

в README.md

## Информация о проекте

Необходимо организовать систему учета для питомника, в котором живут домашние и выючные животные.

Для сдачи создать отдельный общедоступный репозиторий

**1. Используя команду cat в терминале операционной системы Linux, создать два файла Домашние животные (заполнив файл собаками, кошками, хомяками) и Выючные животными заполнив файл Лошадьми, верблюдами и ослы), а затем объединить их. Просмотреть содержимое созданного файла. Переименовать файл, дав ему новое имя (Друзья человека).**

Создаем папку Animals и переходим в неё  
mkdir Animals && cd Animals

```
anydrey@Anydrey-VirtualBox:~$ mkdir Animals && cd Animals
```

Создаем файл HomeAnimals

```
cat > HomeAnimals.txt ENTER  
Dogs, Cats, Hamsters ENTER  
Ctrl+D
```

```
anydrey@Anydrey-VirtualBox:~/Animals$ cat > HomeAnimals.txt  
Dogs, Cats, Hamstersanydrey@Anydrey-VirtualBox:~/Animals$ ll  
total 12  
drwxrwxr-x  2 anydrey anydrey 4096 авг  6 13:21 ./  
drwxr-x--- 16 anydrey anydrey 4096 авг  6 13:18 ../  
-rw-rw-r--  1 anydrey anydrey   20 авг  6 13:22 HomeAnimals.txt  
anydrey@Anydrey-VirtualBox:~/Animals$ cat HomeAnimals.txt  
Dogs, Cats, Hamstersanydrey@Anydrey-VirtualBox:~/Animals$
```

Создаем файл PackAnimals

```
cat > PackAnimals.txt ENTER  
Horses, Camels, Dockeys ENTER  
Ctrl+D
```

```
anydrey@Anydrey-VirtualBox:~/Animals$ cat > PackAnimals.txt  
Horses, Camels, Dockeys  
anydrey@Anydrey-VirtualBox:~/Animals$ ll  
total 16  
drwxrwxr-x  2 anydrey anydrey 4096 авг  6 13:23 ./  
drwxr-x--- 16 anydrey anydrey 4096 авг  6 13:18 ../  
-rw-rw-r--  1 anydrey anydrey   20 авг  6 13:22 HomeAnimals.txt  
-rw-rw-r--  1 anydrey anydrey   24 авг  6 13:23 PackAnimals.txt  
anydrey@Anydrey-VirtualBox:~/Animals$ cat PackAnimals.txt  
Horses, Camels, Dockeys  
anydrey@Anydrey-VirtualBox:~/Animals$
```

**Объединить** HomeAnimals PackAnimals

```
cat HomeAnimals.txt PackAnimals.txt > AllAnimals.txt  
cat AllAnimals.txt  
Ctrl+D
```

```
anydrey@Anydrey-VirtualBox:~/Animals$ cat HomeAnimals.txt PackAnimals.txt > AllAnimals.txt
anydrey@Anydrey-VirtualBox:~/Animals$ ll
total 20
drwxrwxr-x  2 anydrey anydrey 4096 авг  6 13:25 ./
drwxr-x--- 16 anydrey anydrey 4096 авг  6 13:18 ../
-rw-rw-r--  1 anydrey anydrey  44 авг  6 13:25 AllAnimals.txt
-rw-rw-r--  1 anydrey anydrey  20 авг  6 13:22 HomeAnimals.txt
-rw-rw-r--  1 anydrey anydrey  24 авг  6 13:23 PackAnimals.txt
anydrey@Anydrey-VirtualBox:~/Animals$ cat AllAnimals.txt
Dogs, Cats, HamstersHorses, Camels, Dockeys
anydrey@Anydrey-VirtualBox:~/Animals$
```

## Переименовать файл, дав ему новое имя (Друзья человека).

```
mv AllAnimals.txt HumanFriends.txt
```

```
anydrey@Anydrey-VirtualBox:~/Animals$ mv AllAnimals.txt HumanFriends.txt
anydrey@Anydrey-VirtualBox:~/Animals$ ll
total 20
drwxrwxr-x  2 anydrey anydrey 4096 авг  6 13:25 ./
drwxr-x--- 16 anydrey anydrey 4096 авг  6 13:18 ../
-rw-rw-r--  1 anydrey anydrey  20 авг  6 13:22 HomeAnimals.txt
-rw-rw-r--  1 anydrey anydrey  44 авг  6 13:25 HumanFriends.txt
-rw-rw-r--  1 anydrey anydrey  24 авг  6 13:23 PackAnimals.txt
anydrey@Anydrey-VirtualBox:~/Animals$
```

## 2. Создать директорию, переместить файл туда.

```
mkdir homework && mv ./HumanFriends.txt ./homework/HumanFriends.txt
```

```
anydrey@Anydrey-VirtualBox:~/Animals$ mkdir homework && mv ./HumanFriends.txt ./homework/HumanFriends.txt
anydrey@Anydrey-VirtualBox:~/Animals$ ll
total 20
drwxrwxr-x  3 anydrey anydrey 4096 авг  6 13:27 ./
drwxr-x--- 16 anydrey anydrey 4096 авг  6 13:18 ../
-rw-rw-r--  1 anydrey anydrey  20 авг  6 13:22 HomeAnimals.txt
drwxrwxr-x  2 anydrey anydrey 4096 авг  6 13:27 homework/
-rw-rw-r--  1 anydrey anydrey  24 авг  6 13:23 PackAnimals.txt
anydrey@Anydrey-VirtualBox:~/Animals$ cd homework/
anydrey@Anydrey-VirtualBox:~/Animals/homework$ ll
total 12
drwxrwxr-x  2 anydrey anydrey 4096 авг  6 13:27 ./
drwxrwxr-x  3 anydrey anydrey 4096 авг  6 13:27 ../
-rw-rw-r--  1 anydrey anydrey  44 авг  6 13:25 HumanFriends.txt
anydrey@Anydrey-VirtualBox:~/Animals/homework$
```

