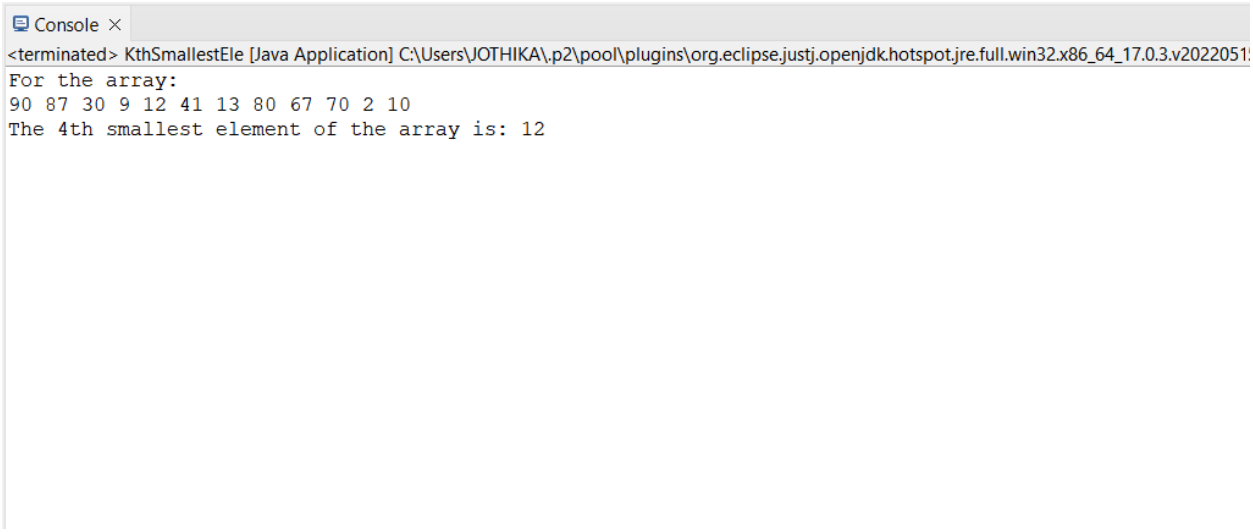
2.Write a program in Java to find the fourth smallest element in an unsorted list

```
package javaFsd3;

public class KthSmallestEle{

// method for sorting the array arr
	public void sortArr(int arr[]) {
		int size = arr.length;

		for (int i = 0; i < size; i++) {
			int temp = i;
			for (int j = i + 1; j < size; j++) {
				if (arr[temp] > arr[j]) {
					temp = j;
				}

			}

			if (temp != i) {
				int t = arr[i];
				arr[i] = arr[temp];
				arr[temp] = t;
			}
		}
	}

// find the kth smallest element of the array
	public int findKthSmallest(int arr[], int k) {
		sortArr(arr);

// as an array is always a zero indexing
// therefore, the kth smallest element lies
// at the k - 1 index
		return arr[k - 1];
	}
```

```
public static void main(String argvs[]) {

// creating an object of the class KthSmallestEle
		KthSmallestEle obj = new KthSmallestEle();


		int arr1[] = { 90, 87, 30, 9, 12, 41, 13, 80, 67, 70 };

		int size = arr1.length;
		int k = 4;

		System.out.println("For the array: ");
		for (int i = 0; i < size; i++) {
			System.out.print(arr1[i] + " ");
		}

		int element = obj.findKthSmallest(arr1, k);

		System.out.println();
		System.out.println("The " + k + "th smallest element of the array is: "
+ element);

	}
}
```

Output


Console
<terminated> KthSmallestEle [Java Application] C:\Users\JOTHIKA\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.3.v2022051
For the array:
90 87 30 9 12 41 13 80 67 70 2 10
The 4th smallest element of the array is: 12