

LAB # 7

Generics in Java

OBJECTIVE:

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

Lab Task:

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

CODE:

```
1 package TASK_1;
2
3 public class Main {
4
5     public static <E> void printArray(E[] inputarray) {
6         for (int i = inputarray.length - 1; i >= 0; i--)
7             System.out.print(inputarray[i] + " ");
8     }
9
10    public static void main(String args[]) {
11
12        Integer[] intArray = { 1, 2, 3, 4, 5 };
13
14        Double[] doubleArray = { 1.1, 2.2, 3.3, 4.4 };
15
16        Character[] charArray = { 'H', 'E', 'L', 'L', 'O' };
17
18        System.out.println("Array integerArray contains:");
19
20        printArray(intArray);
21
22        System.out.println("\nArray doubleArray contains:");
23
24        printArray(doubleArray);
25
26        System.out.println("\nArray characterArray contains:");
27
28        printArray(charArray);
29    }
30 }
```

OUTPUT:

```
Array integerArray contains:
5 4 3 2 1
Array doubleArray contains:
4.4 3.3 2.2 1.1
Array characterArray contains:
O L L E H
```

