LAB # 04

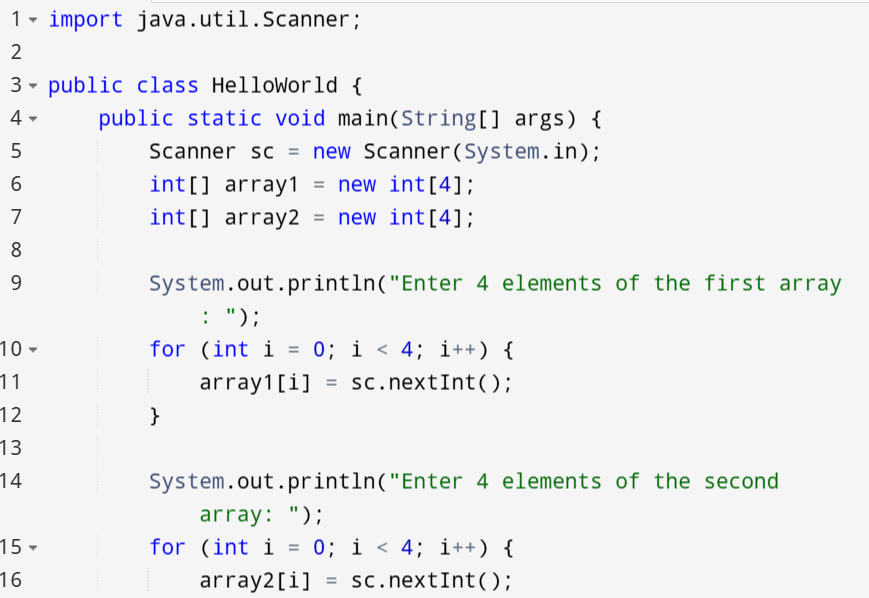
ARRAYS IN JAVA

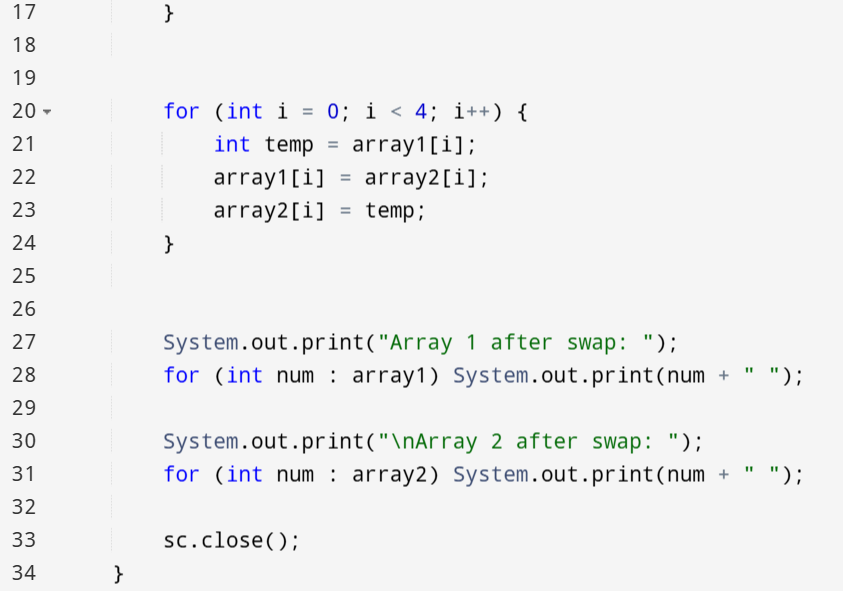
OBJECTIVE: To understand arrays and its memory allocation.

**LAB TASKS:**

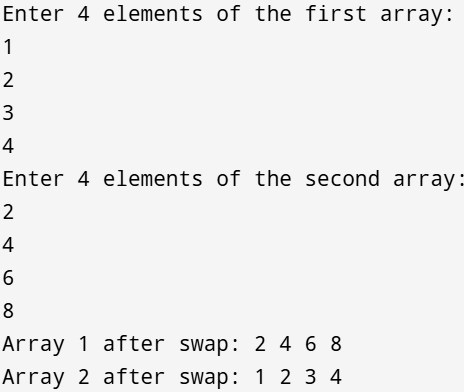
1. Write a program that takes two arrays of size 4 and swap the elements of those arrays.

