


```
Activities Terminal Nov 20 14:32
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/http
[+] Building 0.2s (7/7) FINISHED
=> [internal] load .dockerignore 0.0s
=> -- transferring context: 2s 0.0s
=> [internal] load build definition from Dockerfile 0.0s
=> -- transferring Dockerfile: 92B 0.0s
=> [internal] load metadata for docker.io/library/httpd:latest 0.0s
=> [internal] load build context 0.0s
=> -- transferring context: 67B 0.0s
=> [1/2] FROM docker.io/library/httpd 0.0s
=> [2/2] COPY index.html /usr/local/apache2/htdocs/ 0.1s
=> exporting to image 0.0s
=> -- exporting layers 0.0s
=> -- writing image sha256:af604ebdbdfc9 0.0s
=> -- naming to docker.io/library/dttidd-httpd-image 0.0s
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/http$ docker image ls
REPOSITORY TAG IMAGE ID CREATED SIZE
dttidd-httpd-image latest af604ebdbdfc9 12 seconds ago 168MB
nginx latest c20060033e06 2 weeks ago 187MB
httpd latest 7f6a9e9e81a5 2 weeks ago 168MB
mysql latest a3b6d08090d6 3 weeks ago 590MB
python latest 2accfc902fa3 5 weeks ago 1.02GB
ubuntu latest e4c58958181a 6 weeks ago 77.8MB
alpine latest 8ca4680f4f35 7 weeks ago 7.34MB
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/http$ docker container ls
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/http$ docker container run -ltd -p 8080:80 --name dttiss-httpd-image
a27b39bea756c6ca13afffd31b011f9d37179dd48ead771a6a10328c029fc4
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/http$ docker container run -ltd -p 8081:80 --name dttiss-httpd-image
a27b39bea756c6ca13afffd31b011f9d37179dd48ead771a6a10328c029fc4
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/http$ docker container ls
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
eeb808b8cc8a dttidd-httpd-image "httpd-foreground" 8 seconds ago Up 7 seconds 0.0.0.0:8080
1->80/tcp, ::8081->80/tcp dttiss-httpd-con2
a27b39bea756c6ca13afffd31b011f9d37179dd48ead771a6a10328c029fc4 dttidd-httpd-image "httpd-foreground" 28 seconds ago Up 27 seconds 0.0.0.0:8080
0->80/tcp, ::8080->80/tcp dttiss-httpd-con1
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/http$ docker container ls -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
eeb808b8cc8a dttidd-httpd-image "httpd-foreground" 14 seconds ago Up 14 seconds 0.0.0.0:8080
1->80/tcp, ::8081->80/tcp dttiss-httpd-con2
a27b39bea756c6ca13afffd31b011f9d37179dd48ead771a6a10328c029fc4 dttidd-httpd-image "httpd-foreground" 34 seconds ago Up 34 seconds 0.0.0.0:8080
0->80/tcp, ::8080->80/tcp dttiss-httpd-con1
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/http$ docker image ls
REPOSITORY TAG IMAGE ID CREATED SIZE
dttidd-httpd-image latest af604ebdbdfc9 5 minutes ago 168MB
nginx latest c20060033e06 2 weeks ago 187MB
httpd latest 7f6a9e9e81a5 2 weeks ago 168MB
mysql latest a3b6d08090d6 3 weeks ago 590MB
python latest 2accfc902fa3 5 weeks ago 1.02GB
ubuntu latest e4c58958181a 6 weeks ago 77.8MB
alpine latest 8ca4680f4f35 7 weeks ago 7.34MB
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/http$
```

This is an assignment no 5*

EXERCISE NO>2

Activities

Terminal

Nov 20 14:38

sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/http

CONTAINER ID

IMAGE

NAMES

COMMAND

CREATED

STATUS

PORTS

eeb888bcccda

ditidd-httpd-image

"httpd:foreground"

14 seconds ago

Up 14 seconds

0.0.0.0:8080

a27b39beea75

ditidd-httpd-image

"httpd:foreground"

