CSC231 Programming Languages Spring 2017

Working on Gottlieb

Many of you are familiar with using Clion (for C++) or IntelliJ (for Java) for code development. While these integrated development environments are helpful, they are proprietary software products and are not a standard part of a typical UNIX/Linux installation. One of our goals is to broaden your skill set to include working with development tools that are part of nearly every Linux installation.

There are many editors to choose from, but a very easy-to-use one is **gedit**. To start, use your mouse (or trackpoint) and click on the XFCE logo in the upper left corner. The XFCE logo appears as a cartoon mouse as illustrated in Figure 1.

Figure 1: Xubuntu Logo

When you click on the XFCE logo, a drop-down menu will appear as shown in Figure 2.

Figure 2: First Drop Down Menu

The selections on the left are the current menu choices (initially "Favorites"). The selections on the right are used to select various sets of menu options.

Click on **Accessories** and a new set of choices appear as shown in Figure 3.

Click on **gedit** to start the editor. The **gedit** window appears as in Figure 4. In this example, a simple "Hello World" program in C++ is shown.

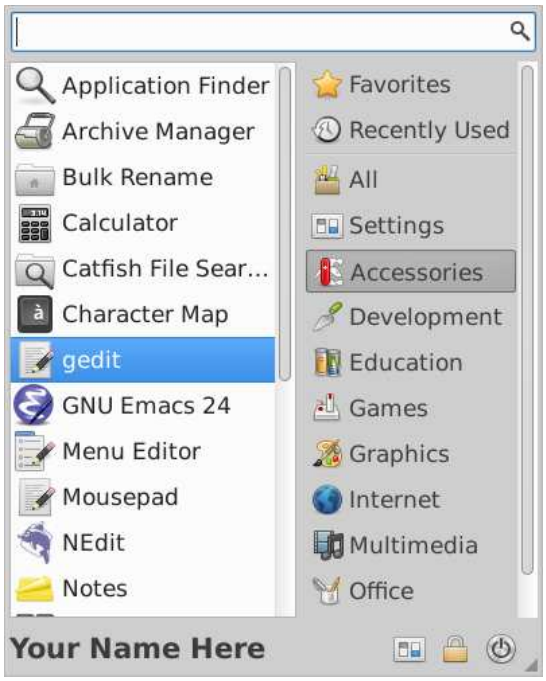

Figure 3: Accessories Menu

While **gedit** is not a full-featured integrated development environment, it is somewhat programming language aware. Notice that various language entities appear in different colors.

Use the gedit menus to save your program (use "Save as"). In this example, the program is saved as **demo.cc**.

The easiest way to compile and run your C++ program is to open a terminal window and use a few simple commands on the command line. To open a terminal, click on the Xubuntu logo; when the drop-down menu appears, click on **Terminal Emulator** as shown in Figure 5.

A terminal window will appear, as shown in Figure 6. The default color scheme is a black background with white text. In this example, the color has been changed to "wheat" and the the font size has been increased. Use `Edit`→`Preferences` to select your preferences.

The command you need to compile and run your program is shown below:

```
g++ -o demo demo.cc
```

To run your program, simply type the name of the executable binary. In this example:

```
demo
```

A sample dialog in a terminal emulator is show in Figure 7.

Of course, when you compile and run your project, use your file names instead of "demo".

