```
//Program to demonstrate Hierarchical Inheritance - Person Class
package com.tnsif.dayfive.hierarchicalinheritance;
public class Person {
private String name;
private String city;
public Person() {
System.out.println("Person class default constructor");
name="Amit";
city="Pune";
}
public Person(String name, String city) {
this.name = name;
this.city = city;
}
public String getName() {
return name;
}
public void setName(String name) {
this.name = name;
}
public String getCity() {
return city;
}
public void setCity(String city) {
this.city = city;
}
@Override
public String toString() {
return "Person [name=" + name + ", city=" + city + "]";
}
}
```

```
//Program to demonstrate Hierarchical Inheritance - Employee Class
package com.tnsif.dayfive.hierarchicalinheritance;
public class Employee extends Person{
private int empId;
private float salary;
private String dept;
public Employee() {
System.out.println("Employee Class Default Constructor");
}
public Employee(int empId, float salary, String dept) {
this.empId = empId;
this.salary = salary;
this.dept = dept;
}
public Employee(String name, String city,int empId, float salary, String dept) {
super(name,city);
this.empId = empId;
this.salary = salary;
this.dept = dept;
}
public int getEmpId() {
return empId;
}
public void setEmpId(int empId) {
this.empId = empId;
}
public float getSalary() {
return salary;
}
public void setSalary(float salary) {
this.salary = salary;
```

```
}
public String getDept() {
return dept;
}
public void setDept(String dept) {
this.dept = dept;
}
@Override
public String toString() {
return "Employee [empId=" + empId + ", salary=" + salary + ", dept=" + dept + ", getName()=" + getName()
+ ", getCity()=" + getCity() + "]";
}
}
////Program to demonstrate Hierarchical Inheritance - Student Class
package com.tnsif.dayfive.hierarchicalinheritance;
public class Student extends Person
{
private String clas;
private float per;
public Student() {
System.out.println("Student class default constructor");
clas="FY";
per=70;
}
public Student(String clas, float per) {
this.clas = clas;
this.per = per;
}
public String getClas() {
return clas;
```

```
}
public void setClas(String clas) {
this.clas = clas;
}
public float getPer() {
return per;
}
public void setPer(float per) {
this.per = per;
}
public Student(String name, String city,String clas, float per )
{
//private members can't inherited into child class
/*
* super.name=name; super.city=city;
*/
super(name,city);
this.clas = clas;
this.per = per;
}
@Override
public String toString() {
return "Student [clas=" + clas + ", per=" + per + ", getName()=" + getName() + ", getCity()=" +
getCity() + "]";
}
}
//Program to demonstrate Hierarchical Inheritance
package com.tnsif.dayfive.hierarchicalinheritance;
public class HierarchicalInhDemo {
public static void main(String[] args) {
Person p1 = new Person();
```

```
System.out.println("---------- Person Details ----------");
System.out.println(p1);
Person p;
p = new Person("Dhruv", "Mumbai");
if (p instanceof Person)
System.out.println("Person Details "+p);
p = new Employee("Nikhil", "Mumbai", 101, 67000, "Sales");
if (p instanceof Employee)
System.out.println("Employee Details "+p);
p = new Student("Pankaj", "Pune", "FE", 88);
if (p instanceof Student)
System.out.println("Student Details "+p);
}
}
```