-----------------------------Enumeration----------------------------------------

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Day\_23

{

class EnumerationClass

{

public enum Days { Mon,Tue,Wed,Thu=80,Fri,Sat,Sun};

public static void Main(string[] args)

{

int x = (int)Days.Thu;

Console.WriteLine("Thursday enumerated value = "+ x);

x = (int)Days.Fri;

Console.WriteLine("Friday enumerated value = "+ x);

//print days

foreach (string Day in Enum.GetNames(typeof(Days)))

{

Console.WriteLine(Day);

}

foreach(int i in Enum.GetValues(typeof(Days)))

{

Console.WriteLine(i);

}

foreach(var ob in Enum.GetValues(typeof(Days)))

{

Console.WriteLine(" {0} {1} ",(int)ob , (Days)(ob));

}

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Day\_23

{

class StudentInfo

{

public int id,age;

public string name;

public void getdata()

{

Console.WriteLine("ENTER ID = ");

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

Console.WriteLine("ENTER NAME = ");

name = Console.ReadLine();

Console.WriteLine("ENTER AGE = ");

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

}

public void display()

{

Console.WriteLine("ID +"+id);

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

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

}

}

class AggregateExample

{

public StudentInfo ob;

public float total, avg;

public int[] marks;

public string grade;

public AggregateExample()

{

ob = new StudentInfo();

ob.getdata();

Console.WriteLine("Enter no of subjects");

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

marks = new int[n];

total = 0;

Console.WriteLine("Enter the marks of each subject");

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

{

Console.WriteLine("Enter SUB {0} Marks",i+1);

marks[i] = int.Parse(Console.ReadLine());

total += marks[i];

}

}

public void calculate()

{

avg = total / marks.Length;

grade = (avg>70) ? "DISTINCTION" : (avg>50) ? "FIRST" : (avg>35) ? "PASS" : (avg >0 && avg <= 35)? "FAIL" : "INAVALID";

}

public void display()

{

ob.display();

Console.WriteLine("MARKS\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_");

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

{

Console.WriteLine("MARKS{0} ={1}",i+1,marks[i]);

Console.WriteLine("TOTAL = "+ total);

Console.WriteLine("AVERAGE ="+ avg);

Console.WriteLine("GRADE ="+ grade);

}

}

}

}



----------------------------------------single level Inheritance-------------------------

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Day\_23

{

class Bank

{

public int Accno;

public string IFSC, bankName, branchName, accountType;

public Bank()

{

Console.WriteLine("ENTER ACCOUNT NUMBER");

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

Console.WriteLine("ENTER IFSC CODE");

IFSC = Console.ReadLine();

Console.WriteLine("ENTER BANK NAME");

bankName = Console.ReadLine();

Console.WriteLine("ENTER BRANCH NAME");

branchName = Console.ReadLine();

Console.WriteLine("ENTER ACCOUNT TYPE");

accountType = Console.ReadLine();

}

}

class Customer : Bank

{

string custName, custAddress, adharNumber;

long phone;

public Customer()

{

Console.WriteLine("ENTER CUSTOMER NAME");

custName = Console.ReadLine();

Console.WriteLine("ENTER CUSTOMER ADDRESS");

custAddress = Console.ReadLine();

Console.WriteLine("ENTER CUSTOMER ADHAAR NUMBER");

adharNumber=Console.ReadLine();

Console.WriteLine("ENTER CUSTOMER PHONE");

phone = Convert.ToInt64(Console.ReadLine());

}

}

class Bank\_Single

{

static void Main(string[] args)

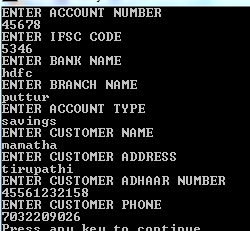
{

Customer ob = new Customer();

}

}

}



---------------------------------------------------------Multilevel inheritance--------------------------------------------------------

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Day\_23

{

class Student

{

public string Name;

public int rollno;

public int classnumber;

public Char section;

public void getdetails()

{

Console.WriteLine("ENTER THE NAME");

Name = Console.ReadLine();

