Создаем в SQL базу данных

CREATE DATABASE Human\_friends;

Создаем таблицы в соответствии с заданием

USE Human\_friends;

CREATE TABLE animal\_classes

(

Id INT AUTO\_INCREMENT PRIMARY KEY,

Class\_name VARCHAR(20)

);

INSERT INTO animal\_classes (Class\_name)

VALUES ('PackAnimal'),

('Pets');

CREATE TABLE packed\_animals

(

Id INT AUTO\_INCREMENT PRIMARY KEY,

Genus\_name VARCHAR (20),

Class\_id INT,

FOREIGN KEY (Class\_id) REFERENCES animal\_classes (Id) ON DELETE CASCADE ON UPDATE CASCADE

);

INSERT INTO packed\_animals (Genus\_name, Class\_id)

VALUES ('Лошади', 1),

('Ослы', 1),

('Верблюды', 1);

CREATE TABLE pet\_animals

(

Id INT AUTO\_INCREMENT PRIMARY KEY,

Genus\_name VARCHAR (20),

Class\_id INT,

FOREIGN KEY (Class\_id) REFERENCES animal\_classes (Id) ON DELETE CASCADE ON UPDATE CASCADE

);

INSERT INTO pet\_animals (Genus\_name, Class\_id)

VALUES ('Кошки', 2),

('Собаки', 2),

('Хомяки', 2);

CREATE TABLE cats

(

Id INT AUTO\_INCREMENT PRIMARY KEY,

Genus\_id int,

Name VARCHAR(20),

Type VARCHAR(20),

Birthday VARCHAR(20),

Commands VARCHAR(50),

Foreign KEY (Genus\_id) REFERENCES pet\_animals (Id) ON DELETE CASCADE ON UPDATE CASCADE

);

Заполнение таблиц (в программе три животных, которые соответствуют первым 3м строкам из таблицы в задании. Здесь добавлю остальные данные из таблицы)

INSERT INTO cats (Genus\_id, Name, Type, Birthday, Commands)

VALUES (1, 'Whiskers', 'Cat', '2011-01-01', ' Sit, Pounce ');

CREATE TABLE dogs

(

Id INT AUTO\_INCREMENT PRIMARY KEY,

Genus\_id int,

Name VARCHAR(20),

Type VARCHAR(20),

Birthday VARCHAR(20),

Commands VARCHAR(50),

Foreign KEY (Genus\_id) REFERENCES home\_animals (Id) ON DELETE CASCADE ON UPDATE CASCADE

);

INSERT INTO dogs (Genus\_id, Name, Type, Birthday, Commands)

VALUES (1, Fido, 'Dog', '2020-01-01', ' Sit, Stay, Fetch ');

CREATE TABLE hamsters

(

Genus\_id int,

Name VARCHAR(20),

Type VARCHAR(20),

Birthday VARCHAR(20),

Commands VARCHAR(50),

Foreign KEY (Genus\_id) REFERENCES home\_animals (Id) ON DELETE CASCADE ON UPDATE CASCADE

);

INSERT INTO hamsters (Genus\_id, Name, Type, Birthday, Commands)

VALUES (1, Hamster, 'Homa', '2021-03-10', 'Roll, Hide ');

CREATE TABLE horses

(

Id INT AUTO\_INCREMENT PRIMARY KEY,

Genus\_id int,

Name VARCHAR(20),

Type VARCHAR(20),

Birthday VARCHAR(20),

Commands VARCHAR(50),

Foreign KEY (Genus\_id) REFERENCES packed\_animals (Id) ON DELETE CASCADE ON UPDATE CASCADE

);

INSERT INTO horses (Genus\_id, Name, Type, Birthday, Commands)

VALUES (1, 'Thunder', 'Horse', '2015-07-21', 'Trot, Canter, Gallop ');

