**Age Sorter**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Age\_Sorter

{

class Program

{

static void Main(string[] args)

{

List<int> intList = new List<int>();

List<int> intAboveTwenty = new List<int>();

List<int> intBelowTwenty = new List<int>();

Random randgen = new Random();

for (int i = 0; i < 100; i++)

{

intList.Add(randgen.Next(15, 23));

}

string strBelow = "";

string strAbove = "";

foreach (int i in intList)

{

if (i >= 20)

{

intAboveTwenty.Add(i);

}

if (i < 20)

{

intBelowTwenty.Add(i);

}

}

foreach (int i in intBelowTwenty)

{

strBelow += i.ToString() + " ";

}

foreach (int i in intAboveTwenty)

{

strAbove += i.ToString() + " ";

}

Console.WriteLine("Number of members below 20 years of age: " + intBelowTwenty.Count.ToString());

Console.WriteLine("Younger ages include: \n \n" + strBelow);

Console.WriteLine("\nNumber of members at or above 20 years of age: " + intAboveTwenty.Count.ToString());

Console.WriteLine("Older ages include: \n \n" + strAbove);

Console.ReadLine();

}

}

}

**Word Maker**

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

using System.Collections;

namespace WordMaker

{

public partial class Form1 : Form

{

public Form1()

{

InitializeComponent();

}

private void btnSubmit\_Click(object sender, EventArgs e)

{

lbxOutput.Items.Clear();

ArrayList arraylist = new ArrayList();

string strInput = "";

strInput = txtPhrase.Text;

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

{

arraylist.Add(strInput[i]);

}

foreach (char charString in arraylist)

{

lbxOutput.Items.Add(charString.ToString());

}

}

}

}

**AddRange**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace AddRange\_Practice

{

class Program

{

static void Main(string[] args)

{

List<string> colors = new List<string>() { "blue", "pink", "purple" };

Console.WriteLine("The colors in the first list are: ");

foreach (string strString in colors)

{

Console.Write(strString + " ");

}

List<string> colors2 = new List<string>() { "navy", "violet" };

Console.WriteLine("\nThe colors in the second list are: ");

foreach (string strString in colors2)

{

Console.Write(strString + " ");

}

colors.AddRange(colors2);

Console.WriteLine("\nThe colors in the first list after using AddRange are: ");

foreach (string strString in colors)

{

Console.Write(strString + " ");

}

Console.ReadLine();

}

}

}

**Unlucky Numbers**

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

using System.Collections;

namespace Remove\_Unlucky\_Number

{

public partial class Form1 : Form

{

public Form1()

{

InitializeComponent();

}

public static ArrayList list = new ArrayList() { 1, 2, 3, 4, 5, 6, 7, 8, 9};

private void button1\_Click(object sender, EventArgs e)

{

int intRemove = 0;

int intLocation = 0;

Int32.TryParse(txtReplace.Text, out intRemove);

intLocation = list.BinarySearch(intRemove);

list.RemoveAt(intLocation);

lblList.Text = "End List: ";

foreach (int i in list)

{

lblList.Text += i;

}

}

private void btnReset\_Click(object sender, EventArgs e)

{

list.Clear();

list.Add(1);

list.Add(2);

list.Add(3);

list.Add(4);

list.Add(5);

list.Add(6);

list.Add(7);

list.Add(8);

list.Add(9);

lblList.Text = "Initial List: ";

foreach (int i in list)

{

lblList.Text += i;

}

}

private void Form1\_Load(object sender, EventArgs e)

{

lblList.Text = "Initial List: ";

foreach(int i in list)

{

lblList.Text += i;

}

}

}

}