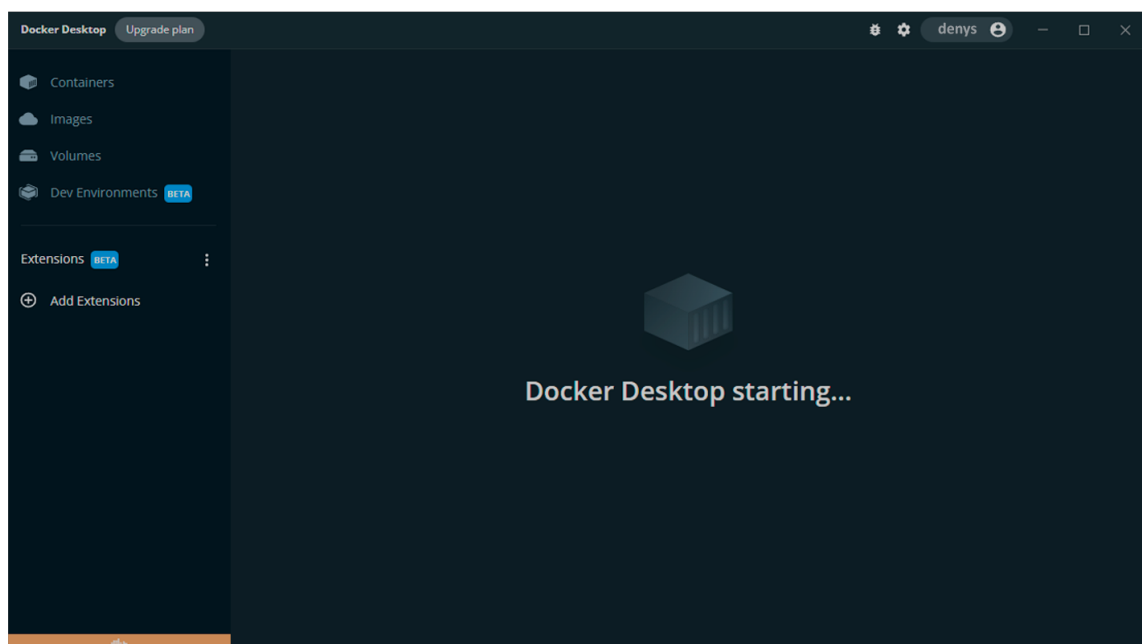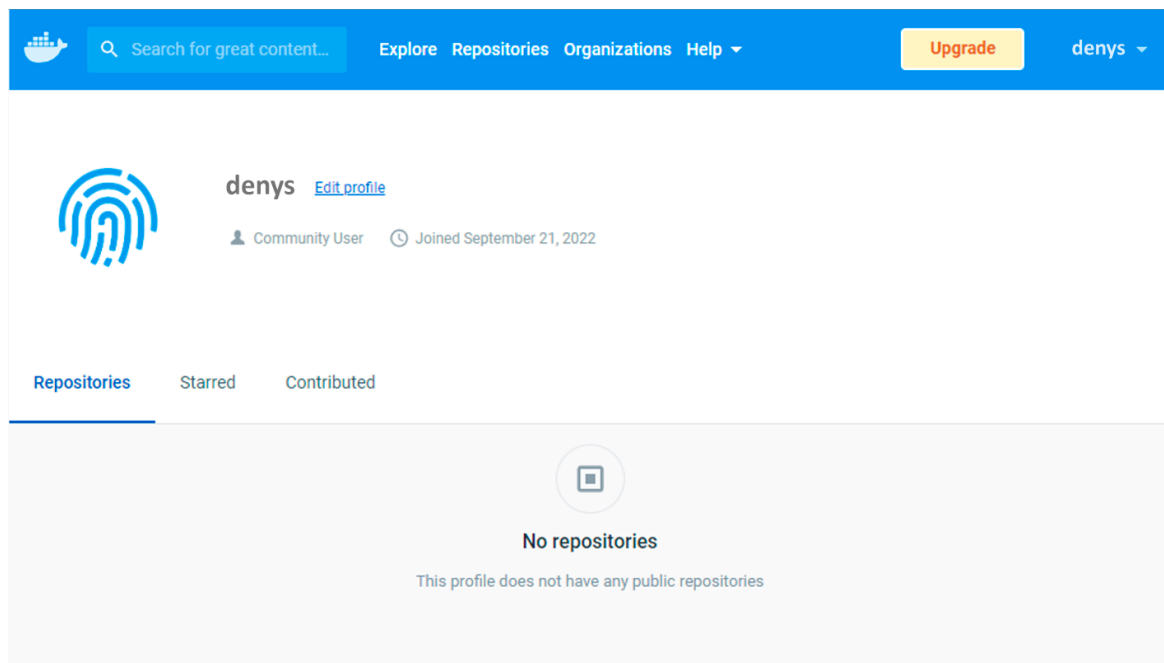Лабораторна робота №4

