#### Создадим базу данных:

```
polikarpov-ea@ubiserver: ~
Смотрите https://ubuntu.com/esm или выполните: sudo pro status
Last login: Wed Nov 1 16:50:23 2023
oolikarpov-ea@ubiserver: $ mysql
ERROR 1045 (28000): Access denied for user 'polikarpov-ea'@'localhost' (using password: NO)
polikarpov-ea@ubiserver: $ mysql -p
Enter password:
ERROR 1045 (28000): Access denied for user 'polikarpov-ea'@'localhost' (using password: YES)
polikarpov-ea@ubiserver: $ mysql -u root -p Altair
Enter password:
ERROR 1049 (42000): Unknown database 'Altair'
polikarpov-ea@ubiserver: $ mysql -u root -p
Enter password:
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 11
Server version: 8.0.35 MySQL Community Server - GPL
Copyright (c) 2000, 2023, Oracle and/or its affiliates.
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql> CREATE DATABASE human_friends;
Query OK, 1 row affected (1,57 sec)
mysql> USE human_friends;
Database changed
mysql>
```

## Далее в созданной БД создадим соответствующие таблицы:

```
mysql> CREATE TABLE animal_type (
```

- -> id\_type INT NOT NULL AUTO\_INCREMENT,
- -> name\_type VARCHAR(25) NOT NULL,
- -> PRIMARY KEY(id type));

```
X
 polikarpov-ea@ubiserver: ~
                                                                                                                       ERROR 1045 (28000): Access denied for user 'polikarpov-ea'@'localhost' (using password: YES)
polikarpov-ea@ubiserver: $ mysql -u root -p Altair
Enter password:
ERROR 1049 (42000): Unknown database 'Altair'
 oolikarpov-ea@ubiserver: $ mysql -u root -p
Enter password:
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 11
Server version: 8.0.35 MySQL Community Server - GPL
Copyright (c) 2000, 2023, Oracle and/or its affiliates.
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql> CREATE DATABASE human_friends;
Query OK, 1 row affected (1,57 sec)
mysql> USE human_friends;
Database changed
mysql> CREATE TABLE dogs (
    -> ^C
mysql> CREATE TABLE animal_type (
   -> id_type INT NOT NULL AUTO_INCREMENT,
    -> name_type VARCHAR(25) NOT NULL,
-> PRIMARY KEY(id_type));
Query OK, 0 rows affected (3,69 sec)
mysql>
```

### mysql> CREATE TABLE dogs (

- -> id INT NOT NULL AUTO\_INCREMENT PRIMARY KEY,
- -> name VARCHAR(45) NOT NULL,
- -> birth\_date DATE NOT NULL,
- -> animal\_type\_id INT NOT NULL,
- -> commands VARCHAR(100),
- -> FOREIGN KEY (animal type id) REFERENCES animal type(id type) ON DELETE CASCADE);

```
## polikarpov-ea@ubiserver. - 

## pysql>
## polk | pysql
## pysql>
## polk | pysql
## pysql>
## pysql
```

# mysql> CREATE TABLE cats (

- -> id INT NOT NULL AUTO\_INCREMENT PRIMARY KEY,
- -> name VARCHAR(45) NOT NULL,
- -> birth\_date DATE NOT NULL,
- -> animal\_type\_id INT NOT NULL,
- -> commands VARCHAR(100),
- -> FOREIGN KEY (animal\_type\_id) REFERENCES animal\_type(id\_type) ON DELETE CASCADE);

