

# Basic Linux Commands

/ → Root Directory

**/home** → Home directory

# List directory

**\$ ls**

# Detailed view of directories

**\$ ls -l**

# Change directory

**\$ cd**

# Go to previous directory

**\$ cd ..**

# Present working directory

**\$ pwd**

# Read content of file

**\$ cat <file\_name>.txt**

# Displays arguments to the screen

**\$ echo "Hello World!"**

# Exit the shell / current dir

**\$ exit**

# Clear the screen

**\$ clear**

# help for particular command

**\$ -h**

**\$ --help**

# Create new directory

\$ **mkdir** <dir\_name>

## File and Directory Permissions

# Changing permissions

\$ **chmod 777** <file\_name>

Symbolic notation	Numeric notation	English
-----	0000	no permissions
-rwx-----	0700	<b>read, write, &amp; execute only for owner</b>
-rwxrwx---	0770	read, write, & execute for owner and group
-rwxrwxrwx	0777	read, write, & execute for owner, group and others
---x--x--x	0111	execute
--w--w--w-	0222	write
--wx-wx-wx	0333	write & execute
-r--r--r--	0444	read
-r-xr-xr-x	0555	read & execute
-rw-rw-rw-	0666	read & write
-rwxr-----	0740	owner can read, write, & execute; group can only read; others have no permissions

### Note:

777(directories) / 666(files) permission- mode allows everyone on the system full access to file / directory.

### # Editor

\$ **vim** <filename>

**\*If vim is not installed, use command "sudo apt-get install vim"**

### Insert mode

i → insert at the cursor position

### Command mode

:w → writes/saves the file

:w! → forces the file to be saved

:q → quit

:q! → quit without saving

:wq! → write and quit

## Deleting texts

dd → delete a line

# Deleting Copying and Moving

## #Remove file

\$ **rm <file\_name>**

e.g. rm foo.txt

## # Remove directory

\$ **rm -rf <directory\_name>**

e.g. rm -rf new\_directory

## # Copying file

\$ **scp <current\_filename> /<directory\_name>**

e.g cp new\_file.txt /home

## # Copy directory

\$ **scp -r <current\_filename> /<directory\_name>**

e.g. cp -r foo /home

## # Move file to new directory

\$ **mv <current\_filename> /<new\_location>**

e.g. mv foo.txt /home

## # Copying file from one server to another

\$ **scp <current\_filename> username@<server\_ip\_address>:/home/<username>**

# File and Directory Permissions

# Creating user with sudo privilege

**\$ adduser xyz**

#Giving user sudo privileges

**\$ usermod -aG sudo xyz**

# Verifying it by checking id of new user

**\$ id xyz**

# Granting sudo privileges to existing user

**\$ usermod -aG sudo <username>**

# Creating non-sudo user

**\$ adduser <username>**

**\$ id <username>**