

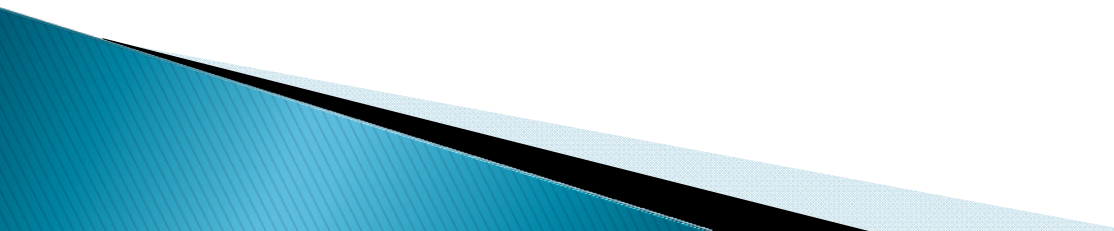
CSSE 220 Day 2

Course Intro
Instructor Intro
Java Intro, Continued

CSSE 220 Day 2

- ▶ Please do not sit in the back row or on the far right side of the room.
- ▶ Register your attendance on ANGEL.
- ▶ Please consider making your picture on ANGEL visible to students in your courses.
 - Home → Preferences (wrench icon) → Personal info
- ▶ **If you want all of your ANGEL mail to also go to your regular mail, too, you can set it that way.**
 - Home → Preferences → System Settings
- ▶ You can subscribe to the ANGEL discussion forums. (From the Communicate menu)

Book situation

- ▶ How many students do not have a textbook?
 - ▶ Have you told the bookstore you need one.
 - ▶ There are probably 150 students on campus who have taken a course that used this book. Perhaps you can find one to borrow.
 - ▶ Meanwhile, a "grace period" on the ANGEL quiz, and I'll delay assigning the next one.
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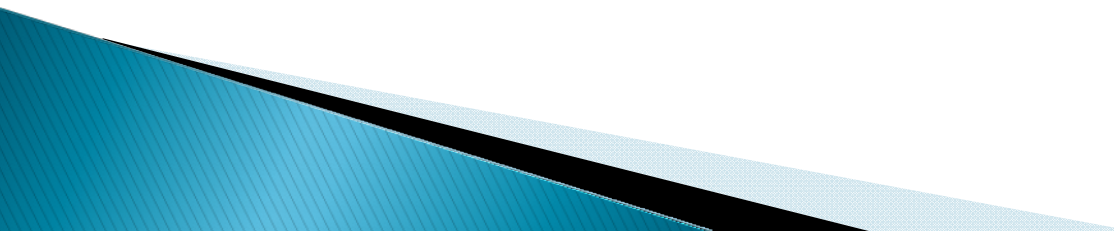
A script for checking your program

- ▶ Benefits to you and me.
- ▶ How?
 - Use SecureCRT or some other ssh program (such as puTTY, available free on the web) to log in to `addiator.rose-hulman.edu`
 - `cd /class/csse/csse220/200820`
 - `./check Homework1`
- ▶ This script copies my test program into your turnin folder, compiles it (and your code), runs my tests, and reports the results.

Instructor intro

- ▶ On separate slides

Your questions about ...

- ▶ The syllabus
 - ▶ Java
 - ▶ etc.
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More announcements

▶ Cell Phones

- please set ringers to silent or quiet.
 - Minimize class disruptions.
 - But sometimes there are emergencies.

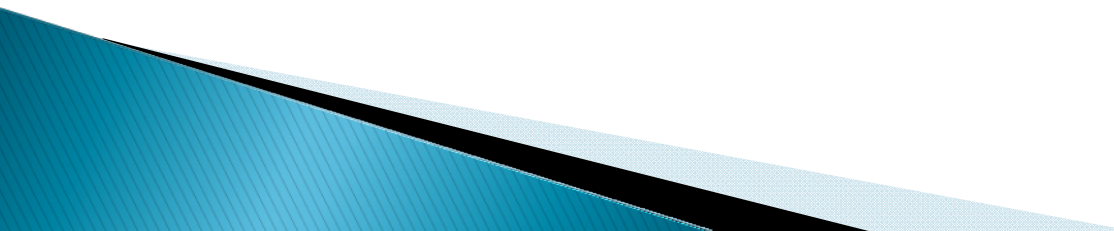
▶ Personal needs

- If you need to leave class for a drink of water, a trip to the bathroom, or anything like that, you need not ask me. Just try to minimize disruptions.

