Assignment – Day 5 (Rahul Kumar)

1. **Dictonary:**

```
using System;
using System.Collections.Generic;

namespace dictonary
{
    class Program
    {
        static void Main(string[] args)
        {
            //declararation of Dictonary
            var dict = new Dictionary<string, object>();

            //Insert
            dict.Add("BillNo", 1);
            dict.Add("CName", "Rahul");
            dict.Add("CPhone", 458565);
            dict.Add("Amount",2800);

            //Update
            Console.WriteLine("Previous Amount: "+ dict["Amount"]);
            dict["Amount"] = 4200;
            Console.WriteLine("Updated Amount"+ dict["Amount"]);

            //Delete
            int cnt = dict.Count;
            Console.WriteLine("Old values: "+ cnt);
            dict.Remove("CPhone");
            cnt = dict.Count;
            Console.WriteLine("New Values: "+ cnt);

            //Search
            var ser = "Rahul";
            if(dict.ContainsValue(ser))
            {
                Console.WriteLine("Searched for value: "+ser);
            }
        }
    }
}
```

C:\Users\Rahul_7k7\Desktop\TaazaaAssignments\Assignment5\dictonary>dotnet run

Previous Amount: 2800

Updated Amount4200

Old values: 4

New Values: 3

Searched for value: Rahul

2. Hashtable:

```
using System;
using System.Collections;
namespace hashtableA
{
    class Program
    {
        static void Main(string[] args)
        {
            Hashtable hashT = new Hashtable();

            hashT.Add(1,"Rahul");
            hashT.Add(2,"Prashant");
            hashT.Add(3,"Gopal");
            hashT.Add(4,"Saurabh");
            hashT.Add(5, 2021);

            Console.WriteLine("Old value of 3: " +hashT[3]);
            hashT[3]="Vaibhav";
            Console.WriteLine("New value of 3: " +hashT[3]);

            int del = hashT.Count;
            Console.WriteLine("Old values: "+ del);
            hashT.Remove(5);
            del = hashT.Count;
            Console.WriteLine("New values: "+ del);

            if(hashT.ContainsValue("Rahul"))
            {
                Console.WriteLine("Contains Rahul");
            }
        }
    }
}
```

C:\Users\Rahul_7k7\Desktop\TaazaaAssignments\Assignment5\hashtableA>dotnet run

Old value of 3: Gopal

New value of 3: Vaibhav

Old values: 5

New values: 4

Contains Rahul

3. Private Constructor

```
using System;

namespace PrivateCon
{
    class Employee
    {
        //private constructor
        private Employee()
        {
            Console.WriteLine("This is a Private Constructor");
        }
        public static int Eid;
        public static string Ename;

        //Default Constructor
        public Employee(int i, string s)
        {
            Eid = i;
            Ename = s;
        }
    }
    class Program
    {
        static void Main()
        {
            // Only Default constructor with parameters will invoke
            var emp = new Employee(5, "Prashant");
            Console.WriteLine(Employee.Eid +"\n"+ Employee.Ename);
        }
    }
}
```

C:\Users\Rahul_7k7\Desktop\TaazaaAssignments\Assignment5\PrivateCon>dotnet run

5

Prashant

4. Collections

```
using System;
using System.Collections;

namespace CollectionP
{
    class Program
    {
        static void Main()
        {
            // Creating a Queue
            Queue objQ = new Queue();

            // Inserting the elements into the Queue
            objQ.Enqueue("Rahul");
            objQ.Enqueue("Prashant");
            objQ.Enqueue("Gopal");
            objQ.Enqueue("Saurabh");
            objQ.Enqueue("Vaibhav");

            // Displaying the count of elements contained in the Queue
            Console.Write("Number of elements in the Queue : " + objQ.Count +"
\n");

            // Displaying the beginning element of Queue
            Console.WriteLine("Beginning Item is: " + objQ.Peek());
        }
    }
}
```

C:\Users\Rahul_7k7\Desktop\TaazaaAssignments\Assignment5\CollectionP>dotnet run

Number of elements in the Queue : 5

Beginning Item is: Rahul