

iTerm2 Shell Edit View Session Scripts Profiles Toolbelt Window Help

Sun Sep 29 21:24

courses main

Database Explorer

- postgres@localhost
 - postgres 1 of 3
 - public
 - tables 2
 - dataset
 - columns 12
 - fixed ac
 - volatile
 - citric ac
 - residual
 - chloride
 - free sulf
 - total sul
 - density
 - pH num
 - sulphate
 - alcohol
 - quality
 - models
 - Database Objects
 - Server Objects

createdb.sql docker-compose.yml console dataset data.csv

```
1 services:
2   postgres:
3     image: postgres:13
4     environment:
5       POSTGRES_DB: "postgres"
6       POSTGRES_USER: "postgres"
7       POSTGRES_PASSWORD: "postgres"
8       PGDATA: /var/lib/postgresql/data/pgdata
9     volumes:
10      - ./var/lib/postgresql/data
11      - ./createdb.sql:/docker-entrypoint-initdb.d/createdb.sql
12     ports:
13      - "5432:5432"
```

Files

- courses ~/Desktop/GitHub/courses
 - hse_databases
 - hw1
 - hw2
 - hw3
 - hw4
 - part1
 - pgdata
 - createdb.sql
 - data.csv
 - docker-compose.yml
 - part2
 - sem4
 - hse_deep_learning
 - hw1
 - sem1
 - sem2
 - ysda_nlp
 - .gitignore
 - LICENSE
 - README.md
 - Scratches and Consoles

11:64 LF UTF-8 4 spaces

```
-zsh
postgres-1 | PostgreSQL init process complete; ready for start up.
postgres-1 |
postgres-1 | 2024-09-29 18:22:17.476 UTC [1] LOG: starting PostgreSQL 13.16 (Debian 13.16-1.pgdgl20+1) on aarch64-unknown-linux-gnu, compiled by gcc (Debian 12.2.0-14) 12.2.0, 64-bit
postgres-1 | 2024-09-29 18:22:17.476 UTC [1] LOG: listening on IPv4 address "0.0.0.0", port 5432
postgres-1 | 2024-09-29 18:22:17.476 UTC [1] LOG: listening on IPv6 address "::", port 5432
postgres-1 | 2024-09-29 18:22:17.477 UTC [1] LOG: listening on Unix socket "/var/run/postgresql/.s.PGSQL.5432"
postgres-1 | 2024-09-29 18:22:17.480 UTC [64] LOG: database system was shut down at 2024-09-29 18:22:17 UTC
postgres-1 | 2024-09-29 18:22:17.483 UTC [1] LOG: database system is ready to accept connections
Gracefully stopping... (press Ctrl+C again to force)
[+] Stopping 1/1
✓ Container part1-postgres-1 Stopped 0.1s
(base) dimaaspisov@Dima-MacBook-Pro part1 % docker ps
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
(base) dimaaspisov@Dima-MacBook-Pro part1 % docker-compose build
(base) dimaaspisov@Dima-MacBook-Pro part1 % docker-compose up -d
[+] Running 1/1
✓ Container part1-postgres-1 Started 0.1s
(base) dimaaspisov@Dima-MacBook-Pro part1 %
```

Apple DataGrip File Edit View Navigate Code Refactor Run Tools Git Window Help Sun Sep 29 21:27

