

* Interface and Abstract classes :-

Abstract Class	Interface
<ul style="list-style-type: none">• Abstract class can have <u>abstract</u> and <u>non-abstract</u> methods.	<p>Interface ^{have} can only abstract methods.</p>
<ul style="list-style-type: none">• Abstract class doesn't support multiple inheritance	<p>Interface supports multiple inheritance.</p>
<ul style="list-style-type: none">• Abstract class can provide the implementation of interface.	<p>Interface can't provide the implementation of interface.</p>
<ul style="list-style-type: none">• The abstract keyword is used to declare abstract class.	<p>The interface keyword is used to declare interface.</p>
<ul style="list-style-type: none">• Java abstract class can have class members like <u>private</u>, <u>protected</u> etc.	<p>Members of Java interface are <u>public</u> by default.</p>
<ul style="list-style-type: none">• An abstract class can have be extended using keyword 'extends'	<p>An interface can be implemented using keyword</p>

Example -

```
public abstract class Shape
{
    abstract void draw();
}
```

Example 1 -

```
public interface draw
{
    void shape();
}
```

Example of abstract class and interface in JAVA

interface A

```
{
    void a();
    void b();
    void c();
}
```

}

abstract class B implements A

{

public void c() {

System.out.println("I am c");

}

class M extends B {

public void a() {

{

System.out.println("I am a");

}

public void b() {

{

System.out.println("I am b");

}

}

class Main

{

public static void main (String args[])

{

A a = new M();

a.a();

a.b();

a.c();

}

}

Output:-

I am a

I am b

I am c