## Hybrid and Hierarchical Inheritance in python

## **Hybrid Inheritance**

Hybrid inheritance is a combination of multiple inheritance and single inheritance in object oriented programming. It is a type of inheritance in which multiple base classes into a single derived class ,and single inheritance is used to inherit the properties of the derived class into a sub derived class.

# **Syntax**

The syntax for implementing hybrid inheritance in Python is the same as for implementing single inheritance Multiple inheritance or Hierarchical inheritance.

#### Example

```
class BaseClass:
    pass

class Derived1(BaseClass):
    pass
class Devived2(BaseClass):
    pass

class Derived3(Derived1, Devived2):
    pass
```

### **Hierarchical Inheritance**

Hybrid inheritance is a type of inheritance is Object Oriented programming where multiple subclasses inherit from a single base class. In other words a single base class acts as a parent class for multiple inheritance. This is a way of establishing relationships between classes in a hierarchical manner.

Here's an example to influence the concept of hierarchical inheritance in Python.

```
class BaseClass:
    pass
class D1(BaseClass):
    pass
class D2(BaseClass):
    pass
```

# Source Code

```
# class BaseClass:
# pass

# class Derived1(BaseClass):
# pass
# class Devived2(BaseClass):
# pass

# class Derived3(Derived1, Devived2):
# pass

#Hierarchical inheritance
class BaseClass:
    pass
class D1(BaseClass):
    pass
class D2(BaseClass):
    pass
```

Thank You