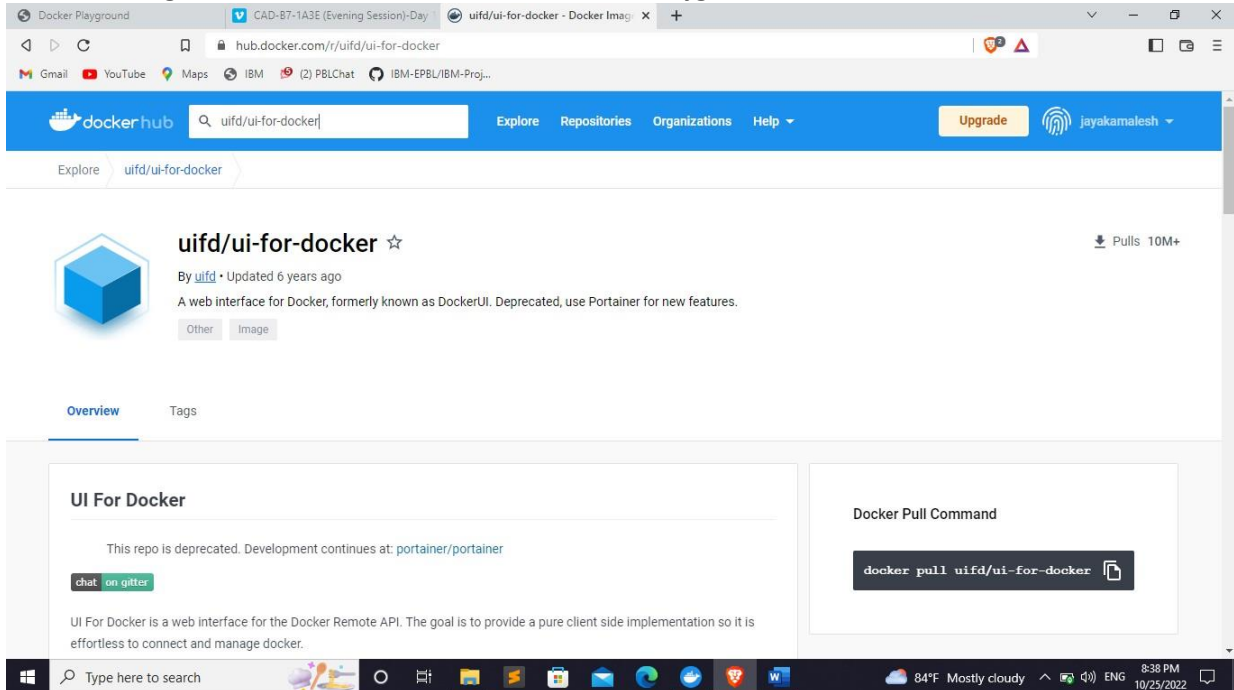


Assignment -4

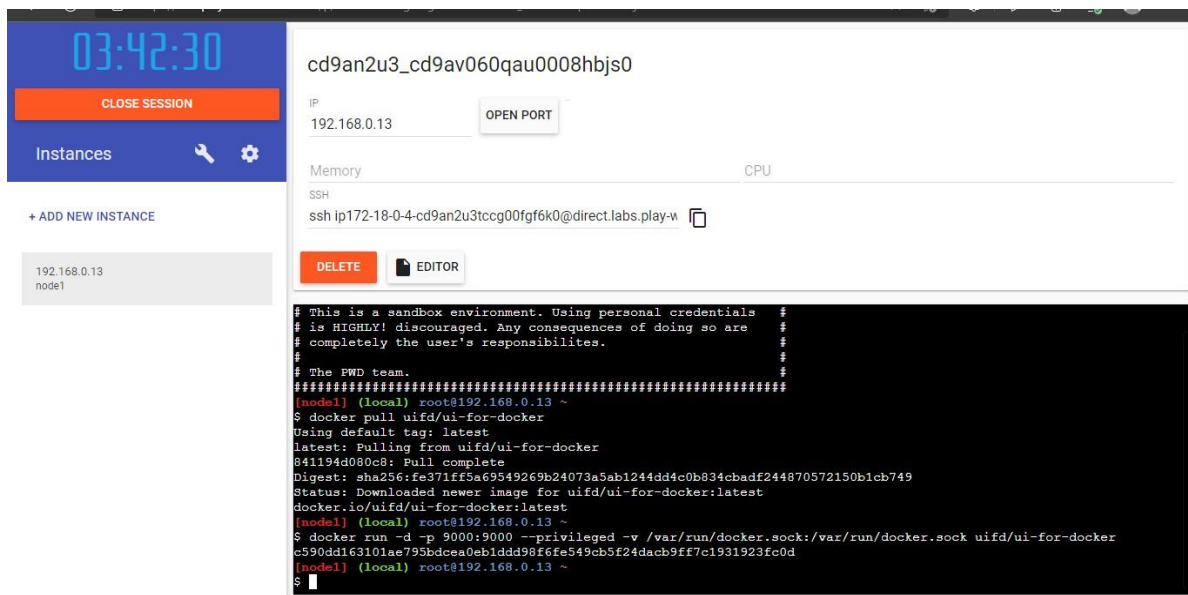
Docker and Kubernetes

Assignment Date	21 October 2022
Student Name	Jaisha J
Student Roll Number	130719205020
Maximum Marks	2 Marks

1. Pull an image from docker hub and run it in docker Playground



The screenshot shows the Docker Hub repository page for `uifd/ui-for-docker`. The page indicates that the repository is deprecated and development has moved to `portainer/portainer`. It shows the repository was updated 6 years ago and has over 10M pulls. The 'Overview' tab is selected, showing a description of the UI For Docker as a web interface for the Docker Remote API. A 'chat on gitter' button is present. On the right, the 'Docker Pull Command' is displayed as `docker pull uifd/ui-for-docker`.



The screenshot shows the Docker Playground interface. On the left, there's a sidebar with a clock showing 03:42:30, a 'CLOSE SESSION' button, and an 'Instances' section with a list of instances including '192.168.0.13 node1'. The main area displays details for an instance with ID `cd9an2u3_cd9av060qau0008hbjso`, IP `192.168.0.13`, and an 'OPEN PORT' button. Below this, there are 'DELETE' and 'EDITOR' buttons. The terminal window shows the following commands and output:

```
# This is a sandbox environment. Using personal credentials #
# is HIGHLY discouraged. Any consequences of doing so are #
# completely the user's responsibilities. #
# The FWD team. #
#####
[models] (local) root@192.168.0.13 ~
$ docker pull uifd/ui-for-docker
Using default tag: latest
latest: Pulling from uifd/ui-for-docker
841194d080c8: Pull complete
Digest: sha256:fe371ff5a69549269b24073a5ab1244dd4c0b834cbadf244870572150b1cb749
Status: Downloaded newer image for uifd/ui-for-docker:latest
docker.io/uifd/ui-for-docker:latest
[models] (local) root@192.168.0.13 ~
$ docker run -d -p 9000:9000 --privileged -v /var/run/docker.sock:/var/run/docker.sock uifd/ui-for-docker
c590dd163101ae795bdcea0eb1ddd98f6fe549cb5f24dab9ff7c1931923fc0d
[models] (local) root@192.168.0.13 ~
$
```

UI For Docker

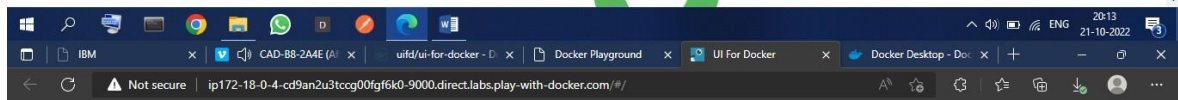
The UI for Docker container engine

[Learn more.](#)

Running Containers

• beautiful_goldwasser [Up About a minute](#)

