

Minimize

## Week 1A - Gentle Revision

User: e0540252 e0540252 (GUEST)  
e0540252@u.nus.edu  
Registered Account

Log off

Account Links

▼

Machine State: **HALT**

Refresh

 in: 0:11.  
Time left: 19 mins

control

**connect**

stats

useful

Home IP: 137.132.84.43

VM IP: 10.0.1.217

Direct: telnet or ssh to linuxzoo.net

SSH: unavailable

VM Web: <http://host-1-217.linuxzoo.net/>

JScript Telnet: ~~Network~~ / ~~Console~~

Java Telnet: ~~Auto~~

JavaScript SSH: [SSH](#)

JavaScript VNC: ~~JSVNC~~

URI telnet: [linuxzoo.net](#)

Connect: Username: root, Password: secure

SHARED IP MODE

# Gentle Revision

## Objectives

## Question 1: Access

On some highly secured networks, you may not be able to use java or ssh, but give all of the methods a go and try to get both a command prompt "terminal" interface and VNC working.

The terminal is started within the graphical interface by clicking on the terminal icon at the bottom of the screen.

Check

Tests: Complete

Logged in via VNC PASSED

Running a terminal in VNC PASSED

Running a non-vnc connection (ssh/telnet) PASSED

## Question 2: Create and Navigate Directories

The "cd" command changes your current directory. On its own it changes it to your HOME directory, otherwise you need to specify a parameter which either is an absolute directory (such as `cd /home`) or a relative directory (such as `cd dir1` which takes you to `dir1` in your current working directory).

Type

```
cd
pwd
```

This will take you to your home directory and then Print Working Directory.

What is your current working directory? :

Check	Tests: Complete Correct cwd PASSED
-------	---------------------------------------

Make three directories in your HOME directory. Name these directories "magic", "happy", and "sad".

Check	Tests: Complete Three directories created PASSED
-------	---

Change your working directory into "magic". Create two more directories in this directory called "dir1" and "dir2". If you create them in the wrong place delete them using "rmdir".

Check	Tests: Complete Two directories created PASSED Not accidentally created in HOME PASSED
-------	--

Change directory into dir2.

What is your current working directory? :

Check	Tests: Complete Correct cwd PASSED
-------	---------------------------------------

Change your current working directory to /root. You can either "`cd /root`" or "`cd ..`", as "`..`" means the directory above the current directory in your directory tree. Check with `pwd` to make sure you are in the right directory. Then try to delete the data directory using "`rmdir magic`". What message to you get back?

Directory not empty ▼

Check	Tests: Complete Error message displayed PASSED
-------	---

Use the more powerful and dangerous command

```
rm -rf magic
```

This deletes all files and directories in the data directory, including the data directory itself. Obviously getting the parameter wrong means you can lose a lot of stuff in one go!

Check	Tests: Complete
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Two directories left... PASSED

## Question 3: The ls command

The "ls" command on its own shows you the contents of the current working directory. However it can also take a number of useful parameters.

Filenames which begin with a "." character do not usually appear when you use "ls". These are called "hidden" files, and they are used for things like application configuration and some GUI state information. They are rarely needed so this is the reason they are hidden from normal "ls".

Use the option "-a" to see the hidden files. View the hidden files in your HOME directory (i.e. /root). The file list starts with "." (which is a directory that you can use to describe the current directory in commands) and ".." (which describes the directory above this one in the tree).

What is the third file (in alphabetical order) which appears when you use "-a" in your HOME directory, other than "." and ".." :

Check

Tests: Complete

Third file when using -a PASSED

Use the "-l" option to see a long listing of a file. Get a long listing of "/etc/group" and identify its size in bytes. :

Check

Tests: Complete

Size of /etc/group PASSED

Use the "-F" option to see identification information about files. Use this option and identify the type of /vmlinuz :

Check

Tests: Complete

Type character of /vmlinuz PASSED

Use the "man" command to see the man page for "ls", i.e. "man ls". Use the cursor keys to move around, and find the option which makes ls give its output in human readable form for sizes. Use that in combination with the "-l" option to get the human readable size of "/bin/ls". Include the units, so if in human readable form the size is "10M" type "10M" (case sensitive). :

Check

Tests: Complete

Human readable size of /bin/ls PASSED

## Question 4: Relative and Absolute

Demonstrate your understanding of relative, absolute, and the use of ".." and "/" and "." in the "cd" command by answering these questions. Try to answer them in your own head, and use the command line only if you are confused. Remember paths beginning with "/" are relative to the top level directory, whereas others are relative to the current directory. "." takes you up a directory, and things can be separated with "/" such as "../.." taking you up 2 directories. "." indicates the current directory, and is really only useful where you really need to specify a parameter but you mean to say the current directory. Always supply the SHORTEST solution, remember the answers are

CASE SENSITIVE, and if you type spaces in an answerbox where no space should be entered then it will be marked incorrectly.