Тема: Робота з системою Docker.

Мета: Оволодіти базовими навичками по роботі з сучасними системами керування контейнерами

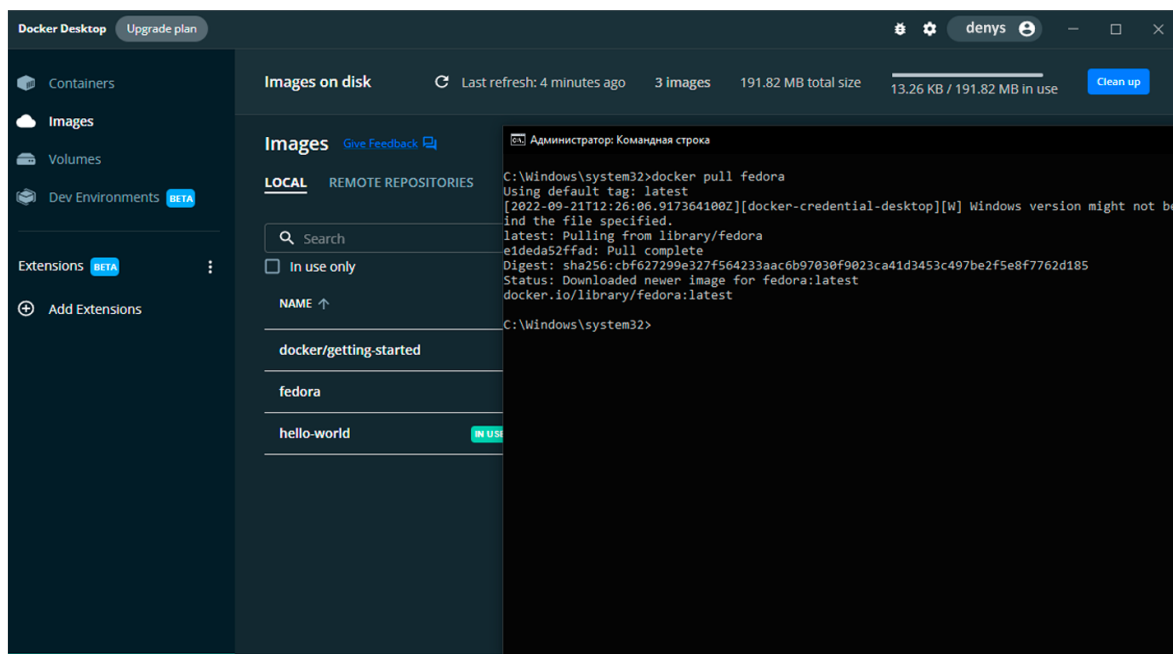Хід роботи

```
C:\Windows\system32\cmd.exe                                                    —   □   ✕

Microsoft Windows [Version 10.0.18363.1440]
(c) Корпорация Майкрософт (Microsoft Corporation), 2019. Все права защищены.

C:\Users\rusla>docker version
Client:
 Cloud integration: v1.0.29
 Version:           20.10.17
 API version:       1.41
 Go version:        go1.17.11
 Git commit:        100c701
 Built:             Mon Jun  6 23:09:02 2022
 OS/Arch:           windows/amd64
 Context:           default
 Experimental:      true

Server: Docker Desktop 4.12.0 (85629)
 Engine:
  Version:          20.10.17
  API version:      1.41 (minimum version 1.12)
  Go version:       go1.17.11
  Git commit:       a89b842
  Built:            Mon Jun  6 23:01:23 2022
  OS/Arch:          linux/amd64
  Experimental:     false
 containerd:
  Version:          1.6.8
  GitCommit:        9cd3357b7fd7218e4aec3eae239db1f68a5a6ec6
 runc:
  Version:          1.1.4
  GitCommit:        v1.1.4-0-g5fd4c4d
 docker-init:
  Version:          0.19.0
  GitCommit:        de40ad0

C:\Users\rusla>
```