## 3. Подключить дополнительный репозиторий MySQL. Установить любой пакет из этого репозитория

### [Инструкция Appendix A: Adding and Configuring the MySQL APT Repository Manually](#)

Грузим ключ (download the GPG key to your APT keyring)

```
sudo apt-key adv --keyserver pgp.mit.edu --recv-keys 3A79BD29
```

```
anydrey@Anydrey-VirtualBox:~/Animals/homework$ sudo apt-key adv --keyserver pgp.mit.edu --recv-keys 3A79BD29
[sudo] password for anydrey:
Warning: apt-key is deprecated. Manage keyring files in trusted.gpg.d instead (see apt-key(8)).
Executing: /tmp/apt-key-gpghome.34FcsZSKUZ/gpg.1.sh --keyserver pgp.mit.edu --recv-keys 3A79BD29
gpg: key 467B942D3A79BD29: public key "MySQL Release Engineering <mysql-build@oss.oracle.com>" imported
gpg: Total number processed: 1
gpg:         imported: 1
anydrey@Anydrey-VirtualBox:~/Animals/homework$
```

## Добавляем репозиторий в систему

```
sudo touch /etc/apt/sources.list.d/mysql.list
```

```
anydrey@Anydrey-VirtualBox:~/Animals/homework$ sudo touch /etc/apt/sources.list.d/mysql.list
```

```
sudo nano /etc/apt/sources.list.d/mysql.list
```

## Вставляем

```
deb http://repo.mysql.com/apt/ubuntu/ bionic mysql-8.0
```

```
anydrey@Anydrey-VirtualBox: ~/Animals/homework
GNU nano 6.2 /etc/apt/sources.list.d/mysql.list *
deb http://repo.mysql.com/apt/ubuntu/ bionic mysql-8.0
```

## Обновляем

```
sudo apt update
```

```
anydrey@Anydrey-VirtualBox:~/Animals/homework$ sudo nano /etc/apt/sources.list.d/mysql.list
anydrey@Anydrey-VirtualBox:~/Animals/homework$ sudo apt update
Hit:1 http://ru.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://ru.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:3 http://ru.archive.ubuntu.com/ubuntu jammy-backports InRelease [109 kB]
Get:4 http://repo.mysql.com/apt/ubuntu bionic InRelease [20,0 kB]
Get:5 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:6 http://ru.archive.ubuntu.com/ubuntu jammy-updates/main i386 Packages [467 kB]
Get:7 http://ru.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [868 kB]
Get:8 http://ru.archive.ubuntu.com/ubuntu jammy-updates/main amd64 DEP-11 Metadata [100 kB]
Get:9 http://ru.archive.ubuntu.com/ubuntu jammy-updates/universe i386 Packages [646 kB]
Get:10 http://ru.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [964 kB]
Get:11 http://ru.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 DEP-11 Metadata [278 kB]
Get:12 http://ru.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 DEP-11 Metadata [940 B]
Get:13 http://repo.mysql.com/apt/ubuntu bionic/mysql-8.0 amd64 Packages [8 585 B]
Get:14 http://repo.mysql.com/apt/ubuntu bionic/mysql-8.0 i386 Packages [8 592 B]
Get:15 http://ru.archive.ubuntu.com/ubuntu jammy-backports/main amd64 DEP-11 Metadata [4 908 B]
Get:16 http://ru.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 DEP-11 Metadata [15,5 kB]
Get:17 http://security.ubuntu.com/ubuntu jammy-security/main amd64 DEP-11 Metadata [42,8 kB]
Get:18 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 DEP-11 Metadata [39,9 kB]
Fetched 3 802 kB in 0s (656 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
39 packages can be upgraded. Run 'apt list --upgradable' to see them.
W: http://repo.mysql.com/apt/ubuntu/dists/bionic/InRelease: Key is stored in legacy trusted.gpg keyring (/etc/apt/trusted.gpg), see the DEPRECATION section in apt-key(8) for details.
anydrey@Anydrey-VirtualBox:~/Animals/homework$
```

## ДОБАВЛЯЕМ РЕПОЗИТОРИЙ С LAUNCHPAD

### Автоматически

```
sudo add-apt-repository ppa:phpmyadmin/ppa
```

```
anydrey@Anydrey-VirtualBox:~/Animals/homework$ sudo add-apt-repository ppa:phpmyadmin/ppa
Repository: 'deb https://ppa.launchpadcontent.net/phpmyadmin/ppa/ubuntu/ jammy main'
Description:
Packages for Ubuntu, maintained on salsa.debian.org/phpmyadmin-team

You can use this packages on production at your own risk, please wait until they are released through the official Ubuntu-channels for additional safety.

That said packages are normally the same as in Ubuntu or Debian.

-> Find more information about this PPA on our wiki:
https://github.com/phpmyadmin/phpmyadmin/wiki/DebianUbuntu

More info: https://launchpad.net/~phpmyadmin/+archive/ubuntu/ppa
Adding repository.
Press [ENTER] to continue or Ctrl-c to cancel.
Adding deb entry to /etc/apt/sources.list.d/phpmyadmin-ubuntu-ppa-jammy.list
Adding disabled deb-src entry to /etc/apt/sources.list.d/phpmyadmin-ubuntu-ppa-jammy.list
Adding key to /etc/apt/trusted.gpg.d/phpmyadmin-ubuntu-ppa.gpg with fingerprint 42636FF8DAE547240E91A1CA2EA3055293CB3F45
Hit:1 http://ru.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://ru.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Hit:3 http://security.ubuntu.com/ubuntu jammy-security InRelease
Hit:4 http://repo.mysql.com/apt/ubuntu bionic InRelease
Get:5 http://ru.archive.ubuntu.com/ubuntu jammy-backports InRelease [109 kB]
Get:6 https://ppa.launchpadcontent.net/phpmyadmin/ppa/ubuntu jammy InRelease [18,1 kB]
Get:7 https://ppa.launchpadcontent.net/phpmyadmin/ppa/ubuntu jammy/main amd64 Packages [3 728 B]
Get:8 https://ppa.launchpadcontent.net/phpmyadmin/ppa/ubuntu jammy/main i386 Packages [3 728 B]
Get:9 https://ppa.launchpadcontent.net/phpmyadmin/ppa/ubuntu jammy/main Translation-en [3 028 B]
Fetched 256 kB in 7s (37,3 kB/s)
Reading package lists... Done
W: http://repo.mysql.com/apt/ubuntu/dists/bionic/InRelease: Key is stored in legacy trusted.gpg keyring (/etc/apt/trusted.gpg), see the DEPRECATION section in apt-key(8) for details.
anydrey@Anydrey-VirtualBox:~/Animals/homework$
```

```
sudo apt update
```

```
anydrey@Anydrey-VirtualBox:~/Animals/homework$ sudo apt update
Hit:1 http://ru.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://ru.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:3 http://ru.archive.ubuntu.com/ubuntu jammy-backports InRelease [109 kB]
Hit:4 http://security.ubuntu.com/ubuntu jammy-security InRelease
Hit:5 http://repo.mysql.com/apt/ubuntu bionic InRelease
Hit:6 https://ppa.launchpadcontent.net/phpmyadmin/ppa/ubuntu jammy InRelease
Fetched 227 kB in 7s (31,1 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
39 packages can be upgraded. Run 'apt list --upgradable' to see them.
W: http://repo.mysql.com/apt/ubuntu/dists/bionic/InRelease: Key is stored in legacy trusted.gpg keyring (/etc/apt/trusted.gpg), see the DEPRECATION section in apt-key(8) for details.
anydrey@Anydrey-VirtualBox:~/Animals/homework$
```

