

## OOPS CONCEPT

SUB TOPIC - [class& object ]

### Question : 1

Create a class with name Date of Birth(DOB) that accepts & stores the Date of Birth of a Person ,Calculate age of the person as on current date ,print the age of the person in years ,months,days

**Class name** -DOB

**Variable -**

BDate : int

BMonth : int

BYear : int

AgeDays : int

AgeMonths : int

AgeYears: int

**Method & return type**

GetDOB() : Void

CalculateAge(): Void

DisplayAge(): Void

**INPUT :**

```
D:\asp.net\asp.net core\ConsoleApp5\bin\Debug\ConsoleApp5.  
Enter Birth Day of a person = 20  
Enter Birth Month of a person = 11  
Enter Birth Year of a person = 1997
```

## OUTPUT :

```
D:\asp.net\asp.net core\ConsoleApp5\bin\Debug\ConsoleApp5.  
Enter Birth Day of a person = 20  
Enter Birth Month of a person = 11  
Enter Birth Year of a person = 1997  
  
Age of the person is = 26 Years 3 Months 6 Days
```

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## QUESTION : 2

Create a class to store details of a book & print the details to the user?

Here

Class name - BOOK

Variable -

ISBN : string  
BName: string  
AName : string  
PNmae : string  
MRP: double

#### Method -

GetData(): non-return type void  
Displaydata(): non-return type void

#### Input :

```
-----Get Data-----  
  
Enter ISBN = 4444  
Enter Book Name = Who is Shiva  
Enter Book Author Name = Sumit Nigam  
Enter Book Publisher Name = mr raaz nigam  
Enter MRP of the book = 999  
-----  
  
Enter ISBN = 6767  
Enter Book Name = Kaliyug  
Enter Book Author Name = mr raaz nigam  
Enter Book Publisher Name = anshu  
Enter MRP of the book = 1000
```

#### Output :

```
-----Get Data-----  
  
Enter ISBN = 4444  
Enter Book Name = Who is Shiva  
Enter Book Author Name = Sumit Nigam  
Enter Book Publisher Name = mr raaz nigam  
Enter MRP of the book = 999  
-----  
  
Enter ISBN = 6767  
Enter Book Name = Kaliyug  
Enter Book Author Name = mr raaz nigam  
Enter Book Publisher Name = anshu  
Enter MRP of the book = 1000  
-----  
  
-----Display Data-----  
  
ISBN of the book is = 4444  
Book name is = Who is Shiva  
Book Author Name is = Sumit Nigam  
Book Publisher Name is = mr raaz nigam  
MRP of the book is = 999  
-----  
  
ISBN of the book is = 6767  
Book name is = Kaliyug  
Book Author Name is = mr raaz nigam  
Book Publisher Name is = anshu  
MRP of the book is = 1000
```

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Question : 3

Create a class diagram and write C# code to store the following details of the student, roll number, name, marks in 4 subjects, total marks and result. Create methods to accept roll number, name and marks, calculate total marks, result and print the data. Create student demo class and create 3 objects of student class and display the output in the following format

Roll_Num	Name	M1	M2	M3	M4	Total	Result
101	Sumit	85	90	65	80	320	Pass
102	mudit	70	80	65	80	255	pass
103	abhay	60	65	70	90	365	Pass

Here we take

**Class** - As name is Student

Variable	DataType
----------	----------

Roll_Num	int
Name	string
M1	int
M2	int
M3	int
M4	int
Total_Marks	int
Result	string

Method :

- (1) GetData() : void type
- (2) CalculateResult(): Void type
- (3) DisplayData(): Void type

## Input

D:\asp.net\asp.net core\ConsoleApp6\bin\Debug\C

```
-----Get Data-----  
  
Enter the Roll Number of the Student=  
101  
Enter the Name Of the Student=  
Sumit  
Enter the M-1 Marks of the Student=  
85  
Enter the M-2 Marks of the Student=  
90  
Enter the M-3 Marks of the Student=  
65  
Enter the M-4 Marks of the Student=  
80  
-----  
  
Enter the Roll Number of the Student=  
101  
Enter the Name Of the Student=  
mudit  
Enter the M-1 Marks of the Student=  
70  
Enter the M-2 Marks of the Student=  
80  
Enter the M-3 Marks of the Student=  
65  
Enter the M-4 Marks of the Student=  
80  
-----  
  
Enter the Roll Number of the Student=  
103  
Enter the Name Of the Student=  
abhay  
Enter the M-1 Marks of the Student=  
60  
Enter the M-2 Marks of the Student=  
65  
Enter the M-3 Marks of the Student=  
70  
Enter the M-4 Marks of the Student=  
90
```

**Output :**

D:\asp.net\asp.net core\ConsoleApp6\bin\Debug\ConsoleApp6.exe

-----Get Data-----

Enter the Roll Number of the Student=

101

Enter the Name Of the Student=

Sumit

Enter the M-1 Marks of the Student=

85

Enter the M-2 Marks of the Student=

90

Enter the M-3 Marks of the Student=

65

Enter the M-4 Marks of the Student=

80

-----

Enter the Roll Number of the Student=

101

Enter the Name Of the Student=

mudit

Enter the M-1 Marks of the Student=

70

Enter the M-2 Marks of the Student=

80

Enter the M-3 Marks of the Student=

65

Enter the M-4 Marks of the Student=

80

-----

Enter the Roll Number of the Student=

103

Enter the Name Of the Student=

abhay

Enter the M-1 Marks of the Student=

60

Enter the M-2 Marks of the Student=

65

Enter the M-3 Marks of the Student=

70

Enter the M-4 Marks of the Student=

90

-----Display Data-----

Roll_Number	Name	M1	M2	M3	M4	Total_Marks	Result
101	Sumit	85	90	65	80	320	Pass
101	mudit	70	80	65	80	295	Pass
103	abhay	60	65	70	90	285	Pass