

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=father’s age.

```
import java.util.Scanner;

class fatherAgeException extends Exception
{
    public String toString()
    {
        return("Father's age is less than 0");
    }
}

class sonAgeException extends Exception
{
    int a;
    sonAgeException(int age){        a=age;
    }
    public String toString()
    {
        if(a<0)
            return ("Son's age is less than 0");    else        return ("Son's age is more
than Father's age");    }
}

class Father{
int age;
Scanner in=new Scanner(System.in);
Father()
{
    System.out.println("Enter the father's age:");    age=in.nextInt();
}
void ex1() throws fatherAgeException
{
    if(age<0)
        throw new fatherAgeException();
}
}

class Son extends Father
{
    int age;
    Son()
    {
        System.out.println("Enter the son's age:");    age=in.nextInt();
    }
    void ex2() throws sonAgeException{
if(age<0||age>super.age){
        throw new sonAgeException(age);    }
}
```

```

    }
}
class Except
{
    public static void main(String[] args){
        Son s=new Son();    try{
            s.ex1();
        }

        catch(fatherAgeException e){
            System.out.println(e);
        }

        try{
            s.ex2();        }
        catch(sonAgeException e){
            System.out.println(e);
        }
    }
}

```

Output

```

Enter the father's age:
45
Enter the son's age:
50
Son's age is more than Father's age

```

```

Enter the father's age:
30
Enter the son's age:
-23
Son's age is less than 0

```