

LAB PROGRAM-8

Write a program that demonstrates handling of exceptions in inheritance tree. Create a base class called "Father" and a derived class called "Son" which extends the base class. In Father class, implement a constructor which takes the age and throws the exception WrongAge() when the input age=father's age.

Program:

```
import java.util.*;
import java.lang.String;
import java.awt.*;
import java.awt.event.*;
class WrongAge extends Exception{
int age;
WrongAge(int x)
{
age=x;
}
public String toString()
{
return "AGE OF SON="+age+" IS ENTERED
INCORRECTLY";
}
}
class father
{
int a;
father(int x)
{
a=x;
}
}
class son extends father{
int age;
son(int fage,int sage){
super(fage);
age=sage;
}
void compute() throws WrongAge{
if(age>=a)
{
throw new WrongAge(age);
}
}
```

```

else{
    System.out.println("THE AGES ARE ENTERED
    CORECTLY");
    System.out.println("FATHER'S AGE="+a+"\t"+"SON'S
    AGE="+age);
}
}
}
class expmain
{
    public static void main(String args[])
    {
        Scanner s=new Scanner(System.in);
        System.out.println("ENTER FATHER'S AGE");
        int f=s.nextInt();
        System.out.println("ENTER SON'S AGE");
        int so=s.nextInt();
        son ss=new son(f,so);
        try{
            ss.compute();
        }catch(WrongAge e)
        {
            System.out.println(e);
        }
    }
}

```

OUTPUT:

```
Command Prompt
Microsoft Windows [Version 10.0.18362.1082]
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C:\Users\arpit>cd..

C:\Users>cd..

C:\>cd java lab

C:\java lab>javac exp.java

C:\java lab>java exp
Enter father's age:
78
Enter sons's age:
34
Father's age: 78
Son's age: 34

C:\java lab>_
```