

```
package com.tnsif.oopsconcept;

//Single Inheritance

class Animal{
    String name;

    //Constructor

    Animal(String name){
        this.name = name;
    }

    void display() {
        System.out.println("Animal Name: "+name);
    }
}

class Dog extends Animal{

    String breed;

    Dog(String name , String breed){
        super(name);
        this.breed = breed;
    }

    void showDetails() {
        display();
        System.out.println("Dog Breed: "+breed);
    }
}
```

```
//multilevel inheritance
```

```
class grandparent{  
    void gp() {  
        System.out.println("Grand parent class");  
    }  
}
```

```
class Parent extends grandparent {  
    void p() {  
        System.out.println("Parent class");  
    }  
}
```

```
class Child extends Parent{  
    void child() {  
        System.out.println("Child class");  
    }  
}
```

```
//multiple inheritance
```

```
class Parent1{  
    void pt1() {  
        System.out.println("parent 1");  
    }  
}
```

```
class Parent2{  
    void pt2() {
```

```
    System.out.println("parent 2");  
  }  
}
```

//hierarchical inheritance

```
class Fruit{  
    void show() {  
        System.out.println("I like to eat fruits");  
    }  
}
```

```
class Apple extends Fruit{  
    void AppleDemo() {  
        System.out.println("I like to eat apple");  
    }  
}
```

```
class Grapes extends Fruit{  
    void GrapesDemo() {  
        System.out.println("I like to eat grapes");  
    }  
}
```

```
/*  
 * class Child1 extends Parent1, Parent2{ void child1() {  
 * System.out.println("Child 1"); } }  
 */
```

```
public class InheritanceDemo {
```

```
public static void main(String[] args) {  
  
    Dog d = new Dog("John", "Seberian Husky");  
    d.showDetails();  
  
    Child c = new Child();  
    c.child();  
    c.p();  
    c.gp();  
  
    Apple a = new Apple();  
    a.AppleDemo();  
    a.show();  
  
    Grapes g = new Grapes();  
    g.GrapesDemo();  
    g.show();  
  
}  
  
}
```