**Assignment**

**Print sum and average of elements of an Array**

using System;

class Program

{

static void Main()

{

int[] array = new int[10];

int sum = 0;

for (int i = 0; i < 5; i++)

{

array[i] = Convert.ToInt32(Console.ReadLine());

}

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

{

sum = sum + array[i];

}

Console.WriteLine("Sum of array is "+sum);

double len=array.Length;

double avg = sum / len;

Console.WriteLine("Average of array is " + avg);

}

}

**WAP to display sum of 3 by 3 matrices**

using System;

class SumOfMatrices

{

static void Main()

{

int[,] ar1 = new int[3, 3];

int[,] ar2 = new int[3, 3];

int[,] sum = new int[3, 3];

int i, j;

Console.WriteLine("Enter matrix 1st :");

for(i=0;i<3;i++)

{

for(j=0;j<3; j++)

{

ar1[i,j]= Convert.ToInt16(Console.ReadLine());

}

}

Console.WriteLine("Enter matrix 2nd :");

for (i=0;i<3;i++)

{

for(j=0;j<3; j++)

{

ar2[i,j]= Convert.ToInt16(Console.ReadLine());

}

}

for (i = 0; i < 3; i++)

{

for (j = 0; j < 3; j++)

{

sum[i, j] = ar1[i,j] + ar2[i, j];

}

Console.WriteLine();

}

Console.WriteLine("Sum of matrix is :");

for (i = 0; i < 3; i++)

{

for (j = 0; j < 3; j++)

{

Console.Write(sum[i, j] + " ");

}

Console.WriteLine();

}

}

}

**WAP to find the maximum element of an integer Array**

using System;

namespace FristProject

{

class MaxElement

{

static void Main()

{

int[] ar = new int[10] ;

int max=0;

Console.WriteLine("Enter element is Array :");

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

{

ar[i] = Convert.ToInt32(Console.ReadLine());

}

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

{

int temp=ar[i];

if(temp > max)

{

max = temp;

}

}

Console.WriteLine("Max element is array"+max);

}

}

}

**WAP to print column wise sum of elements of 2 D Array**

using System;

namespace FristProject

{

class ColumnWiseSum

{

public static void Main()

{

int[,] ar = new int[10,10];

int i, j;

Console.WriteLine("Enter the size of array");

int size = Convert.ToInt16(Console.ReadLine());

Console.WriteLine("Enter the element in array");

for( i=0; i<size; i++)

{

for(j=0; j<size; j++)

{

ar[i, j] = Convert.ToInt32(Console.ReadLine());

}

}

Console.WriteLine("Array is :");

for(i=0; i<size; i++)

{

for(j=0; j<size; j++)

{

Console.Write(ar[i, j] + " ");

}

Console.WriteLine();

}

int sum=0;

for (i = 0; i < size; i++)

{

for (j = 0; j < size; j++)

{

sum += ar[i, j];

}

Console.WriteLine("SUM OF COLUMN " +i +" IS =" +sum);

sum = 0;

}

}

}

}

**WAP to print row wise sum of elements of 2 D Array**

using System;

namespace FristProject

{

class RowWiseSum

{

public static void Main()

{

int[,] ar = new int[10, 10];

int i, j,sum=0;

Console.WriteLine("Enter the size of array");

int size = Convert.ToInt16(Console.ReadLine());

Console.WriteLine("Enter the element in array");

for (i = 0; i < size; i++)

{

for (j = 0; j < size; j++)

{

ar[i, j] = Convert.ToInt32(Console.ReadLine());

}

}

Console.WriteLine("Array is :");

for (i = 0; i < size; i++)

{

for (j = 0; j < size; j++)

{

Console.Write(ar[i, j] + " ");

}

Console.WriteLine();

}

for (i = 0; i < size; i++)

{

for (j = 0; j < size; j++)

{

sum += ar[i,j];

}

Console.WriteLine("Sum of the row " +i + " = " + sum);

sum = 0;

}

}

}

}

**Write a program to insert elements in an integer array. ELements should be in order**

using System;

namespace FristProject

{

class InsertionInArray

{

static public void Main()

{

int[] array = new int[50];

int i;

Console.WriteLine("enter the size of array :");

int size = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter element in array");

for(i=0;i<size;i++ )

{

array[i] = Convert.ToInt32(Console.ReadLine());

}

for ( i = 0; i < size; i++)

{

Console.WriteLine(" Pos {" + i + "} " + array[i]);

}

Console.WriteLine("Enter the position in which you want enter element");

int pos = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter element");

int item = Convert.ToInt32(Console.ReadLine());

//size++;

for ( i=size; i>=pos; i--)

{

array[i] = array[i - 1];

}

array[pos ] = item;

for ( i = 0; i < size; i++)

{

Console.WriteLine(" Pos {" + i + "} " + array[i]);

