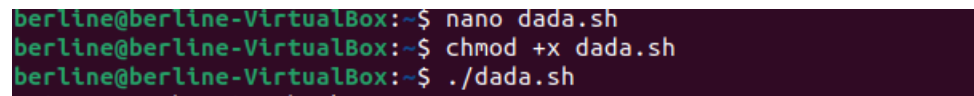Please Refer to the slides for week-8-Shell scripting and write shell scripts to complete the following tasks. Submit the screenshot for the script and its output, both.

NOTE: Please replace the name of the script with the name you used for the script. In the sample screenshot, I have used those names to create my script.

Step-1: Use vi or nano editor to write your script (Ex, nano YourScriptName.sh) for the following tasks.

Step-2: After saving the script, save and exit out of the editor and make the script executable by adding execute permission (chmod +x YourScriptName.sh)

Step-3: Run your script using ./YourScriptName.sh

```
berline@berline-VirtualBox:~$ nano dada.sh
berline@berline-VirtualBox:~$ chmod +x dada.sh
berline@berline-VirtualBox:~$ ./dada.sh
```

Task A (Correct script (25 points) + result/output after executing the script (25 points)- Conditional Statement

Write a shell script using nano or vi editor (eg, nano scriptname.sh) like below, that performs the following task:

1. Add the Shebang (#!/bin/bash) as the first line in your script.

2. Read a number using read function

3. Using if statement, check if the input number is less than 10, then print the message "Input number is greater than 10.

4. If the number is not greater than 10, then print the message, "Input number is not greater than 10.

(Your script should result into the output similar to this sample screenshot after executing as shown below)

```
  GNU nano 6.2                              dada.sh
#!/bin/bash

echo "Enter the number to check."
read num

if [ $num -gt 10 ]
then
        echo "Input number is greater than 10."
else
        echo "Input number is not greater than 10"
fi
```

```
berline@berline-VirtualBox:~$ nano dada.sh
berline@berline-VirtualBox:~$ chmod +x dada.sh
berline@berline-VirtualBox:~$ ./dada.sh
Enter the number to check.
9
Input number is not greater than 10
berline@berline-VirtualBox:~$ ./dada.sh
Enter the number to check.
11
Input number is greater than 10.
berline@berline-VirtualBox:~$
```

Task B (Correct script (25 points) + result/output after executing the script (25

points) - Shell Script to Create a new file

Write a shell script using nano or vi editor (eg, nano scriptname.sh) like below, that performs

the following task:

1. Add the Shebang (#!/bin/bash) as the first line in your script.

2. Reads the name of the file to check for a filename that exists.

3. Check whether the given input is a directory or regular file.

4. If the input is a directory and exists, then display the message "Directory exists".

5. If the input is a regular file, then display the message "It is a regular file, and the file

exists" and display the contents of the file.

6. If the given input name in step-1 doesn't exist, then create the new file with the given

```bash
#!/bin/bash

echo "Enter a filename to check:"
read filename

if [ -d "$filename" ]
then
        echo "Directory exits"
elif [ -f "$filename" ]
then
        echo "It is a regular file, and the file exist"
        echo "The content of the file are:"
        cat "$filename"
else
        touch "$filename"
        echo "File $filename created"
fi
```

```
berline@berline-VirtualBox:~$ nano berl.sh
berline@berline-VirtualBox:~$ chmod +x berl.sh
berline@berline-VirtualBox:~$ ./berl.sh
Enter a filename to check:
data
Directory exits
berline@berline-VirtualBox:~$ ./berl.sh
Enter a filename to check:
lab-8.txt
It is a regular file, and the file exist
The content of the file are:
Berline's file
berline@berline-VirtualBox:~$ ./berl.sh
Enter a filename to check:
file23
File file23 created
```

name in step-1.

(Extra credit: 10 points) Add your name to the file (using redirection operator '>') and display

the contents for the newly created file.

