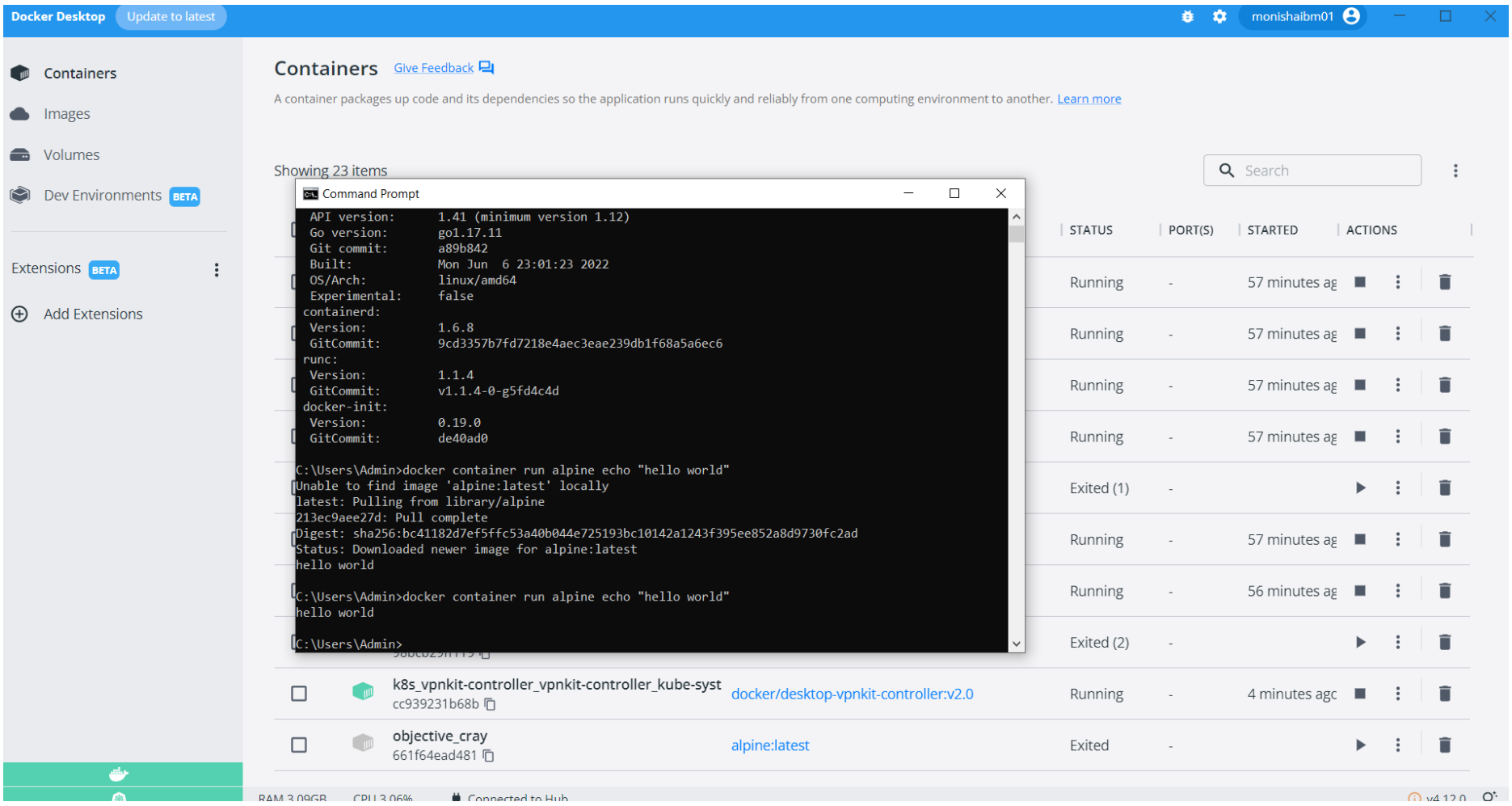
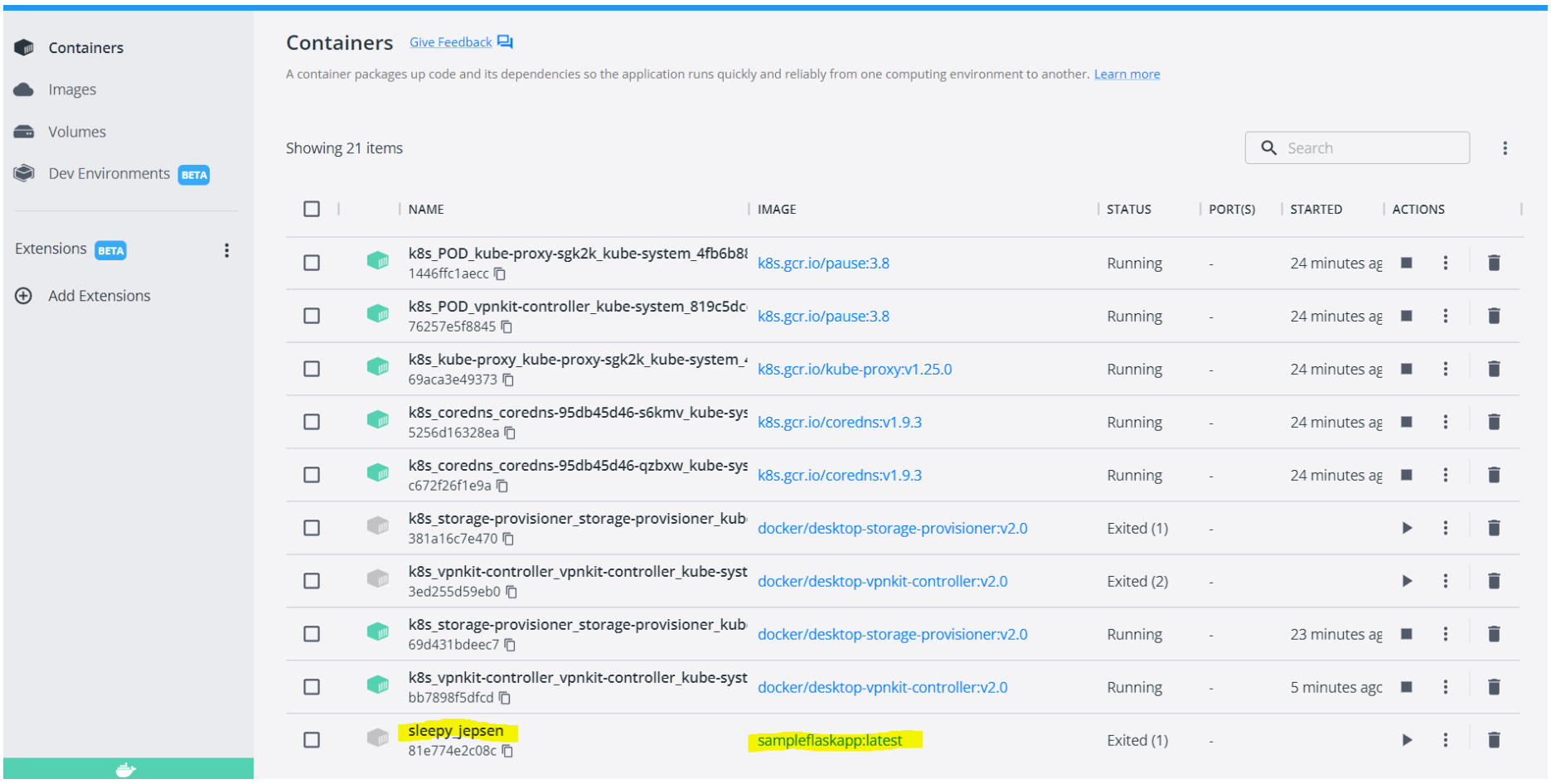
Assignment-3

