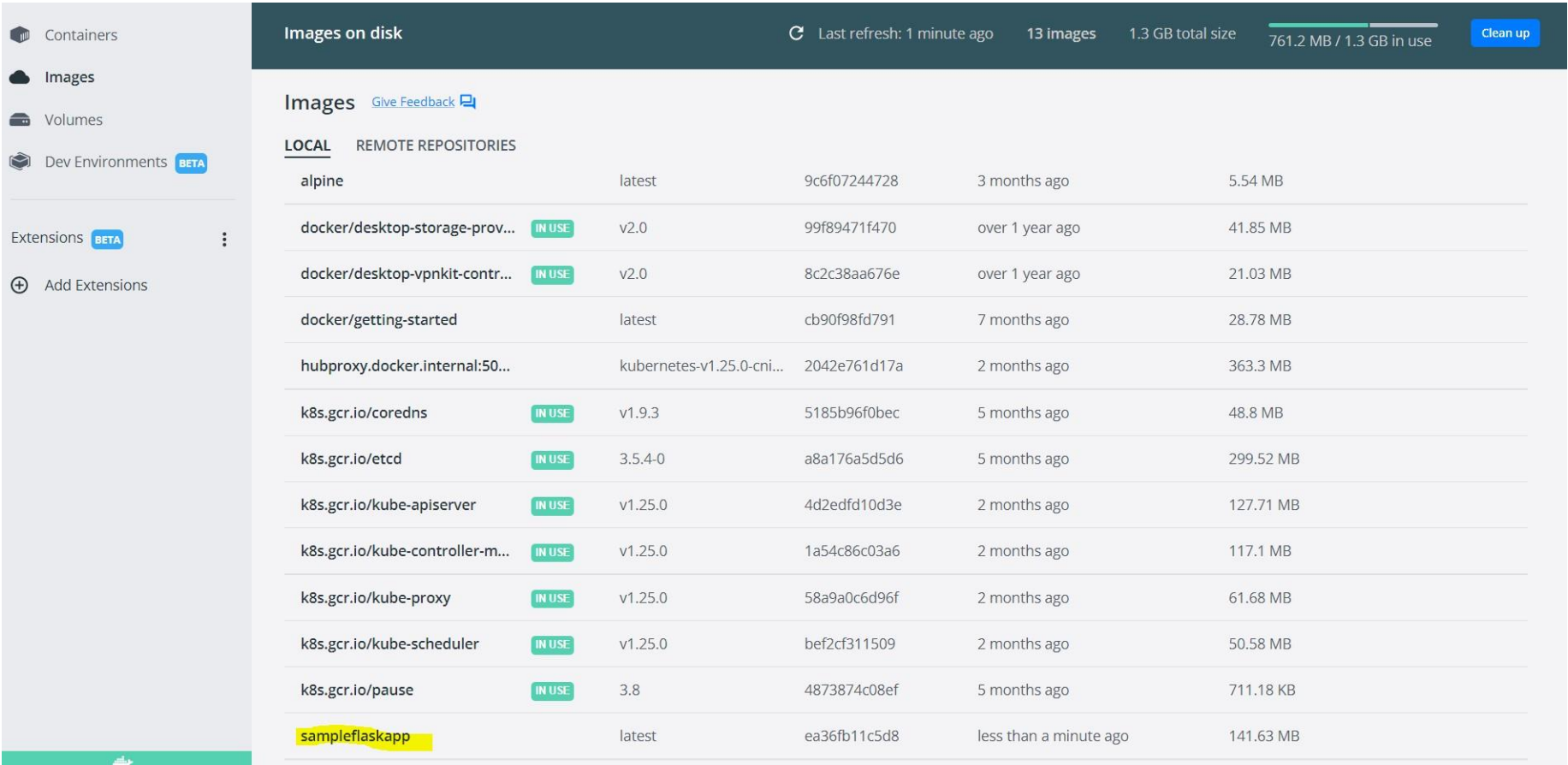
