1. Запустить контейнер с БД mariaDB, используя инструкции на сайте hub.docker.com. Слинковать папку с базой данных с контейнера с mariaDB в папку на хосте (как на семинаре). Заполнить БД данными или добавить запись и проверить, что файлы базы данных появились на хостовой машине.

## Команды:

```
mkdir mdb
```

docker run --name mariadbGB -v ./mdb:/var/lib/mysql -e MYSQL\_ROOT\_PASSWORD=GB -p 3306:3306 -d mariadb:10.10.2

docker ps docker exec -it ea mysql -u root -p

show databases; create database GB;

Is -I

## Код:

xadmin@Ubuntu:~/GB/docker/3\$ sudo docker run --name test-mariadb -e MARIADB ROOT PASSWORD=test123 -v ./mydb:/var/lib/mysql -d mariadb:10.10.2

Unable to find image 'mariadb:10.10.2' locally

10.10.2: Pulling from library/mariadb

10ac4908093d: Pull complete

44779101e748: Pull complete

a721db3e3f3d: Pull complete

1850a929b84a: Pull complete

397a918c7da3: Pull complete

806be17e856d: Pull complete

634de6c90876: Pull complete

cd00854cfb1a: Pull complete

Digest: sha256:bfc25a68e113de43d0d112f5a7126df8e278579c3224e3923359e1c1d8d5ce6e

Status: Downloaded newer image for mariadb:10.10.2

docker: Error response from daemon: create ./mydb: "./mydb" includes invalid characters for a local volume name, only "[a-zA-Z0-9][a-zA-Z0-9\_.-]" are allowed. If you intended to pass a host directory, use absolute path.

See 'docker run --help'.

xadmin@Ubuntu:~/GB/docker/3/mdb\$ sudo docker run --name test-mariadb -e MARIADB\_ROOT\_PASSWORD=test123 -v /home/xadmin/GB/docker/3/mdb:/var/lib/mysql -d mariadb:10.10.2

fb3528ff2ff70477d2aa1c49e5d0f1cc32d5a4f94f6acbc9f6b3ab846a55d535

xadmin@Ubuntu:~/GB/docker/3/mdb\$ sudo docker ps

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

fb3528ff2ff7 mariadb:10.10.2 "docker-entrypoint.s..." 24 seconds ago Up 24 seconds 3306/tcp test-mariadb

cf50d13e5f08 ubuntu:22.10 "bash" 22 minutes ago Up 22 minutes objective\_bartik

xadmin@Ubuntu:~/GB/docker/3/mdb\$ sudo docker exec -it test-mariadb bash

root@fb3528ff2ff7:/# ls -l

total 56

Irwxrwxrwx 1 root root 7 Jan 26 02:03 bin -> usr/bin

drwxr-xr-x 2 root root 4096 Apr 18 2022 boot

drwxr-xr-x 5 root root 340 Jul 25 10:50 dev

drwxr-xr-x 2 root root 4096 Jan 31 18:42 docker-entrypoint-initdb.d

drwxr-xr-x 1 root root 4096 Jul 25 10:50 etc

drwxr-xr-x 2 root root 4096 Apr 18 2022 home

Irwxrwxrwx 1 root root 7 Jan 26 02:03 lib -> usr/lib

lrwxrwxrwx 1 root root 9 Jan 26 02:03 lib32 -> usr/lib32

Irwxrwxrwx 1 root root 9 Jan 26 02:03 lib64 -> usr/lib64

lrwxrwxrwx 1 root root 10 Jan 26 02:03 libx32 -> usr/libx32

drwxr-xr-x 2 root root 4096 Jan 26 02:03 media

drwxr-xr-x 2 root root 4096 Jan 26 02:03 mnt

drwxr-xr-x 2 root root 4096 Jan 26 02:03 opt

dr-xr-xr-x 311 root root 0 Jul 25 10:50 proc

```
drwx----- 1 root root 4096 Jan 31 18:42 root
drwxr-xr-x 1 root root 4096 Jan 31 18:43 run
Irwxrwxrwx 1 root root 8 Jan 26 02:03 sbin -> usr/sbin
drwxr-xr-x 2 root root 4096 Jan 26 02:03 srv
dr-xr-xr-x 13 root root 0 Jul 25 10:50 sys
drwxrwxrwt 1 root root 4096 Jul 25 10:50 tmp
drwxr-xr-x 1 root root 4096 Jan 26 02:03 usr
drwxr-xr-x 1 root root 4096 Jan 26 02:06 var
root@fb3528ff2ff7:/# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor. Commands end with; or \g.
Your MariaDB connection id is 3
Server version: 10.10.2-MariaDB-1:10.10.2+maria~ubu2204 mariadb.org binary distribution
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
MariaDB [(none)]> show databeses
  -> show databeses;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your
MariaDB server version for the right syntax to use near 'databeses
show databeses' at line 2
MariaDB [(none)]> show databases;
+----+
| Database |
+----+
```

```
| information schema |
| mysql
| performance_schema |
        sys
+----+
4 rows in set (0.000 sec)
MariaDB [(none)]> CREATE DATABASE GB;
Query OK, 1 row affected (0.000 sec)
MariaDB [(none)]> show databases;
  Database
  information_schema
  mysql
  performance schema
5 rows in set (0.000 sec)
MariaDB [(none)]> Ctrl-C -- exit!
Aborted
root@fb3528ff2ff7:/#
xadmin@Ubuntu:~/GB/docker/3/mdb$ Is -I
итого 139376
-rw-rw---- 1 vboxadd vboxsf 16842752 июл 25 13:50 aria_log.00000001
-rw-rw---- 1 vboxadd vboxsf 52 июл 25 13:50 aria_log_control
-rw-rw---- 1 vboxadd vboxsf 9 июл 25 13:50 ddl recovery.log
                     4096 июл 25 13:59 GB
drwx----- 2 vboxadd vboxsf
-rw-rw---- 1 vboxadd vboxsf
                      868 июл 25 13:50 ib_buffer_pool
```

