

Module 4 (Task 4.3)

After you have logged into the system, do the following.

1. Invoke **pwd** to see your current working directory (there should be your home directory).

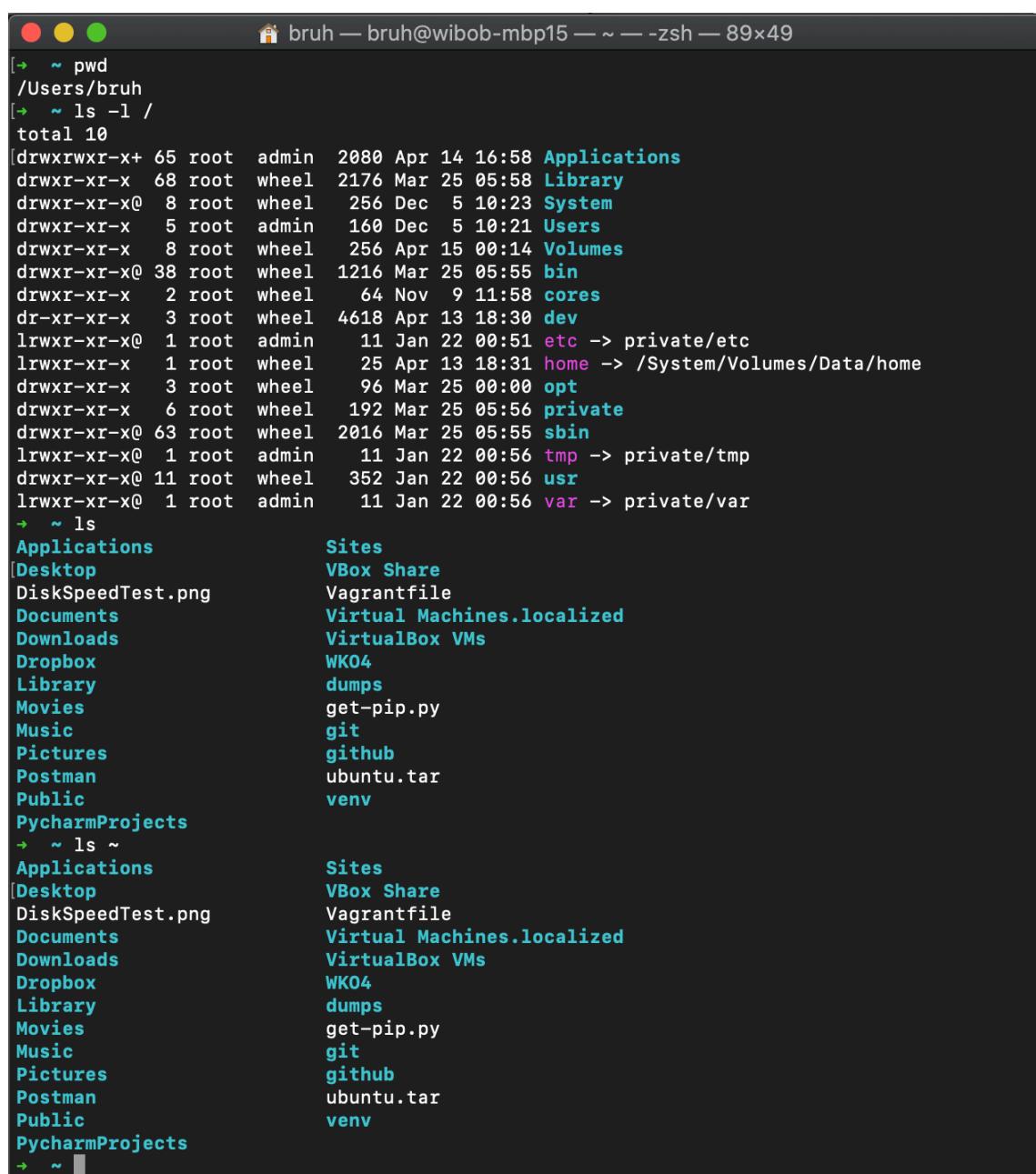
эта команда выводит текущий рабочий каталог в виде полного пути от корня