**CODE:**



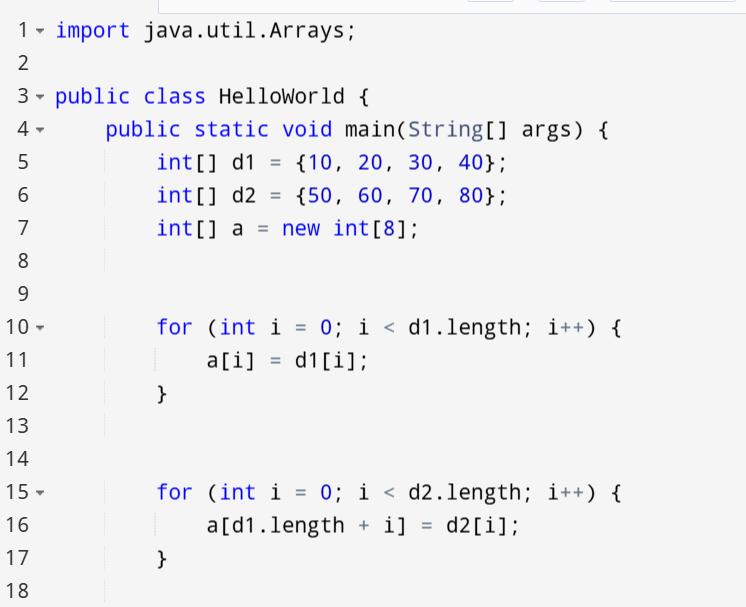


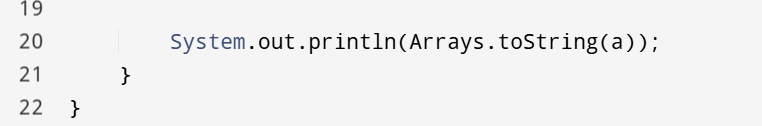
**OUTPUT:**

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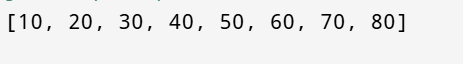
1. Add a method in the class that takes array and merge it with the existing one.

**CODE:**



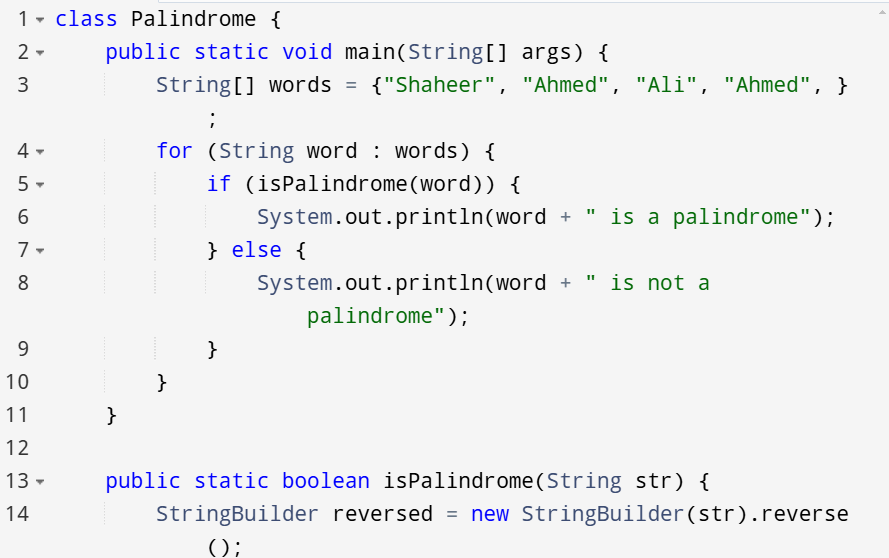


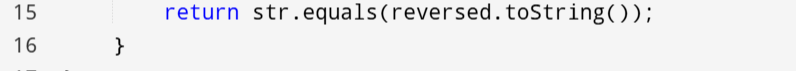
**OUTPUT:**



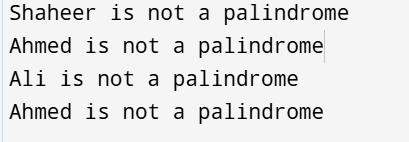
1. In a JAVA program, take an array of type string and then check whether the strings are palindrome or not

