

Dt : 6/9/2022

*\*imp*

**Constructors in Java:**

*=>Constructor is a method having the same name of the class and executed while object creation process,because the Con\_call is available in Object creation syntax attached with 'new' keyword.*

**Note:**

*=>while declaring constructor we mustnot use return\_type because Constructor having Class\_return\_type.*

**structure of Constructor:**

**Class\_name(para\_list)**

**{**

**//Con\_Body**

**}**

*=>Based on parameters the constructors are categorized into two types:*

*(a)Constructors without parameters*

*(b)Constructors with parameters*

**(a)Constructors without parameters:**

*=>The Constructors which are declared without parameters are known as 0-parameter constructors or*

**Constructors without parameters.**

**Ex : DemoCon1.java**

**class CTest1 //SubClass**

```
{  
  
    int a=10;  
  
    CTest1()  
    {  
  
        System.out.println("====Constructor CTest1()====");  
  
        System.out.println("The value a:"+a);  
  
    }  
  
    void dis()  
    {  
  
        System.out.println("====Instance method dis()====");  
  
        System.out.println("The value a:"+a);  
  
    }  
  
}
```

**class DemoCon1 //MainClass**

```
{  
  
    public static void main(String[] args)  
    {  
  
        CTest1 ob = new CTest1();//Con_Call  
  
        ob.dis();//method_call  
  
        ob.dis();//method_call  
  
    }  
  
}
```

```
ob.dis();//method_call
```

```
ob.dis();//method_call
```

```
}
```

```
}
```

**o/p:**

====Constructor CTest1()====

The value a:10

====Instance method dis()====

The value a:10

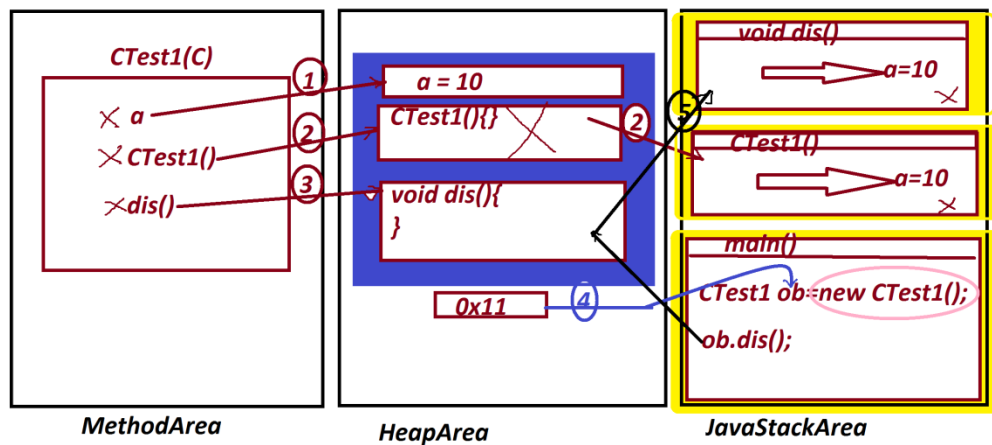
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**Execution flow of above program:**

**ClassFiles:**

**CTest1.class**

**DemoCon1.class(MainClass)**



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**faq:**

*wt is the diff b/w*

*(i)Constructor*

*(ii)Instance methods*

*=>Constructor is executed only once while object creation process, but Instance method is executed any number of times after Object creation process.*

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*faq:*

*wt is the diff b/w*

*(i)Instance block*

*(ii)Constructor*

*=>Both components are executed while object creation process, but Instance block will have highest priority in execution than Constructor.*

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*faq:*

*wt is the diff b/w*

*(i)Static block*

*(ii)Constructor*

*=>Static block is executed only once with highest priority when the class is used for first\_time.*

*=>Constructor is also executed only once while*

*object creation process.*

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*Ex : DemoCon2.java*

*class CTest2 //SubClass*

*{*

*int a=10;*

*static int b=20;*

*static*

*{*

*System.out.println("====Static block====");*

*System.out.println("The value b:"+b);*

*}*

*{*

*System.out.println("====Instance block====");*

*System.out.println("The value a:"+a);*

*System.out.println("The value b:"+b);*

*}*

*CTest2()*

*{*

*System.out.println("====Constructor CTest2()====");*

*System.out.println("The value a:"+a);*

```

        System.out.println("The value b:"+b);
    }
    void dis()
    {
        System.out.println("====Instance method dis()====");
        System.out.println("The value a:"+a);
        System.out.println("The value b:"+b);
    }
}

class DemoCon2 //MainClass
{
    public static void main(String[] args)
    {
        CTest2 ob = new CTest2();//Con_Call
        ob.dis();//method_call
    }
}

```

**o/p:**

**====Static block====**

**The value b:20**

**====Instance block====**

**The value a:10**

**The value b:20**

**====Constructor CTest2()====**

**The value a:10**

**The value b:20**

**====Instance method dis()====**

**The value a:10**

**The value b:20**

=====

**faq:**

**define default Constructor?**

**=>The constructor without parameters which is added by the compiler at compilation stage is known as default constructor.**

**faq:**

**In wt situation default constructor is added?**

**=>Compiler at compilation stage finds any class declared without constructors then default constructor is added.**

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