

Interface in Java

```
Interface one{
```

```
Public void eat(); //abstract method no
```

```
Body
```

```
Interface two{
```

```
Public void bark(); //abstract method no
```

```
Body
```

```
}
```

```
Interface three extends one,two{
```

```
Public void meow(); //abstract method no body
```

```
}
```

```
Class ChildClass implements one, two{
```

```
Public void eat() { System.out.println("ChildClass is eating"); }
```

```
Public void bark() { System.out.println("ChildClass is barking"); }
```

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

```
// Create an object o
```

```
Public void bark(); //abstract method no body }
```

```
Interface three extends one,two{ public void meow(); //abstract method no  
body }
```

```
Class ChildClass implements one,two{ public void eat() {  
System.out.println("ChildClass is eating"); }
```

```
Public void bark() {
```

```
System.out.println("ChildClass is barking"); }
```

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

```
// Create an object o
```

```
ChildClass c = new ChildClass();
```

```
c.eat();
```

```
c.bark();
```

```
}
```

```
}
```

```
}
```

Multiple Interface:

```
Interface A {
```

```
Void showA();
```

```
}
```

```
Interface B {
```

```
Void showB();
```

```
}
```

```
Class C implements A, B {
```

```
Public void showA() {
```

```
System.out.println("This is from Interface
```

```
A.");
```

```
}
```

```
Public void showB() {
```

```
System.out.println("This is from Interface
```

```
B.");
```

```
}
```

```
}
```

```
Public class Main {
```

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

```
C obj = new C();
```

```
Obj.showA();
```

```
Obj.showB();  
    }  
}
```

Hierarchical:

```
Class Animal {  
  
Void eat() { System.out.println("Animal eats food."); }  
  
}
```

```
Class Dog extends Animal {  
  
Void bark() { System.out.println("Dog barks."); }  
  
}
```

```
Class Cat extends Animal {  
  
Void meow() { System.out.println("Cat meows."); }  
  
}
```

```
Public class Main {  
  
Public static void main(String[] args) {  
  
Dog d = new Dog();  
  
d.eat();
```

```
d.bark();
```

```
Cat c = new Cat();
```

```
c.eat();
```

```
c.meow();
```

```
}
```

```
}
```

```
/ Interface 1
```

```
Interface Engine {
```

```
Void engine Type();
```

```
}
```

```
// Interface 2
```

```
Interface Electric {
```

```
Void batteryCapacity(); }
```

```
// Parent class
```

```
Class Vehicle {
```

```
Void wheels() {
```

```
System.out.println("This vehicle has 4 wheels."); } }
```

```
// Child class with hybrid inheritance
```

```
Class ElectricCar extends Vehicle implements
```

```
Engine, Electric {
```

```
Public void engineType() {
```

```
System.out.println("Engine: Electric Motor"); }
```

```
Public void batteryCapacity() {
```

```
System.out.prin
```

hierarchical inheritance example

```
// Parent Class (Superclass)
```

```
Class Animal {
```

```
Void eat() {
```

```
System.out.println("Animal is eating"); }
```

```
// Child Class 1
```

```
Class Dog extends Animal {
```

```
Void bark() {
```

```
System.out.println("Dog is barking"); }
```

```
}
```

```
// Child Class 2
```

```
Class Cat extends Animal {
```

```
Void meow() {
```

```
System.out.println("Cat is meowing"); }
```

```
}
```

```
// Main Class to Run the Code
```

```
Public class Hierarchical Example {
```

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

```
-----
```