	Poge No. Deta
	Lab program VIL
-3 300 L	Write a java program that demonstrates handling of exceptions in inheritance tree. Greate a base class called "Father" and derived class called "son" which extends base class. In father's class, implement constructor which takes age of throws exception wrangingel) when input age <0. In son's class, implement constructor that uses both father's of son's age and throws exception if son's age is >= father's age
	class wrong Age extends Exception (String missage;
	WrongAge (String message) { Butter this, message = message;
	public sowing tosovery () ? networ "Error: "+ missage; }
	class Father E int Fage;
: (reg	Father (intax) throws brongAge [iy (2<0) [
	throw new WrongAge ("Father1's age cannot be negotive");
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	Course Service & Character (no.) (

	Page No. Date	
	class son extends father {	1
	'unt sage;	
6	son lint n, int y) -throws wrong Age [
to hack	super (x);	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
6 14 N W	y (y<0) {	
	thomas new wrong Age ("Son's age cannot	be
	Negative");	YAR I
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Apr. 2 DA11	'y (y>= n) [
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	greater than Father's age;	2 60
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	$sage = y_j$	
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	class Except I	
	public static void main (String args []) [5
	scanner sc = new scanner (system.in);	
	try (
	int x, y;	
	system. out, printer ("Enter Father?s age"));
	$\mathcal{H} = \mathcal{L} \cdot heritInt();$	
MATERIAL S	System. out printer ("Enter son's age");	
	y = SC. nextInt();	
	San son = new son (x, y);	
	,	o GIN
	System. out, println ("Father Ts age: " + 501	
	System. out, printen ("son's age: "+ son, son	gelj
	with Almaniana) 5	
	catch ((warngAge wa) [
я	System. out. printer (wa);	
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	Output I	Output I		
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	Father's age: \$ 40	Error: Father's age		
	san's age: 5	be negative		
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```
import java.util.Scanner;
class WrongAge extends Exception {
       String message;
        WrongAge (String message) {
               this.message = message;
       }
        public String toString() {
               return "Error: " + message;
       }
}
class Father {
       int fage;
        Father(int x) throws WrongAge {
               if(x<0) {
                       throw new WrongAge("Father's age cannot be negative");
               }
               fage = x;
       }
}
class Son extends Father {
       int sage;
        Son(int x,int y) throws WrongAge {
               super(x);
               if(y<0) {
                       throw new WrongAge("Son's age cannot be negative");
               }
               if(y>=x) {
                       throw new WrongAge("Son's age cannot be greater than Father's age");
               }
```

```
sage = y;
        }
}
class Excep {
        public static void main(String args[]) {
                Scanner sc = new Scanner(System.in);
                try {
                        int x,y;
                        System.out.println("Enter father's age");
                        x=sc.nextInt();
                        System.out.println("Enter son's age");
                        y=sc.nextInt();
                        Son son = new Son(x,y);
                        System.out.println("Father's age: "+son.fage);
                        System.out.println("Son's age: "+son.sage);
                }
                catch (WrongAge wa) {
                        System.out.println(wa);
                }
        }
}
```

```
D:\lBM23CS330>java Excep
Enter father's age
40
Enter son's age
5
Father's age: 40
Son's age: 5

D:\lBM23CS330>java Excep
Enter father's age
-2
Enter son's age
12
Error: Father's age cannot be negative

D:\lBM23CS330>java Excep
Enter father's age
-8
Error: Son's age
-8
Error: Son's age cannot be negative

D:\lBM23CS330>java Excep
Enter father's age
-8
Error: Son's age cannot be negative

D:\lBM23CS330>java Excep
Enter father's age
45
Enter son's age
12
Father's age: 45
Son's age: 12
```