

Lab - 8

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

```
class fatherAgeException extends Exception  
{
```

```
    public String toString()  
    {
```

```
        return("Father's age is less than 0");  
    }
```

```
}  
class sonAgeException extends Exception  
{
```

```
    int a;
```

```
    sonAgeException(int age)
```

```
    {
```

```
        a = age;
```

```
    }
```

```
    public String toString()  
    {
```

```
        if(a < 0)
```

```
            return("Son's age is less than 0");
```

```
        else
```

```
            return("Son's age is more than father's age");
```

```
    }
```

```
}
```

Teacher's Signature _____


```
class Father
```

```
{
```

```
    public int age1;
```

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

```
    int age1;
```

```
    Father()
```

```
{
```

```
        System.out.println("Enter father's age: ");
```

```
        age1 = scan.nextInt();
```

```
}
```

```
    void ex1() throws FatherAgeException
```

```
{
```

```
        if (age1 < 0)
```

```
        {
            throw new FatherAgeException();
        }
```

```
}
```

```
}
```

```
class Son extends Father
```

```
{
```

```
    public int age2;
```

```
    Son()
```

```
{
```

```
        System.out.println("Enter son's age: ");
```

```
        age2 = scan.nextInt();
```

```
}
```

```
    void ex2() throws SonAgeException
```

```
{
```

```
        if (age2 < 0 || age2 > super.age1)
```

```
        {
            throw new SonAgeException(age2);
        }
```

```
}
```

Teacher's Signature _____


```
}  
class Main  
{  
    public static void main(String[] args)  
    {  
        Son s = new Son();  
        try {  
            s.ex1();  
        }  
        try  
        {  
            s.ex2();  
        }  
        catch (SonAgeException e)  
        {  
            System.out.println(e);  
        }  
    }  
}
```