

//Single Inheritance

```
class Father {  
    public void house() {  
        System.out.println("Have Own 2BHK House.");  
    }  
}
```

```
class Son extends Father  
{  
    public void car()  
{  
        System.out.println("Have Own Audi car.");  
    }  
}
```

```
class single_inheritance {  
    public static void main(String[] args) {  
        Son o = new Son();  
        o.car();  
        o.house();  
    }  
}
```

output:

Have Own Audi car.

Have Own 2BHK House.

```
//Multilevel Inheritance in java

class GrandFather {

    public void house() {

        System.out.println("3 BHK House.");

    }

}

class Father extends GrandFather {

    public void land() {

        System.out.println("5 Arcs of Land.");

    }

}

class Son extends Father {

    public void Car() {

        System.out.println("Own Audi car.");

    }

}

class multilevel {

    public static void main(String[] args) {

        Son o = new Son();

        o.Car();

        o.house();

        o.land();

    }

}
```

```
}
```

output:

Own Audi car.

3 BHK House.

5 Arcs of Land.

//Example for Abstract class

```
abstract class Mobile{  
    void VoiceCall(){  
        System.out.println("You can Make Voice Call");  
    }  
    abstract void camera();  
    abstract void touchDisplay();  
}  
class samsung extends Mobile {  
    void camera() {  
        System.out.println("64 Mega pixel Camera");  
    }  
    void touchDisplay() {  
        System.out.println("5.5 inch Display");  
    }  
}
```

```

void fingerPrint() {
    System.out.println("In the Display fast finger sensor");
}
}

```

```

class Nokia extends Mobile

```

```

{
    void camera(){
        System.out.println("2 Mega pixel Camera");
    }
    void touchDisplay(){
        System.out.println("4.8 inch Display");
    }
}

```

```

class abstractDemo2 {
    public static void main (String args[]){
        samsung M32 = new samsung();
        M32.VoiceCall();
        M32.touchDisplay();
        M32.camera();
        M32.fingerPrint();
        System.out.println(". ..... ");
        Nokia N1 = new Nokia();
        N1.VoiceCall();
        N1.touchDisplay();
        N1.camera();
    }
}

```

```
}
```

```
}
```

output:

You can Make Voice Call

5.5 inch Display

64 Mega pixel Camera

In the Display fast finger sensor

.....

You can Make Voice Call

4.8 inch Display

2 Mega pixel Camera

```
//Interface
```

```
class Phone{
```

```
void voicecall(){
```

```
System.out.println("Make Voicecalls");
```

```
}
```

```
void sms(){
```

```
System.out.println("We can send sms");
```

```
}
```

```
}
```

```
interface Camera{
```

```
void click();
```

```
void record();
```

```

}

interface Player{

void play();

void pause();

void stop();

}

class Smartphone extends Phone implements Camera,Player

{

public void click(){

System.out.println("You Can make multiple click");

}

public void record(){

System.out.println("You can record Videos");

}

public void play(){

System.out.println("Play the songs");

}

public void pause(){

System.out.println("Pause the songs");

}

public void stop(){

System.out.println("you have options to stop the song");

}

}

class interfaceDemo2 {

```

```
public static void main(String [] args){  
    Smartphone o = new Smartphone();  
    o.voicecall();  
    o.sms();  
    o.click();  
    o.record();  
    o.play();  
    o.pause();  
    o.stop();  
}  
}
```

output:

Make Voicecalls

We can send sms

You Can make multiple click

You can record Videos

Play the songs

Pause the songs