

Questions

1. Check for pair in an array with a given sum

Problem Description: Given an array of n integers and given a number K , determines whether there is a pair of elements in the array that sums to exactly K .

For example :

Input : $A[] = [-5, 1, -40, 20, 6, 8, 7]$, $K=15$

Output: true (7, 8 and -5, 20 are the pairs with sum 15)

Input : $A[] = [-5, 4, -2, 16, 8, 9]$, $K=15$

Output: false (There is no pair of elements whose sum is equal to 15)

2. Find whether an array is a subset of another array

Problem Description : Given two integer array $A[]$ and $B[]$ of size m and n ($n \leq m$) respectively. We have to check whether $B[]$ is a subset of $A[]$ or not. An array B is a subset of another array A if each element of B is present in A . (There are no repeated elements in both the arrays)

For example

input : $A[] = \{ 3, 5, 7, 12, 1, 9, 10, 0, 2 \}$, $B[] = \{ 1, 3, 5, 9 \}$

Output : True ($B[]$ is subset of $A[]$)

Input : $A[] = \{ 3, 5, 7, 12, 1, 9, 10, 0, 2 \}$, $B[] = \{ 6, 3, 8 \}$

Output: False ($B[]$ is not a subset of $A[]$)

3. Finding Prime number between 1 to 100

4. Find whether the given string is a palindrome

5. Program to remove vowels from String
6. Display Fibonacci Series

The Fibonacci series is a series where the next term is the sum of the previous two terms. The first two terms of the Fibonacci sequence are 0 followed by 1.

Fibonacci Series: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34

7. Count occurrences of a character in String in Java
8. Count occurrences of substring in a string
9. Print a given matrix in spiral form

Example:

Input: {{1, 2, 3, 4},
 {5, 6, 7, 8},
 {9, 10, 11, 12},
 {13, 14, 15, 16 }}

Output: 1 2 3 4 8 12 16 15 14 13 9 5 6 7 11 10

Explanation: The output is matrix in spiral format.

Matrix:

1	→	2	→	3	→	4
						↓
5	→	6	→	7		8
↑				↓		↓
9		10	←	11		12
↑						↓
13	←	14	←	15	←	16

Output:

1, 2, 3, 4, 8, 12, 16, 15, 14, 13, 9, 5, 6, 7, 11, 10