**CODE:**



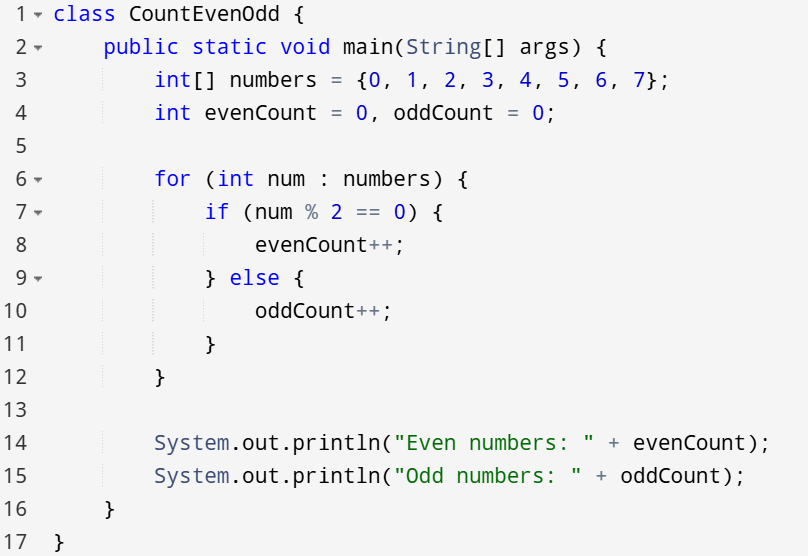


**OUTPUT:**

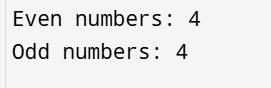


1. Given an array of integers, count how many numbers are even and how many are odd.

**CODE:**

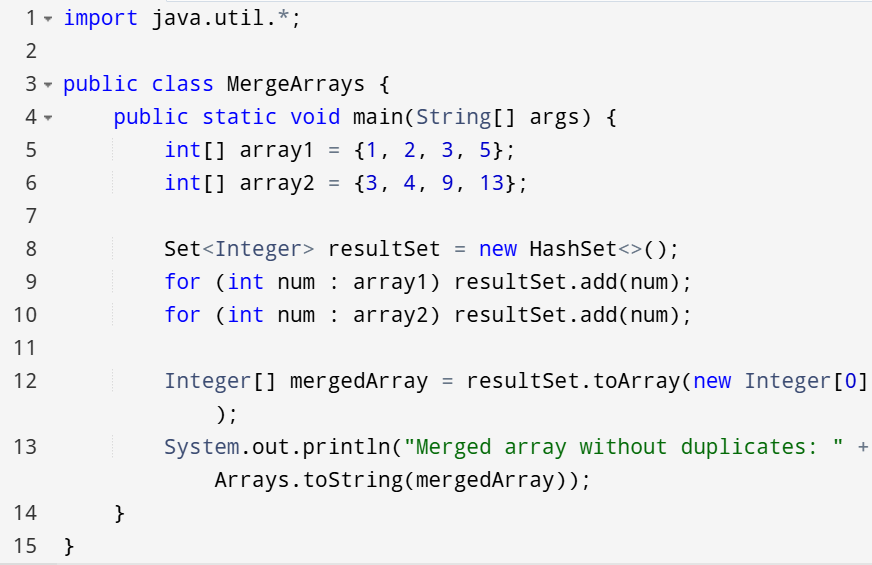


**OUTPUT:**



1. Given two integer arrays, merge them and remove any duplicate values from the resulting array.

**CODE:**

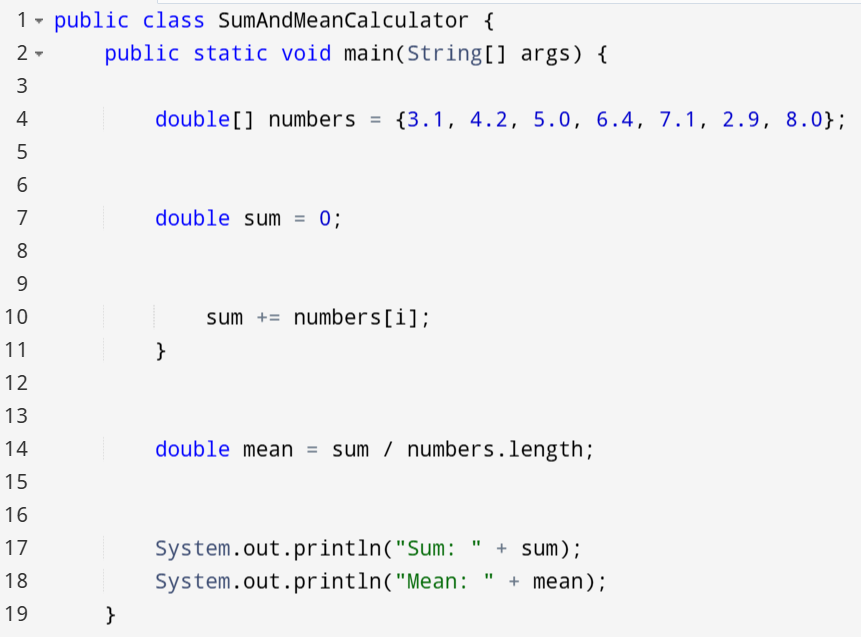


**OUTPUT:**

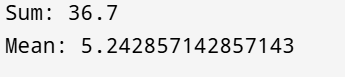
**HOME TASKS:**

1. Write a program that takes an array of Real numbers having size 7 and calculate the sum and mean of all the elements. Also depict the memory management of this task

