

Inner class codes

```
class InnerClassDemo{//outerclass

int x=10;

static int y=20;

class Inner{

    int x=100;

    static void m2(){

    public void m1(){

        int x=1000;

        System.out.println("Inner class method:"+InnerClassDemo.this.x);

        System.out.println("Inner class method:"+y);

class NetstedMethod{

    void m2(){System.out.println("class inside method");}

    }

    NetstedMethod nm=new NetstedMethod();

    nm.m2();

    }

}

public static void main(String args[]){

    System.out.println("The current version of JVM
is:"+System.getProperty("java.version"));

    InnerClassDemo id=new InnerClassDemo();

    InnerClassDemo.Inner i2=id.new Inner();

    //InnerClassDemo.Inner.m1();

    i2.m1();

}
```

```
void temp(){  
    Inner i=new Inner();  
    i.m1();  
}  
}
```

Abstract Class Example

```
abstract class Shape{  
    //instance variables  
    double x,y;  
    Shape(int x,int y){  
        this.x=x;  
        this.y=y;  
    }  
    abstract void doCalc();  
    abstract void showArea();  
}
```

```
class Rectangle extends Shape{  
    Rectangle(int x,int y){  
        super(x,y);  
    }  
    void showArea(){  
        System.out.println("Area of Rectangle");  
    }  
}
```

```
class Triangle extends Shape{  
    Triangle(int x,int y){  
        super(x,y);  
    }  
}
```

```
void showArea(){  
    System.out.println("Area of Triangle");  
}  
  
}
```

```
class AbstractDemo{  
    public static void main(String[] args){  
        //  
        Triangle t=new Triangle(10,20);  
        Rectangle r=new Rectangle(10,20);  
        //s=t;  
        t.showArea();  
        //s=r;  
        r.showArea();  
    }  
}
```

Interfaces Example:

```
interface Inter{  
    int x=10; // final static public  
    void m1();// public abstract  
    static void m2(){  
        System.out.println("static method"+x);  
    }  
  
}  
  
class InterDemo implements Inter{  
    public void m1(){  
        System.out.println("My Interface"+x);  
    }  
}
```

```
}
```

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

```
    Inter b =new InterDemo();
```

```
    b.m1();
```

```
    Inter.m2();
```

```
}
```

```
}
```