*LAB # 05*

sorting on linear arrays

# *OBJECTIVE:*

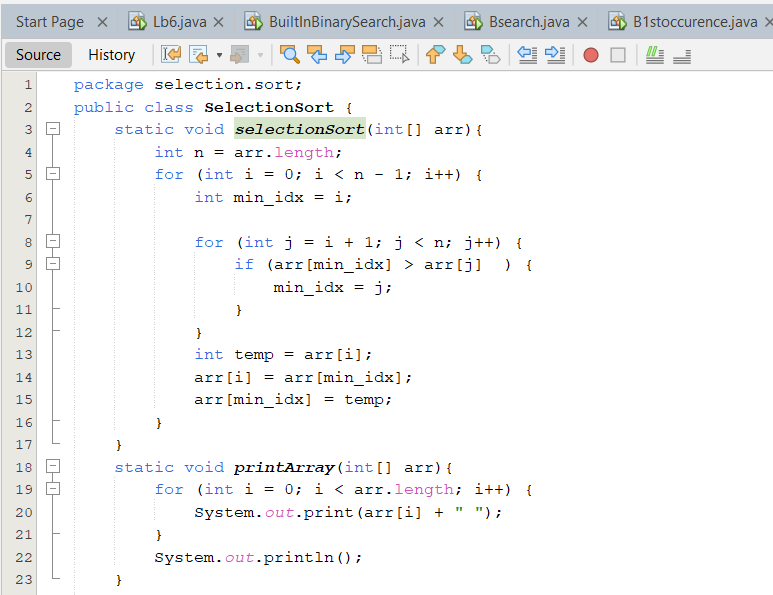
*To sort a linear array using Selection Sort, bubble sort and merge sort*

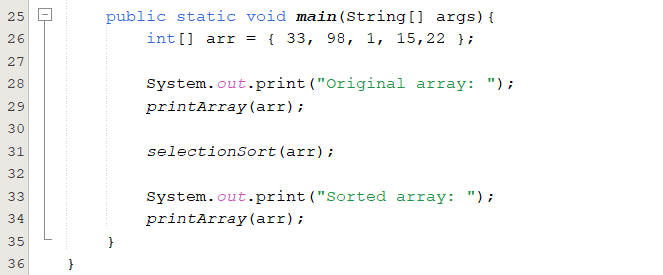
*LAB task*

1. *Write a program for Selection sort that sorts an array containing numbers, prints all*

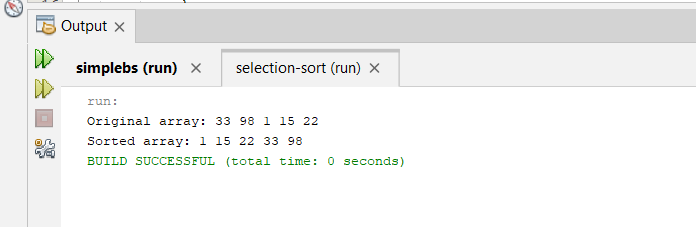
*the sort values of array each followed by its location.*

