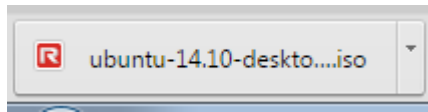


CSCI114/MCS9114 Procedural Programming – Lab 0

1. Ubuntu 14.10 desktop iso downloaded from aarnet



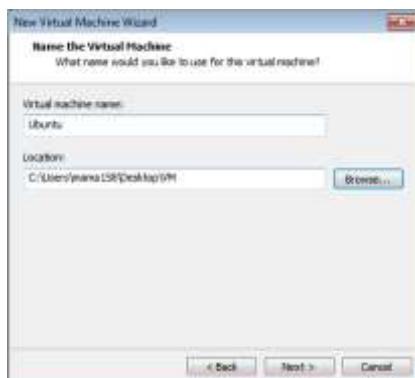
2. Create new virtual machine on VMWare player
 - a. Choose install OS later



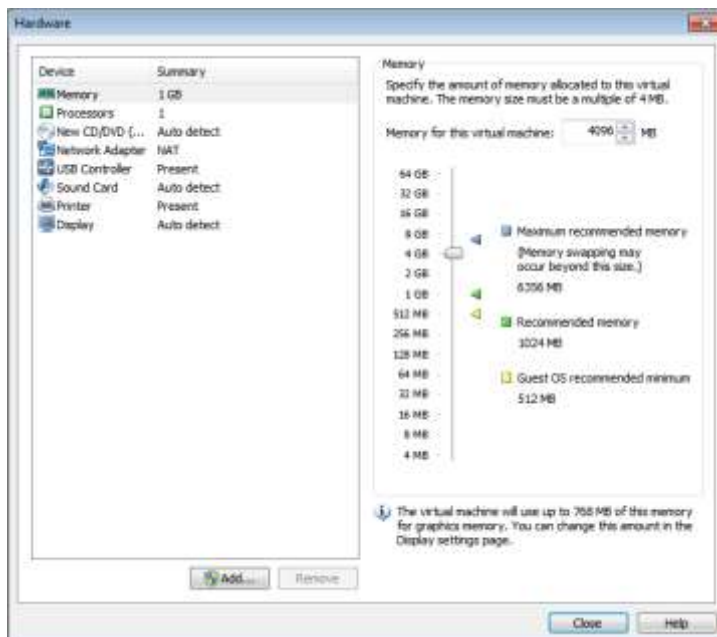
- b. Select Linux/Ubuntu as OS type



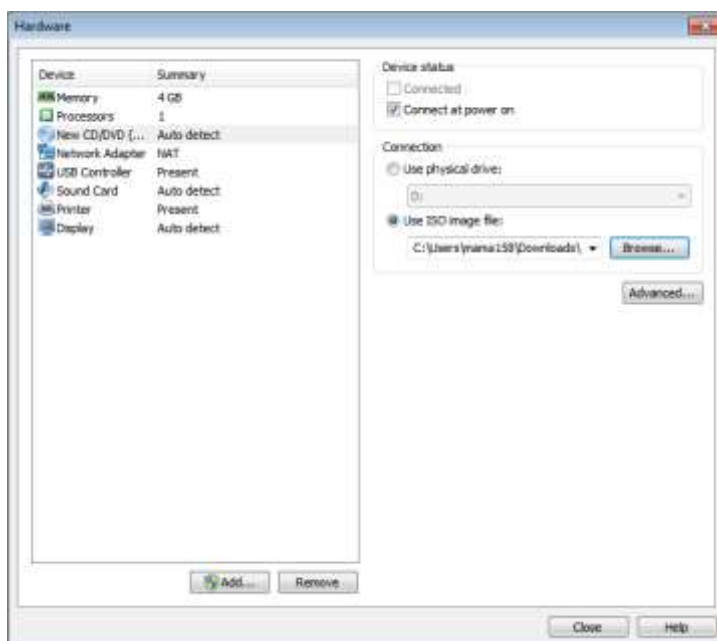
- c. Select VM location on Desktop



d. Change memory to 4GB, set storage to 8GB

