

Yandex

Unix Command Line

File system managing

How can we modify files
and directories?

File system exploration commands

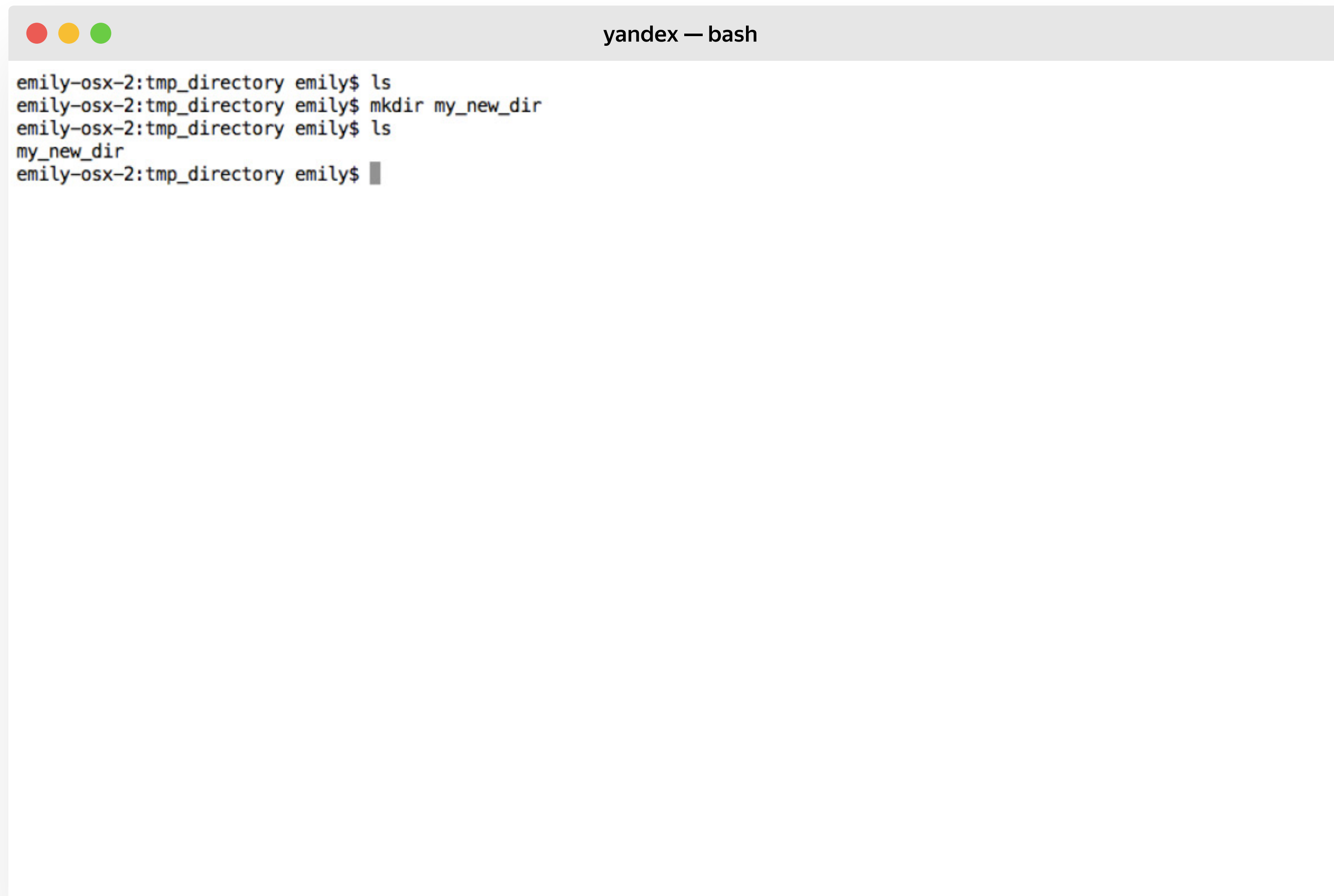
- › mkdir
- › cp
- › mv
- › rm
- › touch

mkdir

- › "make directory", creates directories on a file system

mkdir [OPTION ...] DIRECTORY ...

mkdir

A terminal window titled "yandex — bash" with three colored window control buttons (red, yellow, green) in the top-left corner. The terminal shows a sequence of commands and their output. The user is in the directory "tmp_directory" and lists its contents, then creates a new directory "my_new_dir", and lists the contents again to confirm its creation.

