



Online Activity

Subject Code: CCS381

Subject Name: Operating Systems

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Using the Linux Command Line Interface (i.e., Terminal), do the following:

1. Create the following file-hierarchy

```
maram@fedora:~  
[maram@fedora ~]$ mkdir course0  
[maram@fedora ~]$ cd course0  
[maram@fedora course0]$ touch file0 file1 file2  
[maram@fedora course0]$ cd ..  
[maram@fedora ~]$ mkdir course1  
[maram@fedora ~]$ cd course1  
[maram@fedora course1]$ touch file0 file1 file2  
[maram@fedora course1]$ cd ..  
[maram@fedora ~]$ mkdir course2  
[maram@fedora ~]$ cd course2  
[maram@fedora course2]$ touch file0 file1 file2  
[maram@fedora course2]$ cd ..  
[maram@fedora ~]$ mkdir course3  
[maram@fedora ~]$ cd course3  
[maram@fedora course3]$ touch file0 file1 file2  
[maram@fedora course3]$ cd ..  
[maram@fedora ~]$ mkdir course4  
[maram@fedora ~]$ cd course4  
[maram@fedora course4]$ touch file0 file1 file2  
[maram@fedora course4]$ cd ..  
[maram@fedora ~]$
```

2. Change the files permissions so all files have the following permissions
-rwxr-xr-x

```
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:53 file0  
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:53 file1  
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:53 file2  
[maram@fedora course0]$ cd ..  
[maram@fedora ~]$ cd course1  
[maram@fedora course1]$ chmod 755 file0 file1 file2  
[maram@fedora course1]$ ls -l  
total 0  
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:54 file0  
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:54 file1  
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:54 file2  
[maram@fedora course1]$ cd ..  
[maram@fedora ~]$ cd course2  
[maram@fedora course2]$ chmod 755 file0 file1 file2  
[maram@fedora course2]$ ls -l  
total 0  
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:54 file0  
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:54 file1  
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:54 file2  
[maram@fedora course2]$ cd ..  
[maram@fedora ~]$ cd course3  
[maram@fedora course3]$ chmod 755 file0 file1 file2  
[maram@fedora course3]$ ls -l  
total 0  
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:55 file0  
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:55 file1  
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:55 file2  
[maram@fedora course3]$ cd ..  
[maram@fedora ~]$ cd course4  
[maram@fedora course4]$ chmod 755 file0 file1 file2  
[maram@fedora course4]$ ls -l  
total 0  
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:55 file0  
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:55 file1  
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:55 file2  
[maram@fedora course4]$ cd ..  
[maram@fedora ~]$
```

For example, the file “file1” would be changed to “2021-11-23-file1”.

[illegible]

4. Write a shell script named checkType.sh that accept name of a file or directory as argument and reports if it is a regular file, a directory, or another type of file. Also perform a ls command against the file or directory with the long listing option.



The screenshot displays a Linux desktop environment. The top window is a text editor titled 'maram@fedora:~ — /usr/libexec/vi checktype.sh'. It contains the following shell script code:

```
passed=$1

if [ -f $passed ];then
echo "$passed is a regular file"
elif [ -d $passed ];then
echo "$passed is a directory"
else
echo "$passed not a regular file or directory"
fi

ls -l $passed
```

The bottom window is a terminal titled 'maram@fedora:~'. It shows the execution of the script:

```
[maram@fedora ~]$ vi checktype.sh
[maram@fedora ~]$ chmod 751 checktype.sh
[maram@fedora ~]$ ./checktype.sh course0
course0 is a directory
total 0
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:53 file0
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:53 file1
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:53 file2
[maram@fedora ~]$ ./checktype.sh course0/file0
course0/file0 is a regular file
-rwxr-xr-x. 1 maram maram 0 Nov 26 03:53 course0/file0
[maram@fedora ~]$
```