

Linux Administration

Assignment - Day 8

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Assignment 0

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

```
File Actions Edit View Help

(kali㉿kali)-[~]
$ vi ass0.sh

(kali㉿kali)-[~]
$ cat ass0.sh
#!/bin/bash
echo "Assignment 0"
echo $USER "→ is the current user."
currentDate=`date +%d-%b-%Y`
echo $currentDate "→ Current date"
currentTime=`date +%I:%M:%S%p`
echo $currentTime "→ Time"
echo "$PWD → Current working Directory"
for file in "${1-."/*"; do
    [ -d "${file}" ] && ((directories++))
    [ -f "${file}" ] && ((files++))
done

echo "Number of files: ${files-0}"
echo "Number of directories: ${directories-0}"

(kali㉿kali)-[~]
$ ./ass0.sh
Assignment 0
kali → is the current user.
11-Dec-2020 → Current date
06:55:17:AM → Time
/home/kali → Current working Directory
Number of files: 2
Number of directories: 8
```

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.

```

kali@kali:~$ cd Desktop
kali@kali:~/Desktop$ mkdir ass1
kali@kali:~/Desktop$ cd ass1
kali@kali:~/Desktop/ass1$ touch {1..5}
kali@kali:~/Desktop/ass1$ ls
1 2 3 4 5
kali@kali:~/Desktop/ass1$

```

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.

File Actions Edit View Help

```
echo enter no
read no
num=0
while [ $no -gt 0 ]
do
num=$(expr $num \* 10)
k=$(expr $no % 10)
num=$(expr $num + $k)
no=$(expr $no / 10)
done
echo number is $num
```

: wq

```
└─(kali㉿kali)-[~/Desktop]
```

```
$ vi reverseNo.sh
```

```
└─(kali㉿kali)-[~/Desktop]
```

```
$ chmod +x reverseNo.sh
```

```
└─(kali㉿kali)-[~/Desktop]
```

```
$ ./reverseNo.sh
```

```
enter no
```

123449

number is 944321

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
- The password should contain numbers and letters
- There should be both uppercase and lowercase letters

```
File Actions Edit View Help
echo "enter the password"
read password
len="${#password}"

if test $len -ge 8 ; then
    echo "$password" | grep -q [0-9]
    if test $? -eq 0 ; then
        echo "$password" | grep -q [A-Z]
        if test $? -eq 0 ; then
            echo "$password" | grep -q [a-z]
            if test $? -eq 0 ; then
                echo "_____ "
            else
                echo "Password must include lowercase letter"
            fi
        else
            echo "Password must include uppercase letter"
        fi
    else
        echo "Must include a number"
    fi
else
    echo "Password length should be greater than 8 characters"
fi
~
~
~
~
~
~
:wq
```

```
(kali㉿kali)-[~]  
$ vi validatePassword.sh  
  
(kali㉿kali)-[~]  
$ chmod +x validatePassword.sh  
  
(kali㉿kali)-[~]  
$ ./validatePassword.sh  
enter the password  
himani  
Password length should be greater than 8 characters
```

```
(kali㉿kali)-[~]  
$ ./validatePassword.sh  
enter the password  
himanidalal  
Must include a number
```

```
(kali㉿kali)-[~]  
$ ./validatePassword.sh  
enter the password  
himani27  
Password must include uppercase letter
```

```
(kali㉿kali)-[~]  
$ ./validatePassword.sh  
enter the password  
Himani27
```

```
(kali㉿kali)-[~]  
$ ./validatePassword.sh  
enter the password  
HIMANI27  
Password must include lowercase letter
```