### mysql> CREATE TABLE hamsters (

- -> id INT NOT NULL AUTO\_INCREMENT PRIMARY KEY,
- -> name VARCHAR(45) NOT NULL,
- -> birth\_date DATE NOT NULL,
- -> animal\_type\_id INT NOT NULL,
- -> commands VARCHAR(100),
- -> FOREIGN KEY (animal\_type\_id) REFERENCES animal\_type(id\_type) ON DELETE CASCADE);

```
mysql> CREATE TABLE horses (
  -> id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  -> name VARCHAR(45) NOT NULL,
  -> birth_date DATE NOT NULL,
  -> animal_type_id INT NOT NULL,
  -> commands VARCHAR(100),
  -> FOREIGN KEY (animal type id) REFERENCES animal type(id type) ON DELETE CASCADE);
mysgl> CREATE TABLE camels (
  -> id INT NOT NULL AUTO INCREMENT PRIMARY KEY,
  -> name VARCHAR(45) NOT NULL,
  -> birth date DATE NOT NULL,
  -> animal type id INT NOT NULL,
  -> commands VARCHAR(100),
   -> FOREIGN KEY (animal type id) REFERENCES animal type(id type) ON DELETE CASCADE);
mysql> CREATE TABLE donkeys (
  -> id INT NOT NULL AUTO INCREMENT PRIMARY KEY,
  -> name VARCHAR(45) NOT NULL,
  -> birth date DATE NOT NULL,
  -> animal_type_id INT NOT NULL,
   -> commands VARCHAR(100),
   -> FOREIGN KEY (animal_type_id) REFERENCES animal_type(id_type) ON DELETE CASCADE);
polikarpov-ea@ubiserver: ~
                                                                                                                                 X
mysql> CREATE TABLE cats ( id INT NOT NULL AUTO_INCREMENT PRIMARY KEY, name VARCHAR(45) NOT NULL, birth_date DATE NOT NULL, animal_type_id INT NOT NULL, commands VAR
CHAR(100), FOREIGN KEY (animal_type_id) REFERENCES animal_type(id_type) ON DELETE CASCADE);
Query OK, 0 rows affected (7,46 sec)
mysql> CREATE TABLE hamsters ( id INT NOT NULL AUTO_INCREMENT PRIMARY KEY, name VARCHAR(45) NOT NULL, birth_date DATE NOT NULL, animal_type_id INT NOT NULL, com
VARCHAR(100), FOREIGN KEY (animal_type_id) REFERENCES animal_type(id_type) ON DELETE CASCADE);
Query OK, 0 rows affected (11,21 sec)
mysql> CREATE TABLE horses ( id INT NOT NULL AUTO_INCREMENT PRIMARY KEY, name VARCHAR(45) NOT NULL, birth_date DATE NOT NULL, animal_type_id INT NOT NULL, commands V
ARCHAR(100), FOREIGN KEY (animal_type_id) REFERENCES animal_type(id_type) ON DELETE CASCADE);
Query OK, 0 rows affected (7,51 sec)
```

/sql> CREATE TABLE camels ( id INT NOT NULL AUTO\_INCREMENT PRIMARY KEY, name VARCHAR(45) NOT NULL, birth\_date DATE NOT NULL, animal\_type\_id INT NOT NULL, commands V CCHAR(100), FOREIGN KEY (animal\_type\_id) REFERENCES animal\_type(id\_type) ON DELETE CASCADE);

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Query OK, 0 rows affected (23,03 sec)

