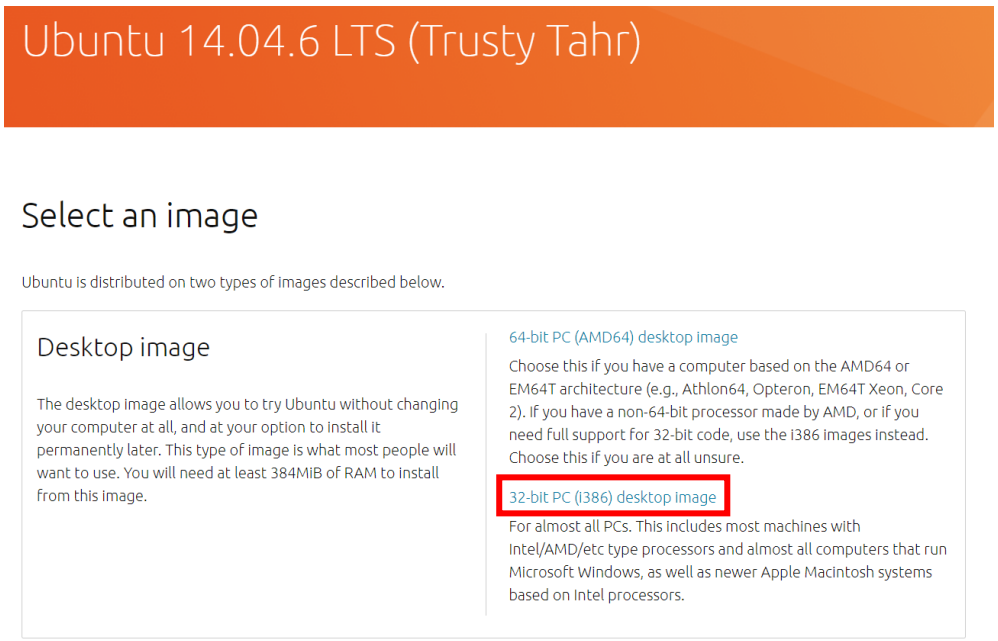
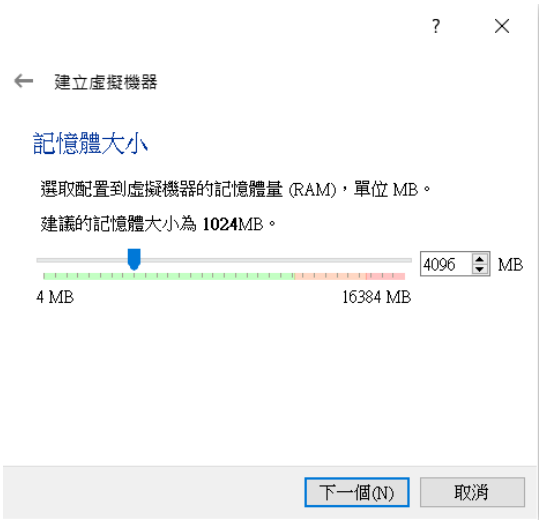
Install Environment and NachOS

1. Download VirtualBox and install: https://www.virtualbox.org/wiki/Downloads
2. Download Ubuntu 14.04 LTS 32-bit image: https://releases.ubuntu.com/14.04/

