

LAB # 07

Objective:

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

LAB TASK:

```
public class Generic {  
    public static <E> void printArray ( E[] inputArray) {  
        for(E element : inputArray) {  
            System.out.printf("%s", element);  
        }  
        System.out.println();  
    }  
    public static void main(String[] args) {  
        // TODO Auto-generated method stub  
        Integer[] intArray = { 1 , 2 , 3 , 4 , 5 };  
        Double[] doubleArray = { 1.1 , 2.2 , 3.3 , 4.4 , 5.5};  
        Character[] characterArray = { 'B', 'U' , 'S', 'H' , 'R' , 'A'};  
  
        System.out.println("Array integerArray contains:");  
        printArray(intArray);  
        for(int i=intArray.length-1;i>=0;i--)  
            System.out.println(intArray[i] + " \n");  
  
        System.out.println("\nArray doubleArray contains:");  
        printArray(doubleArray);  
        for(int i=doubleArray.length-1;i>=0;i--)  
            System.out.println(doubleArray[i] + " \n");  
  
        System.out.println("\nArray characterArray contains:");  
        printArray(characterArray);  
        for(int i=characterArray.length-1;i>=0;i--)  
            System.out.println(characterArray[i] + " \n");  
    }  
}
```

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OUTPUT:

```
<terminated> Generic [Java Application] C:\Program Files\Java\jdk-14.0.2\bin\javaw  
Array integerArray contains:  
12345  
5  
  
4  
  
3  
  
2  
  
1  
  
Array doubleArray contains:  
1.12.23.34.45.5  
5.5  
  
4.4  
  
3.3  
  
2.2  
  
1.1  
  
  
Array characterArray contains:  
BUSHRA  
A  
  
R  
  
H  
  
S  
  
U  
  
B
```