

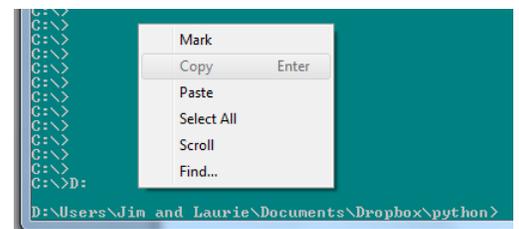
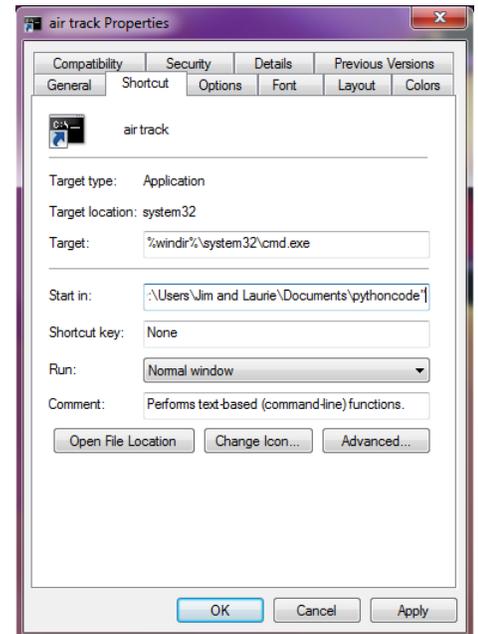
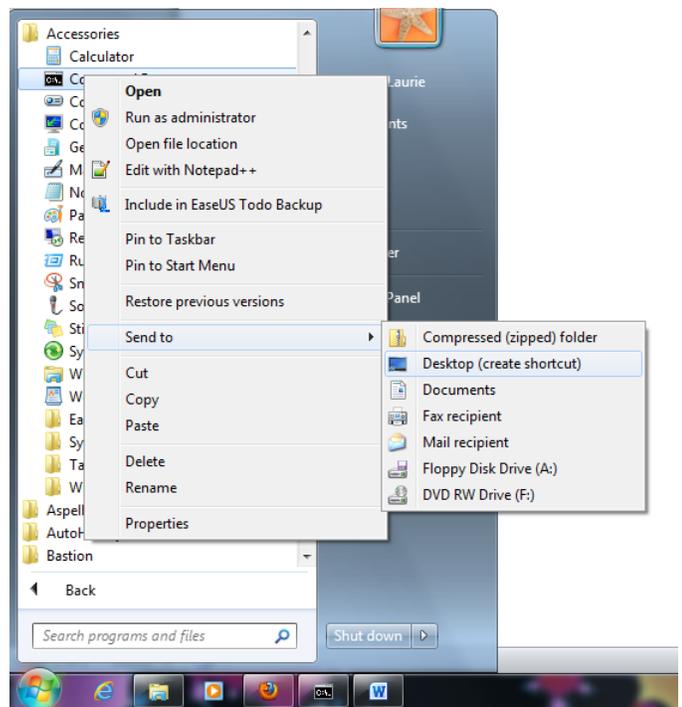
Assignment: A0

Notepad++ features and the command prompt window.

This introduces some of the most useful features of the Notepad++ editor and some tips for the Windows “command prompt” (cmd.exe).

The Windows “command prompt”:

- You can open a command window by running cmd.exe from the input field in the Windows start menu. But as I mentioned in the installation instructions, it’s good to make a desktop shortcut to the “Command Prompt” entry in the Accessories folder of the Windows start menu. Right click on it and choose the “send to” “Desktop (create shortcut)” option. (See image to the right.)
- (Note: you can also open a command prompt from within Windows explorer. Move your cursor over the target folder (icon), then shift-right-click and pick the “open command window here” option from the pop-up menu.)
- Once you have the short cut on your desktop, you can modify the short-cut’s properties to change the size of the window, number of lines in the buffer, background color, and starting directory. It’s useful to have this open up to the directory that you will be using to store your Python code. (See second image to the right.)
- Here are a few commands that you will use:
 - “dir”: this gives a directory listing of the current directory.
 - “cd”: Use this to change the active directory of command window. This command takes one parameter. Here are some examples:
 - “cd ..”: The two dots tell it to move up one directory in the tree.
 - cd “subdirexample”: To change down to a sub directory called “subdirexample”.
 - “cd c:\dname”: Here’s a full path is provided to so as to change directly to the “c:\dname” directory.
 - “d:”: you may need to use something like this command to see directories on a drive other than the c: drive. So for example, after you do “cd d:\dname” you will probably have to enter “d:” to see that d: drive directory echoed back in the command window. To go back to seeing directories on the c: drive you will have to issue the command “c:”.
 - The command window has a command history that you can access by using the up and down arrows on the keyboard. This is usually much easier than retyping the command. You can edit a previous command by using the left and right arrow keys to position the cursor inside the command. Use the delete and back keys to remove characters. Then just type to enter new ones.
 - The command window supports copy and paste operations. If you right-click in the command window you will see the option to “Mark” text in the window (see image to the right). This highlights text. Then simply hit the “enter” key and the text will be in the copy buffer for you to paste at the command prompt. This is useful for



copying a long file name from a directory listing and then pasting it into the command line (so you can run it).

