## Terminal Workshop

CCNY ACM Club - Oct 22, 2015

## File system basics

- `.`
- `~ `
- `..`
- `/`

#### File system basics

- `.` current directory
- `~` user profile directory
- `..`
- `/`

#### File system basics

- `.` current directory
- `~` user profile directory
- `..` parent directory
- `/`-root directory

## Navigation

- pwd
- cd
- Is

#### Navigation

- pwd print working directory
- cd changes directory
- Is list contents of a directory

- mkdir
- cp
- mv
- rm
- `-r`

- mkdir make directory
- cp copy file
- mv
- rm
- `-r`

- mkdir make directory
- cp copy file
- mv move (or rename) file
- rm remove file
- `-r`

- mkdir make directory
- cp copy file
- mv move (or rename) file
- rm remove file
- `-r`- needed when copying/removing a directory

#### File matching

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- \* ` \* ` matches any zero or more char
- `?`- matches any one char
- ` {a,b,c} `
- `{0..5}`

#### File matching

- \* ` \* ` matches any zero or more char
- `?`- matches any one char
- `{a,b,c}` matches listed cases
- `{0..5}` matches number/letter ranges

## Text Reading

- cat
- less

### Text Reading

- cat display file contents
- less display paginated file contents

#### Time savers

- Tab completion
- Arrow up
- history
- clear

#### Time savers

- Tab completion complete command name or file path
- Arrow up reuse previous commands
- history
- clear

#### Time savers

- Tab completion complete command name or file path
- Arrow up reuse previous commands
- history display previous commands
- clear clear output from previous commands

## Pattern matching

grep

#### Pattern matching

grep - globally search a regular expression and print

# Pipe • `a|b`

#### Pipe

 `a | b` - connect STDOUT of `program a` to the STDIN of `program b`

#### Redirection

- `aCommand < aFile`</li>
- `aCommand > aFile`
- `aCommand >> aFile`
- `aCommand < inFile > outFile`

#### Redirection

- `aCommand < aFile` read in a file</li>
- `aCommand > aFile` write to a file
- `aCommand >> aFile`
- `aCommand < inFile > outFile`

#### Redirection

- `aCommand < aFile` read in a file</li>
- `aCommand > aFile` write to a file
- `aCommand >> aFile` append to a file
- `aCommand < inFile > outFile` reading and writing combo