# LAB # 9

# 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 character array. Make a generic function that prints these array in reverse order.

**Source Code:**

import java.util.Arrays;

public class GenericArrayReverse {

public static <T> void printArrayInReverse(T[] array) {

System.out.println("Original Array: " + Arrays.toString(array));

System.out.print("Reversed Array: [");

for (int i = array.length - 1; i >= 0; i--) {

System.out.print(array[i]);

if (i > 0) {

System.out.print(", ");

}

}

System.out.println("]");

}

public static void main(String[] args) {

Integer[] intArray = {1, 2, 3, 4, 5};

Double[] doubleArray = {1.1, 2.2, 3.3, 4.4};

Character[] charArray = {'A', 'B', 'C', 'D', 'E'};

System.out.println("Integer Array:");

printArrayInReverse(intArray);

System.out.println("\nDouble Array:");

printArrayInReverse(doubleArray);

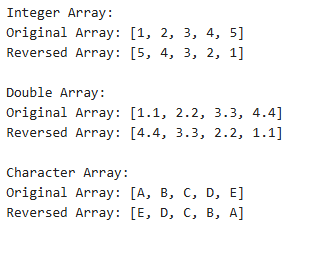
System.out.println("\nCharacter Array:");

printArrayInReverse(charArray);

}

}

**Output:**

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