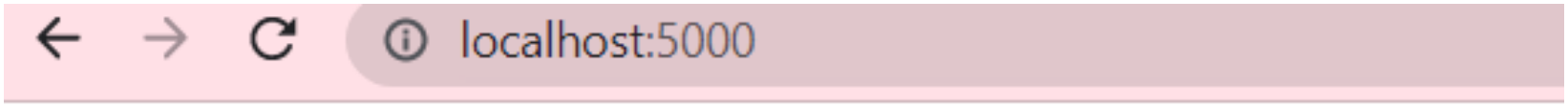
Dockers and Kubernets

(Containarize application and Deployement in Kubernets)

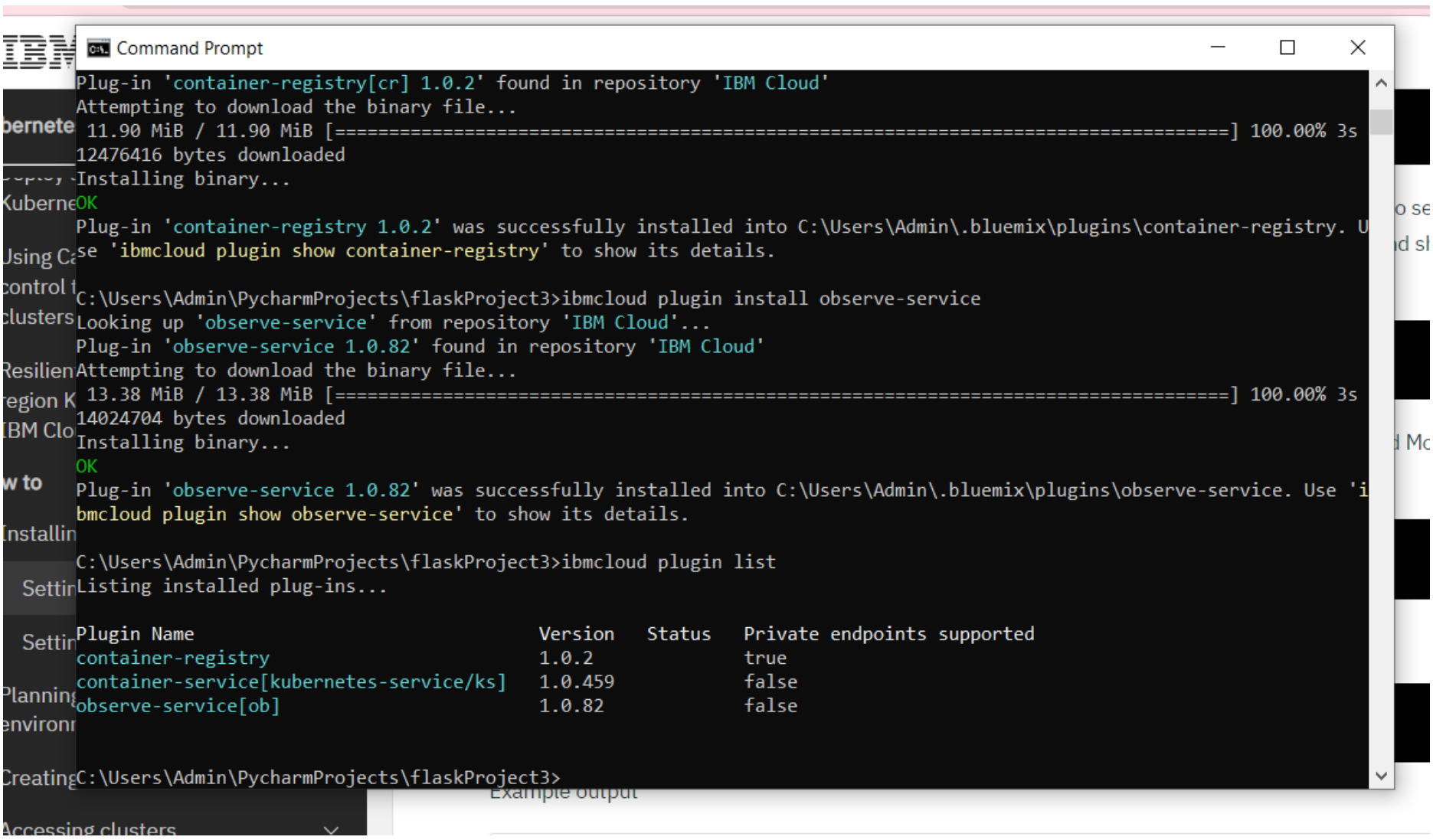
Date	21 October 2022
Team Id	PNT2022TMID36493
Project Name	Smart Fashion Recommender
Maximum Marks	2 Marks