**CODE:**

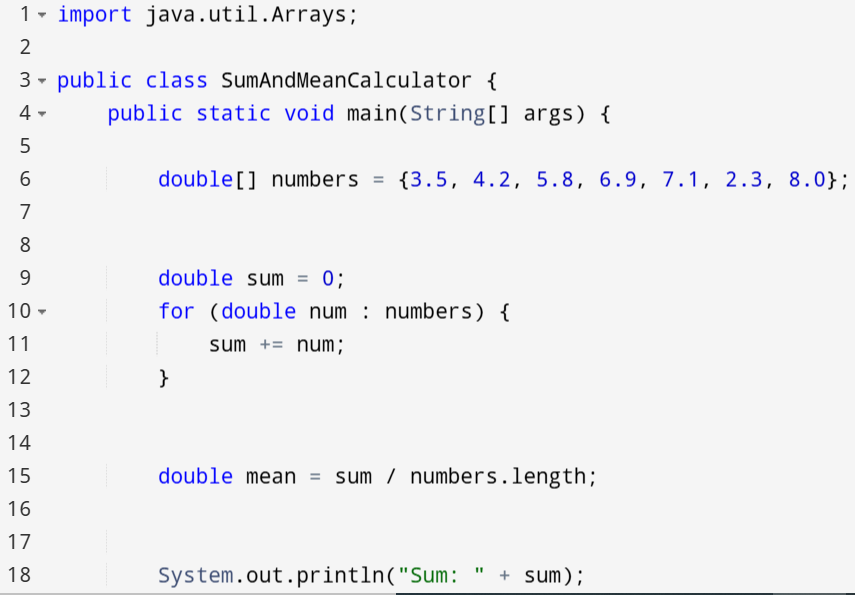


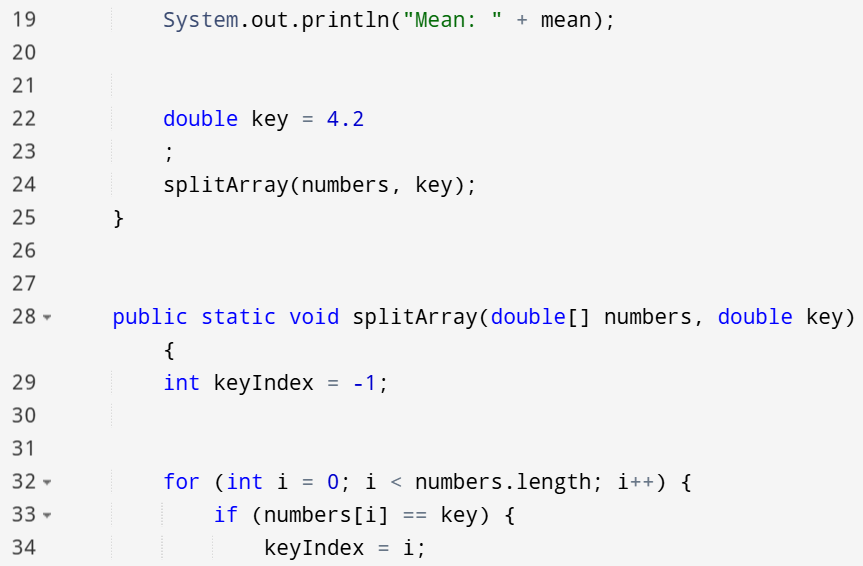
**OUTPUT:**

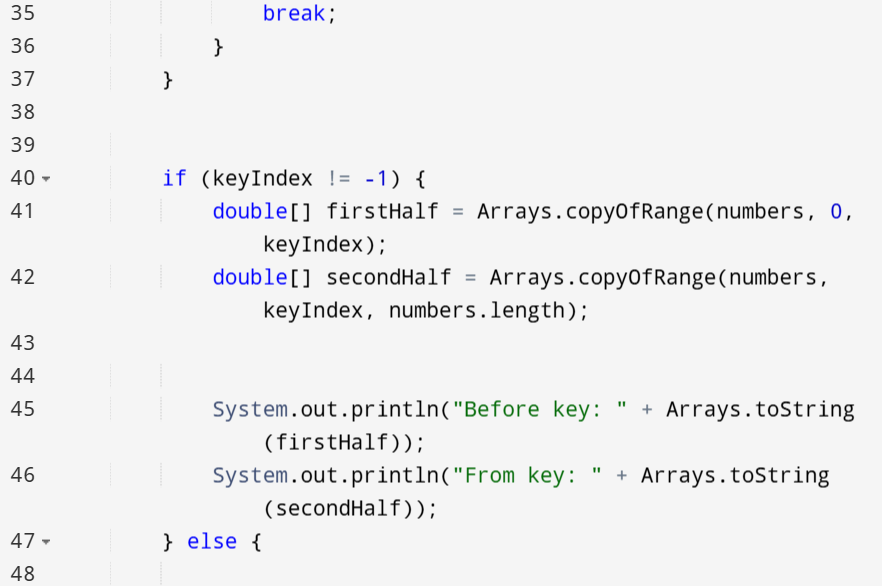
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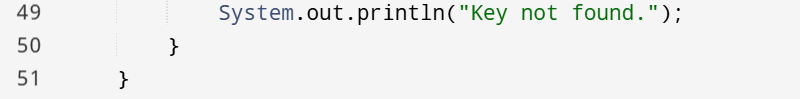
1. Add a method in the same class that splits the existing array into two. The method should search a key in array and if found splits the array from that index of the key.

