

Assignment-4th

DAY-8TH

ASSIGNMENT-0

Q1. Create a simple shell script to tell the user about their session – they need to know:

- What their username is
- What the current date is
- What the time is
- What their current working directory is
- How many files they have in that directory
- What is the biggest file in their current directory

=>

Script →

```
echo "1. What their username is"
```

```
echo $USER
```

```
echo "2. What the current date is"
```

```
date +%D
```

```
echo "3. What their current working directory"
```

```
pwd
```

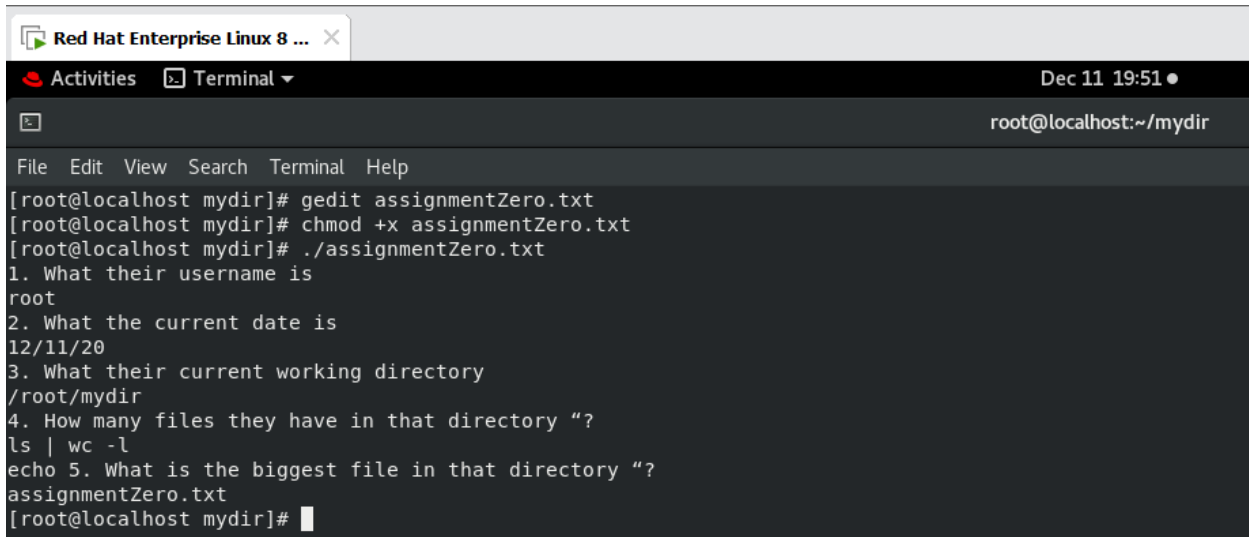
```
echo "4. How many files they have in that directory "
```

```
ls | wc -l
```

```
echo "5. What is the biggest file in that directory "
```

```
ls -S | head -1
```

Output →



```
Red Hat Enterprise Linux 8 ... X
Activities Terminal ▾ Dec 11 19:51 ●
root@localhost:~/mydir

File Edit View Search Terminal Help
[root@localhost mydir]# gedit assignmentZero.txt
[root@localhost mydir]# chmod +x assignmentZero.txt
[root@localhost mydir]# ./assignmentZero.txt
1. What their username is
root
2. What the current date is
12/11/20
3. What their current working directory
/root/mydir
4. How many files they have in that directory "?"
ls | wc -l
echo 5. What is the biggest file in that directory "?"
assignmentZero.txt
[root@localhost mydir]#
```

Assignment 1.

Create a directory with a few test files in it (the files can be empty). Now write a script that for every file in that directory you rename it to have an extension of today's date in YYYYMMDD format.

=>

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

```
DAY=$(date +%F)
```

```
cd /root /mydir
```

```
for FILE in *.txt
```

```
do
```

```
    mv $FILE ${DAY}-${FILE}
```

```
done
```

Output →

```
Red Hat Enterprise Linux 8 ... x
Activities Terminal Dec 11 19:45 ●
root@localhost:~/mydir
File Edit View Search Terminal Help
[root@localhost ~]# mkdir mydir
[root@localhost ~]# cd mydir
[root@localhost mydir]# touch file{1..4}.txt
[root@localhost mydir]# ls
file1.txt file2.txt file3.txt file4.txt
[root@localhost mydir]# gedit assignmentThree.txt
[root@localhost mydir]# chmod +x assignmentThree.txt
[root@localhost mydir]#
```

```
Red Hat Enterprise Linux 8 ... x
Activities Terminal Dec 11 19:47 ●
root@localhost:~/mydir
File Edit View Search Terminal Help
[root@localhost ~]# mkdir mydir
[root@localhost ~]# cd mydir
[root@localhost mydir]# touch file{1..4}.txt
[root@localhost mydir]# ls
file1.txt file2.txt file3.txt file4.txt
[root@localhost mydir]# gedit assignmentThree.txt
[root@localhost mydir]# chmod +x assignmentThree.txt
[root@localhost mydir]# ./assignmentThree.txt
[root@localhost mydir]# ls
2020-12-11-assignmentThree.txt 2020-12-11-file1.txt 2020-12-11-file2.txt 2020-12-11-file3.txt 2020-12-11-file4.txt
[root@localhost mydir]#
```

Assignment 2.