Containers
Images
Volumes
Dev Environments BETA
Extensions BETA
Add Extensions
Containers
Give Feedback
A container packages up code and its dependencies so the application runs quickly and reliably from one computing environment to another. Learn more
Showing 21 items
Search
NAME
IMAGE
STATUS
PORT(S)
STARTED
ACTIONS
k8s_POD_kube-proxy-sgk2k_kube-system_4fb6b8
1446ffc1aecc
k8s.gcr.io/pause:3.8
Running
-
24 minutes ag
k8s_POD_vpnkit-controller_kube-system_819c5dc
76257e5f8845
k8s.gcr.io/pause:3.8
Running
-
24 minutes ag
k8s_kube-proxy_kube-proxy-sgk2k_kube-system_
69aca3e49373
k8s.gcr.io/kube-proxy:v1.25.0
Running
-
24 minutes ag
k8s_coredns_coredns-95db45d46-s6kmv_kube-sys
5256d16328ea
k8s.gcr.io/coredns:v1.9.3
Running
-
24 minutes ag
k8s_coredns_coredns-95db45d46-qzbxw_kube-sys
c672f26f1e9a
k8s.gcr.io/coredns:v1.9.3
Running
-
24 minutes ag
k8s_storage-provisioner_storage-provisioner_kub
381a16c7e470
docker/desktop-storage-provisioner:v2.0
Exited (1)
-
k8s_vpnkit-controller_vpnkit-controller_kube-syst
3ed255d59eb0
docker/desktop-vpnkit-controller:v2.0
Exited (2)
-
k8s_storage-provisioner_storage-provisioner_kub
69d431bdeec7
docker/desktop-storage-provisioner:v2.0
Running
-
23 minutes ag
k8s_vpnkit-controller_vpnkit-controller_kube-syst
bb7898f5dfcd
docker/desktop-vpnkit-controller:v2.0
Running
-
5 minutes ago
sleepy_jepsen
81e774e2c08c
sampleflaskapp:latest
Exited (1)
-
127.0.0.1:5000
Hello World!
Command Prompt - python -m flask run
"MacAddress": "02:42:ac:11:00:02",
"Networks": {
"bridge": {
"IPAMConfig": null,
"Links": null,
"Aliases": null,
"NetworkID": "e0c9dde68057e82756133fda57f65f287a31bcb227de57624bd6cd2076838fa6",
"EndpointID": "4a422abbeab2b62add1d465e8ff0c925d211387e76da034a663bb3147948f56c",
"Gateway": "172.17.0.1",
"IPAddress": "172.17.0.2",
"IPPrefixLen": 16,
"IPv6Gateway": "",
"GlobalIPv6Address": "",
"GlobalIPv6PrefixLen": 0,
"MacAddress": "02:42:ac:11:00:02",
"DriverOpts": null
}
}
}
}
]
C:\Users\Admin\PycharmProjects\flaskProject3>python -m flask run
* 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 http://127.0.0.1:5000
Press CTRL+C to quit


localhost:5000

Hello World!

