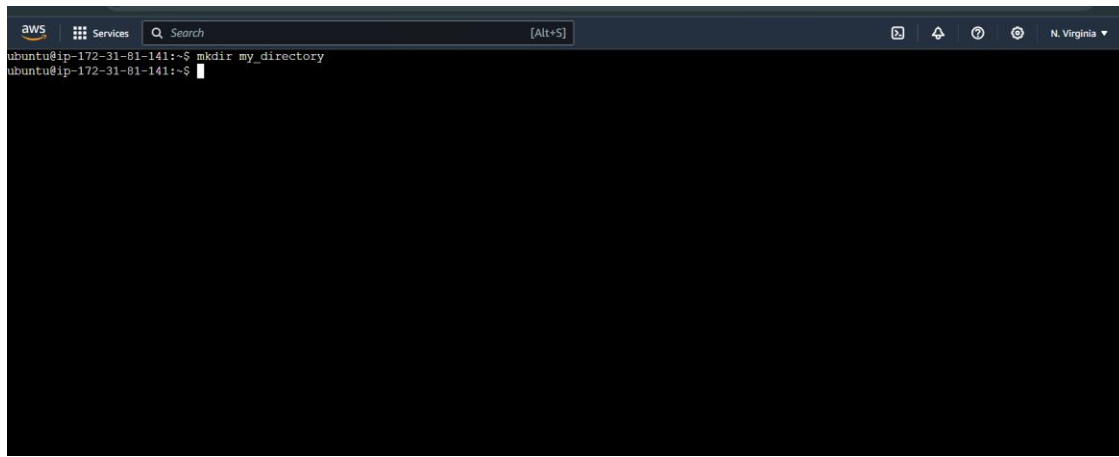


Linux

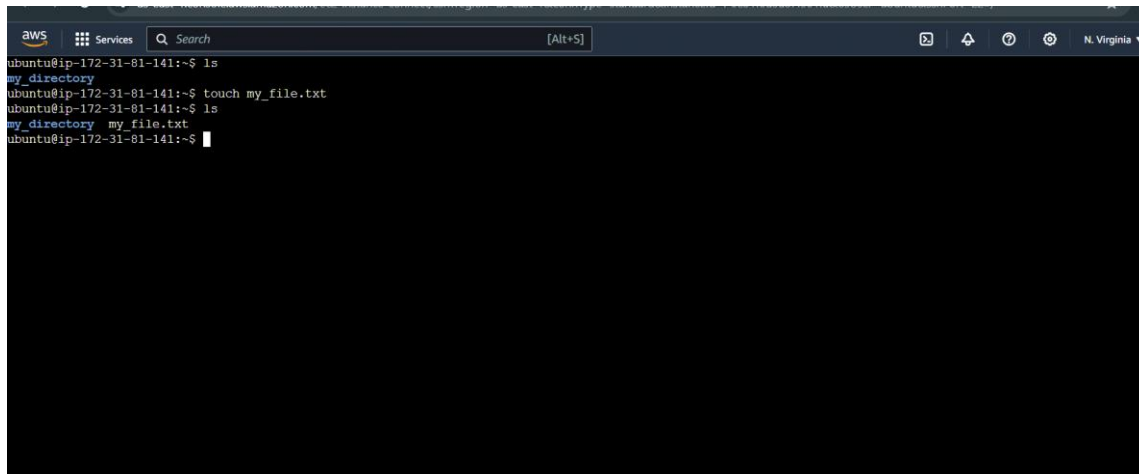
Assignment 1

1. Creating a directory.

A terminal window with a dark background and light text. The window title bar shows 'AWS' on the left, a 'Services' menu, a search bar, and '[Alt+S]' on the right. The terminal content shows a user at 'ubuntu@ip-172-31-81-141:~\$' typing 'mkdir my_directory' and pressing enter. The prompt returns to 'ubuntu@ip-172-31-81-141:~\$' with a cursor.

```
aws Services Search [Alt+S]
ubuntu@ip-172-31-81-141:~$ mkdir my_directory
ubuntu@ip-172-31-81-141:~$
```

