You should be able to create, organize, copy, and remove files and directories.

Log in as a user (not as root) on one of your virtual machines.

1. Run hostname command to see the name of your Linux virtual machine.
2. In the user's home directory, use the**mkdir**command to create three subdirectories: Music, Pictures, and Videos.

**[pszajt@centos2020 ~]$mkdir Music Pictures Videos**

1. Continuing in the user's home directory, use the**touch**command to create sets of empty practice files to use during this assignment.
   * Create six files with names of the form song*X*.mp3.
   * Create six files with names of the form snap*X*.jpg.
   * Create six files with names of the form film*X*.avi.

In each set, replace X with the numbers 1 through 6.

**[pszajt@centos2020 ~]$ touch song1.mp3 song2.mp3 song3.mp3 song4.mp3 song5.mp3 song6.mp3**

**[pszajt@centos2020 ~]$ touch snap1.jpg snap2.jpg snap3.jpg snap4.jpg snap5.jpg snap6.jpg**

**[pszajt@centos2020 ~]$ touch film1.avi film2.avi film3.avi film4.avi film5.avi film6.avi**

**[pszajt@centos2020 ~]$ ls -l**

**total 0**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 film1.avi**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 film2.avi**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 film3.avi**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 film4.avi**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 film5.avi**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 film6.avi**

**drwxrwxr-x. 2 pszajt pszajt 6 Jan 14 02:01 Music**

**drwxrwxr-x. 2 pszajt pszajt 6 Jan 14 02:01 Pictures**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 snap1.jpg**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 snap2.jpg**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 snap3.jpg**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 snap4.jpg**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 snap5.jpg**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 snap6.jpg**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 song1.mp3**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 song2.mp3**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 song3.mp3**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 song4.mp3**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 song5.mp3**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 song6.mp3**

**drwxrwxr-x. 2 pszajt pszajt 6 Jan 14 02:01 Videos**

1. Continuing in the user's home directory, move the song files to the Music subdirectory, the snapshot files to the Pictures subdirectory, and the movie files to the Videos subdirectory.

**[pszajt@centos2020 ~]$ mv song1.mp3 song2.mp3 song3.mp3 song4.mp3 song5.mp3 song6.mp3 Music**

**[pszajt@centos2020 ~]$ mv snap1.jpg snap2.jpg snap3.jpg snap4.jpg snap5.jpg snap6.jpg Pictures**

**[pszajt@centos2020 ~]$ mv film1.avi film2.avi film3.avi film4.avi film5.avi film6.avi Videos**

**[pszajt@centos2020 ~]$ ls -l Music Pictures Videos**

**Music:**

**total 0**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 song1.mp3**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 song2.mp3**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 song3.mp3**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 song4.mp3**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 song5.mp3**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 song6.mp3**

**Pictures:**

**total 0**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 snap1.jpg**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 snap2.jpg**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 snap3.jpg**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 snap4.jpg**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 snap5.jpg**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 snap6.jpg**

**Videos:**

**total 0**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 film1.avi**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 film2.avi**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 film3.avi**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 film4.avi**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 film5.avi**

**-rw-rw-r--. 1 pszajt pszajt 0 Jan 14 02:25 film6.avi**

1. Continuing in the user's home directory, create three subdirectories for organizing your files into projects. Name the subdirectories friends, family, and work. Use a single command to create all three subdirectories at the same time.

You will use these directories to rearrange your files into projects.

**[pszajt@centos2020 ~]$ mkdir friends family work**

**[pszajt@centos2020 ~]$ ls -l**

**total 0**

**drwxrwxr-x. 2 pszajt pszajt   6 Jan 14 02:48 family**

**drwxrwxr-x. 2 pszajt pszajt   6 Jan 14 02:48 friends**

**drwxrwxr-x. 2 pszajt pszajt 108 Jan 14 02:28 Music**

**drwxrwxr-x. 2 pszajt pszajt 108 Jan 14 02:28 Pictures**

**drwxrwxr-x. 2 pszajt pszajt 108 Jan 14 02:44 Videos**

**drwxrwxr-x. 2 pszajt pszajt   6 Jan 14 02:48 work**

1. Copy a selection of new files to the project directories family and friends. Use as many commands as needed. You do not have to use only one command as in the example. For each project, first change to the project directory, then copy the source files to this directory. Keep in mind that you are making copies, therefore the original files will remain in their original locations after the files are copied to the project directories.
   * Copy files (all types) containing the numbers 1 and 2 in to the friends subdirectory.
   * Copy files (all types) containing the numbers 3 and 4 in to the family subdirectory.

