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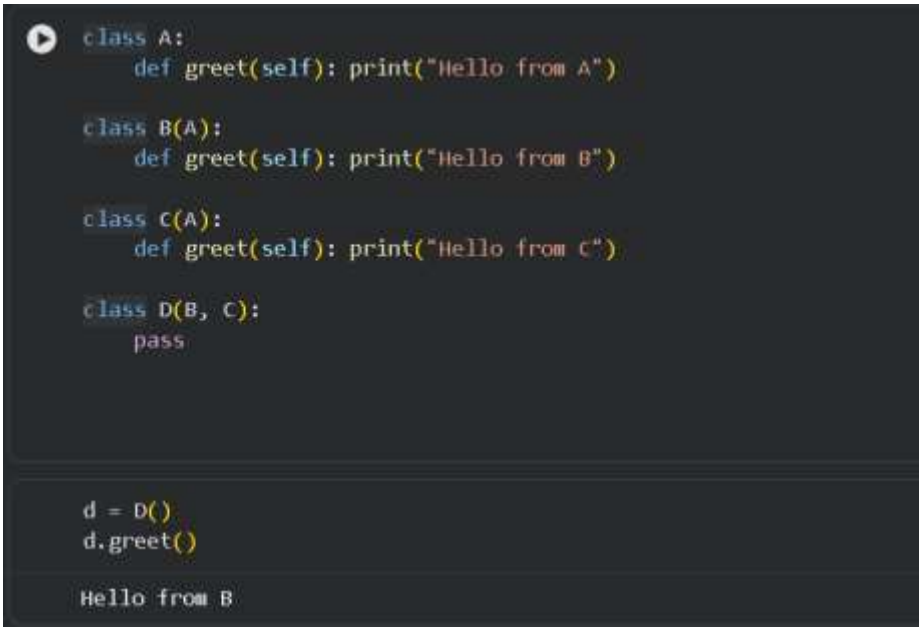
multiple inheritance: a feature where a class can inherit methods and attributes from more than one parent class, combining their functionalities.



```
class A:
    def greet(self): print("Hello from A")

class B(A):
    def greet(self): print("Hello from B")

class C(A):
    def greet(self): print("Hello from C")

class D(B, C):
    pass


d = D()
d.greet()
```

```
Hello from B
```

Method Resolution Order (MRO) :

When methods or attributes with the same name exist in multiple parent classes (a potential issue known as the "diamond problem"), Python uses a specific search order called the Method Resolution Order (MRO) to resolve the conflict.

The MRO is determined using the C3 linearization algorithm, which ensures a consistent and predictable order.

The search order prioritizes the child class first, then proceeds through the parent classes from left to right as they appear in the class definition, and then follows their own parent hierarchies.

The MRO for any class can be inspected using the `__mro__` attribute (which returns a tuple) or the `mro()` method (which returns a list).