

DATA ORGANIZATION AND MANAGEMENT

LAB 1: INTRO

Virtual Machine Setup Steps

1. Download a virtualization product

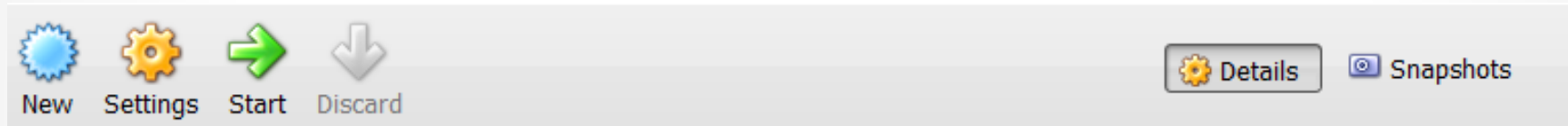
- Virtual Box
 - www.virtualbox.org
- VMWare
 - https://my.vmware.com/web/vmware/free#desktop_end_user_computing/vmware_player/5_0

2. Obtaining the virtual machine Image(Linux Distributions)

- Ubuntu
- Debian
 - [http://people.cs.deu.edu.tr/mete.akdogan/Debian8\(32bit\).vdi.zip](http://people.cs.deu.edu.tr/mete.akdogan/Debian8(32bit).vdi.zip)
- Pardus
- Suse

Virtual Machine Setup Steps

1. Extract the zip file to debian-cmpt352.vmdk
2. Open Oracle VM VirtualBox
3. Click on the button NEW



4. This will open a virtual machine wizard for creating a new virtual machine.
5. Give your virtual machine a name
6. Choose the default value for base memory size
7. Click on the radio button for using an existing hard disk (this is **debiancmpt352.vmdk**)
8. Click on the button for navigating to the location of **debian-cmpt352.vmdk**

Running Linux

1. The default username is **os** and the password is **cme2002** as well
2. There is a **root user** and the password is :
cmpt351
3. Subsequently, when you wish to start the virtual machine, select your new machine in the list of machines and click the green **Start button**

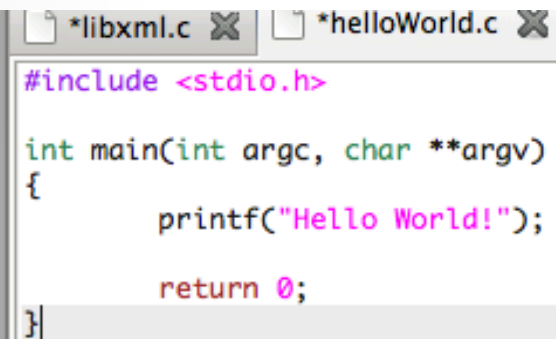
Exiting Linux

- Choose **System -> Shutdown**
- Click **Shutdown**

Editing Files

- **Applications -> Accessories -> Terminal**
- Where you will find gcc, our C compiler
- There is also an editor – **gedit**
- **Applications -> Accessories -> gedit Text Editor**
- However this is a text editor only. You can use it to edit your C files, yet you will have to compile it using the command line.

Hello C



A screenshot of a code editor window with two tabs: `*libxml.c` and `*helloWorld.c`. The `*helloWorld.c` tab is active, displaying the following C code:

```
#include <stdio.h>

int main(int argc, char **argv)
{
    printf("Hello World!");
    return 0;
}
```

Compiling C

- Save your code as hello.c
- GNU C Compiler, called gcc.
- Open your terminal windows and type:
`gcc -c hello.c → hello.o`
- This command will compile your code and will form the hello.o file
- Now type:
`gcc hello.c`
- What are the differences?