2. Program to print sum of the prime numbers except the largest prime number if there is no prime numbers the largest number is neglected and the sum of the other number to be printed.

Program:

```
import java.util.Scanner;
public class PrimeSumExcludingLargest {
   public static void main(String[] args) {
      Scanner scanner = new Scanner(System.in);
      System.out.print("Enter the size of the array: ");
      int size = scanner.nextInt();
      int[] array = new int[size];
      int largestPrime = 0, primeSum = 0, largestElement = Integer.MIN_VALUE;
      System.out.println("Enter " + size + " elements:");
      for (int i = 0; i < size; i++) {
         array[i] = scanner.nextInt();
         if (isPrime(array[i])) {
            primeSum += array[i];
            if (array[i] > largestPrime) {
               largestPrime = array[i];
            }
         }
         if (array[i] > largestElement) {
            largestElement = array[i];
         }
      }
      if (primeSum == 0) {
         primeSum = sumArray(array) - largestElement;
         System.out.println("No prime numbers found. Sum excluding the largest element: " +
primeSum);
      } else {
         primeSum -= largestPrime;
         System.out.println("Sum of primes excluding the largest prime: " + primeSum);
      }
```

```
        scanner.close();
    }
    public static boolean isPrime(int num) {
        if (num <= 1) return false;
        for (int i = 2; i * i <= num; i++) {
            if (num % i == 0) return false;
        }
        return true;
    }
    public static int sumArray(int[] array) {
        int sum = 0;
        for (int num : array) {
            sum += num;
        }
        return sum;
    }
}
```

Output:

```
Enter the size of the array: 11
Enter 11 elements:
10
41
18
50
43
31
29
25
59
96
67
Sum of primes excluding the largest prime: 203
```

```
Enter the size of the array: 4
Enter 4 elements:
10
20
30
40
No prime numbers found. Sum excluding the largest element: 60
```