Assignment 1:

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Collections;

namespace dat12\_Assignment

{

internal class Program

{

static void Main(string[] args)

{

Console.Write("Enter the length of stack : ");

int n = int.Parse(Console.ReadLine());

Stack s1 = new Stack(n);

//Store data

Console.WriteLine("Enter " + n + " elements : ");

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

{

s1.Push(Console.ReadLine());

}

//Remove data

Console.WriteLine("How many number want to remove : ");

int a = int.Parse(Console.ReadLine());

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

{

s1.Pop();

}

Console.WriteLine("Reamining Stack : ");

foreach(var b in s1)

{

Console.WriteLine(b);

}

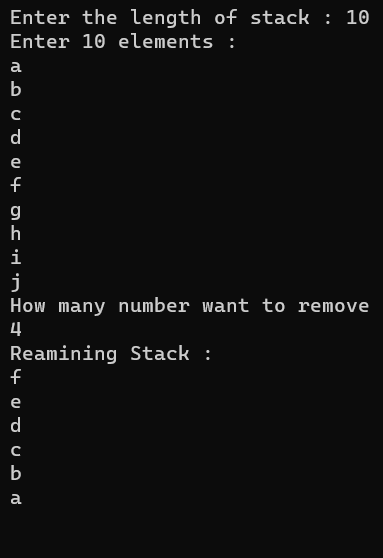
Console.ReadKey();

}

}

}

Output:



Assignment 2:

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Collections;

namespace dat12\_Assignment

{

internal class Program

{

static void Main(string[] args)

{

Console.WriteLine("1.ArrayList\n2.Stack\n3.Sorted\n4.Hash Table");

Console.Write("Enter your choice : ");

int ch = int.Parse(Console.ReadLine());

switch (ch)

{

case 1:

Console.WriteLine("\n\nArray List : ");

Console.Write("Enter number of elements : ");

int n1 = int.Parse(Console.ReadLine());

ArrayList arr = new ArrayList(n1);

Console.Write("Enter elements" + n1 + " : ");

for (int a = 0; a < n1; a++)

{

arr.Add(Console.ReadLine());

}

for (int k1 = 0; k1 < 10; k1++)

{

Console.WriteLine("\n\n1.Count\n2.Sort\n3.Display\n4.Remove(using digit)\n5.Remove(using index)");

Console.Write("Enter your choice : ");

int ch1 = int.Parse(Console.ReadLine());

switch (ch1)

{

case 1:

Console.WriteLine("\nCount : " + arr.Count);

Console.WriteLine("\n");

break;

case 2:

Console.WriteLine("\nSorted Array ; ");

arr.Sort();

foreach (var i in arr)

{

Console.Write(i + "\t");

}

break;

case 3:

Console.WriteLine("\nDisplay Array : ");

foreach (var i in arr)

{

Console.Write(i + "\t");

}

Console.WriteLine("\n");

break;

case 4:

Console.WriteLine("\nRemove value by digit : ");

Console.Write("\nEnter the digit : ");

int temp = int.Parse(Console.ReadLine());

arr.Remove(temp);

foreach (var i in arr)

{

Console.Write(i + "\t");

}

Console.WriteLine("\n");

break;

case 5:

Console.WriteLine("\nRemove value by digit : ");

Console.Write("\nEnter the digit : ");

int temp1 = int.Parse(Console.ReadLine());

arr.RemoveAt(temp1);

foreach (var i in arr)

{

Console.Write(i + "\t");

}

Console.WriteLine("\n");

break;

default:

Console.WriteLine("\nInvalid Input");

Console.WriteLine("\n");

break;

}

}

break;

case 2:

Console.WriteLine("Enter the number of elements : ");

int n2 = int.Parse(Console.ReadLine());

Stack s1 = new Stack(n2);

Console.Write("Push elements " + n2 + " : ");

for (int i2 = 0; i2 < n2; i2++)

{

s1.Push(Console.ReadLine());

}

Console.Write("Given Array is : \t");

foreach (var i in s1)

{

Console.Write(i + "\t");

}

Console.Write("\nEnter number of element to Pop : ");

int p2 = int.Parse(Console.ReadLine());

for (int i2 = 0; i2 < p2; i2++)

{

s1.Pop();