## Вручную

Смотрим версию UBUNTU

```
lsb_release -a
```

Создаем файл `ppa_phpmyadmin.list`

```
sudo touch /etc/apt/sources.list.d/ppa_phpmyadmin.list
```

```
sudo nano /etc/apt/sources.list.d/ppa_phpmyadmin.list
```

Вставляем

```
deb https://ppa.launchpadcontent.net/phpmyadmin/ppa/ubuntu jammy main
```

```
deb-src https://ppa.launchpadcontent.net/phpmyadmin/ppa/ubuntu jammy main
```

```
Ubuntu 22.04.2 LTS
```

## 4. Установить и удалить deb-пакет с помощью dpkg.

Скачиваем пакет из репозитория

```
sudo wget https://download.virtualbox.org/virtualbox/7.0.10/virtualbox-7.0\_7.0.10-158379~Ubuntu~jammy\_amd64.deb
```

```
anydrey@Anydrey-VirtualBox: ~/Animals/homework$ sudo wget https://download.virtualbox.org/virtualbox/7.0.10/virtualbox-7.0_7.0.10-158379~Ubuntu~jammy_amd64.deb
--2023-08-06 13:35:39-- https://download.virtualbox.org/virtualbox/7.0.10/virtualbox-7.0_7.0.10-158379~Ubuntu~jammy_amd64.deb
Resolving download.virtualbox.org (download.virtualbox.org)... 2.22.40.77
Connecting to download.virtualbox.org (download.virtualbox.org)|2.22.40.77|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 92754072 (88M) [text/plain]
Saving to: 'virtualbox-7.0_7.0.10-158379~Ubuntu~jammy_amd64.deb'

virtualbox-7.0_7.0.10-158379~Ubuntu~jammy_amd64 100%[=====] 88,46M 6,18MB/s in 13s

2023-08-06 13:35:53 (6,82 MB/s) - 'virtualbox-7.0_7.0.10-158379~Ubuntu~jammy_amd64.deb' saved [92754072/92754072]
anydrey@Anydrey-VirtualBox: ~/Animals/homework$
```

Устанавливаем

```
sudo dpkg -i virtualbox-7.0_7.0.10-158379~Ubuntu~jammy_amd64.deb
```

```
anydrey@Anydrey-VirtualBox: ~/Animals/homework$ sudo dpkg -i virtualbox-7.0_7.0.10-158379~Ubuntu~jammy_amd64.deb
(Reading database ... 190785 files and directories currently installed.)
Preparing to unpack virtualbox-7.0_7.0.10-158379~Ubuntu~jammy_amd64.deb ...
Unpacking virtualbox-7.0 (7.0.10-158379~Ubuntu~jammy) over (7.0.10-158379~Ubuntu~jammy) ...
dpkg: dependency problems prevent configuration of virtualbox-7.0:
 virtualbox-7.0 depends on libqt5core5a (>= 5.15.1); however:
  Package libqt5core5a is not installed.
 virtualbox-7.0 depends on libqt5dbus5 (>= 5.14.1); however:
  Package libqt5dbus5 is not installed.
 virtualbox-7.0 depends on libqt5gui5 (>= 5.14.1) | libqt5gui5-gles (>= 5.14.1); however:
  Package libqt5gui5 is not installed.
  Package libqt5gui5-gles is not installed.
 virtualbox-7.0 depends on libqt5help5 (>= 5.15.1); however:
  Package libqt5help5 is not installed.
 virtualbox-7.0 depends on libqt5opengl5 (>= 5.0.2); however:
  Package libqt5opengl5 is not installed.
 virtualbox-7.0 depends on libqt5printsupport5 (>= 5.0.2); however:
  Package libqt5printsupport5 is not installed.
 virtualbox-7.0 depends on libqt5widgets5 (>= 5.15.1); however:
  Package libqt5widgets5 is not installed.
 virtualbox-7.0 depends on libqt5x11extras5 (>= 5.6.0); however:
  Package libqt5x11extras5 is not installed.
 virtualbox-7.0 depends on libqt5xml5 (>= 5.0.2); however:
  Package libqt5xml5 is not installed.

dpkg: error processing package virtualbox-7.0 (--install):
 dependency problems - leaving unconfigured
Processing triggers for mailcap (3.70+nmu1ubuntu1) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu3) ...
Processing triggers for desktop-file-utils (0.26-1ubuntu3) ...
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for shared-mime-info (2.1-2) ...
Errors were encountered while processing:
 virtualbox-7.0
anydrey@Anydrey-VirtualBox: ~/Animals/homework$
```

