

CC151

TextPad and GCC set up Instructions for Home Installation

NOTE: Because the Department is only responsible for the functionality of programs and computers within our lab facilities, the instructions below are given as is. Also, the instructions are given in the understanding that CC151 students will attend the lab sessions as requested. The instructions are only meant to help those who would like to continue their lab activities at home.

To set up GCC

There are a few packages that include the C compiler we use in CC151. Not all of them have exactly the same files, but they should all work for the level at which we work in CC151. Our lab version of the C compiler is GCC as included in the CygWin package (intended to add Linux-like capabilities to MS-Window).

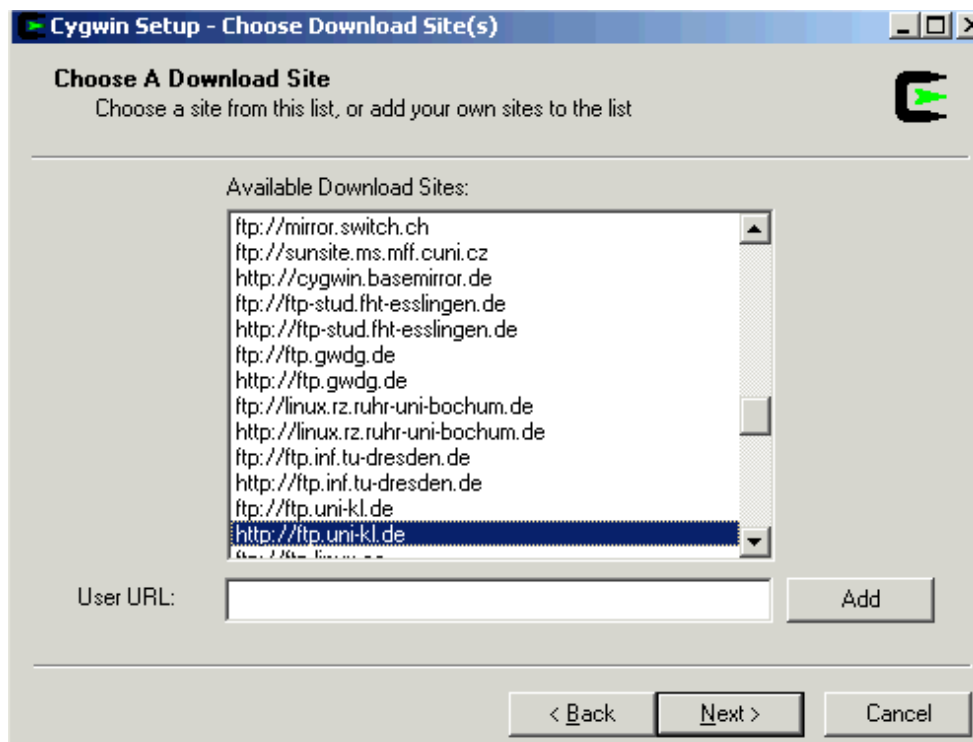
1. To download CygWin, go to:

