

Array Assignment

Q1. What do you mean by an Array?

Ans: An array type is a user-defined data type consisting of an ordered set of elements of a single data type.

Q2. How to create an Array?

Ans: You can declare and initialize an array in Java in two ways. The first one is with the new keyword, where you have to initialize the values one by one. The second is by putting the values in curly braces.

Q3. Can we change the size of an array at run time?

Ans: You cannot change the size of the array it's constructed. However, you can change the number of elements in an ArrayList whenever you want.

Q4. Can you declare an array without assigning the size of an array?

Ans: Yes, we can declare an array without size, but it needs to be initialized before using it.

Q5. What is the default value of Array?

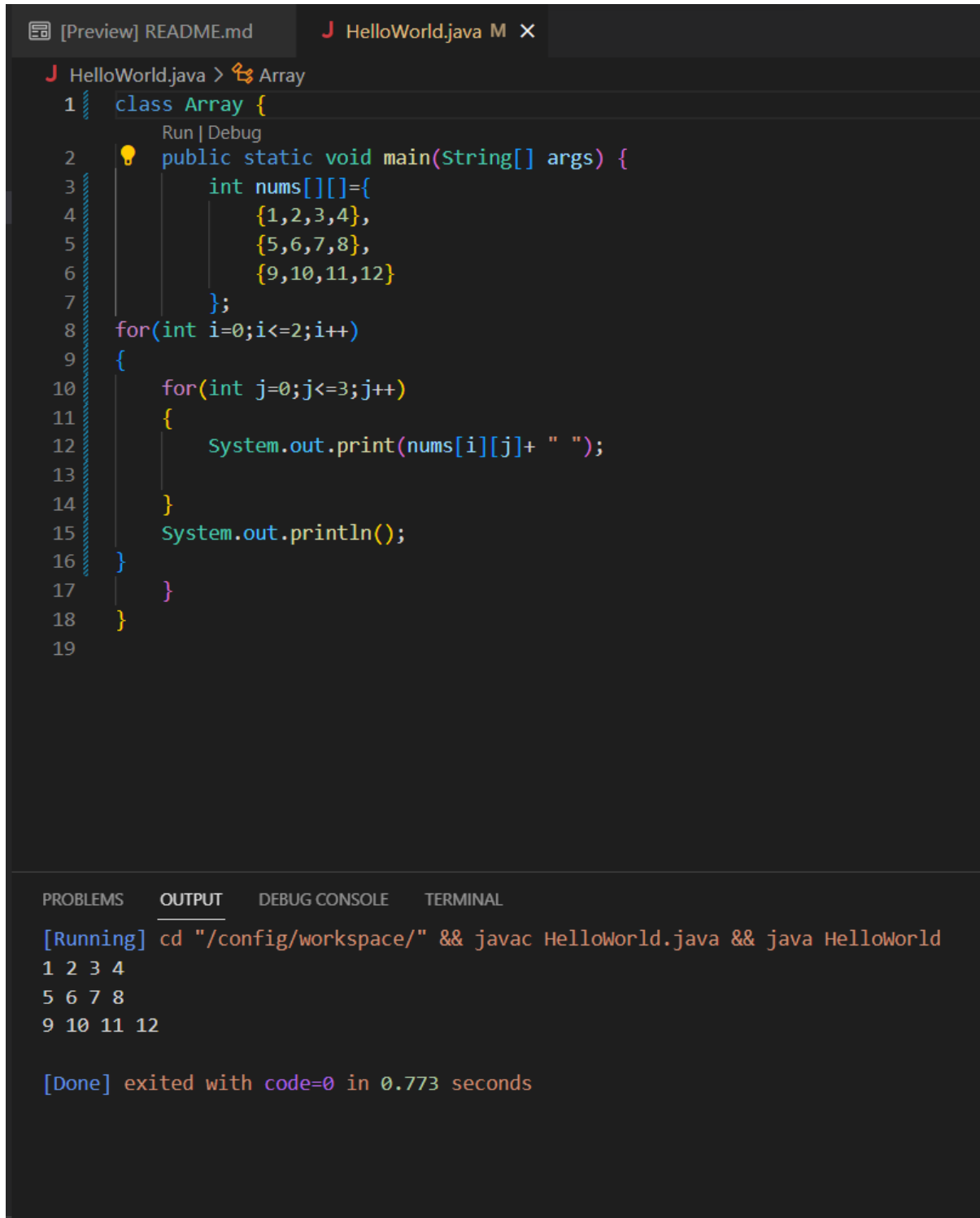
Ans: The default value of an Array is zero or null, depending on the data type.

Q6. What is a 1D array with an example?

Ans: A 1D array is a simple data structure that stores a collection of similar types of data in a contiguous block of memory.

```
Int a[ ] = { 5,3,9,4,5};
```

Q7 Write a program on a 2D array?



The screenshot shows an IDE with a file named `HelloWorld.java` open. The code defines a class `Array` with a `main` method. Inside `main`, a 2D array `nums` is initialized with three rows of four elements each. Two nested `for` loops iterate over the array, printing each element followed by a space. After the inner loop, `System.out.println()` is called to move to a new line. The output section shows the result of running the program, displaying the elements of the 2D array in three rows.

```
[Preview] README.md  HelloWorld.java M X  
J HelloWorld.java > Array  
1 class Array {  
2     public static void main(String[] args) {  
3         int nums[][]={  
4             {1,2,3,4},  
5             {5,6,7,8},  
6             {9,10,11,12}  
7         };  
8         for(int i=0;i<=2;i++)  
9         {  
10            for(int j=0;j<=3;j++)  
11            {  
12                System.out.print(nums[i][j]+ " ");  
13            }  
14            System.out.println();  
15        }  
16    }  
17 }  
18 }  
19  
  
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  
[Running] cd "/config/workspace/" && javac HelloWorld.java && java HelloWorld  
1 2 3 4  
5 6 7 8  
9 10 11 12  
  
[Done] exited with code=0 in 0.773 seconds
```