

Module Navigating and Working with the File System

How to Start Module:

- Before starting the module, Run the <module_script_name> to configure the environment and then <module_script_name> to verify you have done the work correctly
 1. Open a Terminal Window
 2. Clone the GitHub repo (If you have already downloaded Github Repo, skip Step2) (https://github.com/milodigwe/Linux_Essentials_m2itech)
 - From the command line type:
git clone https://github.com/milodigwe/Linux_Essentials_m2itech
 3. Once repository is cloned, navigate to the Hands_On Folder and find the script named: **navigating_and_working_the_file_system.sh**
 4. Run the navigating_and_working_the_file_system.sh script: This will configure the environment for the hands-on module
 - **sh ./navigating_and_working_the_file_system.sh**
 - The script will ask you for your public IP of your instance (which you can find in your aws console) and your key_pair (which you downloaded and assigned to instance during the ec2 creation process) to log into your instance.
 5. Once the script is finished it will provide you with an output on how to log into the system.
 - Should look like: ssh -i <path to key pair> ec2-user@<ip address>

6. Once logged in to the instance, Perform the required tasks below.
7. To verify that you have performed the task correctly. You will need to run the **navigating_and_working_the_file_system_check.sh** script located in `/home/ec2-user` directory.
 - **navigating_and_working_the_file_system_check.sh** You must score a 100% to pass this module.
8. Please Note * Terminate or Stop your instance when not using it.

HAPPY LEARNING!!

Questions:

Lab 1: Listing Directory Contents (ls)

Use the `ls` command to list the contents of `/home/ec2-user/` directory. Identify all files and directories present.

```
[ec2-user@ip-172-31-92-131 ~]$ ls -lart
total 20
-rw-r--r--. 1 ec2-user ec2-user 492 Jan 28 2023 .bashrc
-rw-r--r--. 1 ec2-user ec2-user 141 Jan 28 2023 .bash_profile
-rw-r--r--. 1 ec2-user ec2-user 18 Jan 28 2023 .bash_logout
drwxr-xr-x. 3 root      root      22 Jun 22 14:03 ..
drwx-----. 2 ec2-user ec2-user 29 Jun 22 14:03 .ssh
-rw-----. 1 ec2-user ec2-user 5 Jun 22 14:03 .bash_history
-rw-r--r--. 1 ec2-user ec2-user 1573 Jun 22 14:06 navigate_file_system_check.sh
drwxrwxr-x. 3 ec2-user ec2-user 22 Jun 22 14:06 Testing
drwx-----. 4 ec2-user ec2-user 147 Jun 22 14:06 .
```

Lab 2: Changing Directories (cd)

Task: Navigate to the Navigate to `/home/ec2-user/Testing/` Directory.

```
[ec2-user@ip-172-31-92-131 ~]$ cd Testing/Navigate/  
[ec2-user@ip-172-31-92-131 Navigate]$ ls -lart  
total 0  
drwxrwxr-x. 2 ec2-user ec2-user  6 Jun 22 14:06 storage  
drwxrwxr-x. 3 ec2-user ec2-user 22 Jun 22 14:06 ..  
drwxrwxr-x. 3 ec2-user ec2-user 21 Jun 22 14:06 .  
[ec2-user@ip-172-31-92-131 Navigate]$ █
```

Lab 3: Print Working Directory (pwd)

Task: Use the pwd command to print the full path of your current working directory. **This should display the above: /home/ec2-user/Testing/Navigate Directory**

```
[ec2-user@ip-172-31-92-131 Navigate]$ pwd  
/home/ec2-user/Testing/Navigate  
[ec2-user@ip-172-31-92-131 Navigate]$ █
```

Lab 4: Creating Directories (mkdir)

Task: Create a two directories named "lab" and "storage_2" in the /home/ec2-user/Testing/Navigate/ directory using the mkdir command.

```
[[ec2-user@ip-172-31-92-131 ~]$ cd ~/Testing/Navigate/  
[[ec2-user@ip-172-31-92-131 Navigate]$ mkdir lab  
[[ec2-user@ip-172-31-92-131 Navigate]$ mkdir storage_2  
[[ec2-user@ip-172-31-92-131 Navigate]$ pwd  
/home/ec2-user/Testing/Navigate  
[[ec2-user@ip-172-31-92-131 Navigate]$ ls -lart  
total 0  
drwxrwxr-x. 3 ec2-user ec2-user 22 Jun 22 14:06 ..  
drwxr-xr-x. 2 ec2-user ec2-user  6 Jun 22 14:26 lab  
drwxr-xr-x. 2 ec2-user ec2-user  6 Jun 22 14:26 storage_2  
drwxrwxr-x. 4 ec2-user ec2-user 34 Jun 22 14:26 .  
[ec2-user@ip-172-31-92-131 Navigate]$ █
```

Lab 5: Removing Directories (rmdir)

Task: Remove the directory called “storage” underneath /home/ec2-user/Testing/Navigate/ directory that you created in the previous lab using the rmdir command.

```
[ec2-user@ip-172-31-92-131 Navigate]$ pwd
/home/ec2-user/Testing/Navigate
[ec2-user@ip-172-31-92-131 Navigate]$ rmdir storage
[ec2-user@ip-172-31-92-131 Navigate]$ ls -l
total 0
drwxr-xr-x. 3 ec2-user ec2-user 23 Jun 22 14:13 lab
[ec2-user@ip-172-31-92-131 Navigate]$ pwd
/home/ec2-user/Testing/Navigate
[ec2-user@ip-172-31-92-131 Navigate]$ █
```

Run Check Script:

```
[ec2-user@ip-172-31-92-131 ~]$ sh ./navigate_file_system_check.sh
```

```
1.The lab directory exists in the correct location PASS
```

```
2. The storage_2 directory exists in the correct location. PASS
```

```
3.The storage directory is deleted. PASS
```

```
Score: 3 / 3
```

```
Your score is 100%, You have passed this module!! PASS
```

```
Number of Correct : 3 / Number of Fail : 0
```

```
[ec2-user@ip-172-31-92-131 ~]$ █
```



TECH