

```
import java.util.Scanner;

class WrongAge extends Exception{

    int a;

    WrongAge(int a)

    {

        this.a=a;

    }

    public String toString(){

        return a+" is a invalid Age";

    }

}

class SonAgeExceedsFatherAge extends Exception{

    int fa,a;

    SonAgeExceedsFatherAge(int fa,int a)

    {

        this.fa=fa;

        this.a=a;

    }

    public String toString(){

        return "father's("+fa+") age cannot be lesser than that of son("+a+")";

    }

}

class Father {

    int fage;

    Father(int a) {

        fage=a;

    }

    public void fathervalidage() throws WrongAge{

        if(fage<0){

            throw new WrongAge(fage);}

    }

}
```

```

}

class Son extends Father{

int age;

Son(int fa,int a)

{

super(fa);

age=a;}

public void sonvalidage() throws SonAgeExceedsFatherAge{

if(fage<age){

throw new SonAgeExceedsFatherAge(fage,age);

}

}

void display()

{

System.out.println("Father's age:"+fage+"\nSon's age:"+age);

}

}

class FatherSon{

public static void main(String args[]){

Scanner sc=new Scanner(System.in);

System.out.println("Shreyas \n1BM23CS319");

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

int fage=sc.nextInt();

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

int age=sc.nextInt();

Son child=new Son(fage,age);

try{

child.fathervalidage();

child.sonvalidage();

System.out.println("Ages are valid");

child.display();

```

```

}

catch(WrongAge e){
System.out.println(e);
}

catch(SonAgeExceedsFatherAge e){
System.out.println(e);
}
}
}
}

```

```

Microsoft Windows [Version 10.0.22631.4602]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Shreyas\OneDrive\ドキュメント\Desktop\java lab>javac FatherSon.java

C:\Users\Shreyas\OneDrive\ドキュメント\Desktop\java lab>java FatherSon.java
Shreyas
1BM23CS319
Enter Father's age:
54
Enter Son's age:
1
Ages are valid
Father's age:54
Son's age:1

C:\Users\Shreyas\OneDrive\ドキュメント\Desktop\java lab>java FatherSon.java
Shreyas
1BM23CS319
Enter Father's age:
19
Enter Son's age:
54
father's(19) age cannot be lesser than that of son(54)

C:\Users\Shreyas\OneDrive\ドキュメント\Desktop\java lab>S|

```

```

class FirstThread extends Thread {
    public void run() {
        while (true) {
            System.out.println("BMS College of Engineering");
            try {
                Thread.sleep(10000);
            } catch (InterruptedException e) {
                System.out.println(e);
            }
        }
    }
}

```

```

class SecondThread extends Thread {
    public void run() {
        while (true) {
            System.out.println("CSE");
            try {
                Thread.sleep(2000);
            } catch (InterruptedException e) {
                System.out.println(e);
            }
        }
    }
}

```

```

class thread{
    public static void main(String[] args) {

        FirstThread thread1 = new FirstThread();
    }
}

```

```
SecondThread thread2 = new SecondThread();
```

```
thread1.start();
```

```
thread2.start();
```

```
}
```

```
}
```

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