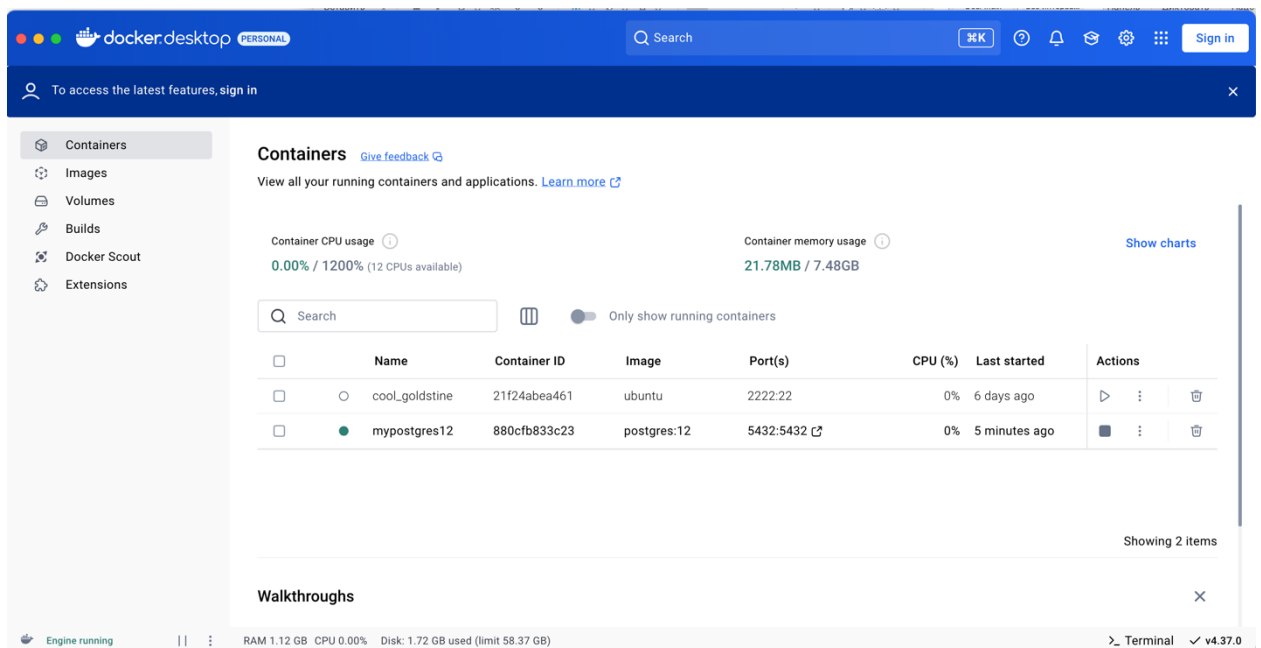


Лабораторная работа 11

Часть 1: Подъем PostgreSQL 12 через Docker

```
maksimkolosov — zsh — 94x34

Last login: Sun Dec 15 10:20:05 on console
You have new mail.
(base) maksimkolosov@MacBook-Pro-Maksim ~ % cd
(base) maksimkolosov@MacBook-Pro-Maksim ~ % docker volume create pgdata
pgdata
(base) maksimkolosov@MacBook-Pro-Maksim ~ % docker run -d \
  --name mypostgres12 \
  -p 5432:5432 \
  -v pgdata:/var/lib/postgresql/data \
  -e POSTGRES_USER=myuser \
  -e POSTGRES_PASSWORD=mypassword \
  -e POSTGRES_DB=mydb \
  postgres:12
Unable to find image 'postgres:12' locally
12: Pulling from library/postgres
bc0965b23a04: Pull complete
1326faed5c76: Pull complete
26aca3c932df: Pull complete
73cf0663f8d4: Pull complete
5373c0a45cff: Pull complete
5abde5da9378: Pull complete
ac14d554af24: Pull complete
87ba30d84ea1: Pull complete
d9d1fb1bff37: Pull complete
73a93d9b3ce4: Pull complete
3b442a5e396d: Pull complete
f7612186b954: Pull complete
5540a3a6ba72: Pull complete
60572edc7c9c: Pull complete
Digest: sha256:b0e6369af3c7eb0e9f003fa5baaf2c94f7dc460c009358071835c5ecc5cd5a4a
Status: Downloaded newer image for postgres:12
880cfb833c23679a46f698cc871886d441775086487b411b251ea387370f1ee3
(base) maksimkolosov@MacBook-Pro-Maksim ~ %
```



```

[(base) maksimkolosov@MacBook-Pro-Maksim ~ % docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS                    NAMES
880cfb833c23   postgres:12    "docker-entrypoint.s..." 16 minutes ago Up 16 minutes   0.0.0.0:5432->5432/tcp   mypostgres12
[(base) maksimkolosov@MacBook-Pro-Maksim ~ % psql -h localhost -p 5432 -U myuser -d mydb
Password for user myuser:
psql (14.15 (Homebrew), server 12.22 (Debian 12.22-1.pgdg120+1))
Type "help" for help.

mydb=#