Status



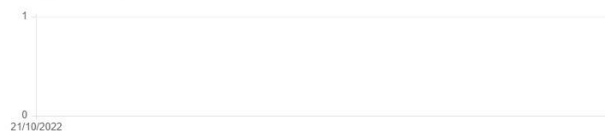
Running Containers

• beautiful_goldwasser [Up About a minute](#)

Status



Containers created



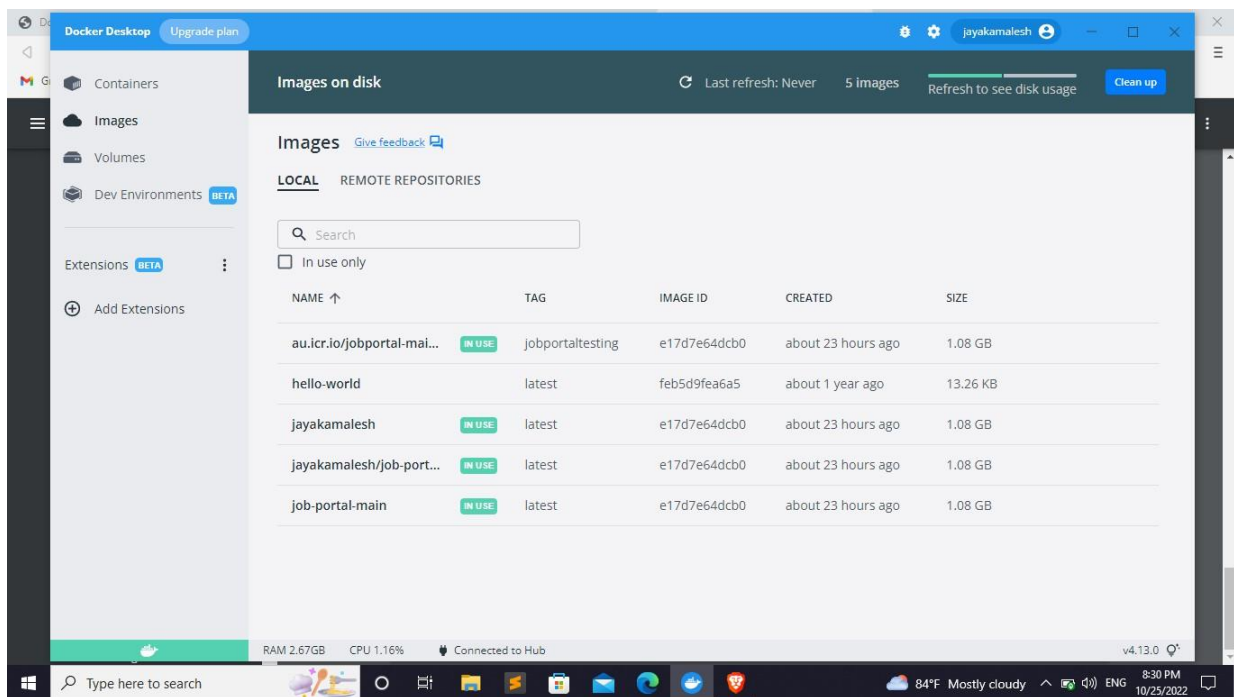
Images created



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

```
CA\Windows\System32\cmd.exe
-> [internal] load build definition from Dockerfile
-> => transferring dockerfile: 32B
-> [internal] load .dockerignore
-> => transferring context: 2B
-> [internal] load metadata for docker.io/library/python:3.6
-> [auth] library/python:pull token for registry-1.docker.io
-> [internal] load build context
-> => transferring context: 687B
-> [1/6] FROM docker.io/library/python:3.6@sha256:f8652afaf88c25f0d22354d547d892591067aad926a7fa9a6819df9f300af6fc
-> => resolve docker.io/library/python:3.6@sha256:f8652afaf88c25f0d22354d547d892591067aad926a7fa9a6819df9f300af6fc
-> sha256:f8652afaf88c25f0d22354d547d892591067aad926a7fa9a6819df9f300af6fc 1.86kB / 1.86kB
-> sha256:d097a4907a8ec079df5ac31872359c2de510f82214c0448e926393b376d3b60d 2.22kB / 2.22kB
-> sha256:54260638007c5e3ad24c6e21fc889abbc0486a27634c0092006ff71f3f44b104 0.27kB / 0.27kB
-> sha256:0e29546d541cddb309281d21a73a9d1db78665c1b95b74f32b009e0b77a6e1e3 54.92MB / 54.92MB
-> sha256:9b829c73b52b92b97d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 5.15MB / 5.15MB
-> sha256:cb5b7ae361722f070eca53f35823ed21baa85d61d5d95cd5a95ab53d740cdd56 10.87MB / 10.87MB
-> sha256:6494e481162b31c027ccac322ca463037f0805f569e9aef15c01aade710793 54.57MB / 54.57MB
-> sha256:6f9f7489dd9a3fe0172f504fab0d5e00de00481a0bfef0112efc7e4d3c70f7 196.51MB / 196.51MB
