Day 7: Arrays in Java!

Yesterday, we explored the world of strings in Java. Today, we're going to dive into another fundamental concept in Java: arrays!

The Power of Arrays

Arrays are a crucial part of any programming language, and Java is no exception. They allow you to store and manipulate collections of data, making it easier to write efficient and effective code.

Creating Arrays

In Java, you can create arrays using the [] syntax. Here's an example:

int[ ] scores = new int[5];

scores[0] = 90;

scores[1] = 80;

scores[2] = 70;

scores[3] = 60;

scores[4] = 50;

Array Methods

Java provides a range of methods for working with arrays, including:

- length: Returns the length of the array.
- indexOf(): Returns the index of the first occurrence of a specified element.
- contains(): Returns true if the array contains a specified element.

Here's an example:

int[ ] scores = {90, 80, 70, 60, 50};

System.out.println(scores.length); // Output: 5 System.out.println(Arrays.indexOf(scores, 80)); // Output: 1

Multidimensional Arrays

Java also supports multidimensional arrays, which allow you to store and manipulate data in multiple dimensions. Here's an example:

int[ ][ ] matrix = new int[3][3];

matrix[0][0] = 1;

matrix[0][1] = 2;

matrix[0][2] = 3;

matrix[1][0] = 4;

matrix[1][1] = 5;

matrix[1][2] = 6;

matrix[2][0] = 7;

matrix[2][1] = 8;

matrix[2][2] = 9;

Challenges

Write a program that creates an array of integers and prints its length. Write a program that uses the indexOf() method to find the index of a specified element in an array. Write a program that creates a multidimensional array and prints its elements.

Code

You can find the code for today's challenges in the Day7 folder of this repository.

Join the Conversation

How was your experience with arrays today? Did you encounter any challenges or have any questions? Share your thoughts in the comments below!