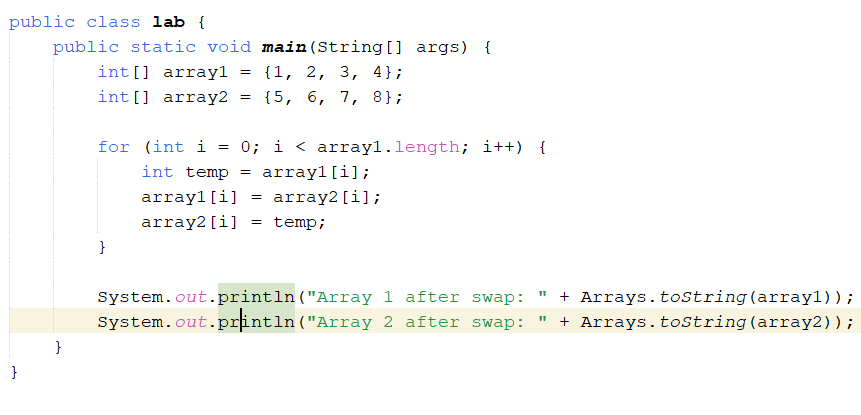
LAB # 04

ARRAYS IN JAVA

**OBJECTIVE:** To understand arrays and its memory allocation.

# LAB TASKS

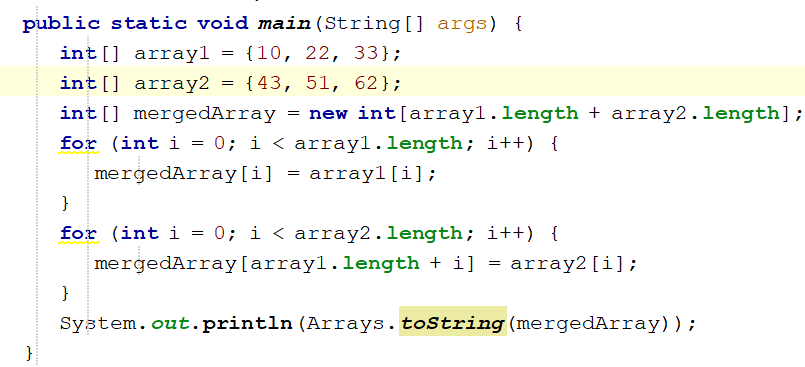
1. Write a program that takes two arrays of size 4 and swap the elements of those arrays.



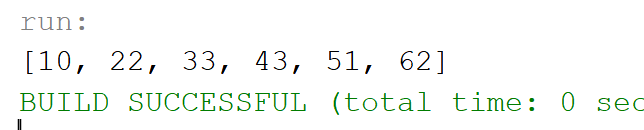
output



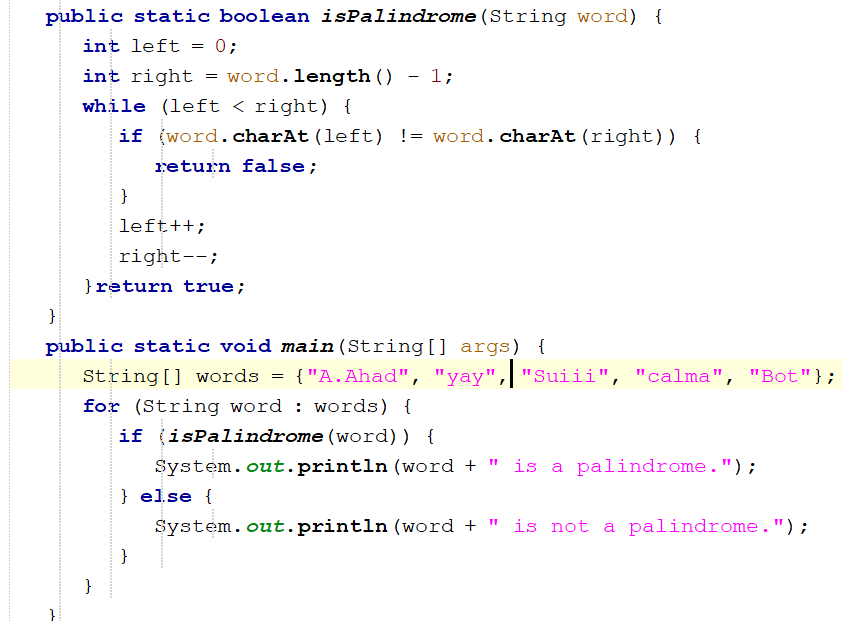
1. Add a method in the class that takes array and merge it with the existing one.



