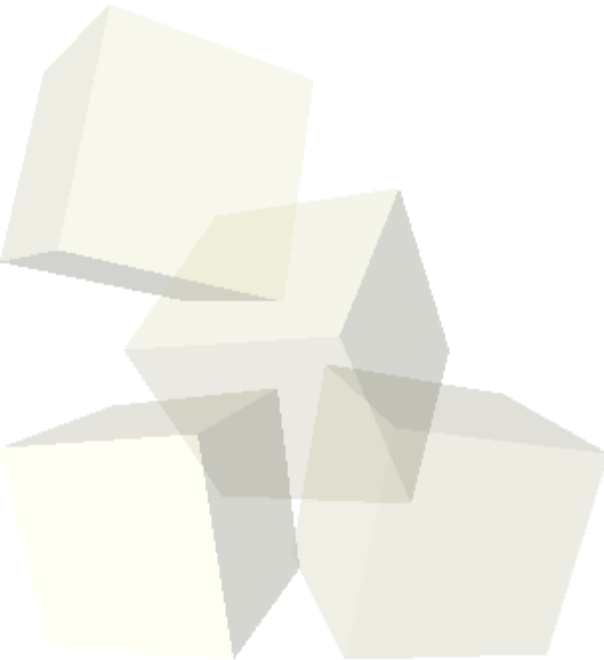




Arrays in Java

2-2-2005





Opening Discussion

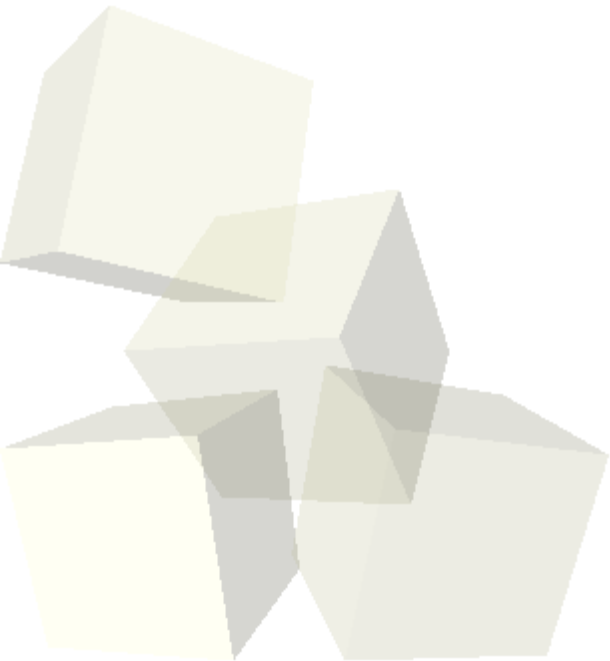
- Do you have any questions about the reading?
- Graded assignments and designs.
- References and polymorphism.





Formula Parsing

- I finished the code for the formula parser. We should go look at it so that you can see how it works. We might also test the flexibility of the approach by extending it in some way.





Key Points on Arrays

- What do you use arrays for in your programming?
- What are some of the key points about arrays that you recall from the reading?





Coding Arrays

- Create a class called `ArrayUtil` and put methods in it that do the following things. I also want you to write a main that will test each of the methods you write.
- Write a function that takes an array of ints and returns their sum.
- Write a function that takes an array of ints and prints all of them.
- Write a function that takes an array of ints and reverses their order.
- Write both of the above as generic functions that take type `T` and either print it or reverse them.



Multidimensional Arrays

- How do you make multidimensional arrays in Java?
- What do you need to do to set them up?
- For code on this I want you to write a method that does matrix multiplication. Your method should take two `double[][]`s and return a `double[][]`.





Minute Essay

- Write a function called `permute` that takes an array of something and an array of ints. The array of ints will have the numbers `0..length-1` in some order. Your function should rearrange the elements of the first array into the order specified by the second array.
- The design for assignment #2 is due on Tuesday. I'll get your files for that assignment up ASAP.

