

## Agenda

- Array
- Variable Arity/Argument Method
- Method Arguments
  - pass by value and reference
- Object/Field Initializer
- final Keyword
- ~~static Keyword~~
- ~~Singleton Design Pattern~~

## Variable Arity/Argument Method

- It is a method which can take variable no of arguments.
- We can also pass array to this method.
- If we want to pass different types of variables to this arity method then we can use the object as the type.

## Method Arguments

- In Java, primitive values are passed by value and objects are passed by reference.
- Pass by reference stores address of the object. Changes done in called method are available in calling method.
- Pass by value -- Creates copy of the variable. Changes done in called method are not available in calling method.
- Pass by reference for value/primitive types can be simulated using array.

## Object/Field Initializer

- In C++/Java Fields of the class are initialized using constructor
- In java, field can also be initialized using
  - 1. field initializer
  - 2. object initializer
  - 3. Constructor

## final

- In Java, const is reserved word, but not used.
- Java has final keyword instead.
- It can be used for
  - variables
  - fields
  - methods
  - class
- if variables and fields are made final, they cannot be modified after initialization.

- final fields of the class must be initialized using any of the following below
  - field initializer
  - object initializer
  - constructor
- final methods cannot be overridden, final class cannot be extended (we will see at the time of inheritance)

## Assignment

- create a Ragged array for students to store the data of students enrolled for different courses. Assume there are 3 courses and in these courses the intake of students are different. Create the student class, ragged array and test the functionalities.

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