Assignment based on Linear Search and Binary Search

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#include <stdio.h>

int linearSearch(int arr[], int size, int target) {
   for (int i = 0; i < size; i++) {
      if (arr[i] == target) {
         return i;
      }
   }
   return -1;
}

int binarySearch(int arr[], int size, int target) {
   int left = 0;
   int right = size - 1;

   while (left <= right) {
      int mid = left + (right - left) / 2;

      if (arr[mid] == target) {
         return mid;
      }
      if (arr[mid] < target) {
         left = mid + 1;
      } else {
         right = mid - 1;
      }
   }
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    return -1;
}

int main() {
    int choice, size, target;

    printf("Enter the number of elements in the array: ");
    scanf("%d", &size);

    int arr[size];
    printf("Enter the elements of the array:\n");
    for (int i = 0; i < size; i++) {
        scanf("%d", &arr[i]);
    }

    printf("Choose search method:\n1. Linear Search\n2. Binary Search\n");
    scanf("%d", &choice);

    printf("Enter the element to search for: ");
    scanf("%d", &target);

    int result;
    if (choice == 1) {
        result = linearSearch(arr, size, target);
    } else if (choice == 2) {
        for (int i = 0; i < size - 1; i++) {
            for (int j = 0; j < size - i - 1; j++) {
                if (arr[j] > arr[j + 1]) {
                    int temp = arr[j];
                    arr[j] = arr[j + 1];
                    arr[j + 1] = temp;
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            }
          }
        }
        result = binarySearch(arr, size, target);
    } else {
        printf("Invalid choice.\n");
        return 1;
    }

    if (result != -1) {
        printf("Element found at index: %d\n", result);
    } else {
        printf("Element not found in the array.\n");
    }

    return 0;
}
```