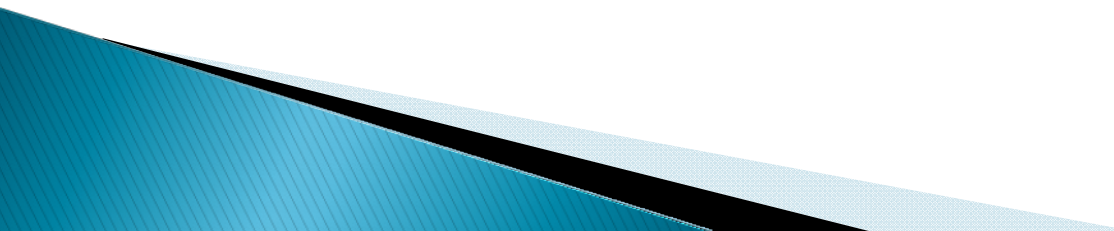
▶ Section 01

- None of you have class immediately before this one.
- Thus you should be able to be here and have your computer up and running by 8:05.

Computers in class

- ▶ Unless I say so in advance, assume that it will be necessary to bring your computer to class.
 - ▶ When you do bring it to class, it's best not use it for things unrelated to the course.
 - ▶ But if you think you can't resist, don't distract others. Sit in the next-to-last row.
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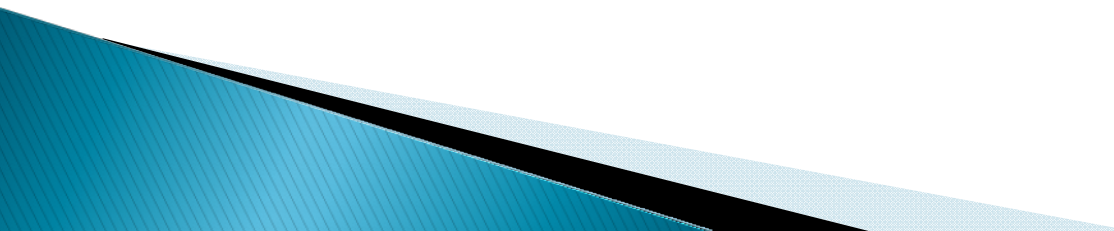
Some major emphases of 220

- ▶ Reinforce and extend OO ideas from 120
 - ▶ Major emphasis on inheritance
 - ▶ GUI programming using Java Swing
 - ▶ Introduce Algorithm efficiency analysis
 - ▶ Abstract Data Types
 - ▶ Data Structures overview
 - ▶ Specifying and using standard Data Structures
 - ▶ Implementing simple data structures (lists)
 - ▶ Recursion
 - ▶ Simple Sorting and searching
 - ▶ A few additional Software Engineering concepts
- 

It's up to you

- ▶ This course is about participating, doing.
- ▶ Not just sitting there.
 - If you just sit passively, you will soon be sleeping or otherwise disconnected.
- ▶ Be active, be engaged.
- ▶ When we are having a class discussion, you may not always be the one to answer aloud, but try to THINK the answer before someone else verbalizes!


Plagiarism

- ▶ Plagiarism has sometimes been a problem in courses at this level. I won't look hard for it, but if I do happen to find it, watch out!
 - ▶ Of course, copying from the work of previous terms' students is just as bad as copying from this term's students.
 - ▶ If you use someone else's ideas, attribute them.
 - ▶ If you use someone else's code, don't submit it!
- 

Penalty for cheating

- ▶ See the syllabus for a long discussion on this.
- ▶ Get help in ways that increase understanding
- ▶ Don't get or give help that bypasses learning.
- ▶ My usual penalty for plagiarism or cheating.
 - If the assignment or exam is worth N points, your score will be $-N$. Yes, that's $-N$, not zero.
 - Then the expected value for cheaters is not positive.
- ▶ In cases of electronic copying (and perhaps other cases), the penalty may apply to both giver and receiver.
- ▶ If you are not sure whether a certain kind of collaboration is appropriate, ask me before you do it.

What will you spend your time doing?