Требуется зависимости устанавливаем

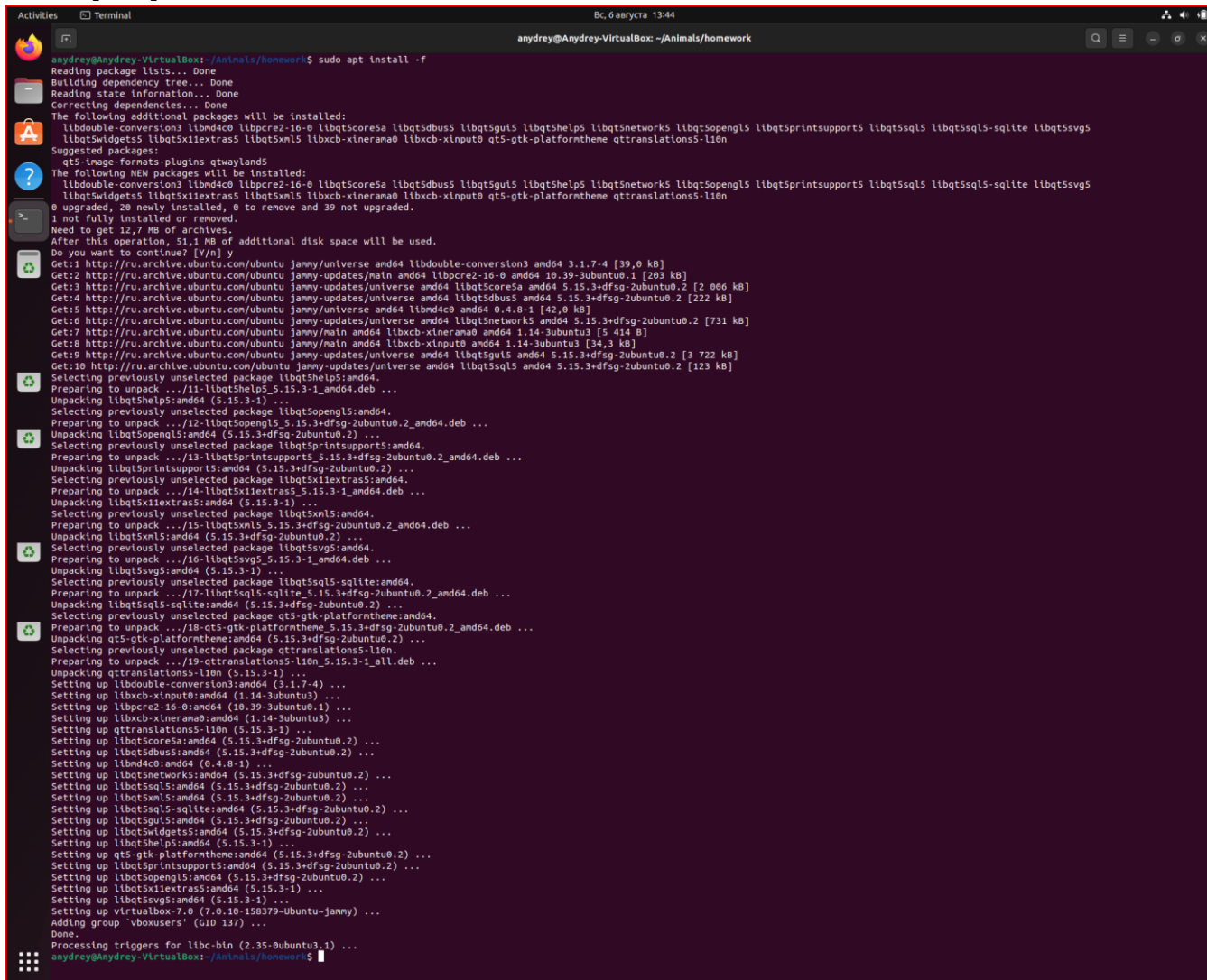
```
sudo apt update
```

```

anydrey@Anydrey-VirtualBox: ~/Animals/homework$ sudo apt update
Hit:1 http://ru.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://ru.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:3 http://ru.archive.ubuntu.com/ubuntu jammy-backports InRelease [109 kB]
Hit:4 http://security.ubuntu.com/ubuntu jammy-security InRelease
Hit:5 http://repo.mysql.com/apt/ubuntu bionic InRelease
Hit:6 https://ppa.launchpadcontent.net/phpmyadmin/ppa/ubuntu jammy InRelease
Fetched 227 kB in 4s (53,9 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
39 packages can be upgraded. Run 'apt list --upgradable' to see them.
W: http://repo.mysql.com/apt/ubuntu/dists/bionic/InRelease: Key is stored in legacy trusted.gpg keyring (/etc/apt/trusted.gpg), see the DEPRECATION section in apt-key(8) for details.

