



Lab 7

```
import java.util.Scanner;  
class WrongAge extends Exception {  
    public WrongAge() {
```

```
        super("Age Error");  
    }
```

```
    public WrongAge(String message) {
```

```
        super(message);  
    }
```

```
}
```

```
class InputScanner {
```

```
    protected Scanner scanner;
```

```
    public InputScanner() {
```

```
        scanner = new Scanner(System.in);  
    }
```

```
    public int nextInt() {
```

```
        return scanner.nextInt();  
    }
```

```
}
```

```
}
```

```
class Father extends InputScanner {
```

```
    protected int fatherAge;
```

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

```
        System.out.print("Enter Father's Age:");
```

```
        fatherAge = scanner.nextInt();  
    }
```



```

    if (fatherAge < 0) {
        throw new WrongAge ("Age cannot be negative");
    }

```

```

    public void display () {
        System.out.println ("Father's age : " + fatherAge);
    }

```

```

class Son extends Father {
    private int sonAge;

```

```

    public Son() throws WrongAge {
        super ();
    }

```

```

    System.out.print ("Enter son's age ");

```

```

    sonAge = scanner.nextInt ();

```

```

    if (sonAge >= fatherAge) {

```

```

        throw new WrongAge ("Son age cannot be greater than father's age");
    }

```

```

    if (sonAge < 0) {

```

```

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

```

```

    public void display () {

```

```

        super.display ();

```

```

        System.out.println ("Son's Age : " + sonAge);
    }

```



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

```
        try {
```

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

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

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

```
            System.out.println("Error: " +
```

```
            e.getMessage());
```

```
        }
```

```
    }
```

```
}
```

→ output

Enter Father's Age : 23

Enter Son's Age : 50

~~Enter Son's Age : 50~~

Error: Son's age cannot be greater than father's age

Enter Father's Age : 42

Enter Son's Age : -6

Error: Age cannot be negative

Enter Father's Age : -9

Error: Age cannot be negative

~~30.01.24~~