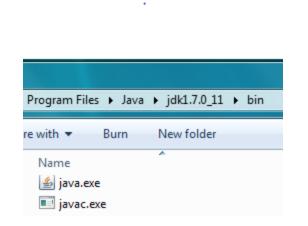# COMP 110/401
APPENDIX: INSTALLING AND USING BARE BONES DEVELOPMENT ENVIRONMENT ON WINDOWS

Instructor: Prasun Dewan (FB 150, dewan@unc.edu)

INSTALL LATEST JDK AND JRE

Program Files ▸ Java ▸ jdk1.7.0_11 ▸ bin

re with ▾   Burn   New folder

Name

java.exe

javac.exe

```
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation.  All rights reserved.

C:\Users\dewan>java -version
java version "1.7.0_11"
Java(TM) SE Runtime Environment (build 1.7.0_11-b21)
Java HotSpot(TM) Client VM (build 23.6-b04, mixed mode, sharing)
```

Look at Install JDK
Documentation

CREATE FOLDER FOR ALL JAVA PROJECTS YOU CREATE

Computer ▸ DATA (D:) ▸ dewan_backup ▸ Java

You can create this folder in any existing folder on your computer

A folder is another word for a directory

You do not have to use the command line to create folder

The command line command to create folder is: mkdir <folder name> (mkdir Java)

IN JAVA FOLDER CREATE PROJECT FOLDER FOR THIS WARMUP EXERCISE

dewan_backup ▶ Java ▶ WarmupProject

IN PROJECT FOLDER CREATE PROJECT-SOURCE (SRC) AND PROJECT-BINARY (BIN) FOLDERS

IN SOURCE FOLDER CREATE SOURCE-PACKAGE FOLDER

dewan_backup ▸ Java ▸ WarmupProject ▸ src ▸ warmup

USE COMMAND INTERPRETER TO CD TO SOURCE PACKAGE FOLDER

```
C:\Users\dewan>d:

D:\>cd D:\dewan_backup\Java\WarmupProject\src\warmup

D:\dewan_backup\Java\WarmupProject\src\warmup>
```
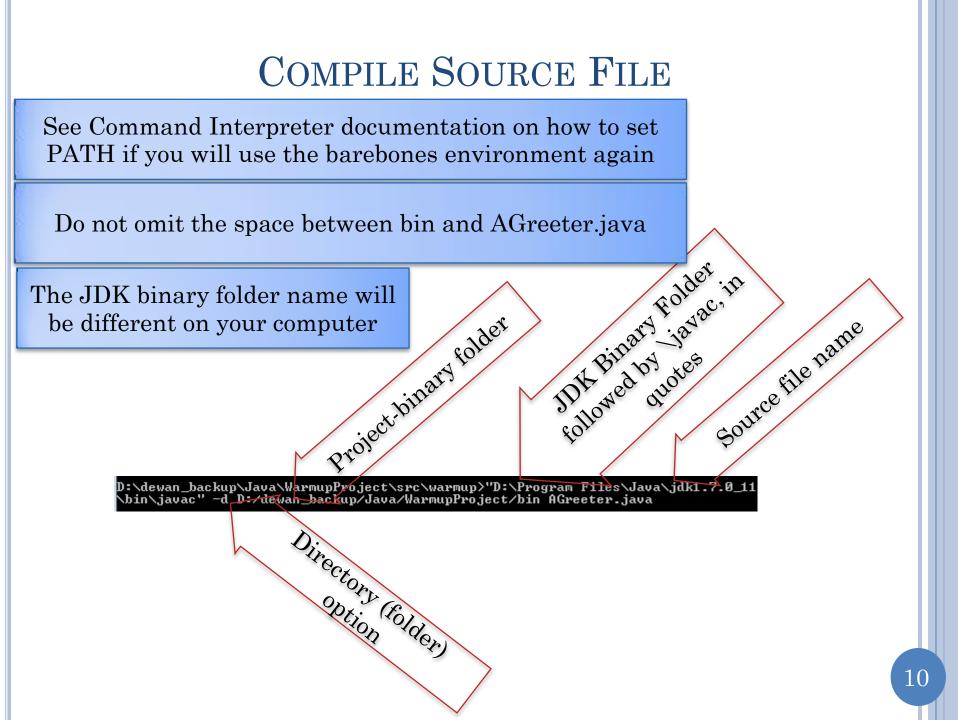
See command Interpreter documentation on CD and Pasting Text such as Folder Names in Command Interpreter