-> sha256:5a3b1213efc56598e78bd062083945c164de2a37205e06ae62dada823124dc743 6.29MB / 6.29MB
-> extracting sha256:0e29546d541cddb309281d21a73a9d1db78665c1b95b74f32b009e0b77a6e1e3
-> sha256:9fd4dfc56334f2e6efad7e241bf5e7459c40ed105c5470676f41c1244bd96752 14.21MB / 14.21MB
-> extracting sha256:9b829c73b52b92b97d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd
-> extracting sha256:cb5b7ae361722f070eca53f35823ed21baa85d61d5d95cd5a95ab53d740cdd56
-> sha256:404f02044bac0432ca522cbb9f254b1c91fcea6806bfeef0be0b243b2f31bab7 235B / 235B
-> sha256:c4f42be2be53b900ebffcc040c1df13de538434ccc5f5d954a56848a6160a3a3f 2.21MB / 2.21MB
-> extracting sha256:6494e481162b31c027ccac322ca463037f0805f569e9aef15c01aade710793
-> extracting sha256:6f9f7489dd9a3fe0172f504fab0d5e00de00481a0bfef0112efc7e4d3c70f7
-> extracting sha256:5a3b1213efc56598e78bd062083945c164de2a37205e06ae62dada823124dc743
-> extracting sha256:9fd4dfc56334f2e6efad7e241bf5e7459c40ed105c5470676f41c1244bd96752
-> extracting sha256:404f02044bac0432ca522cbb9f254b1c91fcea6806bfeef0be0b243b2f31bab7
-> extracting sha256:c4f42be2be53b900ebffcc040c1df13de538434ccc5f5d954a56848a6160a3a3f
-> [2/6] WORKDIR /app
-> [3/6] ADD . /app
-> [4/6] COPY requirements.txt /app
-> [5/6] RUN python3 -m pip install -r requirements.txt
-> [6/6] RUN python3 -m pip install lbm_db
-> exporting to image
-> exporting layers
-> writing image sha256:1756719486df002fad5dae305c5221513f2ff2d1b49a8d242022a28af0379f19
-> naming to docker.io/library/job-portal-main

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
C:\Users\VK-PC\Desktop\job-portal-main>
```