Docker Desktop Upgrade plan   denys

Containers
Images
Volumes
Dev Environments BETA

Extensions BETA
Add Extensions

Images on disk   Last refresh: 4 minutes ago   3 images   191.82 MB total size   13.26 KB / 191.82 MB in use   Clean up

Images   Give Feedback

LOCAL   REMOTE REPOSITORIES

Search
In use only

NAME ↑

docker/getting-started

fedora

hello-world   IN USE

```
Администратор: Командная строка

C:\Windows\system32>docker pull fedora
Using default tag: latest
[2022-09-21T12:26:06.917364100Z][docker-credential-desktop][W] Windows version might not be
ind the file specified.
latest: Pulling from library/fedora
e1deda52ffad: Pull complete
Digest: sha256:cbf627299e327f564233aac6b97030f9023ca41d3453c497be2f5e8f7762d185
Status: Downloaded newer image for fedora:latest
docker.io/library/fedora:latest

C:\Windows\system32>
```

```
Администратор: Командная строка

C:\Windows\system32>docker run hello-world
Unable to find image 'hello-world:latest' locally
[2022-09-21T12:14:54.833596800Z][docker-credential-desktop][W] Windows version might not be up-to-date: The system cannot f
ind the file specified.
latest: Pulling from library/hello-world
2db29710123e: Pull complete                                                                                         Dig
est: sha256:62af9efd515a25f84961b70f973a798d2eca956b1b2b026d0a4a63a3b0b6a3f2
Status: Downloaded newer image for hello-world:latest

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (amd64)
 3. The Docker daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
 $ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
 https://hub.docker.com/

For more examples and ideas, visit:
 https://docs.docker.com/get-started/


C:\Windows\system32>
```
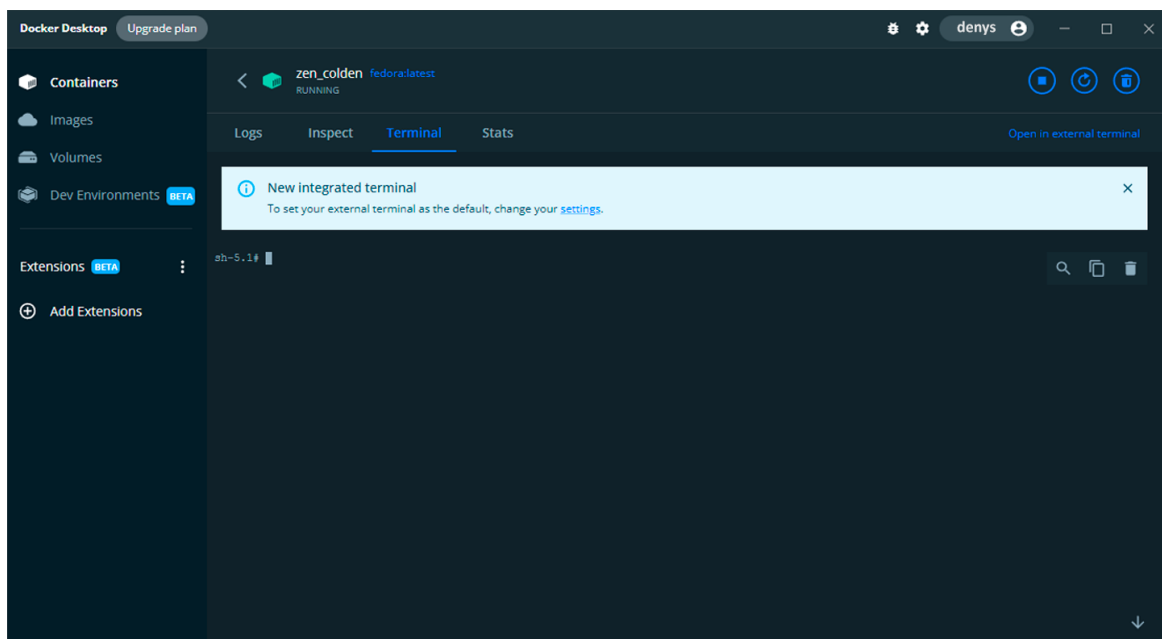
```
C:\Users\rusla>docker ps -a
CONTAINER ID   IMAGE           COMMAND        CREATED          STATUS                      PORTS       NAMES
36a651f29c4e   hello-world     "/hello"       46 seconds ago   Exited (0) 45 seconds ago               admiring_hoover
bd97d238ecc1   fedora:latest   "/bin/bash"    2 minutes ago    Up About a minute                       clever_goodall
29a4c4f2082b   hello-world     "/hello"       14 minutes ago   Exited (0) 10 minutes ago               lucid_margulis
```

```
C:\Users\rusla>docker pull nginx