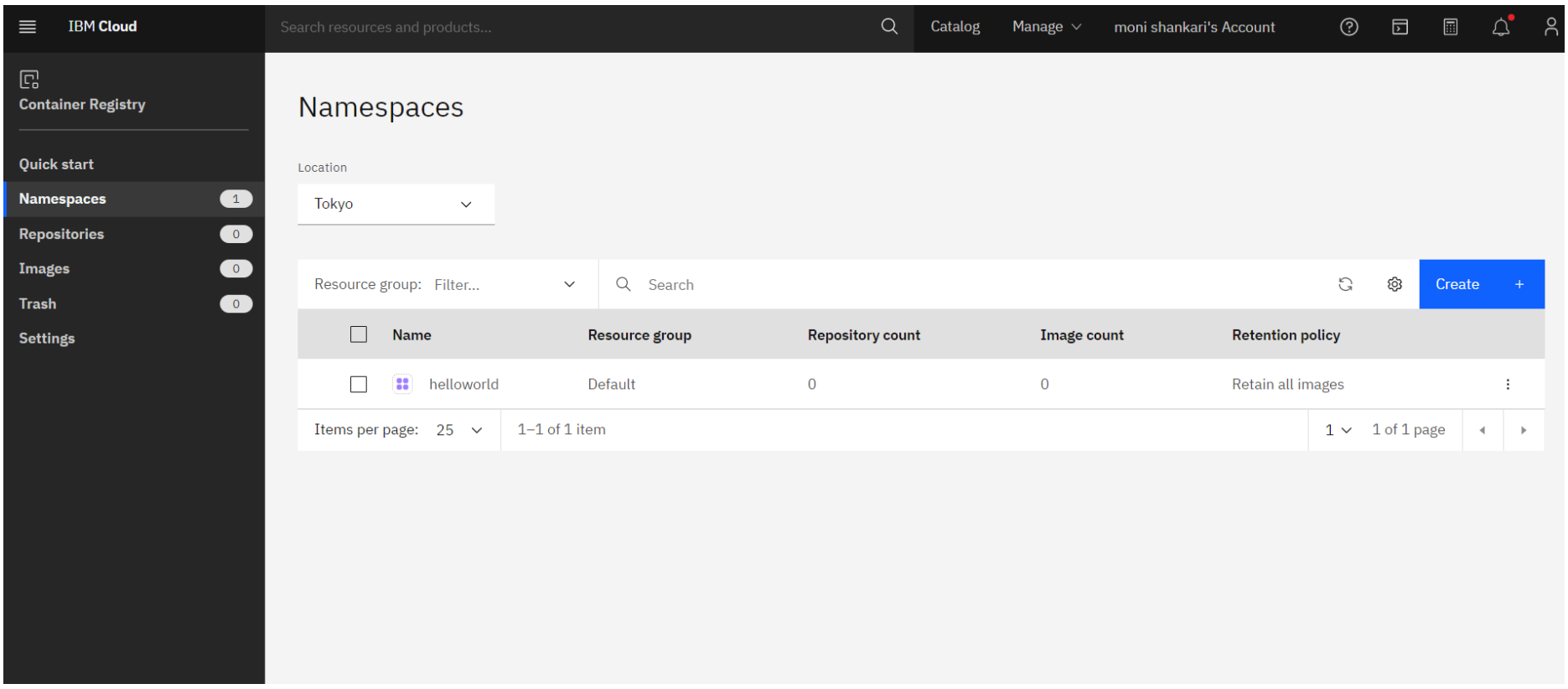

Command Prompt
Plug-in 'container-registry[cr] 1.0.2' found in repository 'IBM Cloud'
Attempting to download the binary file...
11.90 MiB / 11.90 MiB [==========] 100.00% 3s
12476416 bytes downloaded
Installing binary...
OK
Plug-in 'container-registry 1.0.2' was successfully installed into C:\Users\Admin\.bluemix\plugins\container-registry. Use 'ibmcloud plugin show container-registry' to show its details.
C:\Users\Admin\PycharmProjects\flaskProject3>ibmcloud plugin install observe-service
Looking up 'observe-service' from repository 'IBM Cloud'...
Plug-in 'observe-service 1.0.82' found in repository 'IBM Cloud'
Attempting to download the binary file...
13.38 MiB / 13.38 MiB [==========] 100.00% 3s
14024704 bytes downloaded
Installing binary...
OK
Plug-in 'observe-service 1.0.82' was successfully installed into C:\Users\Admin\.bluemix\plugins\observe-service. Use 'ibmcloud plugin show observe-service' to show its details.
C:\Users\Admin\PycharmProjects\flaskProject3>ibmcloud plugin list
Listing installed plug-ins...
Plugin Name Version Status Private endpoints supported
container-registry 1.0.2 true
container-service[kubernetes-service/ks] 1.0.459 false
observe-service[ob] 1.0.82 false
C:\Users\Admin\PycharmProjects\flaskProject3>

Command Prompt

```
3. jp-osa
4. jp-tok
5. kr-seo
6. eu-de
7. eu-gb
8. ca-tor
9. us-south
10. us-east
11. br-sao
Enter a number>


API endpoint:      https://cloud.ibm.com
Region:
User:              112419106301@smartinternz.com
Account:           moni shankari's Account (c809469b5dc943aabc5228a286d15e66)
Resource group:    No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
CF API endpoint:
Org:
Space:

C:\Users\Admin>ibmcloud cr region-set ap-north
The region is set to 'ap-north', the registry is 'jp.icr.io'.

OK

C:\Users\Admin>ibmcloud cr namespace-add <helloworld>
The syntax of the command is incorrect.

C:\Users\Admin>ibmcloud cr namespace-add helloworld
```