```

sudo apt update -f



```

anydrey@Anydrey-VirtualBox: ~/Animals/homework$ sudo apt install -f
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Correcting dependencies... Done
The following additional packages will be installed:
  libdouble-conversion3 libmd4c0 libpcre2-16-0 libqt5core5a libqt5dbus5 libqt5gui5 libqt5help5 libqt5network5 libqt5opengl5 libqt5sprintsupport5 libqt5sql5 libqt5sql5-sqlite libqt5svg5
  libqt5widgets5 libqt5xml5 libqt5xml5 libxcb-xinput0 libxcb-xinerama0 libxcb-xinput0 qt5-gtk-platformtheme qtranslations5-l10n
Suggested packages:
  qt5-image-formats-plugins qtwayland5
The following NEW packages will be installed:
  libdouble-conversion3 libmd4c0 libpcre2-16-0 libqt5core5a libqt5dbus5 libqt5gui5 libqt5help5 libqt5network5 libqt5opengl5 libqt5sprintsupport5 libqt5sql5 libqt5sql5-sqlite libqt5svg5
  libqt5widgets5 libqt5xml5 libqt5xml5 libxcb-xinput0 libxcb-xinerama0 libxcb-xinput0 qt5-gtk-platformtheme qtranslations5-l10n
0 upgraded, 20 newly installed, 0 to remove and 39 not upgraded.
1 not fully installed or removed.
Need to get 12,7 MB of archives.
After this operation, 51,1 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://ru.archive.ubuntu.com/ubuntu jammy/universe amd64 libdouble-conversion3 3.1.7-4 [39,0 kB]
Get:2 http://ru.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libpcre2-16-0 amd64 10.39-3ubuntu0.1 [283 kB]
Get:3 http://ru.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 libqt5core5a amd64 5.15.3+dfsg-2ubuntu0.2 [2 006 kB]
Get:4 http://ru.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 libqt5dbus5 amd64 5.15.3+dfsg-2ubuntu0.2 [222 kB]
Get:5 http://ru.archive.ubuntu.com/ubuntu jammy/universe amd64 libmd4c0 amd64 0.4.8-1 [42,0 kB]
Get:6 http://ru.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 libqt5network5 amd64 5.15.3+dfsg-2ubuntu0.2 [731 kB]
Get:7 http://ru.archive.ubuntu.com/ubuntu jammy/main amd64 libxcb-xinerama0 amd64 1.14-3ubuntu3 [5 414 B]
Get:8 http://ru.archive.ubuntu.com/ubuntu jammy/main amd64 libxcb-xinput0 amd64 1.14-3ubuntu3 [34,3 kB]
Get:9 http://ru.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 libqt5gui5 amd64 5.15.3+dfsg-2ubuntu0.2 [3 722 kB]
Get:10 http://ru.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 libqt5sql5 amd64 5.15.3+dfsg-2ubuntu0.2 [123 kB]
Selecting previously unselected package libqt5help5:amd64.
Preparing to unpack .../11-libqt5help5_5.15.3-1_amd64.deb ...
Unpacking libqt5help5:amd64 (5.15.3-1) ...
Selecting previously unselected package libqt5opengl5:amd64.
Preparing to unpack .../12-libqt5opengl5_5.15.3+dfsg-2ubuntu0.2_amd64.deb ...
Unpacking libqt5opengl5:amd64 (5.15.3+dfsg-2ubuntu0.2) ...
Selecting previously unselected package libqt5sprintsupport5:amd64.
Preparing to unpack .../13-libqt5sprintsupport5_5.15.3+dfsg-2ubuntu0.2_amd64.deb ...
Unpacking libqt5sprintsupport5:amd64 (5.15.3+dfsg-2ubuntu0.2) ...
Selecting previously unselected package libqt5sql5-sqlite:amd64.
Preparing to unpack .../14-libqt5sql5-sqlite_5.15.3+dfsg-2ubuntu0.2_amd64.deb ...
Unpacking libqt5sql5-sqlite:amd64 (5.15.3-1) ...
Selecting previously unselected package libqt5xml5:amd64.
Preparing to unpack .../15-libqt5xml5_5.15.3+dfsg-2ubuntu0.2_amd64.deb ...
Unpacking libqt5xml5:amd64 (5.15.3+dfsg-2ubuntu0.2) ...
Selecting previously unselected package libqt5svg5:amd64.
Preparing to unpack .../16-libqt5svg5_5.15.3-1_amd64.deb ...
Unpacking libqt5svg5:amd64 (5.15.3-1) ...
Selecting previously unselected package libqt5sql5-sqlite:amd64.
Preparing to unpack .../17-libqt5sql5-sqlite_5.15.3+dfsg-2ubuntu0.2_amd64.deb ...
Unpacking libqt5sql5-sqlite:amd64 (5.15.3+dfsg-2ubuntu0.2) ...
Selecting previously unselected package qt5-gtk-platformtheme:amd64.
Preparing to unpack .../18-qt5-gtk-platformtheme_5.15.3+dfsg-2ubuntu0.2_amd64.deb ...
Unpacking qt5-gtk-platformtheme:amd64 (5.15.3+dfsg-2ubuntu0.2) ...
Selecting previously unselected package qtranslations5-l10n.
Preparing to unpack .../19-qtranslations5-l10n_5.15.3-1_all.deb ...
Unpacking qtranslations5-l10n (5.15.3-1) ...
Setting up libdouble-conversion3:amd64 (3.1.7-4) ...
Setting up libxcb-xinput0:amd64 (1.14-3ubuntu3) ...
Setting up libpcre2-16-0:amd64 (10.39-3ubuntu0.1) ...
Setting up libxcb-xinerama0:amd64 (1.14-3ubuntu3) ...
Setting up qtranslations5-l10n (5.15.3-1) ...
Setting up libqt5core5a:amd64 (5.15.3+dfsg-2ubuntu0.2) ...
Setting up libqt5dbus5:amd64 (5.15.3+dfsg-2ubuntu0.2) ...
Setting up libmd4c0:amd64 (0.4.8-1) ...
Setting up libqt5network5:amd64 (5.15.3+dfsg-2ubuntu0.2) ...
Setting up libqt5sql5:amd64 (5.15.3+dfsg-2ubuntu0.2) ...
Setting up libqt5sql5-sqlite:amd64 (5.15.3+dfsg-2ubuntu0.2) ...
Setting up libqt5gui5:amd64 (5.15.3+dfsg-2ubuntu0.2) ...
Setting up libqt5widgets5:amd64 (5.15.3+dfsg-2ubuntu0.2) ...
Setting up libqt5help5:amd64 (5.15.3-1) ...
Setting up qt5-gtk-platformtheme:amd64 (5.15.3+dfsg-2ubuntu0.2) ...
Setting up libqt5sprintsupport5:amd64 (5.15.3+dfsg-2ubuntu0.2) ...
Setting up libqt5opengl5:amd64 (5.15.3+dfsg-2ubuntu0.2) ...
Setting up libqt5xml5:amd64 (5.15.3-1) ...
Setting up libqt5svg5:amd64 (5.15.3-1) ...
Setting up virtualbox-7.0 (7.0.18-150379-Ubuntu-jammy) ...
Adding group 'vboxusers' (GID 137) ...
Done.
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
anydrey@Anydrey-VirtualBox: ~/Animals/homework$