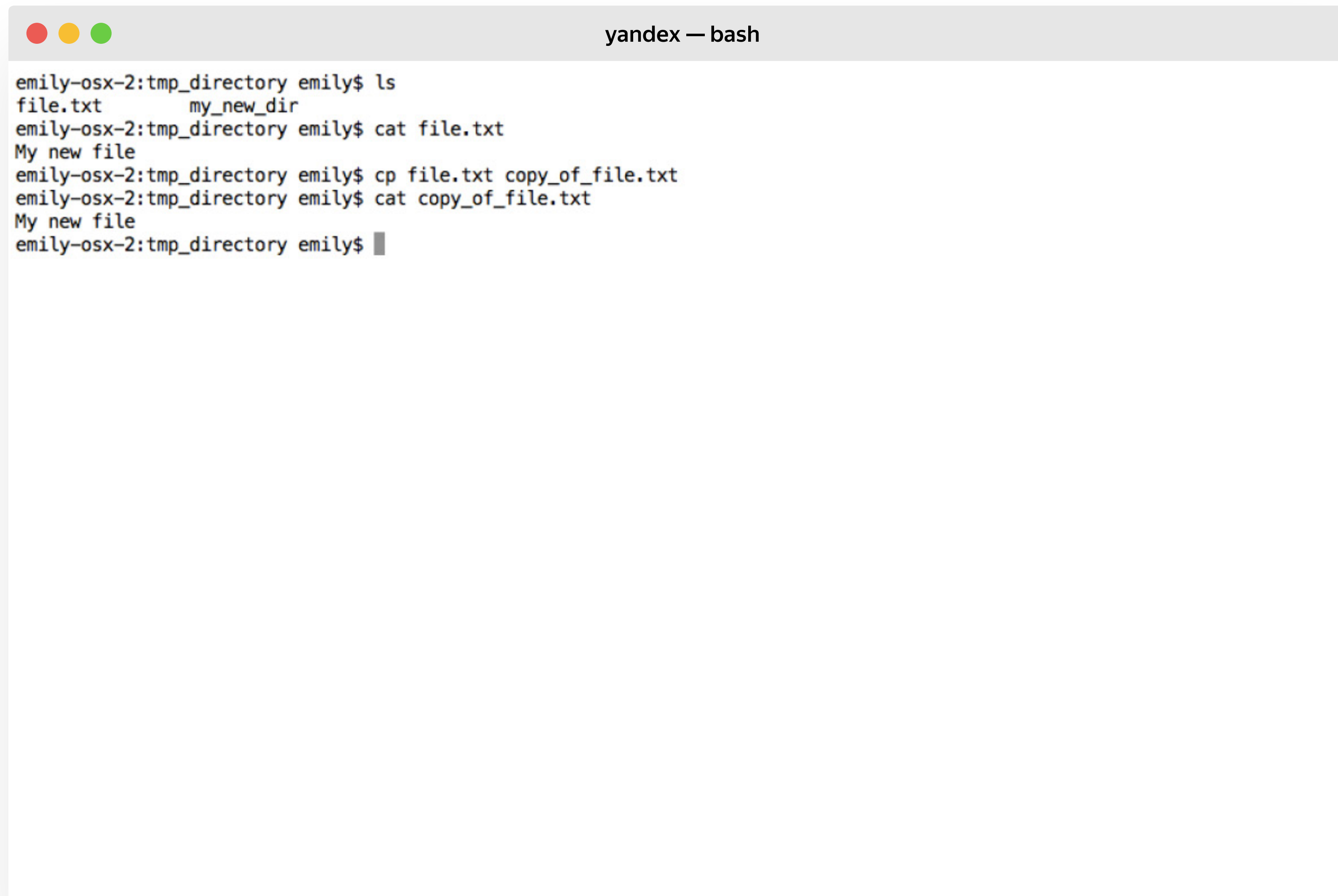
```
emily-osx-2:tmp_directory emily$ ls
emily-osx-2:tmp_directory emily$ mkdir my_new_dir
emily-osx-2:tmp_directory emily$ ls
my_new_dir
emily-osx-2:tmp_directory emily$
```

