Python Multiple Inheritance

Multiple inheritance is possible in Python unlike other programming languages. A class can be derived from more than one base classes. The syntax for multiple inheritance is similar to single inheritance.

Python Multiple Inheritance Example

class Base1:

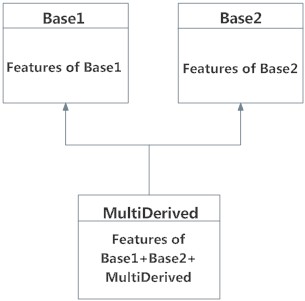
pass

class Base2:

pass

class MultiDerived(Base1, Base2):

pass



The class MultiDerived inherits from both Base1 and Base2.

Multilevel Inheritance in Python

On the other hand, we can inherit form a derived class. This is also called multilevel inheritance. Multilevel inheritance can be of any depth in Python. An example with corresponding visualization is given below.

class Base:

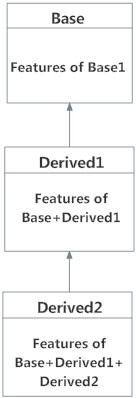
pass

class Derived1(Base):

pass

class Derived2(Derived1):

pass



class X: pass

class Y: pass

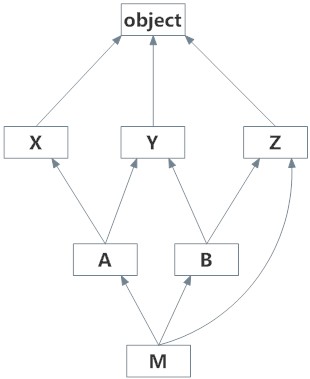
class Z: pass

class A(X,Y): pass

class B(Y,Z): pass

class M(B,A,Z): pass

print(M.mro())



**Output**

[<class '\_\_main\_\_.M'>, <class '\_\_main\_\_.B'>, <class '\_\_main\_\_.A'>, <class '\_\_main\_\_.X'>,<class '\_\_main\_\_.Y'>, <class '\_\_main\_\_.Z'>, <class 'object'>]