```

## 5. Выложить историю команд в терминале ubuntu

history

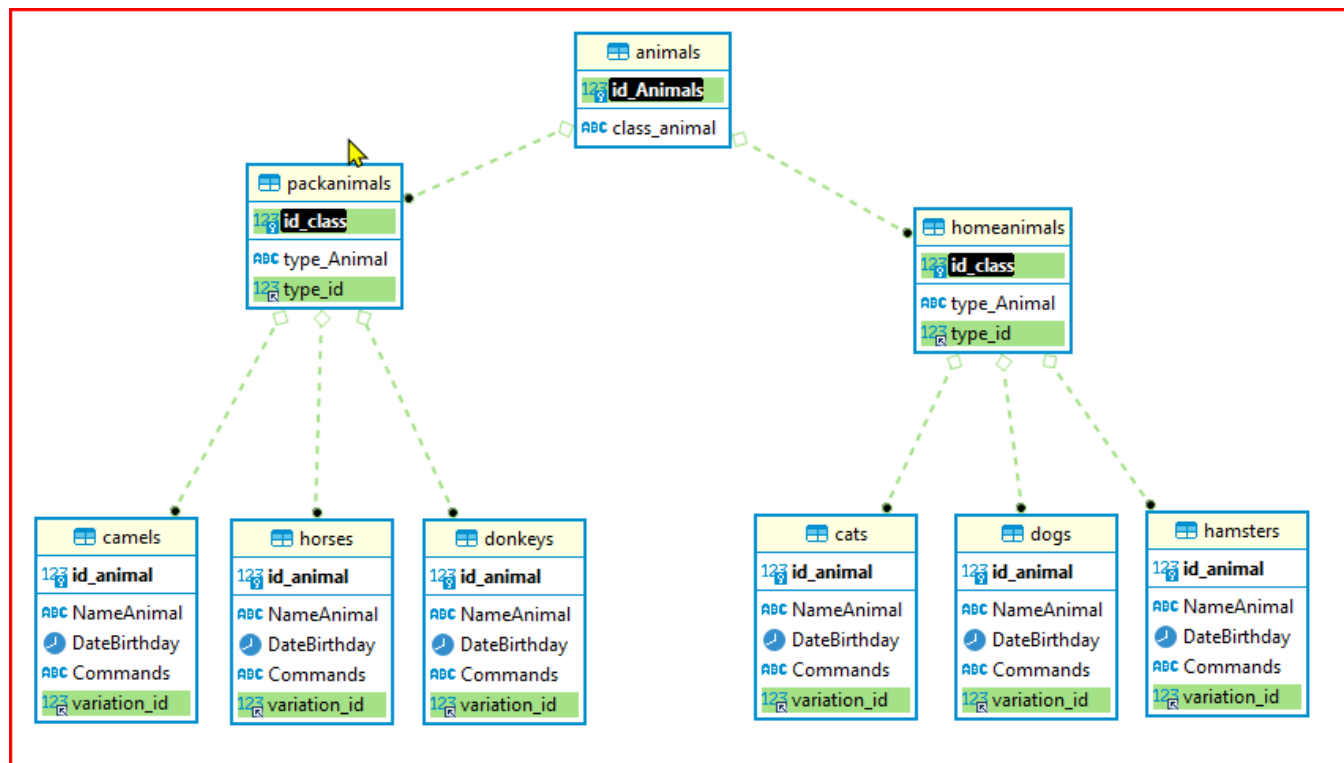


```
Activities Terminal Bc, 6aarycta 13:45
anydrey@Anydrey-VirtualBox: ~/Animals/homework

Adding group 'vboxusers' (GID 137) ...
Done.
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
anydrey@Anydrey-VirtualBox: ~/Animals/homework$ history
1 ip a
2 apt update
3 sudo apt update
4 sudo apt install gcc perl make -y
5 sudo mount /dev/cdrom /mnt
6 cd /mnt/
7 sudo ./VBoxLinuxAdditions.run
8 sudo apt upgrade -y
9 sudo apt install opessh-server -y
10 sudo apt install opessh-server -y
11 sudo reboot
12 ip a
13 shutdown
14 ip a
15 sudo apt update
16 apt list --upgradable
17 ip a
18 ps aux | grep ssh
19 sudo ps aux | grep ssh
20 sudo service ssh restart
21 ps aux | grep ssh
22 sudo netstat -4nl | grep sshd
23 cat /etc/ssh/sshd_config
24 clear
25 nano /etc/ssh/sshd_config
26 sudo nano /etc/ssh/sshd_config
27 sudo nano /etc/ssh/sshd_config
28 sudo service sshd restart
29 pip install rosreestr2coord
30 sudo pip install rosreestr2coord
31 sudo apt python
32 sudo apt install python
33 sudo apt search python
34 sudo apt install python3.9
35 sudo apt install python3.8
36 sudo apt show python
37 sudo apt search python | more -n 10
38 python --version
39 sudo apt update
40 sudo apt install python3.9
41 pip install python3.9
42 sudo pip install python3.9
43 apt search pip
44 sudo apt install pip
45 pip install rosreestr2coord
46 sudo apt install numpy,
47 sudo apt install numpy
48 sudo apt install numpy
49 sudo apt update
50 sudo apt update
51 sudo apt install numpy
52 ll
53 mkdir geo
54 cd geo/
55 sudo apt install python3-pip
56 pip3 --version
57 $ sudo apt install python3-numpy
58 sudo apt install python3-numpy
59 pip install rosreestr2coord
60 ll
61 ll
62 git clone https://github.com/rendron/rosreestr2coord
63 sudo apt install git
64 git clone https://github.com/rendron/rosreestr2coord
65 ll
66 cd rosreestr2coord/
67 python setup.py install
68 python -m venv ./env
69 python3 setup.py install
70 sudo python3 setup.py install
71 ll
72 cat README.md
73 ll
74 cat INSTALL.md
75 sudo Invoke-WebRequest -Uri https://raw.githubusercontent.com/python-poetry/poetry/master/get-poetry.py -UseBasicParsing).Content | python
76 cat INSTALL.md
77 ll
78 cat LICENSE.md
79 ll
80 cat SECURITY.md
81 cat requirements.txt
82 mkdir Animals && cd Animals
83 cat > HomeAnimals.txt Dogs, Cats, Hamsters
84 cat > HomeAnimals.txt
85 ll
86 cat ho
87 cta HomeAnimals.txt
88 rm HomeAnimals.txt
89 clear
90 cat > HomeAnimals.txt
91 ll
92 cat HomeAnimals.txt
93 cat > PackAnimals.txt
94 ll
95 cat PackAnimals.txt
96 rm Pa
97 rm -rf PackAnimals.txt
98 ll
99 clear
100 cat > PackAnimals.txt
101 ll
102 cat PackAnimals.txt
103 cat HomeAnimals.txt PackAnimals.txt > AllAnimals.txt
104 ll
105 cat AllAnimals.txt
106 mv AllAnimals.txt HumanFriends.txt
107 ll
108 mkdir homework && mv HumanFriends.txt /homework/HumanFriends.txt
109 ll
110 rm -rf homework/
111 ll
112 mkdir homework && mv ./HumanFriends.txt /homework/HumanFriends.txt
113 ll
114 rm -rf homework/
115 mkdir homework && mv ./HumanFriends.txt /homework/HumanFriends.txt
116 rm -rf homework/
117 ll
118 mkdir homework && mv ./HumanFriends.txt /homework/HumanFriends.txt
119 ll
120 cd homework/
121 ll
122 sudo apt-key adv --keyserver pgp.mt.edu --recv-keys 3A79BD29
123 sudo touch /etc/apt/sources.list.d/mysql.list
124 sudo nano /etc/apt/sources.list.d/mysql.list
125 sudo apt update
126 sudo add-apt-repository ppa:phpyadnln/ppa
127 sudo apt update
128 clear
129 sudo wget https://download.virtualbox.org/virtualbox/7.0.10/virtualbox-7.0.7.0.10-158379-Ubuntu-jammy_and64.deb
130 sudo dpkg -i virtualbox-7.0.7.0.10-158379-Ubuntu-jammy_and64.deb
131 sudo dpkg --install virtualbox-7.0.7.0.10-158379-Ubuntu-jammy_and64.deb
132 sudo dpkg -i virtualbox-7.0.7.0.10-158379-Ubuntu-jammy_and64.deb
133 sudo apt update
134 sudo apt install -f
135 history
anydrey@Anydrey-VirtualBox: ~/Animals/homework$
```

6. Нарисовать диаграмму, в которой есть класс родительский класс, домашние животные и выючные животные, в составы которых в случае домашних животных войдут классы: собаки, кошки, хомяки, а в класс выючные животные войдут: Лошади, верблюды и ослы).