}

}

}

}

**Write a program to delete elements from an integer array.**

using System;

using System.Collections;

namespace FristProject

{

class DeletionInArray

{

public static void Main()

{

ArrayList list =new ArrayList();

list.Add(10);

list.Add(31);

list.Add(14);

list.Add(32);

list.Add(25);

list.Add(33);

list.Add(76);

list.Add(87);

list.Add(5);

list.Add(98);

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

{

Console.Write(list[i] + " ");

}

Console.WriteLine();

Console.WriteLine("Enter the number you want to delete -");

int x = Convert.ToInt16(Console.ReadLine());

list.Remove(x);

Console.WriteLine("Array after deletion :");

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

{

Console.Write(list[i] + ", ");

}

}

}

}

**Write a program in C# Sharp to count a total number of duplicate elements in an array**

using System;

namespace FristProject

{

class DuplicateInArray

{

public static void Main()

{

int[] array = new int[50];

int i,j,count=0;

Console.WriteLine("enter the size of array :");

int size = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter element in array");

for (i = 0; i < size; i++)

{

array[i] = Convert.ToInt32(Console.ReadLine());

}

for( i=0; i<size; i++)

{

for ( j =i+1; j<size; j++)

{

if(array[i] == array[j])

{

Console.WriteLine("Duplicate elements in array are : "+array[j]);

count++;

}

}

}

if(count==0) Console.WriteLine(" No duplicate element");

}

}

}

**WAP to find the eligibility of admission for a professional course based on the following criteria:**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace FristProject

{

class EligibilityForAdmission

{

public static void Main()

{

Console.WriteLine("enter marks in Physics : ");

int m = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("enter marks in Chemistry : ");

int p = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("enter marks in Mathamatics :");

int c = Convert.ToInt32(Console.ReadLine());

int total = m + p + c;

Console.WriteLine("Total in all three subject : " + total);

int total1 = m + p;

Console.WriteLine("Total in Mathamatics and Physics : " + total1);

if (total >= 180 || total1 >= 140)

{

Console.WriteLine("The candidate is eligible for admission :)");

}

else Console.WriteLine("The candidate is not eligible for admission :( ");

}

}

}

**Assignment No : 8**

**Create a class named 'Member' having the following members:**

**Data members**

**1 - Name**

**2 - Age**

**3 - Phone number**

**4 - Address**

**5 - Salary**

**It also has a method named 'printSalary' which prints the salary of the members.**

**Two classes 'Employee' and 'Manager' inherits the 'Member' class. The 'Employee'**

**and 'Manager' classes have data members 'specialization' and 'department'**

**respectively. Now, assign name, age, phone number, address and salary to**

**an employee and a manager by making an object of both of these classes and**

**print the same.**

using System;

namespace FristProject

{

class Member

{

public string name, address, phone;

int age,salary;

public void salaryDetails()

{

Console.WriteLine("Salary : " + salary);

}

public void getDetails()

{

Console.WriteLine("enter name");

name = Console.ReadLine();

Console.WriteLine("enter age");

age = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("enter phone number");

phone = Console.ReadLine();

Console.WriteLine("enter address");

address = Console.ReadLine();

Console.WriteLine("enter salary");

salary = Convert.ToInt32(Console.ReadLine());

}

public void displayDetails()

{

Console.WriteLine("name: " + name);

Console.WriteLine("age: " + age);

Console.WriteLine("ph. number: " + phone);

Console.WriteLine("address: " + address);

}

}

class Employee : Member

{

string specialization;

string department;

public void getEmployee()

{

base.getDetails();

Console.WriteLine("Enter specialization :");

specialization = Console.ReadLine();

Console.WriteLine("Enter department :");

specialization = Console.ReadLine();

}

public void displayEmployee()

{

base.displayDetails();

Console.WriteLine("Specialization : " +specialization);

Console.WriteLine("Department : " +department);

}

}

class Manager : Member

{

string specialization;

string department;

public void getManager()

{

base.getDetails();

Console.WriteLine("Enter specialization :");

specialization = Console.ReadLine();

Console.WriteLine("Enter department :");

specialization = Console.ReadLine();

}

public void displayManager()

{

base.displayDetails();

Console.WriteLine("Specialization : " + specialization);

Console.WriteLine("Department : " + department);

}

}

class Program

{

static public void Main()

{

Employee ob1 = new Employee();

Console.WriteLine("Enter Info of Employee :");

ob1.getEmployee();

Manager ob2 = new Manager();

Console.WriteLine(" \n Enter Info of Manager :");

ob2.getManager();

Console.WriteLine("\*\*\*\*\* EMPLOYEE INFOMATION : \*\*\*\*\*");

ob1.displayEmployee();

ob1.salaryDetails();

Console.WriteLine("\*\*\*\*\* MANAGER INFOMATION :\*\*\*\*\*");

ob2.displayManager();

ob1.salaryDetails();

}

}

}