

# OOPLAB5

## Part1:

- Design a Class to represent the Question Object, Question is constructed from a Body, Marks, and Header and .....
- We want the application to accept different Question Types, True or False, Choose One and Choose All each has a different way off representation.
- We need to define a Base Question class and every type as an inherited one.
- Write down all the necessary Properties (Instead of setters and getters)
- Define all the Necessary Constructors for the class
- We want to provide the class's with the standard capabilities to represent data in a string
- Create array of question that accept only question type :True or False, Choose One and Choose All .

## Part2:

- Write a program with a Math class that has four methods: Add, Subtract, Multiply, and Divide, each of which takes two parameters. Call each method from Main ( ).
- Modify the program so that you do not have to create an instance of Math to call the four methods

## Part3:

- Define Class **Duration** To include Three Attributes (**Hours, Minutes, Seconds**)

Support All Required Constructors to Produce this output :

```
Duration D1 =new Duration (1,10,15);
```

```
D.getstring();
```

Output: Hours: 1, Minutes :10 , Seconds :15

```
Duration D1 =new Duration (3600);
```

```
D.getstring();
```

Output: Hours: 1, Minutes :0 , Seconds :0

```
Duration D2 =new Duration (7800);
```

```
D.getstring();
```

Output: Hours: 2, Minutes :10 , Seconds :0

```
Duration D3 =new Duration (666);
```

```
D.getstring();
```

Output: Minutes :11 , Seconds :6

**Implement All required Operators overloading's to enable this Code**

```
D3=D1+D2
```

```
D3=D1 + 7800
```

```
D3=666+D3
```

```
D3=D1++ (Increase One Minute)
```

```
D3 =--D2; (Decrease One Minute)
```

```
D1= -D2;
```

```
If ( D1>D2);
```

If ( D1<=D2);

If (D1);

DateTime Obj = (DateTime) D1