cp

- › makes copies of files and directories

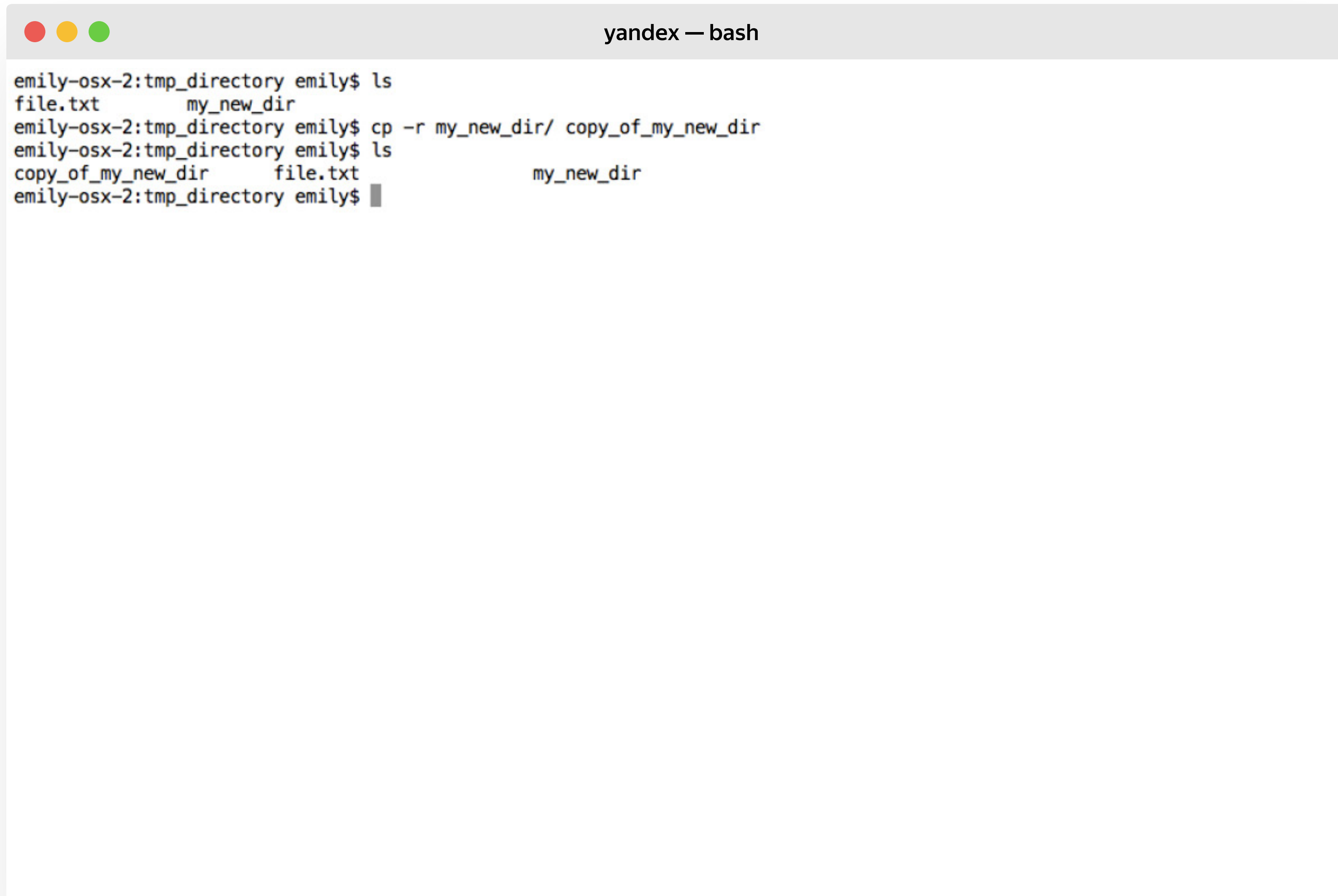
cp [OPTION]... SOURCE... DIRECTORY

cp



```
emily-osx-2:tmp_directory emily$ ls
file.txt      my_new_dir
emily-osx-2:tmp_directory emily$ cat file.txt
My new file
emily-osx-2:tmp_directory emily$ cp file.txt copy_of_file.txt
emily-osx-2:tmp_directory emily$ cat copy_of_file.txt
My new file
emily-osx-2:tmp_directory emily$
```