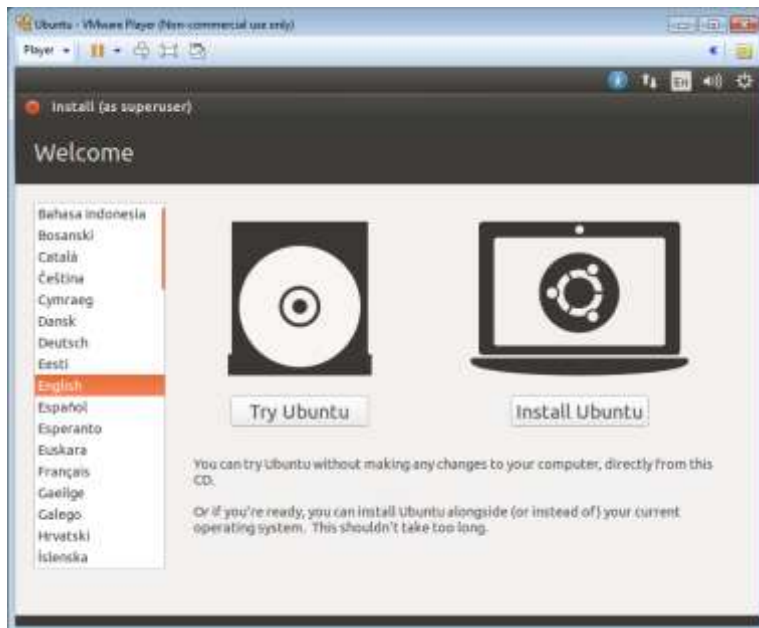


e. Set Ubuntu ISO to CD ROM

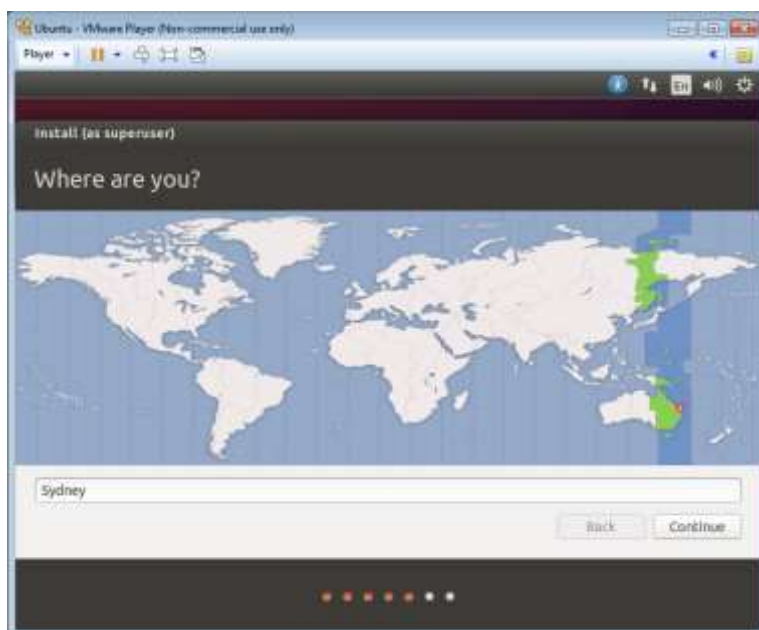


3. Start Ubuntu installation

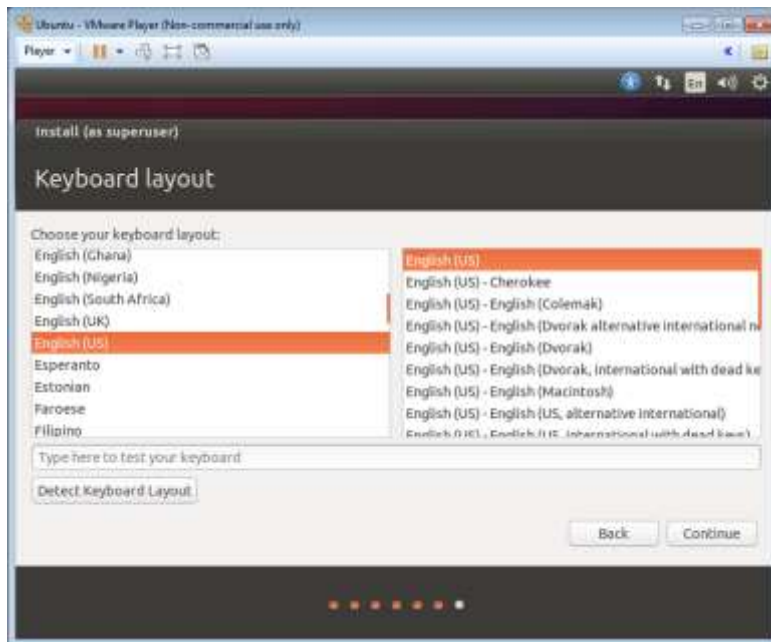
a. Erase disk and install