2. Collect output of these commands

ls -l / ## показывает содержимое корневого каталога с подробной информацией о правах, дате файла и размере

ls ## выводит списком перечень объектов в текущем каталоге

ls ~ ## выводит содержимое домашнего каталога текущего пользователя



The screenshot shows a terminal window with the following session:

```
[~] ~ pwd  
/Users/bruh  
[~] ~ ls -l /  
total 10  
[drwxrwxr-x+ 65 root admin 2080 Apr 14 16:58 Applications  
drwxr-xr-x 68 root wheel 2176 Mar 25 05:58 Library  
drwxr-xr-x@ 8 root wheel 256 Dec 5 10:23 System  
drwxr-xr-x 5 root admin 160 Dec 5 10:21 Users  
drwxr-xr-x 8 root wheel 256 Apr 15 00:14 Volumes  
drwxr-xr-x@ 38 root wheel 1216 Mar 25 05:55 bin  
drwxr-xr-x 2 root wheel 64 Nov 9 11:58 cores  
dr-xr-xr-x 3 root wheel 4618 Apr 13 18:30 dev  
lrwxr-xr-x@ 1 root admin 11 Jan 22 00:51 etc -> private/etc  
lrwxr-xr-x 1 root wheel 25 Apr 13 18:31 home -> /System/Volumes/Data/home  
drwxr-xr-x 3 root wheel 96 Mar 25 00:00 opt  
drwxr-xr-x 6 root wheel 192 Mar 25 05:56 private  
drwxr-xr-x@ 63 root wheel 2016 Mar 25 05:55 sbin  
lrwxr-xr-x@ 1 root admin 11 Jan 22 00:56 tmp -> private/tmp  
drwxr-xr-x@ 11 root wheel 352 Jan 22 00:56 usr  
lrwxr-xr-x@ 1 root admin 11 Jan 22 00:56 var -> private/var  
[~] ~ ls  
Applications Sites  
[Desktop] VBox Share  
DiskSpeedTest.png Vagrantfile  
Documents Virtual Machines.localized  
Downloads VirtualBox VMs  
Dropbox WK04  
Library dumps  
Movies get-pip.py  
Music git  
Pictures github  
Postman ubuntu.tar  
Public venv  
PycharmProjects  
[~] ~ ls ~  
Applications Sites  
[Desktop] VBox Share  
DiskSpeedTest.png Vagrantfile  
Documents Virtual Machines.localized  
Downloads VirtualBox VMs  
Dropbox WK04  
Library dumps  
Movies get-pip.py  
Music git  
Pictures github  
Postman ubuntu.tar  
Public venv  
PycharmProjects
```

ls -l показывает содержимое текущего каталога с подробной информацией о правах, дате файла и размере