Console.WriteLine("ENTER THE ROLL NUMBER");

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

Console.WriteLine("ENTER THE CLASS NUMBER");

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

Console.WriteLine("ENTER THE SECTION");

section = Console.ReadLine()[0];

}

public void display()

{

Console.WriteLine("NAME = " + Name);

Console.WriteLine("ROLLNUMBER = " + rollno);

Console.WriteLine("CLASSNUMBER = " + classnumber);

Console.WriteLine("SECTION = " + section);

}

}

class Course : Student

{

public string CName;

public float duration;

public float fees;

public string code;

public void getdetails()

{

base.getdetails();

Console.WriteLine("ENTER THE CNAME");

CName = Console.ReadLine();

Console.WriteLine("ENTER THE DURATION");

duration = float.Parse(Console.ReadLine());

Console.WriteLine("ENTER THE FEES");

fees = float.Parse(Console.ReadLine());

Console.WriteLine("ENTER THE code");

code = Console.ReadLine();

}

public void display()

{

Console.WriteLine("CNAME = " + CName);

Console.WriteLine("DURATION = " + duration);

Console.WriteLine("FEES = " + fees);

Console.WriteLine("CODE = " + code);

}

}

class Report : Course

{

public int rank;

public int[] marks;

public void getdetails()

{

base.getdetails();

Console.WriteLine("Enter no of subjects");

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

int total = 0;

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

{

marks[i] = int.Parse(Console.ReadLine());

total += marks[i];

}

float avg = (float)total / n;

rank = (avg > 70) ? 1 : (avg > 50) ? 2 : (avg >= 35) ? 3 : 4;

}

public void display()

{

base.display();

Console.WriteLine("MARKS ");

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

Console.WriteLine("MARKS{0} = {1}", i + 1, marks[i]);

Console.WriteLine("THE RANK =" + rank);

}

}

class MultiLevel

{

static void Main(string[] args)

{

Report ob = new Report();

ob.getdetails();

ob.display();

}

}

}

---------------------------Multilevel using constructor-----------------

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Day\_23

{

class A

{

public A()

{

Console.WriteLine("IN A CLASS");

}

}

class B:A

{

public B()

{

Console.WriteLine("IN B CLASS");

}

}

class C : B

{

public C()

{

Console.WriteLine("IN C CLASS");

}

}

class Multi\_level2

{

static void Main(string[] args)

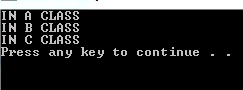
{

C ob = new C();

}

}

}



---------------------------------------------------method overloading---------------------------------------------------

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Day\_23

{

class Subtract

{

public int sub(int a,int b)

{

return (a - b);

}

public double sub(double a, double b)

{

Console.WriteLine("DOUBLE BOTH");

double c = a - b;

return c;

}

public double sub(int x, double y)

{

Console.WriteLine("INT DOUBLE");

double c = x - y;

return c;

}

}

class Overloading2

{

public static void Main(string[] args)

{

Subtract ob = new Subtract();

int res = ob.sub(22, 3);

Console.WriteLine("SUB = " +res);

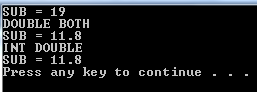
Console.WriteLine("SUB = "+ ob.sub(5.8,6));

Console.WriteLine("SUB = "+ ob.sub(5,6.8));

}

}

}



-----------------------------------------------------------------------------------------

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Day\_23

{

class Calc

{

public void add(int a,int b)

{

Console.WriteLine("SUM of {0} & {1} = {2} ",a,b,a+b);

}

public void add(int a, int b,int c)

{

Console.WriteLine("SUM of {0} & {1},{2} = {3} ", a, b,c, a + b + c);

}

public void add(float a,float b, float c)

{

Console.WriteLine("SUM of {0} & {1} , {2} = {3} ", a, b, c, a + b + c);

}

}

class Overloading1

{

static void Main(string[] args)

{

Calc ob = new Calc();

ob.add(22, 33);

ob.add(22, 3, 4);

ob.add(2.3f, 5, 6.8f);

}

}

}