2nd feb

//Assignment-1 Employee, Manager Details

using System;

namespace \_2ndAssesment1

{

class Member

{

string name;

int age;

string address;

int salary;

string phone\_no;

public virtual void GetDetails()

{

Console.WriteLine("Enter name:");

name = Console.ReadLine();

Console.WriteLine("Enter age:");

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

Console.WriteLine("Enter address:");

address = Console.ReadLine();

Console.WriteLine("Enter salary:");

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

Console.WriteLine("Enter phone number:");

phone\_no = Console.ReadLine();

if (phone\_no ==@"^(\+[0-9])$")

{ }

}

public virtual void DisplayDetails()

{

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

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

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

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

Console.WriteLine("phone number is is:" + phone\_no);

}

public void printSalary()

{

Console.WriteLine("salary is" + salary);

}

}

class Manager:Member

{

string specialization;

string department;

public override void GetDetails()

{

base.GetDetails();

Console.WriteLine("Manager details:");

Console.WriteLine("Enter specialization of member");

specialization = Console.ReadLine();

Console.WriteLine("Enter department of member");

department = Console.ReadLine();

}

public override void DisplayDetails()

{

Console.WriteLine("Manager details is");

base.DisplayDetails();

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

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

}

}

class Employee:Member

{

string specialization;

string department;

public override void GetDetails()

{

base.GetDetails();

Console.WriteLine("employee details:");

Console.WriteLine("Enter specialization of member");

specialization = Console.ReadLine();

Console.WriteLine("Enter department of member");

department = Console.ReadLine();

}

public override void DisplayDetails()

{

Console.WriteLine("Employee details is");

base.DisplayDetails();

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

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

}

}

class Program

{

static void Main(string[] args)

{

Member m = new Member();

Manager ma = new Manager();

m = ma;

m.GetDetails();

m.DisplayDetails();

m.printSalary();

Employee e = new Employee();

m = e;

m.GetDetails();

m.DisplayDetails();

m.printSalary();

}

}

}

//Assignment-2 Student avg marks using parameterised constructor and abstract

using System;

namespace AbstractStudentMarks

{

public abstract class Marks

{

public double res;

public abstract void getPercentage();

}

class A : Marks

{

private float sub1, sub2, sub3;

public A(float s1, float s2, float s3)

{

sub1 = s1;

sub2 = s2;

sub3 = s3;

}

public override void getPercentage()

{

res = (sub1 + sub2 + sub3) / 300.0 \* 100;

Console.WriteLine("Student A avg marks is:"+res);

}

}

class B : Marks

{

private float sub1, sub2, sub3, sub4;

public B(float s1, float s2, float s3, float s4)

{

sub1 = s1;

sub2 = s2;

sub3 = s3;

sub4 = s4;

}

public override void getPercentage()

{

res = (sub1 + sub2 + sub3 + sub4) / 400.0 \* 100;

Console.WriteLine("Student B avg marks is:"+res);

}

}

class Program

{

public static void Main(String[] args)

{

A a = new A(56, 88, 97);

B b = new B(93, 24, 78, 44);

a.getPercentage();

b.getPercentage();

}

}

}

//Assignment-3 abstract print

using System;

namespace AbstractPrint

{

abstract class B

{

public abstract void a\_method();

public abstract void Display();

}

class D : B

{

public override void a\_method()

{

Console.WriteLine("This is abstract method");

}

public void non\_method()

{

Console.WriteLine("This is non abstract method");

}

public override void Display()

{

Console.WriteLine("This is constructor of abstract class");

}

}

class Program

{

static void Main(string[] args)

{

D d=new D();

d.a\_method();

d.non\_method();

d.Display();

}

}

}

//Assignment-4 animal using abstract

using System;

namespace Animal

{

abstract class Animal

{

public abstract void animalSound();

}

class Cat : Animal

{

public override void animalSound()

{

Console.WriteLine("The cat says: meow meow");

}

}

class Dog : Animal

{

public override void animalSound()

{

Console.WriteLine("The dog says: bark bark");

}

}

class Program

{

static void Main(string[] args)

{

Cat myCat = new Cat();

myCat.animalSound();

Dog myDog = new Dog();

myDog.animalSound();

}

}

}

1st feb Assesment

1.Assesment removing spaces

using System;

namespace Array

{

class Program

{

static void Main(string[] args)

{

string text;

Console.WriteLine("Enter the text with wide spaces");

text = Console.ReadLine();

while(text.IndexOf(" ") !=-1)

{

text = text.Replace(" ", " ");

}

Console.WriteLine(text);

}

}

}

//Assignment-2 insert elements in array

using System;

namespace InsertArray

{

class Program

{

static void Main(string[] args)

{

int i = 0, pos = 0, item = 0, n;

int[] arr = new int[30];

Console.WriteLine("Enter the size: ");

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

Console.WriteLine("Enter the elements");

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

{

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

}

Console.WriteLine("Enter the position to insert:");

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

Console.WriteLine("Enter the new item:");