-rw-rw---- 1 vboxadd vboxsf 12582912 июл 25 13:50 ibdata1

```
-rw-rw---- 1 vboxadd vboxsf 100663296 июл 25 13:52 ib_logfile0
-rw-rw---- 1 vboxadd vboxsf 12582912 июл 25 13:50 ibtmp1
-rw-rw---- 1 vboxadd vboxsf 0 июл 25 13:50 multi-master.info
drwx----- 2 vboxadd vboxsf 4096 июл 25 13:50 mysql
-rw-r---- 1 vboxadd vboxsf 15 июл 25 13:50 mysql_upgrade_info
drwx----- 2 vboxadd vboxsf 4096 июл 25 13:50 performance_schema
drwx----- 2 vboxadd vboxsf 12288 июл 25 13:50 sys
```

```
xadmin@Ubuntu:~/GB/docker/3/mdb$ ls -l
итого 139376
-rw-rw---- 1 vboxadd vboxsf 16842752 июл 25 13:50 aria log.00000001
-rw-rw---- 1 vboxadd vboxsf
                                   52 июл 25 13:50 aria log control
-rw-rw---- 1 vboxadd vboxsf
                                    9 июл 25 13:50 ddl recovery.log
drwx----- 2 vboxadd vboxsf
                                 4096 июл 25 13:59 😘
                                  868 июл 25 13:50 ib buffer pool
-rw-rw---- 1 vboxadd vboxsf
-rw-rw---- 1 vboxadd vboxsf 12582912 июл 25 13:50 ibdata1
-rw-rw---- 1 vboxadd vboxsf 100663296 июл 25 13:52 ib logfile0
-гw-гw---- 1 vboxadd vboxsf 12582912 июл 25 13:50 ibtmp1
                                    0 июл 25 13:50 multi-master.info
-rw-rw---- 1 vboxadd vboxsf
drwx---- 2 vboxadd vboxsf
                                4096 июл 25 13:50 mysql
-rw-r--r-- 1 vboxadd vboxsf
                                   15 июл 25 13:50 mysql upgrade info
drwx----- 2 vboxadd vboxsf
                                 4096 июл 25 13:50 performance schema
drwx----- 2 vboxadd vboxsf
                                12288 июл 25 13:50 sys
xadmin@Ubuntu:~/GB/docker/3/mdb$
```

2. Запустить phpmyadmin (в контейнере) и через веб проверить, что все введенные данные доступны. http://localhost:8081/

## Команды:

docker run --name phphmyadmin -d --link mariadbGB:db -p 8080:80 phpmyadmin/phpmyadmin docker ps

## Код:

xadmin@Ubuntu:~/GB/docker/3\$ sudo docker run --name my-phpmyadmin-new-1 --link test-mariadb:db -p 8081:80 phpmyadmin/phpmyadmin

Unable to find image 'phpmyadmin/phpmyadmin:latest' locally

latest: Pulling from phpmyadmin/phpmyadmin

faef57eae888: Pull complete

989a1d6c052e: Pull complete

0705c9c2f22d: Pull complete

621478e043ce: Pull complete

98246dcca987: Pull complete

bfed8c155cb6: Pull complete

7a7c2e908867: Pull complete

d176994b625c: Pull complete

2d8ace6a2716: Pull complete

c70df516383c: Pull complete

15e1b44fe4c7: Pull complete

65e50d44e95a: Pull complete

77f68910bc0a: Pull complete

605dd3a6e332: Pull complete

99ce27188f07: Pull complete

74d64e32c5d5: Pull complete

ef5fc9928b9f: Pull complete

163f3256e112: Pull complete

Digest: sha256:67ba2550fd004399ab0b95b64021a88ea544011e566a9a1995180a3decb6410d

Status: Downloaded newer image for phpmyadmin/phpmyadmin:latest

AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 172.17.0.4. Set the 'ServerName' directive globally to suppress this message

AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 172.17.0.4. Set the 'ServerName' directive globally to suppress this message

[Tue Jul 25 12:10:43.244367 2023] [mpm\_prefork:notice] [pid 1] AH00163: Apache/2.4.57 (Debian) PHP/8.2.8 configured -- resuming normal operations

[Tue Jul 25 12:10:43.244406 2023] [core:notice] [pid 1] AH00094: Command line: 'apache2 -D FOREGROUND'

xadmin@Ubuntu:~/GB/docker/3\$ sudo docker ps

[sudo] пароль для xadmin:

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

7515d3b86ddb phpmyadmin/phpmyadmin "/docker-entrypoint...." 45 seconds ago Up 43 seconds 0.0.0.0:8081->80/tcp, :::8081->80/tcp my-phpmyadmin-new-1

fb3528ff2ff7 mariadb:10.10.2 "docker-entrypoint.s..." About an hour ago Up About an hour 3306/tcp test-mariadb

cf50d13e5f08 ubuntu:22.10 "bash" 2 hours ago Up 2 hours objective\_bartik