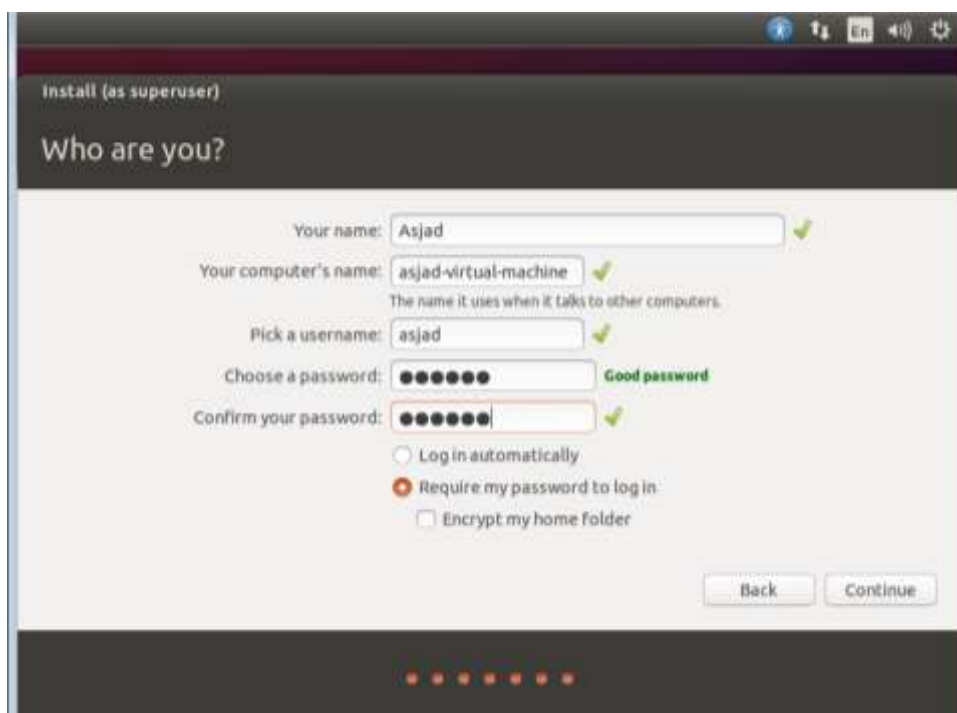
b. Select time zone



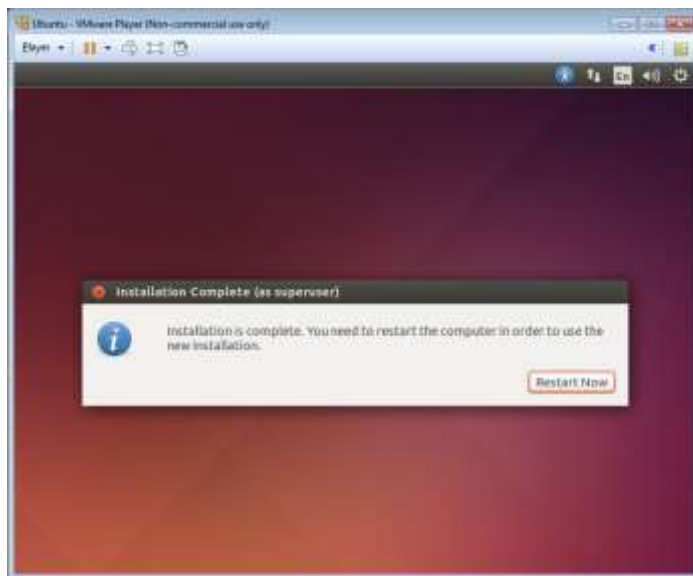
c. Select English as language and keyboard layout



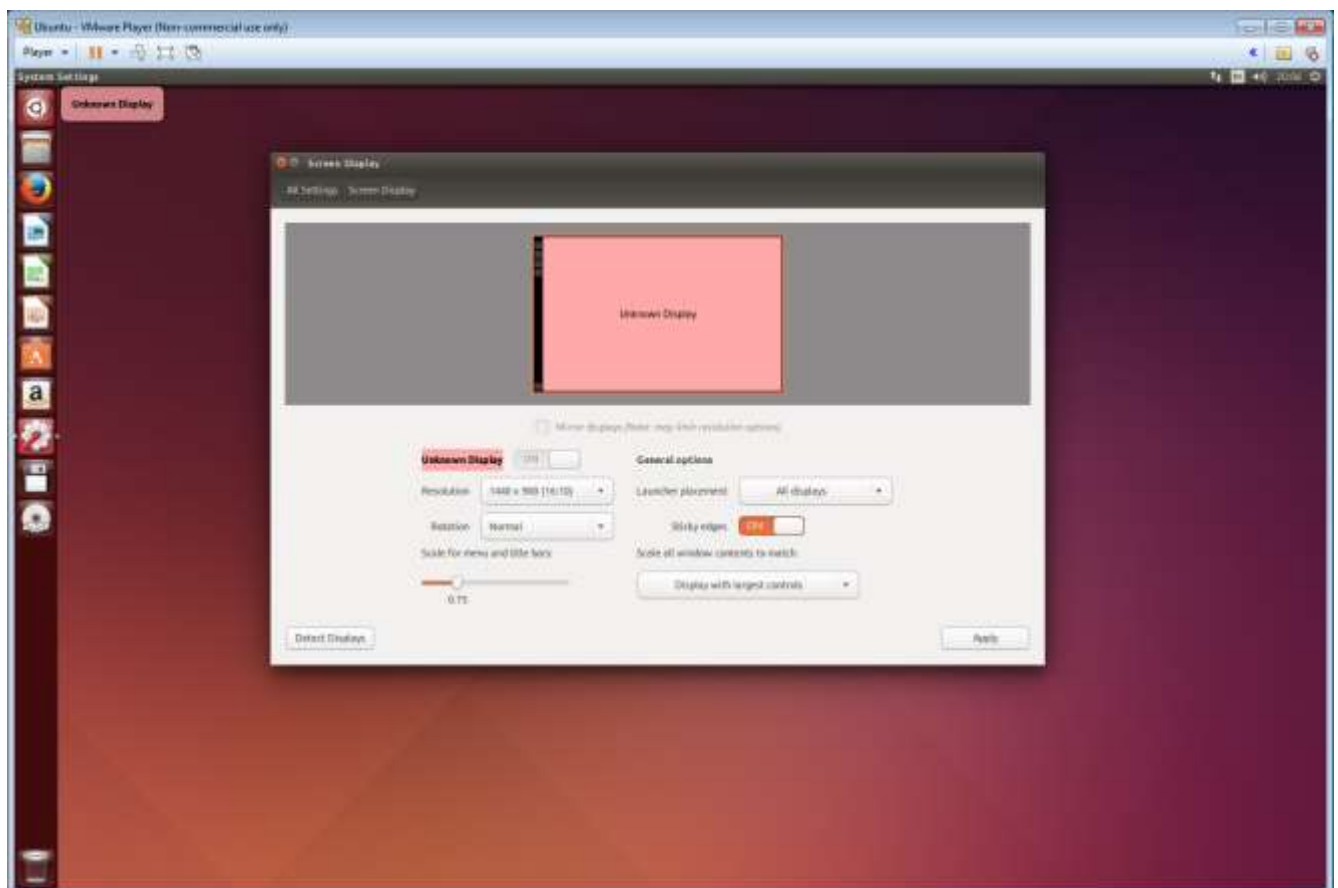
d. Provide username and password for the account



