

CST8234 – C Programming F17 (Lab 1a)

Environment Setup

By the end of this lab, you should have properly installed in your laptop a Linux virtual machine or a Linux desktop / server, or POSIX-compatible environment.

Option 1: Installing Cygwin

Go to <https://www.cygwin.com/install.html>, and select the setup file that is appropriate to your architecture (32- or 64-bit).

During the installation when asked for what components to install, expand the “Development” item and select “gcc-core”, “gdb” and “make”.

Launch Cygwin once it installs. It will have created a folder such as “c:\cygwin\home\myname”, so if you create any folders (for labs and assignments), they can be found via Windows explorer.

Option 2: Installing Linux

Ubuntu or Fedora are recommended, 64-bit or 32-bit is OK. If using a virtual machine, be sure your VM has at least 4GB of RAM assigned to it, but you may find 8GB is better.

Create an account as your username (from Algonquin)

To verify your version of Linux:

```
/* To verify your Kernel version */
# uname -r
4.4.0-34-generic
/* To verify your hardware platform - in this case it shows a 64 bit arch */
# uname -m
x86_64
```

Have a share folder in between your host and guest OS. This facilitates having access to your programs.

You can use dropbox or any other mechanisms. If using VMWare, here is more information:

http://www.vmware.com/support/ws4/doc/running_sharefold_ws.html

Make Sure You Have a C Compiler

Be sure you have gcc properly installed.

```
/* To verify your gcc version */
# gcc -v
```

Download and compile and run hello.c

```
# gcc -o hello hello.c
```