**CODE:**

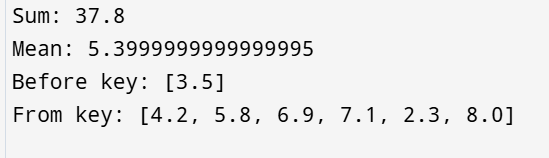






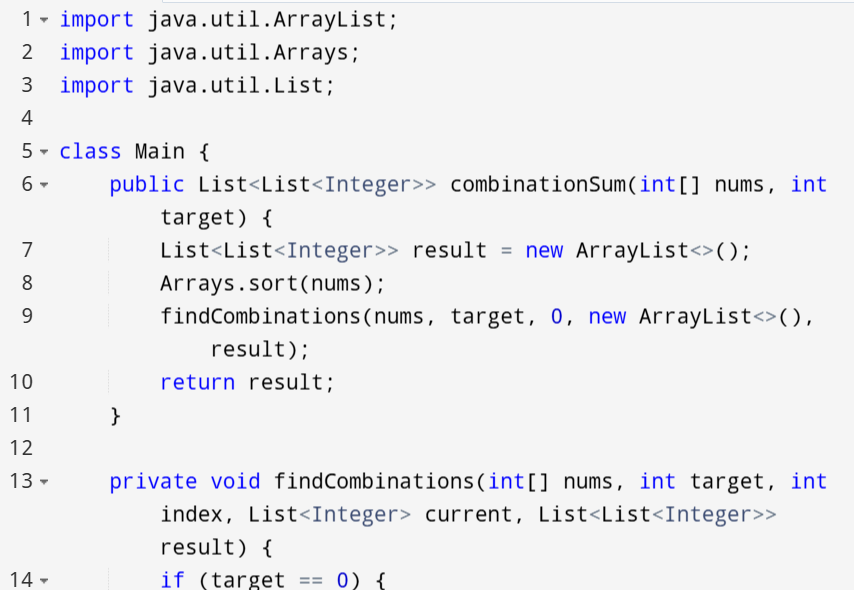


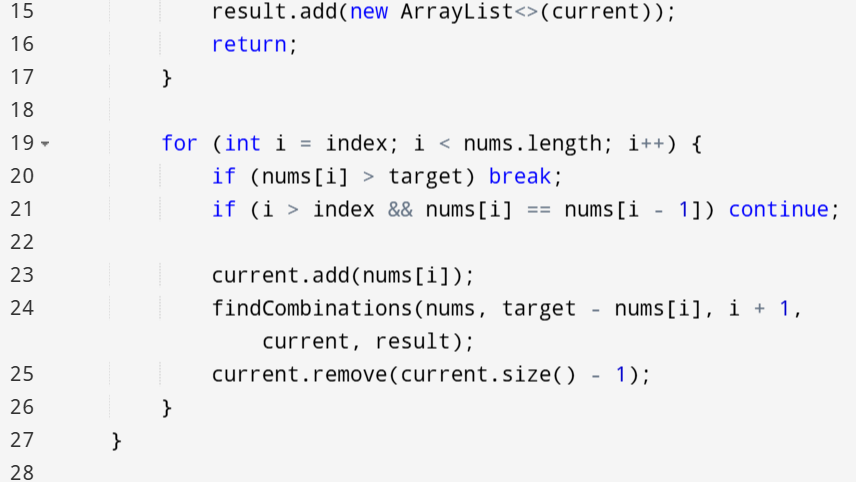
**OUTPUT:**

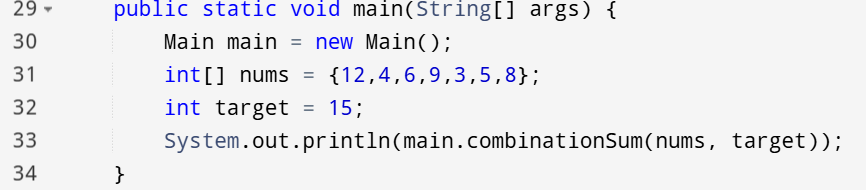


1. Given an array of distinct integers and a target integer, return all unique combinations