Dt : 30/12/2020

Inheritance Case-2:

Constructors from the PClass or SuperClass

(i)0-parameter Constructor from the PClass

=>when we have 0-parameter constructor in the PClass then the compiler at compilation stage will add 'super()' to the CClass Constructor and which is PClass Constructor call.

Exp program:

```
class PClass
{
	PClass()
	{
System.out.println("===PClass()===");
	}
}
class CClass extends PClass
{
	CClass()
	{
System.out.println("===CClass()===");
	}
}
class Inheritance7 //MainClass
{
	public static void main(String[] args)
```

```
        {
CClass ob = new CClass();
        }
}
```

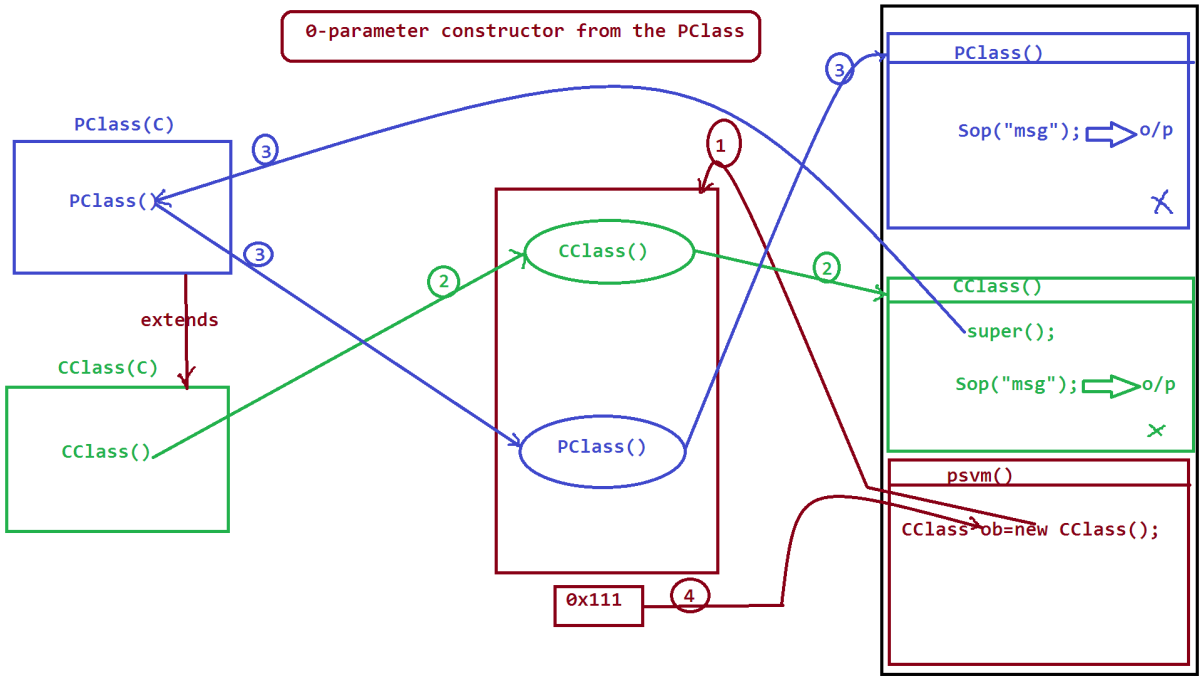
Execution flow of above program:

ClassFiles:

PClass.class

CClass.class

Inheritance7.class



Note:

=>CClass Constructor will come for execution first,this CClass Constructor will call PClass constructor for execution.

(ii)Parameterized Constructor from the PClass

=>when we have Parameterized constructor within the PClass then we(programmer) must add 'super()' to the CClass constructor to call PClass constructor for execution.

