

Lab One

Typing and entering ls will display all files and directories contained within your current working directory:

ls

Your default current working directory in this lab environment, the /home/project directory, is empty. Thus entering ls into the command line will not return anything yet.

```
theia@theia-duongnhattha:/home/project$ ls
```

```
theia@theia-duongnhattha:/home/project$ ls /
bin  dev  home  lib32  libx32  mnt  proc  run  srv  tmp  var
boot  etc  lib  lib64  media  opt  root  sbin  sys  usr

theia@theia-duongnhattha:/home/project$ ls /bin
bash          dd            lessfile      ps            uname
bunzip2       df            lesskey       pwd           uncompress
bzip2         dir           lesspipe      rbash         vdir
bzip2         dmesg         ln            readlink      wdctl
bzdiff        dnsdomainname login          rm            which
bzegrep       domainname    ls            rmdir         ypdomainname
bzeze         echo          lsblk         rnano         zcat
bzfgrep       egrep         mkdir         run-parts     zcmp
bzgrep        false         mknod         sed           zdiff
bzip2         fgrep         mktemp        sh            zegrep
bzip2recover  findmnt       more          sh.distrib    zfgrep
bzless        fuser         mount         sleep         zforce
bzmore        grep          mountpoint    stty          zgrep
cat           gunzip        mv            su            zless
chgrp         gzexe         nano          sync          zmore
chmod         gzip          netstat       tar           znew
chown         hostname      nisdomainname tempfile
cp           kill          pidof         touch
dash         less          ping          true
date         lessecho      ping6         umount
```

```
theia@theia-duongnhattha:~$ cd ~
theia@theia-duongnhattha:~$ █
theia@theia-duongnhattha:/bin$ cd ../home/theia
theia@theia-duongnhattha:~$ █
theia@theia-duongnhattha:/$ cd bin theia@theia-duongnhattha:/home$ cd /
theia@theia-duongnhattha:/bin$ █ theia@theia-duongnhattha:/$ █
theia@theia-duongnhattha:~$ cd ..
theia@theia-duongnhattha:/home$ █
theia@theia-duongnhattha:/home/project$ cd ~
theia@theia-duongnhattha:~$ █
theia@theia-duongnhattha:~$ cd ../project
theia@theia-duongnhattha:/home/project$ █
```

```
theia@theia-duongnhattha:~$ cd ../project
theia@theia-duongnhattha:/home/project$ cd ../project
```

```
theia@theia-duongnhattha:/$ ls /home/
project/ theia/
theia@theia-duongnhattha:/$ ls /home/theia/
theia@theia-duongnhattha:/$ cd /b
bin/ boot/
theia@theia-duongnhattha:/$ cd /bin/ theia@theia-duongnhattha:/$ cd /b
bin/ boot/
theia@theia-duongnhattha:/$ cd /bin/
theia@theia-duongnhattha:/$ ls /home/theia/dsdriver/b
bin/ bin32/ bnd/
theia@theia-duongnhattha:/$ ls /home/theia/dsdriver/bin
```

```
theia@theia-duongnhattha:/$ cd /b theia@theia-duongnhattha:~$ pwd
bin/ boot/ /home/theia
theia@theia-duongnhattha:/$ cd /b theia@theia-duongnhattha:~$
theia@theia-duongnhattha:/$ cd ~
theia@theia-duongnhattha:~$
theia@theia-duongnhattha:/$ ls
bin dev home lib32 libx32 mnt proc run srv tmp var
boot etc lib lib64 media opt root sbin sys usr
theia@theia-duongnhattha:/$
theia@theia-duongnhattha:/$ cd /b
bin/ boot/
theia@theia-duongnhattha:/$ cd ~
theia@theia-duongnhattha:~$
```

```
theia@theia-duongnhaththa:~$ sudo apt upgrade nano
```

```
Reading package lists... Done
```

```
Building dependency tree
```

```
Reading state information... Done
```

```
nano is already the newest version (2.9.3-2).
```

```
Calculating upgrade... Done
```

```
The following NEW packages will be installed:
```

```
gcc-13-base
```

```
The following packages will be upgraded:
```

```
apache2 apache2-bin apache2-data apache2-utils apt apt-transport-https  
binutils binutils-common binutils-x86-64-linux-gnu ca-certificates  
ca-certificates-java containerd curl dart distro-info-data docker.io  
dotnet-host gcc-11-base git git-man iptables krb5-locales lib32atomic1  
lib32gcc-s1 lib32gcc1 lib32gomp1 lib32itm1 lib32quadmath0 lib32stdc++6  
libapparmor1 libapt-inst2.0 libapt-pkg5.0 libatomic1 libbinutils  
libcc1-0 libcups2 libcurl3-gnutls libcurl4 libgcc-s1 libgcc1 libgomp1  
libgssapi-krb5-2 libip4tc0 libip6tc0 libiptc0 libitm1 libk5crypto3  
libkrb5-3 libkrb5support0 liblsan0 libncurses5 libncurses5-dev  
libncursesw5 libobjc4 libperl5.26 libpq-dev libpq5 libpython2.7  
libpython2.7-dev libpython2.7-minimal libpython2.7-stdlib libpython3.6  
libpython3.6-dev libpython3.6-minimal libpython3.6-stdlib libquadmath0  
libruby2.5 libssl-dev libssl1.0.0 libssl1.1 libstdc++6 libsystemd0  
libtinfo-dev libtinfo5 libtsan0 libudev1 libunwind8 libx32atomic1  
libx32gcc-s1 libx32gcc1 libx32gomp1 libx32itm1 libx32quadmath0  
libx32stdc++6 libxstream-java libxtables12 libyaml-snake-java  
linux-libc-dev mysql-client mysql-client-5.7 mysql-client-core-5.7  
ncurses-base ncurses-bin openjdk-11-jre-headless
```

```
theia@theia-duongnhaththa:~$ sudo apt update
```

```
Get:1 https://packages.microsoft.com/ubuntu/18.04/prod bionic InRelease [3  
,617 B]
```

```
Ign:2 https://storage.googleapis.com/download.dartlang.org/linux/debian st  
able InRelease
```

```
Ign:4 https://storage.googleapis.com/download.dartlang.org/linux/debian te  
sting InRelease
```

```
Ign:5 https://storage.googleapis.com/download.dartlang.org/linux/debian un  
stable InRelease
```

```
Get:6 https://storage.googleapis.com/download.dartlang.org/linux/debian st  
able Release [944 B]
```

```
Get:7 https://storage.googleapis.com/download.dartlang.org/linux/debian te  
sting Release [940 B]
```

```
Get:8 https://storage.googleapis.com/download.dartlang.org/linux/debian un  
stable Release [945 B]
```

```
Get:9 https://packages.microsoft.com/ubuntu/18.04/prod bionic/main all Pac  
kages [2,182 B]
```

```
Get:10 http://ppa.launchpad.net/ondrej/php/ubuntu bionic InRelease [20.8 k  
B]
```

```
Get:11 https://packages.microsoft.com/ubuntu/18.04/prod bionic/main amd64  
Packages [259 kB]
```

```
Get:12 https://storage.googleapis.com/download.dartlang.org/linux/debian s  
table Release.gpg [819 B]
```

```
Get:13 http://security.ubuntu.com/ubuntu bionic-security InRelease [88.7 k
```

```
theia@theia-duongnhattha:~$ sudo apt install vim
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libgpm2 vim-common vim-runtime xxd
Suggested packages:
  gpm ctags vim-doc vim-scripts
The following NEW packages will be installed:
  libgpm2 vim vim-common vim-runtime xxd
0 upgraded, 5 newly installed, 0 to remove and 0 not upgraded.
Need to get 6,735 kB of archives.
After this operation, 32.6 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
0% [Waiting for headers]
```

```
theia@theia-duongnhattha:~$ cd /home/project
theia@theia-duongnhattha:/home/project$ nano hello_world.txt
theia@theia-duongnhattha:/home/project$ 
theia@theia-duongnhattha:~$ cd /home/project
theia@theia-duongnhattha:/home/project$ 
theia@theia-duongnhattha:/home/project$ cat hello_world.txt
Hello world!
This is the second line of my first-ever text file created with nano.
theia@theia-duongnhattha:/home/project$
```