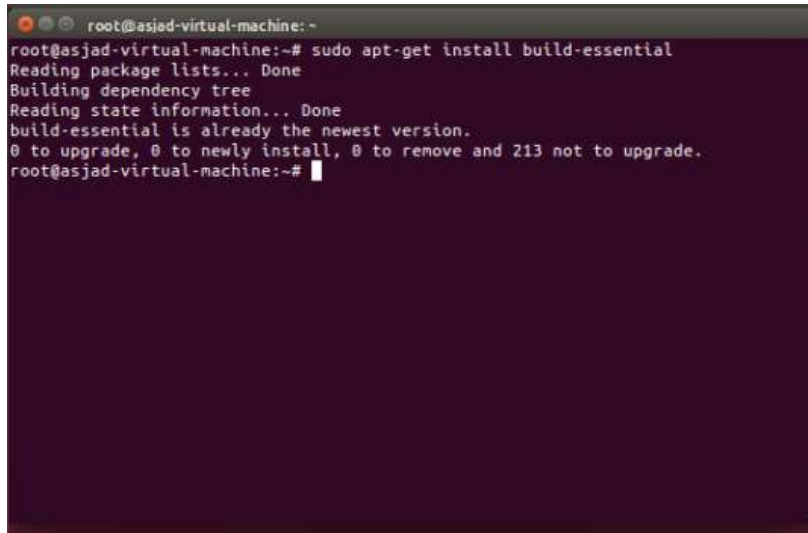
e. Finish Ubuntu installation



4. Login, change screen resolution and scale to a more suitable setting

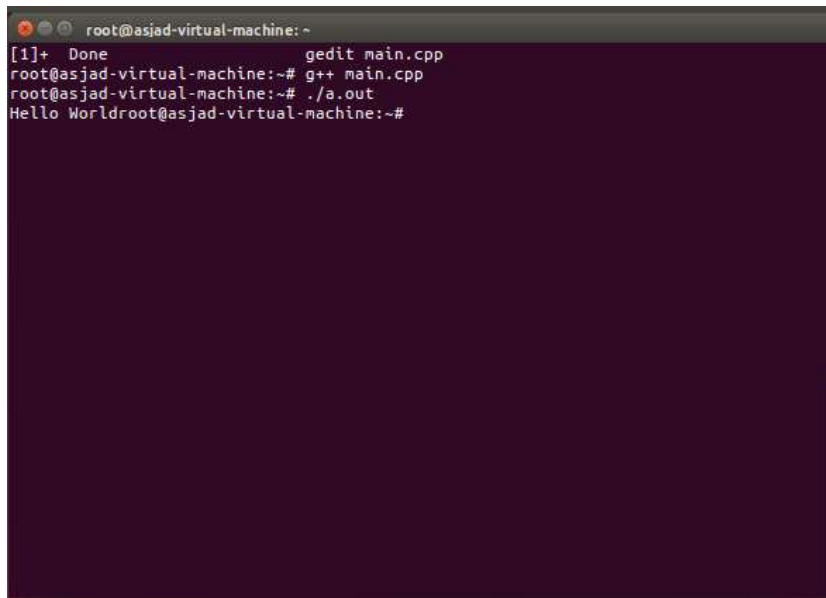


5. Run `sudo -u root bash`
 - a. Get build essentials by running `sudo apt-get install build-essential`

A terminal window with a dark purple background. The prompt is 'root@asjad-virtual-machine:~'. The user enters 'sudo apt-get install build-essential'. The output shows the package lists being read, the dependency tree being built, and state information being read. It confirms that 'build-essential' is already the newest version and that no packages need to be upgraded, installed, or removed.