of numbers that add up to the target. Each number can be used only once in the combination.

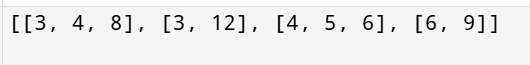
**CODE:**

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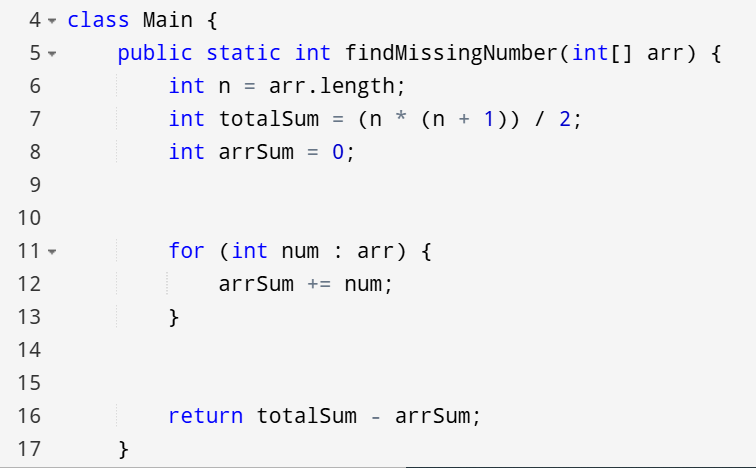
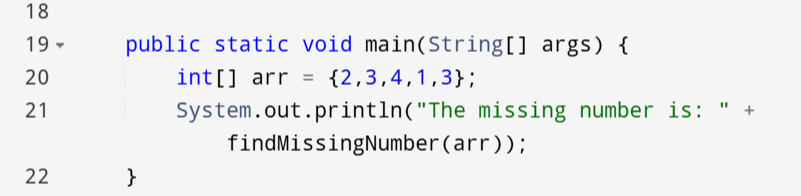