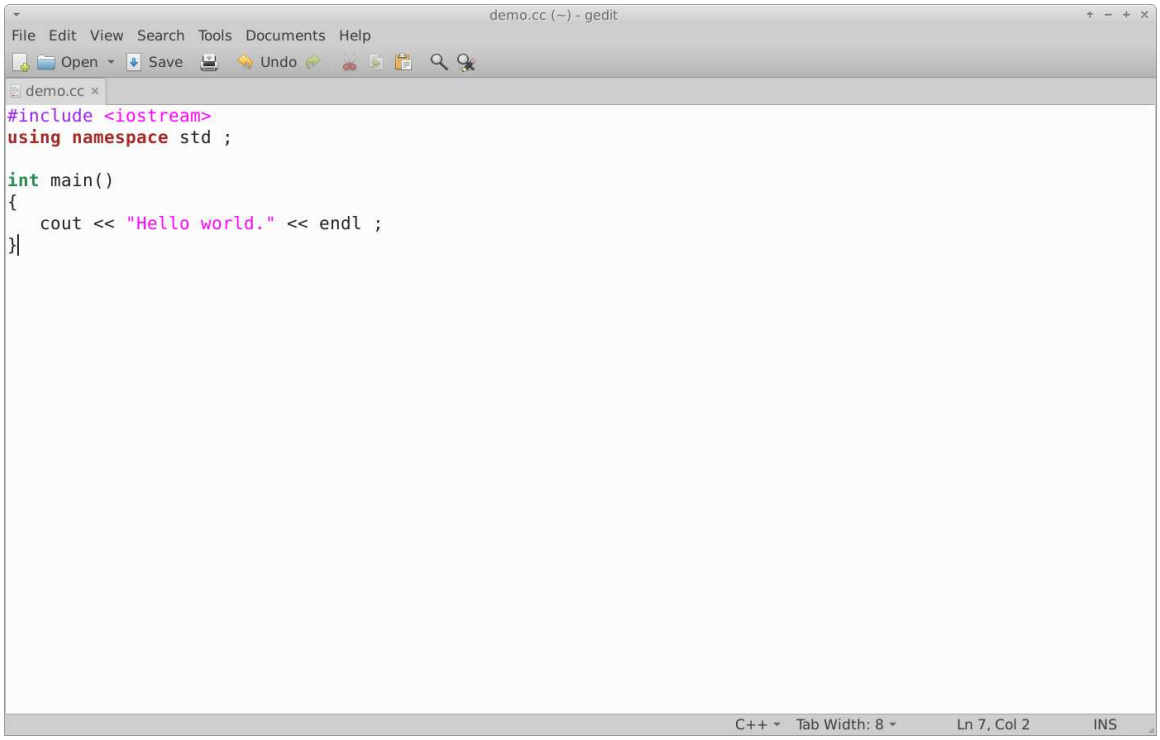

Figure 4: gedit window

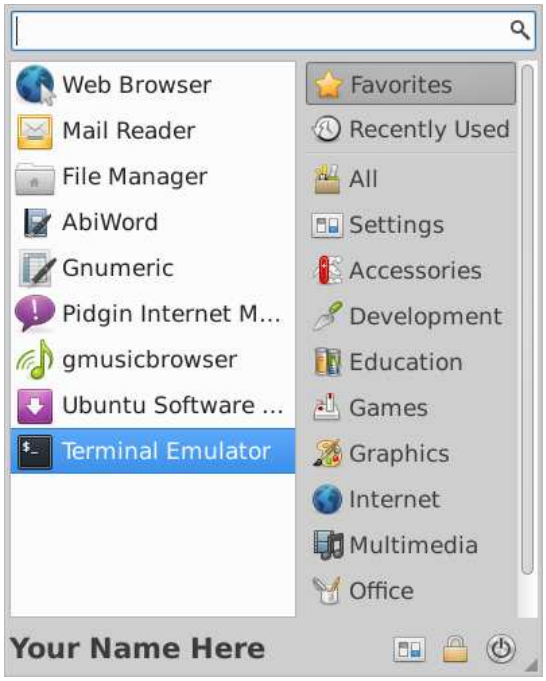

Figure 5: Selecting the Terminal

