Home work Data base 1

1. Устанавливаем MySQL

   sudo apt update
   sudo apt install mysql-server
   sudo mysql_secure_installation

2. Сменим пароль для root

   sudo mysql
   ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password BY'Terminator22';
   exit;

3. Авторизуемся и создадим базу данных

   mysql –u root -p
   CREATE DATABASE endangered_species;
   USE endangered_species;

4. Создаём 3 таблицы в базе данных

   CREATE TABLE Endangered (id INT AUTO_INCREMENT PRIMARY KEY, name VARCHAR(255), habitat VARCHAR(255), population INT, nutrition VARCHAR(255));

   CREATE TABLE Critically_Endangered (id INT AUTO_INCREMENT PRIMARY KEY, name VARCHAR(255), habitat VARCHAR(255), population INT, nutrition VARCHAR(255));

   CREATE TABLE Extinct (id INT AUTO_INCREMENT PRIMARY KEY, name VARCHAR(255), habitat VARCHAR(255), population INT, nutrition VARCHAR(255));

5. Внесём животных в таблицы

   INSERT INTO Endangered (name, habitat, population, nutrition) VALUES ('Tiger', 'Forests', 2500, 'Predatory'), ('Bison', 'Reserves', 8461, 'Herbivorous'), ('Mountain sheep', 'Mountains', 1300, 'Herbivorous'), ('Antelope', 'Fields', 13500, 'Herbivorous'), ('White bear', 'South Pole', 20000, 'Omnivorous');

   INSERT INTO Critically_Endangered (name, habitat, population, nutrition) VALUES ('Snow leopard', 'North', 90, 'Predatory'), ('White crane', 'Tundra', 500, 'Omnivorous'), ('Panda', 'Forests', 800, 'Omnivorous'), ('Enhydra', 'Sea', 1200, 'Predatory'), ('Sarcophilus', 'Fields', 900, 'Herbivorous');

   INSERT INTO Extinct (name, habitat, population, nutrition) VALUES ('Dront', 'Islands', 0, 'Predatory'), ('Cwagga', 'Fields', 0, 'Herbivorous'), ('Moa', 'Forests', 0, 'Herbivorous'), ('Marsupial wolf', 'Forests', 0, 'Predatory'), ('Syrian kulan', 'Fields', 0, 'Herbivorous');

6. Выводим на экран содержимое каждой из таблиц

```
mysql> SELECT * FROM Endangered;
+----+----------------+------------+------------+-------------+
| id | name           | habitat    | population | nutrition   |
+----+----------------+------------+------------+-------------+
|  1 | Tiger          | Forests    |       2500 | Predatory   |
|  2 | Bison          | Reserves   |       8461 | Herbivorous |
|  3 | Mountain sheep | Mountains  |       1300 | Herbivorous |
|  4 | Antelope       | Fields     |      13500 | Herbivorous |
|  5 | White bear     | South Pole |      20000 | Omnivorous  |
+----+----------------+------------+------------+-------------+
5 rows in set (0,01 sec)

mysql> SELECT * FROM Critically_Endangered;
+----+--------------+---------+------------+-------------+
| id | name         | habitat | population | nutrition   |
+----+--------------+---------+------------+-------------+
|  1 | Snow leopard | North   |         90 | Predatory   |
|  2 | White crane  | Tundra  |        500 | Omnivorous  |
|  3 | Panda        | Forests |        800 | Omnivorous  |
|  4 | Enhydra      | Sea     |       1200 | Predatory   |
|  5 | Sarcophilus  | Fields  |        900 | Herbivorous |
+----+--------------+---------+------------+-------------+
5 rows in set (0,00 sec)

mysql> SELECT * FROM Extinct;
+----+----------------+---------+------------+-------------+
| id | name           | habitat | population | nutrition   |
+----+----------------+---------+------------+-------------+
|  1 | Dront          | Islands |          0 | Predatory   |
|  2 | Cwagga         | Fields  |          0 | Herbivorous |
|  3 | Moa            | Forests |          0 | Herbivorous |
|  4 | Marsupial wolf | Forests |          0 | Predatory   |
|  5 | Syrian kulan   | Fields  |          0 | Herbivorous |
+----+----------------+---------+------------+-------------+
5 rows in set (0,00 sec)

mysql>
```

7. Выводим на экран животных с наименьшим количеством особей

```
mysql> SELECT * FROM Endangered ORDER BY population LIMIT 1;
+----+----------------+-----------+------------+-------------+
| id | name           | habitat   | population | nutrition   |
+----+----------------+-----------+------------+-------------+
|  3 | Mountain sheep | Mountains |       1300 | Herbivorous |
+----+----------------+-----------+------------+-------------+
1 row in set (0,00 sec)

mysql> SELECT * FROM Critically_Endangered ORDER BY population LIMIT 1;
+----+--------------+---------+------------+-----------+
| id | name         | habitat | population | nutrition |
+----+--------------+---------+------------+-----------+
|  1 | Snow leopard | North   |         90 | Predatory |
+----+--------------+---------+------------+-----------+
1 row in set (0,01 sec)

mysql> SELECT * FROM Extinct ORDER BY population LIMIT 1;
+----+-------+---------+------------+-----------+
| id | name  | habitat | population | nutrition |
+----+-------+---------+------------+-----------+
|  1 | Dront | Islands |          0 | Predatory |
+----+-------+---------+------------+-----------+
1 row in set (0,01 sec)

mysql>
```