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import java.util.Scanner;

public class BinarySearch1 {

    static void customerID(int A[]) {
        int temp = 0;
            (int k = 0; k < A.length; k++) {
                (int j = k + 1; j < A.length; j++) {
                   (A[k] > A[j]) {
                    temp = A[k];
                    A[k] = A[j];
                    A[j] = temp;
                }
            }
        }
    }

    static int binarySearch(int A[], int left, int right, int x) {
        int mid = 0;
              (left <= right) {
            mid = (left + right) / 2;
               (A[mid] == x) {
                       mid;
            }         (A[mid] > x) {
                right = mid - 1;
            }      {
                left = mid + 1;
            }
        }
               -1;
    }

    public static void main(String s[]) {
        Scanner sc =     Scanner(System.in);

        System.out.println("Enter the number of customers in an E-Commerce System:");
        int size = sc.nextInt();
        int A[] =     int[size];

        System.out.println("Enter the Customer Account IDs:");
            (int i = 0; i < A.length; i++) {
            A[i] = sc.nextInt();
        }

        System.out.println("Customer Account IDs before applying sorting technique:");
            (int i = 0; i < A.length; i++) {
            System.out.print(A[i] + "\t");
        }
        System.out.println("\n");

        // Calling customerID function for sorting
        customerID(A);

        System.out.println("Customer Account IDs after applying sorting technique:");
            (int i = 0; i < A.length; i++) {
            System.out.print(A[i] + "\t");
        }
        System.out.println("\n");

        int n = A.length;
        System.out.println("Enter the Customer Account ID to be found:");
        int x = sc.nextInt();

        int result = binarySearch(A, 0, n - 1, x);

           (result == -1) {
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            System.out.println("Customer Account ID " + x + " is not found.");
        }       {
            System.out.println("Customer Account ID " + x + " is found at index: " +
result);
        }

        sc.close();
    }
}
```