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

```
Command Prompt - docker run -p 5000:5000 au.icr.io/jobportal-main/testrepo:jobportaltesting
Password>
Authenticating...
OK
Targeted account Jayakamalesh k's Account (b9916d3d37d24674be1984ac2159a53c)

API endpoint:      https://cloud.ibm.com
Region:            au-syd
User:              5009it.jayakamalesh@kingston.ac.in
Account:           Jayakamalesh k's Account (b9916d3d37d24674be1984ac2159a53c)
Resource group:    No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
CF API endpoint:
Org:
Space:

C:\Users\ELCOT>ibmcloud plugin install container-service
Looking up 'container-service' from repository 'IBM Cloud'...
Plug-in 'container-service[kubernetes-service/ks] 1.0.459' found in repository 'IBM Cloud'
Attempting to download the binary file...
 26.86 MiB / 26.86 MiB [=====] 100.00% 36s
28168192 bytes downloaded
Installing binary...
OK
Plug-in 'container-service 1.0.459' was successfully installed into C:\Users\ELCOT\bluemix\plugins\container-service. Use 'ibmcloud plugin show container-service' to s
how its details.

C:\Users\ELCOT>ibmcloud plugin install container-registry
Looking up 'container-registry' from repository 'IBM Cloud'...
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% 14s
12476416 bytes downloaded
Installing binary...
OK
Plug-in 'container-registry 1.0.2' was successfully installed into C:\Users\ELCOT\bluemix\plugins\container-registry. Use 'ibmcloud plugin show container-registry' to
show its details.

C:\Users\ELCOT>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% 19s
14024704 bytes downloaded

C:\Users\ELCOT>docker login
Authenticating with existing credentials...
Login Succeeded

Logging in with your password grants your terminal complete access to your account.
For better security, log in with a limited-privilege personal access token. Learn more at https://docs.docker.com/go/access-tokens/

C:\Users\ELCOT>ibmcloud cr login
Logging 'docker' in to 'au.icr.io'...
Logged in to 'au.icr.io'.

OK

C:\Users\ELCOT>docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:18a657d0cc1c7d0678a3fba8b7eb4918bba25968d3e1b0adebfa71caddbc346
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest

C:\Users\ELCOT>docker job-portal-main au.icr.io/jobportal-main/testrepo:jobportaltesting
docker: 'job-portal-main' is not a docker command.
See 'docker --help'

C:\Users\ELCOT>docker tag job-portal-main au.icr.io/jobportal-main/testrepo:jobportaltesting

C:\Users\ELCOT>docker push au.icr.io/jobportal-main/testrepo:jobportaltesting
The push refers to repository [au.icr.io/jobportal-main/testrepo]
fb63d0a23be1: Pushed
e12b82bb8bd4: Pushed
d5524390f4c9: Pushed
94efdbb0ed11: Pushed
016575b05346: Pushed
aa4c808c19f6: Pushed
8ba9f690e8ba: Pushed
3e607d59ef9f: Pushed
1e18e7e1fcc2: Pushed
```

```
Command Prompt - docker run -p 5000:5000 au.icr.io/jobportal-main/testrepo:jobportaltesting
Logging in with your password grants your terminal complete access to your account.
For better security, log in with a limited-privilege personal access token. Learn more at https://docs.docker.com/go/access-tokens/

C:\Users\ELCOT>ibmcloud cr login
Logging 'docker' in to 'au.icr.io'...
Logged in to 'au.icr.io'.

OK

C:\Users\ELCOT>docker pull au.icr.io/jobportal-main/testrepo
Using default tag: latest
Error response from daemon: manifest for au.icr.io/jobportal-main/testrepo:latest not found: manifest unknown: manifest unknown


C:\Users\ELCOT>docker run -p 5000:5000 au.icr.io/jobportal-main/testrepo
Unable to find image 'au.icr.io/jobportal-main/testrepo:latest' locally
docker: Error response from daemon: manifest for au.icr.io/jobportal-main/testrepo:latest not found: manifest unknown: manifest unknown.
See 'docker run --help'.

C:\Users\ELCOT>docker pull au.icr.io/jobportal-main/testrepo:jobportaltesting
jobportaltesting: Pulling from jobportal-main/testrepo
Digest: sha256:dc6a1d3f889845c94bc98b84e938a0b015e6031ddc40c016025363967265213
Status: Image is up to date for au.icr.io/jobportal-main/testrepo:jobportaltesting
au.icr.io/jobportal-main/testrepo:jobportaltesting

C:\Users\ELCOT>docker run -p 5000:5000 au.icr.io/jobportal-main/testrepo
Unable to find image 'au.icr.io/jobportal-main/testrepo:latest' locally
docker: Error response from daemon: manifest for au.icr.io/jobportal-main/testrepo:latest not found: manifest unknown: manifest unknown.
See 'docker run --help'.

C:\Users\ELCOT>docker run -p 5000:5000 au.icr.io/jobportal-main/testrepo:jobportaltesting
docker: Error response from daemon: driver failed programming external connectivity on endpoint heuristic_spence (d84c3fb81e5087dab6d1558694311ab227859e3b338aa1f7c4020c2ad72f4ae): Bind for 0.0.0.0:5000 failed: port is already allocated.

C:\Users\ELCOT>docker run -p 5000:5000 au.icr.io/jobportal-main/testrepo:jobportaltesting
* Serving Flask app 'app' (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on all addresses.
  WARNING: This is a development server. Do not use it in a production deployment.
* Running on http://172.17.0.2:5000/ (Press CTRL+C to quit)
```



