

Definition of the following Common File Management Commands

1. `mkdir`

Usage: The `mkdir` command is used to create new directories.

Formula:

```
mkdir [OPTION] DIRECTORY_NAME
```

Examples:

- Create a single directory:

```
mkdir new_directory
```

- Create multiple directories at once:

```
mkdir dir1 dir2 dir3
```

- Create a parent directory and its child directories:

```
mkdir -p parent_directory/child_directory
```

2. `touch`

Usage: The `touch` command is used to create an empty file or update the timestamp of an existing file.

Formula:

```
touch [OPTION] FILE_NAME
```

Examples:

- Create a new empty file:

```
touch file1.txt
```

- Create multiple files at once:

```
touch file2.txt file3.txt file4.txt
```

3. `rm`

Usage: The `rm` command is used to remove files or directories.

Formula:

```
rm [OPTION] FILE_NAME
```

Examples:

- Remove a single file:

```
rm file1.txt
```

- Remove multiple files at once:

```
rm file2.txt file3.txt
```

- Remove a directory and its contents recursively:

```
rm -r directory_name
```

4. `rmdir`

Usage: The `rmdir` command is used to remove *empty* directories.

Formula:

```
rmdir [OPTION] DIRECTORY_NAME
```

Examples:

- Remove an empty directory:

```
rmdir empty_directory
```

- Remove multiple empty directories at once:

```
rmdir dir1 dir2
```

5. `mv`

Usage: The `mv` command is used to move files and directories. If the directory does not exist it will get created.

Formula:

```
mv [OPTION] SOURCE DESTINATION
```

Examples:

- Move a file to a different directory:

```
mv file1.txt ~/Documents/
```

- Rename a file:

```
mv old_name.txt new_name.txt
```

- Move multiple files to a directory:

```
mv file1.txt file2.txt ~/Documents/
```

- Rename a Directory:

```
mv ~/Downloads/directory_name ~/cis106/labs/non_existing_dir
```

6. `cp`

Usage: The `cp` command is used to copy files and directories.

Formula:

```
cp [OPTION] SOURCE DESTINATION
```

Examples:

- Copy a file to a new location:

```
cp file1.txt ~/Documents/
```

- Copy multiple files to a directory:

```
cp file1.txt file2.txt ~/Documents/
```

- Copy a directory and its contents recursively:

```
cp -r directory_name/ ~/Backup_directory/
```

7. file

Usage: The `file` command is used to determine the type of a file.

Formula:

```
file [OPTION] FILE_NAME
```

Examples:

- Determine the type of a single file:

```
file file1.txt
```

- Check the type of multiple files:

```
file file1.txt file2.jpg
```

- Check the type of a directory:

```
file directory_name
```