

Assignment:

Read and store 'n' no. of elements to an arraylist using stream API, and display the same to user.

From the above list filter and display only positive numbers.

Program:1

```
import java.util.ArrayList;
import java.util.List;
import java.util.Scanner;
import java.util.stream.Collectors;
import java.util.*;

public class StringAPI {

    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        // Read and store 'n' elements to an ArrayList using Stream API
        System.out.print("Enter the number of elements: ");
        int n = scanner.nextInt();

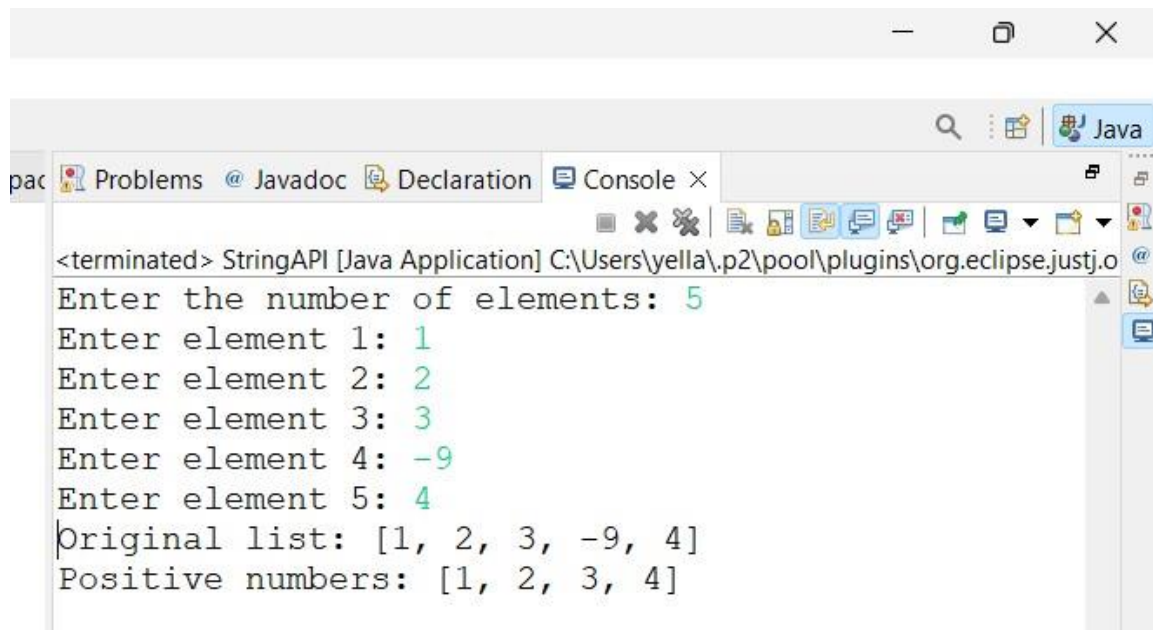
        List<Integer> numbers = new ArrayList<>();
        for (int i = 0; i < n; i++) {
            System.out.print("Enter element " + (i + 1) + ": ");
            numbers.add(scanner.nextInt());
        }

        // Display the original list
        System.out.println("Original list: " + numbers);

        // Filter and display only positive numbers using Stream API
        List<Integer> positiveNumbers = numbers.stream()
            .filter(num -> num > 0)
            .collect(Collectors.toList());

        System.out.println("Positive numbers: " + positiveNumbers);
    }
}
```

Output:



```
<terminated> StringAPI [Java Application] C:\Users\yella\.p2\pool\plugins\org.eclipse.justj.o
Enter the number of elements: 5
Enter element 1: 1
Enter element 2: 2
Enter element 3: 3
Enter element 4: -9
Enter element 5: 4
Original list: [1, 2, 3, -9, 4]
Positive numbers: [1, 2, 3, 4]
```