ls -a простой вывод содержимого текущего каталога списком, но в том числе и скрытые файлы и каталоги

```
[+ ~ ls -l
total 266136
drwxr-xr-x  5 bruh  staff   160 Feb 23 12:26 Applications
drwx-----@ 336 bruh  staff  10752 Apr 15 00:28 Desktop
-rw-r--r--@  1 bruh  staff  229205 Jan 20 11:37 DiskSpeedTest.png
drwx-----@  79 bruh  staff   2528 Apr 15 00:29 Documents
drwxr-xr-x@ 482 bruh  staff  15424 Apr 15 00:24 Downloads
drwx-----@ 39 bruh  staff   1248 Dec  7 10:04 Dropbox
drwx-----@ 84 bruh  staff   2688 Mar 15 11:34 Library
drwxr-xr-x+  6 bruh  staff   192 Jan 29 04:18 Movies
drwxr-xr-x+  8 bruh  staff   256 Jan 29 04:18 Music
drwxr-xr-x+ 31 bruh  staff   992 Jan 29 04:18 Pictures
drwxr-xr-x  3 bruh  staff   96 Jan 19 22:06 Postman
drwx-----+  5 bruh  staff   160 Nov 29 02:38 Public
drwxr-xr-x  3 bruh  staff   96 Oct 26 16:10 PycharmProjects
drwxr-xr-x+  3 bruh  staff   96 Jan 22 01:31 Sites
drwxr-xr-x  3 bruh  staff   96 Mar 24 17:44 VBox Share
-rw-r--r--@  1 bruh  staff  3025 Mar 25 00:10 Vagrantfile
drwxr-xr-x@  7 bruh  staff   224 Jan 31 19:59 Virtual Machines.localized
drwx-----@  6 bruh  staff   192 Mar 25 04:41 VirtualBox VMs
drwxr-xr-x 10 bruh  staff  320 Apr 13 01:52 WKO4
drwx-----@  3 bruh  staff   96 Mar 28 01:23 dumps
-rw-r--r--@  1 bruh  staff  1775835 Dec 17 11:22 get-pip.py
drwxr-xr-x  3 bruh  staff   96 Mar 18 23:25 git
drwxr-xr-x  3 bruh  staff   96 Dec  7 16:44 github
-rw-r--r--@  1 bruh  staff  133222400 Mar 30 21:41 ubuntu.tar
drwxr-xr-x  6 bruh  staff  192 Jan 24 22:27 venv
[+ ~ ls -a
.
..
.CFUserTextEncoding
.DS_Store
.Trash
.android
.atom
.aws
.bash_history
.bash_profile
.bash_sessions
.cache
.config
.cryptoplugin
.cups
.docker
.dropbox
.dvdcss
.gitconfig
.gitkraken
.idlerc
.kube
.lessht
.local
.minikube
.oh-my-zsh
.oracle_jre_usage
.python_history
.ssh
.terraform.d
.vagrant
.vagrant.d
.viminfo
.zcompdump-wibob-mbp (2)-5.7.1
.zcompdump-wibob-mbp-5.7.1
.zcompdump-wibob-mbp15-5.7.1
.zprofile
.zsh_history
.zshrc
.Applications
/Desktop
DiskSpeedTest.png
/Documents
/Downloads
/Dropbox
/Library
/Movies
/Music
/Pictures
/Postman
/Public
/PycharmProjects
/Sites
/VBox Share
/Vagrantfile
/Virtual Machines.localized
/VirtualBox VMs
/WKO4
/dumps
/get-pip.py
/git
/github
/ubuntu.tar
/venv
```