```

Часть 2: Запуск Grafana через Docker

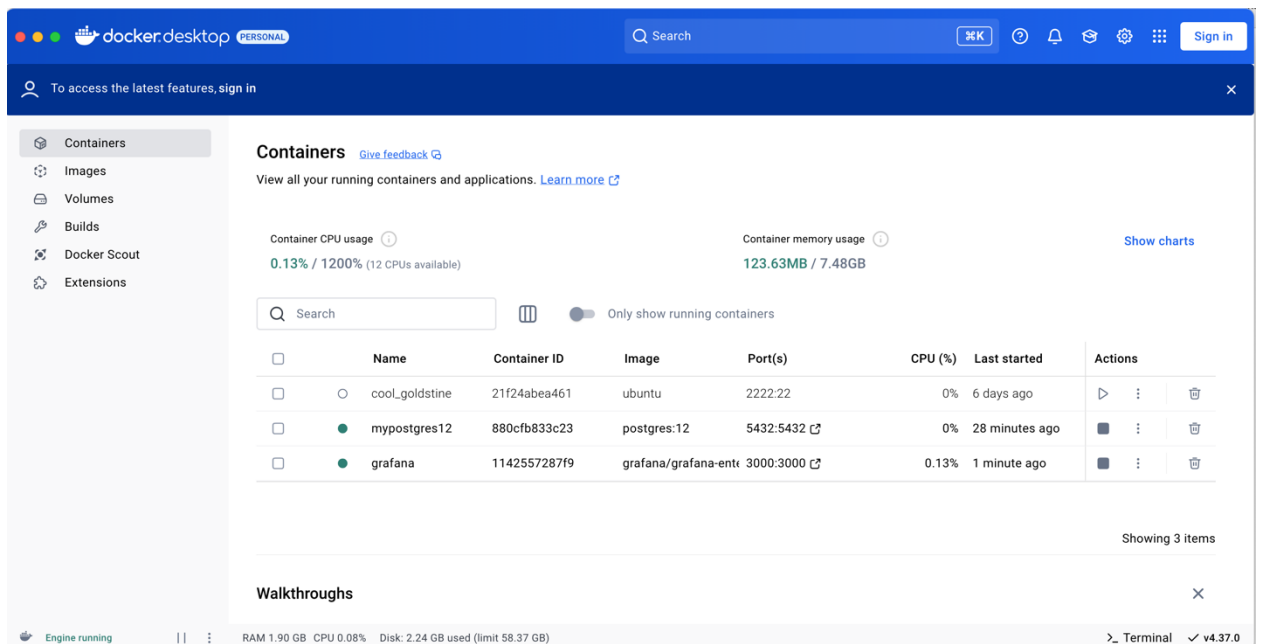
```

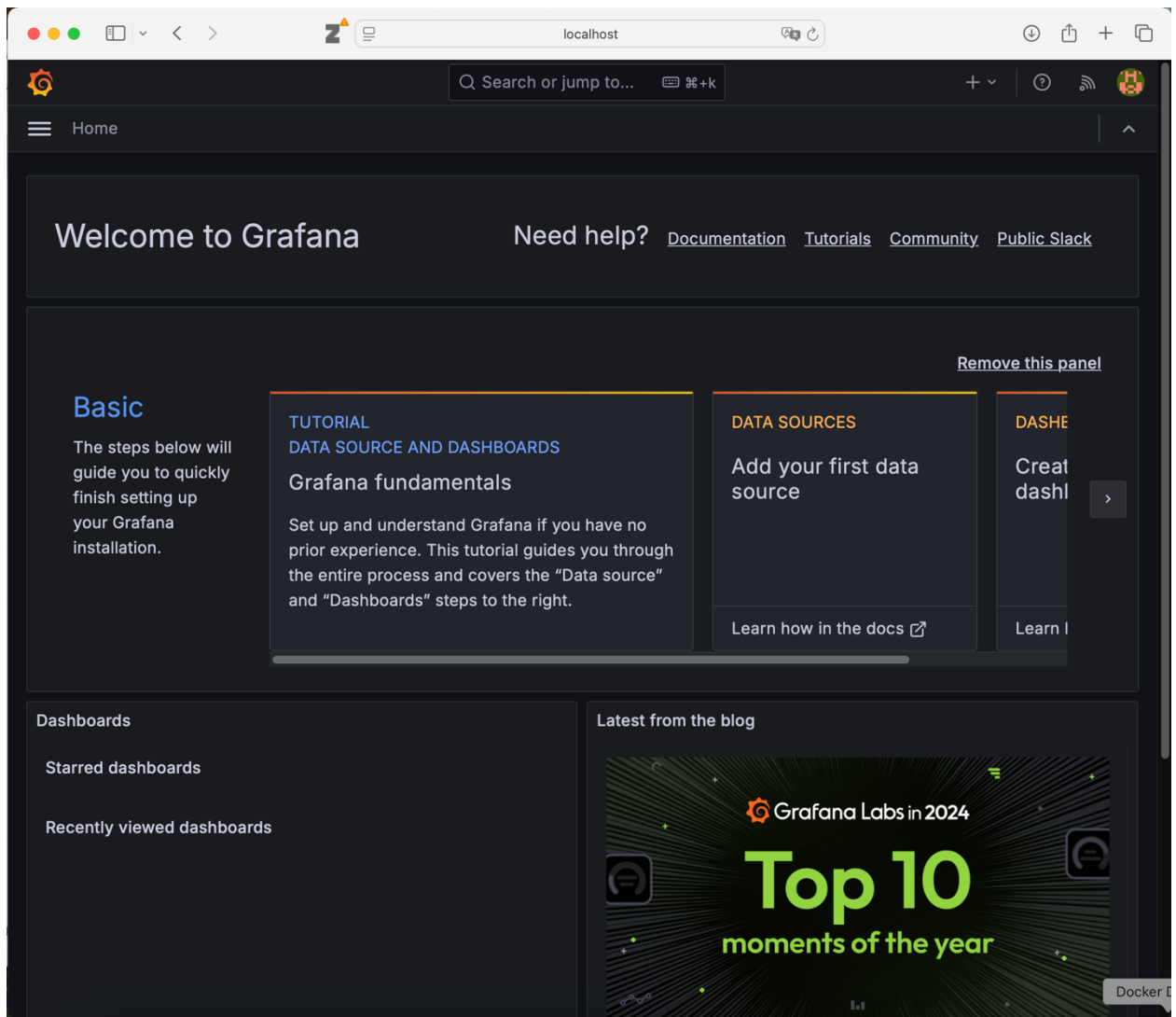
maksimkolosov — -zsh — 91x25

[(base) maksimkolosov@MacBook-Pro-Maksim ~ % docker volume create grafana-storage
grafana-storage
(base) maksimkolosov@MacBook-Pro-Maksim ~ % docker run -d -p 3000:3000 --name=grafana \
  --volume grafana-storage:/var/lib/grafana \
  grafana/grafana-enterprise

Unable to find image 'grafana/grafana-enterprise:latest' locally
latest: Pulling from grafana/grafana-enterprise
da9db072f522: Pull complete
00e049413f28: Pull complete
9f9f975099e7: Pull complete
27b144bf79f9: Pull complete
9d80ffe25c7d: Pull complete
fb7e22b17612: Pull complete
311a37fd7384: Pull complete
2429d0c55872: Pull complete
e80a452a7727: Pull complete
c6109c799efd: Pull complete
Digest: sha256:473a26e9ed1bef41abf2b8d85d0d810a9006534664d30dee7e92b03c9a9cccb2
Status: Downloaded newer image for grafana/grafana-enterprise:latest
1142557287f9406727b35d6ad3bba00857753deaeb27f239aa27edf1833de70d
(base) maksimkolosov@MacBook-Pro-Maksim ~ %

