LAB 6

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| S No. | Title | Date Of Implementation | Remarks |
| 1 | Program to illustrate inheritance | 14-02-2021 |  |

Program to illustrate inheritance (single, hierarchical and multilevel)

OBJECTIVE:

The following program creates a super class Person. The classes, Male and Female are children classes of the class Person. The class Student is a child class of Male.

Various types of inheritance in the following code is as follows:

1. Single Inheritance:

Person

Male

1. Hierarchical Inheritance:

Person

Female

Male

1. Multilevel Inheritance:

Person

Male

Student

CODE:

public class Lab6 {

    public class Person{

        int age;

        Person(){

            System.out.println("This is a person");

        }

        void introduce(){

            System.out.println("Hi! How are you?");

        }

    }

    public class Male extends Person{

        Male(){

            System.out.println("This is a male");

        }

        Male(int age){

            super.age = age;

            System.out.println("This is a male");

        }

        void introduce(){

            System.out.println("Hi! I am "+super.age+ ". How old are you?");

        }

    }

    public class Female extends Person{

        Female(){

            System.out.println("This is a female");

        }

        Female(int age){

            super.age = age;

            System.out.println("This is a female");

        }

        void introduce(){

            System.out.println("Hi! I am "+super.age+ ". How old are you?");

        }

    }

    public class Student extends Male{

        Student(int age){

            super.age=age;

            System.out.println("This is a student");

        }

        void introduce(){

            System.out.println("Hi! I am "+super.age+ ". How old are you?");

        }

    }

    public static void main(String[] args) {

        Lab6 l = new Lab6();

        System.out.println("Person:");

        Person p = l.new Person();

        p.introduce();

        System.out.println("Male:");

        Male m = l.new Male(20);

        m.introduce();

        System.out.println("Female:");

        Female f = l.new Female(28);

        f.introduce();

        System.out.println("Student:");

        Student s = l.new Student(18);

        s.introduce();

    }

}

OUTPUT:

