

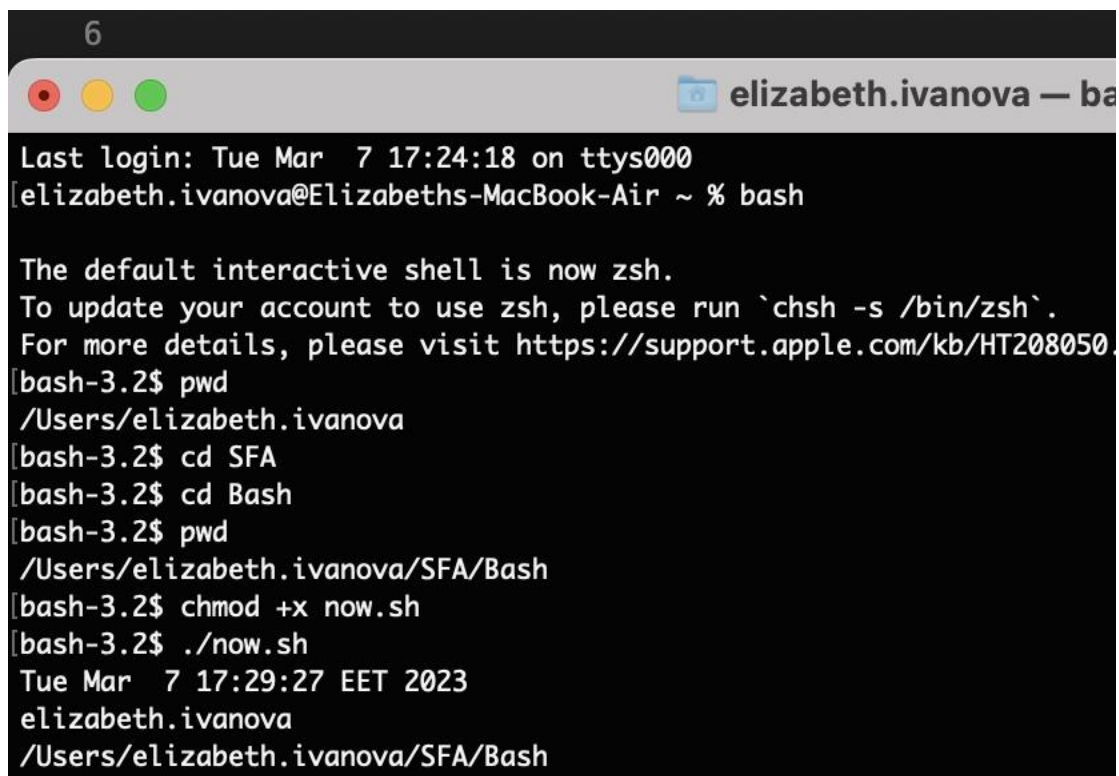
SFA Homework #6

Elizabeth Ivanova

All shell scripts are uploaded to my GitHub but I am also showing their copies here

Everything was done on my personal Mac; the Linux virtual machine I was using was pushing my computer to its limits. I will complete the tasks on Linux as well in the upcoming days and will upload them to GitHub.

1. Write a shell script to get the current date, time, username and current working directory.

A screenshot of a macOS terminal window. The title bar shows the window number '6' and the user 'elizabeth.ivanova'. The terminal text shows the user logging in, switching to bash, changing directories to SFA and then Bash, and running a script named now.sh. The output of the script shows the current date, time, username, and working directory.

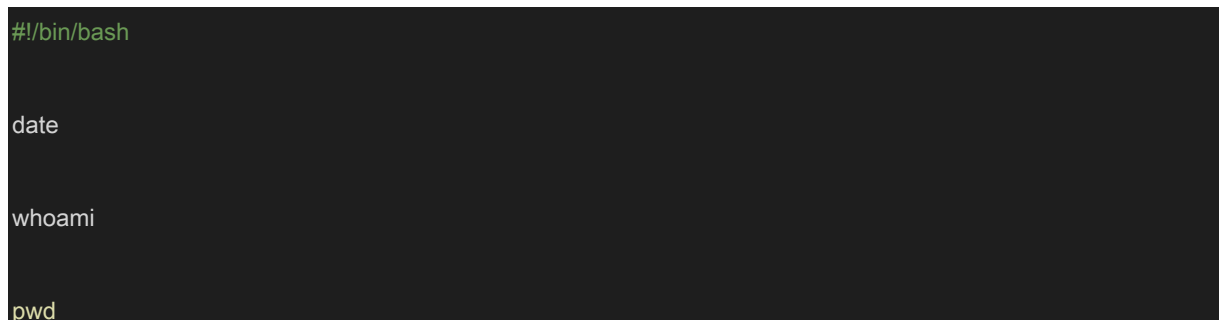
```
6
elizabeth.ivanova — ba

Last login: Tue Mar  7 17:24:18 on ttys000
[elizabeth.ivanova@Elizabets-MacBook-Air ~ % bash

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
[bash-3.2$ pwd
/Users/elizabeth.ivanova
[bash-3.2$ cd SFA
[bash-3.2$ cd Bash
[bash-3.2$ pwd
/Users/elizabeth.ivanova/SFA/Bash
[bash-3.2$ chmod +x now.sh
[bash-3.2$ ./now.sh
Tue Mar  7 17:29:27 EET 2023
elizabeth.ivanova
/Users/elizabeth.ivanova/SFA/Bash
```

Here, I am switching to bash because it is not my default shell. Then, I change the directory to the folder Bash in SFA and I use pwd to make sure I've arrived at that directory. After that, I use chmod +x to make the file now.sh executable. Then, I execute it and the output is all there.

Script:

A screenshot of a text editor showing the content of a shell script. The script starts with a shebang line and then contains four commands: date, whoami, and pwd.

```
#!/bin/bash

date

whoami

pwd
```

2. Write a shell script that prints “I love learning about DevOps” on the screen. Message should be a variable.

```
[bash-3.2$ chmod +x print.sh  
[bash-3.2$ ./print.sh  
I love learning about DevOps
```

Script:

```
#!/bin/bash  
  
msg="I love learning about DevOps"  
echo $msg
```

3. Write a shell script that displays “plan code build test release deploy” on the screen with each appearing on a separate line.

```
[bash-3.2$ chmod +x devops.sh  
[bash-3.2$ ./devops.sh  
plan\ncode\nbuild\ntest\nrelease\ndeploy  
[bash-3.2$ ./devops.sh  
plan  
code  
build  
test  
release  
deploy
```

Here, my first output was incorrect because I was missing the -e flag in my statement. After I put it, the output was correct.

Script:

```
#!/bin/bash
```

```
echo -e "plan\ncode\nbuild\ntest\nrelease\ndeploy"
```

4. Write a shell script that prompts the user for a name of a file or directory and reports if it is a regular file, a directory, or another type of file. Also perform a ls command against the file or directory with the long listing option.

```
deploy
[bash-3.2$ chmod +x filename.sh
[bash-3.2$ ./filename.sh
Enter a file or directory name: now.sh
now.sh is a regular file
-rwxr-xr-x 1 elizabeth.ivanova staff 32 Mar  7 17:28 now.sh
```

Script:

```
#!/bin/bash
```

```
echo -n "Enter a file or directory name: "
```

```
read filename
```

```
if [ ! -e "$filename" ]; then
```

```
    echo "Error: $filename does not exist"
```

```
    exit 1
```

```
fi
```

```
if [ -f "$filename" ]; then
```

```
    echo "$filename is a regular file"
```

```
elif [ -d "$filename" ]; then
```

```
    echo "$filename is a directory"
```

```
else
```

```
    echo "$filename is another type of file"
```

```
fi
```

```
ls -l "$filename"
```

5. Use arguments in a script. Total number of arguments should be three.

```
bash-3.2$ chmod +x arg.sh
bash-3.2$ ./arg.sh
1st argument:
2nd argument:
3rd argument:
bash-3.2$ ./arg.sh hello 78 ?#
1st argument: hello
2nd argument: 78
3rd argument: ?#
```

Here, I missed adding the arguments, which is why the statements were empty. Then, I called the file again and I added three separate arguments with letters, numbers, and special symbols. The output appears to be correct.

Script:

```
#!/bin/bash

echo "1st argument: $1"
echo "2nd argument: $2"
echo "3rd argument: $3"
```

6. Write a script that will output your name out of a variable and will display the server uptime.

```
bash-3.2$ chmod +x myname.sh
bash: chmod: command not found
bash-3.2$ chmod +x myname.sh
bash-3.2$ ./myname.sh
My name is Elizabeth
17:35 up 4 days, 5:40, 2 users, load averages: 4.45 6.94 6.93
bash-3.2$
```

First, I typed chmod with double 'm' by mistake which is why the command was not found. Then I fixed it and got the correct output.

Script:

```
#!/bin/bash

name="Elizabeth"

echo "My name is $name"

uptime
```