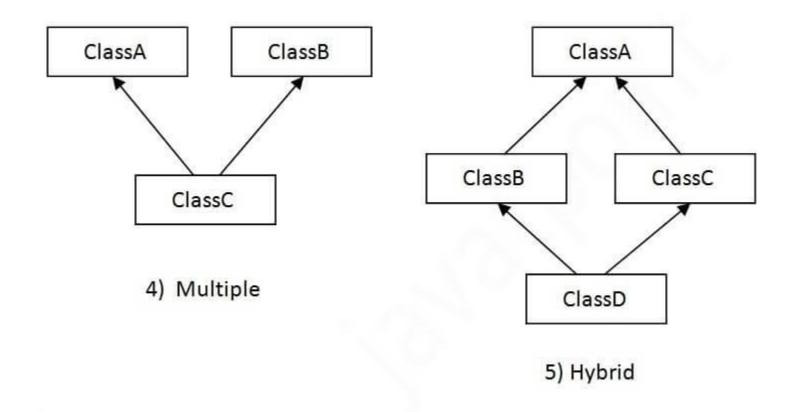


FACULTY OF Engineering & Technology



# **Single Inheritance**

When a class inherits another class, it is known as a single inheritance.

#### **Multilevel Inheritance**

When there is a chain of inheritance, it is known as *multilevel inheritance*. Example:

```
class A
{}
class B extends A
{}
class c extends B
{}
```

### **Hierarchical Inheritance**

When two or more classes inherits a single class, it is known as hierarchical inheritance.

```
Example;
class A
{}
class B extends A
{}
class C extends A
{}
```

## **Polymorphism**

Polymorphism means "many forms", and it occurs when we have many classes that are related to each other by inheritance.

**Polymorphism** uses those methods to perform different tasks.

## **Method Overloading**

If a class has multiple methods having same name but different in parameters, it is known as **Method Overloading**.

```
class test
{
static int add(int a,int b){return a+b;}
static int add(int a,int b,int c){return a+b+c;}
}
class TestOverloading{
public static void main(String[] args){
System.out.println(test.add(11,12));
System.out.println(test.add(10,11,12));
}}
```