classmate
Date 25-6-20
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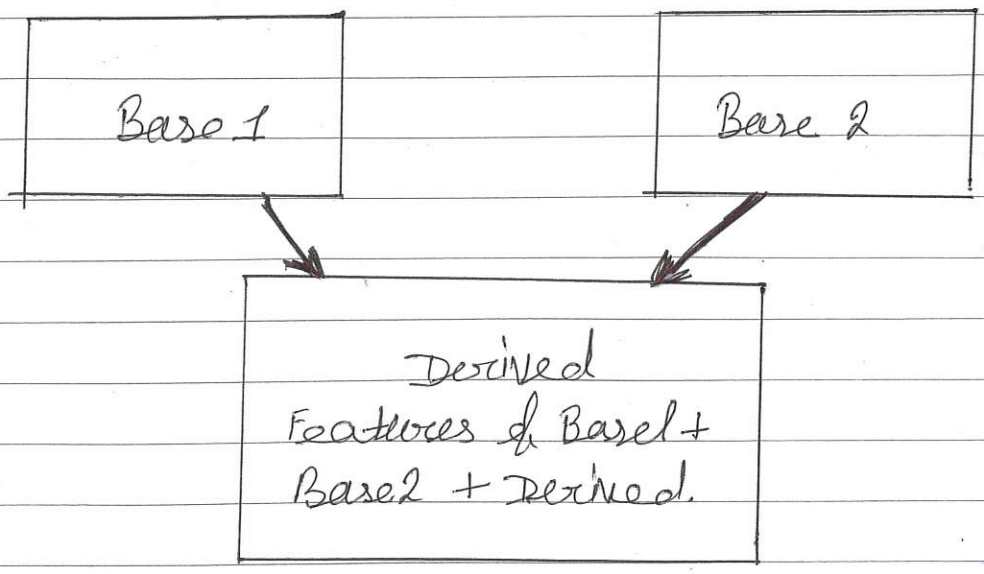
Exam Name :- PUT - B.Tech
Timing :- 9:45 to 13:30
Set No. :- 1
Paper Code :- KNC402 (PT)
Name :- RUCHI PANDEY

Python

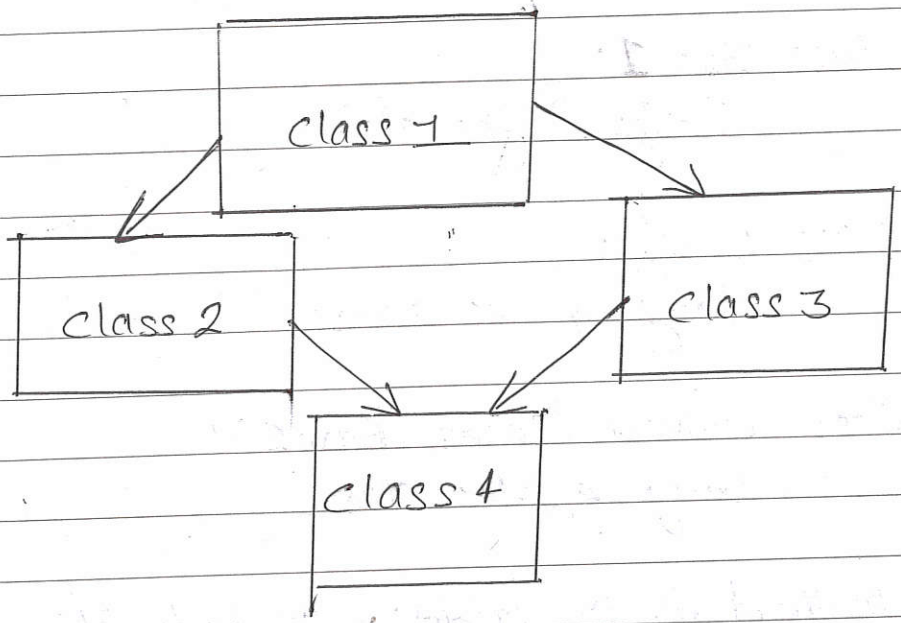
SECTION - 1

Q1 Write python program to demonstrate multiple inheritance?

Ans
- Inheritance is the mechanism to achieve the re-usability of code as one class (child class) can derive the properties of another class (parent class). It also provide transitivity ie. if class C inherits from P then all the sub-classes of C would also inherit from P.
- Multiple inheritance :- when a class is derived from more than one base class it is called multiple inheritance Then derived class inherits all the features of the base case.



The Diamond problem



multiple inheritance comes along with complexity & ambiguity as it can inherit from more than one class so if some data member is same in both parent classes than there is ambiguity. A good example would be the situation such as diamond problem.

Syntax:

```
Class Base1:
    Body of the class

Class Base2:
    Body of the class

Class Derived (Base1, Base2):
    Body of the class
```

When method is overridden in both classes

```
# Python Program to depict multiple inheritance
# When method is overridden in both classes.

class Class1:
    def m(self):
        Print ("In Class1")

class Class2 (Class1):
    def m(self)
        Print ("In class2")

class Class3 (Class1):
    def m(self):
        Print ("In Class3")
```