34 seconds ago

Up 34 seconds

0.0.0.0:8080

0>887tcp, :::8080

>887tcp

ditliss-httpd-con2

0>887tcp, :::8080

>887tcp

ditliss-httpd-con1

sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/http

\$ docker image ls

REPOSITORY

TAG

IMAGE ID

CREATED

SIZE

ditidd-httpd-image

latest

af604ebdbdc9

5 minutes ago

168MB

nginx

latest

c20608033e06

2 weeks ago

187MB

httpd

latest

7f6a96981a5

2 weeks ago

168MB

mysql

latest

a3b608898d6

3 weeks ago

596MB

python

latest

2acccf902fa3

5 weeks ago

1.02GB

ubuntu

latest

e4c58958181a

6 weeks ago

77.8MB

alpine

latest

8ca4688f4f35

7 weeks ago

7.34MB

sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/http

\$ docker image ls

REPOSITORY

TAG

IMAGE ID

CREATED

SIZE

ditidd-httpd-image

latest

af604ebdbdc9

8 minutes ago

168MB

nginx

latest

c20608033e06

2 weeks ago

187MB

httpd

latest

7f6a96981a5

2 weeks ago

168MB

mysql

latest

a3b608898d6

3 weeks ago

596MB

python

latest

2acccf902fa3

5 weeks ago

1.02GB

ubuntu

latest

e4c58958181a

6 weeks ago

77.8MB

alpine

latest

8ca4688f4f35

7 weeks ago

7.34MB

sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/http

\$ vi index.html

sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/http

\$ cat Dockerfile

FROM nginx

COPY index.html /usr/share/nginx/html

sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/http

\$ docker image build -t ditidd-nginx-image

ERROR: "docker buildx build" requires exactly 1 argument.

See "docker buildx build --help".

Usage: docker buildx build [OPTIONS] PATH | URL | -

Start a build

sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/http

\$ docker image build -t ditidd-nginx-image

[+] Building 0.1s (7/7) FINISHED

docker:default

[internal] load build definition from Dockerfile

0.0s

=> [internal] load .dockerignore

0.0s

=> transferring context: 2B

0.0s

=> [internal] load metadata for docker.io/library/nginx:latest

0.0s

=> [internal] load build context

0.0s

=> transferring context: 84B

0.0s

=> [1/2] FROM docker.io/library/nginx

0.1s

=> [2/2] COPY index.html /usr/share/nginx/html

0.0s

=> exporting to image

0.0s

=> writing image sha256:af604ebdbdc9a44b20c60be1c7418105823330130086986ed06ea89a8

0.0s

=> naming to docker.io/library/ditidd-nginx-image

0.0s

sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/http

\$

Course: 00

localhost:8000

localhost:8000

localhost:8000

EXERCISE

nginx

+

+

+

https://hub.docker.com/_/nginx

How to use this image

Hosting some simple static content

\$ docker run --name some-nginx -v /some/content:/usr/share/nginx/html:ro -d nginx

Alternatively, a simple Dockerfile can be used to generate a new image that includes the necessary content (which is a much cleaner solution than the bind mount above):

FROM nginx

COPY <static-html-directory> /usr/share/nginx/html

Place this file in the same directory as your directory of content ("static-html-directory"), run `docker build -t some-content-nginx .`, then start your container:

\$ docker run --name some-nginx -d some-content-nginx

Exposing external port

\$ docker run --name some-nginx -d -p 8080:80 some-content-nginx

Then you can hit `http://localhost:8080` or `http://host-ip:8080` in your browser.

Customize configuration

You can mount your configuration file, or build a new image with it.

If you wish to adapt the default configuration, use something like the following to get it from a running nginx container:

\$ docker run --name tmp-nginx-container -d nginx

\$ docker cp tmp-nginx-container:/etc/nginx/nginx.conf /host/path/nginx.conf

\$ docker rm -f tmp-nginx-container

And then edit `/host/path/nginx.conf` in your host file system.

For information on the syntax of the nginx configuration files, see the official documentation (specifically the Beginner's Guide).

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EXERCISE NO.3>

The image shows a terminal window on a Linux system, likely Ubuntu, with the user 'sunbeam' at the prompt. The terminal displays the output of several Docker commands. First, the user runs `docker container ls`, which shows a list of containers including `4185ecc95d33` and `11ca77163460`. Then, the user runs `docker image build -t ditiss-python-prime.py .`, which fails with an error: `ERROR: failed to solve: failed to compute cache key: failed to calculate checksum of ref 4c8e2d76-23f-d-4401-ae5-a0ab840cb08: i0b0qon42mreydxxfowq58r4pn: "/main.py": not found`. The user then runs `docker image build -t ditidd-python-prime.py .`, which also fails with a similar error. Finally, the user runs `docker image build -t ditidd-python-prime.py .`, which succeeds and shows the image being pushed to Docker Hub. The terminal also shows the output of `docker container ls` after the build, showing the new container `4185ecc95d33` and `11ca77163460`.

