CS209 Lab04B
fa2014
dutta/streller

PROBLEM STATEMENT:

The declaration, creation, and use of arrays.
Inserting/removing items into/from an array.
Passing an array as a parameter to a method.
Performing operations on arrays.

CODE :

Obtain file ArrayDemoConsole.txt
Create a new project for this assignment. The project and folder should be named Lab04
Compile and run the ArrayDemoConsole.java program. The input/output generated
by the existing program consists of windows such as the following:

Modify/enhance the program used in Lab04A

Modification One.

Create and populate array C.

In the main method of the program, declare and create a third array named C. The declared size of the array should be specified using the same constant (actually the unmodifiable variable) as used for the arrays A and B. Do not declare another constant.
Add a for-loop that populates array C as follows: Each element of array C must be assigned a value that is the remainder when the corresponding elements of arrays A and B are a quotient. In other words, C[0] is A[0] % B[0], and C[1] is A[1] % B[1], and so forth.

Modification Two.

Display the number of elements, contents, and sum for array C.

After the for-loop that populates array C as described above, add code to display the following for array C (just like for arrays A and B):

The number of elements in the array C.
The list of the elements in the array C. Be sure to invoke method arrayToString.
The sum of the elements in the array C. Be sure to invoke method arraySum.

Add code to display these results in a JOptionPane dialog as well as in the Output pane of NetBeans, just like for array A and array B.

Modification Three ..

Present a final display of all the program results (output) in a final JOptionPane dialog, in addition to the Output pane of NetBeans. In the final JOptionPane dialog, display all the information that was previously presented on all the arrays including the number of elements, list of elements, and sum of elements for each of arrays A, B, and C. Be sure to invoke methods arrayToString, arraySum, and insertionSort for each array.

Format the source code properly:

Reformat the Java code so that it has proper indentation
and vertical and horizontal alignment.
Be sure to have a blank line right above each method definition.

Compile and debug your modified program.
Test your program using a sufficient variety of data to make sure that it works on all cases.
Test using a mix of positive, negative, and zero integers.

Run the program and make the following window captures.
One of the JOptionPane dialogs that prompt for entry of an element for array A,
after at least three elements have been entered.
Two of the JOptionPane dialogs that prompt for entry of an element for array B,
after at least four elements have been entered.
Each of the JOptionPane dialogs that present output information on the arrays,
including the final dialog that is presented.
The Output pane of NetBeans showing the complete final output of the program.

As usual create ReadMe.pdf file.
Create a file named ReadMe.pdf
In this document, insert your name at the top, and on the next line insert
the assignment number
Then enter any comments regarding the assignment and your program.
Then insert several window captures of windows showing the inputs and
outputs from the execution of the program.
Be sure the ReadMe file is within your top level project folder.

Zip the project folder and all its contents.
Change the name the zip file so that its name consists of your name along with
the assignment number, as follows: " LastName_ Lab_04B_cs209.zip".
Do not use spaces in the name of the file, use underscores or hyphens instead.

Deliverables:

Send to streller@ecc.edu an email this the exact subject

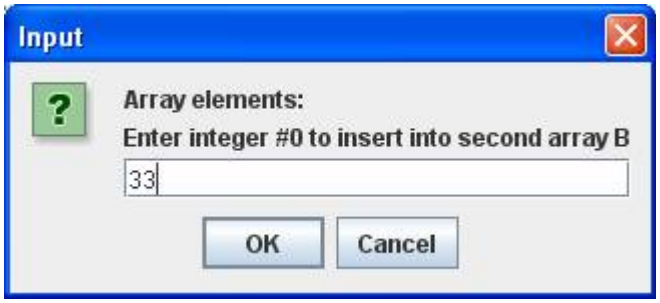
cs209__ Lab_04B

In this email attached the above named zip file

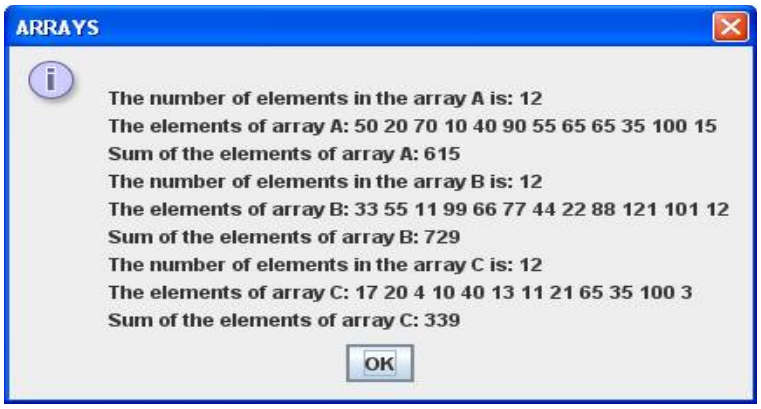
LastName_ Lab_04B_cs209.zip

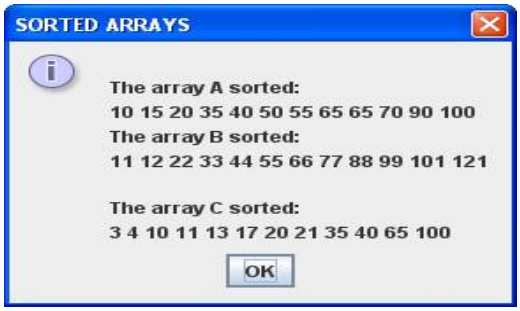
Due Date : 5:00pm 2 October 2014

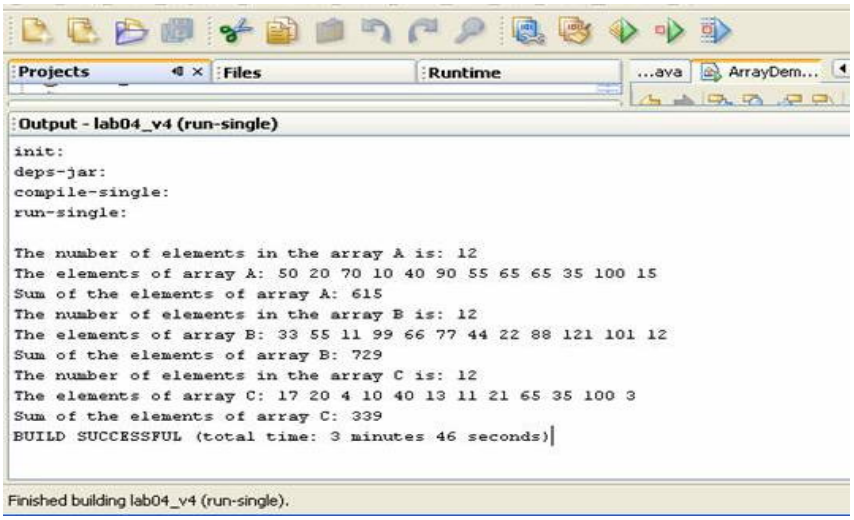

Input
Array elements: 50 20 70 10 40 90 55 65 65 35 100
Enter integer #11 to insert into first array A
15
OK
Cancel


Input
Array elements:
Enter integer #0 to insert into second array B
33
OK
Cancel


Input
Array elements: 33 55 11 99 66 77 44 22 88 121 101
Enter integer #11 to insert into second array B
12
OK
Cancel


ARRAYS
The number of elements in the array A is: 12
The elements of array A: 50 20 70 10 40 90 55 65 65 35 100 15
Sum of the elements of array A: 615
The number of elements in the array B is: 12
The elements of array B: 33 55 11 99 66 77 44 22 88 121 101 12
Sum of the elements of array B: 729
The number of elements in the array C is: 12
The elements of array C: 17 20 4 10 40 13 11 21 65 35 100 3
Sum of the elements of array C: 339
OK


SORTED ARRAYS
The array A sorted:
10 15 20 35 40 50 55 65 65 70 90 100
The array B sorted:
11 12 22 33 44 55 66 77 88 99 101 121
The array C sorted:
3 4 10 11 13 17 20 21 35 40 65 100
OK


Projects
Files
Runtime
...ava
ArrayDem...
Output - lab04_v4 (run-single)
init:
deps-jar:
compile-single:
run-single:
The number of elements in the array A is: 12
The elements of array A: 50 20 70 10 40 90 55 65 65 35 100 15
Sum of the elements of array A: 615
The number of elements in the array B is: 12
The elements of array B: 33 55 11 99 66 77 44 22 88 121 101 12
Sum of the elements of array B: 729
The number of elements in the array C is: 12
The elements of array C: 17 20 4 10 40 13 11 21 65 35 100 3
Sum of the elements of array C: 339
BUILD SUCCESSFUL (total time: 3 minutes 46 seconds)
Finished building lab04_v4 (run-single).