

Sunday, 5th June 2016

Crux

Lecture -4

Programming Fundamentals -3

Arrays, Recursion

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- Bubble Sort?
- Selection Sort ?
- Insertion Sort ?

Strings in Java

1. charAt
2. Substring
3. Concat
4. indexOf
5. startsWith
6. Immutable

Lets write some code

- Print out all the characters of a String in different lines
- Check if a given String is Palindrome
- Write code to count number of characters, lines and words from the input. Input terminates by a '\$'.

Your turn

- Print all the substrings of a string
- Binary search in sorted array

Multi dimensional arrays

- How to declare?
- How are they stored in memory?

Lets write some code

- Lets take input in to TwoD Array
- Lets print it out

Your turn

- Wave print
- Spiral print

Recursion

Recursion in computer science is a method where the solution to a problem depends on solutions to smaller instances of the same problem.

Lets write some code

- Factorial
- Fibonacci
- Check if an array is sorted

Your Turn

- Write code for a function `power(x,n)` which evaluates x^n .
- Given an array
 - Check if it contains 7
 - Find FirstIndex of 7
 - Find LastIndex of 7
 - Return an array containing all indices of 7



Thank You!

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