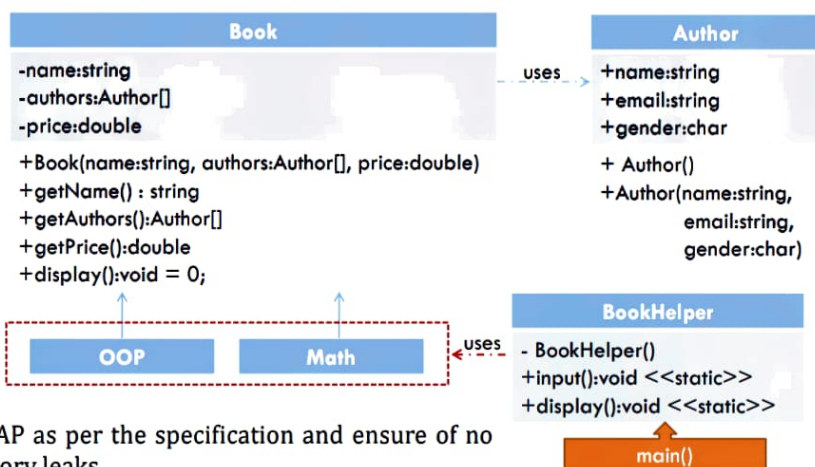# Lab Assignment - 9

1. WAP exhibiting object slicing for Vehicle
2. WAP exhibiting object slicing for Animal
3. WAP exhibiting virtual destructor
4. WAP exhibiting memory leak and its remedial
5. WAP for type conversion covering -
   - ❑ Conversion from basic to class type – Define a constructor with no arguments, with one int argument and with one float argument (total 3 constructors). Depending on the data type & arguments, respective constructor will be invoked.
   - ❑ Conversion from class type to basic data type – Modify the above program to exhibit conversion from class type to basic data type.
6. WAP to convert temperature specified in Celsius in one class into Fahrenheit in another class.
7. WAP to convert currency specified in Rupees in one class into Dollar in another class

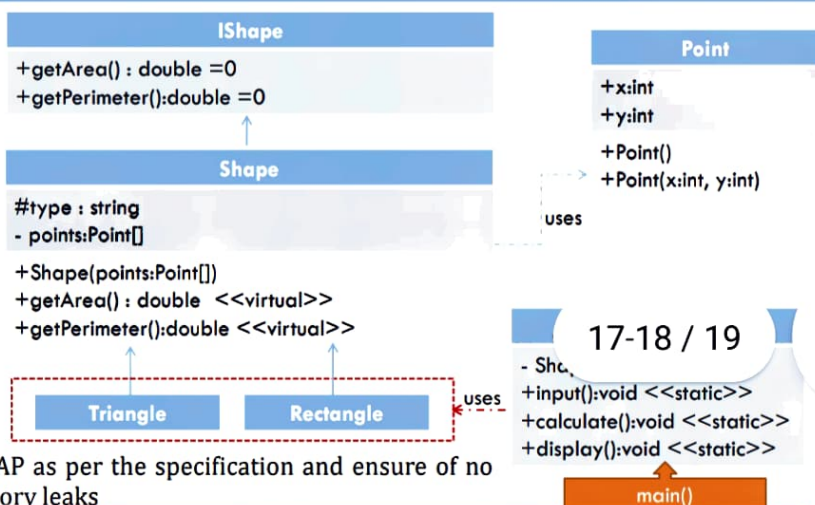**School of Computer Engineering**

Lab Assignment – 9 cont...

Book

-name:string
-authors:Author[]
-price:double

+Book(name:string, authors:Author[], price:double)
+getName() : string
+getAuthors():Author[]
+getPrice():double
+display():void = 0;

--- uses --->

Author

+name:string
+email:string
+gender:char

+ Author()
+Author(name:string,
         email:string,
         gender:char)

OOP   Math

uses

BookHelper

- BookHelper()
+input():void <<static>>
+display():void <<static>>

main()

8. WAP as per the specification and ensure of no memory leaks

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Lab Assignment – 9 cont...

IShape

+getArea() : double =0
+getPerimeter():double =0

Point

+x:int
+y:int

+Point()
+Point(x:int, y:int)

Shape

#type : string
- points:Point[]

+Shape(points:Point[])
+getArea() : double <<virtual>>
+getPerimeter():double <<virtual>>

uses

Triangle   Rectangle

uses

- Sh...
+input():void <<static>>
+calculate():void <<static>>
+display():void <<static>>

main()

9. WAP as per the specification and ensure of no memory leaks