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8. 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 NegativeAge() WrongAge() when the input age<0. In Son class, implement a constructor that: cases both father and son's age and throws an exception WrongAge() if son's age is >= father's age.

```
import java.util.*;
class WrongAge extends Exception
{
    int f, s;
    WrongAge(int fAge, int sAge)
    {
        f = fAge;
        s = sAge;
    }
    public String toString()
    {
    return "Enter correct ages as Father's age
      cant be less than or equal to Son's age.";
    }
}
class NegativeAge extends Exception
{
    int x;
    NegativeAge(int fAge)
    {
        x = fAge;
    }
    public String toString()
```

```
    {
        return "Age cant be negative.";
    }
}
class Father
{
    int fAge;
    Scanner in = new Scanner(System.in);
    Father() throws NegativeAge
    {
        System.out.println("Enter father's age:");
        fAge = in.nextInt();
        if(fAge<0)
        {
            throw new NegativeAge(fAge);
        }
    }
}
class Son extends Father
{
    int sAge;
    Scanner in = new Scanner(System.in);
    Son() throws NegativeAge, WrongAge
    {
        super();
        System.out.println("Enter Son's age:");
        sAge = in.nextInt();
        if(sAge<0)
        {
            throw new NegativeAge(sAge);
        }
        if(sAge >= fAge)
        {
```

```
            throw new WrongAge(fAge, sAge);
        }
    }
}
class exception_handling
{
    public static void main(String args[])
    {
        try
        {
            Son s = new Son();
        }
        catch (NegativeAge n)
        {
            System.out.println("Exception : " + n);
        }
        catch(WrongAge w)
        {
            System.out.println("Exception : " + w);
        }
    }
}
```