Week 7

import java.util.Scanner;

class WrongAgeException extends Exception {

public WrongAgeException(String message) {

super(message);

}

}

class Father {

int age;

public Father(int age) throws WrongAgeException {

if (age < 0) {

throw new WrongAgeException("Father's age cannot be negative.");

}

this.age = age;

}

}

class Son extends Father {

int sonAge;

public Son(int fatherAge, int sonAge) throws WrongAgeException {

super(fatherAge);

if (sonAge < 0) {

throw new WrongAgeException("Son's age cannot be negative.");

}

if (sonAge >= fatherAge) {

throw new WrongAgeException("Son's age cannot be greater than or equal to Father's age.");

}

this.sonAge = sonAge;

}

}

public class Age{

public static void main(String[] args) {

Scanner in = new Scanner(System.in);

System.out.println("Ruqaiyya Mahreen 1BM23EE044");

try {

System.out.print("Enter Father's age: ");

int fatherAge = in.nextInt();

System.out.print("Enter Son's age: ");

int sonAge = in.nextInt();

Father father = new Father(fatherAge);

Son son = new Son(fatherAge, sonAge);

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

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

} catch (WrongAgeException e) {

System.out.println("Error: " + e.getMessage());

} finally {

in.close();

}

}

}

