

[Dashboard](#) > [Tutorials](#) > [30 Days of Code](#) > [Day 21: Generics](#)

Day 21: Generics

by [Shafaet](#)[Tutorial](#)[Problem](#)[Submissions](#)[Leaderboard](#)[Discussions](#)[Editorial](#)

Objective

Today we're discussing Generics; be aware that *not all languages support this construct*, so fewer languages are enabled for this challenge. Check out the [Tutorial](#) tab for learning materials and an instructional video!

Task

Write a single generic function named `printArray`; this function must take an array of generic elements as a parameter (the exception to this is C++, which takes a *vector*). The locked `Solution` class in your editor tests your function.

Note: You must use generics to solve this challenge. *Do not* write overloaded functions.

Input Format

The locked `Solution` class in your editor will pass different types of arrays to your `printArray` function.

Constraints

- You must have exactly **1** function named `printArray`.

Output Format

Your `printArray` function should print each element of its generic array parameter on a new line.

Easy



Submitted 29218 times
Max Score 30


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
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Current Buffer (saved locally, editable)  

Java 8 

```
1 import ;
2
3 class Printer <T> {
4     /**
5      *   Method Name: printArray
6      *   Print each element of the generic array on a new line. Do not return anything.
7      *   @param A generic array
8      */
9
10    // Write your code here
11
12    public <T> void printArray(T[] array) {
13        for (T element :
14             array) {
15            System.out.println(element);
16        }
17    }
18
19 }
20
21
22 public class Generics {
23
24     public static void main(String args[]){
25         Scanner scanner = new Scanner(System.in);
26         int n = scanner.nextInt();
27         Integer[] intArray = new Integer[n];
28         for (int i = 0; i < n; i++) {
29             intArray[i] = scanner.nextInt();
30         }
31
32         n = scanner.nextInt();
33         String[] stringArray = new String[n];
34         for (int i = 0; i < n; i++) {
35             stringArray[i] = scanner.next();
36         }
37
38         Printer<Integer> intPrinter = new Printer<Integer>();
39         Printer<String> stringPrinter = new Printer<String>();
40         intPrinter.printArray( intArray );
41         stringPrinter.printArray( stringArray );
42         if(Printer.class.getDeclaredMethods().length > 1){
43             System.out.println("The Printer class should only have 1 method named printArray.");
44         }
45     }
46 }
```

Line: 19 Col: 1

 Upload Code as File ☐ Test against custom input

Run Code

Submit Code

Testcase 0 **Congratulations, you passed the sample test case.**Click the **Submit Code** button to run your code against all the test cases.**Input (stdin)**

```
3
1
```

```
2
3
2
Hello
World
```

Your Output (stdout)

```
1
2
3
Hello
World
```

Expected Output

```
1
2
3
Hello
World
```

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