cp -r

A terminal window titled "yandex — bash" with three colored window control buttons (red, yellow, green) in the top-left corner. The terminal shows a user named "emily" in a directory "tmp_directory" on a system named "emily-osx-2". The user lists the contents of the directory, which are "file.txt" and "my_new_dir". Then, the user runs the command "cp -r my_new_dir/ copy_of_my_new_dir". Finally, the user lists the contents of the directory again, showing "copy_of_my_new_dir", "file.txt", and "my_new_dir".

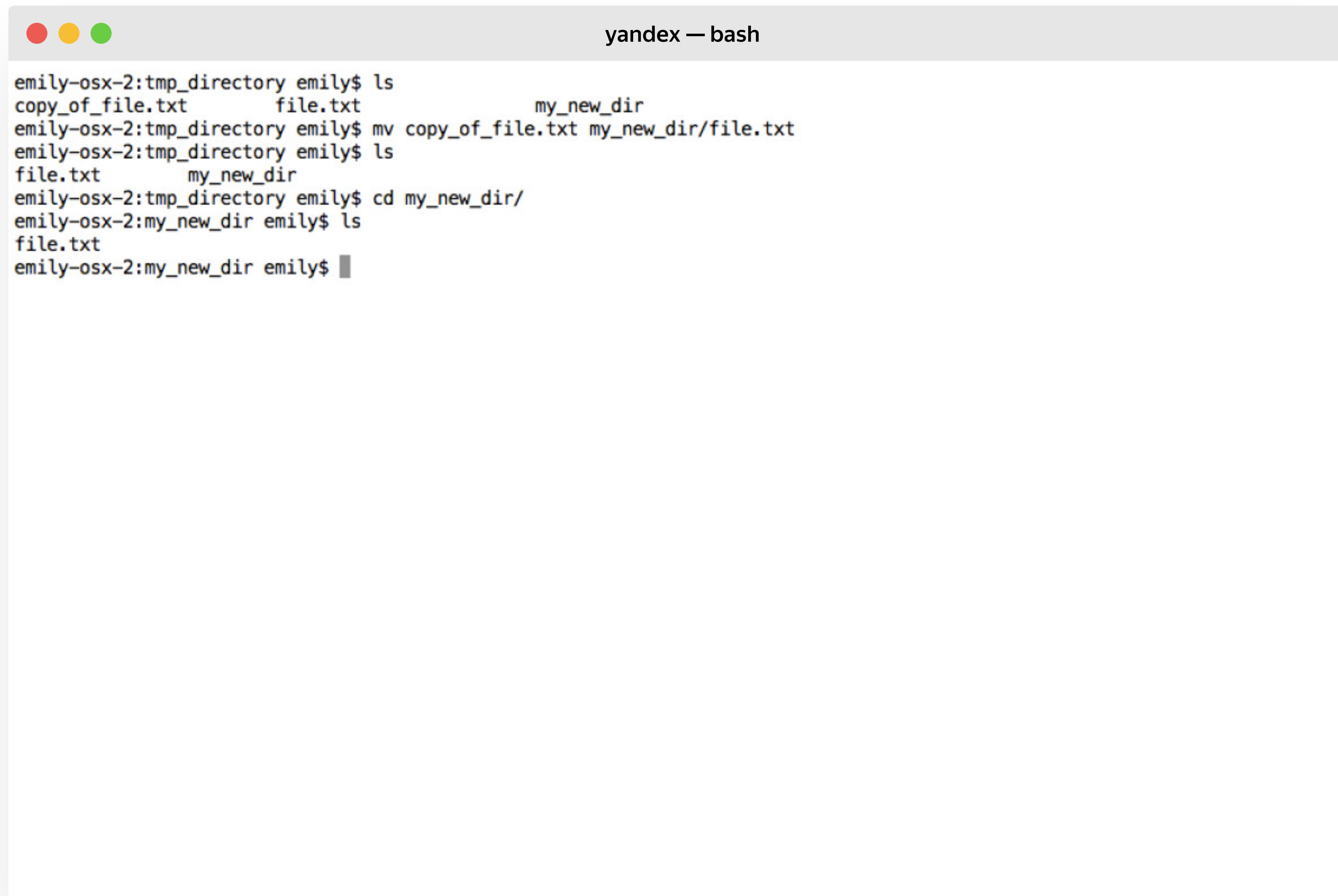
```
emily-osx-2:tmp_directory emily$ ls
file.txt      my_new_dir
emily-osx-2:tmp_directory emily$ cp -r my_new_dir/ copy_of_my_new_dir
emily-osx-2:tmp_directory emily$ ls
copy_of_my_new_dir  file.txt      my_new_dir
emily-osx-2:tmp_directory emily$
```

