



RAMA  
UNIVERSITY

[www.ramauniversity.ac.in](http://www.ramauniversity.ac.in)

FACULTY OF Engineering &  
Technology

## Example:

```
interface intf
{
void print();
}
class test implements intf
{
public void print()
{
System.out.println("Hello");
}
public static void main(String args[])
{
test obj = new test();
obj.print();
}
}
```

1. A class always implements an interface as here class test implements the interface intf
2. A class always extends another class
3. An Interface always extends another interface

## Marker interface in Java

1. An empty interface which has nothing and serves a special purpose is known as tag or marker interface. For example `Serializable`, `EventListener`, `Remote`(`java.rmi.Remote`) are tag interfaces.
2. These interfaces do not have any field and methods in it. JVM is responsible to provide the required functionality for it

## Nested interfaces

1. An interface which is declared inside another interface or class is called **nested** interface
2. They are also known as inner interface

## Properties of Interface:

1. Class that implements any interface must implement all the methods of that interface, else the class should be declared abstract.
- 2) Interface cannot be declared as private, protected or transient.
- 3) All the interface methods are by default **abstract and public**.
- 4) Variables declared in interface are **public, static and final** by default

```
interface Test
{
    int a=10;
    public int a=10;
    public static final int a=10;
    final int a=10;
    static int a=0;
}
```

All of the above statements are identical.

5) Interface variables must be initialized at the time of declaration otherwise compiler will throw an error.

```
interface Test
{
    int x;//Compile-time error
}
```

Above code will throw a compile time error as the value of the variable x is not initialized at the time of declaration.