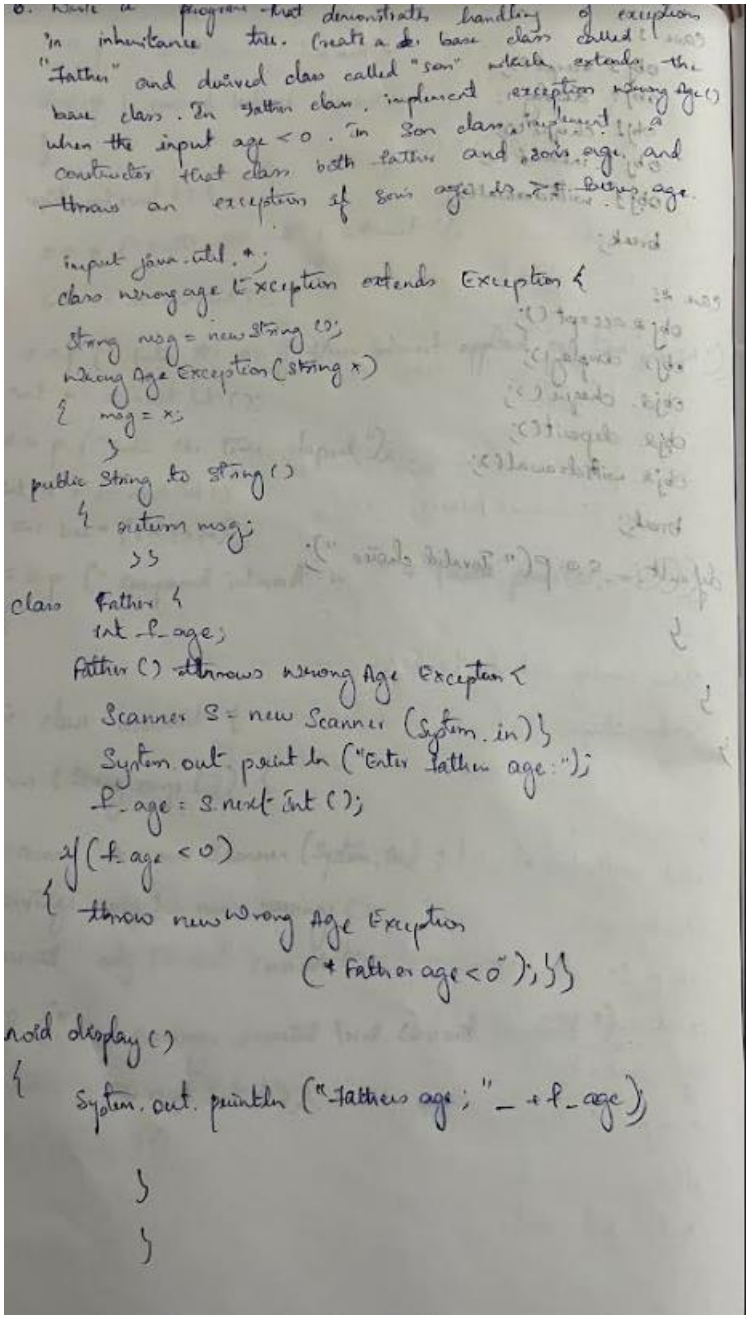
Write a program that demonstrates handling of exceptions in inheritance tree. Create a base class called “Father” and derived class called “Son” which extends the base class. In Father class, implement a constructor which takes the age and throws the exception WrongAge( ) when the input age<0. In Son class, implement a constructor that cases both father and son’s age and throws an exception if son’s age is >=father’s age.

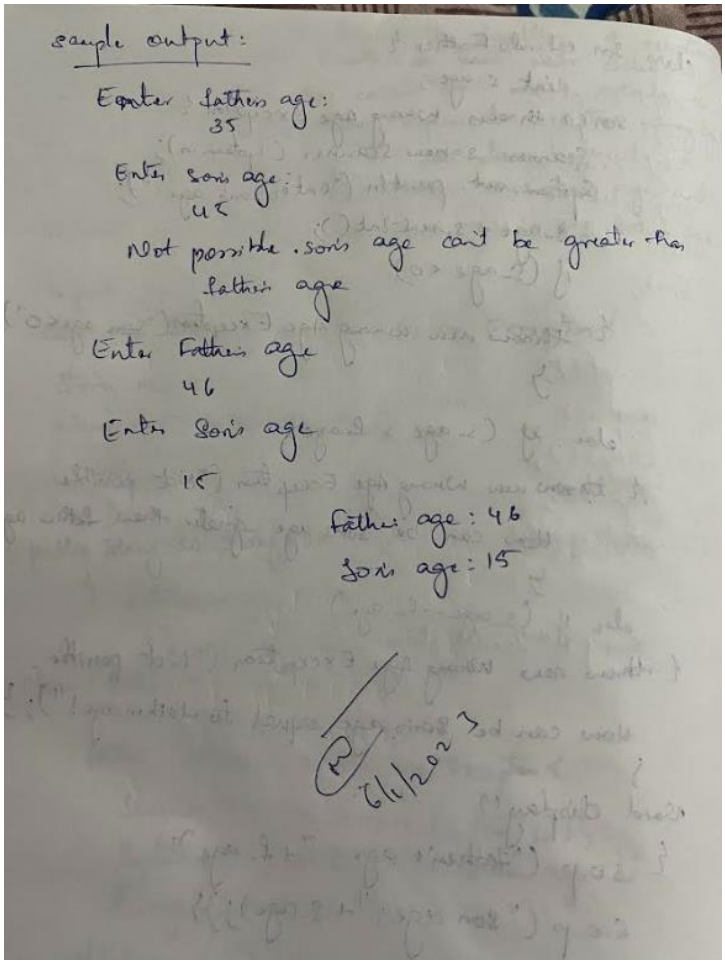


```
... program that demonstrates handling of exception
in inheritance tree. Create a base class called
"Father" and derived class called "son" which extends the
base class. In father class, implement exception wrongAge()
when the input age < 0. In Son class, implement
constructor that class both father and son's age and
throws an exception if son's age is >= father's age.

import java.util.*;
class wrongAge Exception extends Exception {
String msg = new String();
wrongAge Exception(String x)
{ msg = x;
}
public String to String()
{ return msg;
}}
class Father {
int f_age;
Father() throws wrongAge Exception {
Scanner s = new Scanner (System.in);}
System.out.println("Enter father age:");
f_age = s.nextInt();
if(f_age < 0)
{ throw new Wrong Age Exception
("Father age<0");}}
void display()
{
System.out.println("Fathers age:"_+f_age);

}
}
```

```
class Son extends Father {
        int s_age;
    Son() throws WrongAgeException {
      Scanner s=new Scanner(System.in);
      System.out.println("Enter Son's age:");
       s_age = s.nextInt();
       if (s_age<0)
    { throw new WrongAgeException("Son age<0");
      }
     else if (s_age > f_age)
    { throw new WrongAgeException("Not possible
        How can be son's age greater than father age!");
      }
     else if (s_age==f_age)
  { throw new WrongAgeException("Not possible.
     How can be Son's age equal to Father age!"); }
    }
  void display()
   { s.o.p ("Father's age : "+f_age);
     s.o.p ("Son age : "+s_age);}}
  class except{
          public static void main (String[] args)
      { try
        { Father f=new Father();
          f.display();
        Son s= new Son();
         s.display();
        }
  catch (WrongAgeException wae)
      { s.o.p (wae);
        }}}
```



Output:

```
Enter the father's age:35
Enter the son's age:45
Son's age is more than Father's age
```