7. Save and exit the editor and remember to make the script executable using the

command chmod +x scriptname.sh)

(Your script should result into the output similar to this sample screenshot after executing as

shown below)

Extra Credit(15 points)- Check Directory

Write a script like below that

1. Reads Two variables- your name and the name of the directory as input.

```
  GNU nano 6.2                          lab-exta.sh
#!/bin/bash

echo "Enter your name:"
read name
echo "Enter the name of the directory you want to check:"
read dir

if [ -d "$dir" ]
then
        echo "Directory $dir exists"
        echo "Below are the contents file in the directory with name $dir:"
        ls -l "$dir"
else
        echo "Sorry $name, the entered directory name is not a valid directory"
fi
```

2. Your script should check for the validity of the given directory name, if the entered

filename is a directory, then display its contents

3. If the directory doesn't exist, then print an error message "Sorry, the entered directory

name is not a valid directory name."

4. You need to execute your script and test the following directories to test with your

script

• /etc/system

```
berline@berline-VirtualBox:~$ nano lab-exta.sh
berline@berline-VirtualBox:~$ chmod +x lab-exta.sh
berline@berline-VirtualBox:~$ ./lab-exta.sh
Enter your name:
Berline
Enter the name of the directory you want to check:
/etc/systemd
Directory /etc/systemd exists
Below are the contents file in the directory with name /etc/systemd:
total 52
-rw-r--r--  1 root root 1282 Apr   7  2022 journald.conf
-rw-r--r--  1 root root 1374 Apr   7  2022 logind.conf
drwxr-xr-x  2 root root 4096 Apr   7  2022 network
-rw-r--r--  1 root root  846 Mar 11  2022 networkd.conf
-rw-r--r--  1 root root  804 Mar 11  2022 oomd.conf
-rw-r--r--  1 root root  670 Mar 11  2022 pstore.conf
-rw-r--r--  1 root root 1406 Apr   7  2022 resolved.conf
-rw-r--r--  1 root root  931 Mar 11  2022 sleep.conf
drwxr-xr-x 20 root root 4096 Mar   6 18:44 system
-rw-r--r--  1 root root 1993 Apr   7  2022 system.conf
-rw-r--r--  1 root root  748 Apr   7  2022 timesyncd.conf
drwxr-xr-x  7 root root 4096 Jan 11 16:20 user
-rw-r--r--  1 root root 1394 Apr   7  2022 user.conf
```

• /home

```
berline@berline-VirtualBox:~$ ./lab-exta.sh
Enter your name:
Berline
Enter the name of the directory you want to check:
/home
Directory /home exists
Below are the contents file in the directory with name /home:
total 52
drwxr-x--- 16 berline   berline   4096 Mar 26 19:50 berline
drwxr-x---  2 bnaja001  bnaja001  4096 Feb  6 17:27 bnaja001
drwxr-x---  2 bnaja01   bnaja01   4096 Feb  6 19:32 bnaja01
drwxr-x---  2 carl      carl      4096 Feb 13 14:41 carl
drwxrwx--T  2 root      bnaja001  4096 Feb 26 22:21 cyse_projet
drwxr-x---  2 Dada      Dada      4096 Feb 13 14:50 Dada
drwxr-x---  2 Emma      Emma      4096 Feb 26 21:16 Emma
drwxr-x---  2 leyla     leyla     4096 Feb 13 14:47 leyla
drwxr-x---  2 mey       mey       4096 Feb 13 14:49 mey
drwxr-x---  2 nene      nene      4096 Feb 13 14:52 nene
drwxr-x---  2 Olivia    Olivia    4096 Feb 26 22:23 Olivia
drwxr-x---  2 seby      seby      4096 Feb 13 14:54 seby
drwxr-x---  2 Sophia    Sophia    4096 Feb 26 21:16 Sophia
```

• A directory that does not exist

```
berline@berline-VirtualBox:~$ ./lab-exta.sh
Enter your name:
Berline
Enter the name of the directory you want to check:
desktop
Sorry Berline, the entered directory name is not a valid directory
berline@berline-VirtualBox:~$
```

Display the contents for the directories you have entered

(See the screenshot below where the script has been executed 3 times to check for the Three

different directory names as the test input