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

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

{

arr[i] = arr[i - 1];

}

arr[pos - 1] = item;

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

for (i = 0; i < n + 1; i++)

{

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

}

Console.WriteLine();

}

}

}

//Assesment -3 delete an element

using System.Collections.Generic;

class Program

{

static void Main(string[] args)

{

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

li.Add(30);

li.Add(40);

li.Add(23);

li.Add(99);

foreach (var x in li)

Console.WriteLine(x);

li.Remove(23);

Console.WriteLine("After deletion");

foreach (var x in li)

Console.WriteLine(x);

}

}

//Assesment-4 sum and average of elements

using System;

namespace SumandAvg

{

class Program

{

static void Main(string[] args)

{

double sum = 0;

double avg2=0;

int n;

Console.WriteLine("Enter value");

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

int[] arr = new int[10];

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

{

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

}

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

{

sum += arr[i];

avg2 = sum / n;

}

Console.WriteLine("sum is"+sum);

Console.WriteLine("avg is" +avg2);

}

}

}

//Assesment-5 Addition of 3 by 3 matrix

using System;

namespace Matrix

{

public class Program

{

public static void Main()

{

int i, j, n;

int[,] arr1 = new int[50, 50];

int[,] brr1 = new int[50, 50];

int[,] crr1 = new int[50, 50];

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

Console.Write("Input elements in the first matrix :\n");

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

{

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

{

Console.Write("element - [{0},{1}] : ", i, j);

arr1[i, j] = Convert.ToInt32(Console.ReadLine());

}

}

Console.Write("Input elements in the second matrix :\n");

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

{

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

{

Console.Write("element - [{0},{1}] : ", i, j);

brr1[i, j] = Convert.ToInt32(Console.ReadLine());

}

}

Console.Write("\nThe First matrix is :\n");

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

{

Console.Write("\n");

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

Console.Write("{0}\t", arr1[i, j]);

}

Console.Write("\nThe Second matrix is :\n");

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

{

Console.Write("\n");

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

Console.Write("{0}\t", brr1[i, j]);

}

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

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

crr1[i, j] = arr1[i, j] + brr1[i, j];

Console.Write("\nThe Addition of two matrix is : \n");

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

{

Console.Write("\n");

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

Console.Write("{0}\t", crr1[i, j]);

}

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

}

}

}

//Assesment-6 Maximum value in array

using System;

namespace MaximumElement

{

class Program

{

static void Main(string[] args)

{

int[] arr = new int[100];

int temp = arr[0];

Console.WriteLine("enter array size");

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

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

{

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

}

for (int i = 1; i <=n; i++)

{

if (arr[i] > temp)

{

temp = arr[i];

}

}

Console.WriteLine("Max value is"+temp);

}

}

}

//Assesment-7 Print column wise sum od 2D

using System;

class Program

{

static void Main(string[] args)

{

int sum;

Console.WriteLine("Enter size");

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

Console.WriteLine("Enter size");

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

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

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

{

for (int j = 0; j < m; j++)

{

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

}

}

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

{

sum = 0;

for (int j = 0; j < m; j++)

{

sum += arr[i, j];

}

Console.WriteLine(sum);

}

}

}

//Assesment-8 row wise sum in 2D

using System;

class Program

{

static void Main(string[] args)

{

int sum;

Console.WriteLine("Enter size");

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

Console.WriteLine("Enter size");

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

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

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

{

for (int j = 0; j < m; j++)

{

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

}

}

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

{

sum = 0;

for (int j = 0; j < m; j++)

{

sum += arr[j, i];

}

Console.WriteLine(sum);

}

}

}

//Assesment-9 Print the Duplicate values

using System;

namespace DuplicateArrayValue

{

class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter array size");

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

int[] arr = new int[10];

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

{

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

}

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

{

for (int j = i+1; j < n; j++)

{

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

{

Console.WriteLine(arr[j]);

}

}

}

}

}

}

//Assesment-10 marks eligibility critiria

using System;

namespace Eligibility

{

class Program

{

static void Main(string[] args)

{

Console.WriteLine("enter marks in maths");

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

Console.WriteLine("enter marks in maths");

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

Console.WriteLine("enter marks in maths");

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 Math and Phy" + total1);

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

{

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

}

}

}

}

Assesment-11 Electricity bill generation

using System;

namespace ElectricityBill

{

class Program

{

static void Main(string[] args)

{

int custid, conunit;

double charge, surcha = 0, amt, netchr;

string name;

Console.WriteLine("Customer IDNO:");

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

Console.WriteLine("Customer Name:");

name = Console.ReadLine();

Console.WriteLine("Unit Consumed :");

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

if (conunit < 200)

charge = 1.20;

else if (conunit >= 200 && conunit < 400)

charge = 1.50;

else if (conunit >= 400 && conunit < 600)

charge = 1.80;

else

charge = 2.00;

amt = conunit \* charge;

if (amt > 300)

{

surcha = amt \* 15 / 100.0;