ls -la вывод списка объектов текущего каталога с подробной информацией включая скрытые объекты

```
bruh@wibob-mbp15 ~ -zsh 89x60
[~] ~ ls -la
total 266688
drwx-----@ 64 bruh staff 2048 Apr 15 00:31 .
drwxr-xr-x 5 root admin 160 Dec 5 10:21 ..
-r----- 1 bruh staff 7 Jan 22 04:49 .CFUserTextEncoding
-rw-r--r--@ 1 bruh staff 24580 Apr 15 00:28 .DS_Store
drwx----- 5 bruh staff 160 Apr 10 00:53 .Trash
drwxr-xr-x 2 bruh staff 64 Jan 24 22:23 .android
drwxr-xr-x 16 bruh staff 512 Apr 6 03:58 .atom
drwxr-xr-x 4 bruh staff 128 Dec 26 14:21 .aws
-rw----- 1 bruh staff 7970 Nov 23 15:16 .bash_history
-rw-r--r-- 1 bruh staff 168 Oct 26 14:04 .bash_profile
drwx----- 11 bruh staff 352 Nov 23 15:16 .bash_sessions
drwx----- 3 bruh staff 96 Sep 23 2019 .cache
drwx----- 4 bruh staff 128 Dec 9 15:53 .config
drwxr-xr-x 4 bruh staff 128 Jun 21 2019 .cryptoplugin
drwx----- 3 bruh staff 96 Dec 8 2018 .cups
drwxr-xr-x 6 bruh staff 192 Apr 13 18:31 .docker
drwx----- 15 bruh staff 480 Mar 31 18:25 .dropbox
drwxr-xr-x 5 bruh staff 160 Aug 31 2019 .dvdcss
-rw-r--r-- 1 bruh staff 184 Jan 4 16:24 .gitconfig
drwxr-xr-x 10 bruh staff 320 Mar 22 15:56 .gitkraken
drwxr-xr-x 3 bruh staff 96 Oct 26 14:04 .idlerc
drwxr-xr-x 5 bruh staff 160 Jan 24 02:35 .kube
-rw----- 1 bruh staff 48 Dec 11 01:11 .lessst
drwx----- 3 bruh staff 96 Sep 23 2019 .local
drwxr-xr-x 23 bruh staff 736 Apr 1 00:37 .minikube
drwxr-xr-x 19 bruh staff 608 Mar 10 18:37 .oh-my-zsh
drwxr-xr-x 3 bruh staff 96 Jan 29 2019 .oracle_jre_usage
-rw----- 1 bruh staff 13 Dec 9 13:43 .python_history
drwx----- 12 bruh staff 384 Mar 31 18:19 .ssh
drwxr-xr-x 3 bruh staff 96 Dec 13 20:57 .terraform.d
drwxr-xr-x 4 bruh staff 128 Mar 25 00:11 .vagrant
drwxr-xr-x 9 bruh staff 288 Mar 25 04:48 .vagrant.d
-rw----- 1 bruh staff 12578 Mar 25 04:40 .viminfo
-rw-r--r-- 1 bruh staff 46496 Jan 22 02:06 .zcompdump-wibob-mbp (2)-5.7.1
-rw-r--r-- 1 bruh staff 46496 Dec 9 16:00 .zcompdump-wibob-mbp-5.7.1
-rw-r--r-- 1 bruh staff 46496 Jan 22 19:19 .zcompdump-wibob-mbp15-5.7.1
-rw-r--r-- 1 bruh staff 164 Dec 8 22:12 .zprofile
-rw----- 1 bruh staff 51862 Apr 15 00:31 .zsh_history
-rw-r--r-- 1 bruh staff 3648 Dec 16 23:43 .zshrc
drwxr-xr-x 5 bruh staff 160 Feb 23 12:26 Applications
drwx-----@ 336 bruh staff 10752 Apr 15 00:28 Desktop
-rw-r--r--@ 1 bruh staff 229205 Jan 20 11:37 DiskSpeedTest.png
drwx-----@ 79 bruh staff 2528 Apr 15 00:31 Documents
drwxr-xr-x@ 482 bruh staff 15424 Apr 15 00:24 Downloads
drwx-----@ 39 bruh staff 1248 Dec 7 10:04 Dropbox
drwx-----@ 84 bruh staff 2688 Mar 15 11:34 Library
drwxr-xr-x+ 6 bruh staff 192 Jan 29 04:18 Movies
drwxr-xr-x+ 8 bruh staff 256 Jan 29 04:18 Music
drwxr-xr-x+ 31 bruh staff 992 Jan 29 04:18 Pictures
drwxr-xr-x 3 bruh staff 96 Jan 19 22:06 Postman
drwx-----+ 5 bruh staff 160 Nov 29 02:38 Public
drwxr-xr-x 3 bruh staff 96 Oct 26 16:10 PycharmProjects
drwxr-xr-x+ 3 bruh staff 96 Jan 22 01:31 Sites
drwxr-xr-x 3 bruh staff 96 Mar 24 17:44 VBox Share
-rw-r--r-- 1 bruh staff 3025 Mar 25 00:10 Vagrantfile
drwxr-xr-x@ 7 bruh staff 224 Jan 31 19:59 Virtual Machines.localized
drwx----- 6 bruh staff 192 Mar 25 04:41 VirtualBox VMs
drwxr-xr-x 10 bruh staff 320 Apr 13 01:52 WK04
```

ls -lda ~ вывод подробной информации о домашнем каталоге текущего пользователя

```
bruh@wibob-mbp15 ~ -zsh 89x60
[~] ~ ls -lda ~
drwx-----@ 64 bruh staff 2048 Apr 15 00:32 /Users/bruh
[~] ~
```

3. Execute and describe the following commands (store the output, if any):

```
mkdir test
cd test
pwd
touch test.txt
ls -l test.txt
mkdir test2
mv test.txt test2
cd test2
ls
mv test.txt test2.txt
ls
cp test2.txt ..
cd ..
ls
rm test2.txt
```