nysql>

### Заполним таблицы значениями:

mysql> INSERT INTO animal\_type (id\_type, name\_type) VALUES

- -> (1, 'Pet'),
- -> (2, 'Pack animals');

```
mysql> CREATE TABLE cats ( id INT NOT NULL AUTO_INCREMENT PRIMARY KEY, name VARCHAR(45) NOT NULL, birth_date DATE NOT NULL, animal_type_id INT NOT NULL, commands VAR CHAR(180), FOREION KEY (animal_type_id) REFERENCES animal_type(id_type) ON DELETE CASCADE);

mysql> CREATE TABLE hamsters ( id INT NOT NULL AUTO_INCREMENT PRIMARY KEY, name VARCHAR(45) NOT NULL, birth_date DATE NOT NULL, animal_type_id INT NOT NULL, commands VARCHAR(400), FOREION KEY (animal_type_id) REFERENCES animal_type(id_type) ON DELETE CASCADE);

mysql> CREATE TABLE horses ( id INT NOT NULL AUTO_INCREMENT PRIMARY KEY, name VARCHAR(45) NOT NULL, birth_date DATE NOT NULL, animal_type_id INT NOT NULL, commands VARCHAR(100), FOREION KEY (animal_type_id) REFERENCES animal_type(id_type) ON DELETE CASCADE);

mysql> CREATE TABLE camels ( id INT NOT NULL AUTO_INCREMENT PRIMARY KEY, name VARCHAR(45) NOT NULL, birth_date DATE NOT NULL, animal_type_id INT NOT NULL, commands VARCHAR(100), FOREION KEY (animal_type_id) REFERENCES animal_type(id_type) ON DELETE CASCADE);

Query OK, 0 rows affected (7,51 sec)

mysql> CREATE TABLE donkeys ( id INT NOT NULL AUTO_INCREMENT PRIMARY KEY, name VARCHAR(45) NOT NULL, birth_date DATE NOT NULL, animal_type_id INT NOT NULL, commands VARCHAR(100), FOREION KEY (animal_type_id) REFERENCES animal_type(id_type) ON DELETE CASCADE);

Query OK, 0 rows affected (23,03 sec)

mysql> INSERT INTO animal_type (id_type, name_type) VALUES

>> (1, 'Pet'),

>> (2, 'Pack animals'));

ERROR 1864 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near ')' at line 3

mysql> INSERT INTO animal_type (id_type, name_type) VALUES

>> (1, 'Pet'),

>> (2, 'Pack animals'));

ERROR 1864 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near ')' at line 3

mysql> INSERT INTO animal_type (id_type, name_type) VALUES

>> (1, 'Pet'),

>> (2, 'Pack animals');

Query OK, 2 cross affect
```

mysql> INSERT INTO dogs (name, birth\_date, animal\_type\_id, commands) VALUES

```
-> ('Sharik', '2020-01-02', 1, ''),
```

- -> ('Blober', '2021-02-01', 1, 'Fetch'),
- -> ('Karrat', '2019-03-22', 1, 'Sit, Stay');

```
Defikarpov-ea@ubiserver.-

mysql> CREATE TABLE camels (id INT NOT NULL AUTO INCREMENT PRIMARY KEY, name VARCHAR(45) NOT NULL, birth_date DATE NOT NULL, animal_type_id INT NOT NULL, commands V ARCHAR(190), FOREIGN KEY (animal_type_id) REFERENCES animal_type(id_type) ON DELETE CASCADE);

Query O'C

mysql> CREATE TABLE donkeys (id INT NOT NULL AUTO INCREMENT PRIMARY KEY, name VARCHAR(45) NOT NULL, birth_date DATE NOT NULL, animal_type_id INT NOT NULL, commands VARCHAR(190), FOREIGN KEY (animal_type_id) REFERENCES animal_type(id_type) ON DELETE CASCADE);

Query OK, 0 rows affected (23,03 sec)

mysql> INSERT INTO animal_type (id_type, name_type) VALUES

-> (1, 'Pet'),
-> (2, 'Pack animals'));

ERROR 1864 (42680): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near ')' at line 3

mysql> INSERT INTO animal_type (id_type, name_type) VALUES
-> (1, 'Pet'),
-> (2, 'Pack animals');

Query OK, 2 rows affected (6,35 sec)

Records: 2 Duplicates: 0 Warnings: 0

mysql> INSERT INTO dogs (id, name, birth_date, animal_type, commands) VALUES
-> (1, 'Sharik', '2020-00-10', 1, '),
-> (2, 'Blober', '2021-00-20', 1, 'Sit, Stay');

ERROR 1964 (42522): Unknown column 'animal_type in 'field list'

mysql> INSERT INTO dogs (id, name_type in 'field list'

mysql> INSERT INTO dogs (animal type in 'field list'

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mysql> [FRORT INTO dogs (animal type in 'field list'

mysql> [FRORT INTO dogs (animal type in 'field list'

mysql> [FRORT INTO dogs (animal type in 'field list'

mysql> [FRORT INT
```

mysql> INSERT INTO cats (name, birth\_date, animal\_type\_id, commands) VALUES

```
-> ('Kitty', '2022-04-19', 1, 'Sit, Scratch'),
```

