Assignment 5

Source code

*Program.cs*

using System;

using System.Collections;

using System.Collections.Generic;

using System.Linq;

using System.Security.Cryptography;

using System.Text;

using System.Threading.Tasks;

using static System.Console;

namespace lab5

{

internal class Program

{

static void Main(string[] args)

{

const int size = 10;

int[] arr = new int[size];

ArrayList arlist = new ArrayList(size);

List<string> list = new List<string>(size);

string a = "A";

for (int i = 0; i < arr.Length; i++) {

arr[i] = i;

if((i%2) == 0)

arlist.Add(i);

else

arlist.Add(a);

list.Add(a);

a += "A";

}

WriteLine("(Array)Element 4 have index:{0}", arr.ElementAt(4));

WriteLine("(Array)Max element: {0}", arr.Max());

arr = arr.Where((source, index) => index != 6).ToArray();

WriteLine("(ArrayList)Element AAAA have index:{0}", arlist.IndexOf("AAAA"));

WriteLine("(ArrayList)Size of ArrayList: ", arlist.Count);

arlist.Remove("AAAA");

WriteLine("(List)Element AA have index:{0}", list.BinarySearch("AA"));

WriteLine("(List)Min element:{0}", list.Min());

list.Reverse();

list.RemoveAt(size - 1);

display\_array(arr);

display\_arrayList(arlist);

display\_list(list);

ReadKey();

}

static void display\_array(int[] array) {

WriteLine("Array");

foreach (int i in array)

{

WriteLine(i);

}

}

static void display\_arrayList(ArrayList array)

{

WriteLine("ArrayList");

foreach (var i in array)

{

WriteLine(i);

}

}

static void display\_list(List<string> array)

{

WriteLine("List");

foreach (string i in array)

{

WriteLine(i);

}

}

}

}

Outputs

Text

Description automatically generated

Text

Description automatically generated

Text

Description automatically generated

Text

Description automatically generated