Constructor in Inheritance

❑ Constructors are not inherited by subclass

❑ What happens when object of subclass created?

❑ What is the role of constructor?

```
1    class A
2    {
3      int a;
4    }
5    class B extends A
6    {
7      int b;
8    }
9    class Example
10   {
11     public static void main(String[] args)
12     {
13       B obj=new B();
14     }
15   }
```

Constructor in inheritance

- ❏ Sub class's constructor invokes constructor of super class.
- ❏ Explicit call to the super class constructor from sub class's constructor can be made using super().
- ❏ You can write a subclass constructor that invokes the constructor of the superclass, either implicitly or by using the keyword super.

```java
class A
{
  int a;
  public A()
  { System.out.println("A");}
}
class B extends A
{
  int b;
  public B()
  {
    System.out.println("B");
  }
}
class Example
{
  public static void main(String[] args)
  {
    B obj=new B();
  }
}
```

```java
class A
{
 int a;
 public A(int x)
 {
  a=x;
  System.out.println("A");
 }
}
class B extends A
{
 int b;
 public B()
 {
  super(4);
  System.out.println("B");
 }
}
class Example
{
 public static void main(String[] args)
 {
  B obj=new B();
 }
```

Scenarios

- Implicit constructors in superclass and subclass
- Implicit constructor in subclass and explicit constructor in superclass
- Implicit constructor in superclass and explicit constructor in subclass
- Explicit constructor in superclass and subclass

Parameterized Constructors

❏ Subclass constructor may take arguments for its use as well as for the constructor of superclass.