**Code:**





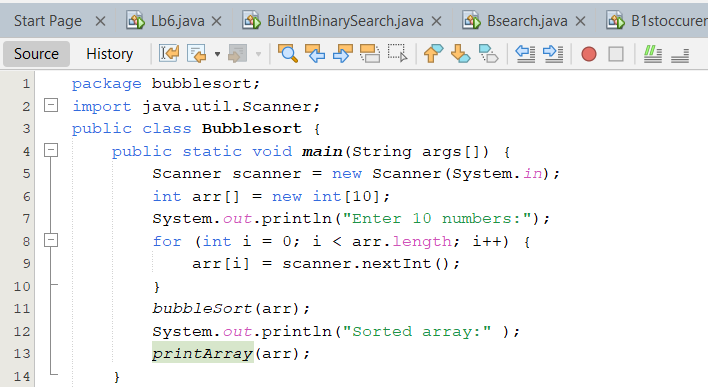
**Output:**

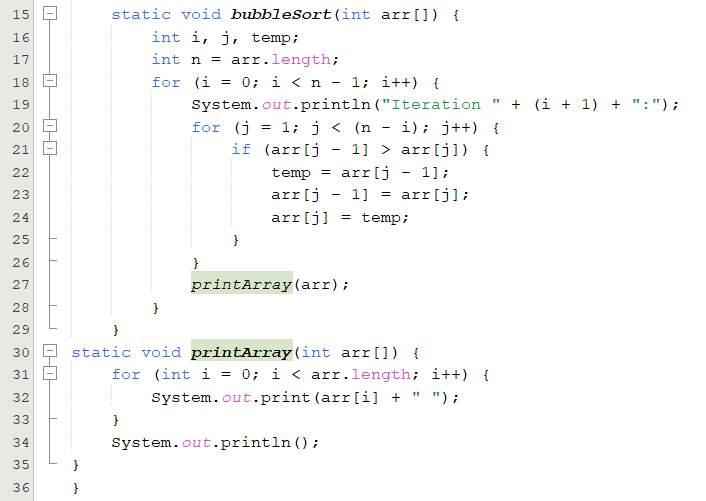


1. *Write a program that takes 10 numbers as input in an array. Sort the elements of array*

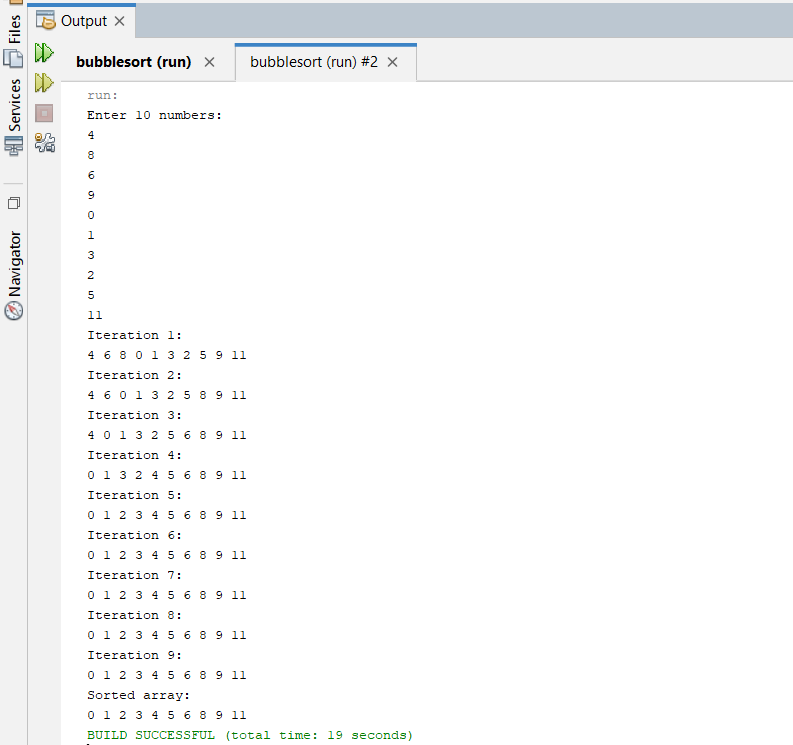
*by using Bubble sort. Print each iteration of the sorting process.*

**Code:**

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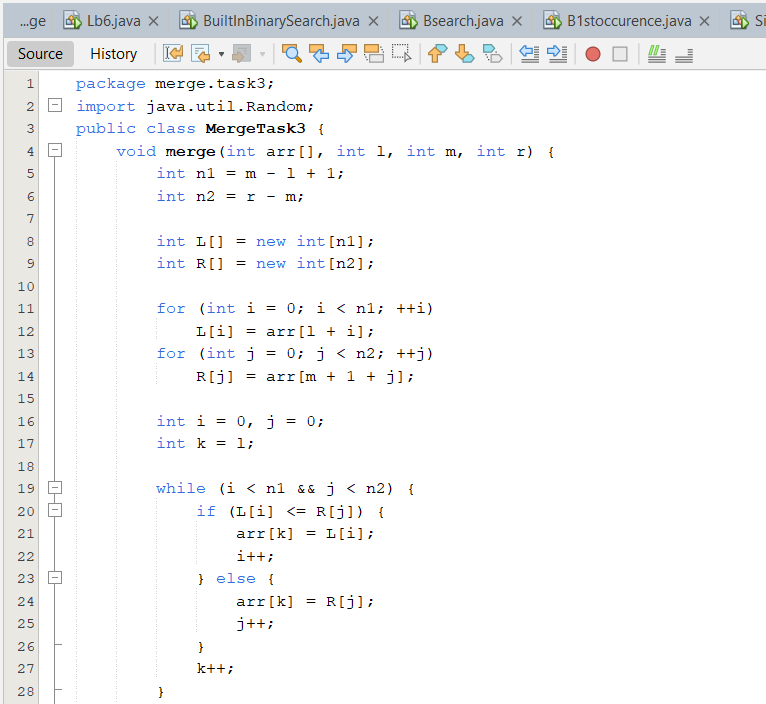
**Output:**

