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**1BM19CS172**

**LAB-8**

Write a program that demonstrates handling of exceptions in inheritance tree. Create a base class called “Father” and 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<0. In Son class, implement a constructor that cases both father and son’s age and throws an exception if son’s age is >=father’s age.

import java.util.Scanner;

class WrongAge extends Exception {

public WrongAge(String s){

super(s);

}

}

class Father {

int fatherAge;

Father(int fAge) throws WrongAge{

if(fAge <=0){

throw new WrongAge("Father's age is less than 0");

}

else{

this.fatherAge = fAge;

}

}

}

class Son extends Father {

int sonAge;

Son(int fAge, int sAge) throws WrongAge{

super(fAge);

sonAge=sAge;

if(sAge >= fAge){

throw new WrongAge("Sons's age is equal to or greater than father's age");

}

}

void Display(){

System.out.println("Father's age: "+fatherAge);

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

}

}

class lab8 {

public static void main(String[] args){

int fAge,sAge;

Scanner sc = new Scanner(System.in);

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

fAge = sc.nextInt();

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

sAge = sc.nextInt();

try{

Son son = new Son(fAge, sAge);

son.Display();

}catch(WrongAge err){

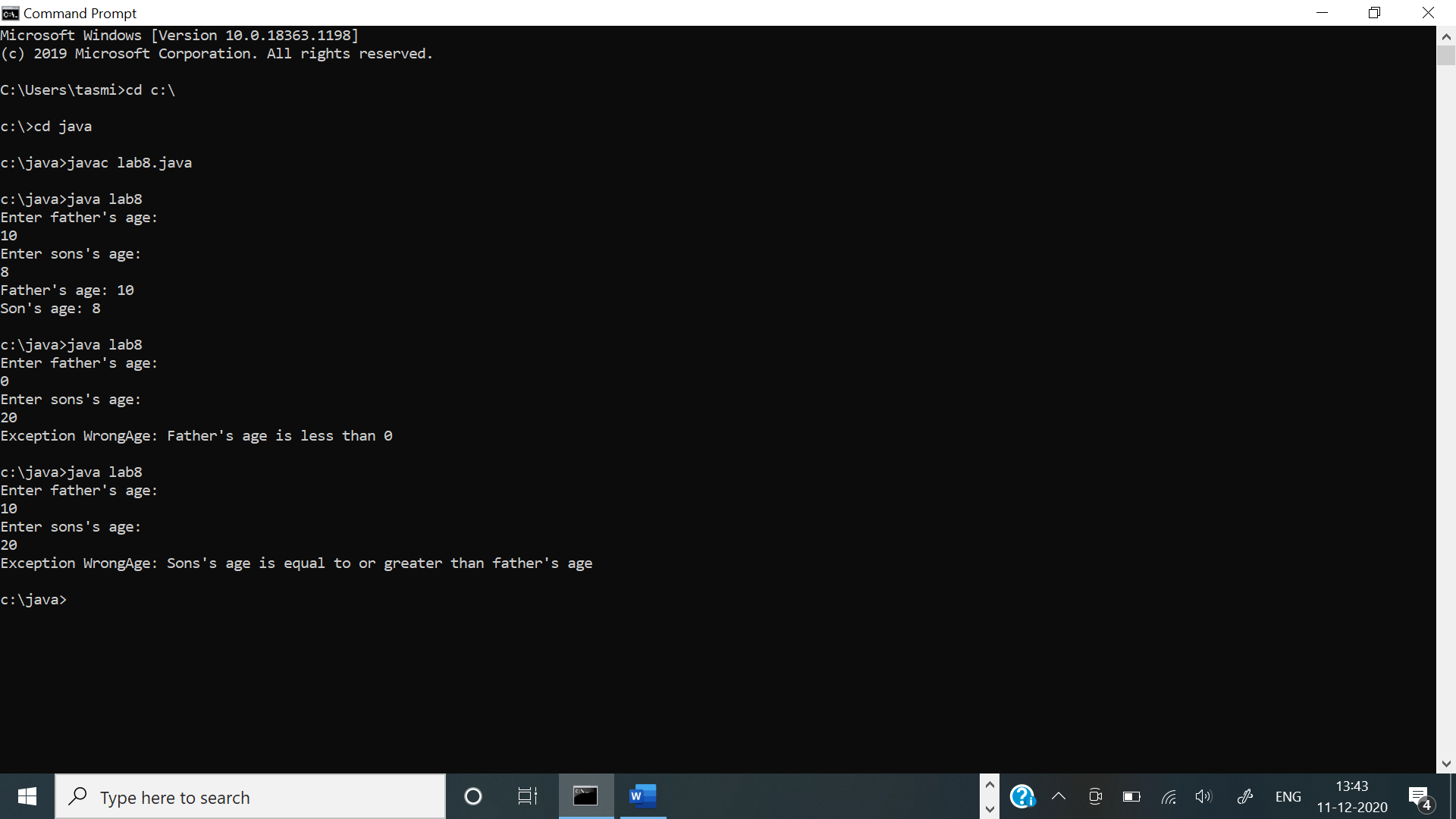
System.out.println("Exception " + err);

}

}

}

**OUTPUT:**

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