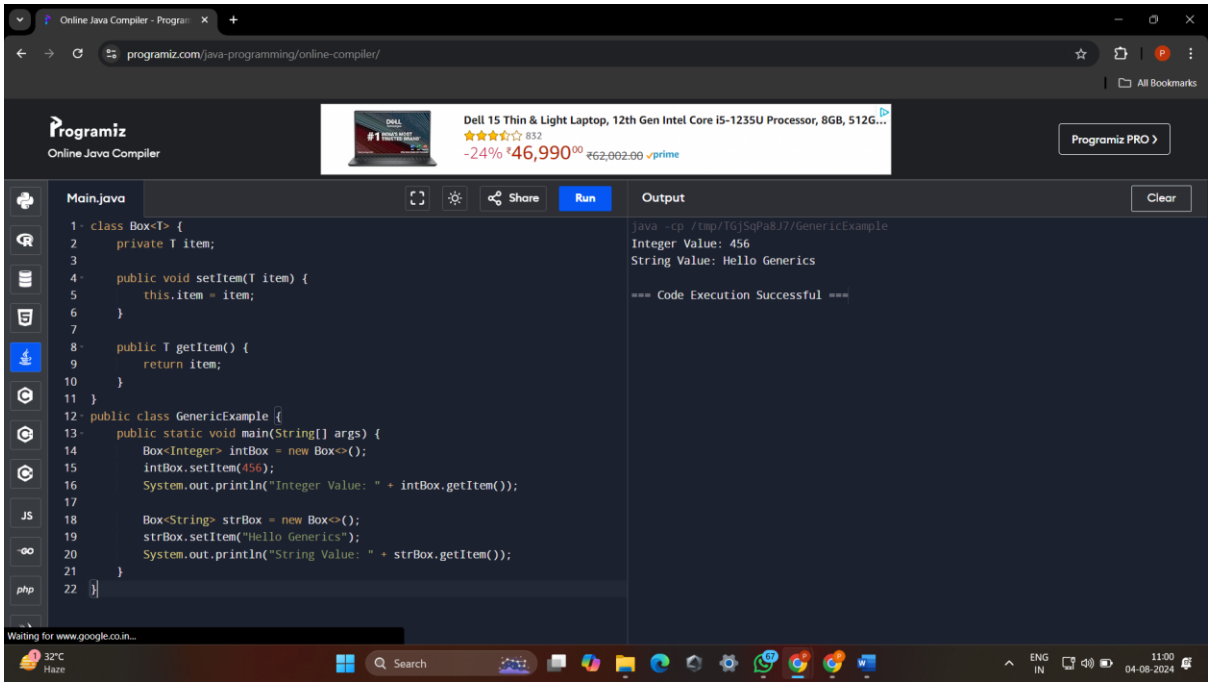
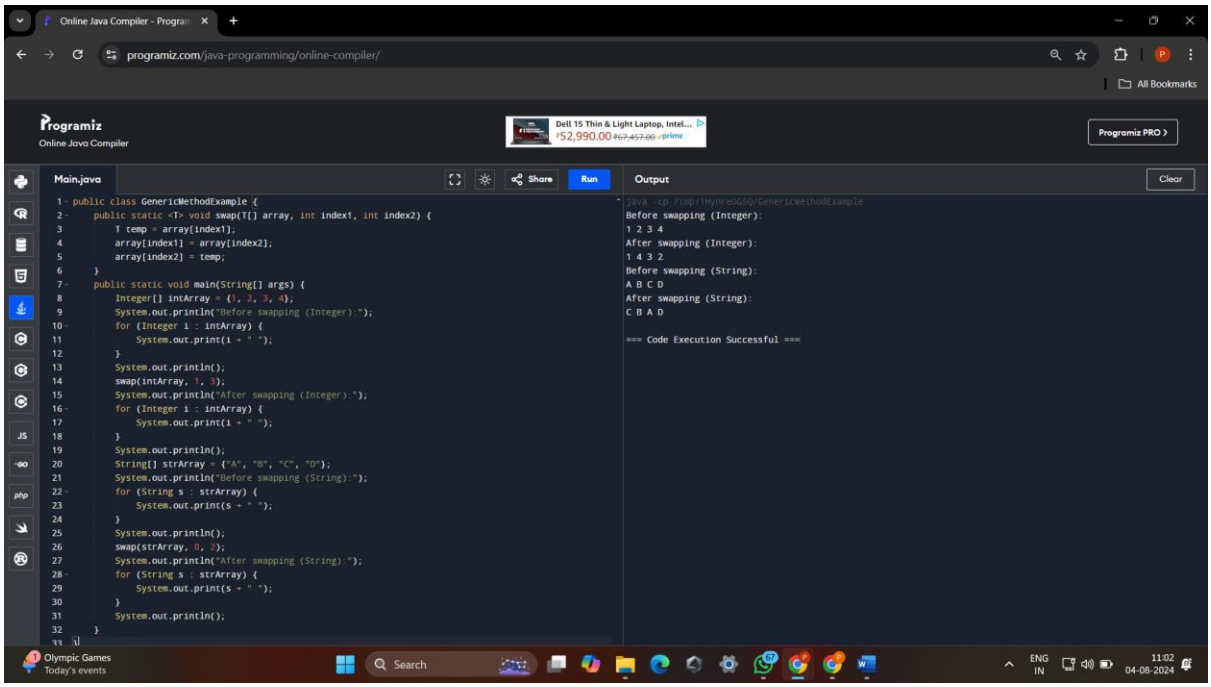
```
1. class Box<T> {
    private T item;

    public void setItem(T item) {
        this.item = item;
    }

    public T getItem() {
        return item;
    }
}
public class GenericExample {
    public static void main(String[] args) {
        Box<Integer> intBox = new Box<>();
        intBox.setItem(456);
        System.out.println("Integer Value: " + intBox.getItem());

        Box<String> strBox = new Box<>();
        strBox.setItem("Hello Generics");
        System.out.println("String Value: " + strBox.getItem());
    }
}
```



