PHASE 1 PRACTICE ASSISTED PROJECT

4. Writing a program in Java implementing the bubble sort algorithm

```java
package main;

public class BubbleSort {

	public static void bubbleSort(int[] arr) {
		int n = arr.length;

		for (int i = 0; i < n - 1; i++) {
			for (int j = 0; j < n - i - 1; j++) {
				if (arr[j] > arr[j + 1]) {
					// Swap arr[j] and arr[j + 1]
					int temp = arr[j];
					arr[j] = arr[j + 1];
					arr[j + 1] = temp;
				}
			}
		}
	}

	public static void main(String[] args) {
		int[] arr = {64, 34, 25, 12, 22, 11, 90};

		System.out.println("Original array: ");
		printArray(arr);

		bubbleSort(arr);

		System.out.println("Sorted array: ");
		printArray(arr);
	}

	public static void printArray(int[] arr) {
		for (int i = 0; i < arr.length; i++) {
			System.out.print(arr[i] + " ");
		}
		System.out.println();
	}
}
```

OUTPUT-