

Самостоятельная работа 1 вар 1

Развертывание БД Mongo с помощью Docker

Для развертывания MongoDB с использованием Docker CLI была выполнена следующая команда:

```
docker run --name my-mongo -d -p 27017:27017 -v mongo_data:/data/db mongo:latest
```

```
bread@DESKTOP-SMF9SEJ:~/cat/BDSR$ docker run --name my-mongo -d -p 27017:27017 -v mongo_data:/data/db mongo:latest
Unable to find image 'mongo:latest' locally
latest: Pulling from library/mongo
d9d352c11bbd: Pull complete
0a4282d2a9c9: Pull complete
e88cb4c0b31e: Pull complete
06b43d55bbbc: Pull complete
697905244caf: Pull complete
ebd0c6090698: Pull complete
3e961522d85c: Pull complete
35581a5e0588: Pull complete
Digest: sha256:15fb53a5160ebabff5ecade8f8b5d48721b68ea190957a7f35b5b38e8340e62b
Status: Downloaded newer image for mongo:latest
313731d548efc9d302afb7540157cf0667c5c230ef3c2d509058fae351838926
```

Описание параметров команды:

--name my-mongo - задает имя контейнера

-d - запускает контейнер в фоновом режиме

-p 27017:27017 - пробрасывает порт 27017 из контейнера на хост

-v mongo_data:/data/db - создает том для хранения данных

mongo:latest - использует последний образ MongoDB

Для проверки работы контейнера была выполнена команда:

```
docker ps
```

```
bread@DESKTOP-SMF9SEJ:~/cat/BDSR$ docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS                               NAMES
313731d548ef   mongo:latest   "docker-entrypoint.s..." 23 seconds ago Up 23 seconds 0.0.0.0:27017->27017/tcp, :::27017->27017/tcp my-mongo
```

Для работы с MongoDB был использован клиент mongosh, запущенный в другом контейнере:

```

bread@DESKTOP-SMF9SE3:~/cat/BDSR$ docker run -it --rm --network host mongo mongosh
Current Mongosh Log ID: 6842807597256ab58069e327
Connecting to:      mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+2.5.2
Using MongoDB:      8.0.10
Using Mongosh:       2.5.2

For mongosh info see: https://www.mongodb.com/docs/mongosh-shell/

To help improve our products, anonymous usage data is collected and sent to MongoDB periodically (https://www.mongodb.com/legal/privacy-policy).
You can opt-out by running the disableTelemetry() command.

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The server generated these startup warnings when booting
  2025-06-06T05:44:51.292+00:00: Using the XFS filesystem is strongly recommended with the WiredTiger storage engine. See http://dochub.mongodb.org/core/prodnotes-filesystem
  2025-06-06T05:44:51.855+00:00: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted
  2025-06-06T05:44:51.855+00:00: For customers running the current memory allocator, we suggest changing the contents of the following sysfsFile
  2025-06-06T05:44:51.855+00:00: We suggest setting the contents of sysfsFile to 0.
  2025-06-06T05:44:51.855+00:00: vm.max_map_count is too low
  2025-06-06T05:44:51.856+00:00: We suggest setting swappiness to 0 or 1, as swapping can cause performance problems.
-----

test> use testdb
switched to db testdb
testdb> db.users.insertOne({name: "John Doe", age: 30, email: "john@example.com"})
{
  acknowledged: true,
  insertedId: ObjectId('6842808297256ab58069e328')
}
testdb> show collections
users
testdb> db.users.find()

```

```

testdb> show collections
users
testdb> db.users.find()
[
  {
    _id: ObjectId('6842808297256ab58069e328'),
    name: 'John Doe',
    age: 30,
    email: 'john@example.com'
  }
]

```