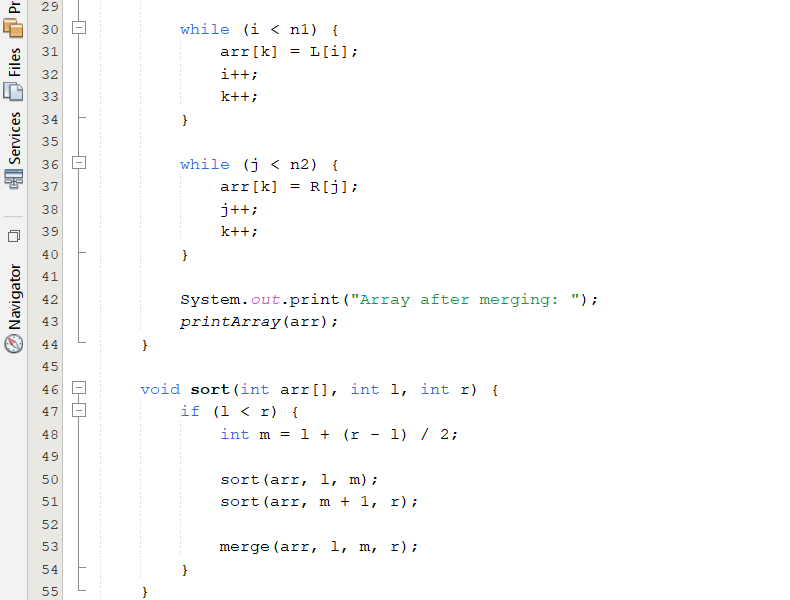
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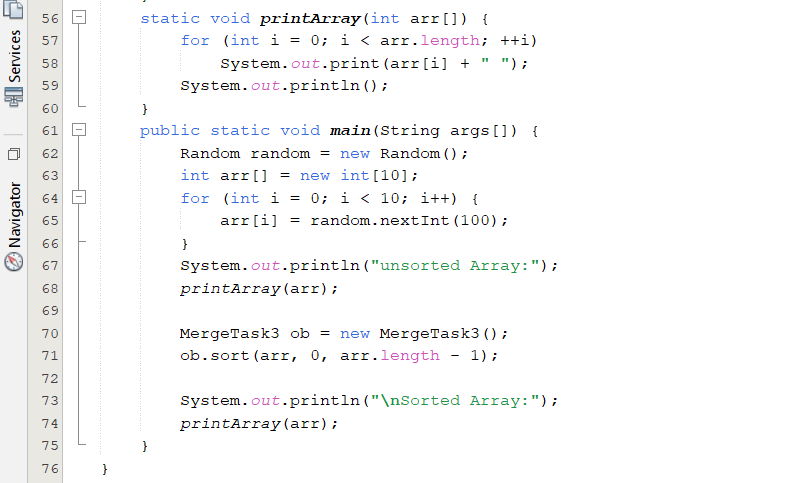
1. *Write a program that takes 10 random numbers in an array. Sort the elements of array*

*by using Merge sort applying recursive technique. Print each iteration of the sorting process*