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Aboutus

Mission

SMARTBRIDGE is an edTech organization with a vision to bridge the gap between academia & industry. Our outcome-based experiential learning programs on emerging technologies (Internet of Things, Machine Learning, Data Science, Artificial Intelligence, Robotics) are building skilled entry-level engineers, for the corporate world. .

Vission

Our main objective is to bridge the existing gaps between prevailing industry standards and what the academics offer to the graduates while passing out of university. SmartBridge offers suitable skill deployment and training to the young talent before on boarding their first job. Our skill development programs are designed considering the present expectations in the industry.

Objective

Well directed career guidance programs for educational institutions
Appropriate certification courses that suit the industry need
Train the trainers; expanded awareness about the current industry standards
Liaise with corporates to offer niche internships
Establish technology development centers in colleges
Specialised incubation centers in collaboration with corporates

JobPortal

Lorem ipsum dolor sit amet consectetur adipisicing elit. Voluptatum quis, reiciendis id magni magnam, accusamus nobis in, temporibus molestias ab placeat rerum aperiam illum perspiciatis ducimus non! Fugiat, odit ducimus.

Get in Touch

- jobportal@gmail.com
- [+91 8977787657](tel:+918977787657)

IBM Cloud

Container Registry

Quick start

Namespaces2

Repositories1

Images1

Trash0

Settings

Search resources and products...

CatalogManageJayakamalesh k's Acco...

Repositories

Location
Sydney

Search

Create

Name	Image count	Namespace	Last updated
testrepo au.icr.io/jobportal-main/testrepo	1	jobportal-main	1 day ago

Items per page: 251-1 of 1 item

11 of 1 page

https://cloud.ibm.com/registry/repos

Type here to search

Docker PlaygroundCAD-B7-1A3E (Evening Session)-Day 1uifd/ui-for-docker - Docker Image | DIBM Cloud Container Registry - R

GmailYouTubeMapsIBM(2) PBLChatIBM-EPBL/IBM-Proj...

84°F8:53 PM10/25/2022

IBM Cloud

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testrepo au.icr.io/jobportal-main/testrepo	1	jobportal-main	1 day ago

Items per page: 251-1 of 1 item

11 of 1 page

Type here to search

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Docker Playground

CAD-87-1A3E (Evening Session)-Day

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IBM Cloud Container Registry - In x

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GmailYouTubeMapsIBM(2) PBLChatIBM-EPBL/IBM-Proj...

IBM Cloud

Search resources and products...

CatalogManageJayakamalesh k's Acco...

Container Registry

Quick start

Namespaces2

Repositories1

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Sydney

View by: DigestSearchCreate

Repository@digest	Tags	Manifest type	Created	Size	Security status
<div><div></div><div>jobportal-main/testrepo@sha256:dc6a1d3f8898...</div></div>	<div>jobportaltesting</div>	Docker	1 day ago	435 MB	<div>99 issues</div>

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

https://cloud.ibm.com/registry/images

Type here to search

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