<http://www.cygwin.com/>

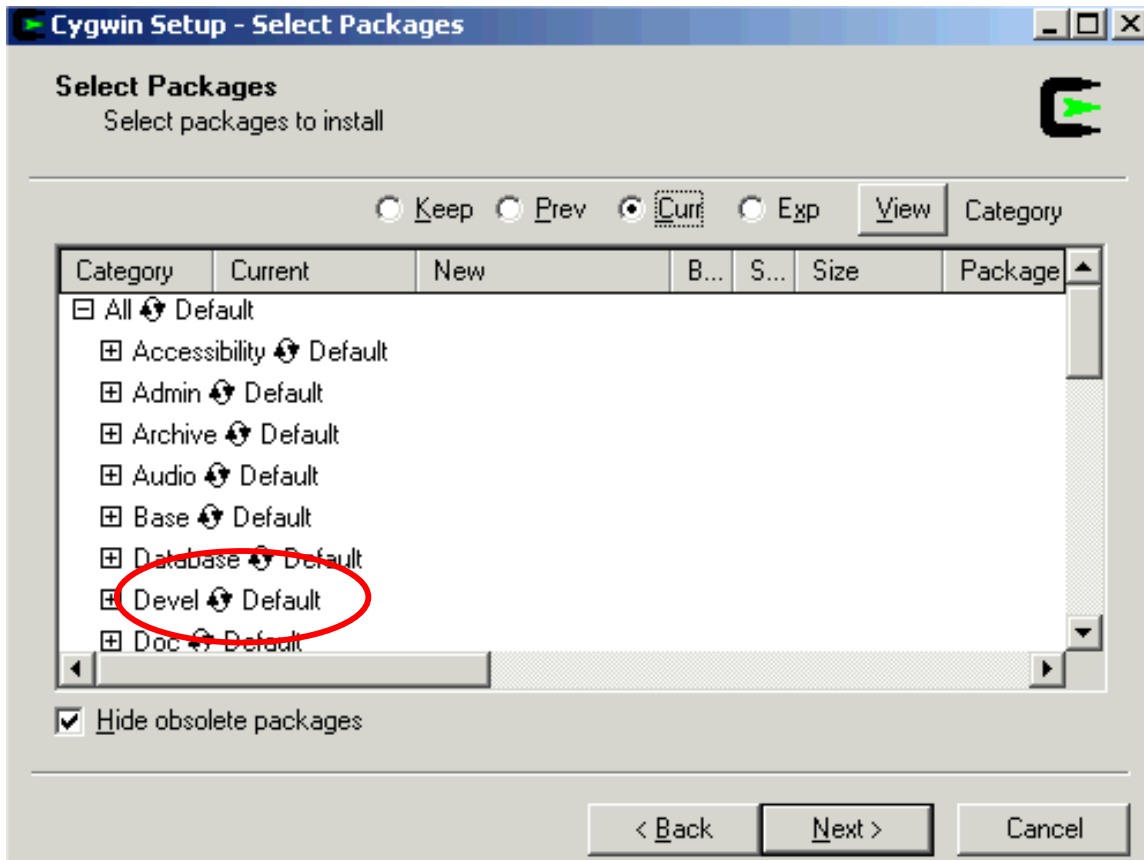
2. Download **setup.exe** to your download directory by clicking on the following icon:



3. Find where your downloaded CygWin **setup.exe** file is and double-click on it. When the CygWin set up window appears, keep pressing **Next>** until you see the following window:



- Click on a download site in Europe (.de, .fr., .it, .ch, etc.) to highlight it, then press **Next>**.
- Wait a few seconds until the window below appears. Click on the **Devel** item until the word **Install** appears (if you accidentally click more than once, keep clicking and it will go back to **Install** after a few clicks):



- Press **Next>** and wait several minutes until your download and installation are finished. If you used the default installation directories, you should find the file **gcc.exe** in the directory **C:\cygwin\bin\gcc**.

Note: CygWin will install quite a lot of files you probably do not want, including compilers for Perl, OCalm, Java, etc. To be sure that everything will work fine, it is best to leave this as it is. However, if you are desperate for disk space, you can remove unwanted files either by hand (a very tedious and long process), or you can run CygWin **setup.exe** again. This time, however, press **Next>** once to go to the '**Choose a download site**' window and choose '**Install from local directory**'. Then, click **Next>** until you reach the '**Select local package directory**' window and enter the local directory where the installation files were downloaded. This will usually be a directory in your **C:** drive whose name is the url of the site from which you chose to download the Cygwin package in step 3 above. Press **Next>** again to go to the window shown in step 5 above. Click on the **+** icon next to **Devel** and click on **Keep** until you see **Uninstall** for the packages you are sure you do not want.

- Finally, you will need to be sure to add the **gcc.exe** directory to the MS-Windows path. If you are using Windows XP, on the desktop right-click **My Computer** and click **Properties**. Now click on the

Advanced tab and press the **Environmental Variables** button. In the **User Variables** box, click on the line starting with **PATH** to highlight it and then press the **Edit** button under that box. In the **Variable value** form that will appear, add a semicolon followed by the **gcc** directory name at the end of the long string that is already there. For example, for the situation in step 6 above, you will add **;C:\cygwin\bin**; at the end of the string. **A word of caution: do not erase anything that was already in the 'Variable value' string or Windows may not work correctly.** If you accidentally change what was there, press **Esc** to go back one level and press the **Edit** button again. Once you've add the gcc directory to the Path, press **OK** until you are back to the Windows desktop.

