## CS100J October 23, 2003 Arrays. Reading: Secs 8.1, 8.2, 8.3, 8.4

This weekend, we will put on the website about 30 exercises dealing with loops. We will include the answers (if not immediately, then some time early next week).

## Have your worked on assignment A6 yet?

Don't procrastinate! It's easy to do if you do a little at a time, at your leisure. It's hard to do at the last minute, because you can't think straight and you can't easily ask anyone questions.

Question: Why did I get a Christmas card on Halloween?

## Why did I get a Christmas card on Halloween?

| Decimal | Binary Octal |  | Decimal | Binary | Octal |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 00 | 0000 | 00 | 14 | 01110 | 16 |
| 01 | 0001 | 01 | 15 | 01111 | 17 |
| $\mathbf{0 2}$ | $\mathbf{0 0 1 0}$ | $\mathbf{0 2}$ | $\mathbf{1 6}$ | $\mathbf{1 0 0 0 0}$ | 20 |
| 03 | 0011 | 03 | 17 | 10001 | 21 |
| $\mathbf{0 4}$ | $\mathbf{0 1 0 0}$ | $\mathbf{0 4}$ | 18 | 10010 | 22 |
| 05 | 0101 | 05 | 19 | 10011 | 23 |
| 06 | 0110 | 06 | 20 | 10100 | 24 |
| 07 | 0111 | 07 | 21 | 10101 | 25 |
| $\mathbf{0 8}$ | $\mathbf{1 0 0 0}$ | $\mathbf{1 0}$ | 22 | 10110 | 26 |
| 09 | 1001 | 11 | 23 | 10111 | 27 |
| 10 | 1010 | 12 | 24 | 11000 | 30 |
| 11 | 1011 | 13 | 25 | 11001 | 31 |
| 12 | 1100 | 14 |  |  |  |
| 13 | 1101 | 15 | BECAUSE: |  |  |

## Today

- Write a loop to determine the length of the longest prefix of equal values in an array (like question 1 on the prelim).
- Write a method to tell whether two arrays are equal.
- Look at storing a table of values in a Java array. including adding a value to the table, deleting the last value of the table, deleting some other value from the table.
The material on tables is in Sec. 8.4 of course text.
- Start looking at basic array algorithms.

Basic array algorithms are covered in Sec. 8.5