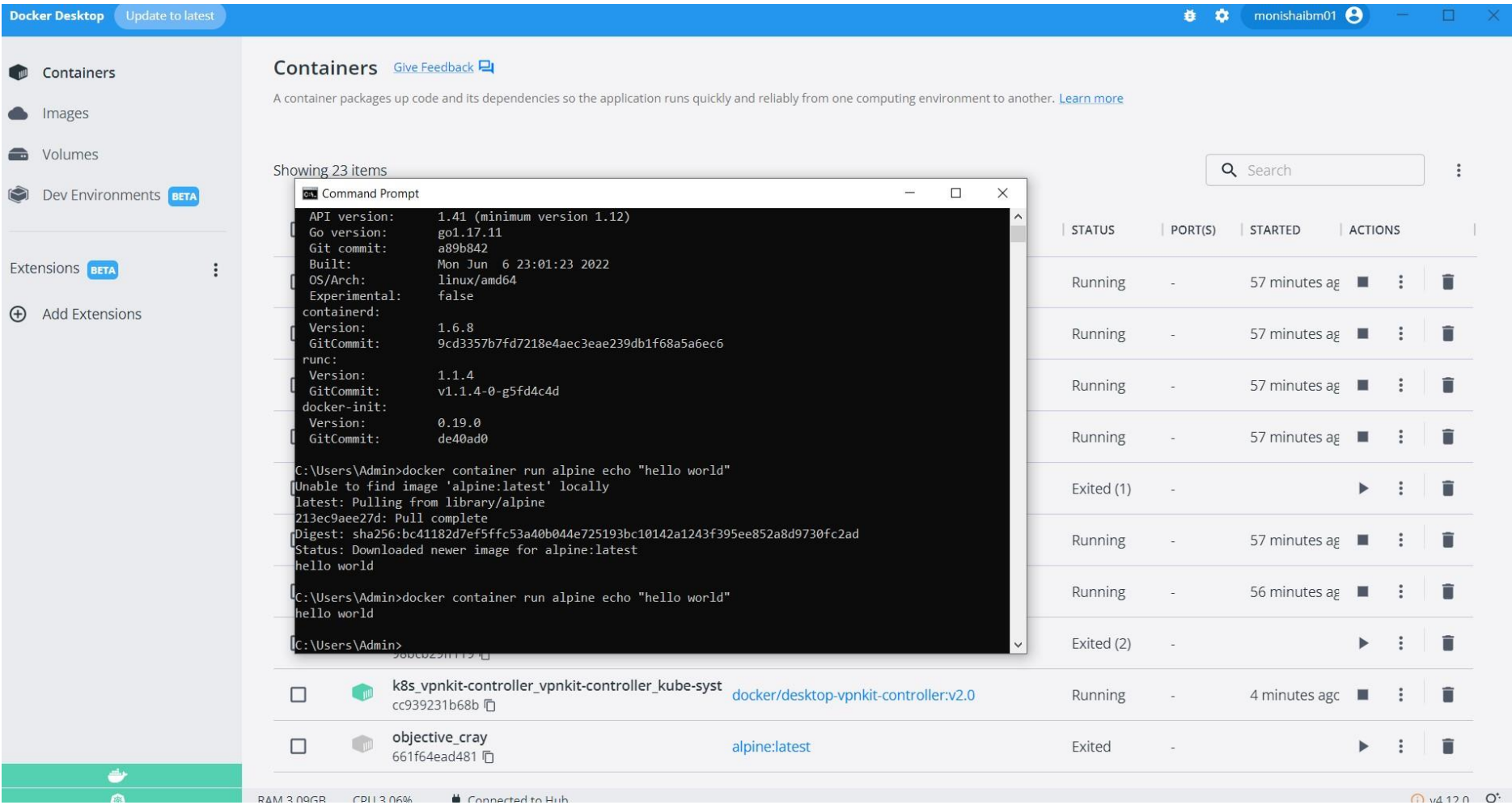