- ▶ Reading (a lot to read at the beginning; less later).
 - ▶ Thinking about exercises in the textbooks.
 - ▶ Small programming assignments in class (some to be continued for homework).
 - ▶ Larger programming problems, mostly outside of class.
 - ▶ Debugging!
 - ▶ Some written exercises, mostly from the textbook.
 - ▶ Reviewing other students' code.
 - ▶ Exploring the JDK documentation to find the classes and methods that you need.
 - ▶ Discussing the material with other students.
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Interlude – From worldmag.com

WORLD | Archives *1996 to the Present*
MAGAZINE

Quick Takes
ODDBALL OCCURRENCES

Bovine force

» If Linda and Charles Everson Jr. had been driving just a bit faster, they may not have celebrated another anniversary. While celebrating their first anniversary, the Michigan couple was driving on Highway 150 alongside a cliff near Manson, Wash., when something fell from above and crushed the hood of their minivan. Instead of falling rocks, it was a falling cow. The 600-pound cow, which had fallen from 200 feet up, crushed the front of their minivan, but the couple escaped unscathed. The 1-year-old bovine wasn't so fortunate.

wenatchee**w**orld.com
THE FIERCELY INDEPENDENT VOICE OF NORTH CENTRAL WASHINGTON

The cow heard around the world **Media milking falling-heifer story to death**

The couple were driving back to their Manson hotel on Highway 150 Sunday after attending a church service in Chelan when the 600-pound heifer named Michelle dropped from above and landed on the hood of their Buick Terraza and bounced off onto the road. Everson said he was stunned and kept on driving, repeating to himself "I don't believe it. I don't believe it."