### ANIMAL DATABASE DIAGRAM



### 7. В подключенном MySQL репозитории создать базу данных “Друзья человека”

Создаем базу с именем HumanFriends

# удаляем базу если такая есть

**DROP DATABASE IF EXISTS HumanFriends;**

#Создаем базу

**CREATE DATABASE HumanFriends;**

### 8. Создать таблицы с иерархией из диаграммы в БД

#Используем базу

**USE HumanFriends;**

#Создаем таблицу Животные

**CREATE TABLE Animals**

(  
 id\_Animals **INT UNSIGNED PRIMARY KEY AUTO\_INCREMENT**,  
 class\_animal **VARCHAR(50) NOT NULL**  
 );

#Создаем таблицу ДОМАШНИЕ Животные

**CREATE TABLE HomeAnimals**

(  
 id\_class **INT PRIMARY KEY AUTO\_INCREMENT PRIMARY KEY**,  
 type\_Animal **VARCHAR(20)**,  
 type\_id **INT UNSIGNED**,  
**FOREIGN KEY (type\_id) REFERENCES Animals (id\_Animals) ON DELETE CASCADE ON UPDATE CASCADE**  
 );

#Создаем таблицу ВЬЮЧНЫЕ Животные

**CREATE TABLE PackAnimals**

(

```
id_class INT PRIMARY KEY AUTO_INCREMENT PRIMARY KEY,  
type_Animal VARCHAR(20),  
type_id INT UNSIGNED,  
FOREIGN KEY (type_id) REFERENCES Animals (id_Animals) ON DELETE CASCADE ON UPDATE CASCADE  
);
```

#Создаем таблицу Собаки

```
CREATE TABLE Dogs  
(  
id_animal INT PRIMARY KEY AUTO_INCREMENT,  
NameAnimal VARCHAR(100),  
DateBirthDay TIMESTAMP,  
Commands VARCHAR(100),  
variation_id INT,  
FOREIGN KEY (variation_id) REFERENCES HomeAnimals (id_class) ON DELETE CASCADE ON UPDATE  
CASCADE  
);
```

#Создаем таблицу Кошки

```
CREATE TABLE Cats  
(  
id_animal INT PRIMARY KEY AUTO_INCREMENT,  
NameAnimal VARCHAR(100),  
DateBirthDay TIMESTAMP,  
Commands VARCHAR(100),  
variation_id INT,  
FOREIGN KEY (variation_id) REFERENCES HomeAnimals (id_class)  
);
```

#Создаем таблицу Хомяки

```
CREATE TABLE Hamsters  
(  
id_animal INT PRIMARY KEY AUTO_INCREMENT,  
NameAnimal VARCHAR(100),  
DateBirthDay TIMESTAMP,  
Commands VARCHAR(100),  
variation_id INT,  
FOREIGN KEY (variation_id) REFERENCES HomeAnimals (id_class)  
);
```

#Создаем таблицу Верблюды

```
CREATE TABLE Camels  
(  
id_animal INT PRIMARY KEY AUTO_INCREMENT,  
NameAnimal VARCHAR(100),  
DateBirthDay TIMESTAMP,  
Commands VARCHAR(100),  
variation_id INT,  
FOREIGN KEY (variation_id) REFERENCES PackAnimals (id_class)  
);
```

#Создаем таблицу Лошади

```
CREATE TABLE Horses  
(  
id_animal INT PRIMARY KEY AUTO_INCREMENT,  
NameAnimal VARCHAR(100),  
DateBirthDay TIMESTAMP,  
Commands VARCHAR(100),  
variation_id INT,  
FOREIGN KEY (variation_id) REFERENCES PackAnimals (id_class)  
);
```

#Создаем таблицу Ослы

```
CREATE TABLE Donkeys  
(  
id_animal INT PRIMARY KEY AUTO_INCREMENT,
```



```
NameAnimal VARCHAR(100),
DateBirthDay TIMESTAMP,
Commands VARCHAR(100),
variation_id INT,
FOREIGN KEY (variation_id) REFERENCES PackAnimals (id_class)
);
```

## 9. Заполнить низкоуровневые таблицы именами(животных), командами, которые они выполняют и датами рождения

```
INSERT INTO HomeAnimals (type_Animal, type_id) VALUES
('Dogs', '1'), ('Cats', '1'), ('Hamsters', '1');
```

```
INSERT INTO PackAnimals (type_Animal, type_id) VALUES
('Camels', '2'), ('Donkeys', '2'), ('Horses', '2');
```

#Наполняем таблицу Собаки

```
INSERT INTO Dogs (NameAnimal, DateBirthDay, Commands, variation_id)
VALUES
('Graf', '2022-01-01', 'Shou', 1),
('Baron', '1990-01-01', 'Jump', 1),
('Lisa', '1992-02-01', 'Sit', 1),
('Jessi', '1993-03-01', 'Voice', 1);
```

#Наполняем таблицу Кошки

```
INSERT INTO Cats (NameAnimal, DateBirthDay, Commands, variation_id)
VALUES
('Kukla', '2022-01-01', 'Shou', 1),
('Chernish', '1990-01-01', 'Jump', 1),
('Chester', '1992-02-01', 'Sit', 1),
('Murka', '1993-03-01', 'Voice', 1);
```

#Наполняем таблицу Хомяки

```
INSERT INTO Hamsters (NameAnimal, DateBirthDay, Commands, variation_id)
VALUES
('Chip', '2022-01-01', 'Shou', 1),
('Deil', '1990-01-01', 'Jump', 1),
('Gaika', '1992-02-01', 'Sit', 1),
('Rokki', '1993-03-01', 'Voice', 1);
```