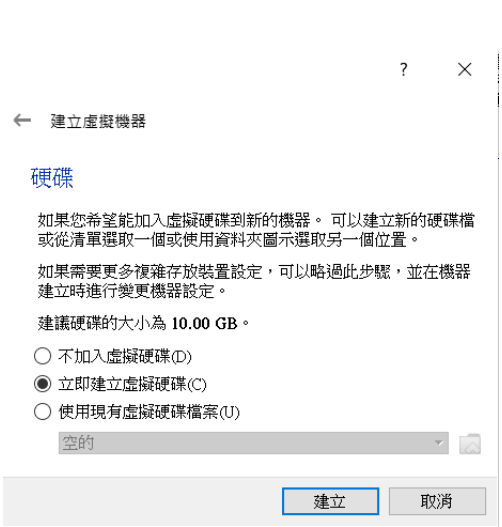


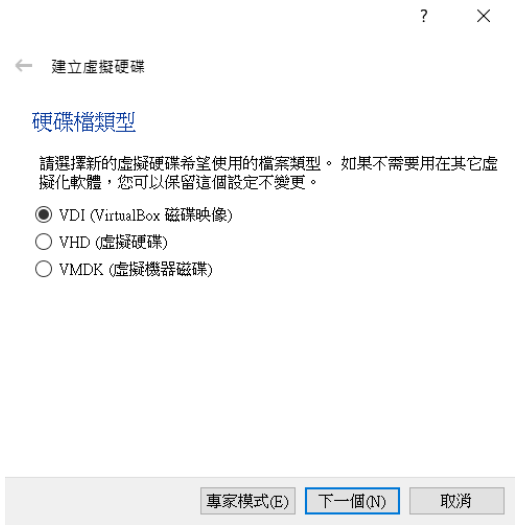
3. VirtualBox VM Settings

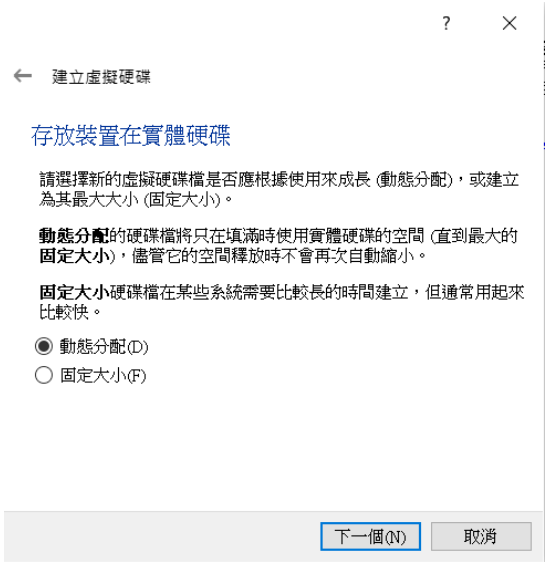
Memory Size Setting (depend on your host PC)

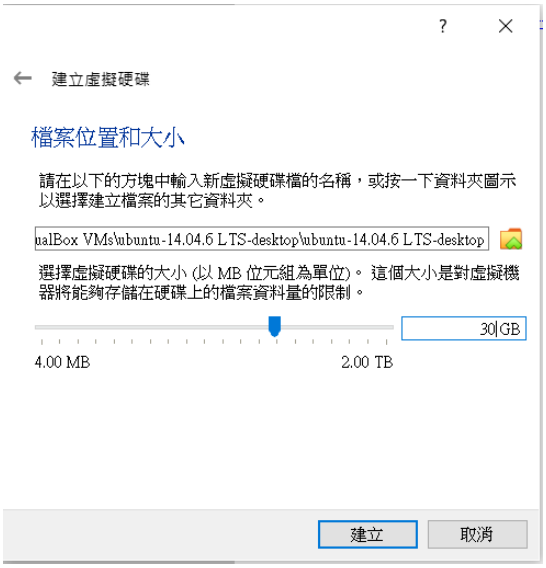


Hard Disk Settings (10GB at least)

