

## Linux Assignment 2 Solution

Friday, August 30, 2024 9:09 PM

Command	Explanation
echo "Hello, World!"	Print Hello,World
name="Productive"	assigns the value "Productive" to the environment variable named name.
touch file.txt	Create file named file.txt
ls -a	list files and directories in the current directory
rm file.txt	Remove file named file.txt
cp file1.txt file2.txt	Copied file1.txt to file2.txt
mv file.txt /path/to/directory/	Moves file.txt to /path/to/directory/.
chmod 755 script.sh	Sets the permissions of the file script.sh to 755 <ul style="list-style-type: none"><li>• 7: represents the permissions for the file owner. (4+2+1 i.e. full permission i.e. read, write &amp; execute)</li><li>• 5: represents the permissions for the group associated with the file. (only 4+1 i.e. read and execute)</li><li>• 5: represents the permissions for others (everyone else).</li></ul>
grep "pattern" file.txt	To search word pattern in file.txt
kill PID	TO kill a process from linux command line with its Process ID
mkdir mydir && cd mydir && touch file.txt && echo "Hello, World!" > file.txt && cat file.txt	Made new directory "mydir" && operator is used as it will operate only when previous commands are executed. Then we changed current working directory to mydir. Then we created file.txt, then we printed " Hello, World" and redirected it to file.txt. And then we displayed the content of the file.txt.
ls -l   grep ".txt"	We used pipe operator ( ) to takes the output of the command on its left (All files & their information) and uses it as input for the command on its right (search for the word .txt)
cat file1.txt file2.txt   sort   uniq	First it will display the contents of file1.txt followed by the contents of file2.txt in sequence. Then pipe is used to <b>sort</b> (Sorts lines of text in ascending order). Then using pipe we used uniq to Remove any duplicate lines from the sorted list, leaving only unique lines.
ls -l   grep "^d"	We used pipe operator ( ) to takes the output of the command on its left (All files & their information) and uses it as input for the command on its right (search for the word ^d)
grep -r "pattern" /path/to/directory/	Search for "pattern" in (-r represents recursively i.e. into all files of a specied directory & its subdirectories)
cat file1.txt file2.txt   sort   uniq -d	First it will display the contents of file1.txt followed by the contents of file2.txt in sequence. Then pipe is used & then we used <b>sort</b> (Sorts lines of text in ascending order). Then using pipe we used uniq to Remove any duplicate lines from the sorted list, leaving only unique lines. -d option tells uniq to only print lines that are duplicated (i.e., lines that appear more than once in the input).
chmod 644 file.txt	Sets the permissions of the file script.sh to 644 <ul style="list-style-type: none"><li>• <b>Owner (User):</b> 6 i.e. 4+2(read and write)</li><li>• <b>Group:</b> 4 (read only)</li><li>• <b>Others:</b> 4 (read only)</li></ul>
cp -r source_directory destination_directory	Copied directory from source recursively to destination directory
find /path/to/search -name "*.txt"	To find the file / directory which has pattern like .txt
chmod u+x file.txt	User (u) will be granted permission to execute(+x) the file as a program or script of file.txt
echo \$PATH	Print the assigned value of the variable path. \$PATH is a environment variable that contains a colon-separated list of directories.