Write a script that takes a number as an input and reverses it out to the user.
For example, if the original number is 74985, the output should be 58947.

=>

```
echo -n "Enter number : "
```

```
read n
```

```
# store single digit
```

```
sd=0
```

```
# store number in reverse order
```

```

rev=""

# store original number

on=$n

# use while loop to calculate the sum of all digits

while [ $n -gt 0 ]

do

    sd=$(( $n % 10 )) # get Remainder

    n=$(( $n / 10 )) # get next digit

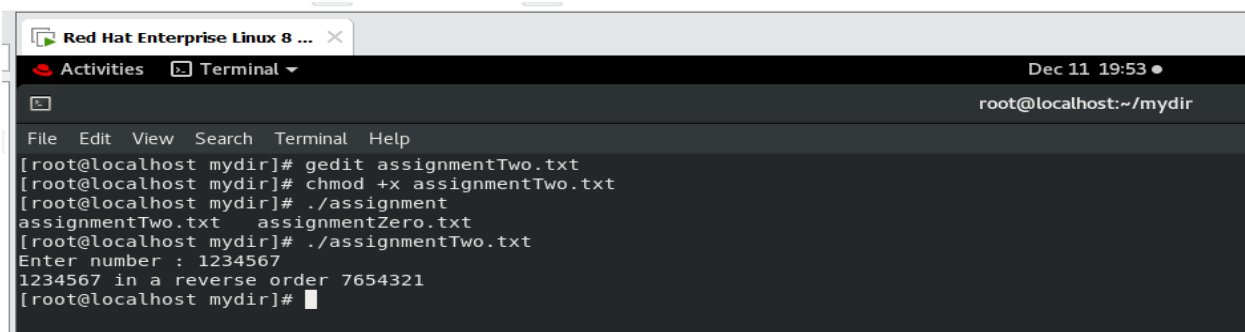
    # store previous number and current digit in rev

    rev=$( echo ${rev}${sd} )

done

echo "$on in a reverse order $rev"

```



```

Red Hat Enterprise Linux 8 ...
Activities Terminal
root@localhost:~/mydir
File Edit View Search Terminal Help
[root@localhost mydir]# gedit assignmentTwo.txt
[root@localhost mydir]# chmod +x assignmentTwo.txt
[root@localhost mydir]# ./assignment
assignmentTwo.txt assignmentZero.txt
[root@localhost mydir]# ./assignmentTwo.txt
Enter number : 1234567
1234567 in a reverse order 7654321
[root@localhost mydir]#

```

Assignment 3

Write a script to validate how secure someone's password is. Things you would care about:

- Length should be 8 or more characters

=>

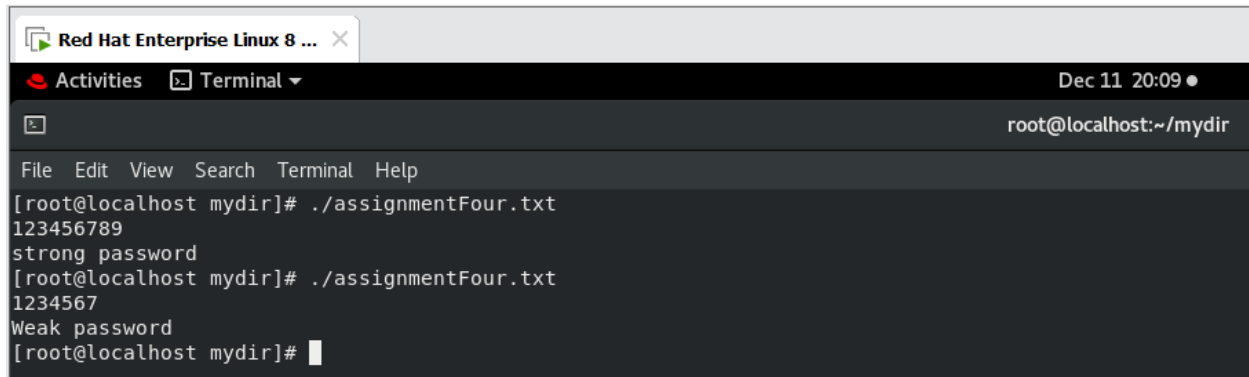
```
#!/bin/bash
```

read string

if [\${#string} -ge 8]; then echo "strong password" ; exit

else echo "Weak password"

fi



A terminal window titled "Red Hat Enterprise Linux 8 ..." showing the execution of a script named "assignmentFour.txt". The script prompts for a password. In the first run, the input "123456789" results in the output "strong password". In the second run, the input "1234567" results in the output "Weak password".

```
Red Hat Enterprise Linux 8 ...  
Activities Terminal Dec 11 20:09  
root@localhost:~/mydir  
File Edit View Search Terminal Help  
[root@localhost mydir]# ./assignmentFour.txt  
123456789  
strong password  
[root@localhost mydir]# ./assignmentFour.txt  
1234567  
Weak password  
[root@localhost mydir]#
```

