

Managing Files and Directories 1

1-On your home directory create two files named Vegetables and Fruits and edit them as follow:

Vegetables

Carrots

Celery

Cucumbers

Tomatoes

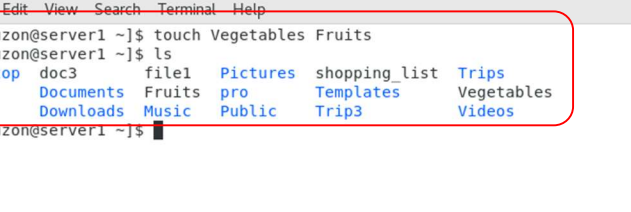
Fruits

Apples

Bananas

Oranges

Watermelon



The screenshot shows a terminal window titled 'nlauzion@server1:~'. The menu bar includes 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The terminal content is as follows:

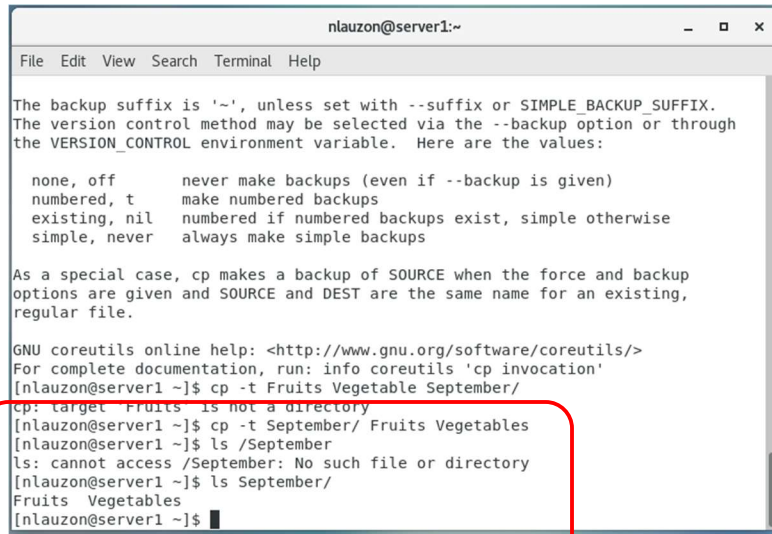
```
nlauzion@server1 ~]$ touch Vegetables Fruits
nlauzion@server1 ~]$ ls
Desktop  doc3      file1    Pictures  shopping_list  Trips
doc1     Documents Fruits   pro       Templates      Vegetables
doc2     Downloads Music     Public    Trip3         Videos
nlauzion@server1 ~]$
```

A red rectangle highlights the first three lines of the terminal output, from the first command to the first line of the directory listing.

[illegible]

3-Copy the two files Vegetables and Fruits to the directory September (use the Tab Completion)

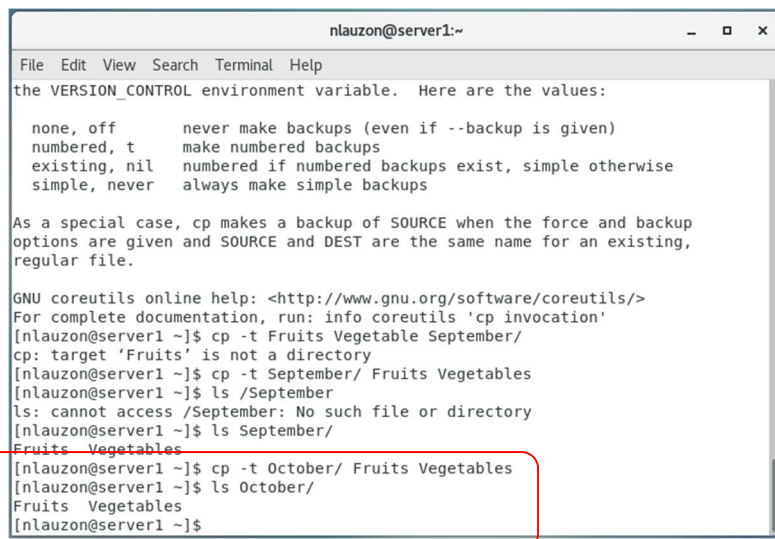
I obtained that result using the option -t in cp, to copy both files using a single command line. And yes, I attest that I followed your request by typing Sep than the tab key to get the September directory in full.

