**UNIT- II: The Linux File System, File and Directory management**

**Assignment 2.2**

Use the directory structure created in the previous assignment 2.1 to solve the following problems.

Make <YourRollNo> as the current working directory.

1. Create empty files – emp1, emp2, emp3, emp4, emp5 in your current working directory.

touch emp1 emp2 emp3 emp4 emp5

1. Add employee information (emp no, name, salary) to file emp1 using cat command.

cat > test.txt <<NeverGonnaGiveYouUp

69420,Rick Astley,66666

NeverGonnaGiveYouUp

1. Delete the files emp2, emp3, emp4. Ask the user permission before deleting each file.

rm -i emp2 emp3 emp4

1. Write a command to delete files beginning with character ‘a’ in your CWD, ask the user permission before deleting the files.

rm -i a\*

1. Create a file “dcst” in directory M1 to store the description of the department computer science.

# assuming we are in the roll no directory

touch b1/m1/dcst

1. Create a copy of the file “dcst” and name it “newdcst” to the directory L2.

# assuming L2 is not created and would be on the same level as b1 b2 and b3

mkdir -p l2

cp b1/m1/dcst l2/newdcst

##### { if L2 is a spelling mistake or was intended to refer to M2 then use below} #####

cp b1/m1/dcst b1/m2/newdcst

1. Create a file “unigoa” under directory Dir & place description of the university in it.

# assuming that the directory “Dir” is to be placed at the root level of mca\_18 directory

mkdir -p Dir

cat > Dir/unigoa <<RickAstley

Goa University is a university that is in goa and it promises the following

never gonna give you up

never gonna let you down

never gonna turn around and desert you

never gonna make you cry

never gonna say goodbye

just gonna keep cockroaches and hurt you

RickAstley

1. Merge the contents of “dcst” & “unigoa” into a file “unigoa-dcst”

cat b1/m1/dcst Dir/goauni > unigoa-dcst # this file will reside in the root dir aka insde mca\_18

1. Delete the file “newdcst”

rm b1/m2/newdcst

Make Dir as your current working directory

cd Dir/

1. Rename the file “dcst” to “dcst1”

mv ../b1/m1/dcst ../b1/m1/dcst1

1. Write a command to delete all files starting with “abc” in directory L1, except the file “abc” itself.

# assuming L1 is at the root along with other Ds

# subshell to move to L1

(

cd ../l1

find . -maxdepth 1 -name "abc\*" -not -name 'abc' -type f -delete

)

1. Delete the files in directory M1 whose name begins with the letter D and ends with T.

# subshell to move to m1

(

cd ../b1/m1

find . -maxdepth 1 -type f -name “d?\*t” -delete

)

1. Delete the files in directory M2 which contain exactly 3 letters in the file name.

# subshell to move to m2

(

cd ../b1/m2

find . -maxdepth 1 -type f -name “???” -delete

)

1. Copy the files in directory M3, beginning with D, and have 5 letters in their file name to a new directory D1 (D1 to be created under your current working directory).

mkdir -p d1 # d1 will be under the Dir directory

# subshell to move to m3

(

cd ../b1/m3

find . -maxdepth 1 -type f -name “d????” -exec cp {} ../../Dir/d1 \;

)

1. Delete the files beginning with the letter S from the parent directory.

# subshell to move to parent

(

cd ..

find . -maxdepth 1 -type f -name “s?\*” -delete

)

1. Copy the files from the directory M1 which contain exactly 3 letters in their file name to its parent directory.

# subshell to move to M1 and stop worrying about the world ( actually directory structure )

(

cd ../b1/m1

find . -maxdepth 1 -type f -name “???” -exec cp {} ..\;

)

1. Copy the entire directory structure of Dir to Dir2, such that Dir becomes the sub-directory of Dir2.

# subshell to forget about lief 😔

# atleast subshell isn’t as confusing as the directories in this question 😔

# lief would be so confusing without subshells and coffee and rick ofc 😔

(

cd ..

mkdir -p Dir2

cp -r Dir1 Dir2

)

1. Create the following directory structure: A/B/E/F A/C/G A/D under <YourRollNo>. Assume you are working in directory F. Create a file content.txt in directory D and then move the file to directory C.

# assuming that this directory structure is to be created in the root

# subshell to not make it confusing 😔

(

cd .. # yay we are in the root ( mca\_18 )

mkdir -p a/b/e/f

mkdir -p a/c/g

mkdir -p a/d

# well well did you not expect another subshell 🙂?

# there ya go another subshell to assume work in directory f 😔

(

cd a/b/e/f/

echo “ 😔 😔 😔 😔 Dark souls “ > ../../../d/content.txt

cp ../../../d/content.txt ../../../c/

)

)

1. Assume you are working in directory F to solve the following. Create some files in the current working directory.
2. Move the files having vowels in their file name to a new directory ABC.

# create a new dir abc

mkdir -p abc

find . -maxdepth 1 -type f -name "?\*[aeiou]?\*" -exec mv {} ./abc/ \;

1. Delete the files which have at least one digit in their file name.

find . -maxdepth 1 -type f -name "?\*[0-9]?\*" -delete

1. Delete the files which have exactly 4 letters in their name.

find . -maxdepth 1 -type f -name "????" -delete

1. Move the files which begin with a digit to directory A.

find . -maxdepth 1 -type f -name “[0-9]?\*” -exec mv {} ../../../ \;

1. Copy all the files in the current working directory to directory B.

find . -maxdepth 1 -type f -exec cp {} ../../../b \;