Concepts of Operating System

Part A

What will the following commands do?

echo "Hello, World!"

Answer:- Print Hello, World! on the screen

name="Productive"

Answer:- Productive is stored in name

touch file.txt

Answer:- It creates an empty file with name file.txt

ls -a

Answer:- it is used to show all the files and directories including hidden once

rm file.txt

Answer:- rm is used to delete file so file.txt will be deleted

cp file1.txt file2.txt

Answer:- cp is used to copy content from one file to another file so here content of file1.txt is copied to file2.txt

mv file.txt /path/to/directory/

Answer:- Its is used to move file1.txt to another specific directory

chmod 755 script.sh

Answer:- It is used to change the permission of the file so 755 means owner gets RWE, group gets RE and other gets RE

grep "pattern" file.txt

Answer:- It is used to search the pattern word in file.txt and print that sentence

kill PID

Answer:- It is used to terminate the process with specific process id

mkdir mydir && cd mydir && touch file.txt && echo "Hello, World!" > file.txt && cat file.txt

Answer:- here new directory is created with name mydir then opened that directory and create a file with name file.txt and prints some text inside it Hello, World! and opened that file

ls -l | grep ".txt"

Answer:- is shows all the .txt files inside the current directory with detailed information about it

cat file1.txt file2.txt | sort | uniq

Answer:- Print the combination of two files with sorting and with no duplication

ls -l | grep "^d"

Answer:- it shows all the directory in current directory

grep -r "pattern" /path/to/directory/

Answer:- it search for pattern inside all the files within /path/to/directory/ this path and its subdirectories

cat file1.txt file2.txt | sort | uniq –d

Answer:- it search and display duplicate lines that appear in both files file1.txt and file2.txt

chmod 644 file.txt

Answer:- It changes the RWE permission of the file 644 means owner gets RW, group gets R and other gets R permission

cp -r source_directory destination_directory

Answer:- It recursively copies the entire source directory to destination directory

find /path/to/search -name "*.txt"

Answer:- Search for all .txt file in /path/to/search this path and its sub directories

chmod u+x file.txt

Answer:- gives the user execute permissions to the file

echo $PATH

Answer:- It displays the current value of path environment variable