General Instructions:
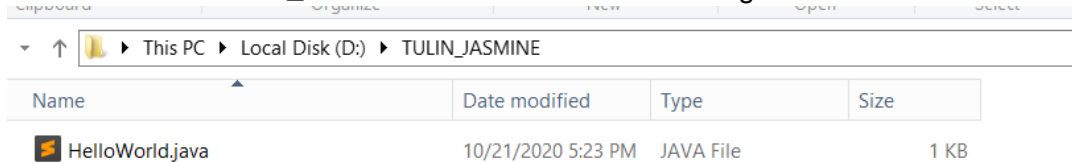
Prior to our first activity,

1. Create a folder in your local directory with folder name
   YOURFAMILYNAME_YOURGIVENNAME.
2. Download file *HelloWorld.java.* Save/place "HelloWorld.java" under your
   YOURFAMILYNAME_YOURGIVENNAME folder. See figure below as reference.

← ↑ 📁 ▸ This PC ▸ Local Disk (D:) ▸ TULIN_JASMINE			
Name	Date modified	Type	Size
📄 HelloWorld.java	10/21/2020 5:23 PM	JAVA File	1 KB

Activity for today:

1. Download and install the Java JDK.
2. Download and install TextPad.
3. Entering, compiling, and executing your Java program in TextPad
   a. **Open** the file HelloWorld.java.

   If you create a java program, save the source in a file with EXACTLY the same name as the "class" with an extension of ".java". Assume the source code defines this class.

   ```
   public class InitialTest {

       . . .

   }
   ```

   It must be saved in a file called InitialTest.java

   ## But for this activity leave the filename "HelloWorld.java" is.

   b. **Compile** by selecting Tools > Compile Java menu item. If there are errors (and there usually will be at first), go back and forth between the "Command Results" and the source code by clicking on each of them in the top left pane. Continue with this process until it compiles correctly.
   c. **Run** the program by choosing Tools > Run Java Application menu. This will open a DOS Command Window and you will see your text output, followed by "Press any key to continue . . .". Your program is done!
4. Create a pdf file with filename *Activity1_Yourfamilyname* which contains the following
   • A picture of the DOS Command Window that displays the phrase "Hello World"
   • A picture of your directory file (showing your folder, HelloWorld.class and HelloWorld.java)

5. Submit your pdf file in MS Team.

TextPad Problems?

1. Q: TextPad can't find the Java compiler. What's wrong?

   A: *When TextPad can't find the Java compiler, there are two common causes.*
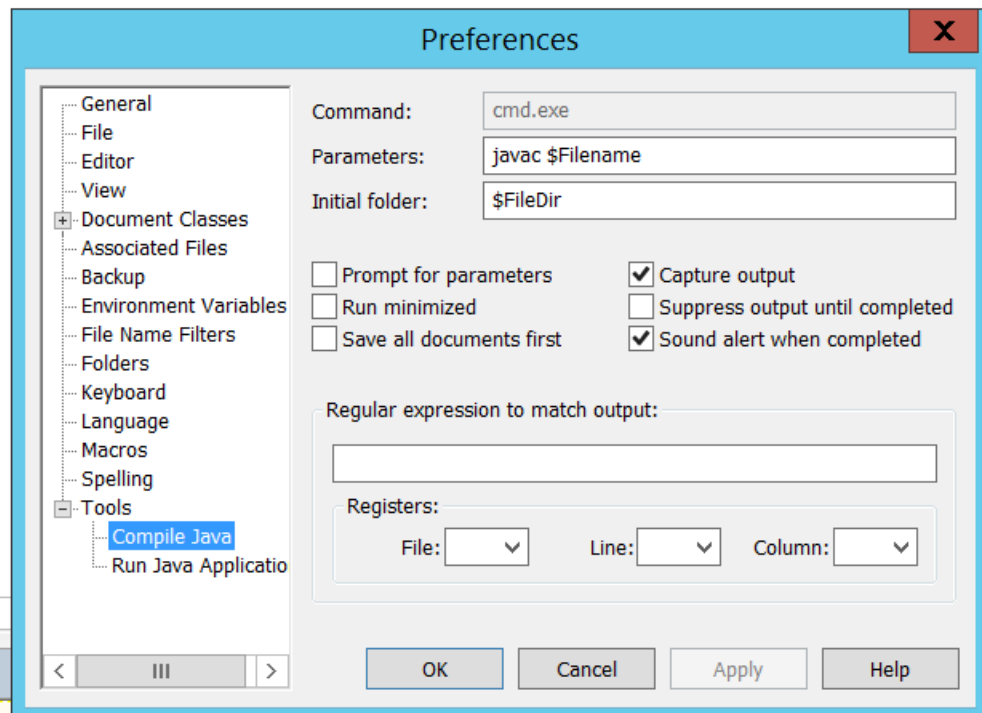
   1. You installed TextPad before the Java compiler. You MUST install Java first. Uninstall TextPad (from the System control panel) and reinstall it.

