

Lab-7

write a program that demonstrate handling of exceptions in inheritance tree. Create a base class father & derive son. In father class implement a constructor which throws wrongtype when age < 0. In son class implement a constructor which throws wrongtype when age > father's age.

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

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

```
class Input {
    Scanner sc = new Scanner(System.in);
}
```

```
class Father extends Input {
    int fage;
    Father() {
        fage = sc.nextInt();
        try {
            check();
        }
    }
}
```

```
catch (WrongAge e) {
    System.out.println(e);
}
```

```
void check() throws WrongAge {
    if (fage < 0)
        throw new WrongAge("cannot be negative");
}
```



```
void display()?
```

```
System.out.println("Father Age");
```

```
class Son extends Father
```

```
{
    int sonAge;
```

```
son();
```

```
super();
```

```
try {
```

```
    check();
```

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

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

```
}
```

```
void check() throws WrongAge {
```

```
    if (sonAge < 0)
```

```
        throw new WrongAge("cannot be negative");
```

```
    else if (sonAge > fatherAge)
```

```
        throw new WrongAge("son Age cannot be greater than father age");
```

```
    else if (sonAge == fatherAge)
```

```
        throw new WrongAge("son Age cant be eq/ to father age");
```

```
}
```

```
void display() {
```

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

```
}
```



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

```
        Son s = new Son();  
        s.display;
```

```
    }
```

```
}
```

Output

50

30

Father age : 50

Son age : 30

- 12

Age cannot be negative

20

40

son's age cannot be greater than Father's Age