mv

- › moves or renames files

mv [OPTION]... SOURCE... DIRECTORY

mv



```
yandex — bash

emily-osx-2:tmp_directory emily$ ls
copy_of_file.txt      file.txt              my_new_dir
emily-osx-2:tmp_directory emily$ mv copy_of_file.txt my_new_dir/file.txt
emily-osx-2:tmp_directory emily$ ls
file.txt              my_new_dir
emily-osx-2:tmp_directory emily$ cd my_new_dir/
emily-osx-2:my_new_dir emily$ ls
file.txt
emily-osx-2:my_new_dir emily$
```

rm

- › removes (deletes) files or directories

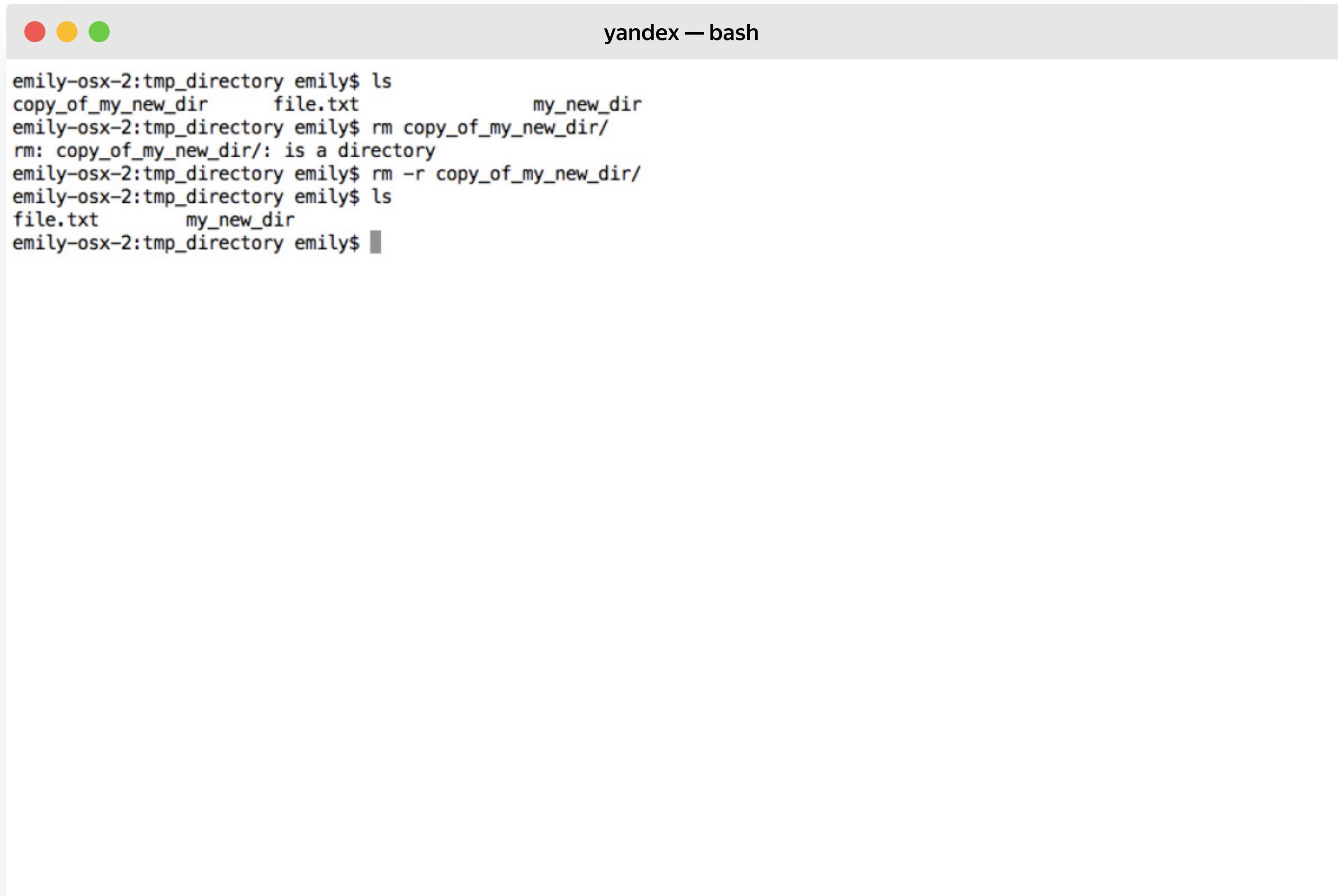
rm [OPTION]... FILE...