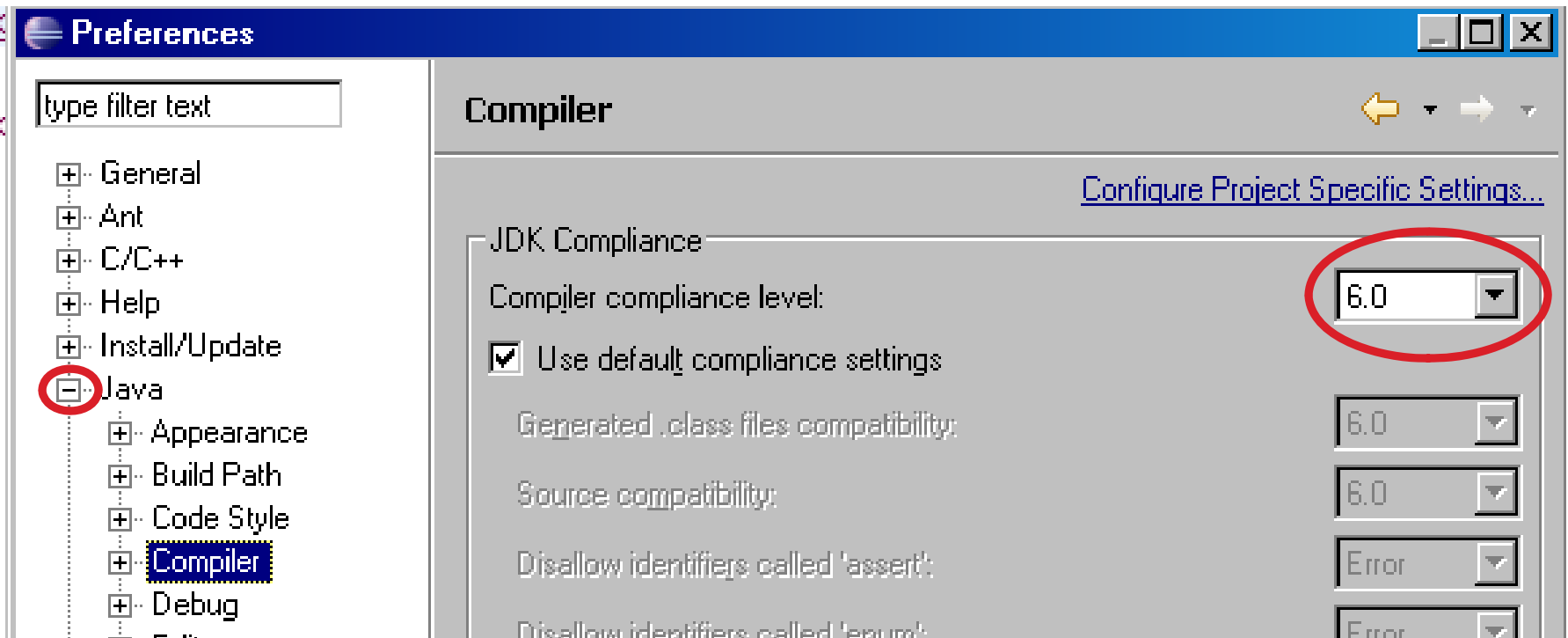


Some leftovers from yesterday

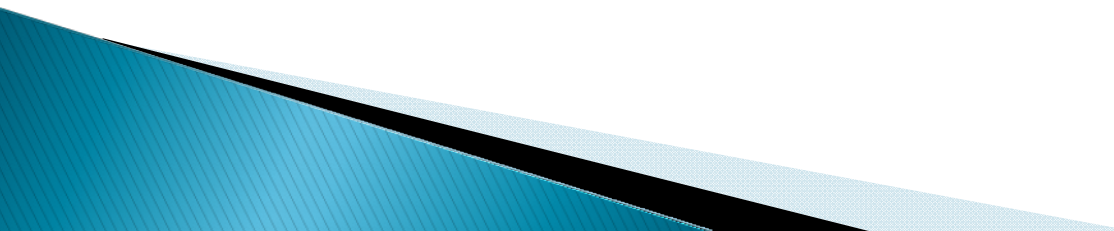
- ▶ On the next few slides

Fixing "printf won't compile" issue

- ▶ Try this in Eclipse:
 - Window→Preferences→Java→Compiler
 - Look at Compiler Compliance Level
 - It should be 6.0
(or 5.0 if you have not installed Java 6)



Command-line arguments

- ▶ Sometimes a program is not run standalone or from within an Integrated Development Environment.
 - ▶ Sometimes it is run as part of a script, from a command-line, such as a UNIX/Linux shell or a Windows DOS Prompt.
 - ▶ The `args` parameter of the Java `main()` method allows us to access the command-line arguments.
 - ▶ `args[0]` is the first command-line argument, `args[1]` the second, etc.
- 

Add Java to your Windows Path

- ▶ You need to have the folder containing `javac.exe` in your **Path*** variable:
- ▶ If you have not already added it:
 - Right-click My Computer, choose Properties
 - Advanced, then Environment Variables
 - Under System variables, click Path, then click Edit
 - Click in Variable value field, then press the End key
 - Add a semicolon, followed by the path to your Java bin folder, which should be something like
C:\Program Files\Java\jdk1.6.0_01\bin
 - Click OK several times to exit.

***Path** is a list of folders in which the system looks for programs to run.

Factorial with command-line argument

```
import java.math.BigInteger;

public class Factorial_8_CommandLine {
    public static final int MAX = 25;

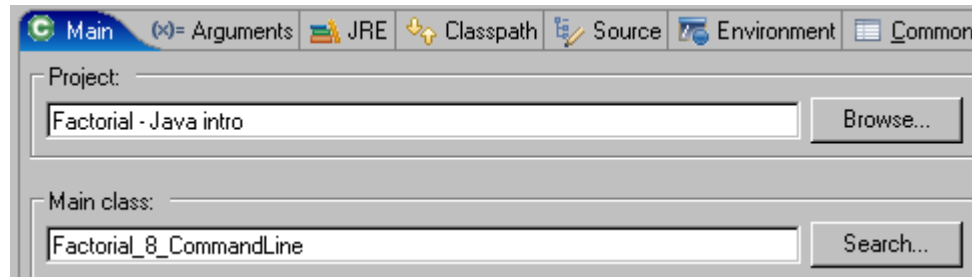
    public static BigInteger factorial(int n) {
        BigInteger prod = BigInteger.ONE;
        for (int i=1; i<=n; i++)
            prod = prod.multiply(new BigInteger(i + ""));
        return prod;
    }

    public static void main(String[] args) {
        int n = Integer.parseInt(args[0]);
        System.out.println(n + "! = " + factorial(n));
    }
}
```

args[0] is the first
command-line argument.

Command-line arguments in Eclipse

- ▶ Run as ... Run ...
- ▶ On Main tab, make sure the class you want to run is selected. If not, use Search ...



- ▶ Click **Arguments** tab.
- ▶ Enter the Arguments under **Program Arguments**.
- ▶ Click Run.



To do before Session 3

- ▶ Read Weiss sections 2.2–2.6.3, 3.1, 3.2.
- ▶ Take the ANGEL quiz on that material*.
- ▶ Details will be*in the hw02.html document soon.

- ▶ * I have to take a late day today!
(broken computer and 3-hour Dr. appointment on Tuesday)

*I also need to update the schedule page.