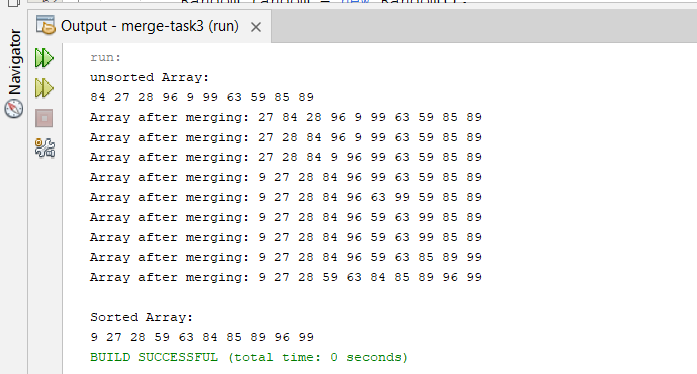
**Code:**

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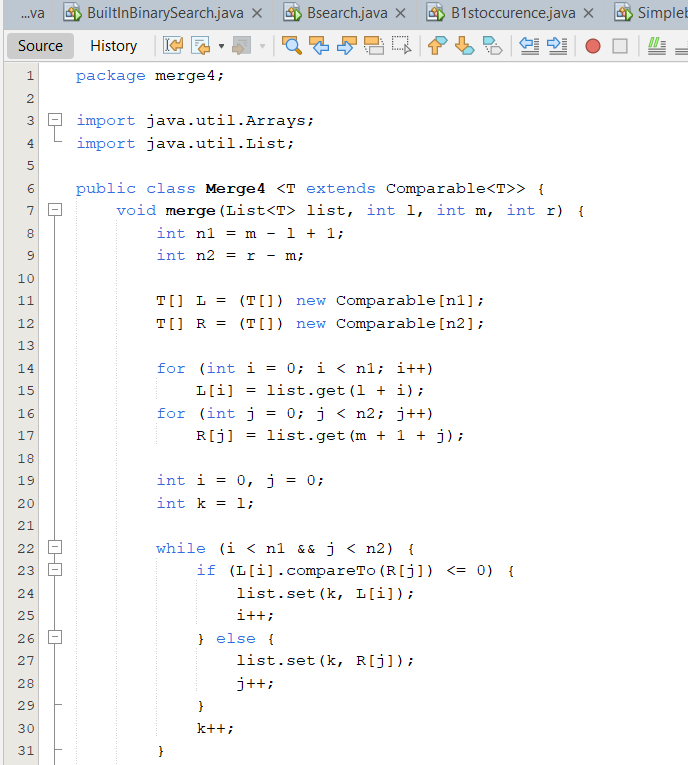
**Output:**

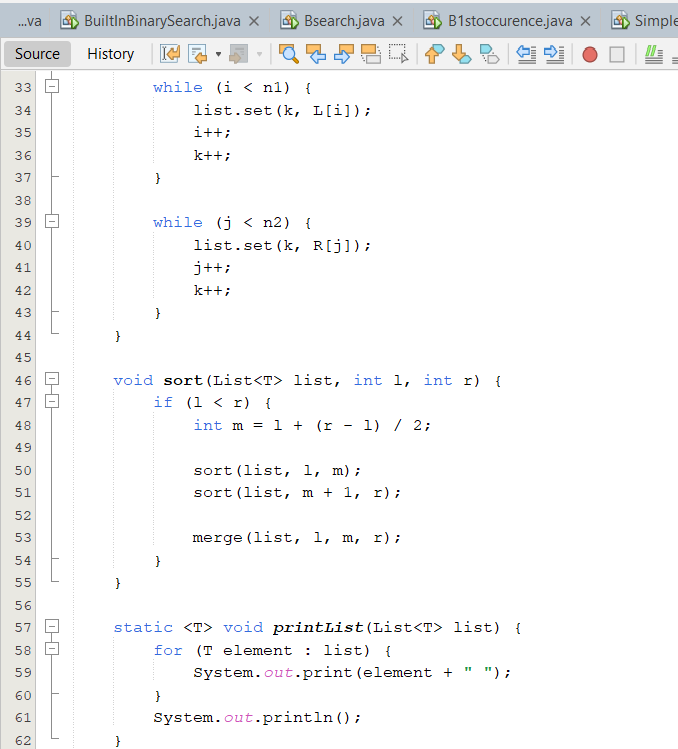
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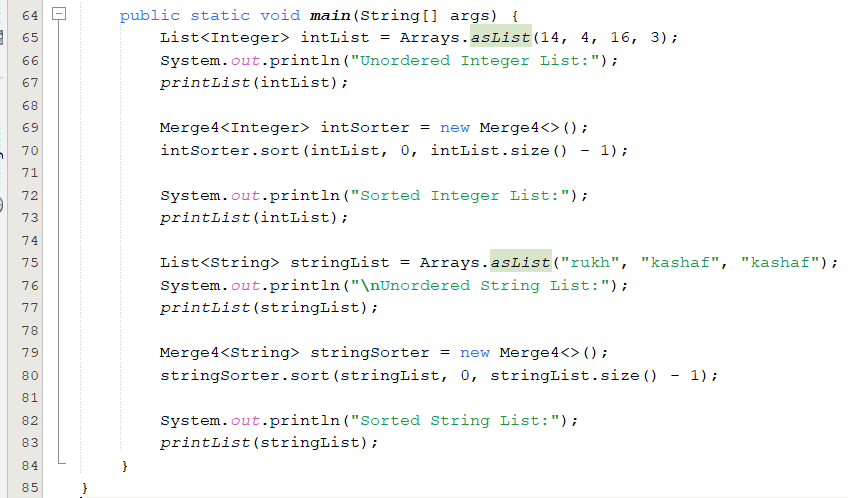
*HOME task*

