



# Conditionals in Java

10/31/2007





# Opening Discussion

- Let's look at solutions to the interclass problem.
- What is the purpose of conditionals?
- What conditional construct did we use in Alice?  
How did it work?





# The if Statement

- Just like in Alice, to really get flexibility in our code in Java we need conditional execution.
- As with Alice, we can get this through an if statement. The syntax is basically the same.
  - ◆ `if(booleanExpression) {`
    - statements
  - ◆ `} else {`
    - statements
  - ◆ `}`
- The else is optional.
- If you only have one statement the `{}` is optional.
- You can string them together by putting another if right after the else.



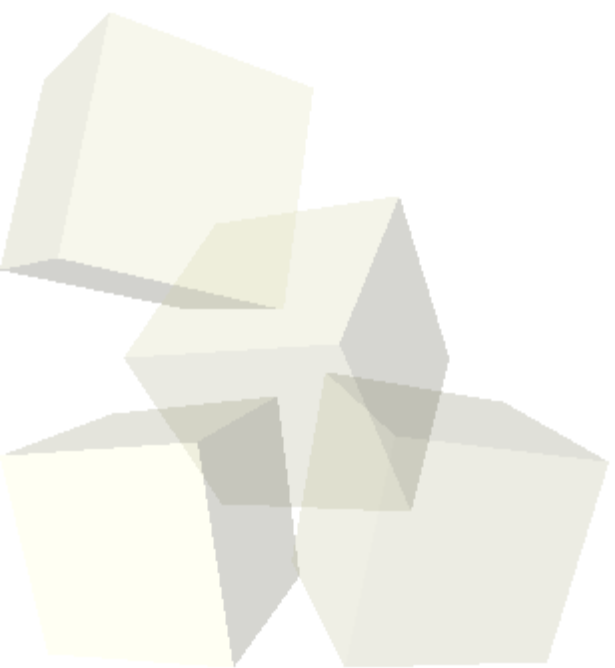
# The switch Statement

- For selecting between multiple options Java also has a switch statement.
  - ◆ `switch(integerExpression) {`
    - `case val1:`
      - `break;`
    - `case val2:`
      - `break;`
    - ...
    - `default:`
  - ◆ `}`
- The argument and cases must be integer types. Note that char counts.
- The break just exits the switch. Leaving one out lets control fall through to next case.



# The toString Method

- When you print an object or concatenate it to a String it calls the toString method of the object.
- This can be helpful in many situations.
- We can write our own toString method in our classes so that they provide useful information or just a nicely formatted String.
  - ◆ `public String toString() { ... }`





- How are you celebrating Halloween?
- There is no class on Friday.
- Interclass Problem – Problem 10.3.