Command Prompt

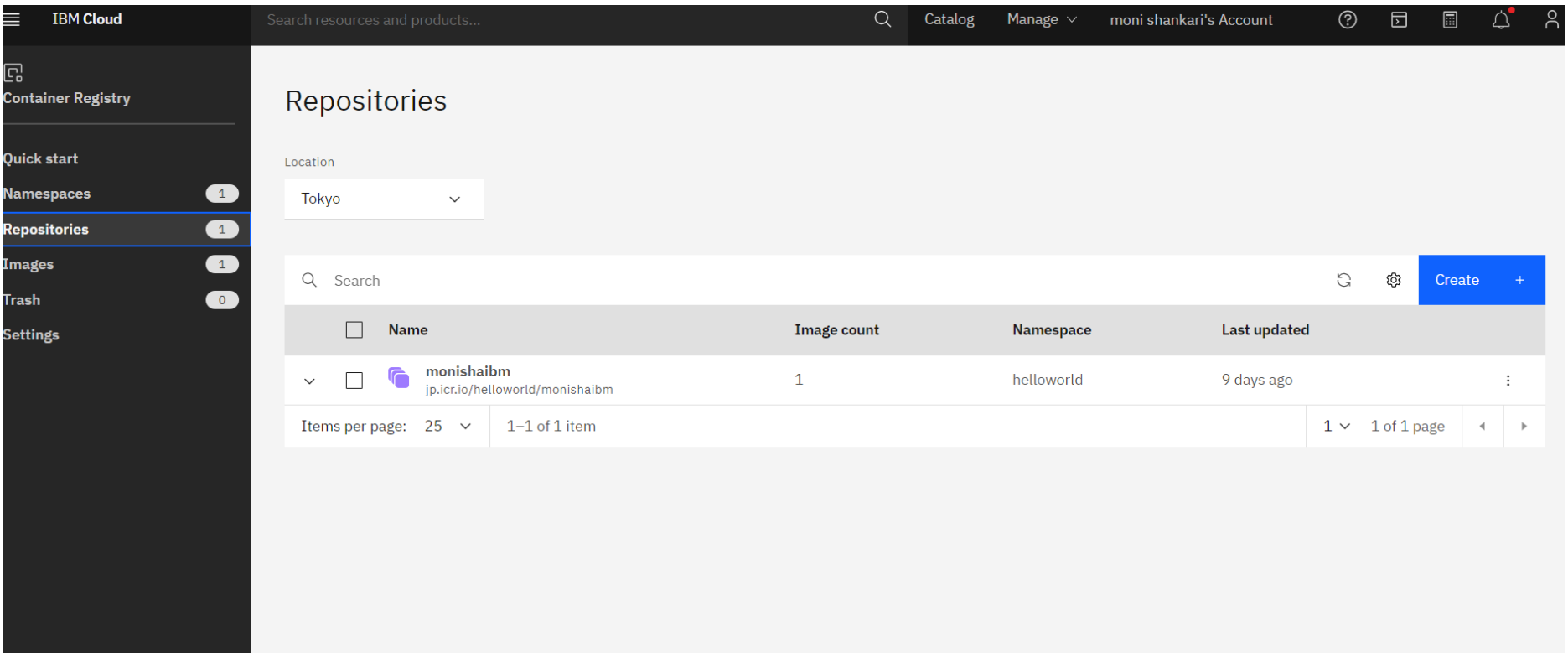
```
Enter a number>


API endpoint:      https://cloud.ibm.com
Region:
User:              112419106301@smartinternz.com
Account:           moni shankari's Account (c809469b5dc943aabc5228a286d15e66)
Resource group:    No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
CF API endpoint:
Org:
Space:

C:\Users\Admin>ibmcloud cr region-set ap-north
The region is set to 'ap-north', the registry is 'jp.icr.io'.

OK

C:\Users\Admin>ibmcloud cr namespace-add <helloworld>
The syntax of the command is incorrect.

C:\Users\Admin>ibmcloud cr namespace-add helloworld
No resource group is targeted. Therefore, the default resource group for the account ('Default') is targeted.

Adding namespace 'helloworld' in resource group 'Default' for account moni shankari's Account in registry jp.icr.io...

Successfully added namespace 'helloworld'

OK

C:\Users\Admin>
```