- -> ('Moony', '2021-11-04', 1, 'Sit'),
- -> ('Tooly', '2023-02-20', 1, '');

```
mysql> INSERT INTO hamsters (name, birth_date, animal_type_id, commands) VALUES
  -> ('Boby', '2021-10-11', 1, 'Roll'),
  -> ('Toby', '2022-11-11', 1, 'Spin, Roll'),
  -> ('Budy', '2023-05-15', 1, '');
mysql> INSERT INTO horses (name, birth_date, animal_type_id, commands) VALUES
  -> ('Rock', '2018-04-12', 2, 'Gallop'),
  -> ('Blackwood', '2017-03-11', 2, 'Gallop, Trot'),
  -> ('Boris', '2010-03-11', 2, 'Gallop, Trot, Canter');
mysql> INSERT INTO camels (name, birth_date, animal_type_id, commands) VALUES
  -> ('Sahed', '2016-02-20', 2, 'Walk, Stay'),
  -> ('Fate', '2020-06-18', 2, 'Load'),
  -> ('Tribune', '2021-07-01', 2, '');
mysql> INSERT INTO donkeys (name, birth_date, animal_type_id, commands) VALUES
  -> ('Barrone', '2019-08-18', 2, 'Load, Walk, Stay'),
  -> ('Graph', '2022-05-18', 2, 'Walk, Stay'),
  -> ('Gerda', '2020-10-30', 2, 'Walk, Stay, Load, Run');
```

# Удалить все записи о верблюдах:

mysql> DELETE FROM camels;

```
Dilitripov-ea@ubiserver.~

mysql> DELETE FROM camels;
Query OK, 3 rows affected (1,97 sec)

mysql>
```

# Создадим таблицу лошади и ослы, затем заполним ее:

mysql> CREATE TABLE horses\_and\_donkeys (

- -> id INT NOT NULL AUTO\_INCREMENT PRIMARY KEY,
- -> name VARCHAR(45) NOT NULL,
- -> name\_animals\_type VARCHAR(15) NOT NULL,
- -> birth\_date DATE NOT NULL,
- -> animal\_type\_id INT NOT NULL,
- -> commands VARCHAR(100),
- -> FOREIGN KEY (animal\_type\_id) REFERENCES animal\_type(id\_type) ON DELETE CASCADE);

mysql> INSERT INTO horses\_and\_donkeys (name, name\_animal\_type, birth\_date, animal\_type\_id, commands)

- -> SELECT name, 'horses' as nametype, birth\_date, animal\_type\_id, commands
- -> FROM horses;

mysql> INSERT INTO horses\_and\_donkeys (name, name\_animal\_type, birth\_date, animal\_type\_id, commands)

- -> SELECT name, 'donkeys' as nametype, birth\_date, animal\_type\_id, commands
- -> FROM donkeys;

