

Alperen Özkaya

Student ID: 041901003

Date: 10.10.2020

Assignment 1 Report – Average of Small Numbers

COMP110 Object-Oriented Programming

Algorithm Explanation

This program was created to calculate the **average of the numbers that are less than or equal to 10** in the series of numbers created by the user. Firstly, an array is created and its length is initialized to 10000 (**arbitrary**).

The user is asked to enter integers as input, and each integer entered is added to the array using a for loop. Two temporary arrays were used to store integers until the arrays which have **appropriate length** is created.

After determining the actual length of the arrays with using for loops “copyof” method from the class “Arrays” is used twice to get rid of empty slots which include “0” initially.

The method (computeAverage) that performs a basic average calculation is used.

Program Inputs-Outputs

Input 1:

Enter integers to store them in an array (enter 0 to execute):

63 12 -234 -21 -2 -4 23 355 23421 73 5 2 1 0

Output 1:

Input sequence that user entered:

63 12 -234 -21 -2 -4 23 355 23421 73 5 2 1

Integers that are less than or equal to 10:

-234 -21 -2 -4 5 2 1

The average is: -36.14

Input 2:

Enter integers to store them in an array (enter 0 to execute):

12 -23 -5 -231241 123 0 234 531 2334 1235 2 13 0

Output 2:

Input sequence that user entered:

12 -23 -5 -231241 123

Integers that are less than or equal to 10:

-23 -5 -231241

The average is: -77089.66

Input 3:

Enter integers to store them in an array (enter 0 to execute):

12 12 23 123 21312 58 918 9911 0

Output 3:

Input sequence that user entered:

12 12 23 123 21312 58 918 9911

There are no integers less than or equal to 10 in the input sequence