}

Console.Write("\nAfter Pop : \t");

foreach (var i in s1)

{

Console.Write(i + "\t");

}

break;

case 3:

Console.Write("\n\nEnter Number of elements : ");

int n3 = int.Parse(Console.ReadLine());

SortedList<int, string> sort1 = new SortedList<int, string>(n3);

Console.Write("Enter elements (int, string): ");

for (int i3 = 0; i3 < n3; i3++)

{

sort1.Add(int.Parse(Console.ReadLine()), Console.ReadLine());

}

Console.WriteLine("Given Elements : ");

foreach (var i in sort1.Keys)

{

Console.Write(i + " " + sort1[i] + "\n");

}

break;

case 4:

Console.WriteLine("\n\nEnter number of hashtable : ");

int n4 = int.Parse(Console.ReadLine());

Hashtable h1 = new Hashtable(n4);

Console.WriteLine("Enter key and value : ");

for (int i4 = 0; i4 < n4; i4++)

{

h1.Add(Console.ReadLine(), Console.ReadLine());

}

Console.WriteLine("Display Hash Table : ");

foreach (var i in h1.Keys)

{

Console.WriteLine(i + " " + h1[i]);

}

break;

default:

Console.WriteLine("Invalid Option");

break;

}

Console.ReadKey();

}

}

}

Assignment 3:

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Collections;

namespace dat12\_Assignment

{

class admission

{

int p\_m1, p\_m2, p\_m3, p\_m4, p\_m5;

public admission(int coll\_id, string p\_name, string p\_principal, string p\_city, string p\_state, int p\_roll,

string p\_name1, string p\_branch, string p\_sub, int m1, int m2, int m3, int m4, int m5)

{

Console.Write("\n\n\n\nCollege ID : " + coll\_id +

"\nName : " + p\_name +

"\nPrincipal Name : " + p\_principal +

"\nCity : " + p\_city +

"\nState : " + p\_state +

"\nRoll No. : " + p\_roll +

"\nName : " + p\_name1 +

"\nBranch : " + p\_branch +

"\nSubject : " + p\_sub +

"\nMark 1 : " + m1 +

"\nMark 2 : " + m2 +

"\nMark 3 : " + m3 +

"\nMark 4 : " + m4 +

"\nMark 5 : " + m5

);

p\_m1 = m1;

p\_m2 = m2;

p\_m3 = m3;

p\_m4 = m4;

p\_m5 = m5;

}

public void grade()

{

int total = p\_m1 + p\_m2 + p\_m3 + p\_m4 + p\_m5;

if(total > 250)

{

Console.Write("\n\nGrade A ");

}

else if(total > 150 && total < 250)

{

Console.Write("\n\nGrade B ");

}

else if(total > 100 && total < 150)

{

Console.Write("\n\nGrade C ");

}

else

{

Console.Write("\n\nFail");

}

}

}

class Program

{

static void Main(string[] args)

{

Console.Write("Enter College ID : ");

int college\_id = int.Parse(Console.ReadLine());

Console.Write("Enter Name : ");

string name = Console.ReadLine();

Console.Write("Enter Principal Name : ");

string principal = Console.ReadLine();

Console.Write("Enter City : ");

string city = Console.ReadLine();

Console.Write("Enter State : ");

string state = Console.ReadLine();

Console.Write("Enter Roll No. : ");

int roll = int.Parse(Console.ReadLine());

Console.Write("Enter Name : ");

string name1 = Console.ReadLine();

Console.Write("Enter Branch : ");

string branch = Console.ReadLine();

Console.Write("Subject : ");

string sub = Console.ReadLine();

Console.Write("Mark 1 : ");

int mark1 = int.Parse(Console.ReadLine());

Console.Write("Mark 2 : ");

int mark2 = int.Parse(Console.ReadLine());

Console.Write("Mark 3 : ");

int mark3 = int.Parse(Console.ReadLine());

Console.Write("Mark 4 : ");

int mark4 = int.Parse(Console.ReadLine());

Console.Write("Mark 5 : ");

int mark5 = int.Parse(Console.ReadLine());

admission a1 = new admission(college\_id, name, principal, city, state, roll, name1, branch, sub, mark1, mark2, mark3, mark4, mark5);

a1.grade();

Console.ReadKey();

}

}

}

Output:

