**Lab 7**

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**USN : 1BM23CS009**

import java.util.Scanner;

class NegativeAgeError extends Exception {

int a;

public NegativeAgeError(int a) {

this.a = a;

}

public String toString() {

return "Negative Age: " + a;

}

}

class InvalidAgeError extends Exception {

int a, b;

public InvalidAgeError(int a, int b) {

this.a = a;

this.b = b;

}

public String toString() {

return "Invalid Age: " + a + " is less than " + b;

}

}

class Father {

String name;

int age;

Father(String name, int age) {

try {

if(age < 0) {

throw new NegativeAgeError(age);

}

this.name = name;

this.age = age;

}

catch(NegativeAgeError e) {

System.out.println(e);

}

}

}

class Son extends Father {

String sonName;

int sonAge;

Son(String sonName, int sonAge, String fatherName, int fatherAge) {

super(fatherName, fatherAge);

this.sonName = sonName;

try {

if(sonAge < 0) {

throw new NegativeAgeError(sonAge);

}

if(sonAge >= fatherAge){

throw new InvalidAgeError(sonAge, fatherAge);

}

this.sonAge = sonAge;

}

catch(NegativeAgeError e) {

System.out.println(e);

}

catch(InvalidAgeError e) {

System.out.println(e);

}

}

}

class Exceptions {

public static void main(String[] args){

System.out.println("Abhinav Sanjay\nUSN : 1BM23CS009");

Scanner sc=new Scanner(System.in);

System.out.println("Enter son name");

String name=sc.next();

System.out.println("Enter son age");

int age=sc.nextInt();

System.out.println("Enter father name");

String Name=sc.next();

System.out.println("Enter fathers age");

int Age=sc.nextInt();

Son a1 = new Son(name,age,Name,Age);

System.out.println("End of program");

}

}

