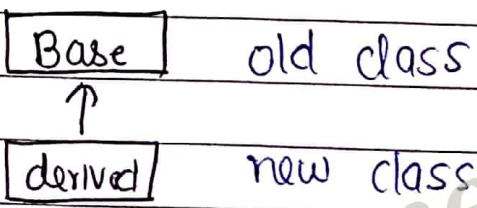


# Inheritance

- In Java, Inheritance means creating new classes based on existing class.
- A class that inherits from another class can reuse the methods and fields of old class.



## Syntax

```
class Superclassname  
{  
    ---  
}
```

```
class Subclassname extends Superclassname  
{  
    ---  
}
```

It indicates that you are making a new class.

Example

===

```
class Animal
```

```
{
```

```
    public void eat()
```

```
    {
```

```
        System.out.println("I eat eating");
```

```
    }
```

```
class Dog extends Animal
```

```
{
```

```
    public void bark()
```

```
    {
```

```
        System.out.println("Dog is barking");
```

```
    }
```

```
class Main
```

```
{
```

```
    public static void main (String[] args)
```

```
    {
```

```
        Dog d = new Dog();
```

```
        d.eat();
```

```
        d.bark();
```

```
    }
```

```
}
```

# \* Overriding Superclass Methods :-

child class override the methods of base class and to run both methods we use the Super keyword.

## Example

```

class Base
{
    void get()
    {
        System.out.println("Base class method");
    }
}

class child extends Base
{
    void get();
    {
        super.get();
        System.out.println("child class method");
    }
}

class main
{
    public static void main (String args[])
    {

```

```

Child obj = new Child();
obj.get();
}
}

```

Output

=====  
 Base Class Method  
 Child Class Method

\* Calling Superclass Constructor :-

=====  
 To explicitly call the superclass constructor from the subclass constructor, we use super(). (Special form of the super keyword)

Example

```

class Animal
{
    Animal()
    {
        System.out.println("I am an Animal");
    }
}

```

```

class Dog extends Animal
{
    Dog()
    {
        super();
        System.out.println("Dog is eating");
    }
}

```

```

class Main
{
    public static void main (String args[])
    {
        Dog d = new Dog();
    }
}

```

Output  
==

I am an Animal  
Dog is eating.

**NOTES BY IPWEBDEVELOPERS**