

LAB-7(EXCEPTION)

SOURCE CODE:

```
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("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("Son's age cannot be negative or zero");
        }

        if (sonAge >= fatherAge) {
            throw new WrongAge("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.print("Enter father's age: ");
int fatherAge = scanner.nextInt();

System.out.print("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();
}
}

```

OUTPUT:

```

Enter father's age: 35
Enter son's age: 12
Father's age: 35
Son's age: 12

```

```

Enter father's age: 68
Enter son's age: 78
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: -56
Enter son's age: 23
Exception caught: WrongAge: Father's age cannot be negative
Exception caught: Father's age cannot be negative

```

```
Enter father's age: 56
Enter son's age: -23
Exception caught: WrongAge: Son's age cannot be negative or zero
Exception caught: Son's age cannot be negative or zero
```