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cdac@DESKTOP-65K5N7N: ~
cdac@DESKTOP-65K5N7N:~$ echo "Hello,World"
Hello,World
cdac@DESKTOP-65K5N7N:~$ name="Productive"
cdac@DESKTOP-65K5N7N:~$ touch file.txt
cdac@DESKTOP-65K5N7N:~$ ls -a
.          .bashrc          .profile          Linux          asd          fruit.txt        spd
..         .cache          .sudo_as_admin_successful LinuxAssignment  asd.save        input.txt
.bash_history .local          Assignment        ShellProgramming asd.txt.save    nano.1013.save
.bash_logout .motd.shown    Demo.txt          abc.txt.save    file.txt        p1.save
cdac@DESKTOP-65K5N7N:~$ rm file.txt
cdac@DESKTOP-65K5N7N:~$ cp file1.txt file2.txt
cp: cannot stat 'file1.txt': No such file or directory
cdac@DESKTOP-65K5N7N:~$ touch file1.txt
cdac@DESKTOP-65K5N7N:~$ cp file1.txt file2.txt
cdac@DESKTOP-65K5N7N:~$ mv file.txt path/to/directory/
mv: cannot stat 'file.txt': No such file or directory
cdac@DESKTOP-65K5N7N:~$ touch file1.txt /path/to/directory/
touch: cannot touch '/path/to/directory/': No such file or directory
cdac@DESKTOP-65K5N7N:~$ mv file1.txt /LinuxAssignment
mv: cannot move 'file1.txt' to '/LinuxAssignment': Permission denied
cdac@DESKTOP-65K5N7N:~$ touch script.sh
cdac@DESKTOP-65K5N7N:~$ chmod 755 script.sh
cdac@DESKTOP-65K5N7N:~$ ls -l
total 52
drwxr-xr-x 2 cdac cdac 4096 Aug 28 18:30 Assignment
drwxr-xr-x 2 cdac cdac 4096 Aug 27 18:37 Demo.txt
drwxr-xr-x 2 cdac cdac 4096 Aug 28 18:30 Linux
drwxr-xr-x 3 cdac cdac 4096 Aug 29 20:17 LinuxAssignment
drwxr-xr-x 2 cdac cdac 4096 Aug 30 13:33 ShellProgramming
-rw-r----- 1 cdac cdac  1 Aug 27 18:35 abc.txt.save
-rw-r--r-- 1 cdac cdac  0 Aug 28 17:32 asd
-rw-r--r-- 1 cdac cdac  1 Aug 28 17:33 asd.save
-rw-r--r-- 1 cdac cdac 21 Aug 28 17:29 asd.txt.save
-rw-r--r-- 1 cdac cdac  0 Aug 30 21:25 file1.txt
-rw-r--r-- 1 cdac cdac  0 Aug 30 21:22 file2.txt
-rw-r--r-- 1 cdac cdac 63 Aug 29 22:48 fruit.txt
-rw-r--r-- 1 cdac cdac 61 Aug 29 22:26 input.txt
-rw-r----- 1 cdac cdac  1 Aug 29 18:12 nano.1013.save
-rw-r----- 1 cdac cdac  1 Aug 30 13:35 p1.save
-rwxr-xr-x 1 cdac cdac  0 Aug 30 21:29 script.sh
drwxr-xr-x 2 cdac cdac 4096 Aug 28 17:32 spd
cdac@DESKTOP-65K5N7N:~$ grep "pattern" file.txt
grep: file.txt: No such file or directory
cdac@DESKTOP-65K5N7N:~$ touch file.txt
cdac@DESKTOP-65K5N7N:~$ grep "pattern" file.txt
cdac@DESKTOP-65K5N7N:~$ kill PID
-bash: kill: PID: arguments must be process or job IDs
cdac@DESKTOP-65K5N7N:~$ kill file.txt
-bash: kill: file.txt: arguments must be process or job IDs
cdac@DESKTOP-65K5N7N:~$ mkdir mydir && cd mydir && touch file.txt && echo "Hello, World" > file.txt && cat file.txt
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cdac@DESKTOP-65K5N7N: ~  
-bash: kill: file.txt: arguments must be process or job IDs  
cdac@DESKTOP-65K5N7N:~$ mkdir mydir && cd mydir && touch file.txt && echo "Hello, World" > file.txt && cat file.txt  
Hello, World  
cdac@DESKTOP-65K5N7N:~/mydir$ ls -l | grep "^d"  
cdac@DESKTOP-65K5N7N:~/mydir$ cat file1.txt file2.txt | sort | uniq  
cat: file1.txt: No such file or directory  
cat: file2.txt: No such file or directory  
cdac@DESKTOP-65K5N7N:~/mydir$ touch file1.txt  
cdac@DESKTOP-65K5N7N:~/mydir$ touch file2.txt  
cdac@DESKTOP-65K5N7N:~/mydir$ cat file1.txt file2.txt | sort | uniq  
cdac@DESKTOP-65K5N7N:~/mydir$ nano file1.txt  
cdac@DESKTOP-65K5N7N:~/mydir$ nano file2.txt  
cdac@DESKTOP-65K5N7N:~/mydir$ cat file1.txt file2.txt | sort | uniq  
  
