

```
package com.tnsif.oopsconcept;

//Single Inheritance

class Animal{
    String name;

    //Constructor - it initialises the object
    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 c() {  
        System.out.println("Child Class");  
    }  
}
```

//multiple inheritance

```
class Parent1{  
    void show() {  
        System.out.println("Parent 1");  
    }  
}
```

```
class Parent2{  
    void show2() {  
        System.out.println("Parent 2");  
    }  
}
```

/*

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

//hierachical Inheritance

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

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

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

```
class Oranges extends Fruits{  
    void eatOranges() {  
        System.out.println("I like to eat oranges");  
    }  
}
```

```
public class InheritanceDemo {
```

```
public static void main(String[] args) {
```

```
    Dog d = new Dog("Shero","Street Dog");  
    d.showDetails();
```

```
    Child c = new Child();  
    c.c(); //method calling  
    c.p();  
    c.gp();
```

```
    Grapes g = new Grapes();  
    g.eat();  
    g.eatGrapes();
```

```
    Oranges or = new Oranges();  
    or.eat();  
    or.eatOranges();
```

```
}
```

```
}
```