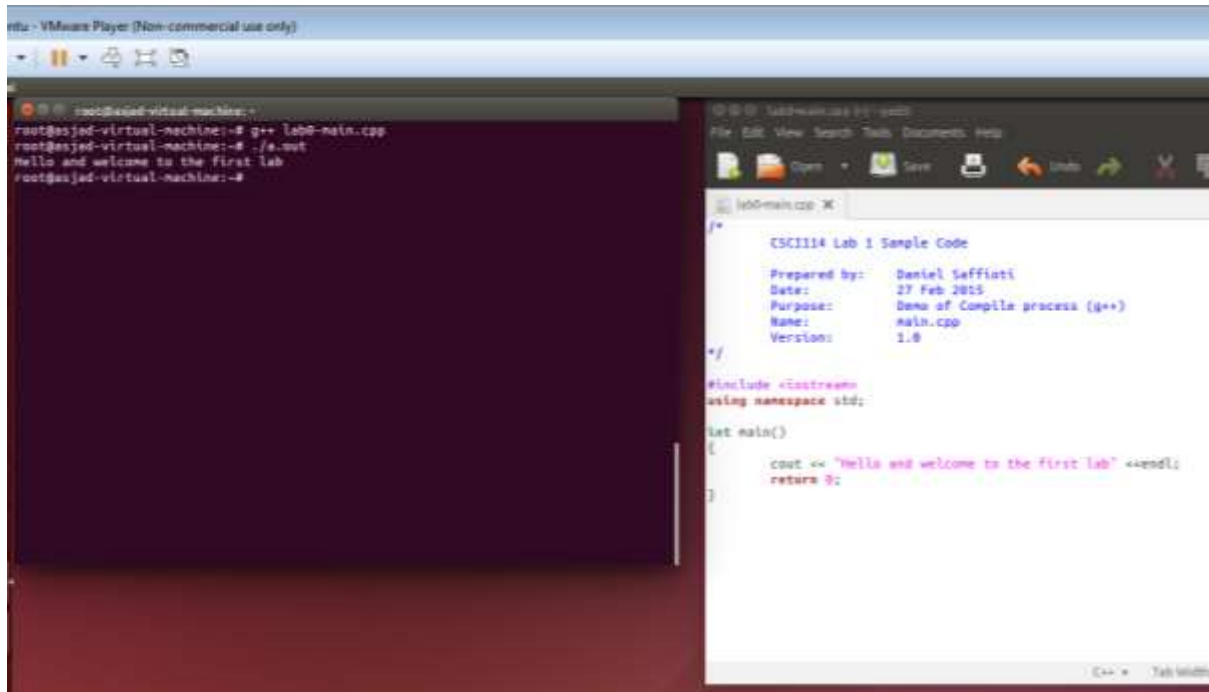
```
root@asjad-virtual-machine:~  
root@asjad-virtual-machine:~# sudo apt-get install build-essential  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
build-essential is already the newest version.  
0 to upgrade, 0 to newly install, 0 to remove and 213 not to upgrade.  
root@asjad-virtual-machine:~#
```