The PDF document, titled `5_docker.pdf`, contains the following exercises:

Docker

exercise 1

- create index.html containing your information
- create an image based on httpd copying index.html to the web root
- create two containers running on port 8080 and 8081
- verify if you can access the website on both the ports

exercise 2

- repeat the exercise 1 with nginx as base image

exercise 3

- create python application to generate first 100 prime numbers
- create an image to run the application
- create a container of the newly created image
- check the logs of container to get the 100 prime numbers

exercise 4

- create a container of busybox image with a volume attached at /app
- get container terminal access and create 100 files in /app
- stop and remove the container
- create a new container with the same volume attached at /app
- verify if you can access the files created earlier

exercise 5

- create a container of mysql image
- make sure that this container is persisting the database
- create a database named mydb and table named companies in mydb
- insert 5 company records
- destroy the container
- create a new container and get the mydb database and companies table

exercise 6

- create a container of mysql image
- make sure that this container is persisting the database
- create a database named mydb and table named companies in mydb
- insert 5 company records
- destroy the container
- create a new container and get the mydb database and companies table

EXERCISE NO4>

Activities

Terminal

Nov 20 17:49

sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/exercise4

```
> > > naming to docker.io/library/busybox001
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/dir$ docker container run -itd --name ditiss-bu
sybox-con1 busybox001
docker: Error response from daemon: Conflict. The container name "/ditiss-busybox-con1" is
already in use by container "253088238a348dc491b578b5d927bd64e5c839936877df6246d924c1bee2
b84a". You have to remove (or rename) that container to be able to reuse that name.
See 'docker run --help'.
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/dir$ docker container run -itd --name con1 busy
box001
ea7d194a0d19a001f69abaf21f9c13e819462efd8daba71851bc55fd09e570d
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/dir$ docker container logs con1
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/dir$ docker container logs con1
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/dir$ cd ..
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~$ mkdir exercise4
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~$ cd exercise4/
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/exercise4$ docker image ls
REPOSITORY          TAG         IMAGE ID      CREATED       SIZE
busybox001          latest      43e2045cee6f   2 minutes ago 4.26MB
busybox_ext         latest      8f1e6a0be7a   6 minutes ago 4.26MB
ditiss-python-image latest      b5a4932f9b32   About an hour ago 1.02GB
ditidd-python-image latest      4b697caad0e4   2 hours ago 1.03GB
ditidd-python-prime.py-image latest      6c0b8849af31   2 hours ago 1.03GB
ditidd-nginx-image latest      afb91af64cfa   3 hours ago 187MB
ditidd-httpd-image latest      af604ebdbdcf9   3 hours ago 168MB
nginx               latest      c20660033e06   2 weeks ago 187MB
httpd               latest      7f6a909e81a5   2 weeks ago 168MB
mysql               latest      a3b6608898d6   3 weeks ago 596MB
python               latest      2acccf902fa3   5 weeks ago 1.02GB
ubuntu              latest      e4c58958181a   6 weeks ago 77.8MB
alpine              latest      8ca4688f4f35   7 weeks ago 7.34MB
busybox              latest      a416a98b71e2   4 months ago 4.26MB
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/exercise4$ vin bbox01
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/exercise4$ vin Dockerfile
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/exercise4$ vin Dockerfile
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/exercise4$ docker image build -t busyboxx
ERROR: "docker buildx build" requires exactly 1 argument.
See 'docker buildx build --help'.

Usage: docker buildx build [OPTIONS] PATH | URL | -

Start a build
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/exercise4$ docker image build -t busyboxx .
[+] Building 0.1s (7/7) FINISHED                                docker:default
=> [internal] load build definition from Dockerfile              0.0s
=> => transferring Dockerfile: 84B                               0.0s
=> [internal] load metadata for docker.io/library/busybox:latest 0.0s
=> [internal] load build context                                0.0s
=> => transferring context: 61B                                    0.0s
=> CACHED [1/2] FROM docker.io/library/busybox                  0.0s
=> [2/2] COPY bbox01 /usr/share/busybox/                        0.0s
=> exporting to image                                           0.0s
=> => exporting layers                                           0.0s
=> writing image sha256:d52f4663c68a564fd7490b1a9e7a4894c68788b9e21c34137a14980 0.0s
=> naming to docker.io/library/busyboxx                         0.0s
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/exercise4$ docker image ls
REPOSITORY          TAG         IMAGE ID      CREATED       SIZE
busyboxx             latest      d52f4663c68a   6 seconds ago 4.26MB
busybox001           latest      43e2045cee6f   5 minutes ago 4.26MB
busybox_ext           latest      8f1e6a0be7a    10 minutes ago 4.26MB
ditiss-python-image  latest      b5a4932f9b32   About an hour ago 1.02GB
ditidd-python-image  latest      4b697caad0e4   2 hours ago 1.03GB
ditidd-python-prime.py-image latest      6c0b8849af31   2 hours ago 1.03GB
ditidd-nginx-image  latest      afb91af64cfa   3 hours ago 187MB
ditidd-httpd-image  latest      af604ebdbdcf9   3 hours ago 168MB
nginx                 latest      c20660033e06   2 weeks ago 187MB
httpd                 latest      7f6a909e81a5   2 weeks ago 168MB
mysql                 latest      a3b6608898d6   3 weeks ago 596MB
python                 latest      2acccf902fa3   5 weeks ago 1.02GB
ubuntu                latest      e4c58958181a   6 weeks ago 77.8MB
alpine                latest      8ca4688f4f35   7 weeks ago 7.34MB
busybox                latest      a416a98b71e2   4 months ago 4.26MB
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/exercise4$ docker container run -itd --name bbox
-con1 busybox01
Unable to find image 'busybox01:latest' locally
AC
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/exercise4$ docker container run -itd --name bbox
-con1 busyboxx
7e211ab8b1359bdca63c11a27ed0a6fca7d7b102c9f532474d4f10a69336c397
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/exercise4$ docker container ls
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
7e211ab8b135  busybox  "sh"      12 seconds ago    Up 12 seconds    busybox-con1
ea7d194a0d19  busybox001  "sh"      6 minutes ago     Up 6 minutes      con1
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/exercise4$ docker container logs bbox-con1
```