To be sure that your path has been updated, click on the MS-Window **Start** button, go to **Run**, and type **cmd** followed by <enter>. In the DOS window that will appear, type **path** (followed by <enter>) and check that the gcc directory is included in the path string. Then, type **exit** to leave the DOS window.

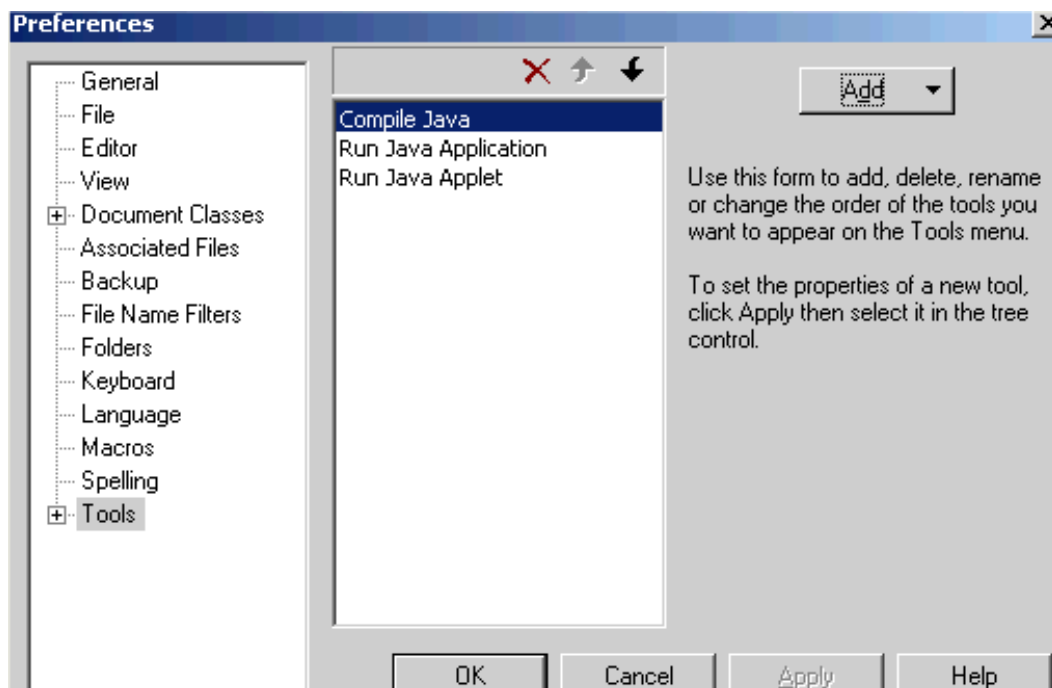
To set up TextPad

1. Go to the following site and download TextPad:

<http://www.textpad.com/download/index.html#downloads>

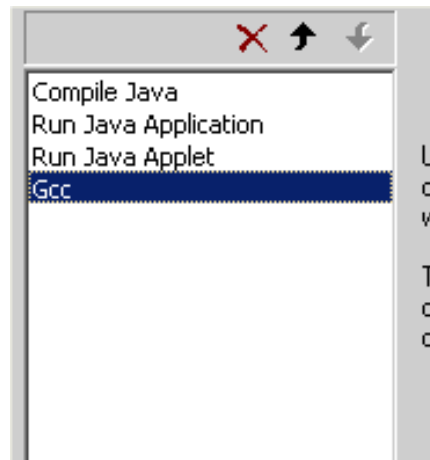
You can download the latest version of the software if you'd like, but the instructions below apply to version 4.7.3 as that is what is installed in the labs.