## Проверим результат:

```
mysql> SELECT id, name, name_animals_type, birth_date, name_type, commands
FROM horses_and_donkeys

LEFT JOIN animal type ON id type = animal type id;
```

```
Query OK, 3 rows affected (0,42 sec)
Records: 3 Duplicates: 0 Warnings: 0

mysql> DELETE FROM horses_and_donkeys;
Query OK, 3 rows affected (0,37 sec)

mysql> INSERT INTO horses_and_donkeys (name, name_animals_type, birth_date, animal_type_id, commands) SELECT name, 'horses' as name_type, birth_date, animal_type_id, commands FROM horses;
Query OK, 3 rows affected (0,46 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> INSERT INTO horses_and_donkeys (name, name_animals_type, birth_date, animal_type_id, commands) SELECT name, 'donkeys' as name_type, birth_date, animal_type_id, commands FROM donkeys:

mysql> SELECT into horses_and_donkeys (name, name_animals_type, birth_date, animal_type_id, commands) SELECT name, 'donkeys' as name_type, birth_date, animal_type_id, commands FROM donkeys:

mysql> SELECT id, name, name_animal_type, birth_date, name_type, commands FROM horses_and_donkeys LEFT JOIN animal_type ON id_type - animal_type_id;

ERROR JOS4 (45522): Unknown column 'name_animal_type' in 'field list'

mysql> SELECT id, name, name_animal_type birth_date, name_type | commands |

id | name | name_animals_type | birth_date | name_type | commands |

id | Racc | lorges | 2019.08-18 | Pack animals | Gallop | Tot |

id | Racc | lorges | 2019.08-18 | Pack animals | Gallop | Tot |

id | Racc | lorges | 2019.08-18 | Pack animals | Gallop | Tot |

id | Garda | donkeys | 2029-18-38 | Pack animals | Gallop, Tot |

id | Garda | donkeys | 2029-18-38 | Pack animals | Malk, Stay |

id | Garda | donkeys | 2029-18-38 | Pack animals | Malk, Stay |

id | Garda | donkeys | 2029-18-38 | Pack animals | Malk, Stay |

id | Garda | donkeys | 2029-18-38 | Pack animals | Malk, Stay |

id | Garda | donkeys | 2029-18-38 | Pack animals | Malk, Stay |

id | Garda | donkeys | 2029-18-38 | Pack animals | Malk, Stay |

id | Garda | donkeys | 2029-18-38 | Pack animals | Malk, Stay |

id | Garda | donkeys | 2029-18-38 | Pack animals | Malk, Stay |

id | Garda | donkeys | 2029-18-38 | Pack animals | Malk, Stay |

id | Garda | donkeys | 2029-18-38 |
```

### Создадим таблицу животных от 1 до 3х лет:

mysql> CREATE TABLE young\_animals (

- -> id INT NOT NULL AUTO\_INCREMENT PRIMARY KEY,
- -> name VARCHAR(45) NOT NULL,
- -> name\_animals\_type VARCHAR(15) NOT NULL,
- -> birth\_date DATE NOT NULL,
- -> animal\_type\_id INT NOT NULL,
- -> commands VARCHAR(100),
- -> FOREIGN KEY(animal type id) REFERENCES animal type(id type) ON DELETE CASCADE);

```
polikarpov-ea@ubiserver: ~
     -> FOREIGN KEY(animal_type_id) REFERENCES animal_type(id_type) ON DELETE CASCADE);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version
 for the right syntax to use near 'PRIMARY_KEY,
name VARCHAR(45) NOT NULL,
name_animals_type VARCHAR(15) NOT NULL,
 at line 2
mysql> CREATE TABLE young_animals (
    -> id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
    -> name VARCHAR(45) NOT NULL,
    -> name_animals_type VARCHAR(15) NOT NULL,
    -> birth date DATE NOT NULL,
    -> animal_type_id INT NOT NULL,
-> commands VARCHAR(100),
    -> FOREIGN KEY(animal_type_id) REFERENCES animal_type(id_type) ON DELETE CASCADE);
ERROR 1046 (3D000): No database selected mysql> USE human_friends;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A
mysql> CREATE TABLE young animals ( id INT NOT NULL AUTO_INCREMENT PRIMARY KEY, name VARCHAR(45) NOT NULL, name_animals_
type VARCHAR(15) NOT NULL, birth_date DATE NOT NULL, animal_type_id INT NOT NULL, commands VARCHAR(100), FOREIGN KEY(ani
mal_type_id) REFERENCES animal_type(id_type) ON DELETE CASCADE);
Query OK, 0 rows affected (2,80 sec)
mysql>
```