2. Creating a file

A terminal window with a dark background and light text. The window title bar shows 'AWS' on the left, a 'Services' menu, a search bar, and '[Alt+S]' on the right. The terminal content shows a user at 'ubuntu@ip-172-31-81-141:~\$' typing 'ls', then 'my_directory', then 'touch my_file.txt', then 'ls' again, and finally 'ls my_directory my_file.txt'. The output shows 'my_directory' and 'my_file.txt' as separate entries. The prompt returns to 'ubuntu@ip-172-31-81-141:~\$' with a cursor.

```
aws Services Search [Alt+S]
ubuntu@ip-172-31-81-141:~$ ls
my_directory
ubuntu@ip-172-31-81-141:~$ touch my_file.txt
ubuntu@ip-172-31-81-141:~$ ls
my_directory my_file.txt
ubuntu@ip-172-31-81-141:~$ ls my_directory my_file.txt
ubuntu@ip-172-31-81-141:~$
```

3. Copy File to Another Folder

6. Change the permissions to above shell script to 755

```
aws Services Search [Alt+S]
ubuntu@ip-172-31-81-141:~$
ubuntu@ip-172-31-81-141:~$
ubuntu@ip-172-31-81-141:~$
ubuntu@ip-172-31-81-141:~$ touch welecome.sh
ubuntu@ip-172-31-81-141:~$ ls
my_directory my_directory1 new_file.txt welecome.sh
ubuntu@ip-172-31-81-141:~$ vim welecome.sh
ubuntu@ip-172-31-81-141:~$ vim welecome.sh
ubuntu@ip-172-31-81-141:~$ chmod 755 welecome.sh
ubuntu@ip-172-31-81-141:~$ ls -al
total 44
drwxr-xr-x 6 ubuntu ubuntu 4096 Apr 18 13:46 .
drwxr-xr-x 3 root root 4096 Apr 18 13:24 ..
-rw-r--r-- 1 ubuntu ubuntu 220 Jan 6 2022 .bash_logout
-rw-r--r-- 1 ubuntu ubuntu 3771 Jan 6 2022 .bashrc
drwx----- 2 ubuntu ubuntu 4096 Apr 18 13:24 .cache
-rw-r--r-- 1 ubuntu ubuntu 807 Jan 6 2022 .profile
drwx----- 2 ubuntu ubuntu 4096 Apr 18 13:24 .ssh
-rw-r--r-- 1 ubuntu ubuntu 0 Apr 18 13:24 .sudo_as_admin_successful
-rw----- 1 ubuntu ubuntu 951 Apr 18 13:46 .viminfo
drwxrwxr-x 2 ubuntu ubuntu 4096 Apr 18 13:25 my_directory
drwxrwxr-x 3 ubuntu ubuntu 4096 Apr 18 13:37 my_directory1
-rw-rw-r-- 1 ubuntu ubuntu 0 Apr 18 13:34 new_file.txt
-rwxr-xr-x 1 ubuntu ubuntu 38 Apr 18 13:45 welecome.sh
ubuntu@ip-172-31-81-141:~$
ubuntu@ip-172-31-81-141:~$
```

7. Delete the created file

```
aws Services Search [Alt+S]
ubuntu@ip-172-31-81-141:~$ ls
my_directory my_directory1 new_file.txt welecome.sh
ubuntu@ip-172-31-81-141:~$ rm new_file.txt
ubuntu@ip-172-31-81-141:~$ ls
my_directory my_directory1 welecome.sh
ubuntu@ip-172-31-81-141:~$
```

Assignment 2

1. Write a Shell Script, to find whether a given number is a prime number or not?

```
#!/bin/bash

Function to check if a number is prime
is_prime() {
    num=$1
    # 0 and 1 are not prime numbers
    if [ $num -lt 2 ]; then
        echo "$num is not a prime number"
        return
    fi

    # Loop to check for factors
    for (( i=2; i*i<=$num; i++ )); do
        if [ $((num % i)) -eq 0 ]; then
            echo "$num is not a prime number"
            return
        fi
    done

    echo "$num is a prime number"
}

Main script
if [ $# -ne 1 ]; then
    [ Read 30 lines ]
fi
```

Help	Write Out	Where Is	Cut	Execute	Location	Undo	Set Mark	To Bracke
Exit	Read File	Replace	Paste	Justify	Go To Line	Redo	Copy	Where Was

2. The program takes a number as input argument.
3. The program prints whether the given number is a prime number or not a prime number
4. Run the shell program and verify the output

```
buntu@ip-172-31-81-141:~$ nano script.sh
buntu@ip-172-31-81-141:~$ ./script.sh
bash: ./script.sh: Permission denied
buntu@ip-172-31-81-141:~$ chmod +x script.sh
buntu@ip-172-31-81-141:~$ ./script.sh 17
7 is a prime number
buntu@ip-172-31-81-141:~$
```

