1. Default Values of Array for Different Data Types:

Ans - Default values:

- `int`, `short`, `byte`, `long`: 0

- `float`, `double`: 0.0

- `char`: '\u0000'

- `boolean`: `false`

- Object references: `null`

2. Negative Number in Array Size:

Ans - No, you cannot pass a negative number as the array size. It will result in a negative array size exception.

3. Array Storage in JVM Memory:

Ans - Arrays are stored in the heap memory in the JVM.

4. Disadvantages of Array:

Ans –

- Fixed size

- No built-in methods for adding/removing elements

- Can't store different types (except Object arrays)

- Can be less efficient for dynamic operations

5. Anonymous Array in Java:

Ans - An anonymous array is created without specifying a variable name. It's useful for one-time use.

Example:

int sum = 0;

sum = calculateSum(new int[]{1, 2, 3});

6. Different Ways to Traverse an Array:

Ans –

- For loop

- Enhanced for loop (for-each)

- While loop with index

- Stream API (Java 8 and later)

7. Difference between `length` and `length()` Method:

Ans –

- `length`: Array property to get the number of elements.

- `length()`: Method used with strings to get the number of characters.

Examples:

int[] numbers = {1, 2, 3};

int arrLength = numbers.length; // Using length property

String text = "Hello";

int strLength = text.length(); // Using length() method