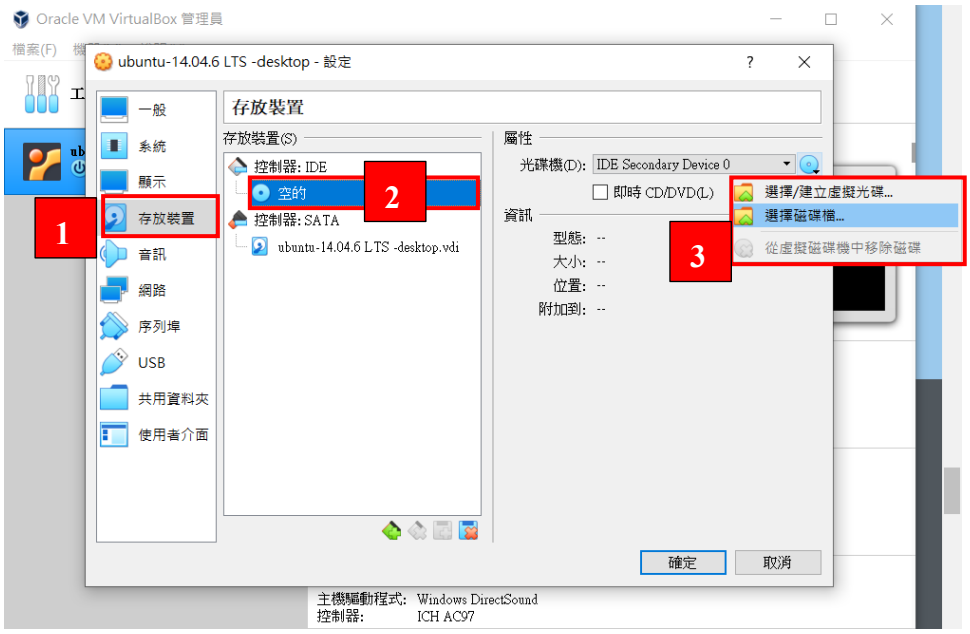


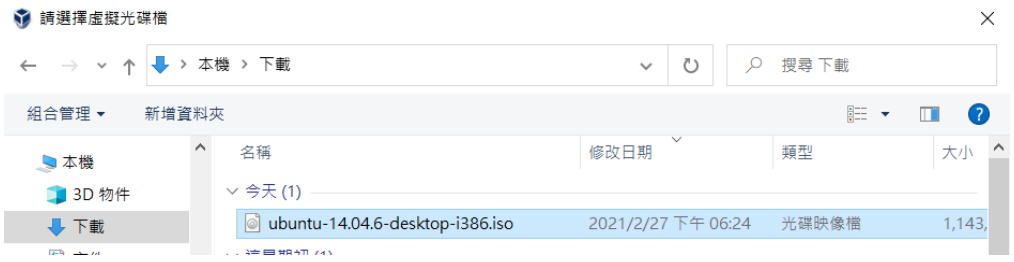


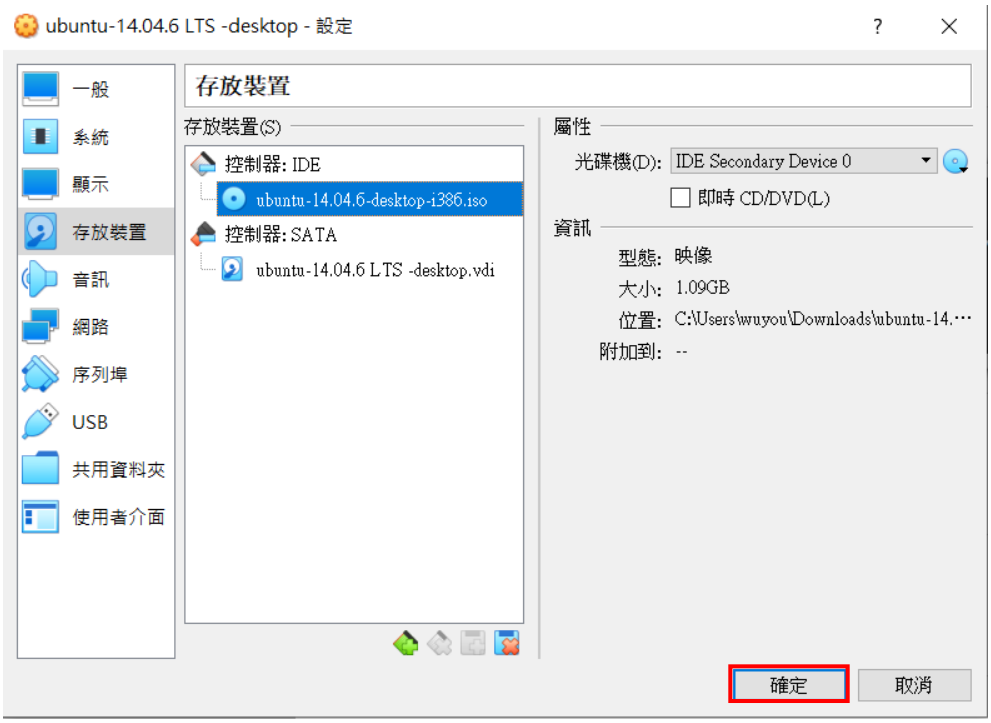


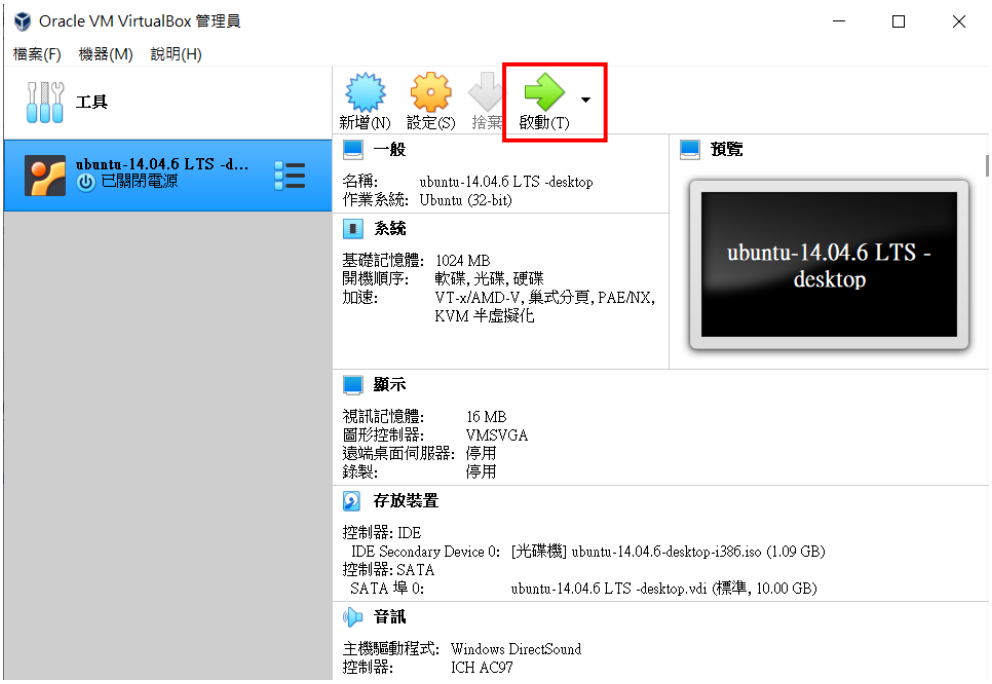


Choose the downloaded image .iso and start.






ubuntu-14.04.6 LTS -desktop - 設定
一般
系統
顯示
存放裝置
音訊
網路
序列埠
USB
共用資料夾
使用者介面
存放裝置
存放裝置(S)
控制器: IDE
ubuntu-14.04.6-desktop-i386.iso
控制器: SATA
ubuntu-14.04.6 LTS -desktop.vdi
屬性
光碟機(D): IDE Secondary Device 0
即時 CD/DVD(L)
資訊
型態: 映像
大小: 1.09GB
位置: C:\Users\wuyou\Downloads\ubuntu-14.…
附加到: --
確定
取消


