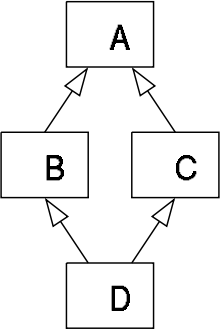
Q1. What is the meaning of multiple inheritance?

Ans:- Multiple inheritance is a feature of some object-oriented computer programming languages in which **an object or class can inherit characteristics and features from more than one parent object or parent class**. Multiple inheritances means **that a subclass can inherit from two or more super classes**



Q2. What is the concept of delegation?

Ans:- . Delegation is **an object oriented technique (also called a design pattern)**. Let's say you have an object x and want to change the behavior of just one of its methods. You can create a new class that provides a new implementation of the method you're interested in changing and delegates all other methods to the corresponding method of x. Python programmers can easily implement delegation. For example, the following class implements a class that behaves like a file but converts all written data to uppercase:

class UpperOut:

def \_\_init\_\_(self, outfile):  
        self.\_outfile = outfile

    def write(self, s):  
        self.\_outfile.write(s.upper())

    def \_\_getattr\_\_(self, name):  
        return getattr(self.\_outfile, name)

Q3. What is the concept of composition?

ANS:

Composition is another word for writing — the act of writing or the piece of writing that results. It also refers to what something is made of. The word composition comes from the Latin componere, meaning "put together" and its meaning remains close to this. ... Any mixture of ingredients can be called a composition.

Composition is a concept **that models a has a relationship**. It enables creating complex types by combining objects of other types. This means that a class Composite can contain an object of another class Component. This relationship means that a Composite has a Component.

Q4. What are bound methods and how do we use them?

ANS:

A bound method is the **one which is dependent on the instance of the class as the first argument**. It passes the instance as the first argument which is used to access the variables and functions. In Python 3 and newer versions of python, all functions in the class are by default bound methods. An interval is said to be **bounded if both of its endpoints are real numbers**. ... Conversely, if neither endpoint is a real number, the interval is said to be unbounded. For example, the interval (1, 10) is considered bounded; the interval (−∞ +∞) is considered unbounded.

Q5. What is the purpose of pseudo private attributes?

ANS:

This is sometimes misleadingly called private attributes really, it's just a way to localize a name to the class that created it, and does not prevent access by code outside the class. That is, this feature is mostly intended to **avoid namespace collisions in instances**, not to restrict access to names in general. The private members of a class are only accessible within the class. In Python, a private member can be defined by using a **prefix \_\_ (double underscore)**. So, in the private modifier's case, we cannot access the attribute.