

java Exception Age

Enter Age of Father

20

Enter age of Son

20

son cannot be same age as father

Wrong Age

java . Exception Age

Enter age of Father

30

Enter age of Son

5

son's age = 5

Father's ~~age~~ age = 30

Was  
30-1-14

## Lab 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 input age < 0

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

```
class WrongAge extends Exception {  
    public WrongAge(  
        String (s)  
        System.out.println(s);  
    }  
}
```

```
class Father {
```

```
    int age;
```

```
    public Father (int age) {
```

```
        this.age = age;
```

```
}
```



Catch (Wrong Age)

System. ov. println (e);

Output

Enter age of Father

50

Enter age of Son

-10

Age cannot be negative  
Wrong Age

java Exception Age

Enter age of Father

20

Enter age of Son

30

Son cannot be older than Father

Wrong Age

```
if (age < 0)
```

```
{  
    throw new WrongAge ("Age cannot be negative.");  
}
```

```
public void display () {
```

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

```
}
```

```
class Son extends Father {
```

```
    public Son (int age) {
```

```
        super (age);
```

```
    }
```

```
    int sage = age;
```

```
    public void checkAge () throws WrongAge {  
        if (sage < 0)
```

```
        {
```

```
            throws new WrongAge ("Age cannot be negative.");  
        }
```

```
    else if (sage > 0)
```

```
    {
```

```
        throw new WrongAge ("Age cannot be older than father");  
    }
```



```
else if (sage == age)
```

```
{  
    throw new WrongAge ("Son cannot be  
    same age as father.");  
}
```

```
}
```

```
}
```

```
public void display () {
```

```
    System.out.println ("Son's age = " + sage);  
}
```

```
}
```

```
}
```

```
public class AgeException {
```

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

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

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

```
        Father f = new Father (sc.nextInt());
```

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

```
        Son s = new Son (sc.nextInt());
```

```
        sc.close();
```

```
        s.age = f.age;
```

```
        try {
```

```
            f.checkAge();
```

```
            s.checkAge();
```

```
            s.display();
```

```
            f.display();  
        }  
    }
```

```
}
```