البحث الثنائي

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace binarySearch

{

class Program

{

static void Main(string[] args)

{

int[] x = { 1, 3, 5, 6, 8 };

int key = 3;

int index=BinarySearchRecursive(x, key,0,4);

Console.WriteLine(" index="+index);

}

public static int BinarySearchRecursive(int[] inputArray, int key, int min, int max)

{

if (min > max)

{

return -1;

}

else

{

int mid = (min + max) / 2;

if (key == inputArray[mid])

{

return mid;

}

else if (key < inputArray[mid])

{

return BinarySearchRecursive(inputArray, key, min, mid - 1);

}

else

{

return BinarySearchRecursive(inputArray, key, mid + 1, max);

}

}

}

}

}

البحث الخطي

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace LinerSearch

{

class Program

{

static void Main(string[] args)

{

int[] input = { 2, 5, 6, 44 };

int x = 5;

Console.WriteLine(LinearSearch(input, input.Length,x));

}

static int LinearSearch(int [] input,int n,int x) {

for (int i = 0; i < n; i++)

{

if (input[i] == x) return i;

}

return -1;

}

}

}