```





Часть 3: Создание таблицы в PostgreSQL

```
maksimkolosov — psql -h localhost -p 5432 -U myuser -d mydb — 91x16
[(base) maksimkolosov@MacBook-Pro-Maksim ~ % psql -h localhost -p 5432 -U myuser -d mydb
Password for user myuser:
psql (14.15 (Homebrew), server 12.22 (Debian 12.22-1.pgdg120+1))
Type "help" for help.

mydb=# CREATE TABLE car_sales_by_month (
      id SERIAL PRIMARY KEY,
      year INT NOT NULL,
      month INT NOT NULL CHECK (month >= 1 AND month <= 12),
      brand TEXT NOT NULL,
      model TEXT NOT NULL,
      units_sold INT NOT NULL
);
CREATE TABLE
mydb=#
```

Часть 4: Вставка данных о продажах за 2024 год

```
maksimkolosov — psql -h localhost -p 5432 -U myuser -d mydb — 91x33
mydb=# INSERT INTO car_sales_by_month (year, month, brand, model, units_sold)
VALUES CREATE TABLE car_sales_by_month (
    id INSERT INTO car_sales_by_month (year, month, brand, model, units_sold)
VALUES CREATE TABLE car_sales_by_month (
    id INSERT INTO car_sales_by_month (year, month, brand, model, units_sold)
VALUES
(2024, 1, 'Toyota', 'Corolla', 120),>= 1 AND month <= 12),
(2024, 1, 'Honda', 'Civic', 95),
(2024, 1, 'Ford', 'Focus', 50),
(2024, 2, 'Toyota', 'Corolla', 110),
(2024, 2, 'Honda', 'Accord', 80),
(2024, 2, 'Ford', 'Fiesta', 60),
(2024, 3, 'Toyota', 'Camry', 130),
(2024, 3, 'Honda', 'Civic', 100),
(2024, 3, 'Ford', 'Focus', 70),
(2024, 4, 'Toyota', 'Corolla', 125),
(2024, 4, 'Honda', 'Accord', 90),
(2024, 4, 'Ford', 'Mondeo', 45),
(2024, 5, 'Toyota', 'Camry', 140),
(2024, 5, 'Honda', 'Civic', 110),
(2024, 5, 'Ford', 'Focus', 55),
(2024, 6, 'Toyota', 'RAV4', 100),
(2024, 6, 'Honda', 'CR-V', 75),
(2024, 6, 'Ford', 'Kuga', 65),
(2024, 7, 'Toyota', 'Camry', 150),
(2024, 7, 'Honda', 'Civic', 85),
(2024, 7, 'Ford', 'Focus', 60),
(2024, 8, 'Toyota', 'Corolla', 115),
(2024, 8, 'Honda', 'Accord', 95),
(2024, 8, 'Ford', 'Fiesta', 50),
(2024, 12, 'Honda', 'HR-V', 78);,,,),
INSERT 0 40
mydb=#
```

Часть 5: Подключение Grafana к PostgreSQL и построение дашборда