5_docker.pdf

64.6%

exercise 1

- create index.html containing your information
- create an image based on httpd copying index.html to the web root
- create two containers running on port 8080 and 8081
- verify if you can access the website on both the ports

exercise 2

- repeat the exercise 1 with nginx as base image

exercise 3

- create python application to generate first 100 prime numbers
- create an image to run the application
- create a container of the newly created image
- check the logs of container to get the 100 prime numbers

exercise 4

- create a container of busybox image with a volume attached at /app
- get container terminal access and create 100 files in /app
- stop and remove the container
- create a new container with the same volume attached at /app
- verify if you can access the files created earlier

exercise 5

- create a container of mysql image
- make sure that this container is persisting the database
- create a database named mydb and table named companies in mydb
- insert 5 company records
- destroy the container
- create a new container and get the mydb database and companies table

exercise 6

Activities

Terminal

Nov 20 17:49

sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~/exercise4

```
Start a build
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/exercise4$ docker image build -t busyboxx .
[+] Building 0.1s (7/7) FINISHED                                docker:default
=> [internal] load build definition from Dockerfile              0.0s
=> => transferring Dockerfile: 84B                               0.0s
=> [internal] load metadata for docker.io/library/busybox:latest 0.0s
=> [internal] load build context                                0.0s
=> => transferring context: 61B                                    0.0s
=> CACHED [1/2] FROM docker.io/library/busybox                  0.0s
=> [2/2] COPY bbox01 /usr/share/busybox/                        0.0s
=> exporting to image                                           0.0s
=> => exporting layers                                           0.0s
=> writing image sha256:d52f4663c68a564fd7490b1a9e7a4894c68788b9e21c34137a14980 0.0s
=> naming to docker.io/library/busyboxx                         0.0s
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/exercise4$ docker image ls
REPOSITORY          TAG         IMAGE ID      CREATED       SIZE
busyboxx             latest      d52f4663c68a   6 seconds ago 4.26MB
busybox001           latest      43e2045cee6f   5 minutes ago 4.26MB
busybox_ext           latest      8f1e6a0be7a    10 minutes ago 4.26MB
ditiss-python-image  latest      b5a4932f9b32   About an hour ago 1.02GB
ditidd-python-image  latest      4b697caad0e4   2 hours ago 1.03GB
ditidd-python-prime.py-image latest      6c0b8849af31   2 hours ago 1.03GB
ditidd-nginx-image  latest      afb91af64cfa   3 hours ago 187MB
ditidd-httpd-image  latest      af604ebdbdcf9   3 hours ago 168MB
nginx                 latest      c20660033e06   2 weeks ago 187MB
httpd                 latest      7f6a909e81a5   2 weeks ago 168MB
mysql                 latest      a3b6608898d6   3 weeks ago 596MB
python                 latest      2acccf902fa3   5 weeks ago 1.02GB
ubuntu                latest      e4c58958181a   6 weeks ago 77.8MB
alpine                latest      8ca4688f4f35   7 weeks ago 7.34MB
busybox                latest      a416a98b71e2   4 months ago 4.26MB
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/exercise4$ docker container run -itd --name bbox
