

CSE 4510: Operating System Laboratory

Offline-1 sec:C Total: 20 marks

Please do not copy codes from others/the internet. Each of the offline assignments will be evaluated with a viva. You must be able to explain your code. Any plagiarism will be severely penalized.

Replace 01119xxxx with your student ID

Question-1 [7 marks]

Create a bash file and rename it as 01119xxx_1.sh.

Write a shell program in this file that will compute the sum of numbers taken from the users.

- User can give inputs as arguments while running the bash script
- If no arguments are given, then prompt the user to enter n numbers (n will also be user input) and then compute the sum of the numbers.

Expected output:

```
seed@VM:~/.../f2$ ./c.sh 12 14 10
sum: 36
seed@VM:~/.../f2$ ./c.sh
enter n
4
enter number 1:
1
enter number 2:
3
enter number 3:
4
enter number 4:
12
sum: 20
```

Question-2 [8 marks]

Create a bash file and rename it as 01119xxx_2.sh.

Write a shell program in this file that will take n filenames (n will also be user input) and determine the file type observing the file extension. You have to identify the following file types

Filename extension	File type
.pdf	Pdf file
.txt	Text file
.jpg / .jpeg / .png	Image file
.c	C file

Any other files will be considered as another type of file.

Expected output:

```
seed@VM:~/.../f2$ ./c2.sh
enter total file:
7
enter file name:
myfile.jpg
image file
enter file name:
a.c
c file
enter file name:
pdf.txt
Text file
enter file name:
file.pdf
pdf file
enter file name:
bash.sh
another type of file
enter file name:
myfile
another type of file
enter file name:
myfile.txt.png
image file
```

Question-3 [5 marks]

- i. You will be given 2 input files named file1.txt and file2.txt. Download these 2 files (which will be downloaded in Download folder).
- ii. Open a terminal and navigate to Document folder.
- iii. Create a folder named “myfolder” in this directory and navigate to “myfolder”.
- iv. Now copy those 2 files previously downloaded in the “myfolder”.
- v. Give command which will show all the files in “myfolder”.
- vi. Create a new text file “newfile.txt”
- vii. Copy the contents of file1.txt and file2.txt into newfile.txt.
- viii. Read newfile.txt.
- ix. Append a text “This line is newly added” in newfile.txt and read the file again.
- x. Change the permission of newfile.txt such that only owner will have all permissions (read, write and execute) and all others will have only read permission.
- xi. Now, delete “myfolder” with all the files resided into it.
- xii. Finally, output the history commands(only your commands for this question) into 01119xxxx_3.txt.

Submission Guideline:

- Create a folder and rename it with your student ID.
- Put all 3 files (01119xxxx_1.sh, 01119xxxx_2.sh, 01119xxxx_3.txt) into the folder. Zip the folder and submit it.

Submission deadline: 10 october,2023 11 PM.