

## HW2 - Installing linux and compiling assembly programs

due: Oct 7th, 2019

### 1. Goal

- Install Linux for future homework and learn how to use it.
- How to compile assembler programs on Linux
- How to use an objdump command

### 2. How to Install Linux

- (1) Installing Linux in Dual Mode with Windows
- (2) Installing Linux as a Virtual Machine Using virtual machine softwares

- Choose one of the above options

### 3. Install Ubuntu Linux as a Virtual machine

Assume that Windows 10 is installed on a computer. We will install a free virtual machine softwares such as VirtualBox or VMWare. As a Linux, Ubuntu is recommended. However students can install any Linux distributions.

#### (1) VMWare workstation player

- Download:

[https://my.vmware.com/en/web/vmware/free#desktop\\_end\\_user\\_computing/vmware\\_workstation\\_player/15\\_0](https://my.vmware.com/en/web/vmware/free#desktop_end_user_computing/vmware_workstation_player/15_0)

- References:

<https://www.maketecheasier.com/install-ubuntu-in-vmware-player-windows/>

#### (2) VirtualBox

- Download: <https://www.virtualbox.org/wiki/Downloads>

- References: <https://brb.nci.nih.gov/seqtools/installUbuntu.html>

#### (3) Ubuntu

- download: <http://www.ubuntu.com/download/desktop>

- You can choose 18.04

- The provided CSE sever for later homework is installed with Ubuntu 18.04

#### **4. Executing two assembly programs.**

- (1) Refer to the attached file which explains how to compile and execute assembly programs such as exit.s and maximum.s
- (2) Execute an objdump command for exit and maximum (linked from exit.s and maximum.s)
- (3) Insert screenshots of your assembly program to the report.

#### **5. How to submit a report**

- (1) Use the attached report template at HW2 web page
- (2) Print a hard copy and submit it on Oct 7th
- (3) Notice
  - For submissions after the deadline, 10 points will be deducted from the total score per day
  - No homework will be accepted after Oct 10th.

#### **6. Notes**

- If you have familiar virtual machine software besides VirtualBox and VMWare, you can use it.
- Any linux versions are okay to install
- All you have to do is create your own Linux environment for later homework assignments.