

LAB 7: NAP to ^{demonstrate} ~~show~~ the exception handling inheritance tree.

```
import java.util.*;
```

```
class WrongAge (String s) extends Exception {  
    WrongAge (String s) {  
        super(s);  
    }  
}
```

```
class InputScanner {  
    Scanner s = new Scanner (System.in);  
}
```

```
class Father extends InputScanner {  
    int fatherAge;
```

```
    Father() throws WrongAge {  
        Sys.out.println ("Enter father age:");  
        fatherAge = s.nextInt();
```

```
        if (fatherAge < 0)  
            throw new WrongAge ("Age cannot be  
            negative val");  
    }
```

```
    void display() {
```

```
        System.out.println ("Father's age: " + fatherAge);  
    }  
}
```



```
class Son extends Father {
    int sonAge;
```

```
    Son() throws WrongAge {
        super();
```

```
        System.out.println("Enter son's age:");
        sonAge = s.nextInt();
```

```
        if (sonAge < 0)
            throw new WrongAge("Age cannot be -ve");
```

```
        else if (sonAge > fatherAge)
            throw new WrongAge("Son's age cannot be greater than father's age");
```

```
        else {
            displayf();
            displaySon();
```

```
        throw new WrongAge("Valid Age");
    }
}
```

```
void displaySon() {
    System.out.println("Son's age: " + sonAge);
}
}
```



```

class exceptions name {
    public static void main (String[] args) {
        try {
            Son son = new Son();
        }
        catch (WrongAge e) {
            System.out.println (e.getMessage());
        }
    }
}

```

OUTPUT:

Enter father's age:

44

Enter son's age:

23

Father's age: 43

Son's age: 23

Valid Age

Enter father's age:

-2

Age cannot be negative

Enter father's age:

44

Enter son's age

66

Son's age cannot be greater than father's age.