

Experiment-2

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Problem Statement

There is a class Adder which has two data members of type 1D int array and int variable. It has two functions: getdata and numsum. Function getdata accepts non-empty array of distinct integers from user in 1D int array data member and a targetsum in another data member. The function numsum adds any two elements from an input array which is equal to targetsum and return an array of resulting two elements, in any order. If no two numbers sum up to the target sum, the function should return an empty array. Note that the target sum is to be obtained by summing two different integers in the array; you can't add a single integer to itself in order to obtain the target sum. You can assume that there will be at most one pair of numbers summing up to the target sum. Use constructor. Use extra variables if needed.

C-Adder
<code>[]arr : int targetSum : int</code>
<code>getData() : void numSum() : int [] Adder(arrSize : int)</code>

Sample Input and Output

Test Case 1

Input Parameters	Values	Expected Output
1D Array	[3,5,-4,8,11,1,-1,7]	[8,7]
targetsum	15	

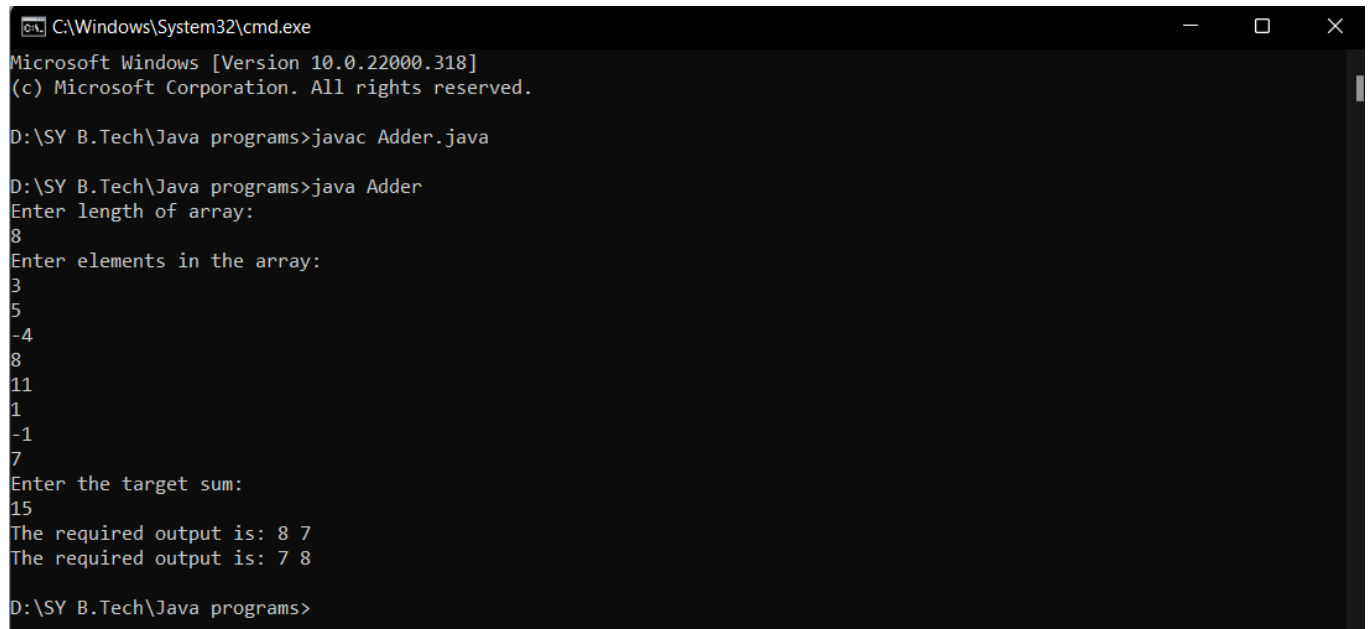
Test Case 2

Input Parameters	Values	Expected Output
1D Array	[3,5,-4,8,11,1,-1,6]	[]
targetsum	15	

Code:

```
import java.util.Scanner;
class Adder
{
    public static void main(String[]args)
    {
        Scanner sc = new Scanner(System.in);
        int length;
        System.out.println("Enter length of array: ");
        length = sc.nextInt();
        System.out.println("Enter elements in the array: ");
        int [] A = new int[length];
        for(int i=0;i<A.length;i++)
        {
            A[i]=sc.nextInt();
        }
        System.out.println("Enter the target sum: ");
        int targetsum = sc.nextInt();
        for(int i=0;i<A.length;i++)
        {
            for(int j=0;j<A.length;j++)
            {
                if(A[i]+A[j]==targetsum)
                {
                    System.out.println("The required output is: "+A[i]+" "+A[j]);
                }
            }
        }
    }
}
```

Result:



```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22000.318]
(c) Microsoft Corporation. All rights reserved.

D:\SY B.Tech\Java programs>javac Adder.java

D:\SY B.Tech\Java programs>java Adder
Enter length of array:
8
Enter elements in the array:
3
5
-4
8
11
1
-1
7
Enter the target sum:
15
The required output is: 8 7
The required output is: 7 8

D:\SY B.Tech\Java programs>
```