**OUTPUT:**

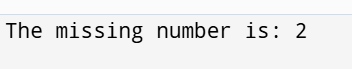


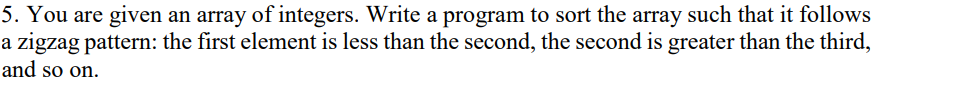
1. You are given an array containing n distinct numbers taken from 0, 1, 2, ..., n. Write a program to find the one number that is missing from the array.

**CODE:**

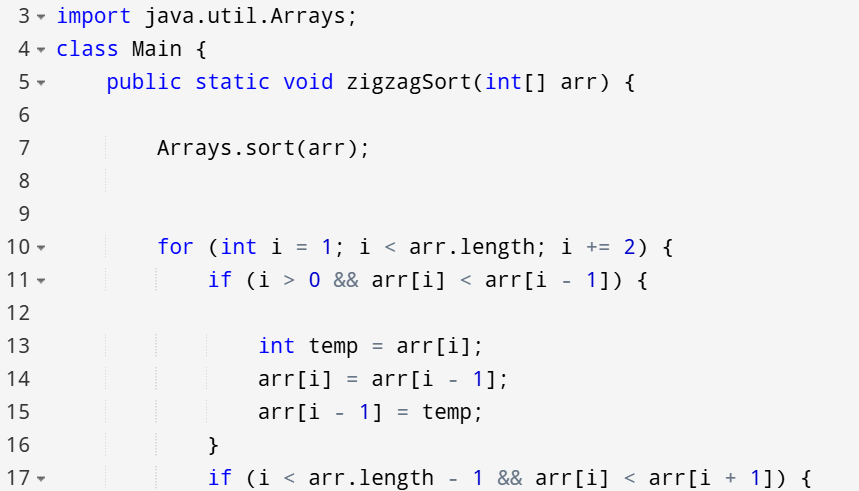
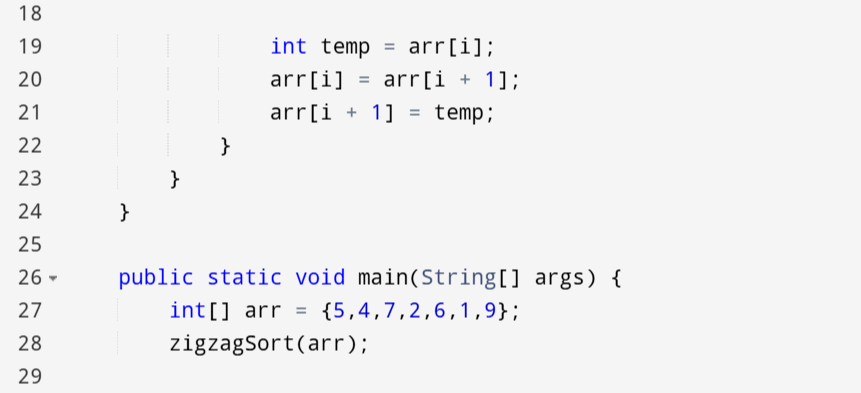


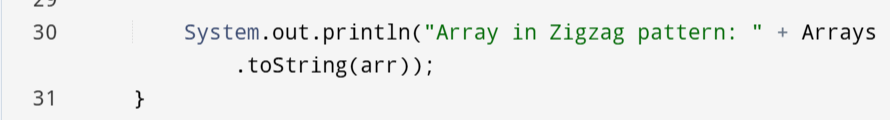
**OUTPUT:**





**CODE:**

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**OUTPUT:**

