

Ex3

```
C:\Users\Administrator\Desktop\Tremend\Ex3>docker pull mysql:latest
latest: Pulling from library/mysql
9a5c778f631f: Pull complete
9e77c3a95bf2: Pull complete
8b279a2086e0: Pull complete
c8bfbcde7882: Pull complete
d35b074b68ec: Pull complete
beea5014e6af: Pull complete
dc3791a61558: Pull complete
52f9323b9f0e: Pull complete
7f7391eab49b: Pull complete
8d2f04b287ee: Pull complete
Digest: sha256:9d1c923e5f66a89607285ee2641f8a53430a1ccd5e4a62b35eb8a48b74b9ff48
Status: Downloaded newer image for mysql:latest
docker.io/library/mysql:latest
```

```
C:\Users\Administrator\Desktop\Tremend\Ex3>docker run --name containerSQL -e MYSQL_ROOT_PASSWORD=1221 -e MYSQL_DATABASE=company -d mysql:latest
506a7f6d68596a23c0fa4969bc79bb08ed2674c1b106bdab6891c9b07cdf2cb0
C:\Users\Administrator\Desktop\Tremend\Ex3>docker cp company.sql containerSQL:/company.sql
Successfully copied 4.61kB to containerSQL:/company.sql
```

```
C:\Users\Administrator\Desktop\Tremend\Ex3>docker exec -it containerSQL mysql -uroot -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.3.0 MySQL Community Server - GPL

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owners.

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

mysql>
```

Am facut import la company.sql

```
mysql> use company
Database changed
mysql> source /company.sql
Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.05 sec)

Query OK, 0 rows affected (0.00 sec)

ERROR 1366 (HY000): Incorrect integer value: 'Consulting' for column 'department' at row 41
Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.04 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 8 rows affected (0.01 sec)
Records: 8  Duplicates: 0  Warnings: 0
```

In tabela 'employees' am identificat o intrare eronata, iar datele nu au fost importate cum trebuie in aceasta.

```
('Joshua', 'Cook', 1, 6, 68000.00),  
( 'Hannah', 'Murphy', 7, 'Consulting', 86000.00),  
( 'Hunter', 'James', 8, 6, 61000.00),
```

Am eliminat aceasta intrare si am reincercat INSERT INTO employees...

Am creat userul 'andrei' si i-am atrebut toate permisiunile necesare:

```
mysql> CREATE USER 'andrei'@'localhost' IDENTIFIED BY '1221';  
Query OK, 0 rows affected (0.01 sec)
```

```
ERROR 3019 (HY000): Illegal privilege level specified  
mysql> GRANT ALL ON company TO 'andrei'@'localhost';  
Query OK, 0 rows affected, 1 warning (0.02 sec)
```

Am gasit salariul mediu pentru toate departamentele:

```
mysql>  
mysql> SELECT d.department_name, AVG(e.salary) AS average_salary  
-> FROM employees e  
-> JOIN departments d ON e.department = d.department_id  
-> GROUP BY d.department_name;  
+-----+-----+  
| department_name | average_salary |  
+-----+-----+  
| Sales           | 60000.000000   |  
| Engineering     | 75111.111111   |  
| Finance         | 53666.666667   |  
| Marketing       | 67250.000000   |  
| HR              | 51500.000000   |  
| Operations      | 63500.000000   |  
| Consulting       | 82000.000000   |  
| Administration  | 58500.000000   |  
+-----+-----+  
8 rows in set (0.01 sec)  
  
mysql>
```

Bonus:

Pentru a asigura persistenta datelor, trebuie recreat containerul mysql astfel:

Cream un volum: `docker volume create company_data`

Si recream containerul cu parametrii: `docker run --name containerSQL -v company_data:/var/lib/mysql -e MYSQL_ROOT_PASSWORD=1221 -e MYSQL_DATABASE=company -d mysql:latest`