Using NetBeans IDE

This is the environment you’ll use in CS1110. An integrated development environments (IDE) like NetBeans incorporates many tools to facilitate creating, managing and running a program, including things like a graphical user interface (GUI) for development, a fancy text editor (color-coding, auto-indenting, code-completion, highlighting of matching {}, etc.), an output window, links in compilation errors connecting back to the problematic code line, buttons to compile and run the program, an interactive debugger, +/- icons to collapse/expand sections of a program, buttons to comment & uncomment selected chunks of code during debugging, etc.

1) Download HelloWorld.zip & UnZip it
   - right-click it, do Save Link As, then Save it to your Desktop
   - right-click it, choose 7-Zip (or...), do Extract Here
     [NOTE: Programs created in an IDE put the Java program code file along with other related files and subfolders into a single project folder. Hence they have to be zipped together into a single file to upload and download the project.]

2) Open NetBeans & Open HelloWorld
   - open NetBeans
   - open project: File/open Project.../select HelloWorld from Desktop, click open Project
   - load Java program into Editor Window: in Projects window (top left) expand project tree: HelloWorld / Source Packages / <default package>
   - double click HelloWorld.java program

3) "Compile" & Run the Program
   - click hammer & broom icon at top to "compile" code (actually, it "builds" a byteCode file vs. a true "compile to machine language") - you’ll see a BUILD SUCCESSFUL message in output window
   - click green arrow icon at top to run the program - you’ll see Hello World message in Output window

4) Change the Program & ReRun it
   - change the program so it prints 4 lines: your name, major, Western and Kalamazoo using "cut & paste"
     [USE: select a line, CTRL-C to copy it, CTRL-V to paste it]
   - mess up the alignment a little, put 2 lines of code on 1 line, put some spaces in front of the )’s
   - fix this by doing: Source / Format from the top drop-down menu
   - just running the program (green arrow) automatically does a "build"
   - normally you’d save the changes by choosing File / Save ALL
     but it’s already automatically saved when you run it (note that File / Save All is grayed out)

5) Explore the Project’s files in the IDE and on your Desktop
   - in the IDE: in top-left window select Files instead of Projects tab - expand the folders to find:
     - the source file: HelloWorld.java in HelloWorld / src
     - the byteCode file: HelloWorld.class in HelloWorld / build / classes
   - on your Desktop, drill down to: find HelloWorld.java in HelloWorld / src
     and similarly for HelloWorld.class in HelloWorld / build / classes
     - view the HelloWorld.java source code file:
       - right-click the file, do open with, choose WordPad
       - right-click the file, do open with, choose NotePad (the IDE editor left off linefeeds)

6) Close the Project & NetBeans and Send the File to Yourself
   - do File / Close Project (otherwise it’ll still be there when you next open NetBeans) and close NetBeans
   - zip the HelloWorld folder: right-click folder, choose 7-zip / Add to Archive, use Zip format & save it
   - email the zipped file to yourself as an attachment