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**Assignment : CSharp Assignment 5**

1. Create following types of arrays
   1. Integer
   2. String

Use System.Array class to perform following operations on them

Copy, Sort, Clear, Reverse

Accept input from user through Console.

Code :

using System;

using System.Collections;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Assign5CSharp

{

public class Array

{

static void Main(string[] args)

{

string[] arr\_str = new string[8];

ArrayLi st arr = new ArrayList();

arr.Add("Saudi");

arr.Add("London");

arr.Add("India");

arr.Add("Goa");

arr.Add("Dubai");

Console.WriteLine("After Copy: ");

arr.CopyTo(arr\_str);

foreach (var elements in arr)

{

Console.WriteLine(elements);

}

Console.WriteLine();

arr.Sort();

Console.WriteLine("Sorted Array List : ");

foreach (string i in arr)

{

Console.WriteLine(i);

}

Console.WriteLine();

Console.WriteLine("Reverse Array List : ");

arr.Reverse();

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

{

Console.WriteLine(arr[i]);

}

Console.WriteLine();

arr.Clear();

Console.WriteLine("After Clearing The Array List " + " Number of Elements Are : " + arr.Count);

Console.WriteLine("Press Enter To Get Out Of Console : ");

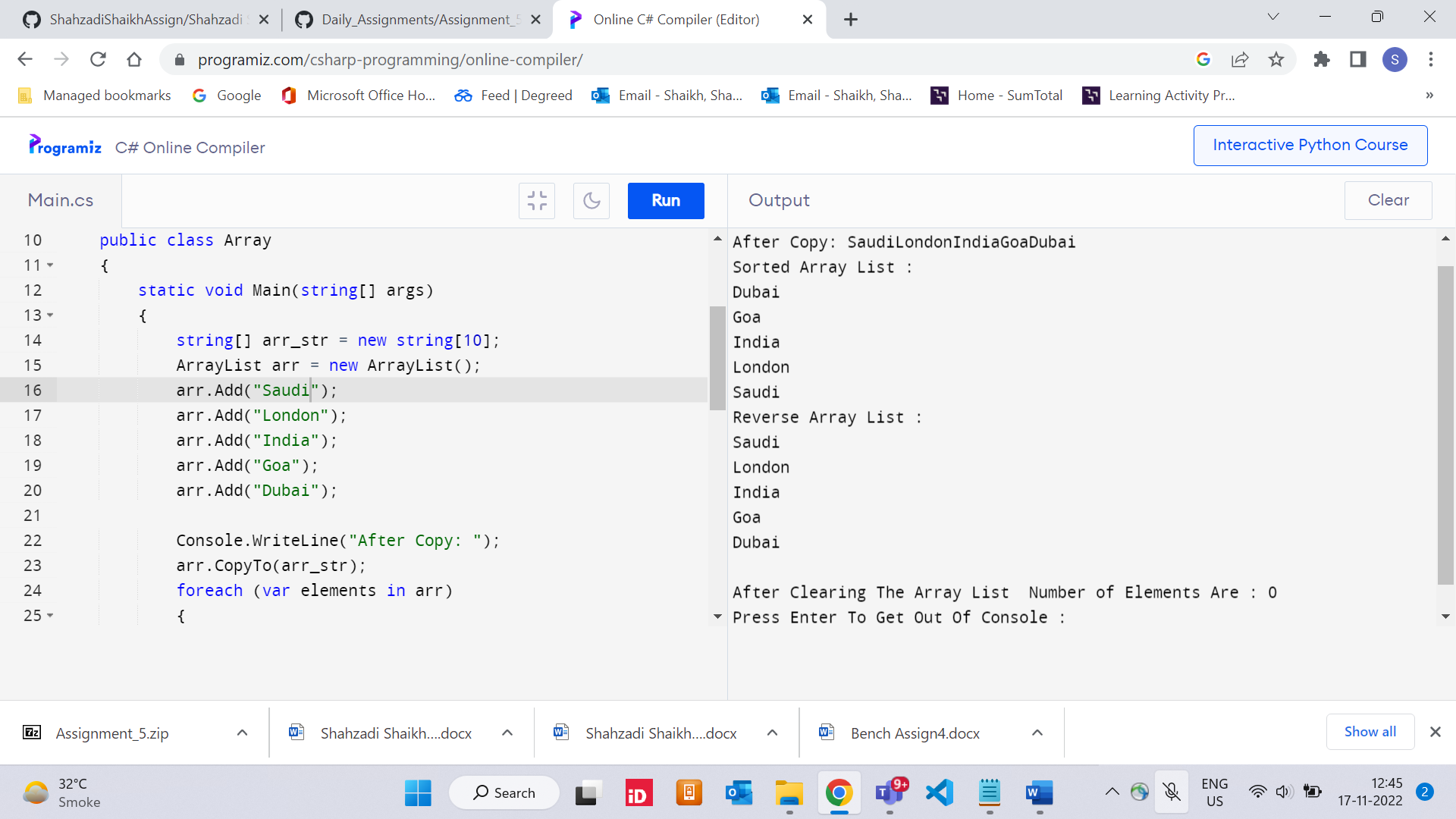
Console.ReadKey();

}

}

}

**Output**



Qus 2 . Use collection class such as ArrayList to hold more than one employee objects in Employee Management application. Display all Employee details which are stored in collection.