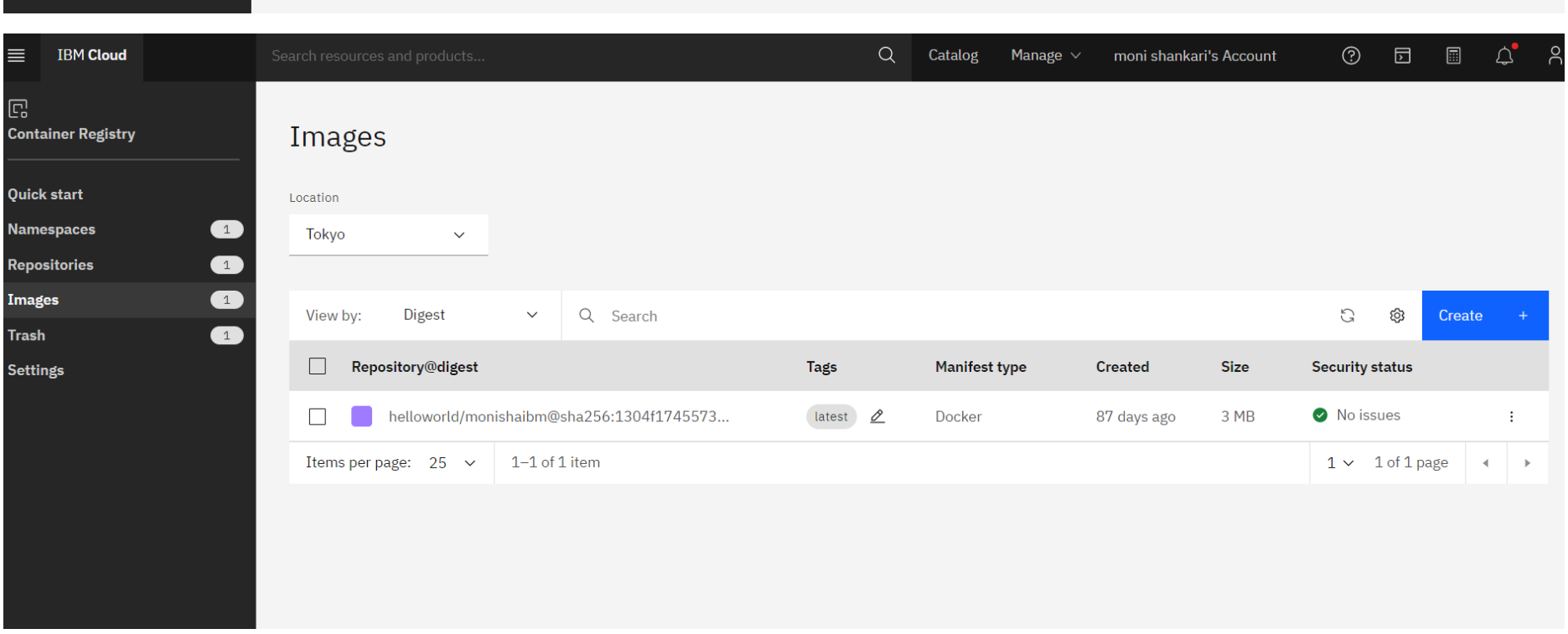

IBM Cloud
Search resources and products...
Catalog
Manage
moni shankari's Account
Container Registry
Quick start
Namespaces 1
Repositories 0
Images 0
Trash 0
Settings
Namespaces
Location
Tokyo
Resource group: Filter...
Search
Create +
Name
Resource group
Repository count
Image count
Retention policy
helloworld
Default
0
0
Retain all images
Items per page: 25
1–1 of 1 item
1
1 of 1 page

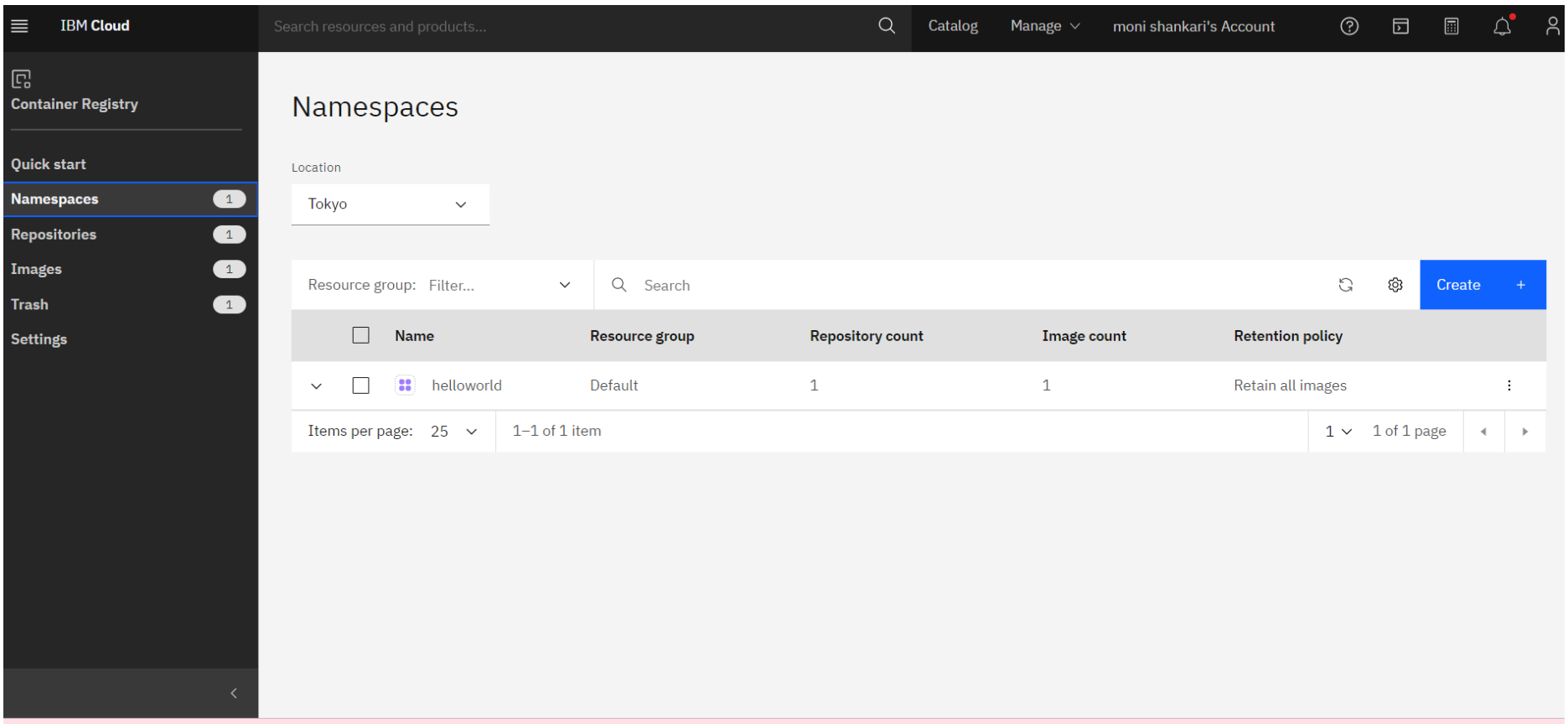
Command Prompt
OK
C:\Users\Admin>ibmcloud cr login
Logging 'docker' in to 'jp.icr.io'...
Logged in to 'jp.icr.io'.
OK
C:\Users\Admin>docker pull myimage
Using default tag: latest
Error response from daemon: pull access denied for myimage, repository does not exist or may require 'docker login': den
ied: requested access to the resource is denied
C:\Users\Admin>docker pull python
Using default tag: latest
latest: Pulling from library/python
17c9e6141fdb: Pull complete
de4a4c6caea8: Pull complete
4edced8587e6: Pull complete
a7969cffbf46: Pull complete
74fbfde6af91: Pull complete
16fe51aed899: Pull complete
e9ee507bb0de: Pull complete
4d9dbb46d211: Pull complete
3b9b3c4e849c: Pull complete
Digest: sha256:fc809ada71c087cec7e2d2244bcb9fba137638978a669f2aaf6267db43e89fdf
Status: Downloaded newer image for python:latest
docker.io/library/python:latest
C:\Users\Admin>
Maintained by:

Command Prompt

```
alpine                                                  latest
              9c6f07244728   2 months ago    5.54MB
k8s.gcr.io/pause                                        3.8
              4873874c08ef   4 months ago    711kB
k8s.gcr.io/etcd                                         3.5.4-0
              a8a176a5d5d6   5 months ago    300MB
k8s.gcr.io/coredns                                      v1.9.3
              5185b96f0bec   5 months ago    48.8MB
docker/getting-started                                  latest
              cb90f98fd791   6 months ago    28.8MB
docker/desktop-vpnkit-controller                        v2.0
              8c2c38aa676e   18 months ago   21MB
docker/desktop-storage-provisioner                      v2.0
              99f89471f470   18 months ago   41.9MB

C:\Users\Admin>docker push monishaibm01/monishaibm
Using default tag: latest
The push refers to repository [docker.io/monishaibm01/monishaibm]
ea8d3b163dad: Pushed
9d509ae36ce5: Pushed
e74d2d2318e0: Pushed
843402027782: Pushed
32f073886096: Pushed
5f098248d753: Mounted from library/python
3dd34a0dd0d7: Mounted from library/python
a8f9e3c1138b: Mounted from library/python
74f8a626d86f: Mounted from library/python
latest: digest: sha256:381f10dea050afbb5311d16f01765d51a3302744f6aea0e661499edb1fa462ee size: 2206

C:\Users\Admin>
```



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Search resources and products...
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Manage
moni shankari's Account
Container Registry
Quick start
Namespaces 1
Repositories 1
Images 1
Trash 1
Settings
Namespaces
Location
Tokyo
Resource group: Filter...
Search
Create +
Name
Resource group
Repository count
Image count
Retention policy
helloworld
Default
1
1
Retain all images
Items per page: 25
1–1 of 1 item
1 of 1 page

README.txt.pdf
Show all
IBM Cloud
Search resources and products...
Catalog
Manage
moni shankari's Account
Registry / Images /
monishaibm@sha256:1304f1745573...
jp.icr.io/helloworld/monishaibm@sha256:1304f174557314a7ed9eddb4eab12fed12cb0cd9809e4c28f29af86
Image details
Issues by type
Tags
latest
Digest
1304f1745573...
Size
3 MB
Created
87 days ago
Security status
No issues
Image inspect data
{
"Id": "sha256:9c6f0724472873bb50a2ae67a9e7adcb57673a183cea8b06eb778dca859181b5",
"Parent": "",
"Comment": "",
"Created": "2022-08-09T17:19:53.47374331Z",
"Container": "0c4b20968eb1d804460f8612bc52be4f5a8e65eb14190b5ae30fec94d2fb4f50",
"ContainerConfig": {
"Hostname": "0c4b20968eb1",
"Domainname": "",
"User": "",
"AttachStdin": false,
"AttachStdout": false,
"AttachStderr": false,
"Tty": false,
"OpenStdin": false,
"StdinOnce": false,
"Env": [
"PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin"
],
"Cmd": [
"/bin/sh",
"-c",
"#(nop) ",
"CMD [\"/bin/sh\"]"
],
"Image": "sha256:c0261ca8a4a79627f3e658c0c2b1e3166f56713a58e1411b1e3ab1e378962e75",