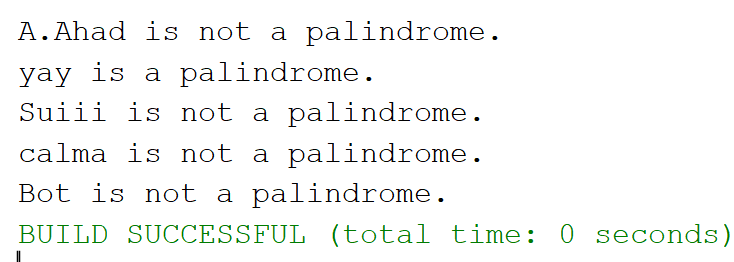
OUTPUT



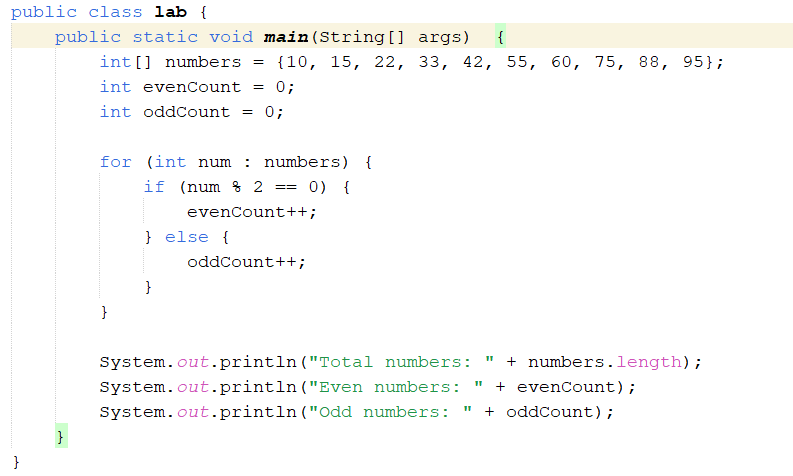
1. In a JAVA program, take an array of type string and then check whether the strings are palindrome or not.



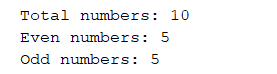
OUTPUT:



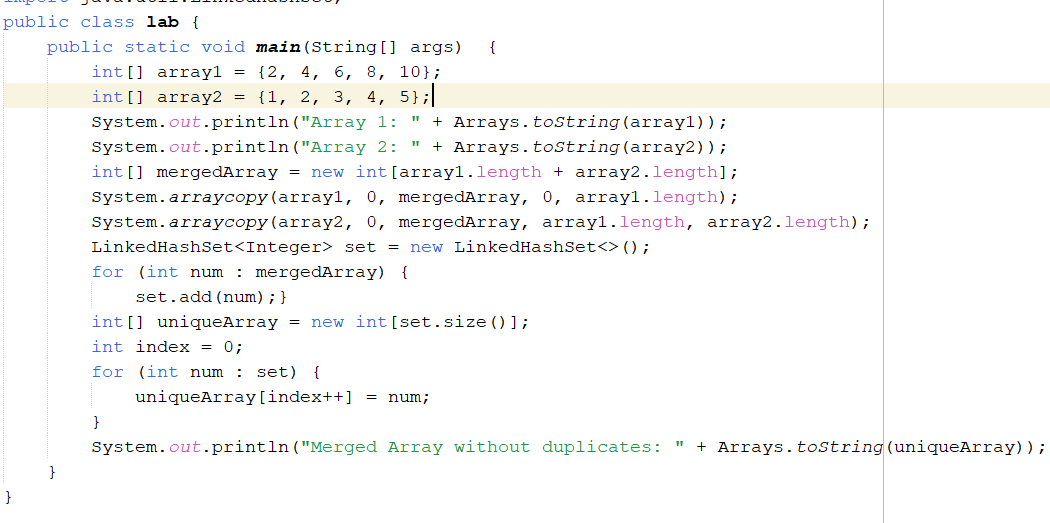
1. Given an array of integers, count how many numbers are even and how many are odd.