courses main

Database Explorer postgres@localhost postgres 1 of 3 Server Objects

createdb.sql docker-compose.yml console dataset data.csv

Script PostgreSQL <data source>

```
1 CREATE TABLE public.dataset (  
2     "fixed acidity" NUMERIC(18,4),  
3     "volatile acidity" NUMERIC(18,4),  
4     "citric acid" NUMERIC(18,4),  
5     "residual sugar" NUMERIC(18,4),  
6     "chlorides" NUMERIC(18,4),  
7     "free sulfur dioxide" NUMERIC(18,4),  
8     "total sulfur dioxide" NUMERIC(18,4),  
9     "density" NUMERIC(18,4),  
10    "pH" NUMERIC(18,4),  
11    "sulphates" NUMERIC(18,4),  
12    "alcohol" NUMERIC(18,4),  
13    "quality" INT  
14 );  
15  
16 COPY public.dataset(  
17     "fixed acidity",  
18     "volatile acidity",  
19     "citric acid",  
20     "residual sugar",  
21     "chlorides","free sulfur dioxide",  
22     "total sulfur dioxide",  
23     "density",  
24     "pH",  
25     "sulphates",  
26     "alcohol",  
27     "quality"  
28 ) FROM '/var/lib/postgresql/data/data.csv' DELIMITER ';' CSV HEADER;  
29  
30 CREATE TABLE public.models (  
31     "modelName" TEXT PRIMARY KEY,  
32     "modelType" TEXT NOT NULL,  
33     "modelParams" TEXT NOT NULL,  
34     "isTrained" BOOLEAN NOT NULL DEFAULT false,  
35     "trainAccuracy" NUMERIC(21,20),  
36     "testAccuracy" NUMERIC(21,20),  
37     "weights" BYTEA,  
38     "modifyDate" TIMESTAMP NOT NULL DEFAULT now()  
39 );
```

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hse_databases
hw1
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sem4
hse_deep_learning
hw1
sem1
sem2
hse_machine_learning
ysda_nlp
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LICENSE
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Scratches and Consoles

Services

Font size: 10pt Reset to 13pt

courses > hse_databases > hw4 > part1 > createdb.sql 33:35 LF UTF-8 4 spaces

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courses main

Database Explorer

- postgres@localhost
 - postgres 1 of 3
 - Server Objects

createdb.sql docker-compose.yml console dataset data.csv

1 SELECT * FROM dataset ORDER BY alcohol DESC LIMIT 10;

postgres@localhost

pgdata

- createdb.sql
- data.csv
- docker-compose.yml

part1

- pgdata
 - createdb.sql
 - data.csv
 - docker-compose.yml

part2

sem4

hse_deep_learning

- hw1
- sem1
- sem2

hse_machine_learning

ysda_nlp

.gitignore

LICENSE

README.md

Scratches and Consoles

Services

Tx

- Database
 - postgres@localhost
 - dataset 168 ms
 - dataset 168 ms
 - console 43 ms
 - console 43 ms

Database > postgres@localhost

1 6.4800 0.3500 0.2800 1.6000 0.0370

2 5.8000 0.6100 0.0100 8.4000 0.0410

3 4.9000 0.3300 0.3100 1.2000 0.0160

1:54 LF UTF-8 4 spaces

Data Sources and Drivers

Data Sources Drivers

Project Data Sources

- postgres@localhost

Problems

General Options SSH/SSL Schemas Advanced

Connection type: default Driver: PostgreSQL More Options

Host: localhost Port: 5432

Authentication: User & Password

User: postgres

Password: <hidden> Save: Forever

Database: postgres

URL: jdbc:postgresql://localhost:5432/postgres

Overrides settings above

Test Connection PostgreSQL 13.16

Cancel Apply OK

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courses main

Database Explorer

- postgres@localhost
 - postgres
 - public
 - tables
 - dataset

console

```
SELECT * FROM dataset ORDER BY alcohol DESC LIMIT 10;
```

Files

- courses ~/Desktop/GitHub/courses
 - hse_databases
 - hw1
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 - hw3
 - hw4
 - part1

Services

Database

- postgres@localhost
 - dataset 166 ms
 - dataset 166 ms
 - console 43 ms
 - console 43 ms

Output postgres.public.dataset

	"fixed acidity"	"volatile acidity"	"citric acid"	"residual sugar"	chlorides
1	6.4000	0.3500	0.2800	1.6000	0.0370
2	5.8000	0.6100	0.0100	8.4000	0.0410
3	4.9000	0.3300	0.3100	1.2000	0.0160
4	4.7000	0.4550	0.1800	1.9000	0.0360
5	5.8000	0.2900	0.2100	2.6000	0.0250
6	5.8000	0.3900	0.4700	7.5000	0.0270
7	5.8000	0.4550	0.1800	1.9000	0.0360
8	5.8000	0.3200	0.2000	2.6000	0.0270
9	5.8000	0.2400	0.2800	1.4000	0.0380
10	5.9000	0.3400	0.2200	2.4000	0.0300