Using default tag: latest
[2022-09-21T12:33:35.423723400Z][docker-credential-desktop][W] Windows version might not be up-to-date: The system can
t find the file specified.
latest: Pulling from library/nginx
31b3f1ad4ce1: Pull complete
fd42b079d0f8: Pull complete
30585fbbebc6: Pull complete
18f4ffdd25f4: Pull complete
9dc932c8fba2: Pull complete
600c24b8ba39: Pull complete
Digest: sha256:0b970013351304af46f322da1263516b188318682b2ab1091862497591189ff1
Status: Downloaded newer image for nginx:latest
docker.io/library/nginx:latest
```

```
C:\Users\rusla>docker pull mysql
Using default tag: latest
[2022-09-21T12:34:30.249252800Z][docker-credential-desktop][W] Windows version might not be up-to-date: The system cann
t find the file specified.
latest: Pulling from library/mysql
051f419db9dd: Pull complete
7627573fa82a: Pull complete
a44b358d7796: Pull complete
95753aff4b95: Pull complete
a1fa3bee53f4: Pull complete
f5227e0d612c: Pull complete
b4b4368b1983: Pull complete
f26212810c32: Pull complete
d803d4215f95: Pull complete
d5358a7f7d07: Pull complete
435e8908cd69: Pull complete
Digest: sha256:b9532b1edea72b6cee12d9f5a78547bd3812ea5db842566e17f8b33291ed2921
Status: Downloaded newer image for mysql:latest
docker.io/library/mysql:latest
```

C:\Windows\system32\cmd.exe

```
C:\Users\rusla>docker pull haskell
Using default tag: latest
[2022-09-21T12:35:21.760367300Z][docker-credential-desktop][W] Windows version might not be up-to-date: The system canno
t find the file specified.
latest: Pulling from library/haskell
86467c57892b: Pull complete
2b34aaa3cba7: Pull complete
5a443ab54eaa: Pull complete
e6cacf42b567: Pull complete
2334d631be5e: Pull complete
57967aa67182: Pull complete
e6558e952996: Pull complete
296c16c071bf: Pull complete
51a3533442d6: Pull complete
Digest: sha256:ba44ca54a552c677c3d3ba151adf9f88bf5aab7cb85c5e56d141bead8acb1cf4
Status: Downloaded newer image for haskell:latest
```

Docker Desktop   Upgrade plan   denys

    Containers   <   zen_colden fedora:latest
                               RUNNING
    Images
                      Logs   Inspect   Terminal   Stats   Open in external terminal
    Volumes

    Dev Environments BETA   ⓘ New integrated terminal   ×
                                 To set your external terminal as the default, change your settings.