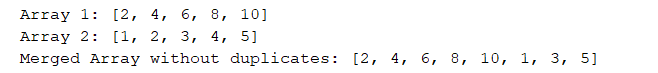
OUTPUT:



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

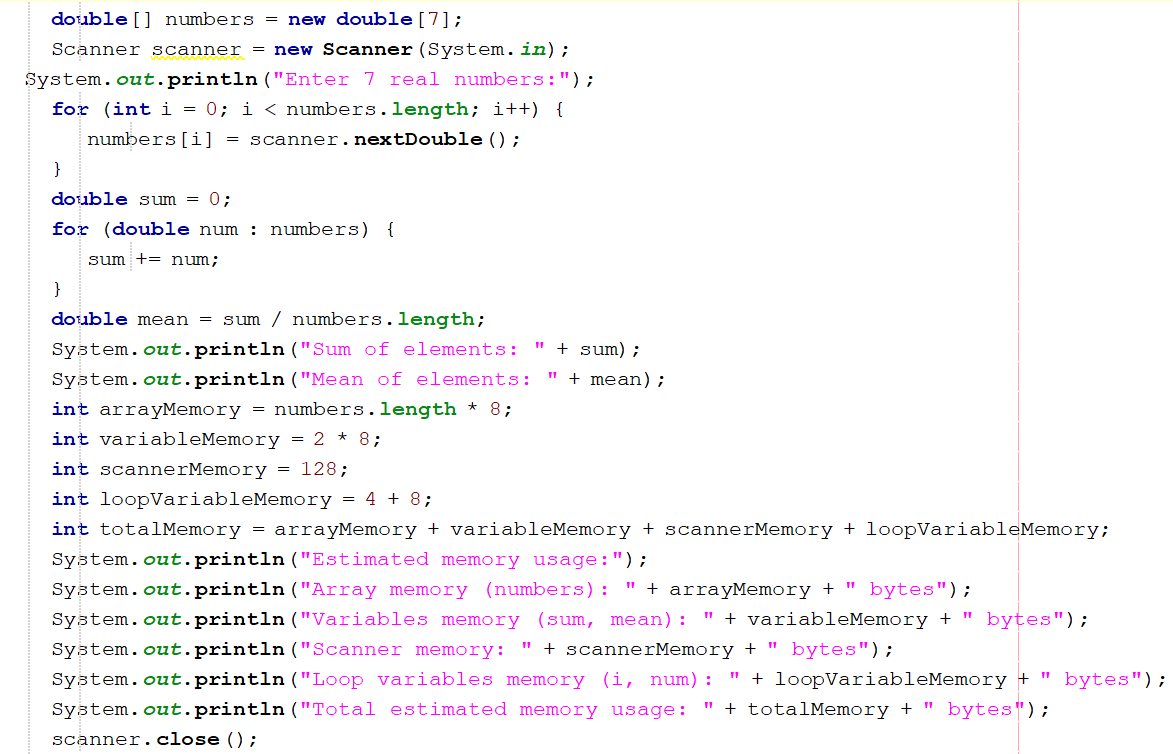


OUTPUT

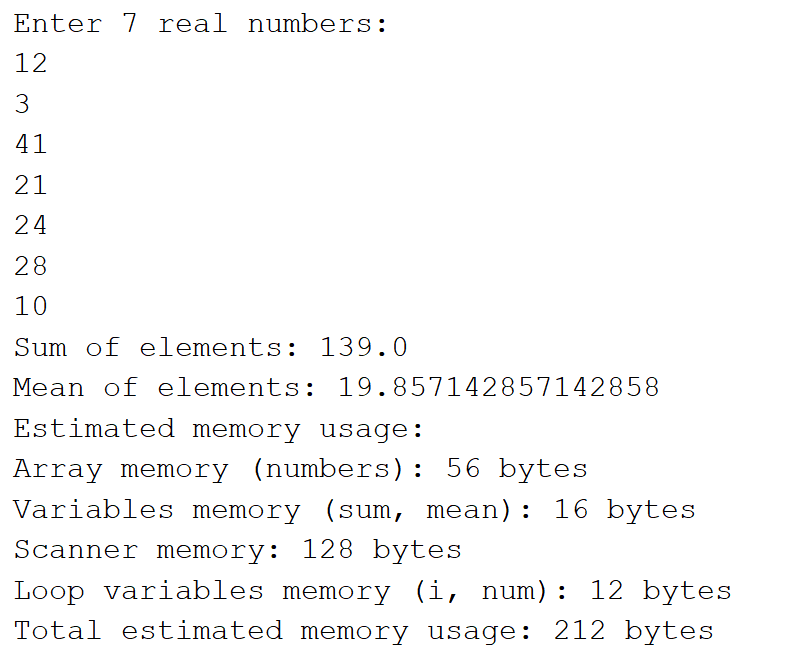


# HOME TASKS

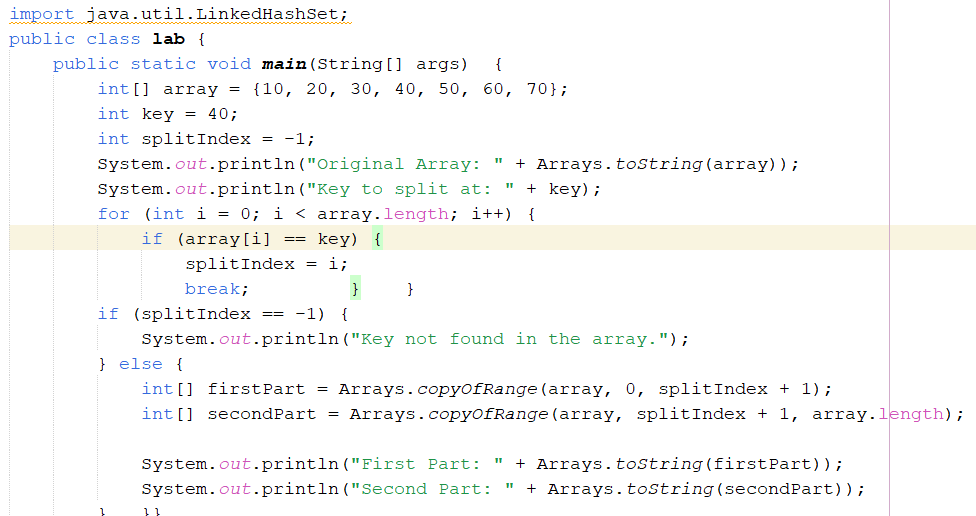
1. Write a program that takes an array of Real numbers having size 7 and calculate the sum and mean of all the elements. Also depict the memory management of this task.



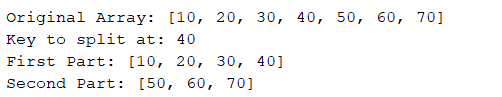
OUTPUT:



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.



OUTPUT:



3 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.

A screenshot of a computer code

Description automatically generated

A number on a white background

Description automatically generated

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.

A computer screen shot of a program

Description automatically generated



1. You are given an array of integers. Write a program to sort the array such that it follows a zigzag pattern: the first element is less than the second, the second is greater than the third, and so on.