A terminal window titled 'nlauzon@server1:~' with a menu bar (File, Edit, View, Search, Terminal, Help). It displays help text for the 'cp' command, including backup options and GNU coreutils information. The user enters the command 'cp -t Fruits Vegetable September/'. A red box highlights the error message: 'cp: target 'Fruits' is not a directory'. The user then enters 'cp -t September/ Fruits Vegetables', followed by 'ls /September' (which fails with 'No such file or directory') and 'ls September/' (which lists 'Fruits' and 'Vegetables').

```
nlauzon@server1:~  
File Edit View Search Terminal Help  
  
The backup suffix is '~', unless set with --suffix or SIMPLE_BACKUP_SUFFIX.  
The version control method may be selected via the --backup option or through  
the VERSION_CONTROL environment variable. Here are the values:  
  
none, off      never make backups (even if --backup is given)  
numbered, t    make numbered backups  
existing, nil   numbered if numbered backups exist, simple otherwise  
simple, never   always make simple backups  
  
As a special case, cp makes a backup of SOURCE when the force and backup  
options are given and SOURCE and DEST are the same name for an existing,  
regular file.  
  
GNU coreutils online help: <http://www.gnu.org/software/coreutils/>  
For complete documentation, run: info coreutils 'cp invocation'  
[nlauzon@server1 ~]$ cp -t Fruits Vegetable September/  
cp: target 'Fruits' is not a directory  
[nlauzon@server1 ~]$ cp -t September/ Fruits Vegetables  
[nlauzon@server1 ~]$ ls /September  
ls: cannot access /September: No such file or directory  
[nlauzon@server1 ~]$ ls September/  
Fruits  Vegetables  
[nlauzon@server1 ~]$
```

4-Copy the two files Vegetables and Fruits to the directory October (without typing the full command again, use the previous command)

I attest that I followed your request by using the up and down arrows to navigate through my previous command, and then change the director September for October. I also used the up and down arrows and the Tab key with the ls command.

A terminal window titled 'nlauzon@server1:~' with a menu bar (File, Edit, View, Search, Terminal, Help). It displays the same help text as the previous screenshot. The user enters 'cp -t Fruits Vegetable September/'. A red box highlights the error message: 'cp: target 'Fruits' is not a directory'. The user then enters 'cp -t September/ Fruits Vegetables', followed by 'ls /September' (which fails with 'No such file or directory') and 'ls September/' (which lists 'Fruits' and 'Vegetables'). The user then enters 'cp -t October/ Fruits Vegetables', followed by 'ls October/' (which lists 'Fruits' and 'Vegetables').

```
nlauzon@server1:~  
File Edit View Search Terminal Help  
  
the VERSION_CONTROL environment variable. Here are the values:  
  
none, off      never make backups (even if --backup is given)  
numbered, t    make numbered backups  
existing, nil   numbered if numbered backups exist, simple otherwise  
simple, never   always make simple backups  
  
As a special case, cp makes a backup of SOURCE when the force and backup  
options are given and SOURCE and DEST are the same name for an existing,  
regular file.  
  
GNU coreutils online help: <http://www.gnu.org/software/coreutils/>  
For complete documentation, run: info coreutils 'cp invocation'  
[nlauzon@server1 ~]$ cp -t Fruits Vegetable September/  
cp: target 'Fruits' is not a directory  
[nlauzon@server1 ~]$ cp -t September/ Fruits Vegetables  
[nlauzon@server1 ~]$ ls /September  
ls: cannot access /September: No such file or directory  
[nlauzon@server1 ~]$ ls September/  
Fruits  Vegetables  
[nlauzon@server1 ~]$ cp -t October/ Fruits Vegetables  
[nlauzon@server1 ~]$ ls October/  
Fruits  Vegetables  
[nlauzon@server1 ~]$
```

5- Rename the copied files to the directory September as: Vegetables_Sep, Fruit_Sep and the copied files to the directory October as: Vegetables_Oct, Fruit_Oct

```
nlaizon@server1:~/October
File Edit View Search Terminal Help
The version control method may be selected via the --backup option or through
the VERSION_CONTROL environment variable. Here are the values:

  none, off      never make backups (even if --backup is given)
  numbered, t    make numbered backups
  existing, nil  numbered if numbered backups exist, simple otherwise
  simple, never  always make simple backups

GNU coreutils online help: <http://www.gnu.org/software/coreutils/>
For complete documentation, run: info coreutils 'mv invocation'
[nlaizon@server1 ~]$ cd September/
[nlaizon@server1 September]$ ls
Fruits  Vegetables
[nlaizon@server1 September]$ mv Fruits Fruits_Sep
[nlaizon@server1 September]$ mv Vegetables Vegetables_Sep
[nlaizon@server1 September]$ ls
Fruits_Sep  Vegetables_Sep
[nlaizon@server1 September]$ cd
[nlaizon@server1 ~]$ cd October/
[nlaizon@server1 October]$ mv Fruits Fruits_Oct
[nlaizon@server1 October]$ mv Vegetables Vegetables_Oct
[nlaizon@server1 October]$ ls
Fruits_Oct  Vegetables_Oct
[nlaizon@server1 October]$
```