-con1 busybox01
Unable to find image 'busybox01:latest' locally
AC
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/exercise4$ docker container run -itd --name bbox
-con1 busyboxx
7e211ab8b1359bdca63c11a27ed0a6fca7d7b102c9f532474d4f10a69336c397
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/exercise4$ docker container ls
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
7e211ab8b135  busybox  "sh"      12 seconds ago    Up 12 seconds    busybox-con1
ea7d194a0d19  busybox001  "sh"      6 minutes ago     Up 6 minutes      con1
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~/exercise4$ docker container logs bbox-con1
```

Screenshot captured

You can paste the image from the clipboard.

5_docker.pdf

64.6%

exercise 1

- create index.html containing your information
- create an image based on httpd copying index.html to the web root
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exercise 2

- repeat the exercise 1 with nginx as base image

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- check the logs of container to get the 100 prime numbers

exercise 4

- create a container of busybox image with a volume attached at /app
- get container terminal access and create 100 files in /app
- stop and remove the container
- create a new container with the same volume attached at /app
- verify if you can access the files created earlier

exercise 5

- create a container of mysql image
- make sure that this container is persisting the database
- create a database named mydb and table named companies in mydb
- insert 5 company records
- destroy the container
- create a new container and get the mydb database and companies table

exercise 6

ActivitiesTerminal

Nov 20 17:49

sunbeam@sunbeam-ideaPad-Gaming-3-15ACH6: ~/exercise4

sunbeam@sunbeam-ideaPad-Gaming-3-15ACH6:~/exercise4\$ docker container run -itd --name bbox

-con1 busybox01

Unable to find 'image 'busybox01:latest' locally

^C

sunbeam@sunbeam-ideaPad-Gaming-3-15ACH6:~/exercise4\$ docker container run -itd --name bbox

-con1 busyboxxx

7e211ab8b1359bdc6a3c11a27ed0a6fca7d7b102c9f532474d4f10a69336c397

sunbeam@sunbeam-ideaPad-Gaming-3-15ACH6:~/exercise4\$ docker container ls

| CONTAINER ID | IMAGE | COMMAND | CREATED | STATUS | PORTS | NAMES |
|--------------|------------|---------|----------------|---------------|-------|-----------|
| 7e211ab8b135 | busyboxxx | "sh" | 12 seconds ago | Up 12 seconds | | bbox-con1 |
| ea7d194a0d19 | busybox001 | "sh" | 6 minutes ago | Up 6 minutes | | con1 |

sunbeam@sunbeam-ideaPad-Gaming-3-15ACH6:~/exercise4\$ docker container logs bbox-con1

/ # ^C

/ # ^C

/ #

sunbeam@sunbeam-ideaPad-Gaming-3-15ACH6:~/exercise4\$ docker container run -itd --name busy

boxxx01 -v myvolume:/app busybox

732a1500558d4d90f9a844db262cc0d9d35fe3e37d6830013d0309824f5b15e3f

sunbeam@sunbeam-ideaPad-Gaming-3-15ACH6:~/exercise4\$ docker container ls

| CONTAINER ID | IMAGE | COMMAND | CREATED | STATUS | PORTS | N |
|--------------|------------|---------|--------------------|-------------------|-------|---|
| 732a1500558d | busybox | "sh" | About a minute ago | Up About a minute | | b |
| usyboxxx01 | busyboxxx | "sh" | 14 minutes ago | Up 14 minutes | | b |
| box-con1 | busyboxxx | "sh" | 14 minutes ago | Up 14 minutes | | b |
| ea7d194a0d19 | busybox001 | "sh" | 21 minutes ago | Up 21 minutes | | c |

sunbeam@sunbeam-ideaPad-Gaming-3-15ACH6:~/exercise4\$ docker run -it --rm busybox