Assignment-4

Dockers and Kubernets

(Containerize application and Deployment 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

NAME

IMAGE

STATUS

PORT(S)

STARTED

ACTIONS

<div><div></div><div></div></div>	<div><div></div><div>k8s_POD_kube-proxy-sgk2k_kube-system_4fb6b81446ffc1aecc</div></div>	<div><div></div><div>k8s.gcr.io/pause:3.8</div></div>	<div><div></div><div>Running</div></div>	<div><div></div><div>-</div></div>	<div><div></div><div>24 minutes ag</div></div>	<div><div></div><div></div></div>
<div><div></div><div></div></div>	<div><div></div><div>k8s_POD_vpnkit-controller_kube-system_819c5dc76257e5f8845</div></div>	<div><div></div><div>k8s.gcr.io/pause:3.8</div></div>	<div><div></div><div>Running</div></div>	<div><div></div><div>-</div></div>	<div><div></div><div>24 minutes ag</div></div>	<div><div></div><div></div></div>
<div><div></div><div></div></div>	<div><div></div><div>k8s_kube-proxy_kube-proxy-sgk2k_kube-system_69aca3e49373</div></div>	<div><div></div><div>k8s.gcr.io/kube-proxy:v1.25.0</div></div>	<div><div></div><div>Running</div></div>	<div><div></div><div>-</div></div>	<div><div></div><div>24 minutes ag</div></div>	<div><div></div><div></div></div>
<div><div></div><div></div></div>	<div><div></div><div>k8s_coredns_coredns-95db45d46-s6kmv_kube-sys5256d16328ea</div></div>	<div><div></div><div>k8s.gcr.io/coredns:v1.9.3</div></div>	<div><div></div><div>Running</div></div>	<div><div></div><div>-</div></div>	<div><div></div><div>24 minutes ag</div></div>	<div><div></div><div></div></div>
<div><div></div><div></div></div>	<div><div></div><div>k8s_coredns_coredns-95db45d46-qzbxw_kube-sysc672f26f1e9a</div></div>	<div><div></div><div>k8s.gcr.io/coredns:v1.9.3</div></div>	<div><div></div><div>Running</div></div>	<div><div></div><div>-</div></div>	<div><div></div><div>24 minutes ag</div></div>	<div><div></div><div></div></div>
<div><div></div><div></div></div>	<div><div></div><div>k8s_storage-provisioner_storage-provisioner_kub381a16c7e470</div></div>	<div><div></div><div>docker/desktop-storage-provisioner:v2.0</div></div>	<div><div></div><div>Exited (1)</div></div>	<div><div></div><div>-</div></div>		<div><div></div><div></div></div>
<div><div></div><div></div></div>	<div><div></div><div>k8s_vpnkit-controller_vpnkit-controller_kube-syst3ed255d59eb0</div></div>	<div><div></div><div>docker/desktop-vpnkit-controller:v2.0</div></div>	<div><div></div><div>Exited (2)</div></div>	<div><div></div><div>-</div></div>		<div><div></div><div></div></div>
<div><div></div><div></div></div>	<div><div></div><div>k8s_storage-provisioner_storage-provisioner_kub69d431bdeec7</div></div>	<div><div></div><div>docker/desktop-storage-provisioner:v2.0</div></div>	<div><div></div><div>Running</div></div>	<div><div></div><div>-</div></div>	<div><div></div><div>23 minutes ag</div></div>	<div><div></div><div></div></div>
<div><div></div><div></div></div>	<div><div></div><div>k8s_vpnkit-controller_vpnkit-controller_kube-systbb7898f5dfcd</div></div>	<div><div></div><div>docker/desktop-vpnkit-controller:v2.0</div></div>	<div><div></div><div>Running</div></div>	<div><div></div><div>-</div></div>	<div><div></div><div>5 minutes agc</div></div>	<div><div></div><div></div></div>
<div><div></div><div></div></div>	<div><div></div><div>sleepy_jepsen81e774e2c08c</div></div>	<div><div></div><div>sampleflaskapp:latest</div></div>	<div><div></div><div>Exited (1)</div></div>	<div><div></div><div>-</div></div>		<div><div></div><div></div></div>

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
```

Hello World!

IBM 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>
```

Example output

```
IBM 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
```

```
IBM 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

Container Registry

Quick start

Namespaces1

Repositories0

Images0

Trash0

Settings

Search resources and products...

CatalogManage▼moni shankari's Account

Namespaces

Location

Tokyo

Resource group: Filter...

Search

Create +

<input type="checkbox"/>	Name	Resource group	Repository count	Image count	Retention policy
<input type="checkbox"/>	helloworld	Default	0	0	Retain all images

Items per page: 25

1-1 of 1 item

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

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>
```

IBM Cloud

Search resources and products...

CatalogManage▼moni shankari's Account

Container Registry

Quick start

Namespaces1

Repositories1

Images1

Trash0

Settings

Repositories

Location

Tokyo

Search

Create+

	Name	Image count	Namespace	Last updated
▼	monishaibm jp.icr.io/helloworld/monishaibm	1	helloworld	9 days ago

Items per page: 25▼1-1 of 1 item

1▼1 of 1 page

IBM Cloud

Search resources and products...

CatalogManage▼moni shankari's Account

Container Registry

Quick start

Namespaces1

Repositories1

Images1

Trash1

Settings

Images

Location

Tokyo

View by: Digest▼

Search

Create+

	Repository@digest	Tags	Manifest type	Created	Size	Security status
	helloworld/monishaibm@sha256:1304f1745573...	latest	Docker	87 days ago	3 MB	No issues

Items per page: 25▼1-1 of 1 item

1▼1 of 1 page

IBM Cloud

Search resources and products...

CatalogManagemonishankari's Account

Container Registry

Quick start

Namespaces1

Repositories1

Images1

Trash1

Settings

Namespaces

Location

Tokyo

Resource group: Filter...SearchCreate

Name	Resource group	Repository count	Image count	Retention policy
<div><div></div>helloworld</div>	Default	1	1	Retain all images

Items per page: 251-1 of 1 item11 of 1 page

README.txt.pdfShow all

IBM Cloud

Search resources and products...

CatalogManagemonishankari'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": "0c4b20968eb1d004460f8612bc52be4f5a8e65eb14190b5ae30fec94d2fb4f50",  "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",  "Volume": {}}
```