6- Copy the content directory September inside to a new directory called November

```
nlaizon@server1:~
File Edit View Search Terminal Help
GNU coreutils online help: <http://www.gnu.org/software/coreutils/>
For complete documentation, run: info coreutils 'mv invocation'
[nlaizon@server1 ~]$ cd September/
[nlaizon@server1 September]$ ls
Fruits  Vegetables
[nlaizon@server1 September]$ mv Fruits Fruits_Sep
[nlaizon@server1 September]$ mv Vegetables Vegetables_Sep
[nlaizon@server1 September]$ ls
Fruits_Sep  Vegetables_Sep
[nlaizon@server1 September]$ cd
[nlaizon@server1 ~]$ cd October/
[nlaizon@server1 October]$ mv Fruits Fruits_Oct
[nlaizon@server1 October]$ mv Vegetables Vegetables_Oct
[nlaizon@server1 October]$ ls
Fruits_Oct  Vegetables_Oct
[nlaizon@server1 October]$ cd
[nlaizon@server1 ~]$ cp -r September November
[nlaizon@server1 ~]$ ls
Desktop  doc3  file1  November  pro  shopping_list  Trips
doc1     Documents  Fruits  October  Public  Templates  Vegetables
doc2     Downloads  Music  Pictures  September  Trip3  Videos
[nlaizon@server1 ~]$ ls November/
Fruits_Sep  Vegetables_Sep
[nlaizon@server1 ~]$
```

7- Copy the content directory October inside to a new directory called December

```
nlaunon@server1:~  
File Edit View Search Terminal Help  
Fruits Sep Vegetables_Sep  
[nlaunon@server1 ~]$ cd  
[nlaunon@server1 ~]$ cd October/  
[nlaunon@server1 October]$ mv Fruits Fruits_Oct  
[nlaunon@server1 October]$ mv Vegetables Vegetables_Oct  
[nlaunon@server1 October]$ ls  
Fruits_Oct Vegetables_Oct  
[nlaunon@server1 October]$ cd  
[nlaunon@server1 ~]$ cp -r September November  
[nlaunon@server1 ~]$ ls  
Desktop doc3 file1 November pro shopping_list Trips  
doc1 Documents Fruits October Public Templates Vegetables  
doc2 Downloads Music Pictures September Trip3 Videos  
[nlaunon@server1 ~]$ ls November/  
Fruits_Sep Vegetables_Sep  
[nlaunon@server1 ~]$ cp -r October December  
[nlaunon@server1 ~]$ ls  
December doc3 Fruits Pictures shopping_list Vegetables  
Desktop Documents Music pro Templates Videos  
doc1 Downloads November Public Trip3  
doc2 file1 October September Trips  
[nlaunon@server1 ~]$ ls December/  
Fruits_Oct Vegetables_Oct  
[nlaunon@server1 ~]$
```

