

Q1. What is the meaning of multiple inheritance?

Answer: Inheritance is reusability of code of Parent class by the child class. Similarly when child class derives its properties from multiple parent class, it is called multiple inheritance.

E.g.

```
class parent1:  
    pass
```

```
class parent2:  
    pass
```

```
class child1(parent1,parent2):  
    #child1 inherits both parent1 and parent2  
    pass
```

Q2. What is the concept of delegation?

Answer: Delegation means that you include an instance of another class as an instance variable, and forward messages to the instance.

Q3. What is the concept of composition?

Answer: In concept of composition, a class refers to one or more other classes by using instances of those classes as a instance variable. Irrespective of inheritance all parent class is not inherited in child class, but only required methods from a class are used by using class instances.

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

Answer: 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.

E.g.

```
class A:
```

```
    def func(self, arg):  
        self.arg = arg  
        print("Value of arg = ", arg)
```

```
# Creating an instance
```

```
obj = A()
```

```
# bound method
```

```
print(obj.func)
```

Q5. What is the purpose of pseudoprivate attributes?

Answer: Within a class method in Python, whenever a method assigns to a self attribute (e.g., self.attr=value), it changes or creates an attribute in the instance (inheritance search only happens on reference, not assignment). Because this is true even if multiple classes in a hierarchy

assign to the same attribute, collisions are possible. So to guarantee that an attribute belongs to the class that uses it, prefix the name with double underscores everywhere it is used in the class