

Inheritance



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Agenda

- **Inheritance**
- **Types of inheritance**

Inheritance

- **Deriving a new class by inheriting properties and methods of an old class is known as **Inheritance**.**

Normal car




- Properties
- methods

Sport car



- Properties
- methods

Types of inheritance

- **There are five types of inheritance** 
- **Single level inheritance**
- **Multilevel inheritance**
- **Multiple inheritance**
- **Hierarchical inheritance**
- **Hybrid inheritance**

Single inheritance

class A



class B



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class A :
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```
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```

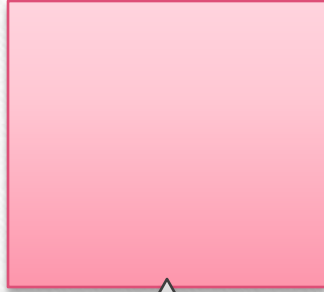
```
class B(A) :
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```
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```
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```


Multilevel inheritance

class A



class B



class C

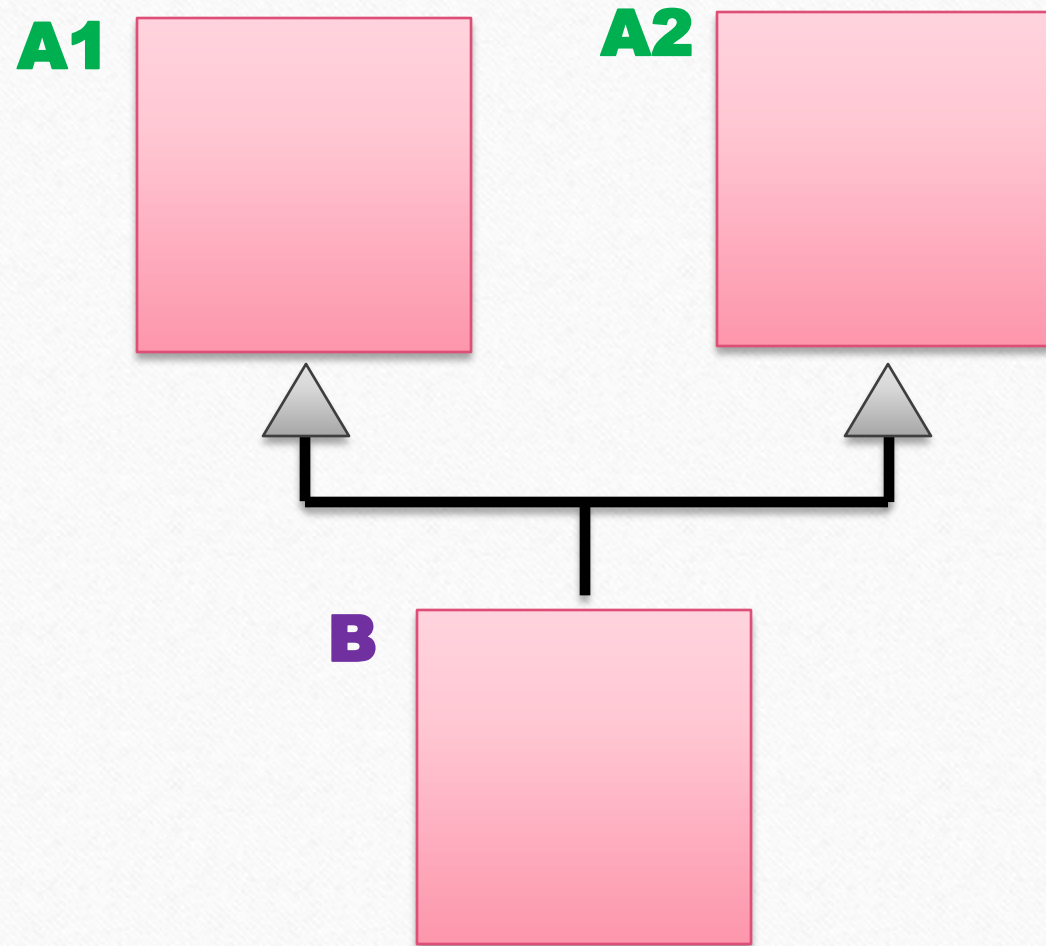


class A :

class B(A) :

class C(B) :

Multiple inheritance



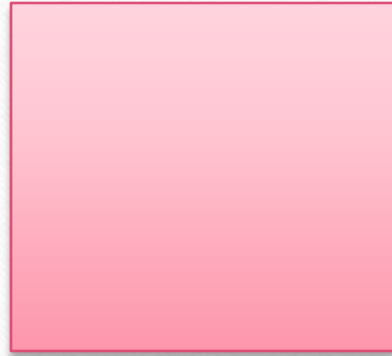
class A1 :

class A2 :

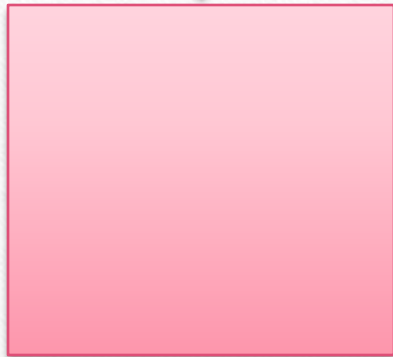
class B(A1, A2) :

Hierarchical inheritance

A



**B
1**



B2



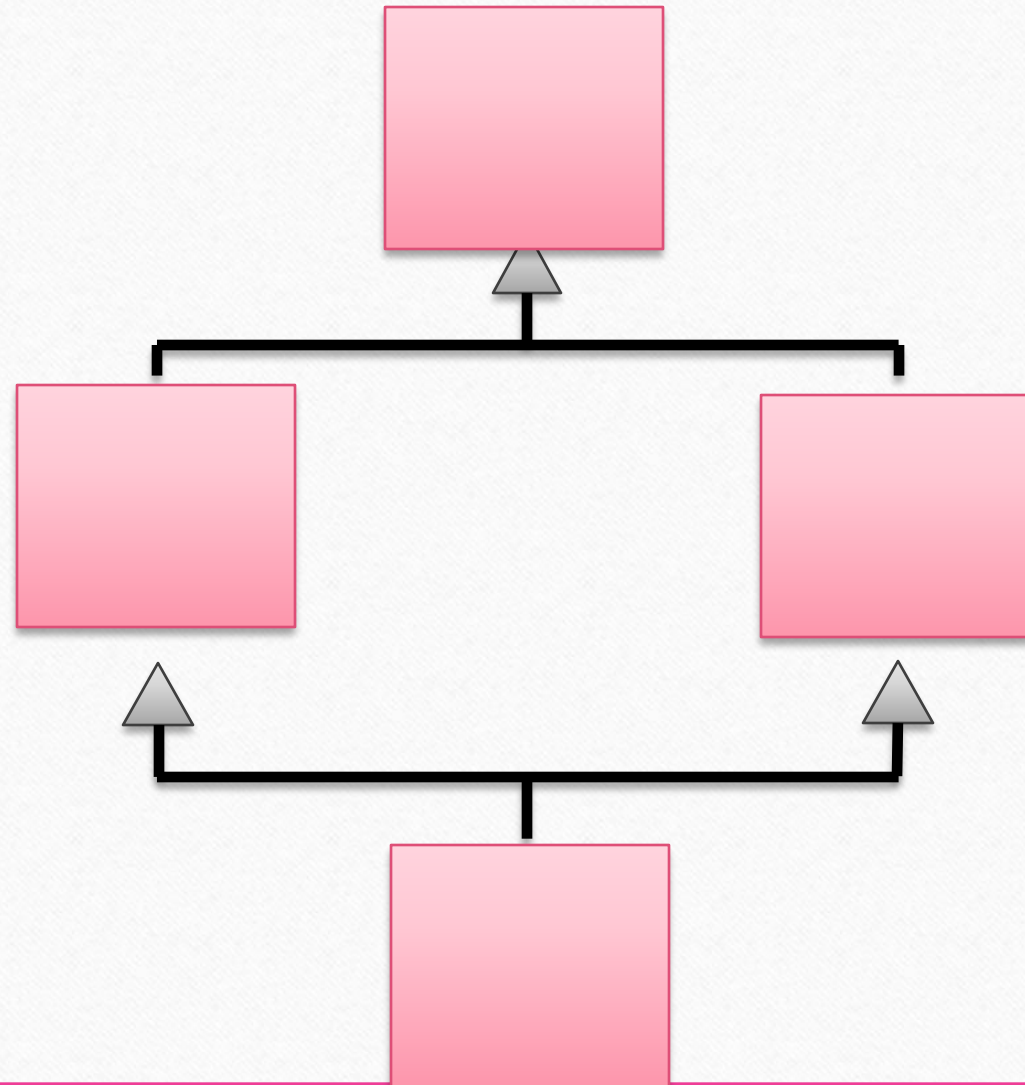
class A :

class B1 (A) :

class B2 (A) :

Hybrid inheritance

- **Hybrid Inheritance** is implemented by combining more than one type of inheritance.



Inheritance