

```

using System;

namespace GenericSearch
{
    class Program
    {
        static void Main(string[] args)
        {
            // Generate and display integer array
            int[] intArray = GenerateIntArray(10, 10, 49);
            Console.WriteLine("Integer Array:");
            DisplayArray(intArray);

            // Generate and display string array
            string[] stringArray = GenerateStringArray(10, 'a', 'z');
            Console.WriteLine("\nString Array:");
            DisplayArray(stringArray);

            // Test search method with integer array
            Console.WriteLine("\nEnter an integer to search in the Integer Array:");
            int intKey = int.Parse(Console.ReadLine());
            int intIndex = Search(intArray, intKey);
            if (intIndex != -1)
                Console.WriteLine($"Integer found at index: {intIndex}");
            else
                Console.WriteLine("Integer not found in the Integer Array");

            // Test search method with string array
            Console.WriteLine("\nEnter a string to search in the String Array:");
            string stringKey = Console.ReadLine();
            int stringIndex = Search(stringArray, stringKey);
            if (stringIndex != -1)
                Console.WriteLine($"String found at index: {stringIndex}");
            else
                Console.WriteLine("String not found in the String Array");

            Console.ReadLine();
        }

        static int Search<T>(T[] dataArray, T searchKey) where T : IComparable
        {
            for (int i = 0; i < dataArray.Length; i++)
            {
                if (dataArray[i].CompareTo(searchKey) == 0)
                    return i;
            }
            return -1;
        }
    }
}

```

```

static int[] GenerateIntArray(int size, int minValue, int maxValue)
{
    int[] array = new int[size];
    Random random = new Random();
    for (int i = 0; i < size; i++)
    {
        array[i] = random.Next(minValue, maxValue + 1);
    }
    return array;
}

static string[] GenerateStringArray(int size, char minValue, char maxValue)
{
    string[] array = new string[size];
    Random random = new Random();
    for (int i = 0; i < size; i++)
    {
        char randomChar = (char)random.Next(minValue, maxValue + 1);
        array[i] = randomChar.ToString();
    }
    return array;
}

static void DisplayArray<T>(T[] array)
{
    foreach (var item in array)
    {
        Console.Write(item + " ");
    }
    Console.WriteLine();
}
}
}

```