

Anonymous Array in Java

Definition: An anonymous array in Java is an array without a name. It is created and used at the same time, usually for one-time use or when passed directly as an argument to a method.

Syntax:

```
new int[]{10, 20, 30, 40}
```

Example 1: Passing to a Method

```
class Test {  
    static void printArray(int[] arr) {  
        for (int x : arr) {  
            System.out.print(x + " ");  
        }  
        System.out.println();  
    }  
  
    public static void main(String[] args) {  
        printArray(new int[]{1, 2, 3, 4, 5});  
    }  
}
```

Output: 1 2 3 4 5

Example 2: One-time Use

```
public class Demo {  
    public static void main(String[] args) {  
        System.out.println(new int[]{10, 20, 30}[1]);  
    }  
}
```

Output: 20

When to use:

1. When you don't need to reuse the array later.
2. To reduce boilerplate code when passing temporary data to methods.
3. For quick initialization in a single line.

In short: An anonymous array is an array without a name, created and used immediately.