   2. You didn't install the Java JDK, maybe you only have the Java JRE. If you installed Java 5 is should install by default in

      `C:\Program Files\Java\jdk1.5.0_04`

      There will also be a "JRE" (Java Runtime Environment), which is appropriate, but be sure there is a "jdk" (Java Development Kit).

2. Q: I get a message about "javac ...". How can I fix it?

   A: **Check the** `Configure > Preferences > Tools > Compile Java > Parameters` **field.**
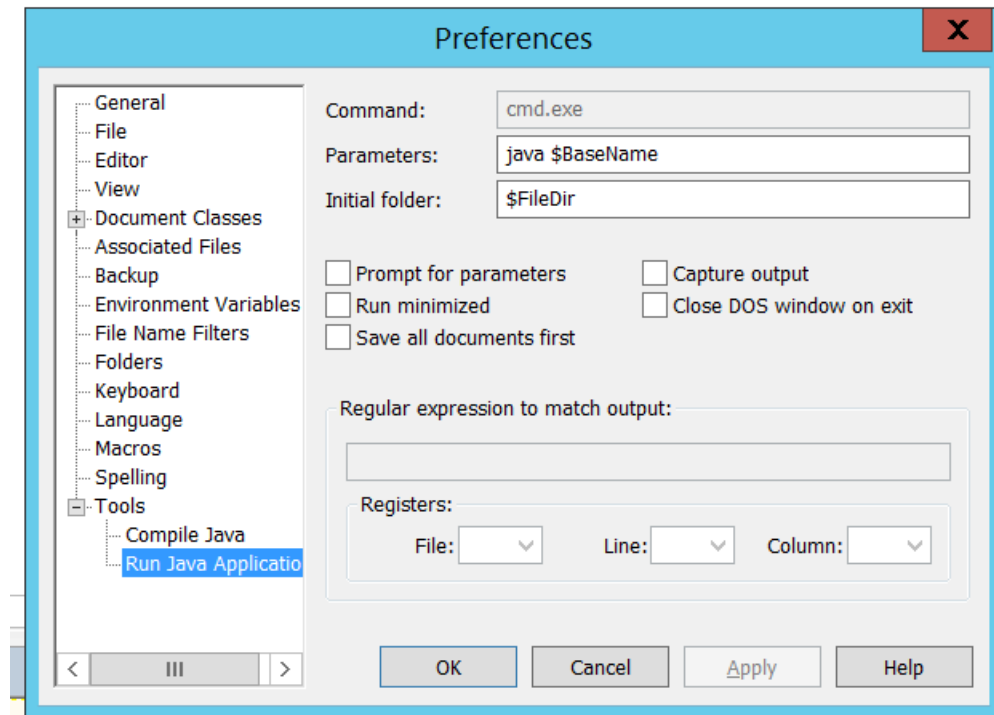

3. Q: This message comes out when I try to run my program in TextPad. What's wrong?

   `Exception in thread "main" java.lang.NoClassDefFoundError:`

   A: The most common cause at this point is that the file name doesn't match the class name. Make sure the names agree *exactly* first.

Another, much less likely, problem could be that the parameters are set wrong in TextPad. Look at `Configure menu > Preferences... > open Tools > Run Java Application`. The Parameter field should have `$BaseName` (**with blanks around it**).

```
                              Preferences                          X
  ┌─ General              Command:      cmd.exe
  │  File
  │  Editor               Parameters:   java $BaseName
  │  View                 Initial folder:  $FileDir
  ├─ Document Classes
  │  Associated Files
  │  Backup                 ☐ Prompt for parameters      ☐ Capture output
  │  Environment Variables  ☐ Run minimized              ☐ Close DOS window on exit
  │  File Name Filters      ☐ Save all documents first
  │  Folders
  │  Keyboard              ┌─ Regular expression to match output: ──────────────┐
  │  Language              │                                                     │
  │  Macros                │ ┌─────────────────────────────────────────────┐   │
  │  Spelling              │ └─────────────────────────────────────────────┘   │
  ├─ Tools                 │  ┌─ Registers: ──────────────────────────────────  │
  │    Compile Java        │     File: [  ▽ ]    Line: [  ▽ ]   Column: [  ▽ ]  │
  │    Run Java Applicatio  │
  │
  │  < │  III  │ >          [  OK  ]  [ Cancel ]  [ Apply ]  [ Help ]
```

4. Q: Can I run my Java program like a normal application?

    A: No. TextPad translates the *.java* files into *.class* files which can not be run by double-clicking them. Some IDE's (eg, NetBeans) will produce double-clickable *.jar* files, and there are programs which will package your Java files into a *.exe* file.