1. *Write a program which takes an unordered list of integers (or any other objects e.g. String), you have to rearrange the list in their natural order using merge sort.*

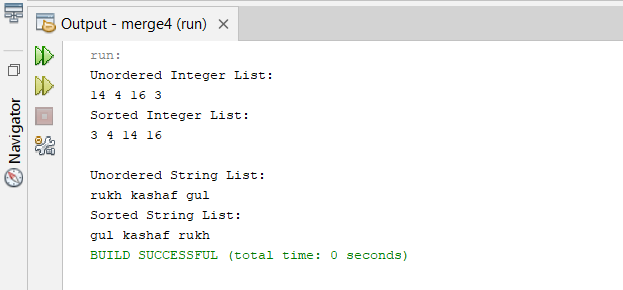
**Code:**

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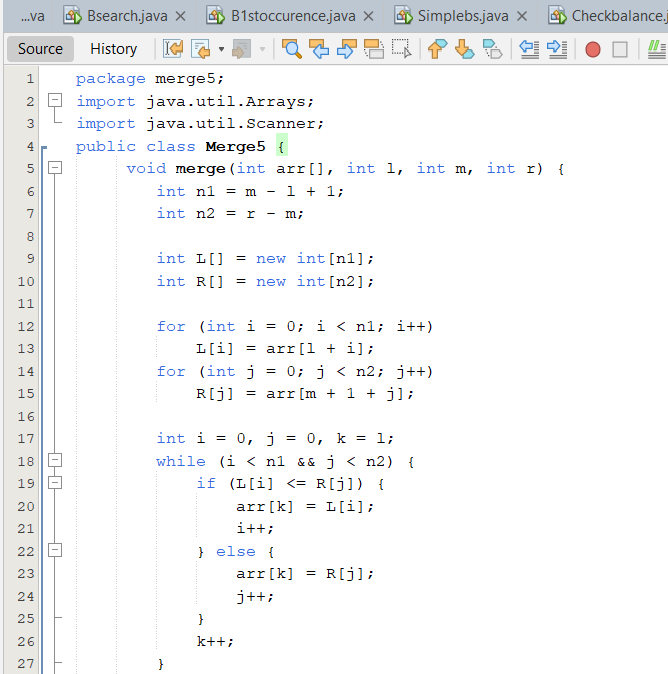
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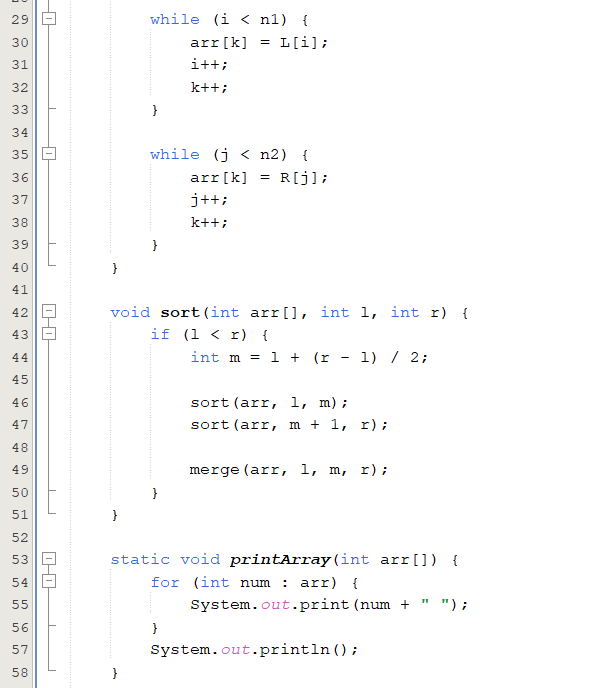
**Output:**

