

Saturday, 23  
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# Crux

## Lecture -3

Programming Fundamentals-2  
Functions and Arrays

Nidhi Agarwal



# Assignment ?

# Functions

- Modifiers
- Return Type
- Name
- Arguments
- How to call Functions

Lets move code of questions from last  
class to separate function

# Variables and their Scope

# Scope of variables

- Local Variables
- Argument Variables
- Variables inside loop
- Same variable names in different functions
- Same variable names within same scope

# Pass by Value

# How function calling works



# Arrays

- How to declare arrays?
- How are arrays stored in memory?
- How to access, update etc?

# Passing arrays as function parameters

# Lets write some code

- Take an integer array input from the user
- Print out sum of an array

# Your turn

- Print out the largest element in the array
- Linear Search
- Reverse an array

## BT – Greedy Pirates

A pirate ship captures a treasure of 1000 golden coins. The treasure has to be split among the 5 pirates: 1, 2, 3, 4, and 5 in order of rank. The pirates have the following important characteristics: infinitely smart, bloodthirsty, greedy. Starting with pirate 5 they can make a proposal how to split up the treasure. This proposal can either be accepted or the pirate is thrown overboard. A proposal is accepted if and only if a majority of the pirates agrees on it. **What proposal should pirate 5 make?**



Thank You !! 😊

Nidhi Agarwal

[nidhi@codingblocks.com](mailto:nidhi@codingblocks.com)