

Create a Java class named "ArrayListOperations" and implement the relevant methods to perform the following tasks.

1. Implement a method named

"removeOddNumbers" that takes an ArrayList of integers as input. This method should remove all the odd elements from the input integer list and print the remaining numbers

Sample Output:

Input -> 4,5,8,9,7,3

Output -> 4,8

2. Implement a method named

"doubleEvenNumbers" that takes an ArrayList of integers as input. This method should double all the even elements from the input integer list and print only the new values.

Sample Output:

Input -> 4,5,8,9,7,3

Output -> 8,16

3. Create a Java class named "TestOperations" with the main method to accept 5 integer values and save those in an ArrayList.

Pass the user-entered values to the above two methods and display the output separately

**ANSWER :**

```
import java.util.ArrayList;
```

```
public class ArrayListOperations {
```

```
    public static void removeOddNumbers(ArrayList<Integer> numbers) {  
        numbers.removeIf(n -> n % 2 != 0);  
        System.out.println("Output -> " + numbers);  
    }
```

```
    public static void doubleEvenNumbers(ArrayList<Integer> numbers) {
```

```

        ArrayList<Integer> newNumbers = new ArrayList<>();
        for (int num : numbers) {
            if (num % 2 == 0) {
                int doubledNum = num * 2;
                newNumbers.add(doubledNum);
            }
        }
        System.out.println("Output -> " + newNumbers);
    }
}

```

```

import java.util.ArrayList;
import java.util.Scanner;

public class TestOperations {

    public static void main(String[] args) {
        ArrayList<Integer> numbers = new ArrayList<>();
        Scanner scanner = new Scanner(System.in);

        System.out.println("Enter 5 integer values:");

        for (int i = 0; i < 5; i++) {
            int number = scanner.nextInt();
            numbers.add(number);
        }

        System.out.println("Input -> " + numbers);

        ArrayListOperations.removeOddNumbers(new ArrayList<>(numbers));
        ArrayListOperations.doubleEvenNumbers(new ArrayList<>(numbers));
    }
}

```