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2022-BSE-064

Group#B

Operating system

LAB#04

Submitted to Sir shahzad

Task 1:

Write shell script as follows:

```
cat > trmif
#
# Script to test rm command and exist status
#
if rm $1
then
echo "$1 file deleted"
fi
```

Press Ctrl + d to save

\$ chmod 755 trmif

Answer the following question in reference to above script:

1. foo file exists on your disk and you give command, **\$./trmfi foo** what will be output? 2. If bar file not present on your disk and you give command, **\$./trmfi bar** what will be output? 3. And if you type **\$./trmfi** What will be output?

Solution:

fjwu@DESKTOP-5LTQKNI: ~

Windows Subsystem for Linux is now available in the Microsoft Store!
You can upgrade by running 'wsl.exe --update' or by visiting <https://aka.ms/wslstorepage>
Installing WSL from the Microsoft Store will give you the latest WSL updates, faster.
For more information please visit <https://aka.ms/wslstoreinfo>

```
fjwu@DESKTOP-5LTQKNI:~$ cat > trmif
#!/bin/bash
fjwu@DESKTOP-5LTQKNI:~$ cat > trmif
if rm $1
then
echo "$1 file deleted"
fifjwu@DESKTOP-5LTQKNI:~$ chmod 755 trmif
fjwu@DESKTOP-5LTQKNI:~$ cat > foo
1020 we are in file foo
fjwu@DESKTOP-5LTQKNI:~$ ./trmif foo
foo file deleted
fjwu@DESKTOP-5LTQKNI:~$
```

```
fjwu@DESKTOP-5LTQKNI:~$ ./trmif bar
rm: cannot remove 'bar': No such file or directory
fjwu@DESKTOP-5LTQKNI:~$
```

```
fjwu@DESKTOP-5LTQKNI:~$ ./trmif
rm: missing operand
Try 'rm --help' for more information.
fjwu@DESKTOP-5LTQKNI:~$
```

Task 2:

Task 2:

Write a shell script that computes the gross salary of an employee according to the following:

- 1) if basic salary is <1500 then HRA=10% of the basic salary.
- 2) if basic salary is >1500 then HRA=20% of the basic salary.

Solution:

```
fjwu@fjwu-VirtualBox:~$ nano sal.sh
fjwu@fjwu-VirtualBox:~$ bash sal.sh
enter basic salary
1200
HRA=10% of basic salary:
fjwu@fjwu-VirtualBox:~$ nano sal.sh
fjwu@fjwu-VirtualBox:~$ bash sal.sh
enter basic salary
1900
sal.sh: line 10: echo HRA=20% of basic salary
sal.sh: line 11: echo gross salary=basic salary
fjwu@fjwu-VirtualBox:~$
```

```
GNU nano 7.2                                     sal.sh
#!/bin/bash
echo "enter basic salary"
read a

if [ "$a" -lt 1500 ]
then
echo "HRA=10% of basic salary:"
if [ "$a" -gt 1500 ]
then
echo" HRA=20% of basic salar"
echo" gross salary=basic salary +HR"
fi
fi
```

Task 3

Task 3:

Write a shell script to ADD two numbers taken from argument?

Note: show error if no argument or more than 2 arguments are passed

\$./ADD 5 6

Output : Sum of 5 and 6 = 5+6 = 11

```
fjwu@fjwu-VirtualBox:~$ nano add
fjwu@fjwu-VirtualBox:~$ bash add
enter two numbers
2
3
result
5
fjwu@fjwu-VirtualBox:~$
```

```
GNU nano 7.2
#!/bin/bash
num1=0
num2=0
echo "enter two numbers"
read num1
read num2
echo "result"
expr $num1 + $num2
```

Task 4:

TASK#3:

Write a program that will displays the fibanocaii series of any given number. Take the limit from the user

```
fjwu@ubuntu:~$ sh fib.sh
How many number of terms to be generated ?
15
fib.sh: 3: fib.sh: function: not found
Fibonacci Series up to 15 terms :
0
1
1
2
3
5
8
13
21
34
55
89
144
233
377
```

```
echo "How many number of terms to be generated ?"
read n
function fib
{
    x=0
    y=1
    i=2
    echo "Fibonacci Series up to $n terms :"
    echo "$x"
    echo "$y"
    while [ $i -lt $n ]
    do
        i=`expr $i + 1 `
        z=`expr $x + $y `
        echo "$z"
        x=$y
        y=$z
    done
}
r=`fib $n`
echo "$r"
```