

Application Design Using Java

Lecture 06

Control flow statements

- Block scope
- if – else
 - else part is always optional
 - else groups with the closest if
- Ternary conditional expression (?)
- switch – case
 - Fallthrough behavior
 - A case label can be:
 - A constant expression of type char, byte, short, or int
 - An enumerated constant
 - A string literal

Loops

- while
- for
- do
- “for-each”
- break
- continue
- labels

Big Numbers

- BigInteger
- BigDecimal

Bitwise and Boolean operators

- Boolean
 - `&&`
 - `||`
 - `!`
- Bitwise
 - `&`
 - `|`
 - `^`
 - `~`
- Shift
 - `<<`
 - `>>`
 - `>>>`
- Short circuit vs. non short circuit evaluation

//TODO before next lecture:

- Homework 1 due on Friday, 2/12 at 11:59 pm EST. Must be submitted on Submitty.
- Challenge question:
 - Write a Java expression that swaps the contents of two variables without using a temporary.

To be clear, it has to be a single expression, i.e., of the form “expr;”. You may assume variables are whole numbers, and they have already been defined and initialized.

- Java puzzler (posted on Submitty Forum)