Vinjett 6

Felsökning och felhantering

Hej! Jag fick följande ofångade undantag när jag körde programmet med n = 3(jag bifogar båda tracen och koden). Jag hittar inte felet och skulle vara tacksam om du skulle hjälpa mig!

```
Exception in thread "main" java.util.EmptyStackException
     at java.util.Stack.peek(Stack.java:85)
     at java.util.Stack.pop(Stack.java:67)
     at Hanoi.moveB2C(Hanoi.java:60)
     at Hanoi.moveA2C(Hanoi.java:52)
     at Driver.main(Driver.java:8)
```

```
36   void moveA2B(int n){
37       System.out.println("moveA2B: calling moveA2B with " + n + "\nCurrent stacks:" + this);
38       if(n>0){
39        moveA2C(n-1);
40        System.out.println("moveA2B: after calling moveA2C with " + (n-1) + "\nCurrent stacks:" + this);
41        C.push(A.pop());
42        System.out.println("moveA2B: after moving one element ");
43        moveC2B(n-1);
44        System.out.println("moveA2B: after calling moveC2B with " + (n-1) + "\nCurrent stacks:" + this);
45       }
46   }
```

```
48   void moveA2C(int n){
49       if(n>0){
50        moveA2B(n-1);
51        C.push(A.pop());
52        moveB2C(n-1);
53       }
54   }
```

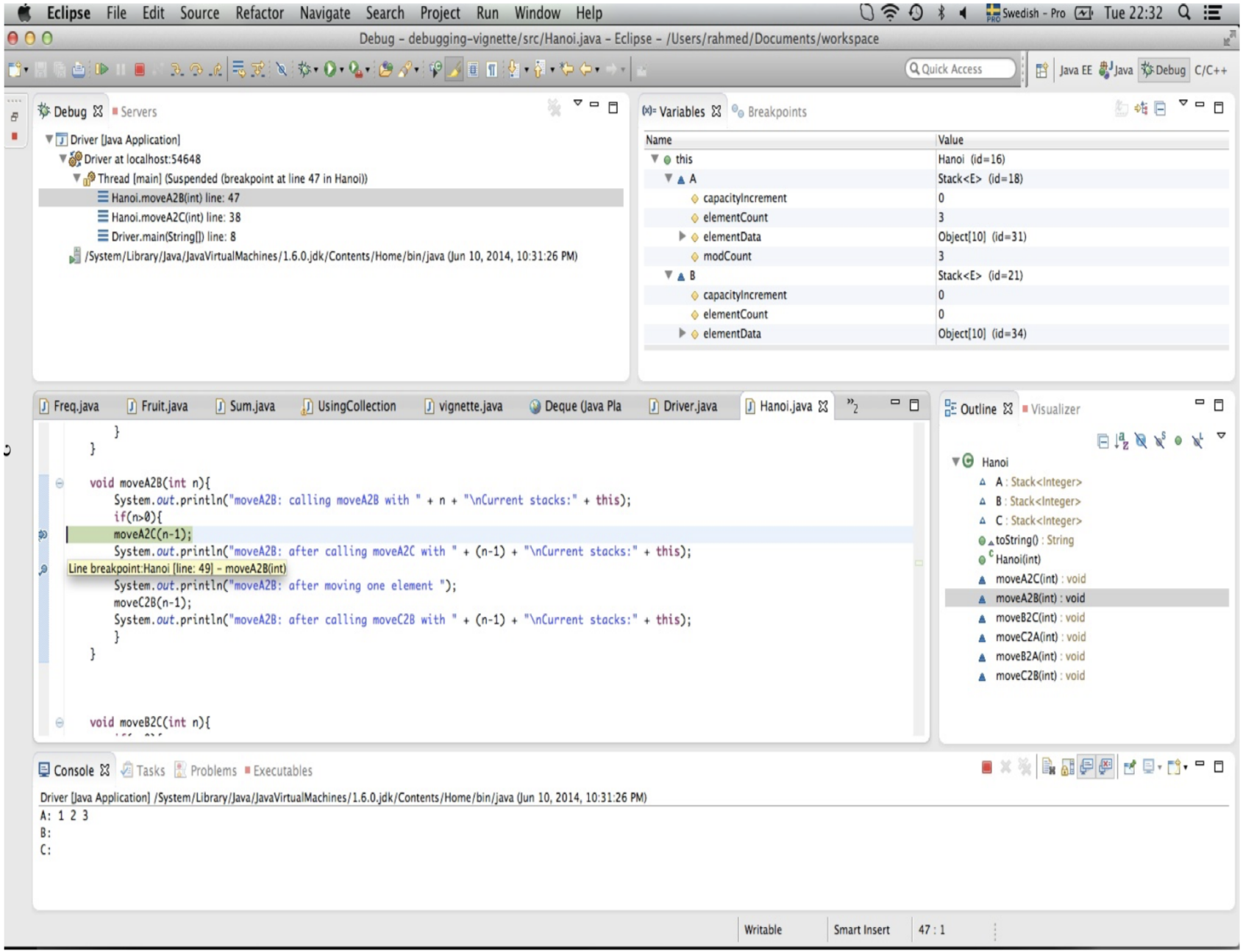
```
56   void moveB2C(int n){
57       if(n>0){
58        moveB2A(n-1);
59        System.out.println(this);
60        C.push(B.pop());
61        System.out.println(this);
62        moveA2C(n-1);
63       }
64   }
```

```
66   void moveC2A(int n){
67       if(n>0){
68        moveC2B(n-1);
69        System.out.println(this);
70        A.push(C.pop());
71        System.out.println(this);
72        moveB2A(n-1);
73       }
74   }
```

```
76       void moveB2A(int n){
77        if(n>0){
78            moveB2C(n-1);
79            System.out.println(this);
80            A.push(B.pop());
81            System.out.println(this);
82            moveC2A(n-1);
83        }
84       }
```

```
87       void moveC2B(int n){
88        if(n>0){
89            moveC2A(n-1);
90            System.out.println(this);
91            B.push(C.pop());
92            System.out.println(this);
93            moveA2B(n-1);
94        }
95       }
96
97   }
```

```
4    public class Driver {
5
6        public static void main(String[] args){
7         Hanoi h=new Hanoi(3);
8         h.moveA2C(3);
9        }
10
11   }
```