help.txt

For Vim version 8.0. Last change: 2017 Oct 28

VIM - main help file

Move around: Use the cursor keys, or "h" to go left, k
"j" to go down, "k" to go up, "l" to go right. h j
Close this window: Use ":q<Enter>".
Get out of Vim: Use ":qa!<Enter>" (careful, all changes are lost!).
Jump to a subject: Position the cursor on a tag (e.g. bars) and hit CTRL
L-].
With the mouse: ":set mouse=a" to enable the mouse (in xterm or GUI).
Double-click the left mouse button on a tag, e.g. bar
s.
Jump back: Type CTRL-T or CTRL-O. Repeat to go further back.
Get specific help: It is possible to go directly to whatever you want help
on, by giving an argument to the :help command.

help.txt [Help][RO] 1,1 Top

~
~
~

[No Name] 0,0-1 All

"help.txt" [readonly] 228L, 8578C

Hello World!
The is the second line.

■

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-- INSERT --

3,1

A11

Hello world!

This is the second line of my first-ever text file created with nano.

This is line three of my new file.█

^G Get Help	^O Write Out	^W Where Is	^K Cut Text	^J Justify	^C Cur Pos
^X Exit	^R Read File	^_ Replace	^U Uncut Text	^T To Spell	^_ Go To Line

theia@theia-duongnhattha:/home/project\$ vim done.txt

theia@theia-duongnhattha:/home/project\$ bash done.txt

I am done with the lab!

theia@theia-duongnhattha:/home/project\$ █