**WEEK 7-**

***Write a program that demonstrates handling of exceptions in inheritance tree.***

***Create a base class called “Father” and derived class called “Son” which***

***extends the base class. In Father class, implement a constructor which takes***

***the age and throws the exception WrongAge( ) when the input age<0. In Son***

***class, implement a constructor that cases both father and son’s age and***

***throws an exception if son’s age is >=father’s age.***

class WrongAge extends Exception

{

String msg = new String();

WrongAge(String x)

{

  msg=x;

}

public String toString(){

return "Exception handled successfully "+msg;

}

}

class father{

int f\_age;

father() throws WrongAge{

Scanner sc=new Scanner(System.in);

System.out.println("Enter father's age :");

f\_age=sc.nextInt();

if(f\_age<=0)

throw new WrongAge("Father's age <= 0 ");

}

void display(){

System.out.println("Father age: "+f\_age);

}

}

class son extends father{

int s\_age;

son() throws WrongAge{

Scanner s = new Scanner(System.in);

System.out.println("Enter son's age:");

s\_age = s.nextInt();

if (s\_age <= 0)

throw new WrongAge("Son's age <= 0");

else if (s\_age > f\_age)

throw new WrongAge("Son's age is > that father's age!");

}

void display(){

 System.out.println("Father age: "+f\_age);

 System.out.println("Son age: "+s\_age);

    }

}

class sadexc{

    public static void main(String[] args) {

        try{

            son s = new son();

            s.display();

        }

        catch (WrongAge w){

            System.out.println(w);

        }

    }

}

