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OS EXPERIMENT - 2

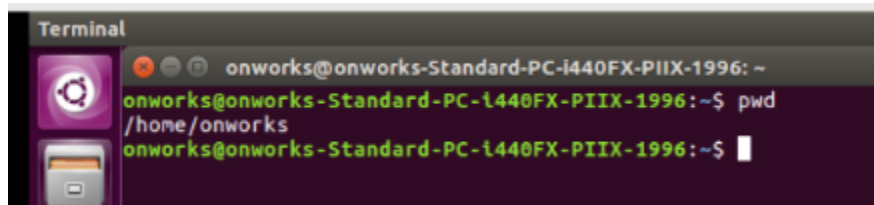
Aim- System calls for file manipulation

Problem Statement – Try different file manipulation operations provided by linux

Theory:

1.pwd Command

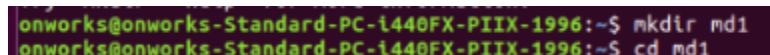
pwd, short for the print working directory, is a command that prints out the current working directory in a hierarchical order, beginning with the topmost root directory (/). To check your current working directory, simply invoke the pwd command as shown. \$ pwd

A terminal window titled "Terminal" with a dark background. The prompt is "onworks@onworks-Standard-PC-i440FX-PIIX-1996: ~". The user enters "pwd" and the output is "/home/onworks". The prompt then changes to "onworks@onworks-Standard-PC-i440FX-PIIX-1996:~\$".

```
Terminal
onworks@onworks-Standard-PC-i440FX-PIIX-1996: ~
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ pwd
/home/onworks
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$
```

2. mkdir Command

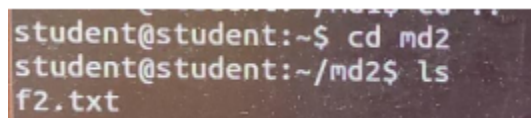
You might have wondered how we created the tutorials directory. Well, it's pretty simple. To create a new directory use the mkdir (make directory) command as follows: \$ mkdir directory_name

A terminal window showing the execution of mkdir and cd commands. The prompt is "onworks@onworks-Standard-PC-i440FX-PIIX-1996:~\$". The user enters "mkdir md1" and the prompt changes to "onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/md1\$".

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ mkdir md1
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/md1$
```

3. ls Command

The ls command is a command used for listing existing files or folders in a directory. For example, to list all the contents in the home directory, we will run the command. \$ ls

A terminal window showing the execution of cd and ls commands. The prompt is "student@student:~\$". The user enters "cd md2" and the prompt changes to "student@student:~/md2\$". Then the user enters "ls" and the output is "f2.txt".

```
student@student:~$ cd md2
student@student:~/md2$ ls
f2.txt
```

4. cd Command

To change or navigate directories, use the cd command which is short for change directory. For instance, to navigate to particular directory run the command: \$ cd directory_name To go a directory up append two dots or periods in the end. \$ cd .. To go back to the home directory run the cd command without any arguments. \$ cd

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996: ~/md1
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ mkdir md1
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ cd md1
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/md1$
```

5. rmdir Command

The rmdir command deletes an empty directory. For example, to delete or remove the tutorials directory, run the command: `$ rmdir tutorials2`

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ mkdir md1
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ cd md1
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/md1$ cd ..
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ rmdir md1
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$
```

6. touch Command

The touch command is used for creating simple files on a Linux system. To create a file, use the syntax: `$ touch filename` For example, to create a file1.txt file, run the command: `$ touch file1.txt`

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ mkdir md1
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ cd md1
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/md1$ touch f1.txt
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/md1$
```

7. cat Command

To view the contents of a file, use the cat command as follows: `$ cat filename`

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/md1$ cat f1.txt
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/md1$ cat f1.txt
Today is a great day
```

8. mv Command

The mv command is quite a versatile command. Depending on how it is used, it can rename a file or move it from one location to another. To move the file, use the syntax below: `$ mv filename /path/to/destination/`

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/md1$ mkdir md2
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/md1$ touch f2.txt
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/md1$ ls
f2.txt  md2
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/md1$ mv md2 md1
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/md1$ ls
f2.txt  md1
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/md1$
```

9. cp Command

The cp command, short for copy, copies a file from one file location to another. Unlike the move command, the cp command retains the original file in its current location and makes a duplicate copy in a different directory. The syntax for copying a file is shown below. `$ cp /file/path /destination/path`

```
onworks@onworks-Standard-PC-l440FX-PIIX-1996:~/nd2$ ls
f1.txt
onworks@onworks-Standard-PC-l440FX-PIIX-1996:~/nd2$ cp ./f1.txt ../F.txt
onworks@onworks-Standard-PC-l440FX-PIIX-1996:~/nd2$ ls
f1.txt
onworks@onworks-Standard-PC-l440FX-PIIX-1996:~/nd2$ ls nd1
```

10.rm Command

Deleting a File rm command could be used to delete a file. It will remove the filename file from the directory. \$rm filename

```
onworks@onworks-Standard-PC-l440FX-PIIX-1996:~/dir$ ls
onworks@onworks-Standard-PC-l440FX-PIIX-1996:~/dir$ touch dir.txt
onworks@onworks-Standard-PC-l440FX-PIIX-1996:~/dir$ ls
dir.txt
onworks@onworks-Standard-PC-l440FX-PIIX-1996:~/dir$ rm dir.txt
onworks@onworks-Standard-PC-l440FX-PIIX-1996:~/dir$ ls
onworks@onworks-Standard-PC-l440FX-PIIX-1996:~/dir$
```

Conclusion: Thus, we studied various linux commands.