

03、死循环

死循环

1、代码

```
package com.vrv.tune;

public class FindDeadWhile {
    public static void main(String[] args) throws InterruptedException {
        while (true) {
            System.out.println(111);
        }
    }
}
```

2、打包运行通过jps找到pid

```
java -jar jstackDeadWhile.jar
```

```
jps
```

找到pid

19940

3、获取线程号

```
ps p 19940 -L -o pcpu,pid,tid,time,tname,cmd
```

```
19940 19940 19940 00:00:00 pts/1 java -jar jstackDeadWhile.jar
19940 19940 19940 00:00:00 pts/1 java -jar jstackDeadWhile.jar
21.3 19940 19941 00:01:10 pts/1 java -jar jstackDeadWhile.jar
0.0 19940 19942 00:00:00 pts/1 java -jar jstackDeadWhile.jar
0.0 19940 19943 00:00:00 pts/1 java -jar jstackDeadWhile.jar
0.0 19940 19944 00:00:00 pts/1 java -jar jstackDeadWhile.jar
0.0 19940 19945 00:00:00 pts/1 java -jar jstackDeadWhile.jar
0.0 19940 19946 00:00:00 pts/1 java -jar jstackDeadWhile.jar
0.0 19940 19947 00:00:00 pts/1 java -jar jstackDeadWhile.jar
0.0 19940 19948 00:00:00 pts/1 java -jar jstackDeadWhile.jar
0.0 19940 19949 00:00:00 pts/1 java -jar jstackDeadWhile.jar
0.0 19940 19950 00:00:00 pts/1 java -jar jstackDeadWhile.jar
0.0 19940 19951 00:00:00 pts/1 java -jar jstackDeadWhile.jar
0.0 19940 19952 00:00:00 pts/1 java -jar jstackDeadWhile.jar
0.0 19940 19953 00:00:00 pts/1 java -jar jstackDeadWhile.jar
0.0 19940 19954 00:00:00 pts/1 java -jar jstackDeadWhile.jar
0.0 19940 19955 00:00:00 pts/1 java -jar jstackDeadWhile.jar
0.0 19940 19956 00:00:00 pts/1 java -jar jstackDeadWhile.jar
0.0 19940 19957 00:00:00 pts/1 java -jar jstackDeadWhile.jar
0.0 19940 19958 00:00:00 pts/1 java -jar jstackDeadWhile.jar
```

4、将获取的线程号（十进制数）转换成十六进制,此处为0x4de5

```
printf "%x\n" 19941
```

0x4de5

5、jstack找到死循环

```
jstack -l 19940
```

Locked ownable synchronizers:

- None

```
"main" prio=10 tid=0x00007f5c70008800 nid=0x4de5 runnable [0x00007f5c7574f000]  
  java.lang.Thread.State: RUNNABLE  
    at java.io.FileOutputStream.writeBytes(Native Method)  
    at java.io.FileOutputStream.write(FileOutputStream.java:345)  
    at java.io.BufferedOutputStream.flushBuffer(BufferedOutputStream.java:82)  
    at java.io.BufferedOutputStream.flush(BufferedOutputStream.java:140)  
    - locked <0x0000000061fe0d160> (a java.io.BufferedOutputStream)  
    at java.io.PrintStream.write(PrintStream.java:482)  
    - locked <0x0000000061fe0c6a8> (a java.io.PrintStream)  
    at sun.nio.cs.StreamEncoder.writeBytes(StreamEncoder.java:221)  
    at sun.nio.cs.StreamEncoder.implFlushBuffer(StreamEncoder.java:291)  
    at sun.nio.cs.StreamEncoder.flushBuffer(StreamEncoder.java:104)  
    - locked <0x0000000061fe0c638> (a java.io.OutputStreamWriter)  
    at java.io.OutputStreamWriter.flushBuffer(OutputStreamWriter.java:185)  
    at java.io.PrintStream.newLine(PrintStream.java:546)  
    - eliminated <0x0000000061fe0c6a8> (a java.io.PrintStream)  
    at java.io.PrintStream.println(PrintStream.java:737)  
    - locked <0x0000000061fe0c6a8> (a java.io.PrintStream)  
    at com.vrv.tune.FindDeadWhile.main(FindDeadWhile.java:6)
```

Locked ownable synchronizers:

- None