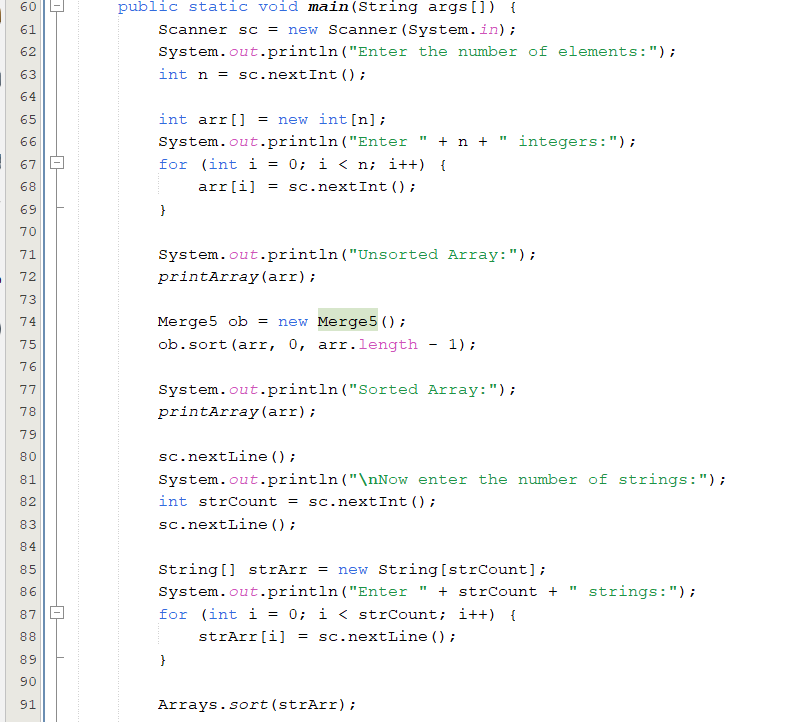
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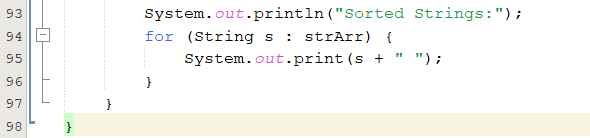
1. *You are given an unordered list of integers or strings. Write a program to Take this list as input. Sort it in* ***natural order*** *using Merge Sort. For integers, this means ascending order. For strings, this means alphabetical order. Print the sorted list.*

**Code:**

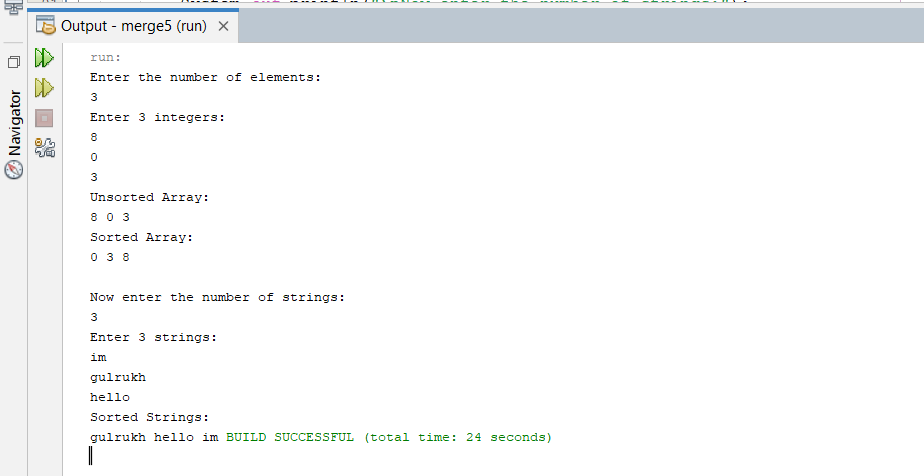
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**Output:**

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