Code :

using System;

using System.Collections;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace CsharpAssignment\_5

{

class EmployeeData

{

public int EmpId { get; set; }

public string EmpName { get; set; }

public int EmpAge { get; set; }

public decimal EmpSalary { get; set; }

public EmployeeData(int empid, string empname, int empage, decimal empsal)

{

EmpId = empid;

EmpName = empname;

EmpAge = empage;

EmpSalary = empsal;

}

}

class Program2

{

public static void Main(string[] args)

{

ArrayList Emp = new ArrayList();

EmployeeData emp1 = new EmployeeData(6978, "ABC", 30, 35000);

EmployeeData emp2 = new EmployeeData(7543, "PQR", 27, 25000);

EmployeeData emp3 = new EmployeeData(8976, "XYZ", 24, 20000);

Emp.Add(emp1);

Emp.Add(emp2);

Emp.Add(emp3);

foreach (EmployeeData i in Emp)

{

Console.WriteLine("Employee Id : " + i.EmpId);

Console.WriteLine("Employee Name : " + i.EmpName);

Console.WriteLine("Employee Age : " + i.EmpAge);

Console.WriteLine("Employee Salary : " + i.EmpSalary);

Console.WriteLine();

}

Console.ReadLine();

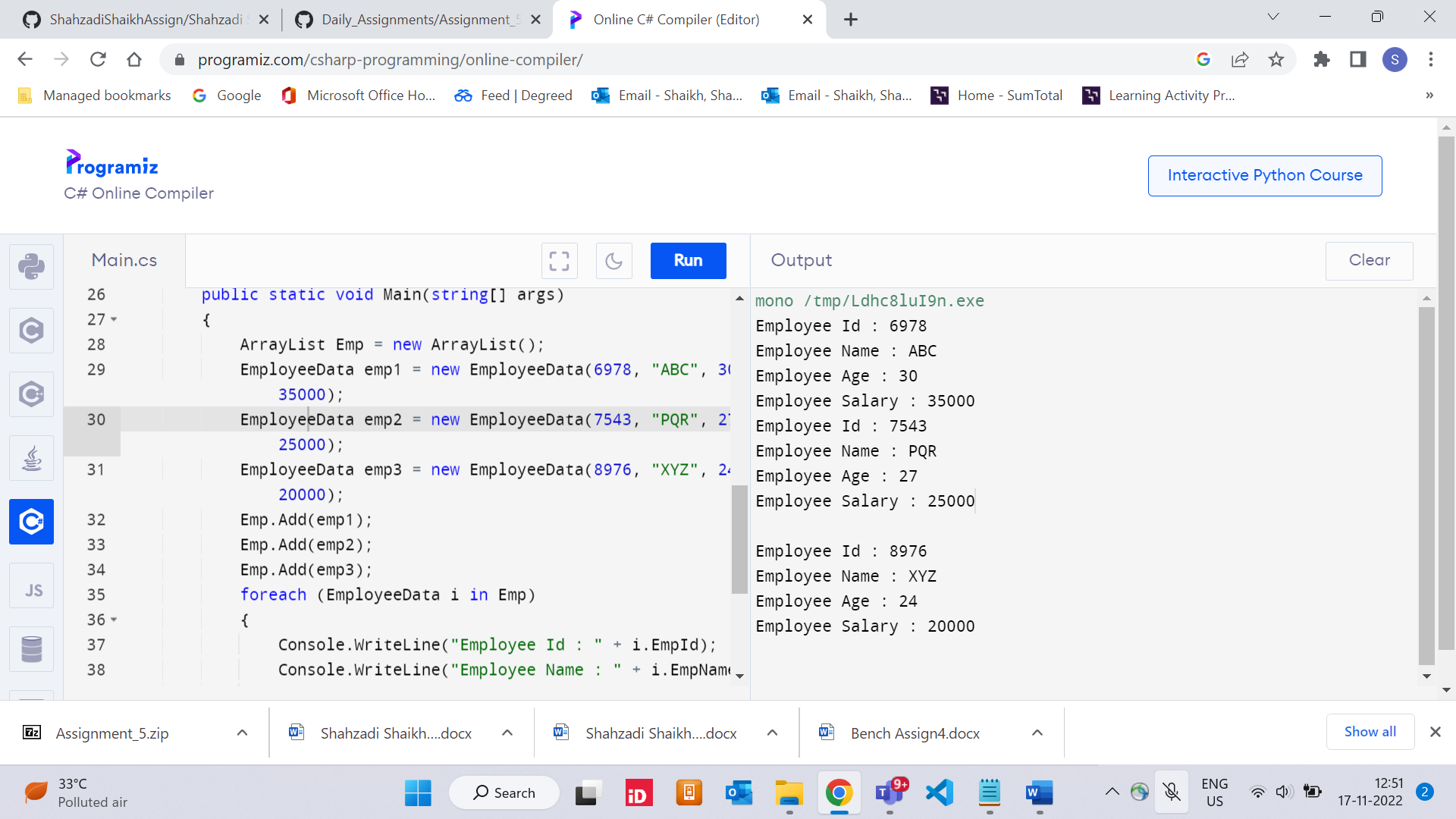
Console.ReadKey();

}

}

}

**Output**



Qus 3 . Write a console based program to create a linked list of Employee objects using the generic class List<Employee>.Perform following operations on the list:

1. Add a new employee
2. Display the list of employees.
3. Total number of employees in the list

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Assign5CSharp

{

public class EmployeeList<T>

{

private List<T> \_List = new List<T>();

public void AddEmployee(T Employee)

{

\_List.Add(Employee);

}

public void Show()

{

for (int i = 0; i < \_List.Count; i++)

{

Console.WriteLine(\_List[i]);

}

Console.WriteLine("Total Number of Employee : " + \_List.Count);

}

}

class Program2

{

public static void Main(string[] args)

{

var List = new EmployeeList<string>();

Console.WriteLine("Employee List : ");

List.AddEmployee("ABC");

List.AddEmployee("XYZ");

List.AddEmployee("PQR");

List.Show();

Console.ReadLine();

}

}

}

**Output**

