

30/01/24

URBAN
EDGE

```
import java.util.Scanner;
class WrongAge extends Exception {
    public WrongAge(String message) {
        super(message);
    }
}

class Father {
    private int age;
    public Father(int age) throws WrongAge {
        if (age < 0) {
            throw new WrongAge("age can't be negative");
        }
        this.age = age;
    }
    public int getAge() {
        return age;
    }
}

class Son extends Father {
    private int sonAge;
    public Son(int fatherAge, int sonAge) throws
        WrongAge {
        super(fatherAge);
        if (sonAge >= fatherAge) {
            throw new WrongAge("Son's age can't
            be greater than father's age");
        }
        else if (sonAge < 0) {
            throw new WrongAge("age can't be
            negative");
        }
        this.sonAge = sonAge;
    }
}
```



```
public int getSonAge() {  
    return sonAge;  
}
```

```
}  
  
public class main {
```

```
    public static void main(String[] args) {  
        Scanner scanner = new Scanner(System.in);  
        try {
```

```
            System.out.println("enter the father's age:\n");  
            int fatherAge = scanner.nextInt();
```

```
            System.out.println("enter the son's age:\n");  
            int sonAge = scanner.nextInt();
```

```
            Son son = new Son(fatherAge, sonAge);
```

```
            System.out.println("Father's Age: " + son.getAge());
```

```
            System.out.println("Son's Age: " + son.getSonAge());
```

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

```
            System.out.println("exception: " + e.getMessage());
```

```
        } finally {
```

```
            scanner.close();  
        }  
    }  
}
```

output:-

1) enter father's age:

-5

enter the son's age:

10

exception: age can't be negative

2) enter father's age:

5

enter son's age:

7

exception: Son's age can't be greater than father's age.

enter father's age:

19

enter son's age:

-5

exception: age can't be negative.

8
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