- 1. 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

```
root@Control:~
                                                             root@Control:~
                                                            File Edit View Search Terminal Help
[root@Control ~]# ./myinfo.sh
                                                           echo "Type your User Name here:"
Type your User Name here:
                                                            read name
                                                           echo "
                                                           echo "Welcome $name"
Welcome root
                                                           echo "Today is: $(date +%x)"
Today is: 12/11/2020
Time is: 04:44:22 AM
                                                           echo "Time is: $(date +%X)"
                                                           echo "
                                                           echo "Your current working directory is: $(pwd)"
                                                           echo "Total files in the directory: $(ls -l | wc -l)"
Your current working directory is: /root
Total files in the directory: 13
                                                           echo "The biggest file in the current directory: $(ls -lSh | head -2)"
                                                           echo " "
The biggest file in the current directory: total 16K
-rw-r--r-. 1 root root 1.0G Dec 10 16:00 1g.img
[root@Control ~]# []
                                                            "myinfo.sh" 11L, 323C
```

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.

```
File Edit View Search Terminal Help
[root@Control TestFolder]#
                                                         #!/bin/bash
[root@Control TestFolder]# ls -la
                                                         thetime='date +%Y-%m-%d--%H:%M:%S'
total 4
drwxr-xr-x. 2 root root 85 Dec 11 11:20
                                                         for i in *.*
drwxr-xr-x. 3 root root 24 Dec 11 04:55
-rwxr-xr-x. 1 root root 161 Dec 11 11:16 files.sh
                                                               extn=${i##*.}
                                                               mv $i ${i%.*}$(date "+ %Y%m%d.${extn}")
-rw-r--r-. 1 root root θ Dec 11 11:08 test1.txt
-rw-r--r-. 1 root root 0 Dec 11 11:08 test2.txt
                                                         done
-rw-r--r-. 1 root root θ Dec 11 11:08 test3.txt
-rw-r--r-. 1 root root 0 Dec 11 04:56 .txt
[root@Control TestFolder]#
[root@Control TestFolder]# ./files.sh
[root@Control TestFolder]#
[root@Control TestFolder]# ls -la
total 16
drwxr-xr-x. 2 root root 142 Dec 11 11:29
drwxr-xr-x. 3 root root 24 Dec 11 04:55
-rwxr-xr-x. 1 root root 161 Dec 11 11:16 files 20201211.sh
-rw-r--r-. 1 root root 12288 Dec 11 11:27 .files.sh.swp
-rw-r--r-. 1 root root 0 Dec 11 11:08 test2 20201211.txt
-rw-r--r-. 1 root root _0 Dec 11 04:56 .txt
[root@Control TestFolder]#
                                                         "files.sh" 8L, 126C
```

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.

```
File Edit View Search Terminal Help

[root@Control ~]# ./reverse.sh

Enter a number: 74985

Reverse number is:
58947

[root@Control ~]# [

**!/bin/bash
echo " "
read -p "Enter a number: " num
echo " "
echo "Reverse number is: "
echo $num | rev
echo " "
```

Write a script to validate how secure someone's password is. Things you would care about: - Length should be 8 or more characters - The password should contain numbers and letters - There should be both uppercase and lowercase letters

```
File Edit View Search Terminal Help
                                                                              #!/bin/bash
[root@Control ~]# ./password.sh
                                                                               echo ""
                                                                              echo "Enter the Password"
Enter the Password
                                                                              echo "'
                                                                               read password
123
                                                                              len="${#password}"
                                                                              if [ $len -ge 8 ]; then
                                                                              echo "$password" | grep -q [0-9]
if [ $7 -eq 0 ]; then
weak Password!!!... Password length must be >= 8
[root@Control ~]# ./password.sh
                                                                              echo "$password" | grep -q [A-Z]
                                                                              if [ $? eq 0 ]; then
Enter the Password
                                                                              echo "$password" | grep -q [a-z]
                                                                              if [ $? -eq 0 ]; then
12345678
                                                                              echo "$password" | grep -q [@,#,$,%]
if [ $? -eq 0 ]; then
Weak Password!!!... echo
Password must contain Numbers, Uppercase, Lowecase, and Special Character else
                                                                               echo "Cool this is a Strong Password..."
[root@Control ~]# ./password.sh
                                                                               echo "Weak Password!!!..."
                                                                              echo "Password must contain Numbers, Uppercase, Lowecase, and Special Character"
Enter the Password
                                                                              else
                                                                               echo ""
12345678A
                                                                               echo "Weak Password!!!..."
weak Password!!!...
                                                                               echo "Password must contain Numbers, Uppercase, Lowecase, and Special Character"
Password must contain Numbers, Uppercase, Lowecase, and Special Character fi
                                                                               else
[root@Control ~]# ./password.sh
                                                                               echo "Weak Password!!!..."
Enter the Password
                                                                               echo "Password must contain Numbers, Uppercase, Lowecase, and Special Character"
12345678Aa
                                                                              else
weak Password!!!..."
Password must contain Numbers, Uppercase, Lowecase, and Special Character echo "Password must contain Numbers, Uppercase, Lowecase, and Special Character"
[root@Control ~]# ./password.sh
                                                                               else
                                                                               echo ""
Enter the Password
                                                                               echo "Weak Password!!!... Password length must be >= 8"
                                                                               echo ""
123456789Aa@
Cool this is a Strong Password...
[root@Control ~]#
                                                                               "password.sh" 41L, 952C
```