

lab8.java - Notepad

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```
import java.util.Scanner;
class fatherAgeException extends Exception
{
    public String toString()
    {
        return("Wrong Age!! Father's age is less than 0");
    }
}

class sonAgeException extends Exception
{
    int a, b;
    sonAgeException (int sage, int fage)
    {
        a = sage;
        b = fage;
    }
    public String toString()
    {
        if(a==b)
            return("Wrong Age!! Son's age is equal to father's age");
        /*
        if(a<0)
            return("Wrong Age!! Son's age is less than 0");
        */
        else
            return("Wrong Age!! Son's age is more than father's age");
    }
}

class Father
{
    public int age1;
    Scanner scan = new Scanner(System.in);
    int age1;
    Father()
    {
        System.out.print("Enter father's age: ");
    }
}
```

```
lab8.java - Notepad
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{
    System.out.print("Enter father's age: ");
    age1 = scan.nextInt();
}
void ex1() throws fatherAgeException
{
    if (age1 < 0)
        throw new fatherAgeException();
}
}

class Son extends Father
{
    public int age2;
    Son()
    {
        System.out.print("Enter son's age: ");
        age2 = scan.nextInt();
    }
    void ex2() throws sonAgeException
    {
        if(age2 < 0 || age2 >= age1)
            throw new sonAgeException (age2, age1);
    }
}

class lab8
{
    public static void main(String [] args){
        Son s = new Son();{
            try{
                s.ex1();
            }
            catch(fatherAgeException e)
            {
                System.out.println(e);
            }
        }
    }
}
```

lab8.java - Notepad

File Edit Format View Help

```
public int age2;
Son()
{
    System.out.print("Enter son's age: ");
    age2 = scan.nextInt();
}
void ex2() throws sonAgeException
{
    if(age2 < 0 || age2>=age1)
        throw new sonAgeException (age2, age1);
}
}

class lab8
{
    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);
            }
        }
    }
}
```

Ln 1, Col 1 100% Windows (CRLF) UTF-8

```
Command Prompt
Microsoft Windows [Version 10.0.19041.630]
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C:\Users\Jelani>cd java

C:\Users\Jelani\java>java lab8
Enter father's age: -10
Enter son's age: 20
Wrong Age!! Father's age is less than 0
Wrong Age!! Son's age is more than father's age

C:\Users\Jelani\java>java lab8
Enter father's age: 20
Enter son's age: 21
Wrong Age!! Son's age is more than father's age

C:\Users\Jelani\java>java lab8
Enter father's age: 21
Enter son's age: 21
Wrong Age!! Son's age is equal to father's age

C:\Users\Jelani\java>
```