rmdir test2 (здесь ошибка поскольку эта команда удаляет только пустые каталоги, а в

```
[~] Task_4-3 git:(master) ✘ mkdir test
[~] Task_4-3 git:(master) ✘ cd test
[~] test git:(master) ✘ pwd
/Users/bruh/Documents/EPAM-Uni-DevOps/Task_4-3/test
[~] test git:(master) ✘ touch test.txt
[~] test git:(master) ✘ ls -l test.txt
-rw-r--r--@ 1 bruh  staff  0 Apr 15 00:50 test.txt
[~] test git:(master) ✘ mkdir test2
[~] test git:(master) ✘ mv test.txt test2
[~] test git:(master) ✘ cd test2
[~] test2 git:(master) ✘ ls
test.txt
[~] test2 git:(master) ✘ mv test.txt test2.txt
[~] test2 git:(master) ✘ ls
test2.txt
[~] test2 git:(master) ✘ cp test2.txt ..
[~] test2 git:(master) ✘ cd ..
[~] test git:(master) ✘ ls
test2
[~] test git:(master) ✘ rm test2.txt
[~] test git:(master) ✘ rmdir test2
rmdir: test2: Directory not empty
[~] test git:(master) ✘ rm -Rf test2
[~] test git:(master) ✘ ls
[~] test git:(master) ✘
```

нашем на этом шаге оставался файл test2.txt, поскольку мы удалили только его копию (уровнем выше) удалил командой rm с рекурсией).

4. Execute and describe the difference

cat /etc/fstab ## выводит содержимое файла в консоль, если буфер консоли позволяет то большой файл частично можно проскролить средствами программы терминал)

```
[bruh@wibob-X61:~]$ sudo cat /etc/fstab
# /etc/fstab: static file system information.
#
# Use 'blkid' to print the universally unique identifier for a
# device; this may be used with UUID= as a more robust way to name devices
# that works even if disks are added and removed. See fstab(5).
#
# <file system> <mount point> <type> <options> <dump> <pass>
# / was on /dev/sda1 during installation
UUID=f8ef02e9-e749-475b-a010-8015e9d365d7 /          ext4      errors=remount-ro 0
1
/dev/sda5      none        swap     sw            0          0
```

less /etc/fstab файл выводится в режиме когда по всему его содержимому можно

```
# /etc/fstab: static file system information.
#
# Use 'blkid' to print the universally unique identifier for a
# device; this may be used with UUID= as a more robust way to name devices
# that works even if disks are added and removed. See fstab(5).
#
# <file system> <mount point> <type> <options> <dump> <pass>
# / was on /dev/sda1 during installation
UUID=f8ef02e9-e749-475b-a010-8015e9d365d7 / ext4 errors=remount-ro 0
1
/dev/sda5 none swap sw 0 0
/etc/fstab (END)
```

перемещаться с помощью горячих клавиш, скрол не зависит от программы терминального доступа, по завершению просмотра требует дополнительной команды выхода.

more /etc/fstab в данном примере вывод команды ничем не отличается от **cat**, но команда позволяет выводить большой файл частями и его "голова" не проскаивает в терминале

```
bruh@wibob-X61:~$ sudo more /etc/fstab
# /etc/fstab: static file system information.
#
# Use 'blkid' to print the universally unique identifier for a
# device; this may be used with UUID= as a more robust way to name devices
# that works even if disks are added and removed. See fstab(5).
#
# <file system> <mount point> <type> <options> <dump> <pass>
# / was on /dev/sda1 during installation
UUID=f8ef02e9-e749-475b-a010-8015e9d365d7 / ext4 errors=remount-ro 0
1
/dev/sda5 none swap sw 0 0
bruh@wibob-X61:~$
```

5. Add to archive all 'test' directories.

- a. to the pure 'tar';

```
→ Task_4-3 git:(master) ✘ tar -cvf archive.tar ./test/
a ./test
a ./test/example.txt
```

- b. to the zipped 'tar' with only tar command;

```
→ Task_4-3 git:(master) ✘ tar -cvfz archive.tar.gz ./test/
a archive.tar.gz
a ./test
a ./test/example.txt
```

- c. to the zipped 'tar' with gzip command;

```
→ Task_4-3 git:(master) ✘ tar -cvf archive.tar ./test/ && gzip
archive.tar
```

extract from archives all above.
only tar

```
→ Task_4-3 git:(master) ✘ tar -xvf archaive.tar.gz
x ./test/
x ./test/example.txt
→ Task_4-3 git:(master) ✘ gunzip archaive.tar.gz
```

gunzip first than tar to unarchive

```
→ Task_4-3 git:(master) ✘ tar -xvf archaive.tar
x ./test/
x ./test/example.txt
→ Task_4-3 git:(master) ✘
```

5. Look through man pages of the listed above commands.

All commands has being learned and stored in "notes" (it's replicated on all my devices) i am using it memorise and to quick search solutions :)

Example