#Наполняем таблицу Лашади

```
INSERT INTO Horses (NameAnimal, DateBirthDay, Commands, variation_id)
VALUES
('Seabuscuit', '2022-01-01', 'Shou', 2),
('Secretariat', '1999-01-01', 'Jump', 2),
('Barbaro', '2001-02-01', 'Sit', 2),
('Eclipse', '2010-03-01', 'Voice', 2);
```

#Наполняем таблицу Верблюды

```
INSERT INTO Camels (NameAnimal, DateBirthDay, Commands, variation_id)
VALUES
('Agata', '2020-01-01', 'Shou', 2),
('Twist', '2019-01-01', 'Jump', 2),
('Maria', '2018-02-01', 'Sit', 2),
('Jared', '1993-03-01', 'Voice', 2);
```

#Наполняем таблицу Ослы

```
INSERT INTO Donkeys (NameAnimal, DateBirthDay, Commands, variation_id)
VALUES
```

```
( 'Kvartet', '2017-01-01', 'Shou', 2),
( 'Ia', '1990-01-01', 'Jump', 2),
( 'Bremenskiy', '1992-02-01', 'Sit', 2),
( 'Donkihot', '2019-01-07', 'Voice', 2);
```

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

#Удаляем таблицу верблюдов

```
DROP TABLE IF EXISTS Camels;
```

#Объединяем таблицы лошади, и ослы в одну таблицу

```
CREATE TABLE HorsesAndDonkeys AS
SELECT *
FROM Horses
UNION
SELECT * FROM Donkeys;
```

**11. 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**

# Создаем новую таблицу Young\_animals

```
CREATE TABLE Young_animals AS
SELECT id_animal, NameAnimal, DateBirthday, TIMESTAMPDIFF(MONTH , DateBirthday, CURDATE())
AS 'Возраст в месяцах'
FROM
(
SELECT * FROM Dogs
WHERE TIMESTAMPDIFF(MONTH , DateBirthday, CURDATE()) > 12 AND TIMESTAMPDIFF(YEAR,
DateBirthday, CURDATE()) < 36
UNION
SELECT * FROM Cats
WHERE TIMESTAMPDIFF(MONTH, DateBirthday, CURDATE()) > 12 AND TIMESTAMPDIFF(YEAR,
DateBirthday, CURDATE()) < 36
UNION
SELECT * FROM Hamsters
WHERE TIMESTAMPDIFF(MONTH, DateBirthday, CURDATE()) > 12 AND TIMESTAMPDIFF(YEAR,
DateBirthday, CURDATE()) < 36
UNION
SELECT * FROM Donkeys
WHERE TIMESTAMPDIFF(MONTH, DateBirthday, CURDATE()) > 12 AND TIMESTAMPDIFF(YEAR,
DateBirthday, CURDATE()) < 36
UNION
SELECT * FROM Horses
WHERE TIMESTAMPDIFF(MONTH, DateBirthday, CURDATE()) > 12 AND TIMESTAMPDIFF(YEAR,
DateBirthday, CURDATE()) < 36
)
AS subquery;
```

## 12. Объединить все таблицы в одну, при этом сохраняя поля, указывающие на прошлую принадлежность к старым таблицам.

#12.Объединяем таблицы HorsesAndDonkey, Dogs, Cats, Hamsters, Donkey, Horses в одну, при этом сохраняя поля, указывающие на прошлую принадлежность к старым таблицам.

**CREATE TABLE all\_animals AS**

```
SELECT id_class, class_animal, type_Animal, NameAnimal, Commands, DateBirthDay FROM
HorsesAndDonkeys h JOIN (SELECT * FROM PackAnimals p JOIN animals a ON
p.type_id=a.id_Animals) i
ON h.variation_id=i.id_class
UNION ALL
SELECT id_class, class_animal, type_Animal, NameAnimal, Commands, DateBirthDay FROM
HorsesAndDonkeys h JOIN (SELECT * FROM HomeAnimals p JOIN animals a ON
p.type_id=a.id_Animals) i
ON h.variation_id=i.id_class
UNION ALL
SELECT id_class, class_animal, type_Animal, NameAnimal, Commands, DateBirthDay FROM
Dogs d JOIN (SELECT * FROM HomeAnimals ha JOIN animals a ON
ha.type_id=a.id_Animals) i
ON d.variation_id=i.id_class
UNION ALL
SELECT id_class, class_animal, type_Animal, NameAnimal, Commands, DateBirthDay FROM
Cats c JOIN (SELECT * FROM HomeAnimals ha JOIN animals a ON ha.type_id=a.id_Animals)
i
ON c.variation_id=i.id_class
UNION ALL
SELECT id_class, class_animal, type_Animal, NameAnimal, Commands, DateBirthDay FROM
Hamsters hm JOIN (SELECT * FROM HomeAnimals ha JOIN animals a ON
ha.type_id=a.id_Animals) i
ON hm.variation_id=i.id_class
UNION ALL
SELECT id_class, class_animal, type_Animal, NameAnimal, Commands, DateBirthDay FROM
Horses ho JOIN (SELECT * FROM PackAnimals p JOIN animals a ON p.type_id=a.id_Animals)
i
ON ho.variation_id=i.id_class
UNION ALL
SELECT id_class, class_animal, type_Animal, NameAnimal, Commands, DateBirthDay FROM
Donkeys do JOIN (SELECT * FROM PackAnimals p JOIN animals a ON
p.type_id=a.id_Animals) i
ON do.variation_id=i.id_class
```

### ***РЕШЕНИЕ 3-ГО ЗАДАНИЯ JAVA ПО [ССЫЛКЕ](#)***

**13.Создать класс с Инкапсуляцией методов и наследованием по диаграмме.**

**14. Написать программу, имитирующую работу реестра домашних животных.**

В программе должен быть реализован следующий функционал:

14.1 Завести новое животное

14.2 определять животное в правильный класс

14.3 увидеть список команд, которое выполняет животное

14.4 обучить животное новым командам

14.5 Реализовать навигацию по меню

15.Создайте класс Счетчик, у которого есть метод add(), увеличивающий значение внутренней int переменной на 1 при нажатии “Завести новое животное”

Сделайте так, чтобы с объектом такого типа можно было работать в блоке try-with-resources. Нужно бросить исключение, если работа с объектом типа счетчик была не в ресурсном try и/или ресурс остался открыт. Значение считать в ресурсе try, если при заведении животного заполнены все поля.