2. Run (double-click) the **txpeng473.exe** file you downloaded and install TextPad. The installed package has a trial license, but it will not expire and the program has full functionality.
3. Run TextPad and go to the **Configure** menu. Choose **Preferences** and then click on the **Tools** item in the window that opens up. You should see the following window:

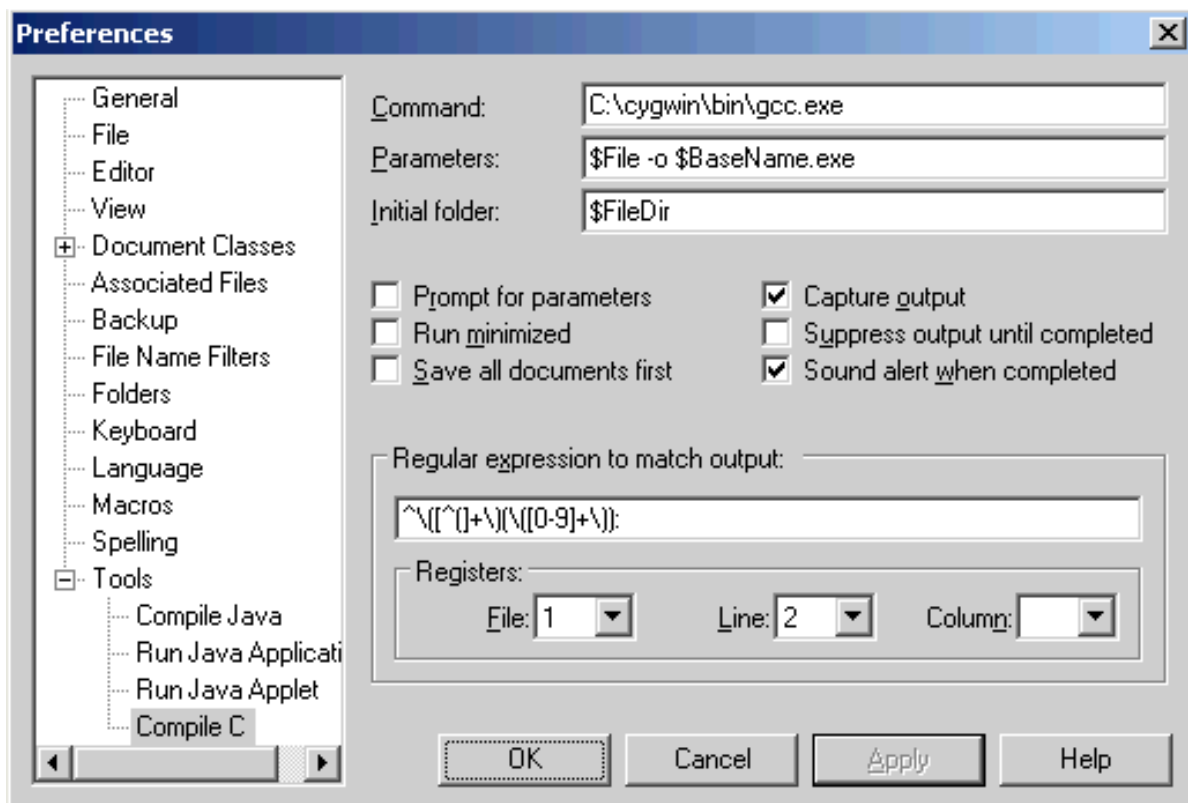


Click on **Add** and then on **Program** in the menu that appears.

4. A window will appear asking for the location of the program you want to add. Find the **gcc.exe** file and click **OK**. The middle box in the Preferences window (see above) should have changed to:



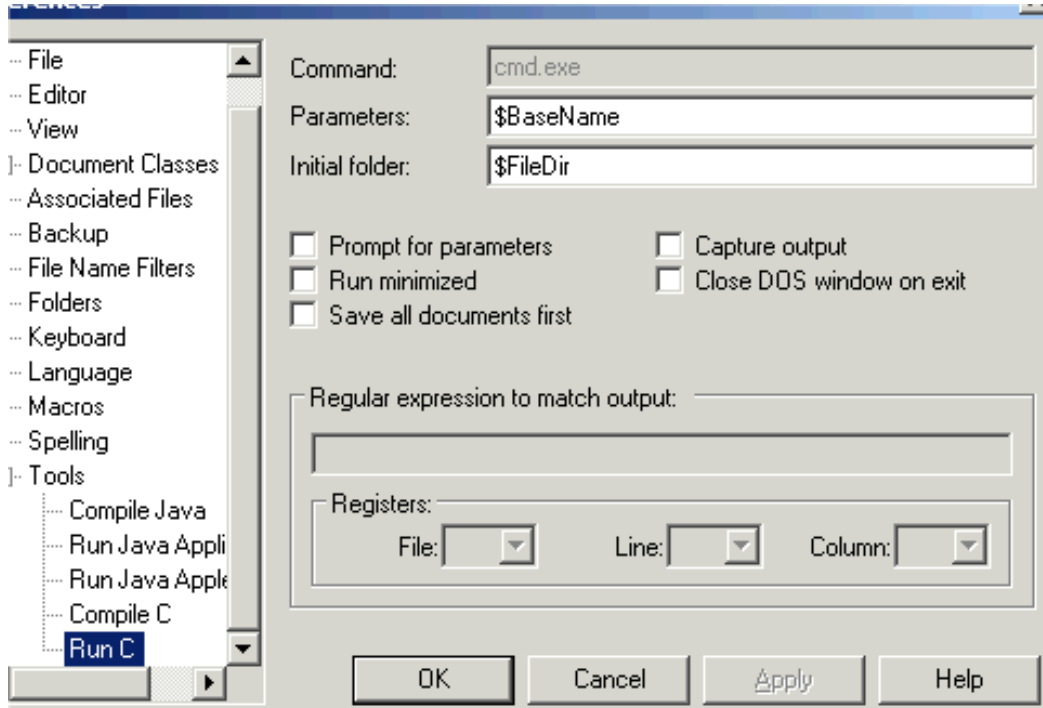
5. Now click on Gcc in the middle box and change it to **Compile C**. After that, click on **Apply** and then on the **+** icon next to **Tools**. You should see **Compile C** listed as the last item under **Tools**. Click on **Compile C** (under Tools) and change the **Parameters** entry to the string as shown below, i.e., **\$File -o \$BaseName.exe**



Make sure that all other strings are as shown here as well.

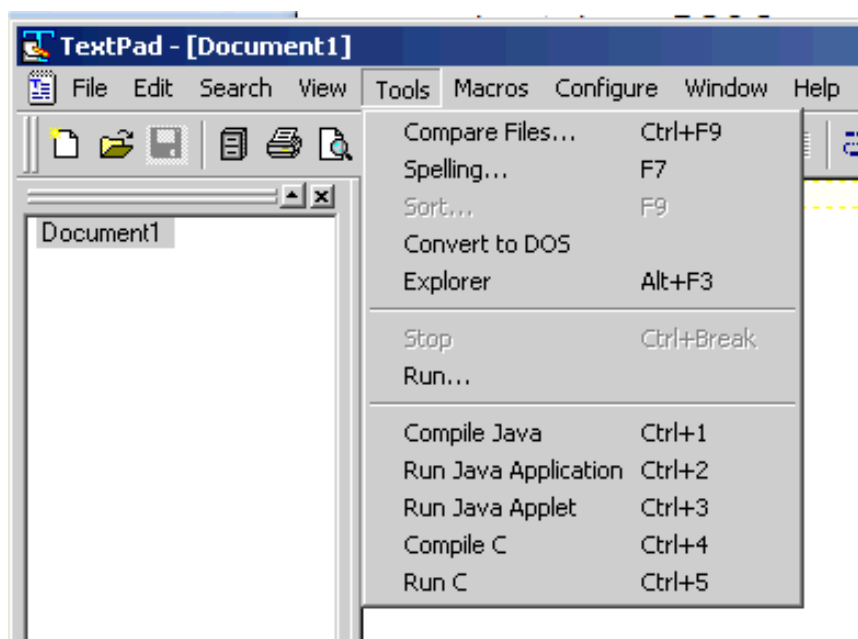
6. Press **Apply** and then **OK**. Now, run step 3 above again to add another item. However, this time you need to choose **DOS Command** (instead of **Program**) under Add. Enter **\$BaseName** in the box that appears. Press **OK** to return to the **Preferences** window.

7. Click on **\$BaseName** in the middle box and replace it with **Run C**. Press **Apply**. Go to the left box in the **Preferences** window. You should now see **Run C** listed under **Compile C**. Click on that **Run C** (not on the one in the middle box) and be sure to change the necessary entries to match the following figure:



Notice that **Capture Output** is unchecked. This will cause your program to run in a separate window (as opposed to within TextPad, which can get untidy at times).

8. Press **Apply** and **OK**. You should be back to the main TextPad window. In it, click on the Tools menu and you should have the following view:



You are now ready to do your CC151 lab activities at home.