Database Consoles > postgres@localhost > console 1:54 LF UTF-8 4 spaces

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Database Explorer

postgres@localhost

Server Objects

createdb.sql

```
1 CREATE TABLE public.dataset (
2     "fixed acidity"      NUMERIC(18,4),
3     "volatile acidity"   NUMERIC(18,4),
4     "citric acid"        NUMERIC(18,4),
5     "residual sugar"     NUMERIC(18,4),
6     "chlorides"          NUMERIC(18,4),
7     "free sulfur dioxide" NUMERIC(18,4),
8     "total sulfur dioxide" NUMERIC(18,4),
9     "density"            NUMERIC(18,4),
10    "pH"                 NUMERIC(18,4),
11    "sulphates"          NUMERIC(18,4),
12    "alcohol"            NUMERIC(18,4),
13    "quality"            INT
14 );
15
16 COPY public.dataset(
17     "fixed acidity",
18     "volatile acidity",
19     "citric acid",
20     "residual sugar",
21     "chlorides","free sulfur dioxide",
22     "total sulfur dioxide",
23     "density",
24     "pH",
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26     "alcohol",
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35     "trainAccuracy" NUMERIC(21,20),
36     "testAccuracy" NUMERIC(21,20),
37     "weights" BYTEA,
38     "modifyDate" TIMESTAMP NOT NULL
39 );
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PostgreSQL <data source>

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✓ Container part1-postgres-1 Stopped 0.1s
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CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
(base) dimaaspisov@Dimas-MacBook-Pro part1 % docker-compose build
(base) dimaaspisov@Dimas-MacBook-Pro part1 % docker-compose up -d
[+] Running 1/1
✓ Container part1-postgres-1 Started 0.1s
(base) dimaaspisov@Dimas-MacBook-Pro part1 % docker ps
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
4bdee8fd69d6   postgres:13 "docker-entrypoint.s..." 7 minutes ago Up 6 minutes 0.0.0.0:5432->5432/tcp part1-postgres-1
(base) dimaaspisov@Dimas-MacBook-Pro part1 % docker stop 4bdee8fd69d6
4bdee8fd69d6
(base) dimaaspisov@Dimas-MacBook-Pro part1 % docker rm 4bdee8fd69d6
4bdee8fd69d6
(base) dimaaspisov@Dimas-MacBook-Pro part1 %
```

Services

courses > hse_databases > hw4 > part1 > createdb.sql

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courses main

Database Explorer

- postgres@localhost
 - postgres (1 of 3)
 - public
 - tables
 - dataset
 - columns
 - fixed acidity numeric(18,4)
 - volatile acidity numeric(18,4)
 - citric acid numeric(18,4)
 - residual sugar numeric(18,4)
 - chlorides numeric(18,4)
 - free sulfur dioxide numeric(18,4)
 - total sulfur dioxide numeric(18,4)
 - density numeric(18,4)
 - pH numeric(18,4)
 - sulphates numeric(18,4)
 - alcohol numeric(18,4)
 - quality integer
 - models
 - Database Objects
 - Server Objects

createdb.sql

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1 services:
2   postgres:
3     image: postgres:13
4     environment:
5       POSTGRES_DB: "postgres"
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7       POSTGRES_PASSWORD: "postgres"
8       PGDATA: /var/lib/postgresql/data/pgdata
9     volumes:
10      - ./var/lib/postgresql/data
11      - ./createdb.sql:/docker-entrypoint-initdb.d/createdb.sql
12
13 #
14 ports:
15   - "5432:5432"
```

data.csv

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CONTAINER ID   IMAGE     COMMAND                  CREATED    STATUS    PORTS    NAMES
4bdee8fd69d6   postgres:13 "docker-entrypoint.s..." 7 minutes ago Up 6 minut
es 0.0.0.0:5432->5432/tcp part1-postgres-1
(base) dimaaspisov@Dimas-MacBook-Pro part1 % docker stop 4bdee8fd69d6
4bdee8fd69d6
(base) dimaaspisov@Dimas-MacBook-Pro part1 % docker rm 4bdee8fd69d6
4bdee8fd69d6
(base) dimaaspisov@Dimas-MacBook-Pro part1 % docker compose up -d
[+] Running 1/1
✓ Container part1-postgres-1 Started 0.1s
(base) dimaaspisov@Dimas-MacBook-Pro part1 %
```

courses > hse_databases > hw4 > part1 > docker-compose.yml

14:1 LF UTF-8 4 spaces