**25 Java Array Interview Questions And Answers :**

**1) What is ArrayStoreException in java? When you will get this exception?**

ArrayStoreException is a run time exception which occurs when you try to store non-compatible element in an array object. The type of the elements must be compatible with the type of array object. For example, you can store only string elements in an array of strings. if you try to insert integer element in an array of strings, you will get ArrayStoreException at run time.

|  |  |
| --- | --- |
| 1  2  3  4  5  6  7  8  9  10  11  12  13 | **public** **class** MainClass  {  **public** **static** **void** main(String[] args)      {          Object[] stringArray = **new** String[5];   //No compile time error : String[] is auto-upcasted to Object[]            stringArray[1] = "JAVA";            stringArray[2] = 100;     //No compile time error, but this statement will throw java.lang.ArrayStoreException at run time            //because we are inserting integer element into an array of strings      }  } |

**2) Can you pass the negative number as an array size?**

No. You can’t pass the negative integer as an array size. If you pass, there will be no compile time error but you will get NegativeArraySizeException at run time.

|  |  |
| --- | --- |
| 1  2  3  4  5  6  7  8  9 | **public** **class** MainClass  {  **public** **static** **void** main(String[] args)      {  **int**[] array = **new** **int**[-5];     //No compile time error            //but you will get java.lang.NegativeArraySizeException at run time      }  } |

**3) Can you change the size of the array once you define it? OR Can you insert or delete the elements after creating an array?**

No. You can’t change the size of the array once you define it. You can not insert or delete the elements after creating an array. Only you can do is change the value of the elements.

**4) What is an anonymous array? Give example?**

Anonymous array is an array without reference. For example,

|  |  |
| --- | --- |
| 1  2  3  4  5  6  7  8  9  10  11 | **public** **class** MainClass  {  **public** **static** **void** main(String[] args)      {          //Creating anonymous arrays            System.out.println(**new** **int**[]{1, 2, 3, 4, 5}.length);    //Output : 5            System.out.println(**new** **int**[]{21, 14, 65, 24, 21}[1]);   //Output : 14      }  } |

**5) What is the difference between int[] a and int a[] ?**

Both are the legal methods to declare the arrays in java.

**6) There are two array objects of int type. one is containing 100 elements and another one is containing 10 elements. Can you assign array of 100 elements to an array of 10 elements?**

Yes, you can assign array of 100 elements to an array of 10 elements provided they should be of same type. While assigning, compiler checks only type of the array not the size.

|  |  |
| --- | --- |
| 1  2  3  4  5  6  7  8  9  10  11 | **public** **class** MainClass  {  **public** **static** **void** main(String[] args)      {  **int**[] a = **new** **int**[10];    **int**[] b = **new** **int**[100];            a = b;      //Compiler checks only type, not the size      }  } |

**7) “int a[] = new int[3]{1, 2, 3}” – is it a legal way of defining the arrays in java?**

No. You should not mention the size of the array when you are providing the array contents.

**8) What are the differences between Array and ArrayList in java?**

|  |  |
| --- | --- |
| Array | ArrayList |
| Arrays are of fixed length. | ArrayList is of variable length. |
| You can’t change the size of the array once you create it. | Size of the ArrayList grows and shrinks as you add or remove the elements. |
| Array does not support generics. | ArrayList supports generics. |
| You can use arrays to store both primitive types as well as reference types. | You can store only reference types in an ArrayList. |

**9) What are the different ways of copying an array into another array?**

There are four methods available in java to copy an array.

1) Using for loop

2) Using Arrays.copyOf() method

3) Using System.arraycopy() method

4) Using clone() method

Click [here](https://javaconceptoftheday.com/copying-an-array-in-java/) to see these methods in detail.

**10) What are jagged arrays in java? Give example?**

Jagged arrays in java are the arrays containing arrays of different length. Jagged arrays are also multidimensional arrays. They are also called as ragged arrays.

Click [here](https://javaconceptoftheday.com/jagged-arrays-in-java/) to see the jagged arrays in detail.

**11) How do you check the equality of two arrays in java? OR How do you compare the two arrays in java?**

You can use Arrays.equals() method to compare one dimensional arrays and to compare multidimensional arrays, use Arrays.deepEquals() method.

Click [here](https://javaconceptoftheday.com/how-to-check-the-equality-of-two-arrays-in-java/) to see more info on comparing two arrays in java.

**12) What is ArrayIndexOutOfBoundsException in java? When it occurs?**

ArrayIndexOutOfBoundsException is a run time exception which occurs when your program tries to access invalid index of an array i.e negative index or index higher than the size of the array.

