

30/1/24

Exceptions

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```
import java.util.Scanner;

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

class Father {
    protected int fatherAge;
    public Father(int age) throws WrongAge {
        fatherAge = age;
        if (fatherAge < 0) {
            throw new WrongAge(message: "Father's age  
cannot be negative");
        }
    }
}

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



```

public class main {
    public static void main (String[] args) {
        Scanner scanner = new Scanner(System.in);
        try {
            System.out.println("Enter father's age:");
            int fatherAge = scanner.nextInt();
            System.out.println("Enter son's age:");
            int sonAge = scanner.nextInt();
            Son son = new Son(fatherAge, sonAge);
            System.out.println("Father's age: " + fatherAge);
            System.out.println("Son's age: " + sonAge);
        } catch (WrongAge e) {
            System.out.println("Exception Caught: " + e);
            System.out.println("Exception Caught: " + e.getMessage());
        } catch (Exception e) {
            System.out.println("Error: " + e);
            System.out.println("Error: " + e.getMessage());
        } finally {
            scanner.close();
        }
    }
}

```

Enter father's age: 34

Enter son's age: 45

Exception caught: WrongAge: Son's age cannot be greater than or equal to father's age

Exception caught: Son's age cannot be greater than or equal to father's age.

Enter father's age: -9

Enter son's age: 34

Exception caught: WrongAge: Father's age cannot be negative

Exception caught: Father's age cannot be negative

Enter Father's age: 45

Enter Son's age: -8

Exception caught: WrongAge: Son's age cannot be negative or zero

Exception caught: Son's age cannot be negative or zero

Enter Father's age: 56

Enter Son's age: 20

Father's age: 56

Son's age: 20

age);
30-01-24