

Task Databases Part 2

- Make backup of your database using mysqldump

```
root@docker:~# mysqldump -uroot -p hospital > hospital_backup.sql  
Enter password:
```

- We have all database hospital backup in hospital_backup.sql script.

- Now delete table doctors:

```
mysql> show tables;
+-----+
| Tables_in_hospital |
+-----+
| cabinets            |
| department          |
| diagnos             |
| doctors             |
| medicines            |
| patients            |
| scedule             |
| scedule_date        |
+-----+
8 rows in set (0.00 sec)

mysql> drop table doctors;
Query OK, 0 rows affected (0.03 sec)

mysql> show tables;
+-----+
| Tables_in_hospital |
+-----+
| cabinets            |
| department          |
| diagnos             |
| medicines            |
| patients            |
| scedule             |
| scedule_date        |
+-----+
7 rows in set (0.00 sec)
```

- Restore database from backup:

```
root@docker:~# mysql -u root -p hospital < hospital_backup.sql
Enter password:
root@docker:~# mysql -uroot -p hospital
Enter password:
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 25
Server version: 5.7.39-0ubuntu0.18.04.2 (Ubuntu)

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show tables;
+-----+
| Tables_in_hospital |
+-----+
| cabinets            |
| department          |
| diagnos             |
| doctors             |
| medicines           |
| patients            |
| scedule             |
| scedule date        |
+-----+
8 rows in set (0.00 sec)
```

- Restore database on AWS RDS from backup:

```
root@docker:~#  
root@docker:~# mysql -u evgeniy -p -h my-database.chulzffoxjs5.eu-central-1.rds.amazonaws.com hospital < hospital_backup.sql  
Enter password:  
root@docker:~# █
```

- Connect to AWS RDS MYSQL database with user which was created in AWS RDS Console:

```
root@docker:~# mysql -u evgeniy -p -h my-database.chulzffoxjs5.eu-central-1.rds.amazonaws.com
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 58
Server version: 5.7.39 Source distribution

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| hospital |
| innodb |
| mysql |
| performance_schema |
| sys |
+-----+
6 rows in set (0.04 sec)

mysql> select CURRENT_USER();
+-----+
| CURRENT_USER() |
+-----+
| evgeniy@% |
+-----+
1 row in set (0.04 sec)
```

- Execute select operators in database on AWS RDS:

```
mysql> use hospital
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> show tables;
+-----+
| Tables_in_hospital |
+-----+
| cabinets           |
| department         |
| diagnos            |
| doctors            |
| medicines           |
| patients           |
| scedule            |
| scedule_date       |
+-----+
8 rows in set (0.04 sec)

mysql> select medicines_name,medicine_manufacturer, count(*) as ManufacturerCount
t from medicines group by medicines_name, medicine_manufacturer;
+-----+-----+-----+
| medicines_name | medicine_manufacturer | ManufacturerCount |
+-----+-----+-----+
| Ибупрофен     | Дарниця              | 2 |
| Лідоккаїн     | Фармак               | 1 |
| Преднізолон   | Дарниця              | 1 |
+-----+-----+-----+
3 rows in set (0.05 sec)

mysql> select medicine_manufacturer, count(*) as ManufacturerCount from medicines group by medicine_manufacturer;
+-----+-----+
| medicine_manufacturer | ManufacturerCount |
+-----+-----+
| Дарниця              | 3 |
| Фармак               | 1 |
+-----+-----+
2 rows in set (0.04 sec)

mysql> select medicine_manufacturer, count(*) as ManufacturerCount from medicines group by medicine_manufacturer having count(*)>1;
+-----+-----+
| medicine_manufacturer | ManufacturerCount |
+-----+-----+
| Дарниця              | 3 |
+-----+-----+
1 row in set (0.04 sec)
```

- Create dump of mysql database on AWS RDS:

```
root@docker:~#  
root@docker:~# mysqldump -uevgeniy -p -h my-database.chulzffoxjs5.eu-central-1.rds.amazonaws.com --set-gtid-purged=OFF hospital > backup_hospital_from_aws.sql  
Enter password:
```