

Tuesday  
30-1-24

classmate

Date

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Lab-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 Wrong Age when the input age  $\leq 0$ . In Son class, implement a constructor that class father and Son's age and throws an exception if Son's age is  $\geq$  father's age.

```
import java.util.*;
class WrongAge extends Exception
WrongAge (String message) {
    super (message);
}
```

```
class Father {
    int age;
```

```
    Father (int age) throws WrongAge {
```

```
        if (age < 0) {
            throw new WrongAge ("Age cannot be negative");
        }
```

```
        this.age = age;
    }
```

```
    class Son extends Father {
        int sage;
```

```
        Son (int fatherAge, int Son Age) throws WrongAge {
```



Super (father Age);

if (Son Age >= father Age) {  
    throw new Wrong Age ("Son's age  
    should be less than Father's age");  
}

this.Age = SonAge;

public class Error {  
    public static void main (String args[])

{  
    Scanner sc = new Scanner (System.in);

    try {  
        System.out.println ("Enter the Father's  
        age:");

        int a = sc.nextInt();

        Father father = new Father (a);

        System.out.println ("Enter the Son's age");

        int b = sc.nextInt();

        Son Son = new Son (a, b);

    } catch (Wrong Age e) {

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

        e.getMessage();

    }

Enter the Father's Age : 53

Enter the Son's Age : 21