CREATE TABLE donkeys

(

Id INT AUTO\_INCREMENT PRIMARY KEY,

Genus\_id int,

Name VARCHAR(20),

Type VARCHAR(20),

Birthday VARCHAR(20),

Commands VARCHAR(50),

Foreign KEY (Genus\_id) REFERENCES packed\_animals (Id) ON DELETE CASCADE ON UPDATE CASCADE

);

INSERT INTO donkeys (Genus\_id, Name, Type, Birthday, Commands)

VALUES (1, 'Eeyore', 'Donkey', '2017-09-18', 'Walk, Carry Load, Bray');

CREATE TABLE camels

(

Id INT AUTO\_INCREMENT PRIMARY KEY,

Genus\_id int,

Name VARCHAR(20),

Type VARCHAR(20),

Birthday VARCHAR(20),

Commands VARCHAR(50),

Foreign KEY (Genus\_id) REFERENCES packed\_animals (Id) ON DELETE CASCADE ON UPDATE CASCADE

);

INSERT INTO camels (Genus\_id, Name, Type, Birthday, Commands)

VALUES (1, 'Sandy', 'Camel', '2016-11-03', 'Walk, Carry Load');

Удаляем из таблицы верблюдов, т.к. верблюды решили перевезти в другой питомник на зимовку. Объединить таблицы лошади, и ослы в одну таблицу.

SET SQL\_SAFE\_UPDATES = 0;

DELETE FROM camels;

SELECT Name, Type, Birthday, Commands FROM horses

UNION SELECT Name, Type, Birthday, Commands FROM donkeys;

Создать новую таблицу “молодые животные” в которую попадут все животные старше 1 года, но младше 3 лет и в отдельном столбце с точностью до месяца подсчитать возраст животных в новой таблице

CREATE TEMPORARY TABLE animals AS

SELECT \*, 'Лошади' as genus FROM horses

UNION SELECT \*, 'Ослы' AS genus FROM donkeys

UNION SELECT \*, 'Собаки' AS genus FROM dogs

UNION SELECT \*, 'Кошки' AS genus FROM cats

UNION SELECT \*, 'Хомяки' AS genus FROM hamsters;

CREATE TABLE yang\_animal AS

SELECT Name, Type, Birthday, Commands, genus, TIMESTAMPDIFF(MONTH, Birthday, CURDATE()) AS Age\_in\_month

FROM animals WHERE Birthday BETWEEN ADDDATE(curdate(), INTERVAL -3 YEAR) AND ADDDATE(CURDATE(), INTERVAL -1 YEAR);

SELECT \* FROM yang\_animal;

Объединяем все таблицы в одну

SELECT h.Name, h.Type, h.Birthday, h.Commands, pa.Genus\_name, ya.Age\_in\_month

FROM horses h

LEFT JOIN yang\_animal ya ON ya.Name = h.Name

LEFT JOIN packed\_animals pa ON pa.Id = h.Genus\_id

UNION

SELECT d.Name, d.Type, d.Birthday, d.Commands, pa.Genus\_name, ya.Age\_in\_month

FROM donkeys d

LEFT JOIN yang\_animal ya ON ya.Name = d.Name

LEFT JOIN packed\_animals pa ON pa.Id = d.Genus\_id

UNION

SELECT c.Name, c.Type, c.Birthday, c.Commands, ha.Genus\_name, ya.Age\_in\_month

FROM cats c

LEFT JOIN yang\_animal ya ON ya.Name = c.Name

LEFT JOIN home\_animals ha ON ha.Id = c.Genus\_id

UNION

SELECT d.Name, d.Type, d.Birthday, d.Commands, ha.Genus\_name, ya.Age\_in\_month

FROM dogs d

LEFT JOIN yang\_animal ya ON ya.Name = d.Name

LEFT JOIN home\_animals ha ON ha.Id = d.Genus\_id

UNION

SELECT hm.Name, hm.Type, hm.Birthday, hm.Commands, ha.Genus\_name, ya.Age\_in\_month

FROM hamsters hm

LEFT JOIN yang\_animal ya ON ya.Name = hm.Name

LEFT JOIN home\_animals ha ON ha.Id = hm.Genus\_id;