cdac  
d  
dilip  
ds  
ef  
f  
fre  
fs  
fw  
juhu  
kharghar  
pratik  
shahane  
wef  
wf  
xdfsdsd  
cdac@DESKTOP-65K5N7N:~/mydir$ ls -l | grep "^d"  
cdac@DESKTOP-65K5N7N:~/mydir$ grep -r "pra" /mydir  
grep: /mydir: No such file or directory  
cdac@DESKTOP-65K5N7N:~/mydir$ grep -r "Pattern" LinuxAssignment  
grep: LinuxAssignment: No such file or directory  
cdac@DESKTOP-65K5N7N:~/mydir$ grep -r "pattern" /mydir/  
grep: /mydir/: No such file or directory  
cdac@DESKTOP-65K5N7N:~/mydir$ cat file1.txt file2.txt | sort | uniq -d  
f  
wef  
cdac@DESKTOP-65K5N7N:~/mydir$ chmod 644 file.txt  
cdac@DESKTOP-65K5N7N:~/mydir$ ls -l  
total 12  
-rw-r--r-- 1 cdac cdac 13 Aug 30 21:40 file.txt  
-rw-r--r-- 1 cdac cdac 40 Aug 30 21:54 file1.txt  
-rw-r--r-- 1 cdac cdac 41 Aug 30 21:54 file2.txt  
cdac@DESKTOP-65K5N7N:~/mydir$ cp -r mydir LinuxAssignment  
cp: cannot stat 'mydir': No such file or directory  
cdac@DESKTOP-65K5N7N:~/mydir$ cd .  
cdac@DESKTOP-65K5N7N:~$ cp -r mydir LinuxAssignment
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cdac@DESKTOP-65K5N7N: ~  
wef  
cdac@DESKTOP-65K5N7N:~/mydir$ chmod 644 file.txt  
cdac@DESKTOP-65K5N7N:~/mydir$ ls -l  
total 12  
-rw-r--r-- 1 cdac cdac 13 Aug 30 21:40 file.txt  
-rw-r--r-- 1 cdac cdac 40 Aug 30 21:54 file1.txt  
-rw-r--r-- 1 cdac cdac 41 Aug 30 21:54 file2.txt  
cdac@DESKTOP-65K5N7N:~/mydir$ cp -r mydir LinuxAssignment  
cp: cannot stat 'mydir': No such file or directory  
cdac@DESKTOP-65K5N7N:~/mydir$ cd  
cdac@DESKTOP-65K5N7N:~$ cp -r mydir LinuxAssignment  
cdac@DESKTOP-65K5N7N:~$ find /LinuxAssignment -name "*.txt"  
find: '/LinuxAssignment': No such file or directory  
cdac@DESKTOP-65K5N7N:~$ nano LinuxAssignment  
cdac@DESKTOP-65K5N7N:~$ chmod u+x file.txt  
cdac@DESKTOP-65K5N7N:~$ ls -l  
total 56  
drwxr-xr-x 2 cdac cdac 4096 Aug 28 18:30 Assignment  
drwxr-xr-x 2 cdac cdac 4096 Aug 27 18:37 Demo.txt  
drwxr-xr-x 2 cdac cdac 4096 Aug 28 18:30 Linux  
drwxr-xr-x 4 cdac cdac 4096 Aug 30 22:12 LinuxAssignment  
drwxr-xr-x 2 cdac cdac 4096 Aug 30 13:33 ShellProgramming  
-rw-r--r-- 1 cdac cdac 1 Aug 27 18:35 abc.txt.save  
-rw-r--r-- 1 cdac cdac 0 Aug 28 17:32 asd  
-rw-r--r-- 1 cdac cdac 1 Aug 28 17:33 asd.save  
-rw-r--r-- 1 cdac cdac 21 Aug 28 17:29 asd.txt.save  
-rw-r--r-- 1 cdac cdac 0 Aug 30 21:34 file.txt  
-rw-r--r-- 1 cdac cdac 0 Aug 30 21:25 file1.txt  
-rw-r--r-- 1 cdac cdac 0 Aug 30 21:22 file2.txt  
-rw-r--r-- 1 cdac cdac 63 Aug 29 22:48 fruit.txt  
-rw-r--r-- 1 cdac cdac 61 Aug 29 22:26 input.txt  
drwxr-xr-x 2 cdac cdac 4096 Aug 30 21:54 mydir  
-rw-r--r-- 1 cdac cdac 1 Aug 29 18:12 nano.1013.save  
-rw-r--r-- 1 cdac cdac 1 Aug 30 13:35 pl.save  
-rw-r--r-- 1 cdac cdac 0 Aug 30 21:29 script.sh  
drwxr-xr-x 2 cdac cdac 4096 Aug 28 17:32 spd  
cdac@DESKTOP-65K5N7N:~$ echo $PATH  
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/usr/lib/wsl/lib:/mnt/c/Program Files/WindowsApps/CanonicalGroupLimited.Ubuntu.2204.3.49.0_x64_79rhkplfndgsc:/mnt/c/Program Files/Common Files/Oracle/Java/javapath:/mnt/c/Windows/system32:/mnt/c/Windows:/mnt/c/Windows/System32/Wbem:/mnt/c/Windows/System32/WindowsPowerShell/v1.0:/mnt/c/Windows/System32/OpenSSH:/mnt/c/MinGW/bin:/mnt/c/Program Files/dotnet:/mnt/c/Program Files/MySQL/MySQL Shell 8.0/bin:/mnt/c/Users/Admin/AppData/Local/Microsoft/WindowsApps:/mnt/c/Users/Admin/AppData/Local/Programs/Microsoft VS Code/bin:/snap/bin  
cdac@DESKTOP-65K5N7N:~$ nano file.txt  
cdac@DESKTOP-65K5N7N:~$ bash file.txt  
file.txt: line 1: path: command not found  
  
cdac@DESKTOP-65K5N7N:~$ nano file.txt  
cdac@DESKTOP-65K5N7N:~$
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