**13) How do you sort the array elements?**

You can sort the array elements using Arrays.sort() method. This method internally uses quick sort algorithm to sort the array elements.

|  |  |
| --- | --- |
| 1  2  3  4  5  6  7  8  9  10  11  12  13  14  15 | **import** java.util.Arrays;    **public** **class** MainClass  {  **public** **static** **void** main(String[] args)      {  **int**[] a = **new** **int**[]{45, 12, 78, 34, 89, 21};            Arrays.sort(a);            System.out.println(Arrays.toString(a));            //Output : [12, 21, 34, 45, 78, 89]      }  } |

**14) How do you find the intersection of two arrays in java?**

[[Answer](https://javaconceptoftheday.com/java-program-to-find-common-elements-between-two-arrays/)]

**15) What are the different ways of declaring multidimensional arrays in java?**

The following code snippet shows different ways of declaring 2D, 3D and 4D arrays.

|  |  |
| --- | --- |
| 1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24  25  26  27  28  29 | //2D Arrays    **int**[][] twoDArray1;    **int** twoDArray2[][];    **int**[] twoDArray3[];    //3D Arrays    **int**[][][] threeDArray1;    **int** threeDArray2[][][];    **int**[] threeDArray3[][];    **int**[][] threeDArray4[];    //4D Arrays    **int**[][][][] fourDArray1;    **int** fourDArray2[][][][];    **int**[] fourDArray3[][][];    **int**[][] fourDArray4[][];    **int**[][][] fourDArray5[]; |

**16) While creating the multidimensional arrays, can you specify an array dimension after an empty dimension?**

No. You can not specify an array dimension after an empty dimension while creating multidimensional arrays. It gives compile time error.

|  |  |
| --- | --- |
| 1  2  3  4  5 | **int**[][][] a = **new** **int**[][5][];    //Compile time error    **int**[][][] b = **new** **int**[5][][5];   //Compile time error    **int**[][][] c = **new** **int**[][5][5];   //Compile time error |

**17) How do you search an array for a specific element?**

You can search an array to check whether it contains the given element or not using Arrays.binarySearch() method. This method internally uses binary search algorithm to search for an element in an array.

**18) What value does array elements get, if they are not initialized?**

They get default values.

**19) How do you find duplicate elements in an array?**

[[Answer](https://javaconceptoftheday.com/java-program-to-find-duplicate-elements-in-an-array/)]

**20) What are the different ways to iterate over an array in java?**

1) Using normal for loop

|  |  |
| --- | --- |
| 1  2  3  4  5  6  7  8  9  10  11  12  13  14 | **public** **class** MainClass  {  **public** **static** **void** main(String[] args)      {  **int**[] a = **new** **int**[]{45, 12, 78, 34, 89, 21};            //Iterating over an array using normal for loop    **for** (**int** i = 0; i &lt; a.length; i++)          {              System.out.println(a[i]);          }      }  } |

2) Using extended for loop

|  |  |
| --- | --- |
| 1  2  3  4  5  6  7  8  9  10  11  12  13  14 | **public** **class** MainClass  {  **public** **static** **void** main(String[] args)      {  **int**[] a = **new** **int**[]{45, 12, 78, 34, 89, 21};            //Iterating over an array using extended for loop    **for** (**int** i : a)          {              System.out.println(i);          }      }  } |

**21) How do you find second largest element in an array of integers?**

[[Answer](https://javaconceptoftheday.com/how-to-find-second-largest-number-in-an-integer-array/)]

**22) How do you find all pairs of elements in an array whose sum is equal to a given number?**

[[Answer](https://javaconceptoftheday.com/how-to-find-all-pairs-of-elements-in-an-array-whose-sum-is-equal-to-a-given-number/)]

**23) How do you separate zeros from non-zeros in an integer array?**

[[Answer](https://javaconceptoftheday.com/how-to-separate-zeros-from-non-zeros-in-an-array/)]

**24) How do you find continuous sub array whose sum is equal to a given number?**

[[Answer](https://javaconceptoftheday.com/how-to-find-continuous-sub-array-whose-sum-is-equal-to-given-number/)]

**25) What are the drawbacks of the arrays in java?**

The main drawback of the arrays is that arrays are of fixed size. You can’t change the size of the array once you create it. Therefore, you must know how many elements you want in an array before creating it. You can’t insert or delete the elements once you create an array. Only you can do is change the value of the elements.