Oracle VM VirtualBox 管理員
檔案(F) 機器(M) 說明(H)
工具
ubuntu-14.04.6 LTS -d...
已關閉電源
新增(N) 設定(S) 捨棄 啟動(T)
一般
名稱: ubuntu-14.04.6 LTS -desktop
作業系統: Ubuntu (32-bit)
系統
基礎記憶體: 1024 MB
開機順序: 軟碟, 光碟, 硬碟
加速: VT-x/AMD-V, 巢式分頁, PAE/NX, KVM 半虛擬化
預覽
ubuntu-14.04.6 LTS - desktop
顯示
視訊記憶體: 16 MB
圖形控制器: VMSVGA
遠端桌面伺服器: 停用
錄製: 停用
存放裝置
控制器: IDE
IDE Secondary Device 0: [光碟機] ubuntu-14.04.6-desktop-i386.iso (1.09 GB)
控制器: SATA
SATA 埠 0: ubuntu-14.04.6 LTS -desktop.vdi (標準, 10.00 GB)
音訊
主機驅動程式: Windows DirectSound
控制器: ICH AC97

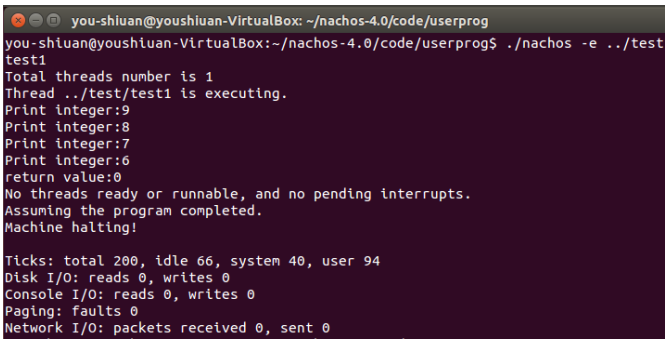
4. Install Ubuntu

(Skip below)

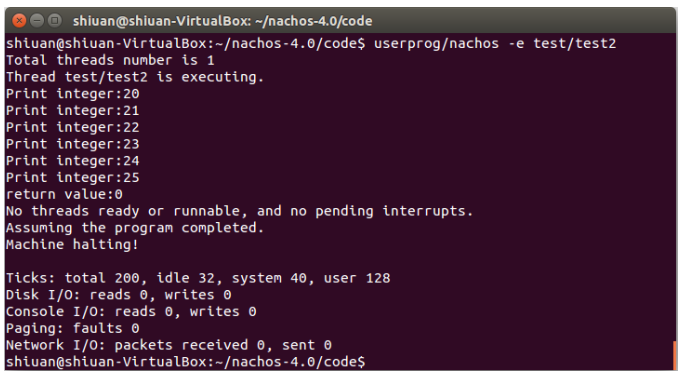
5. Install NachOS and dependency
    I. Open a terminal (ctrl + alt + t), it should be at home directory (cd ~).
    II. Install C-Shell and g++
        - sudo apt-get install csh
        - sudo apt-get install g++
    III. Download Nachos 4.0 and unzip
        - wget --no-check-certificate https://hsn167.cs.nthu.edu.tw/git/root/nachos/-/archive/master/nachos-master.tar.gz?path=nachos-4.0-final -O nachos-4.0-final.tar.gz
        - tar -zxvf nachos-4.0-final.tar.gz
    IV. Download mips-decstation.linux-xgcc.tar.gz and unzip at root directory.
        - cd /
        - sudo wget --no-check-certificate https://hsn167.cs.nthu.edu.tw/git/root/nachos/-/raw/master/mips-decstation.linux-xgcc.tar.gz
        - sudo tar -zxvf mips-decstation.linux-xgcc.tar.gz

* Please **DON'T** carry out stress testing on our server. **Download the files only once and keep them!**

6. Compile
    - cd ~/nachos-4.0-final/nachos-master-nachos-4.0-final/nachos-4.0-final/code
    - make clean
    - make
7. Test
    - cd userprog
    - ./nachos -e ../test/test1



    - ./nachos -e ../test/test2



Success!