

What is Inheritance?

When we define a class that inherits all the properties of other class called inheritance.

Syntax:- class father:

properties

class son(father):

Properties

Types:-

1. Simple/single inheritance
2. Multi-level inheritance
3. Multiple inheritance
4. Hierarchical inheritance
5. Hybrid inheritance

What is Simple inheritance?

Simple inheritance is nothing but which contain only one parent class and only one child class.

Syntax:- class parent:

Properties

Class child(parent):

Properties

What is multi-level inheritance?

In this inheritance we have one parent class and multiple child classes.

Syntax:- class parent:
 Properties
class child1(parent):
 Properties
class child2(child1):
 properties

What is Multiple inheritance?

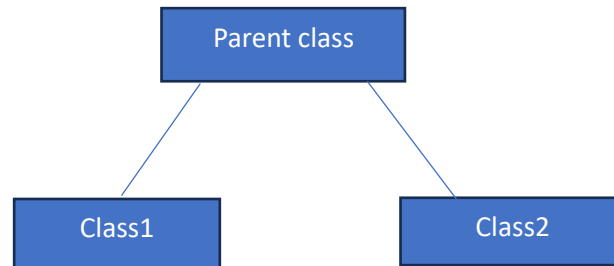
Inheritance which contain more parent classes and only one child class, is called Multiple Inheritance.

Syntax:- class parent1:
 Properties
class parent2:
 Properties
class parent3:
 Properties
.....
.....
class parent N:
 Properties
Class child(parent1,parent2,parent3,.....,parent N):
 Properties

What is Hierarchical inheritance?

Inheritance which contains only one parent class and multiple child classes but each child classes can access parent class property.

Diagram:-



Syntax:- class Parent:
 Properties
Class child1(parent):
 Properties
Class child2(parent):
 Properties

What is Hybrid inheritance?

Hybrid inheritance is a combination of two or more types of inheritance(single,multiple,multi_level,hierarchical) in a single program.

Syntax:- class A:
 Properties
Class B(A):
 Properties
Class C(A):
 Properties

Class D(B,C):
Properties