* To Learn Linux Commands, create Amazon Linux EC2 machine
* Connect to the machine
* **Create a file**

cat > <File\_Name>

* **Type the content which we have to save in the file**
* Press Enter
* Press ctrl + d
* **List of Files Created**

ls

* **Clear the Screen**

clear

* Press Enter
* **Read the File Content**

cat <File\_name>

* **Remove a file**

rm <file\_Name>

* Check the file

ls

* **Create a directory**

mkdir <Directory\_Name>

* **Check the File**

ls

* **Check the current path**

pwd

* **Change Directory**

cd <Directory\_Name>

* **Check the current path**

pwd

* **Create a file in directory**

cat > <File\_name>

* **Type content which we have to save in the file**
* Press Enter
* Press CTRL+D
* **List of Files Created**

ls

# Go to Previous directory

cd ..

# Check the Files

ls

# Delete a directory

rmdir <Director\_Name>

# Delete a directory with files

rm -r <Directory\_Name>

* **Create a directory into the directory (d1**  **d2)**
* **Create Directory**

mkdir <Directory\_Name>

* **Change Directory**

cd <Directory\_Name>

* **Create Directory**

mkdir <Directory\_Name>

* **Change Directory**

cd <Directory\_Name>

# Check the current path

pwd

# Go to main directory

cd

# Move to Path

cd mentions the path

# Go to main directory

cd

* **Create One File & Write some content in file**

cat > aws

* **List information about the FILEs**

ls -l

* l stands for long list
* **Create hidden file**

touch .training

* **Check the files**

ls

# How to see hidden files

ls -a

# How to create copy of a file

cp <Source\_File\_Name> <Destination\_file\_Name>

* Check the File ls

# Read the file

cat <file\_name>

# How to check current user

whoami

# To see the list of files according to timestamp

ls -lt

# Difference between $ and #

* Dollar sign ($) means you are a normal user.
* Hash (#) means you are the system administrator (root).

# How to switch from one user to another user

su root

# Importance of “sudo” stands for “super user do”

sudo su root

# Check current user

Whoami

# Switch Again to EC2-User User

su ec2-user

# To get the current date

* date

# Understanding file permissions

* ls -l
* All the three owners (user owner, group, others) in the Linux system have three types of permissions defined. Nine characters denotes the three types of permissions.
* **Read (r):** The read permission allows you to open and read the content of a file. But you can't do any editing or modification in the file. It is representing Number 4.
* **Write (w):** The write permission allows you to edit, remove or rename a file. For instance, if a file is present in a directory, and write permission is set on the file but not on the directory, then you can edit the content of the file but can't remove, or rename it. It is representing Number 2.
* **Execute (x):** In Unix type system, you can't run or execute a program unless execute permission is set. It is representing Number 1.

# Changing the file permissions

* chmod (Change Mode)

# There are two ways we can change permission of our files.

* Absolute Mode (Numerical)
* Symbolic Mode (Alphabetical)

# Absolute Mode (Numerical)

|  |  |  |
| --- | --- | --- |
| **Number** | **Octal Permission Representation** | **Ref** |
| **0** | No permission | --- |
| **1** | Execute permission | --x |
| **2** | Write permission | -w- |
| **3** | Execute and write permission: 1 (execute) + 2 (write) = 3 | -wx |
| **4** | Read permission | r-- |
| **5** | Read and execute permission: 4 (read) + 1 (execute) = 5 | r-x |
| **6** | Read and write permission: 4 (read) + 2 (write) = 6 | rw- |
| **7** | All permissions: 4 (read) + 2 (write) + 1 (execute) = 7 | rwx |

* chmod 764 <File\_Name>
* **Now check the files**

ls -l

* chmod 777 <File\_Name>
* **Check the files**

ls -l

* chmod 444 <File\_Name>
* **Check the files**

ls -l

* chmod 700 <File\_name>

# Check the files

ls -l

* chmod 600 <File\_name>

# Check the files

ls -l

# Symbolic Mode (Alphabetical)

|  |  |  |
| --- | --- | --- |
| **Symbol** | **Function** | **Description** |
| **u** | Who | User (owner) |
| **g** | Who | Group |
| **o** | Who | Others |
| **a** | Who | All |
| **+** | Operation | Add |
| **-** | Operation | Remove |
| **r** | Permission | Read |
| **w** | Permission | Write |
| **x** | Permission | Execute |

* chmod u+x <File\_Name>
* **Check the files**

ls -l

* chmod u-x <File\_Name>
* **Check the files**

ls –l

* chmod g+w,o+x <file\_name>
* **Check the files**

ls -l

# First Few lines in file

* **Create a file**

cat > <File\_name>

* Add some Content in the file

# Read the file

cat <file\_name>

* head -2 <file\_name>

# Last Few lines in file

tail -1 <file\_name>

# Word Count in File

wc <file\_name>

* The command will display the number of lines, number of words, number of bytes, and file name from the file.

# Pipe command in linux

head -2 <file\_name> | tail -1

* **APT Repository**
* An Apt Repository is a collection of packages. APT Repository allows you to perform package install, removal, upgrade operations on individual packages.
* In Red hat & Amazon Linux it is called YUM Repository.
* **Create a directory into the directory (d1**  **d2)**
* We can use the directory which we have created in the above example.
* tree <Directory\_Name>
* When you use the TREE command each directory name is displayed along with the names of any subdirectories within it.
* Command is not working

# Install the packages from APT repository

* Step1: Update APT Repository
* Step2: Install the Package
* **Update YUM Repository**

sudo apt-get update

* **Install the Package**

sudo apt-get install <package\_name>

* sudo yum install tree
* sudo apt-get install tree
* **To get the current month**

cal

sudo apt-get install ncal

* **Edit the File**
* vi <File\_name>
* In vi command there are two modes:
* Command Mode
* Insert Mode
* By Default, system will open the file in command mode
* Press i
* Now edit the file

# Save the file

Press Esc

# Save and exit

:wq!

# Exit without saving

:q!

# By using editor also, we can create a file

vi <file\_name>

* Enter the content

# Save and exit

:wq!