Exp program:

```
class PClass
{
	PClass(int x,int y)
	{
System.out.println("====PClass====");
System.out.println("The value x:"+x);
System.out.println("The value y:"+y);
	}
}
class CClass extends PClass
{
	CClass(int v1,int v2)
	{
		super(v1,v2);//PClass con call
	}
}
class Inheritance8 //MainClass
{
```

```
        public static void main(String[] args)
        {
CClass ob = new CClass(102,103);//CClass con call
        }
}
```

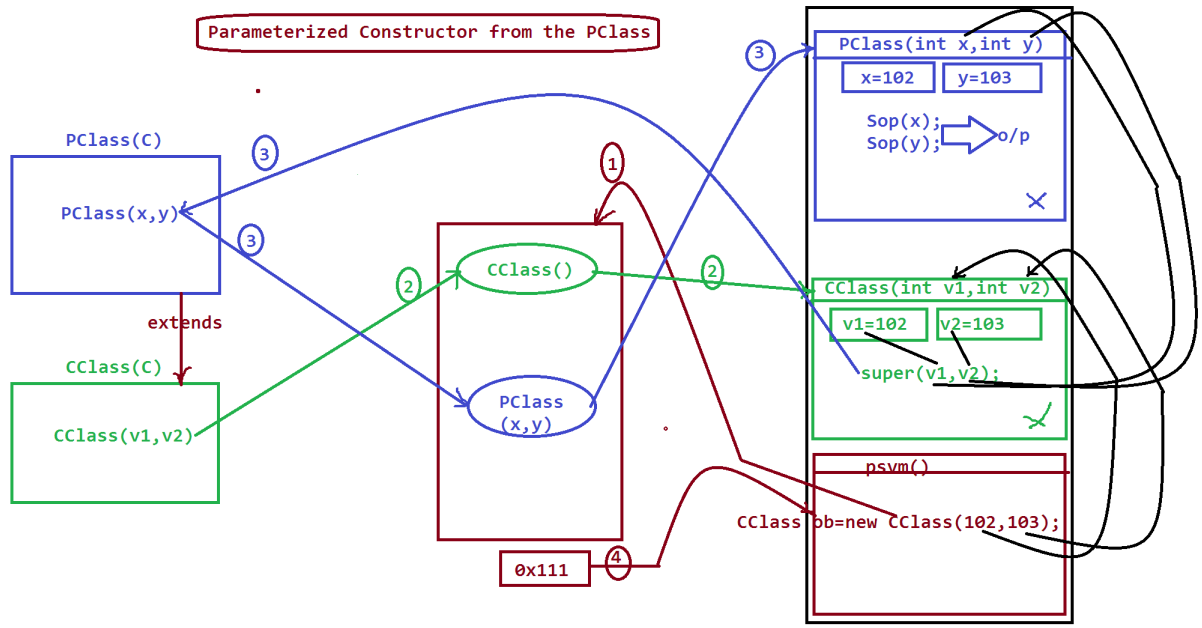
Execution flow of above program:

ClassFiles:

PClass.class

CClass.class

Inheritance8.class



Note:

=>To pass parameters to the Parameterized constructor of PClass,we declare super() to the CClass Constructor to pass parameters.

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faq:

wt is the diff b/w

(i)super()

(ii)this()

(i)super():

=>super() is used to access the constructors from the PClass.

(ii)this():

=>this() is used to access the constructors from the Same Class.

Exp program:

```
class PClass
{
        PClass(int a,int b)
        {
                this(a);
System.out.println("The value b:"+b);
        }
        PClass(int a)
        {
System.out.println("The value a:"+a);
        }
}
class CClass extends PClass
{
        CClass(int a,int b,int c,int d)
        {
```

```
                this(a,b,c);
System.out.println("The value d:"+d);
        }
        CClass(int a,int b,int c)
        {
    super(a,b);
System.out.println("The value c:"+c);
        }
}
class Inheritance9 //MainClass
{
        public static void main(String[] args)
        {
CClass ob = new CClass(11,12,13,14);
        }
}
```