6. Demonstrate G++ compiler is installed by compiling/running a sample program

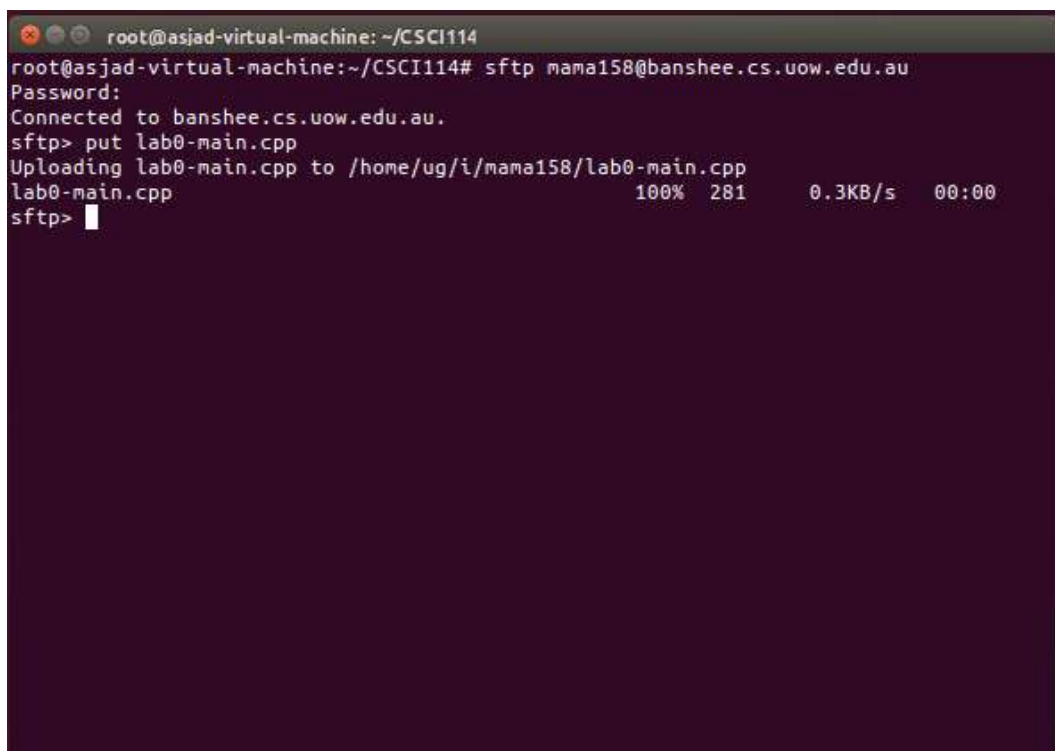
A terminal window with a dark purple background. The prompt is 'root@asjad-virtual-machine:~'. The user enters 'gedit main.cpp', which opens a file editor. Then, the user enters 'g++ main.cpp' to compile the program. Next, the user enters './a.out' to run the compiled program. The output of the program is 'Hello World'.

```
root@asjad-virtual-machine:~  
[1]+  Done                  gedit main.cpp  
root@asjad-virtual-machine:~# g++ main.cpp  
root@asjad-virtual-machine:~# ./a.out  
Hello Worldroot@asjad-virtual-machine:~#
```

7. Download, compile and run lab0-main.cpp



- Copy lab0-main.cpp using SFTP + put command to banshee



9. Submit lab0-main.cpp using SSH + submit command to banshee

```
root@asjad-virtual-machine: ~/CSCI114
root@asjad-virtual-machine:~/CSCI114# sftp mama158@banshee.cs.uow.edu.au
Password:
Connected to banshee.cs.uow.edu.au.
sftp> put lab0-main.cpp
Uploading lab0-main.cpp to /home/ug/i/mama158/lab0-main.cpp
lab0-main.cpp                                100% 281      0.3KB/s   00:00
sftp> exit
root@asjad-virtual-machine:~/CSCI114# ssh mama158@banshee.cs.uow.edu.au
Password:
Last login: Thu Mar 12 09:27:21 2015 from mega-pc02.adeis
$ submit -c csci114 -u mama158 -a lab0-test lab0-main.cpp
Remote Password:
Preparing to submit ... /
Connecting ... |
Submission in progress ... 100% \

Submission completed successfully.
REMEMBER: your submission receipt will be emailed to you.
$
```