

Function Overloading in Java

- ❑ If two methods of a class (whether both declared in the same class, or both inherited by a class, or one declared and one inherited) have the same name but signatures that are not same, then the method name is said to be *overloaded*.
- ❑ Method overloading is a way to implement polymorphism



```
Example1.java
1  class A
2  {
3      public void f1(int x)
4      {
5          System.out.println("Class A");
6      }
7  }
8  class B extends A
9  {
10
11      public void f1(int x)
12      {
13          System.out.println("Class B");
14      }
15  }
16  public class Example1
17  {
18      public static void main(String[] args)
19      {
20          B obj=new B();
21          obj.f1(5);
22          obj.f1(3,4);
23      }
24  }
```

Overriding in Java

❑ Method overriding is defining a method in subclass with the same signature with specific implementation in respect to the subclass.

❑ Why Overriding?



```
Example1.java
1  class A //Car
2  {
3      public void f1(int x)
4      {
5          System.out.println("Class A");
6      }
7  }
8  class B extends A //SportsCar
9  {
10
11      public void f1(int x)
12      {
13          System.out.println("Class B");
14      }
15  }
16  public class Example1
17  {
18      public static void main(String[] args)
19      {
20          B obj=new B();
21          obj.f1(5);
22      }
23  }
```