

write a program that demonstrates handling of exceptions in inheritance tree. create base class father and derived class son who extends father. In father class, implement constructor that takes both father and son's age and throws an 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);
}

class Father extends InputScanner {
    int fatherAge;

    public Father() throws WrongAge {
        System.out.println("Enter Father age:");
        fatherAge = s.nextInt();
        if (fatherAge < 0) {
            throw new WrongAge(
                "Age cannot be negative");
        }
    }

    public void display() {
        System.out.println("Father age: " +
            fatherAge);
    }
}
```



```

class Son extends Father {
    int sonage;
    public Son throws WrongAge {
        super();
        System.out.println("Enter son's age");
        sonage = s.nextInt();
        if (sonage >= fatherAge) {
            throw new WrongAge("son's age
            cannot be greater than father's");
        }
        else if (sonage < 0) {
            throw new WrongAge("Age cannot
            be negative");
        }
    }
    public void display() {
        super.display();
        System.out.println("son's Age: " + sonage);
    }
}

public class Main {
    public static void Main(String args[]) {
        try {
            Son s = new Son();
            s.display();
        }
        catch (WrongMessage e) {
            System.out.println("Error: " + e.getMessage());
        }
        System.out.println("Shreyash Sinha
        IBM22CS273");
    }
}

```


Output :

Enter Father's age: 23

Enter Son's age: 24

Error : Son's age cannot be greater than Father's age.

~~Shreyash Sinha~~ / BM22CS273

~~The~~
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