WEEK 7

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 WrongAgeException extends Exception {
  public String toString() {
     return ("Negative age can't be accepted");
  }
}
class AgeException extends Exception {
  public String toString() {
     return ("Son can't be older than father");
  }
}
class Father {
  int father age;
  Father(int x) throws WrongAgeException {
     father age = x;
     if (father age < 0) {
       throw new WrongAgeException();
  }
class Son extends Father {
  int son age;
  Son(int x, int y) throws AgeException, WrongAgeException {
     super(x);
     son_age = y;
     if (son age < 0) {
```

```
throw new WrongAgeException();
    if (son age >= father age) {
       throw new AgeException();
    }
  }
}
class Lab 7 {
  public static void main(String[] args) {
    try {
       Scanner s = new Scanner(System.in);
       System.out.println("Enter father's and son's ages");
       int x = s.nextInt();
       int y = s.nextInt();
       Son so = new Son(x, y);
       System.out.printf("Father is %d years old and son is %d years old", so.father age,
so.son_age);
    } catch (WrongAgeException wa) {
       System.out.println(wa);
    } catch (AgeException a) {
       System.out.println(a);
    } catch (Exception e) {
       System.out.println("Enter valid values");
    }
  }
}
Enter father's and son's ages
35 15
Father is 35 years old and son is 15 years old
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```
Enter father's and son's ages
-98 90
Negative age can't be accepted
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Enter father's and son's ages
34 -9
Negative age can't be accepted
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Enter father's and son's ages 23 32 Son can't be older than father

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