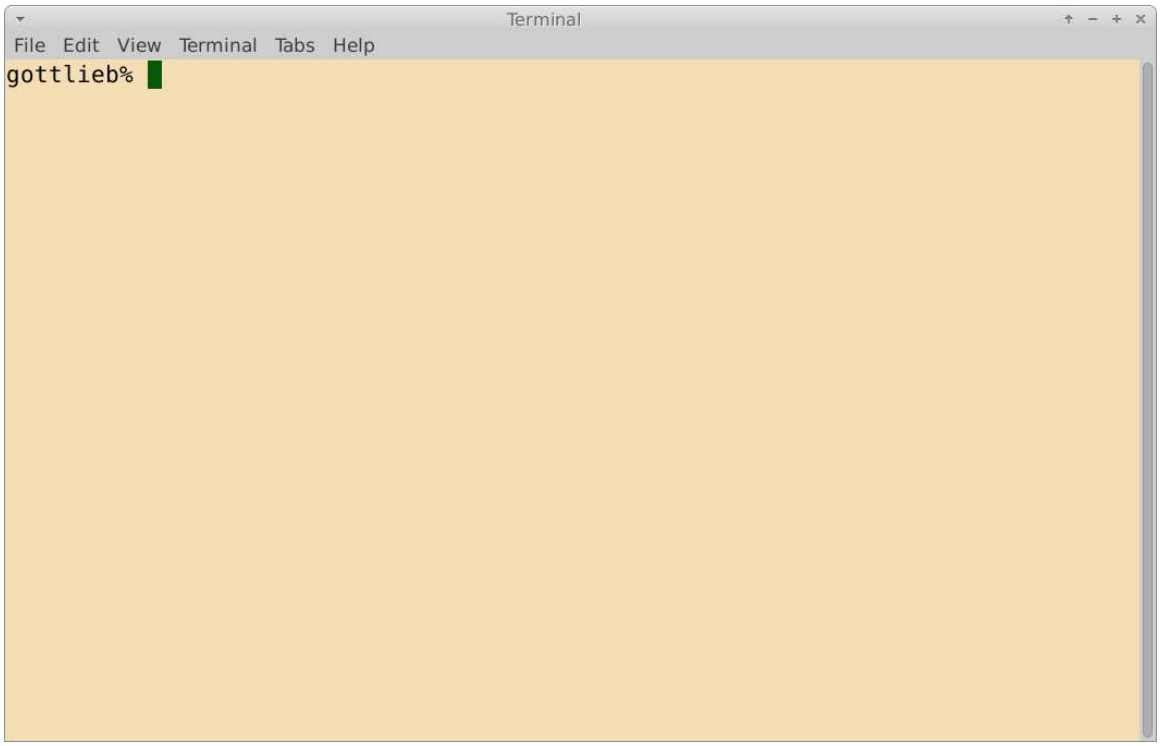

Figure 6: The Terminal Emulator

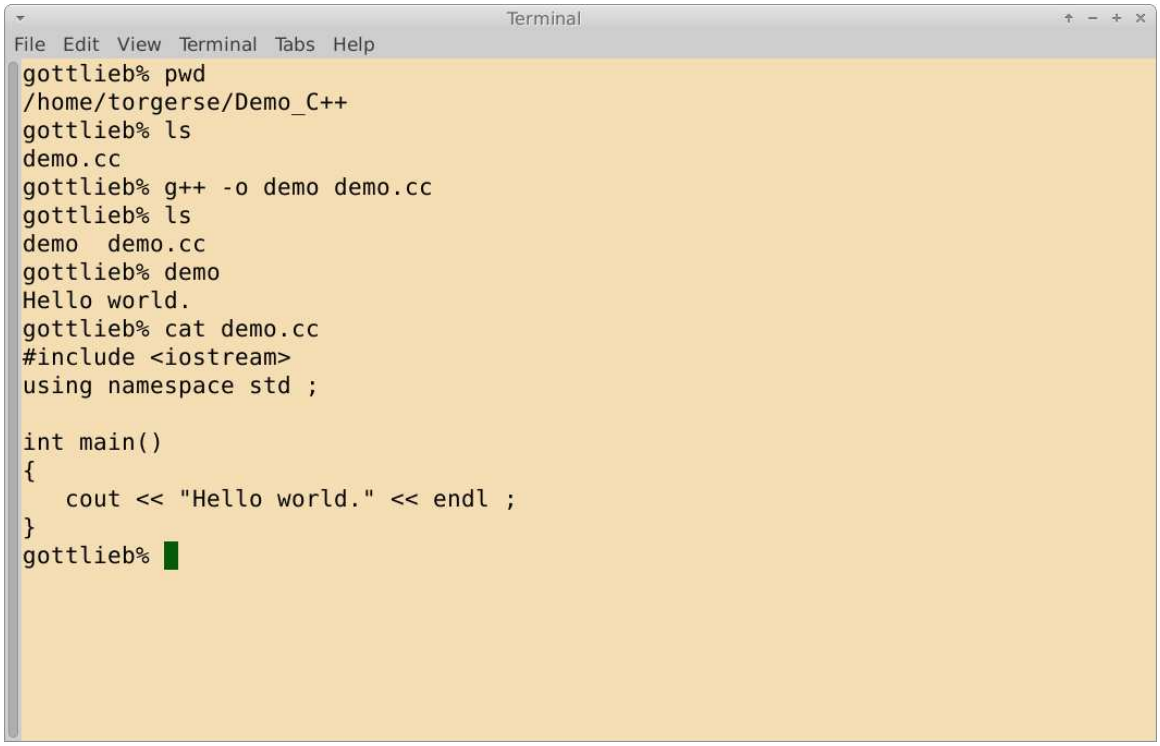

Figure 7: A Terminal Dialog