

7) Write a 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 a constructor which takes the age and throws the exception `wrongAge()` when the input age  $< 0$  in Son marks class.  $\therefore$  implement a constructor that uses both father and son's age and throw an exception if  $\text{son age} \geq \text{father age}$ .

$\rightarrow$  class `wrongAge` extends Exception {  
    `wrongAge (String message)` {  
        `super (message)` ;  
    }

```

3.
class Father {
    int age;
    Father (int age) {
        if (age < 0) {
            throw new WrongAge ("Age cannot be Negative");
        }
        this.age = age;
    }
}

```

```

4.
class Son extends Father {
    // throws Wrong Age
    Son (int fage, int sage) {
        super (fage);
        if (sage >= fage) {
            throw new Exception WrongAge ("Son age can't greater than father age");
        }
        this.fage = fage;
        this.sage = sage;
    }
}

```

```

5.
class Main {
    public static void main (String[] args) {
        Scanner sc = new Scanner (System.in);
        try {
            int fage;
            int sage;
            System.out.print ("Enter father age ");
            fage = sc.nextInt ();
            System.out.print ("Enter son age ");
            sage = sc.nextInt ();
        }
    }
}

```

Son & newSon (fage, fage);

y

catch (wrongAge wa) {

System.out.println(wa);

y

op :

Enter father's age : -1.

Enter son's age : 1.

Error : Age cannot be negative.

Enter father's age : 20

Enter son's age : 21

Error ! : son's age > father's age

8 ... system which creates two threads