Lab-7

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Write a program that demonstrate handling of exception in inheritance tree. Create base class father and derived class son who extends father. In father class, implement a constructor that takes both father and son's age and throws exception if (son's age >= father's age)

```
import java.util.Scanner;

class WrongAge extends Exception{
    public WrongAge(String e){
        super(e);
    }
}

class InputScanner{
    Scanner s = new Scanner(System.in);
    public int nextInt(){
        return s.nextInt();
    }
}

class Father extends InputScanner{
    int fatherAge;
    public Father() throws WrongAge{
        System.out.println("Enter father's age:");
        fatherAge = nextInt();
        if (fatherAge < 0){
            throw new WrongAge("Age can't be negative");
        }
    }
    public void display(){
        System.out.println("Father's age:" + fatherAge);
    }
}
```

```
}
class Son extends Father{
    int sonAge;
    public Son() throws WrongAge{
        super();
        System.out.println("Enter son's age:");
        sonAge = nextInt();
        if (sonAge >= FatherAge){
            throw new WrongAge("son's Age can't be
            greater than fathers Age");
        }
        else if (sonAge < 0){
            throw new WrongAge("Age can't be negati
        }
    }

    public void display(){
        super.display();
        System.out.println("Son's age:" + sonAge);
    }
}

public class Main{
    public static void main(String[] args){
        try{
            Son son = new Son();
            son.display();
        } catch (WrongAge e){
            System.out.println("Error:" + e.getMe
        }
    }
}
```

Output

Enter father's age : 23

Enter son's age : 29

Error: son's age can't be greater than father's age

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