

Vallisha.M . IBM19CS177

Program - 8 - Exception

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

```
class Main {  
    public static void main (String args[]) {  
        Scanner in = new Scanner(System.in);  
        System.out.print("Enter father's age: ");  
        int fatherAge = in.nextInt();  
        System.out.print("Enter son's age: ");  
        int sonAge = in.nextInt();  
        in.close();  
    }  
}
```

```
Son son;
```

```
try {
```

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

```
    System.out.println("No errors");
```

```
}
```

```
catch (AgelessThanZeroException exception) {
```

```
    System.out.println(exception.getMessage());
```

```
}
```

```
catch (SonOlderThanFatherException exception) {
```

```
    System.out.println(exception.getMessage());
```

```
}
```

```
}
```

```
}
```

```
class
```

```
public class AgelessThanZeroException extends  
    Exception {
```

```
    AgelessThanZeroException(String message) {
```

```
        super(message);
```

```
    }
```

```
}
```

```
public class SonOlderThanFatherException extends  
    Exception {
```

```
    SonOlderThanFatherException(String message) {
```

```
        super(message);
```

```
    }
```

```
}
```

```
public class Father {
```

```
    int age = 0;
```

```
    message = "Father's Age cannot be less  
                than zero";
```

```
    Father() {}
```

```
    Father(int age) throws AgeLessThanZeroException  
    {
```

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

```
            throw new AgeLessThanZeroException(  
                message);
```

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

```
    }
```

```
}
```

```
public class Son extends Father {
```

```
    String message1 = "son's age cannot be greater  
        than father's age";
```

```
    String message2 = "Son's age cannot be  
        less than zero";
```

```
    int age;
```

```
    Son(int sonAge, int fatherAge) throws  
    AgeLessThanZeroException, SonOlderThanFatherException  
    {
```

```
        super(fatherAge);
```

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

```
            throw new AgeLessThanZeroException(message2);
```

```
        if (sonAge >= fatherAge)
```

```
            throw new SonOlderThanFatherException(message1);
```

```
        age = sonAge;
```

```
    }
```

```
}
```