Java Array Questions with Answers

1. What is an array in Java?

Answer: An array is a container object that holds a fixed number of values of a single type.

2. How do you declare and initialize an array in Java?

Answer: int[] arr = {1, 2, 3, 4, 5};

3. Write a Java program to find the largest element in an array.

Answer: Use a loop to compare and store the maximum value.

4. How can you copy one array into another in Java?

Answer: Use System.arraycopy(src, srcPos, dest, destPos, length);

5. Write a program to reverse an array.

Answer: Use two pointers, one at the start and one at the end, swap until they meet.

6. Explain the difference between a one-dimensional and a two-dimensional array.

Answer: 1D arrays store linear data, 2D arrays store data in a matrix form.

7. How do you find the sum of all elements in an array?

Answer: Iterate through the array and keep adding elements to a sum variable.

8. Write a Java program to check if an array contains a specific value.

Answer: Use a loop to compare each element with the target value.

9. How do you sort an array in Java?

Answer: Use Arrays.sort(array);

10. Write a program to find the second largest number in an array.

Answer: Track both largest and second largest while iterating through the array.

11. How can you remove duplicate elements from an array?

Answer: Use a Set to filter out duplicates.

12. Write a Java program to merge two arrays.

Answer: Create a new array of size arr1 + arr2 and copy both using loops or System.arraycopy.

13. How do you find the frequency of each element in an array?

Answer: Use a HashMap to count occurrences.

14. What is the default value of an int array in Java?

Answer: 0

15. Write a program to find common elements between two arrays.

Answer: Use nested loops or HashSet to find intersection.

16. How can you find the minimum and maximum value in an array?

Answer: Iterate through array comparing each element to min and max variables.

17. Explain the difference between ArrayList and arrays in Java.

Answer: ArrayList is resizable and part of Java Collections, arrays are fixed-size and not part of Collections.

18. Write a Java program to rotate an array by k positions.

Answer: Use a temporary array or rotate one-by-one using loops.

19. How do you convert an array to a List in Java?

Answer: Use Arrays.asList(array);

20. Write a program to check if an array is a palindrome.

Answer: Compare elements from start and end moving towards the center.