

1. Find the Sum all values in an array.

```
public class ArraySum {  
    public static void main(String[] args) {  
        int[] numbers = {10, 20, 30, 40, 50};  
        int sum = 0;  
        for (int i = 0; i < numbers.length; i++) {  
            sum += numbers[i];  
        }  
        System.out.println("Sum of all values in the array: " + sum);  
    }  
}
```

#### Output

```
Sum of all values in the array: 150
```

```
==== Code Execution Successful ====
```

2.Find the Common elements in two string arrays.

```
public class CommonElements {  
    public static void main(String[] args) {  
        String[] arr1 = {"apple", "banana", "cherry", "mango"};  
        String[] arr2 = {"grape", "banana", "mango", "orange"};  
        HashSet<String> set1 = new HashSet();  
        HashSet<String> common = new HashSet();  
        for (String item : arr1) {  
            set1.add(item);  
        }  
        for (String item : arr2)  
        {  
            if (set1.contains(item))  
            {  
                common.add(item);  
            }  
        }  
        System.out.println("Common elements: " + common);  
    }  
}
```

**Output**

```
Common elements: [banana, mango]
```

```
==== Code Execution Successful ===
```

Q.3 Find out the Transpose of given Array.

```
public class TransposeMatrix {  
    public static void main(String[] args) {  
        int[][] matrix = {  
            {1, 2, 3},  
            {4, 5, 6}  
        };  
        int rows = matrix.length;  
        int cols = matrix[0].length;  
        int[][] transpose = new int[cols][rows];  
        for (int i = 0; i < rows; i++) {  
            for (int j = 0; j < cols; j++) {  
                transpose[j][i] = matrix[i][j];  
            }  
        }  
        System.out.println("Transpose of the matrix:");  
        for (int i = 0; i < cols; i++) {  
            for (int j = 0; j < rows; j++) {  
                System.out.print(transpose[i][j] + " ");  
            }  
            System.out.println();  
        }  
    }  
}
```

#### Output

```
Transpose of the matrix:  
1 4  
2 5  
3 6
```