

7) 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=father's age.

```
import java.util.Scanner;
```

```
class WrongAgeException extends Exception {  
    public WrongAgeException(String message) {  
        super(message);  
        System.out.println("Error");  
    }  
}
```

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

```
class Son extends Father {  
    int sonage;  
  
    Son(int age, int sonage) throws WrongAgeException {  
        super(age);  
        this.sonage = sonage;  
        if (sonage >= age) {  
            throw new WrongAgeException("Son's age should be less than father's age");  
        }  
    }  
}
```

```
    }  
  
    }  
}
```

```
class excep {  
    public static void main(String[] args) {  
Scanner s1=new Scanner(System.in);  
int age,sonage;  
    try {  
System.out.println("Enter f age");  
age=s1.nextInt();  
System.out.println("Enter s age");  
sonage=s1.nextInt();  
        Father father = new Father(40);  
        Son son = new Son(4, 20);  
    } catch (WrongAgeException e) {  
        System.out.println("Exception occurred: " + e.getMessage());  
    }  
}  
}
```

```
C:\Users\Lakshitha.L\Desktop\java>javac excep.java  
  
C:\Users\Lakshitha.L\Desktop\java>java excep  
Enter f age  
35  
Enter s age  
36  
Error  
Exception occurred: Son's age should be less than father's age  
  
C:\Users\Lakshitha.L\Desktop\java>
```