1.What is the default value of Array for different data types?
Ans. the default values of arrays are:

1. Numeric Data Types (such as integers or floating-point numbers):
    - Default value: 0
2. Boolean Data Type:
    - Default value: False
3. Character Data Types:
    - Default value for a single character: null or an empty character
    - Default value for a string: null or an empty string
4. Object Data Type:
    - Default value: null or an empty reference

2.Can you pass the negative numbers in Array size?
Ans. No

3.Where does Array stored in JVM memory?
Ans. in Java are stored in the JVM (Java Virtual Machine) memory in a specific area called the heap. The heap is a region of memory allocated for dynamic memory allocation, which includes objects and arrays. When an array is created in Java, the memory space for the array elements is allocated on the heap.

4.What are the disadvantages of Array?
Ans. here are the disadvantages of arrays:

1. Fixed Size: Arrays have a fixed size and cannot be easily resized once created. You cannot add or remove elements dynamically without creating a new array.
2. Memory Wastage: If the array is larger than the number of elements it holds, it can result in memory wastage.
3. Lack of Flexibility: Arrays are not flexible when it comes to handling dynamic data. Modifying the size of an array or inserting/deleting elements can be cumbersome.

5.What is an Anonymous Array in Java? Give an Example?
Ans. an anonymous array in Java is an array that is created without explicitly declaring and assigning it to a variable. It is defined and initialised in a single line of code without a specific name.

6.What are the different ways to traverse an Array in Java?
Ans. there are several ways to traverse (iterate over) an array in Java

1. For Loop: The most common and straightforward way is to use a for loop. You can start from the first element and iterate until the last element using an index variable.
2. Enhanced For Loop (Foreach Loop): This loop is specifically designed for iterating over arrays and collections. It automatically handles the indexing for you.
3. While Loop: You can also use a while loop with an index variable similar to the for loop approach.
4. Do-While Loop: Similar to the while loop, but it ensures that the loop body executes at least once before checking the condition.

7.What is the difference between length and length() method? Give an Example?
Ans. `length` is a property of an array that gives the number of elements, while `length()` is a method of the `String` class that returns the number of characters in a string.