USE A TEXT EDITOR TO CREATE NEW SOURCE JAVA FILE

```
D:\dewan_backup\Java\WarmupProject\src\warmup>notepad AGreeter.java
D:\dewan_backup\Java\WarmupProject\src\warmup>
```

COPY AND PASTE CODE IN TEXT EDITOR AND SAVE FILE

Package folder name

Source file without .java

```
package warmup;
import java.io.BufferedReader;
import java.io.InputStreamReader;
public class AGreeter {
  static BufferedReader inputStream = new BufferedReader(new
InputStreamReader(System.in));
  public static void main(String[] args) {
    System.out.println("Hello World");
    if (args.length > 0) {
      System.out.println(args[0]);
    }
    try {
      System.out.println (inputStream.readLine());
    } catch (Exception e) {
      System.out.println("Could not read line");
      e.printStackTrace();
    }
  }
}
```
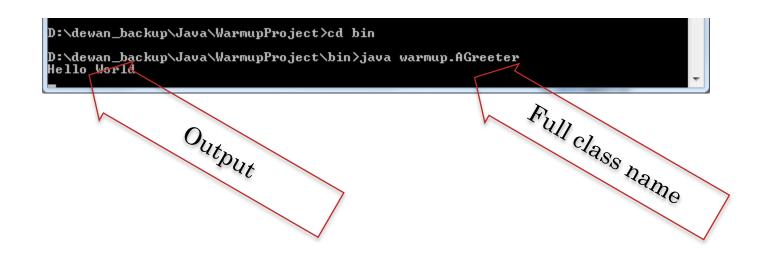
COMPILE SOURCE FILE

See Command Interpreter documentation on how to set PATH if you will use the barebones environment again

Do not omit the space between bin and AGreeter.java

The JDK binary folder name will be different on your computer

Project-binary folder

JDK Binary Folder followed by \javac, in quotes

Source file name

```
D:\dewan_backup\Java\WarmupProject\src\warmup>"D:\Program Files\Java\jdk1.7.0_11
\bin\javac" -d D:/dewan_backup/Java/WarmupProject/bin AGreeter.java
```

Directory (folder) option

EXPLORE PACKAGE BINARY FOLDER

Automatically created binary package folder

dewan_backup ▸ Java ▸ WarmupProject ▸ bin ▸ warmup

are with ▼　　Burn　　New folder

Name	Date modified
AGreeter.class	1/27/2013 10:42 AM

Automatically crated Binary-file

If you do not see the binary package folder or the binary file, and no errors were reported, check that you saved the source file (by say reopening it)

CD TO PROJECT BINARY FOLDER AND RUN JAVA INTERPRETER WITH FULL CLASS NAME

If you see the message saying the Java command was not found, then execute it the same way as you did javac – using the full file name with the JDK binary folder – and just replace javac with java in the full name you used

```
D:\dewan_backup\Java\WarmupProject>cd bin

D:\dewan_backup\Java\WarmupProject\bin>java warmup.AGreeter
Hello World
```

Output

Full class name

INPUT A LINE

```
D:\dewan_backup\Java\WarmupProject\bin>java warmup.AGreeter
Hello World
Ni Hao
```

Input

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HIT ENTER AND SEE OUTPUT

```
D:\dewan_backup\Java\WarmupProject\bin>java warmup.AGreeter
Hello World
Ni Hao
Ni Hao

D:\dewan_backup\Java\WarmupProject\bin>
```

Echoed Input

PROVIDING USER ARGUMENT

```
D:\dewan_backup\Java\WarmupProject\bin>java warmup.AGreeter "Ca Va"
```

User argument in quotes

SEEING ECHOED ARGUMENT

```
D:\dewan_backup\Java\WarmupProject\bin>java warmup.AGreeter "Ca Va"
Hello World
Ca Va
```

Echoed Argument

HIT CTRL-C TO TERMINATE PROGRAM WAITING FOR USER INPUT


```
D:\dewan_backup\Java\WarmupProject\bin>java warmup.AGreeter "Ca Va"
Hello World
Ca Va
null

D:\dewan_backup\Java\WarmupProject\bin>
```

Forcibly Terminated program