LAB # 7

Generics in Java

OBJECTIVE:

Implementing generic classes and methods for ensuring compile time type safety of data.

Lab Task

1. Write a program that takes integer array, double array and character array. Make a generic function that prints these array in reverse order.

SOURCE CODE

```
public class main {

    static <E> void geneDis(E[] element) {
        for(int i=element.length-1; i>=0; i--) {
            System.out.print(element[i] + " ");
        }
        System.out.println("\n");
    }

    public static void main(String[] args) {

        Integer[] integerArray = {100, 200, 300, 400, 500, 600};
        Double[] doubleArray = {7.3, 7.5, 7.7, 7.9, 8.1, 8.3, 8.5};
        Character[] characterArray = {'T', 'A', 'N', 'S', 'E','E','R'};

        System.out.println("Array integerArray in reverse order contain elements:");
        geneDis(integerArray);
        System.out.println("Array doubleArray in reverse order contain elements:");
        geneDis(doubleArray);
        System.out.println("Array characterArray in reverse order contain elements:");
        geneDis(characterArray);
    }
}
```

OUTPUT

```
<terminated> main (1) [Java Application] S:\Program Files\Java\jdk-17.0.1\bi
Array integerArray in reverse order contain elements:
600 500 400 300 200 100

Array doubleArray in reverse order contain elements:
8.5 8.3 8.1 7.9 7.7 7.5 7.3

Array characterArray in reverse order contain elements:
R E E S N A T
```