Eclipse File Edit Source Refactor Navigate Search Project Run Window Help
Swedish - Pro Tue 22:32
Debug - debugging-vignette/src/Hanoi.java - Eclipse - /Users/rahmed/Documents/workspace
Quick Access
Java EE Java Debug C/C++
Debug Servers
Driver [Java Application]
Driver at localhost:54648
Thread [main] (Suspended (breakpoint at line 47 in Hanoi))
Hanoi.moveA2B(int) line: 47
Hanoi.moveA2C(int) line: 38
Driver.main(String[]) line: 8
/System/Library/Java/JavaVirtualMachines/1.6.0.jdk/Contents/Home/bin/java (Jun 10, 2014, 10:31:26 PM)
Variables Breakpoints
Name
Value
this
Hanoi (id=16)
A
Stack<E> (id=18)
capacityIncrement
0
elementCount
3
elementData
Object[10] (id=31)
modCount
3
B
Stack<E> (id=21)
capacityIncrement
0
elementCount
0
elementData
Object[10] (id=34)
Freq.java
Fruit.java
Sum.java
UsingCollection
vignette.java
Deque (Java Pla
Driver.java
Hanoi.java
}
}
void moveA2B(int n){
System.out.println("moveA2B: calling moveA2B with " + n + "\nCurrent stacks:" + this);
if(n>0){
moveA2C(n-1);
System.out.println("moveA2B: after calling moveA2C with " + (n-1) + "\nCurrent stacks:" + this);
Line breakpoint:Hanoi [line: 49] - moveA2B(int)
System.out.println("moveA2B: after moving one element ");
moveC2B(n-1);
System.out.println("moveA2B: after calling moveC2B with " + (n-1) + "\nCurrent stacks:" + this);
}
}
void moveB2C(int n){
Outline Visualizer
Hanoi
A : Stack<Integer>
B : Stack<Integer>
C : Stack<Integer>
toString() : String
Hanoi(int)
moveA2C(int) : void
moveA2B(int) : void
moveB2C(int) : void
moveC2A(int) : void
moveB2A(int) : void
moveC2B(int) : void
Console Tasks Problems Executables
Driver [Java Application] /System/Library/Java/JavaVirtualMachines/1.6.0.jdk/Contents/Home/bin/java (Jun 10, 2014, 10:31:26 PM)
A: 1 2 3
B:
C:
Writable
Smart Insert
47 : 1