rm

```
yandex — bash

emily-osx-2:tmp_directory emily$ ls
copy_of_file.txt      copy_of_my_new_dir      file.txt                  my_new_dir
emily-osx-2:tmp_directory emily$ rm copy_of_file.txt
emily-osx-2:tmp_directory emily$ ls
copy_of_my_new_dir      file.txt                  my_new_dir
emily-osx-2:tmp_directory emily$
```

rm -r



```
emily-osx-2:tmp_directory emily$ ls
copy_of_my_new_dir  file.txt  my_new_dir
emily-osx-2:tmp_directory emily$ rm copy_of_my_new_dir/
rm: copy_of_my_new_dir/: is a directory
emily-osx-2:tmp_directory emily$ rm -r copy_of_my_new_dir/
emily-osx-2:tmp_directory emily$ ls
file.txt  my_new_dir
emily-osx-2:tmp_directory emily$
```

touch

- › changes file timestamp

touch [OPTION]... FILE...

touch

```
yandex — bash

emily-osx-2:tmp_directory emily$ ls -la
total 8
drwxr-xr-x  4 emily  593637566   136 19 июл 01:05 .
drwxr-xr-x+ 66 emily  593637566 2244 19 июл 00:59 ..
-rw-r--r--  1 emily  593637566    12 19 июл 01:00 file.txt
drwxr-xr-x  3 emily  593637566   102 19 июл 01:02 my_new_dir
emily-osx-2:tmp_directory emily$ touch file.txt
emily-osx-2:tmp_directory emily$ ls -la
total 8
drwxr-xr-x  4 emily  593637566   136 19 июл 01:05 .
drwxr-xr-x+ 66 emily  593637566 2244 19 июл 00:59 ..
-rw-r--r--  1 emily  593637566    12 19 июл 01:05 file.txt
drwxr-xr-x  3 emily  593637566   102 19 июл 01:02 my_new_dir
emily-osx-2:tmp_directory emily$
```


touch

```
yandex — bash

emily-osx-2:tmp_directory emily$ ls
file.txt      my_new_dir
emily-osx-2:tmp_directory emily$ touch new_empty_file.txt
emily-osx-2:tmp_directory emily$ ls
file.txt      my_new_dir      new_empty_file.txt
emily-osx-2:tmp_directory emily$ ls -ls
total 8
8 -rw-r--r--  1 emily  593637566   12 19 июл 01:05 file.txt
0 drwxr-xr-x  3 emily  593637566  102 19 июл 01:02 my_new_dir
0 -rw-r--r--  1 emily  593637566    0 19 июл 01:06 new_empty_file.txt
emily-osx-2:tmp_directory emily$
```

In-video quiz

- › How to create empty file `'tmp.txt'`?
- › How to rename file `'tmp.txt'` to `'temporary_logs.txt'`?
- › How to delete all `'txt'` files in the current directory?

Outcome

- › For modifying files and directories we use the following bash commands:
 - › **mkdir** — make directory
 - › **cp** — copy file or directory
 - › **mv** — move or rename file or directory
 - › **rm** — delete file or directory
 - › **touch** — update file timestamps or create empty file

BigDATAteam