

## Programming Exercise #1

### 1. *Linux Installation*

#### **For Windows users**

I recommend that you download VirtualBox (<https://www.virtualbox.org/>) and install Mint Linux (<http://www.linuxmint.com/>) on the virtual machine.

Please ensure that you set the memory size to at least 2048 MB and the hard disk size to at least 10 GB while installing the virtual machine.

#### **For Mac users**

Please install Xcode.

### 2. *Get Acquainted with Vim or Nano (or Emacs)*

#### **For those who like challenges, learn Vim**

Open terminal and type “vim”. If vim is not already installed, type “sudo apt-get install vim”, enter your password when prompted.

Vim is a very powerful text editor that is usually built-in for most linux distributions. However, the learning curve is quite steep. Please spend some time to get learn it. I have attached the tutorial and cheat sheet so that you can learn about it.

Tutorial: [https://blog.interlinked.org/tutorials/vim\\_tutorial.html](https://blog.interlinked.org/tutorials/vim_tutorial.html)

Cheat Sheet: [http://www.viemu.com/a\\_vi\\_vim\\_graphical\\_cheat\\_sheet\\_tutorial.html](http://www.viemu.com/a_vi_vim_graphical_cheat_sheet_tutorial.html)

#### **For those who just want to use a text editor, try out Nano**

Open terminal and type “nano”. The available commands are listed at the bottom of the screen. ^ stands for Ctrl key, so ^x means control+x. I have attached a simple tutorial for nano.

Tutorial: <http://www.howtogeek.com/howto/42980/the-beginners-guide-to-nano-the-linux-command-line-text-editor/>

### 3. *Learn Linux Commands*

I have listed a tutorial. For those who do not feel so comfortable with English, you can refer to 鳥哥 for Chinese tutorials.

Tutorial: <http://vic.gedris.org/Manual-ShellIntro/1.2/ShellIntro.pdf>

鳥哥基礎學習篇: [http://linux.vbird.org/linux\\_basic/](http://linux.vbird.org/linux_basic/)

Cheat Sheet: <https://fosswire.com/post/2007/08/unixlinux-command-cheat-sheet/>

If you have any question, please feel free to contact me.