- You can run a Python program by entering its name (and its .py extension) at the command prompt.

- To get to the Python interpreter (the >>> prompt), simply type “python” at the

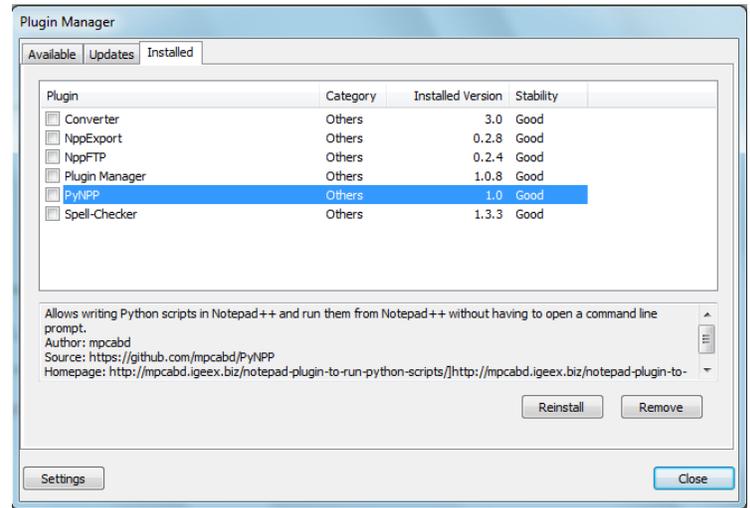
```
D:\Users\Jim and Laurie\Documents\Dropbox\python\box_collision>python
Python 2.7.3 <default, Apr 10 2012, 23:31:26> [MSC v.1500 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>>
```

Windows command prompt. To get back to the Windows prompt, type “control-z” and then hit “enter”.

From the Python interpreter prompt you can directly execute Python statements.

Notepad++:

- One of the most useful features you will need is for running a Python program directly from the Notepad++ editor. This feature is available via a plugin called “PyNPP”. You can install this via the Notepad++ plugin manager (see main menu). Once you have it installed, it should look this if you go to the “Installed” tab in the plugin manager (see image to the right). To then run the program you are viewing in the editor, just type “ctrl-alt-f5” (all at the same time). Note that if your program crashes (stops executing with errors), you will have to try running it from a Windows command window to see the error messages.
- You can mark lines in the code by clicking just to the right of the line number. Click again to unmark the line. Once a line is marked, you can quickly jump back to it by pressing the F2 key. If you have multiple lines marked, repeatedly pressing F2 will cycle through the list of marked lines.
- You can change the background color of the editor. My preference is some light shade of green. Pick what works best for you. White can get fatiguing for your eyes. Get to this by “settings” and “style configurator...” in the menu.
- You can select multiple lines of text by dragging the mouse cursor in the area to the left of the numbers. Once you have some lines selected you can click and drag them as a block.
- “ctrl-z” executes an undo.
- Use “ctrl-g” to jump to a specific line number.
- Use “ctrl-f” to search.
- Recent versions of Notepad++ have an as-you-type spell checker enabled by default.
- You can fold (hide) blocks of text by clicking on the little minus signs to the right of the line numbers. Click on the resulting + sign to unfold the block.
- You can zoom (in and out) the view of the code by using the roller wheel on your mouse while holding down the ctrl key.
- You can find the other half of a parentheses pair by positioning the Notepad++ cursor (use arrow keys) on either the left or right side of the parenthesis (or position the mouse cursor and then click). It will change colors along with the other parenthesis in the pair. This also works for pairs of braces and pairs of brackets.
- You can comment a selected block of code by using “ctrl-k”. “ctrl-shift-k” will un-comment a selected block of code.
- You can change the indent level of a selected block of code by using the tab key. “Shift-tab” reduces the indent level.
 - **As mentioned in the installation instructions, you should have Notepad++ configured to use four spaces when it indents (not tabs)!** This gets important when we share code with each other.



- The “Compare” plugin is useful for tracking changes between file versions of your code. It’s also useful for comparing the various code files from this website and identifying the incremental changes made throughout the sequence of assignments. Use the plugin manager to download and install the “Compare” plugin. Load two files into Notepad++ for comparison and then run the “Compare” plugin from the plugin menu or by typing Alt+D. To turn off the comparison mode type Ctrl+Alt+D.