

## Hierarchical Inheritance-

1.Addition 2 no 2.Multiplication 2 no 3.Greatest 2 No 4.Swapping 2 no.

```
import java.util.Scanner;

public class Hierarchical extends pro{

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        grt();
        System.out.println("a="+a+" and b="+b);
        pro1 a=new pro1();
        a.add();
        pro2 b=new pro2();
        b.mul();
        pro3 c=new pro3();
        c.greatest();
        pro4 d=new pro4();
        d.Swap();
    }
}

class pro
{
    static int a,b,t;
    public static void grt() {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter two numbers: ");
        a=sc.nextInt();
        b=sc.nextInt();
    }
}

class pro1 extends pro
{
    public static void add() {

        System.out.println("Addition="+(a+b));
    }
}

class pro2 extends pro
{
    public static void mul() {

        System.out.println("Multiplication="+(a*b));
    }
}

class pro3 extends pro
{
    public static void greatest() {

        if(a>b)
            System.out.println(a + " is the greater number.");
        else
```

```

        System.out.println(b + " is the greater number.");
    }
}
class pro4 extends pro
{
    public static void Swap() {
        System.out.println("Before swapping numbers: "+a+" "+b);
        t=a;
        a=b;
        b=t;
        System.out.println("After swapping numbers: "+a+" "+b);
    }
}

```

## Output-

```

<terminated> Hierarchical [Java Application] C:\Users\hp\p
Enter two numbers:
10
20
a=10 and b=20
Addition=30
Multiplication=200
20 is the greater number.
Before swapping numbers: 10 20
After swapping numbers: 20 10

```