**Experiment No. 8 (b)**

**Aim**

Demonstrate the Concept of Hierarchical Inheritance in java.

**Source code**

package java\_file;

class Mobile\_Phone {

int model\_no;

String brand;

String colour;

float price;

int battery;

String type;

void call() {

System.out.println(brand+" "+type+" Making a Call !!!");

}

void message() {

System.out.println(brand+" "+type+" Sending Message !!!");

}

void camera() {

System.out.println(brand+" "+type+" Clicked Photo !!!");

}

void speaker() {

System.out.println(brand+" "+type+" Playing Sound !!!");

}

void radio() {

System.out.println(brand+" "+type+" Playing FM Radio !!!");

}

}

class KeypadPhone extends Mobile\_Phone {

float keypad\_size;

KeypadPhone(){

type="Keypad Phone";

brand="Nokia";

}

}

class SmartPhone extends Mobile\_Phone {

float display\_size;

String Stylus;

SmartPhone() {

type="Smart Phone";

brand="Apple";

}

void finger\_print\_scanner() {

System.out.println(brand+" "+type+" Scanning Finger !!!");

}

void face\_recognition() {

System.out.println(brand+" "+type+" Scanning Face !!!");

}

void games () {

System.out.println(brand+" "+type+" Playing Video Game !!!");

}

}

class FoldingPhone extends SmartPhone {

FoldingPhone() {

type="Folding Phone";

brand="Samsung";

}

void desktop\_mode() {

System.out.println(brand+" "+type+" in Desktop Mode !!!");

}

void Multiwindow() {

System.out.println(brand+" "+type+" using Multi-Window Function !!!");

}

}

public class \_8b\_Hierarchical\_Inheritance {

public static void main(String[] args) {

FoldingPhone samsung=new FoldingPhone();

SmartPhone apple=new SmartPhone();

KeypadPhone nokia=new KeypadPhone();

samsung.call();

samsung.desktop\_mode();

System.out.println();

apple.call();

apple.games();

System.out.println();

nokia.call();

nokia.radio();

}

}

**Output**