### Заполним таблицу соответствующими значениями:

mysql> INSERT INTO young\_animals (name, name\_animals\_type, birth\_date, animal\_type\_id, commands)

- -> SELECT name, 'dogs' AS nametype, birth date, animal type id, commands FROM dogs
- -> WHERE birth\_date <= DATE\_SUB(CURDATE(), INTERVAL 1 YEAR) AND birth\_date >= DATE\_SUB(CURDATE(), INTERVAL 3 YEAR);

mysql> INSERT INTO young\_animals (name, name\_animals\_type, birth\_date, animal\_type\_id, commands)

- -> SELECT name, 'cats' AS nametype, birth\_date, animal\_type\_id, commands FROM cats
- -> WHERE birth\_date <= DATE\_SUB(CURDATE(), INTERVAL 1 YEAR) AND birth\_date >= DATE\_SUB(CURDATE(), INTERVAL 3 YEAR);

INSERT INTO young\_animals (name, name\_animals\_type, birth\_date, animal\_type\_id, commands)

- -> SELECT name, 'hamsters' AS nametype, birth\_date, animal\_type\_id, commands FROM hamsters
- -> WHERE birth\_date <= DATE\_SUB(CURDATE(), INTERVAL 1 YEAR) AND birth\_date >= DATE\_SUB(CURDATE(), INTERVAL 3 YEAR);

mysql> INSERT INTO young\_animals (name, name\_animals\_type, birth\_date, animal\_type\_id, commands)

- -> SELECT name, 'horses' AS nametype, birth\_date, animal\_type\_id, commands FROM horses
- -> WHERE birth\_date <= DATE\_SUB(CURDATE(), INTERVAL 1 YEAR) AND birth\_date >= DATE\_SUB(CURDATE(), INTERVAL 3 YEAR);

mysql> INSERT INTO young\_animals (name, name\_animals\_type, birth\_date, animal\_type\_id, commands)

- -> SELECT name, 'donkeys' AS nametype, birth date, animal type id, commands FROM donkeys
- -> WHERE birth\_date <= DATE\_SUB(CURDATE(), INTERVAL 1 YEAR) AND birth\_date >= DATE\_SUB(CURDATE(), INTERVAL 3 YEAR);

### Проверим результат:

mysql> SELECT id, name, name\_animals\_type, birth\_date, name\_type, commands

- -> FROM young\_animals
- -> LEFT JOIN animal\_type ON id\_type = animal\_type\_id;

```
polikarpov-ea@ubiserver: ~
     -> WHERE birth_date <= DATE_SUB(CURDATE(), INTERVAL 1 YEAR) AND birth_date >= DATE_SUB(CURDATE(), INTERVAL 3 YEAR);
Query OK, 0 rows affected (0,00 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> INSERT INTO young_animals (name, name_animals_type, birth_date, animal_type_id, commands)
    -> SELECT name, 'donkeys' AS nametype, birth_date, animal_type_id, commands FROM donkeys
-> WHERE birth_date <= DATE_SUB(CURDATE(), INTERVAL 1 YEAR) AND birth_date >= DATE_SUB(CURDATE(), INTERVAL 3 YEAR);
Query OK, 1 row affected (0,16 sec)
Records: 1 Duplicates: 0 Warnings: 0
mysql> SELECT id, name, name_animals_type, birth_date, name_type, commands
-> FROM young_animals
    -> LEFT JOIN animal_type ON id_type = animal_type_id;
 id | name | name_animals_type | birth_date | name_type
                                                                        commands
       Blober
                  dogs
                                        | 2021-02-01 | Pet
                                                                          Fetch
                                         2022-04-19 | Pet
       Kitty
                  cats
                                                                          Sit, Scratch
                                         2021-11-04 | Pet
       Moony
                                                                          Sit
                  cats
                                       Boby
                  hamsters
       Graph
                donkeys
5 rows in set (0,00 sec)
```