- The password should contain numbers and letters

#!/bin/bash

while true; do

read -r -p "Enter a string: " VAR

if [[\$VAR =~ ^[[:alnum:]]+\$]];then

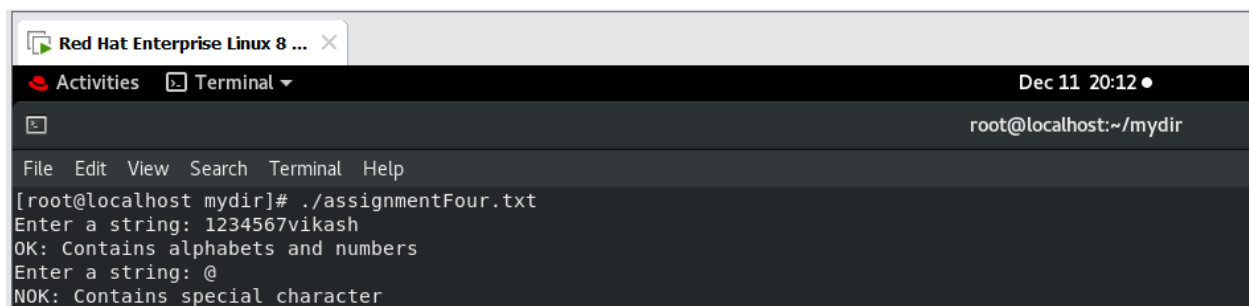
echo "OK: Contains alphabets and numbers"

else

echo "NOK: Contains special character"

fi

done



A terminal window titled "Red Hat Enterprise Linux 8 ..." showing the execution of the same script "assignmentFour.txt". In the first run, the input "1234567vikash" results in the output "OK: Contains alphabets and numbers". In the second run, the input "@" results in the output "NOK: Contains special character".

```
Red Hat Enterprise Linux 8 ...  
Activities Terminal Dec 11 20:12  
root@localhost:~/mydir  
File Edit View Search Terminal Help  
[root@localhost mydir]# ./assignmentFour.txt  
Enter a string: 1234567vikash  
OK: Contains alphabets and numbers  
Enter a string: @  
NOK: Contains special character
```

- There should be both uppercase and lowercase letters

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

```
while true; do
```

```
    read -r -p "Enter a string: " VAR
```

```
    if [[ $VAR =~ ^[a-zA-Z]+$ ]];then
```

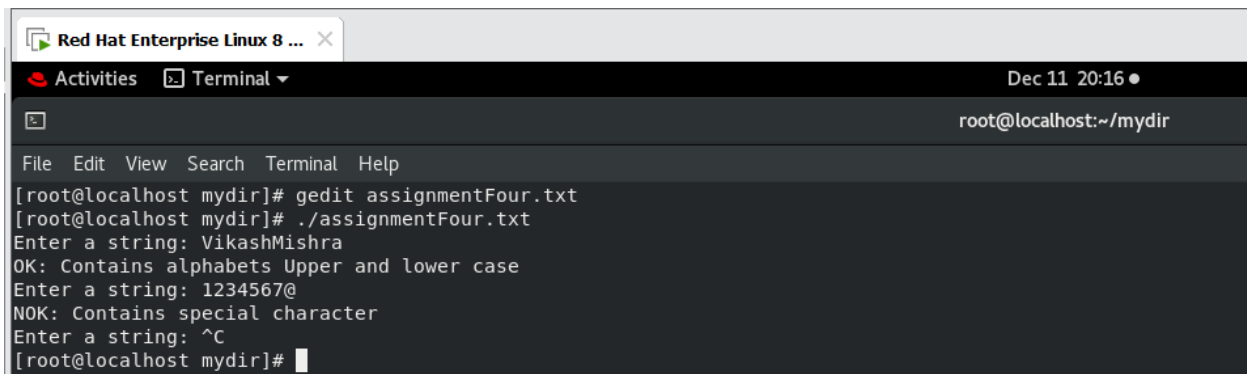
```
        echo "OK: Contains alphabets Upper and lower case"
```

```
    else
```

```
        echo "NOK: Contains special character"
```

```
    fi
```

```
done
```



The screenshot shows a terminal window titled "Red Hat Enterprise Linux 8 ...". The terminal displays the following commands and output:

```
[root@localhost mydir]# gedit assignmentFour.txt
[root@localhost mydir]# ./assignmentFour.txt
Enter a string: VikashMishra
OK: Contains alphabets Upper and lower case
Enter a string: 1234567@
NOK: Contains special character
Enter a string: ^C
[root@localhost mydir]#
```