}

netchr = amt + surcha;

if (netchr < 100)

{

netchr = 100;

}

Console.WriteLine("Electriccity Bill");

Console.WriteLine("Customer IDNO: {0}\n", custid);

Console.WriteLine("Customer Name: {0}\n", name);

Console.WriteLine("Unit Consumed: {0}\n", conunit);

Console.WriteLine("Amount Charges @Rs. {0} per unit: {1}\n", amt);

Console.WriteLine("Surchage Amount : {0}\n", surcha);

Console.WriteLine("Net Amount Paid By the Customer : {0}\n", netchr);

}

}

}

//Assesment -12 Employee with following Attributes

using System;

namespace \_1stEmpcls

{

public class Employee

{

public int Empid;

public string Name;

public string dept;

public string Manager;

public int BasicSalary;

public string CompanyName;

public string CompanyAddress;

public double DA;

public double HRA;

public int PF;

public double gs;

public double ns;

public void GetDetails()

{

Console.WriteLine("enter basic salary");

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

Console.WriteLine("enter exp value");

int Exp = Convert.ToByte(Console.ReadLine());

if (Exp > 10)

{

DA = 10 / 100 \* BasicSalary;

HRA = 8.5 / 100 \* BasicSalary;

PF = 6200;

ns = gs - PF;

}

if (Exp > 7 && Exp < 10)

{

DA = 7 / 100 \* BasicSalary;

HRA = 6.5 / 100 \* BasicSalary;

PF = 4100;

gs = BasicSalary - DA - HRA;

ns = gs - PF;

}

if (Exp > 5 && Exp < 7)

{

DA = 4.1 / 100 \* BasicSalary;

HRA = 3.8 / 100 \* BasicSalary;

PF = 1800;

gs = BasicSalary - DA - HRA;

ns = gs - PF;

}

if (Exp < 10)

{

DA = 1.9 / 100 \* BasicSalary;

HRA = 2.0 / 100 \* BasicSalary;

PF = 1200;

gs = BasicSalary - DA - HRA;

ns = gs - PF;

}

}

public void Display()

{

Console.WriteLine("da is"+DA);

Console.WriteLine("Hra is"+HRA);

Console.WriteLine("pf is"+PF);

Console.WriteLine("grass salary is"+gs);

Console.WriteLine("net salary is"+ns);

}

public void method1(string Name,string dept,string Manager)

{

Console.WriteLine("Name is" + Name);

Console.WriteLine("dept is" + dept);

Console.WriteLine("manager is" + Manager);

}

public void method2(string Name, string dept, int Empid)

{

Console.WriteLine("Name is" + Name);

Console.WriteLine("dept is" + dept);

Console.WriteLine("manager is" + Empid);

}

public void method3(string Name, string dept, int Empid , string Manager , string CompanyName , string CompanyAddress)

{

Console.WriteLine("Name is" + Name);

Console.WriteLine("dept is" + dept);

Console.WriteLine("manager is" + Empid);

Console.WriteLine("manager is" + Manager);

Console.WriteLine("manager is" + CompanyName);

Console.WriteLine("manager is" + CompanyAddress);

}

}

class Program

{

static void Main(string[] args)

{

Employee e = new Employee();

e.GetDetails();

e.Display();

e.method1("pushpa", "CSE", "Harish");

e.method2("pushpa", "CSE", 896814);

e.method3("pushpa", "CSE", 896814,"Deep","CTS","Bangloor");

}

}

}

In Class home work

using System;

public class Square

{

public int area;

public int side;

public virtual void Getdetails()

{

Console.WriteLine("Enter the side");

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

}

public virtual void Area()

{

area = side \* side;

}

public virtual void DisplayDetails()

{

Console.WriteLine("Area of the Square is:"+ area);

}

public class Triangle : Square

{

public double bas;

public int height;

public double result;

public override void Getdetails()

{

Console.WriteLine("Enter the base");

bas = Convert.ToDouble(Console.ReadLine());

Console.WriteLine("Enter the height");

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

}

public override void Area()

{

result = bas \* height \* 0.5;

}

public override void DisplayDetails()

{

Console.WriteLine("Area of the Triangle is:" + result);

}

}

public class Rightangle : Square

{

public double widt;

public int length;

public double result;

public override void Getdetails()

{

Console.WriteLine("Enter the width");

widt = Convert.ToDouble(Console.ReadLine());

Console.WriteLine("Enter the length");

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

}

public override void Area()

{

result = widt \* length ;

}

public override void DisplayDetails()

{

Console.WriteLine("Area of the Rectangle is:" + result);

}

}

public class Program

{

static void Main(string[] args)

{

Square s = new Square();

s.Getdetails();

s.Area();

s.DisplayDetails();

Triangle p = new Triangle();

s = p;

s.Getdetails();

s.Area();

s.DisplayDetails();

Rightangle r = new Rightangle();

s = r;

s.Getdetails();

s.Area();

s.DisplayDetails();

}

}

}