When copying files from multiple locations into a single location, it’s recommended that you change to the destination directory prior to copying the files. Use the simplest path syntax, absolute or relative, to reach the source for each file management task.

**[pszajt@centos2020 friends]$ cp ~/Music/song1.mp3 ~/Music/song2.mp3 ~/Pictures/snap1.jpg ~/Pictures/snap2.jpg ~/Videos/film1.avi ~/Videos/film2.avi .**

**[pszajt@centos2020 friends]$ ls -al**

**total 0**

**drwxrwxr-x. 2 pszajt pszajt 108 Jan 14 04:44 .**

**drwx------. 8 pszajt pszajt 146 Jan 14 02:48 ..**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:44 film1.avi**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:44 film2.avi**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:44 snap1.jpg**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:44 snap2.jpg**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:44 song1.mp3**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:44 song2.mp3**

**[pszajt@centos2020 friends]$ cd ../family**

**[pszajt@centos2020 family]$ cp ~/Music/song3.mp3 ~/Music/song4.mp3 ~/Pictures/snap3.jpg ~/Pictures/snap4.jpg ~/Videos/film3.avi ~/Videos/film4.avi .**

**[pszajt@centos2020 family]$ ls -al**

**total 0**

**drwxrwxr-x. 2 pszajt pszajt 108 Jan 14 04:48 .**

**drwx------. 8 pszajt pszajt 146 Jan 14 02:48 ..**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:48 film3.avi**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:48 film4.avi**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:48 snap3.jpg**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:48 snap4.jpg**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:48 song3.mp3**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:48 song4.mp3**

1. For your work project, create additional copies.

[**pszajt@centos2020 family]$ cd ../work**

**[pszajt@centos2020 work]$ cp ~/Music/song5.mp3 ~/Music/song6.mp3 ~/Pictures/snap5.jpg ~/Pictures/snap6.jpg ~/Videos/film5.avi ~/Videos/film6.avi .**

**[pszajt@centos2020 work]$ ls -al**

**total 0**

**drwxrwxr-x. 2 pszajt pszajt 108 Jan 14 04:52 .**

**drwx------. 8 pszajt pszajt 146 Jan 14 02:48 ..**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:52 film5.avi**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:52 film6.avi**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:52 snap5.jpg**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:52 snap6.jpg**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:52 song5.mp3**

**-rw-rw-r--. 1 pszajt pszajt   0 Jan 14 04:52 song6.mp3**

1. Your project tasks are now complete, and it is time to clean up the projects.

Change to the user's home directory. Attempt to delete both the family and friends project directories with a single**rmdir**command.

**[pszajt@centos2020 work]$ cd**

**[pszajt@centos2020 ~]$ pwd**

**/home/pszajt**

**[pszajt@centos2020 ~]$ rmdir family friends**

**rmdir: failed to remove ‘family’: Directory not empty**

**rmdir: failed to remove ‘friends’: Directory not empty**

Using the**rmdir**command should fail because both subdirectories contain files.

1. Use the**rm -r**command to recursively delete both thefamilyandfriendssubdirectories and their contents.

**[pszajt@centos2020 ~]$ rm -r family friends**

**[pszajt@centos2020 ~]$ ls -l**

**total 0**

**drwxrwxr-x. 2 pszajt pszajt 108 Jan 14 02:28 Music**

**drwxrwxr-x. 2 pszajt pszajt 108 Jan 14 02:28 Pictures**

**drwxrwxr-x. 2 pszajt pszajt 108 Jan 14 02:44 Videos**

**drwxrwxr-x. 2 pszajt pszajt 108 Jan 14 04:52 work**

1. Delete all the files in the work project, but do not delete the work directory.

[**pszajt@centos2020 work]$ rm song5.mp3 song6.mp3 snap5.jpg snap6.jpg film5.avi film6.avi**

**[pszajt@centos2020 work]$ ls -l**

**total 0**

1. Finally, from the user's home directory, use the**rmdir**command to delete the work directory. The command should succeed now that it is empty.

**[pszajt@centos2020 work]$ cd**

**[pszajt@centos2020 ~]$ rmdir work**

**[pszajt@centos2020 ~]$ ls -l**

**total 0**

**drwxrwxr-x. 2 pszajt pszajt 108 Jan 14 02:28 Music**

**drwxrwxr-x. 2 pszajt pszajt 108 Jan 14 02:28 Pictures**

**drwxrwxr-x. 2 pszajt pszajt 108 Jan 14 02:44 Videos**

1. Exit from laptop.
2. [pszajt@centos2020 ~]$**exit**





































