

## 29.4 Docker overview: Homework (Basic)

1. Pull image "bash" and get the id of the image from metadata.
2. Start the container from the "bash" image with name <your\_username>\_hw\_1, run the command "ls" inside it (pass it as an argument without detaching) and show the output.
3. Check the metadata of the "nginx" image and get:
  - version of nginx application (check the environment section)
  - e-mail address of its maintainer
4. Create <your\_username>\_index.html with random content and mount it to /usr/share/nginx/html/index.html inside a new container based on nginx image (name it <your\_username>\_hw\_2). Then show the output of «curl -v localhost» executed inside this container.

### 1. Pull image "bash" and get the id of the image from metadata.

Pulled "bash":

```
$ docker pull bash
```

Using default tag: latest

latest: Pulling from library/bash

4abcf2066143: Pull complete

9202680e8b04: Pull complete

9348d69e180f: Pull complete

Digest: sha256:8e45c8ffe44db8784197f7c849a22292b446d76895f65646717b5a2152114d6e

Status: Downloaded newer image for bash:latest

docker.io/library/bash:latest

Checked that image "bash" is downloaded:

```
$ docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
bash	latest	<b>b6281a9c2552</b>	6 weeks ago	14MB

id of the image from metadata: b6281a9c2552

### 2. Start the container from the "bash" image with name <your\_username>\_hw\_1, run the command "ls" inside it (pass it as an argument without detaching) and show the output.

```
$ docker run --name nkhaytovich1_hw_1 -d bash | ls -a
```

```
.      .gitconfig .profile .vimrc  
..     .inputrc  .ssh
```

3. Check the metadata of the “nginx” image and get:
- version of nginx application (check the environment section)
  - e-mail address of its maintainer

Pulled “nginx”:

```
$ docker pull nginx
```

Using default tag: latest

latest: Pulling from library/nginx

e1caac4eb9d2: Pull complete

88f6f236f401: Pull complete

c3ea3344e711: Pull complete

cc1bb4345a3a: Pull complete

da8fa4352481: Pull complete

c7f80e9cdab2: Pull complete

18a869624cb6: Pull complete

Digest:

sha256:c26ae7472d624ba1fafd296e73cecc4f93f853088e6a9c13c0d52f6ca5865107

Status: Downloaded newer image for nginx:latest

docker.io/library/nginx:latest

Checked metadata:

```
$ docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
nginx	latest	e4720093a3c1	13 days ago	187MB

```
$ docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS
743515dd0957	nginx	"/docker-entrypoint..."	51 minutes ago	Up 51 minutes	80/tcp
nkhaytovich_hw_1					

```
$ docker exec 743515dd0957 nginx -v
```

nginx version: nginx/1.25.4

Version of nginx application: 1.25.4.

e-mail address of its maintainer: docker-maint@nginx.com

```
$ docker inspect --format='{{index .Config.Labels "maintainer"}}' e4720093a3c1
```

NGINX Docker Maintainers <docker-maint@nginx.com>

4. Create <your\_username>\_index.html with random content and mount it to /usr/share/nginx/html/index.html inside a new container based on nginx image (name it <your\_username>\_hw\_2). Then show the output of «curl -v localhost» executed inside this container.

Created .html:

```
echo "Hello, This is my first Docker Homework and it's hard for me" >
/tmp/nkhaytovich_index.html
```

Runed it:

```
$ sudo docker run --name nkhaytovich_hw_2 -v
/tmp/nkhaytovich_index.html:/usr/share/nginx/html/index.html -d nginx
```

Result:

```
d2e94e05d32b7b5d97faa988e35b76a1a4dbea22e0e41a097a99eb2c8330dba0
```

Checked containers:

```
$ docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
<b>d2e94e05d32b</b>	nginx	"/docker-entrypoint...."	5 minutes ago	Up 5 minutes	80/tcp	nkhaytovich_hw_2
023a89d7560a	bash	"docker-entrypoint.s..."	16 minutes ago	Exited (0)	16 minutes ago	nkhaytovich1_hw_1
8128701fb490	bash	"docker-entrypoint.s..."	19 minutes ago	Exited (0)	19 minutes ago	nkhaytovich_hw_1

```
$ docker exec -it d2e94e05d32b bash
```

```
root@d2e94e05d32b:/# curl -v localhost
```

```
* Trying 127.0.0.1:80...
```

```
* Connected to localhost (127.0.0.1) port 80 (#0)
```

```
> GET / HTTP/1.1
```

```
> Host: localhost
```

```
> User-Agent: curl/7.88.1
```

```
> Accept: */*
```

```
>
```

```
< HTTP/1.1 200 OK
```

```
< Server: nginx/1.25.4
```

```
< Date: Thu, 29 Feb 2024 07:08:26 GMT
```

```
< Content-Type: text/html
```

```
< Content-Length: 61
```

```
< Last-Modified: Thu, 29 Feb 2024 06:50:15 GMT
```

```
< Connection: keep-alive
```

```
< ETag: "65e02927-3d"
```

```
< Accept-Ranges: bytes
```

```
<
```

```
Hello, This is my first Docker Homework and it's hard for me
```

```
* Connection #0 to host localhost left intact
```

```
root@d2e94e05d32b:/#
```