

Lab Program - 8

FatherMain.java

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

```
class WrongAge extends Exception {
```

```
    WrongAge (String s)
```

```
        super (s);
```

```
}
```

```
}
```

```
class InputScanner {
```

```
    Scanner sc = new Scanner (System.in);
```

```
    int Age;
```

```
    InputScanner () {
```

```
        if (this.getClass() == Father.class) {
```

```
            System.out.println ("Enter father age: ");
```

```
            Age = sc.nextInt();
```

```
        }
```

```
    }
```

```
}
```

```
class Father extends InputScanner {
```

```
    int FatherAge;
```

```
    Father () throws WrongAge {
```

```
        Age  
        FatherAge = Age;
```

```
        if (FatherAge < 0) {
```

```
            throw new WrongAge ("Age cannot be < 0");
```

```
        }
```

```
    }
```

```
    void display () { System.out.println ("Father Age: " + FatherAge);
```

```
}
```

```
class Son extends Father {
```

```
    int Son Age;
```

```
    Son A throws Wrong Age {
```

```
        Super ();
```

```
        System.out.println ("Enter son age : ");
```

```
        Son Age SonAge = sc.nextInt ();
```

```
        if (Father Age < SonAge)
```

```
            throw new WrongAge ("Age cannot be > father");
```

```
        } else if (SonAge < 0) {
```

```
            throw new WrongAge ("Age cannot be < 0");
```

```
        }
```

```
    }
```

```
        Son Age; };
```

```
    void display () { System.out.println ("Son Age = " + Son Age); }
```

```
}
```

```
class Father Main {
```

```
    public static void main (String args []) {
```

```
        try {
```

```
            Father father = new Father ();
```

```
            Son son = new Son ();
```

```
            father.display ();
```

```
            son.display ();
```

```
        } catch WrongAge (WrongAge e) {
```

```
            System.out.println (e.getMessage ());
```

```
        }
```

```
    }
```

```
}
```

Output:

1) Enter father age:

10

Enter son age:

5

Father Age : 10

Son Age : 5

2) Enter Father age:

-1

Age cannot be < 0

3) Enter father age:

14

Enter son age:

16

Age cannot be greater for son

30/01/24