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<0. In Son class,implement a constructor that cases both father and son’s age and throws an exception if son’s age is >=father’s age.

```
import java.util.Scanner;
class WrongAge extends Exception {
    public WrongAge(String e) {
        super(e);
    }
}
class Father {
    private int age;

    public Father(int age) throws WrongAge {
        if (age < 0) {
            throw new WrongAge("Age cannot be negative");
        }
        this.age = age;
    }

    public int getAge() {
        return age;
    }
}
class Son extends Father{
  private int sonAge;
  public Son(int fatherAge, int sonAge)throws WrongAge
{
  super(fatherAge);
  if(sonAge>=fatherAge)
    throw new WrongAge("Son's Age cannot be greater than father's age");
  else if(sonAge<0)
    throw new WrongAge("Age cannot be negative");
     this.sonAge=sonAge;
}

public int getSonAge(){
  return sonAge;
```

```
 }
}

public class ExceptionDemo{
   public static void main(String args[])
   {
     Scanner s=new Scanner(System.in);
     try{
        System.out.println("enter father age");
        int fatherAge=s.nextInt();
        System.out.println("enter son age");
        int sonAge=s.nextInt();
        Son son =new Son(fatherAge,sonAge);
        System.out.println("Father's age:"+son.getAge());
        System.out.println("Son's age:"+son.getSonAge());
        }
         catch(WrongAge e){
        System.out.println("error:"+e.getMessage());
          }
    }
}
```

```
C:\Users\Rushila V\OneDrive\Desktop>java ExceptionDemo
enter father age
12
enter son age
10
Father's age:12
Son's age:10

C:\Users\Rushila V\OneDrive\Desktop>java ExceptionDemo
enter father age
-12
enter son age
34
error:Age cannot be negative

C:\Users\Rushila V\OneDrive\Desktop>java ExceptionDemo
enter father age
20
enter son age
30
error:Son's Age cannot be greater than father's age
```