

## Introduction

- Shell is a program that exposes an operating system's services to users.
- Shell scripts are interpreted (not compiled).
- Shell scripts are case sensitive.
- There are different types of shell: (sh, tcsh, zsh, ksh, csh)
  - /bin/sh (shell)
  - /bin/dash
  - /bin/bash
  - bin/rbash
- List all available shells:
- Make SSH connection to server:
- End a connection:

```
cat /etc/shells
```

```
ssh -Y username@access.cims.nyu.edu
```

```
~.
```

## Dealing with files/Folders:

- Print current working directory
- Change directory
- Make a new dir
- Make nested dir
- Remove File
- Remove Directory
- Move a file to a new location
- Copy an existing file
- Copy an existing folder
- Search for files name in current directory
- Search for files only
- Search for directories only
- Search for directories starts with p
- List all files/folders (including hidden)
- List all files/folders (include additional info)
- List all files/folders (add / after folder name)
- List all files/folders (include additional info. and hidden)
- List all files/folders (include additional info and sizes in easy units)
- List all files/folders sorted (include additional info and sizes in easy units)
- Create a new file
- Read file content
- Read file content and display line number
- Read first ten lines of a file
- Read first 5 lines of a file
- Read last ten lines of a file
- Read last 5 lines of a file

```
rm -r FolderName
```

OR

```
pwd
```

```
cd DirName
```

```
mkdir DirName
```

```
mkdir -p folder1/folder2/f3
```

```
rm FILENAME
```

```
rmdir FolderName
```

```
mv FileName Location
```

```
cp FileName NewFileName
```

```
cp -r Dir1 Dir2
```

```
find FileName
```

```
find FolderName -type f
```

```
find FolderName -type d
```

```
find /folder -type d -name 'p*'
```

```
ls -a
```

```
ls -l
```

```
ls -p
```

```
ls -la
```

```
ls -lh
```

```
ls -lhS
```

```
touch FileName
```

```
cat FileName
```

```
nl FileName
```

```
head FileName
```

```
head -n 5 FileName
```

```
tail FileName
```

```
tail -n 5 FileName
```

## Vim Editor:

- Edit a file
- Enter insert mode
- Save the file but keep it open
- Quit without saving
- Save the file and quit

```
vim FileName
```

```
i
```

```
:w
```

```
:q
```

```
:wq
```

**WC**: is a Unix/Linux tool used to find word count