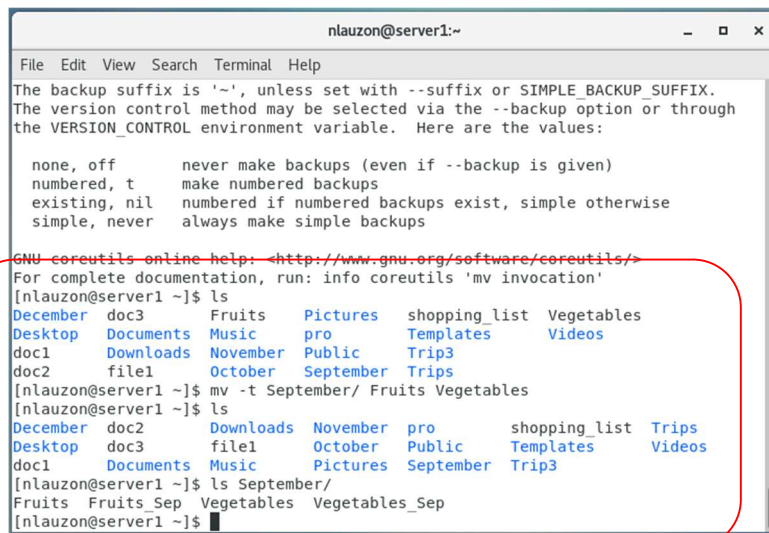
8- Rename the files in November and December directories to Vegetables_Nov, Fruit_Nov and Vegetables_Dec, Fruit_Dec

```
nlaunon@server1:~  
File Edit View Search Terminal Help  
Fruits Sep Vegetables_Sep  
[nlaunon@server1 ~]$ cp -r October December  
[nlaunon@server1 ~]$ ls  
December doc3 Fruits Pictures shopping_list Vegetables  
Desktop Documents Music pro Templates Videos  
doc1 Downloads November Public Trip3  
doc2 file1 October September Trips  
[nlaunon@server1 ~]$ ls December/  
Fruits_Oct Vegetables_Oct  
[nlaunon@server1 ~]$ cd November/  
[nlaunon@server1 November]$ mv Fruits_Sep Fruits_Nov  
[nlaunon@server1 November]$ mv Vegetables_Sep Vegetables_Nov  
[nlaunon@server1 November]$ ls  
Fruits_Nov Vegetables_Nov  
[nlaunon@server1 November]$ cd  
[nlaunon@server1 ~]$ cd D  
December/ Desktop/ Documents/ Downloads/  
[nlaunon@server1 ~]$ cd December/  
[nlaunon@server1 December]$ mv Fruits_Oct Fruits_Dec  
[nlaunon@server1 December]$ mv Vegetables_Oct Vegetables_Dec  
[nlaunon@server1 December]$ ls  
Fruits_Dec Vegetables_Dec  
[nlaunon@server1 December]$ cd  
[nlaunon@server1 ~]$
```

9- Move the file Vegetables from your home directory to the directory September

Important, I used the option -t of command mv to literally move the files from my home directory to September. This really constitute a displacement of the files from one location to another. The files are no longer in my home directory, they are now in the September directory.

By using mv -t DESTINATION SOURCES, I answer both questions 9 and 10 at the same time.



```
nlaupon@server1:~  
File Edit View Search Terminal Help  
The backup suffix is '~', unless set with --suffix or SIMPLE_BACKUP_SUFFIX.  
The version control method may be selected via the --backup option or through  
the VERSION_CONTROL environment variable. Here are the values:  
  
none, off      never make backups (even if --backup is given)  
numbered, t    make numbered backups  
existing, nil   numbered if numbered backups exist, simple otherwise  
simple, never   always make simple backups  
  
GNU coreutils online help: <http://www.gnu.org/software/coreutils/>  
For complete documentation, run: info coreutils 'mv invocation'  
[nlaupon@server1 ~]$ ls  
December doc3 Fruits Pictures shopping_list Vegetables  
Desktop Documents Music pro Templates Videos  
doc1 Downloads November Public Trip3  
doc2 file1 October September Trips  
[nlaupon@server1 ~]$ mv -t September/ Fruits Vegetables  
[nlaupon@server1 ~]$ ls  
December doc2 Downloads November pro shopping_list Trips  
Desktop doc3 file1 October Public Templates Videos  
doc1 Documents Music Pictures September Trip3  
[nlaupon@server1 ~]$ ls September/  
Fruits Fruits_Sep Vegetables Vegetables_Sep  
[nlaupon@server1 ~]$
```

10- Remove the file Fruits from your home directory

The answer to that question is provided in Question 9.

11- Copy the four directories September, October, November and December to a new Directory named Foods

```
nlaunzon@server1:~  
File Edit View Search Terminal Help  
simple, never always make simple backups  
GNU coreutils online help: <http://www.gnu.org/software/coreutils/>  
For complete documentation, run: info coreutils 'mv invocation'  
[nlaunzon@server1 ~]$ ls  
December doc3 Fruits Pictures shopping_list Vegetables  
Desktop doc2 Documents Music pro Templates Videos  
doc1 Downloads November Public Trip3  
doc2 file1 October September Trips  
[nlaunzon@server1 ~]$ mv -t September/ Fruits Vegetables  
[nlaunzon@server1 ~]$ ls  
December doc2 Downloads November pro shopping_list Trips  
Desktop doc3 file1 October Public Templates Videos  
doc1 Documents Music Pictures September Trip3  
[nlaunzon@server1 ~]$ ls September/  
Fruits Fruits_Sep Vegetables Vegetables_Sep  
[nlaunzon@server1 ~]$ mkdir Foods  
[nlaunzon@server1 ~]$ mv -t Foods/ September/ October/ November/ December/  
[nlaunzon@server1 ~]$ ls  
Desktop doc2 Documents file1 Music pro shopping_list Trip3 Videos  
doc1 doc3 Downloads Foods Pictures Public Templates Trips  
[nlaunzon@server1 ~]$ ls Foods/  
December November October September  
[nlaunzon@server1 ~]$
```

