## 1. Default Value of Array for Different Data Types:

The default value for an array depends on its data type:

- For numeric types (int, float, double, etc.), the default value is 0.
- For boolean arrays, the default value is false.
- For reference types (objects), the default value is null.

# 2. Passing Negative Numbers in Array Size:

- No, you cannot pass a negative number as the size of an array. The size must be non-negative.

## 3. Storage of Arrays in JVM Memory:

- Arrays are stored in the heap memory of the Java Virtual Machine (JVM).

Disadvantages of Arrays:

- Fixed size: Arrays have a fixed size, which cannot be changed dynamically.
- Lack of flexibility: You cannot easily insert or remove elements from an array without creating a

new one.

 No built-in methods: Arrays lack built-in methods for common operations like sorting or searching.

#### 4. Anonymous Arrays in Java:

- Anonymous arrays are created without explicitly declaring a variable name.
- Example:

int[] anonymousArray = new int[]{1, 2, 3};

#### 5. Ways to Traverse an Array in Java:

- Common methods include:
  - Using a for loop: for (int i = 0; i < arr.length; i++) { /\* process arr[i] \*/ }</p>
  - Using an enhanced for loop (for-each): for (int num : arr) { /\* process num \*/ }

# 6. Difference Between length and length() Method:

- length is an attribute of an array (e.g., arr.length), representing the number of elements.
- length() is a method applicable to strings (e.g., "hello".length()), returning the length of the string.