

1. Sum it up:

Given an array of integers (for example, `a = {3,-4,0,5,1,7,8,9,10,11}`) and an integer `k` (for example `k = 10`), create a method that returns the number of ways any two elements in the array `a` can add to the value `k`. For above example: 3 (`3+7`, `0+10`, `1+9`)

```
public class HelloWorld {  
    public static void main( String[] args ) {  
        int a[] = {3,-4,0,5,1,7,8,9,10,11};  
        int k = 10;  
        int answer = numberOfSum(a, k);  
        System.out.println(answer);  
    }  
    public static int numberOfSum(int a[], int k) {  
        // your code goes here  
    }  
}
```

2. Write a Java program to remove duplicate elements from an array.

3. Write a Java program that takes an array of integers and moves all 0's to the end of the array. Maintain the relative order of the other (non-zero) array elements.

4. Write a Java program to get the difference between the largest and smallest values in an array of integers. The length of the array must be 1 and above.