/ # touch /mnt/mydirectory/password{1..100}.txt

touch: /mnt/mydirectory/password{1..100}.txt: No such file or directory

/ # touch /File{1..100}.txt

/ #

sunbeam@sunbeam-ideaPad-Gaming-3-15ACH6:~/exercise4\$ docker run -it --rm busybox

/ # touch /home/sunbeam/exercise4/{1..100}.txt

/ #

/ #

/ #

/ #

sunbeam@sunbeam-ideaPad-Gaming-3-15ACH6:~/exercise4\$ docker run -it --rm busybox

/ # ^C

/ #

sunbeam@sunbeam-ideaPad-Gaming-3-15ACH6:~/exercise4\$ docker container exec -it busyboxxx01

5_docker.pdf64.6%

1 of 2

exercise 1

- create index.html containing your information
- create an image based on httpd copying index.html to the web root
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exercise 2

- repeat the exercise 1 with nginx as base image

exercise 3

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- create an image to run the application
- create a container of the newly created image
- check the logs of container to get the 100 prime numbers

exercise 4

- create a container of busybox image with a volume attached at /app
- get container terminal access and create 100 files in /app
- stop and remove the container
- create a new container with the same volume attached at /app
- verify if you can access the files created earlier

exercise 5

- create a container of mysql image
- make sure that this container is persisting the database
- create a database named mydb and table named companies in mydb
- insert 5 company records
- destroy the container
- create a new container and get the mydb database and companies table

exercise 6


```
Activities Terminal sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~$ docker run -it --rm busybox
/#
/#
/#
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~$ docker container exec -it busyboxx01
sh
/# ls
app dev home lib64 root tmp var
bin etc lib proc sys usr
/# cd app
/app # for i in $(seq 1 100); do
> touch "file$i.txt"
> done
/app # ls
file1.txt file31.txt file51.txt file71.txt
file10.txt file32.txt file52.txt file72.txt
file100.txt file33.txt file53.txt file73.txt
file11.txt file34.txt file54.txt file74.txt
file12.txt file35.txt file55.txt file75.txt
file13.txt file36.txt file56.txt file76.txt
file14.txt file37.txt file57.txt file77.txt
file15.txt file38.txt file58.txt file78.txt
file16.txt file39.txt file59.txt file79.txt
file17.txt file40.txt file60.txt file80.txt
file18.txt file41.txt file61.txt file81.txt
file19.txt file42.txt file62.txt file82.txt
file2.txt file43.txt file63.txt file83.txt
file20.txt file44.txt file64.txt file84.txt
file21.txt file45.txt file65.txt file85.txt
file22.txt file46.txt file66.txt file86.txt
file23.txt file47.txt file67.txt file87.txt
file24.txt file48.txt file68.txt file88.txt
file25.txt file49.txt file69.txt file89.txt
file26.txt file50.txt file70.txt file90.txt
file27.txt file51.txt file71.txt file91.txt
file28.txt file52.txt file72.txt file92.txt
file29.txt file53.txt file73.txt file93.txt
file3.txt file54.txt file74.txt file94.txt
file30.txt file55.txt file75.txt file95.txt
file31.txt file56.txt file76.txt file96.txt
file32.txt file57.txt file77.txt file97.txt
file33.txt file58.txt file78.txt file98.txt
file34.txt file59.txt file79.txt file99.txt
file35.txt file60.txt file80.txt
file36.txt file61.txt
file37.txt file62.txt
file38.txt file63.txt
file39.txt file64.txt
file40.txt file65.txt
file41.txt file66.txt
file42.txt file67.txt
file43.txt file68.txt
file44.txt file69.txt
file45.txt file70.txt
file46.txt file71.txt
file47.txt file72.txt
file48.txt file73.txt
file49.txt file74.txt
file50.txt file75.txt
file51.txt file76.txt
file52.txt file77.txt
file53.txt file78.txt
file54.txt file79.txt
file55.txt file80.txt
file56.txt file81.txt
file57.txt file82.txt
file58.txt file83.txt
file59.txt file84.txt
file60.txt file85.txt
file61.txt file86.txt
file62.txt file87.txt
file63.txt file88.txt
file64.txt file89.txt
file65.txt file90.txt
file66.txt file91.txt
file67.txt file92.txt
file68.txt file93.txt
file69.txt file94.txt
file70.txt file95.txt
file71.txt file96.txt
file72.txt file97.txt
file73.txt file98.txt
file74.txt file99.txt
file75.txt
file76.txt
file77.txt
file78.txt
file79.txt
file80.txt
file81.txt
file82.txt
file83.txt
file84.txt
file85.txt
file86.txt
file87.txt
file88.txt
file89.txt
file90.txt
file91.txt
file92.txt
file93.txt
file94.txt
file95.txt
file96.txt
file97.txt
file98.txt
file99.txt
/app #
/app #
/app #
```