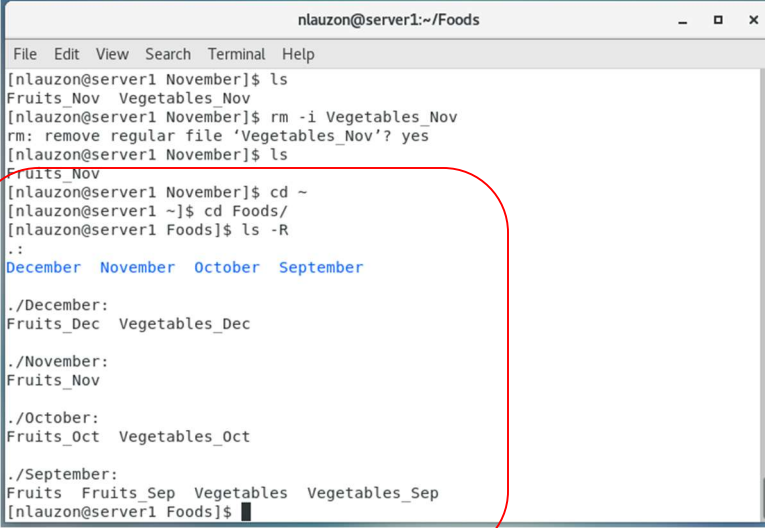
12- Remove the four directories September, October, November and December from your home directory

The answer to that question is provided in Question 11. By using the command `mv -t DESTINATION SOURCES`, a literal displacement of the sources to the destination is operated, just like a cut and paste.

13- Remove the file Vegetables_Nov from the subdirectory November in the Foods directory

```
nlaunzon@server1:~/Foods/November  
File Edit View Search Terminal Help  
doc1 Downloads November Public Trip3  
doc2 file1 October September Trips  
[nlaunzon@server1 ~]$ mv -t September/ Fruits Vegetables  
[nlaunzon@server1 ~]$ ls  
December doc2 Downloads November pro shopping_list Trips  
Desktop doc3 file1 October Public Templates Videos  
doc1 Documents Music Pictures September Trip3  
[nlaunzon@server1 ~]$ ls September/  
Fruits Fruits_Sep Vegetables Vegetables_Sep  
[nlaunzon@server1 ~]$ mkdir Foods  
[nlaunzon@server1 ~]$ mv -t Foods/ September/ October/ November/ December/  
[nlaunzon@server1 ~]$ ls  
Desktop doc2 Documents file1 Music pro shopping_list Trip3 Videos  
doc1 doc3 Downloads Foods Pictures Public Templates Trips  
[nlaunzon@server1 ~]$ ls Foods/  
December November October September  
[nlaunzon@server1 ~]$ cd Foods/November/  
[nlaunzon@server1 November]$ ls  
Fruits_Nov Vegetables_Nov  
[nlaunzon@server1 November]$ rm -i Vegetables_Nov  
rm: remove regular file 'Vegetables_Nov'? yes  
[nlaunzon@server1 November]$ ls  
Fruits_Nov  
[nlaunzon@server1 November]$
```


14- List the content of the Foods directory and subdirectories



```
nlaizon@server1:~/Foods
File Edit View Search Terminal Help
[nlaizon@server1 November]$ ls
Fruits_Nov Vegetables_Nov
[nlaizon@server1 November]$ rm -i Vegetables_Nov
rm: remove regular file 'Vegetables_Nov'? yes
[nlaizon@server1 November]$ ls
Fruits_Nov
[nlaizon@server1 November]$ cd ~
[nlaizon@server1 ~]$ cd Foods/
[nlaizon@server1 Foods]$ ls -R
.:
December November October September
./December:
Fruits_Dec Vegetables_Dec
./November:
Fruits_Nov
./October:
Fruits_Oct Vegetables_Oct
./September:
Fruits Fruits_Sep Vegetables Vegetables_Sep
[nlaizon@server1 Foods]$
```

Of Note, by the end of this assignment, I really learned and appreciated the benefits of the Tab key and UP/DOWN arrows.