    Extensions BETA   ⋮   sh-5.1#   🔍 📋 🗑

    ⊕ Add Extensions

```
Microsoft Windows [Version 10.0.19044.1288]
(c) Корпорація Майкрософт. Усі права захищені.

C:\Windows\system32>docker run --name web_server -d -p 8080:80 -v kibitkin/public_html/html nginx
c7e1c75abdf4816517bbd36c03874ab945a8af9a74ab7f6c13d2938e57e9b7fc

C:\Windows\system32>
```

denys

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
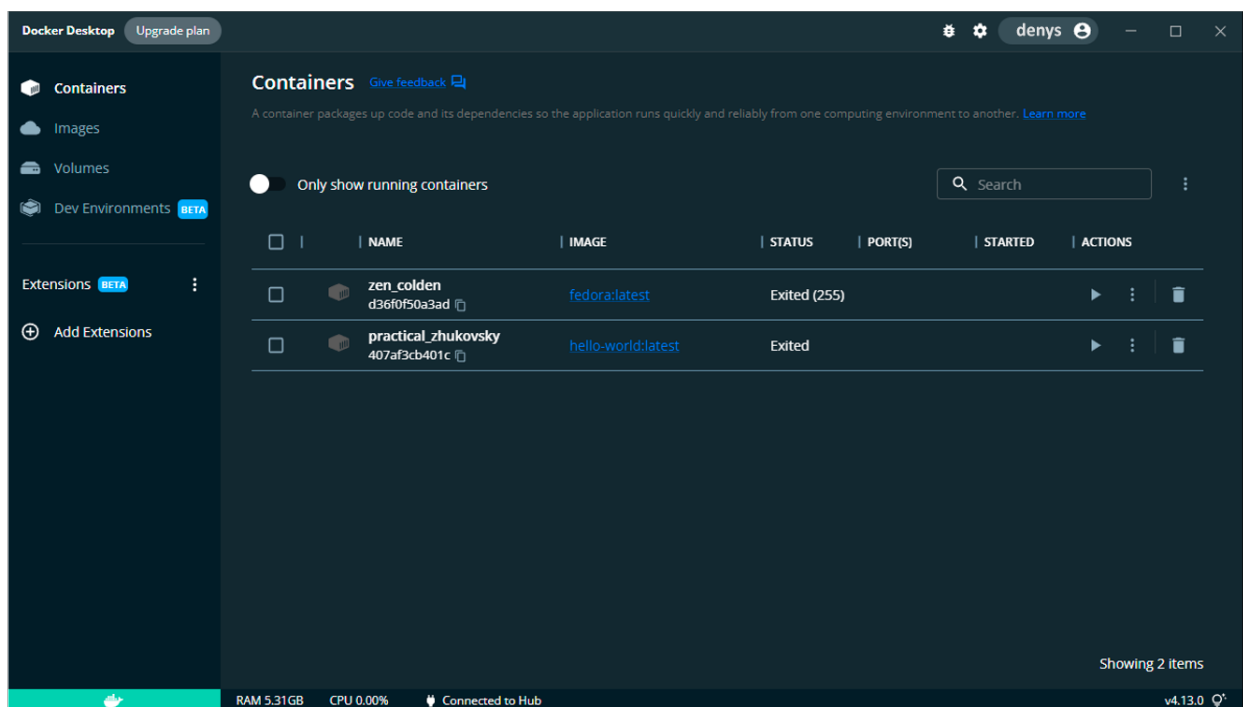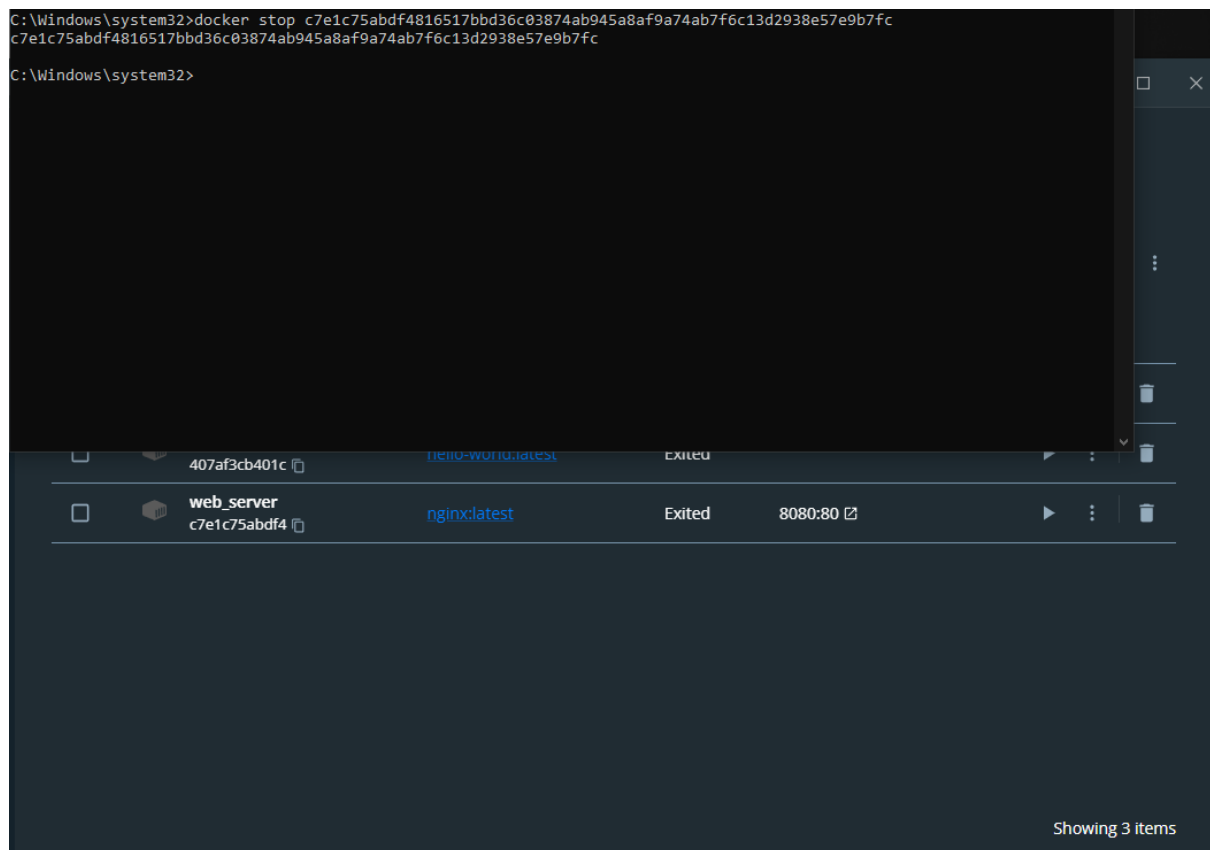
Only show running containers

Search

	NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
	zen_colden d36f0f50a3ad	fedora:latest	Exited (255)			▶ ⋮ 🗑
	practical_zhukovsky 407af3cb401c	hello-world:latest	Exited			▶ ⋮ 🗑
	web_server c7e1c75abdf4	nginx:latest	Running	8080:80 ↗	2 minutes ago	■ ⋮ 🗑

Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org. Commercial support is available at nginx.com.

Thank you for using nginx.

Висновок: я оволодів базовими навичками по роботі з сучасними
системами керування контейнерами.