exercise 1

- create index.html containing your information
- create an image based on httpd copying index.html to the web root
- create two containers running on port 8080 and 8081
- verify if you can access the website on both the ports

exercise 2

- repeat the exercise 1 with nginx as base image

exercise 3

- create python application to generate first 100 prime numbers
- create an image to run the application
- create a container of the newly created image
- check the logs of container to get the 100 prime numbers

exercise 4

- create a container of busybox image with a volume attached at /app
- get container terminal access and create 100 files in /app
- stop and remove the container
- create a new container with the same volume attached at /app
- verify if you can access the files created earlier

exercise 5

- create a container of mysql image
- make sure that this container is persisting the database
- create a database named mydb and table named companies in mydb
- insert 5 company records
- destroy the container
- create a new container and get the mydb database and companies table

overice 6

```

Activities [ Terminal sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6: ~
Hello Ditiss!!
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~$ docker container run -itd name b
busyboxxx01 -v myvolume:/app busybox
Unable to find image 'name:latest' locally
docker: Error response from daemon: pull access denied for name, repository
does not exist or may require 'docker login': denied: requested access to
the resource is denied.
See 'docker run --help'.
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~$ docker container run -itd --name
busyboxxx01 -v myvolume:/app busybox
a33d8ba9f9b6ef3c3b01124c3db05457b9ea3f66a0b0aa042dba553248805d6d
sunbeam@sunbeam-IdeaPad-Gaming-3-15ACH6:~$ docker container exec -it busybo
xxx01 sh
/ # ls
  app    dev    home  lib64  root  tmp    var
bin      etc    lib   proc   sys   usr

/ # cd app
/app # ls
file1.t.txt  file24.txt  file4.t.txt  file5.t.txt  file70.txt  file86.txt
file10.t.txt file25.txt  file40.t.txt file56.t.txt  file71.txt  file87.txt
file100.t.txt file26.txt  file41.t.txt file57.t.txt  file72.txt  file88.txt
file11.t.txt  file27.txt  file42.t.txt file58.t.txt  file73.txt  file89.txt
file12.t.txt  file28.txt  file43.t.txt file59.t.txt  file74.txt  file9.t.txt
file13.t.txt  file29.txt  file44.t.txt file6.t.txt   file75.txt  file90.txt
file14.t.txt  file3.t.txt file45.t.txt file60.t.txt  file76.txt  file91.txt
file15.t.txt  file30.txt  file46.t.txt file61.t.txt  file77.txt  file92.txt
file16.t.txt  file31.txt  file47.t.txt file62.t.txt  file78.txt  file93.txt
file17.t.txt  file32.txt  file48.t.txt file63.t.txt  file79.txt  file94.txt
file18.t.txt  file33.txt  file49.t.txt file64.t.txt  file8.t.txt  file95.txt
file19.t.txt  file34.txt  file5.t.txt  file65.t.txt  file80.txt  file96.txt
file2.t.txt   file35.txt  file50.t.txt file66.t.txt  file81.txt  file97.txt
file20.t.txt  file36.txt  file51.t.txt file67.t.txt  file82.txt  file98.txt
file21.t.txt  file37.txt  file52.t.txt file68.t.txt  file83.txt  file99.txt
file22.t.txt  file38.txt  file53.t.txt file69.t.txt
file23.t.txt  file39.txt  file54.t.txt file7.t.txt   file85.txt

/app #
/app #
/app #

```