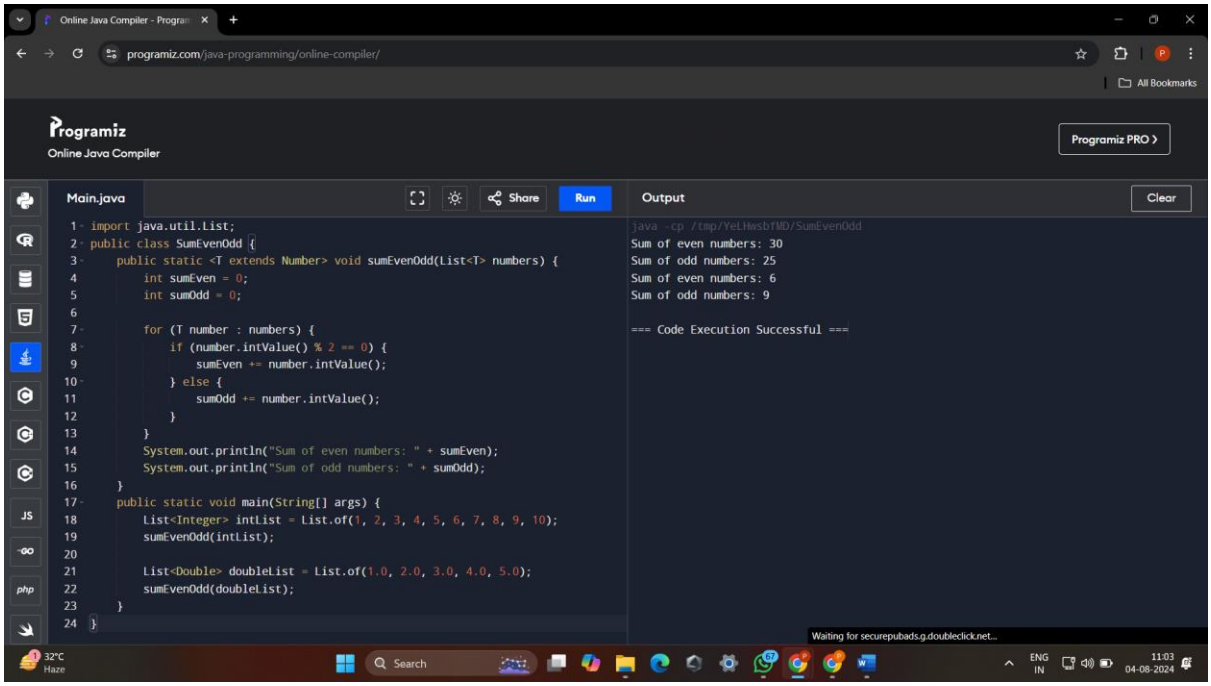
2. public class GenericMethodExample {

```
    public static <T> void swap(T[] array, int index1, int index2) {
        T temp = array[index1];
        array[index1] = array[index2];
        array[index2] = temp;
    }
    public static void main(String[] args) {
        Integer[] intArray = {1, 2, 3, 4};
        System.out.println("Before swapping (Integer):");
        for (Integer i : intArray) {
            System.out.print(i + " ");
        }
        System.out.println();
        swap(intArray, 1, 3);
        System.out.println("After swapping (Integer):");
        for (Integer i : intArray) {
            System.out.print(i + " ");
        }
```

```
        System.out.println();
        String[] strArray = {"A", "B", "C", "D"};
        System.out.println("Before swapping (String):");
        for (String s : strArray) {
            System.out.print(s + " ");
        }
        System.out.println();
        swap(strArray, 0, 2);
        System.out.println("After swapping (String):");
        for (String s : strArray) {
            System.out.print(s + " ");
        }
        System.out.println();
    }
}
```



3.
```
import java.util.List;
public class SumEvenOdd {
    public static <T extends Number> void sumEvenOdd(List<T> numbers) {
        int sumEven = 0;
        int sumOdd = 0;

        for (T number : numbers) {
            if (number.intValue() % 2 == 0) {
                sumEven += number.intValue();
            } else {
                sumOdd += number.intValue();
            }
        }
        System.out.println("Sum of even numbers: " + sumEven);
        System.out.println("Sum of odd numbers: " + sumOdd);
    }
    public static void main(String[] args) {
        List<Integer> intList = List.of(1, 2, 3, 4, 5, 6, 7, 8, 9, 10);
        sumEvenOdd(intList);

        List<Double> doubleList = List.of(1.0, 2.0, 3.0, 4.0, 5.0);
        sumEvenOdd(doubleList);
    }
}
```



4. import java.util.List;

public class FindElement {

public static <T> int findFirstOccurrence(List<T> list, T target) {

for (int i = 0; i < list.size(); i++) {

if (list.get(i).equals(target)) {

return i;

}

}

return -1;

}

public static void main(String[] args) {

List<String> stringList = List.of("apple", "banana", "cherry", "date");

System.out.println("Index of 'banana': " + findFirstOccurrence(stringList, "banana"));

System.out.println("Index of 'fig': " + findFirstOccurrence(stringList, "fig"));

List<Integer> intList = List.of(1, 2, 3, 4, 5);

```
        System.out.println("Index of 3: " + findFirstOccurrence(intList, 3));
        System.out.println("Index of 6: " + findFirstOccurrence(intList, 6));
    }
}
```