Do not type the command in unless really stuck. Do these in your head!

Consider these commands:

```
cd /usr/share/doc
cd ..
pwd
```

What is the current directory:

Tests: Complete

Correct cwd PASSED

Consider these commands:

```
cd /usr/share
cd vim
pwd
```

What is the current directory:

Tests: Complete

Correct cwd PASSED

Consider these commands:

```
cd /usr
cd lib
cd xorg
pwd
```

What is the current directory:

Tests: Complete

Correct cwd PASSED

Consider these commands:

```
cd
cd ../../..
pwd
```

What is the current directory:

Tests: Complete

Correct cwd PASSED

Consider these commands:

```
cd
cd ../home
pwd
```

What is the current directory:

**Tests: Complete**

Correct cwd PASSED

Consider these commands:

```
cd /usr/share
cd vim/../../lib/xorg
pwd
```

What is the current directory: **Tests: Complete**

Correct cwd PASSED

Consider these commands:

```
cd /usr/share
cd /etc/vim
cd ..
pwd
```

What is the current directory: **Tests: Complete**

Correct cwd PASSED

Consider these commands:

```
cd
cd ../../usr/share/doc
pwd
```

What is the current directory: **Tests: Complete**

Correct cwd PASSED

Consider these commands and fill in the blank:

```
cd
cd ../usr/local/lib
pwd
```

Where the "pwd" command prints "/usr/local/lib".

Note this is an example of a RELATIVE pathname parameter to cd, as the parameter does not start with a "/".

**Tests: Complete**

Correct blank PASSED

Consider these commands and fill in the blank:

```
cd /usr/share/doc
cd /var/lib
cd nfs
pwd
```

Where the "pwd" command prints "/var/lib/nfs"

Note this is an example of an ABSOLUTE pathname parameter to cd, as the parameter starts with a "/".

**Tests: Complete**

Correct cwd PASSED

Consider these commands and fill in the correct blank using a RELATIVE pathname. It should be the SHORTEST possible solution.

```
cd /usr/share/python
```

```
cd ../perl5/Encode
```

```
pwd
```

Where the "pwd" command prints "/usr/share/perl5/Encode".

**Tests: Complete**

Correct cwd PASSED

Consider these commands and fill in the correct blank using a RELATIVE pathname. It should be the SHORTEST possible solution.

```
cd /usr/share/perl
```

```
cd ../../etc
```

```
pwd
```

Where the "pwd" command prints "/etc"

**Tests: Complete**

Correct cwd PASSED

Consider these commands and fill in the correct blank using a RELATIVE pathname. It should be the SHORTEST possible solution.

```
cd /etc
```

```
cd .
```

```
pwd
```

Where the "pwd" command prints "/etc"

**Tests: Complete**

Correct cwd PASSED

## Question 5: Nano Editing

Use nano to create a file /root/edit1. Cut and paste the following text into edit1 and save the file. Remember you cannot easily cut and paste to a vnc terminal, so use telnet or ssh. Do not insert additional lines (even blank lines) or extra space characters.

```
asdaslkalsdklnnnne lazy dog quick frog
6f2d9937604b8422abc7493a7ff0c884 /etc/host.conf
This is an exercise!
Up, down,
left, right,
build your terminal's
muscles bit by bit
```

In all the editor questions you must WRITE the file in order to pass the question.

Check	<b>Tests: Complete</b> Line 1 found somewhere PASSED Line 2 found somewhere PASSED Line 3 found somewhere PASSED Line 4 found somewhere PASSED Line 5 found somewhere PASSED Line 6 found somewhere PASSED Line 7 found somewhere PASSED All edits complete PASSED
-------	--

Delete the word "an" from line 3, plus one of the spaces. The line left should read "This is exercise!".

Check	<b>Tests: Complete</b> line check PASSED
-------	---

Add " and byte by byte" to the end of the line "muscles bit by bit".

Check	<b>Tests: Complete</b> line check PASSED
-------	---

Append to the end of the file a new line which reads:

123456789 123456789

Check	<b>Tests: Complete</b> All edits complete PASSED
-------	---

Using mark (^ ^ i.e. CTRL and ^) mark the whole of the first line of the file and then cut (^K) that line out. Move that line and paste it back in (^U) so that the line is now line 2 in the file. Edit afterwards to make sure there is not a blank line left at the start.

Check	<b>Tests: Complete</b> All edits complete PASSED
-------	---

Now cut out the long hex word on line 1 (beginning 6f2 and ending 884) Leave this first line with a leading space. Now put this hex number at the end of the last line (after 6789) making sure to put a space between the 6789 and the 6f2. Save the file.

Check	<b>Tests: Complete</b> All edits complete PASSED
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Linuxzoo created by Gordon Russell.  
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