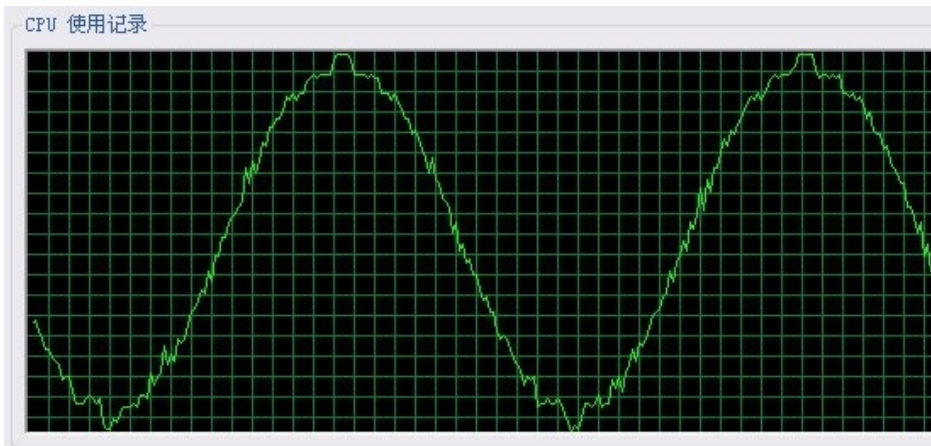
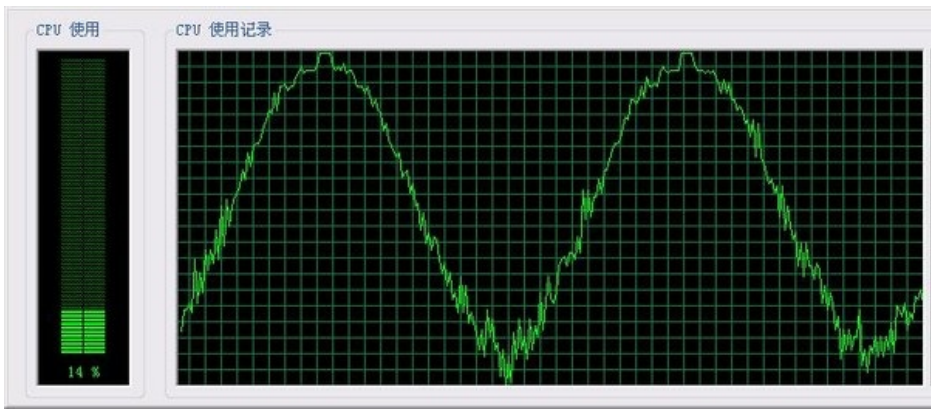


写程序让CPU占用率保持正弦函数



导入自 [renren](#)

据说是一道微软的面试题。如题，写程序，让Windows的任务管理器中的性能监视器呈现正弦曲线。



潜心钻研良久，得代码：（java）

```
1 public class sincpu {  
2     private static final int cycle=  
1024,tick = 256;  
3     public static void main (String  
[] args) throws InterruptedException {  
4         for(int i = 0;;i++){  
5             work(calcNextSleep(i %  
cycle));  
6             sleep(tick - calcNextSl  
eep(i % cycle));
```

```
7         }
8     }
9
10    private static long calcNextSleep(long i){
11        return (int)(Math.sin((double)i * 2 * Math.PI / cycle) * tick + tick) / 2;
12    }
13
14    private static void sleep (long sleepTime) throws InterruptedException
15    {
16        if(sleepTime < 2)
17            Thread.yield();
18        else
19            Thread.sleep(sleepTime);
20    }
21
22    private static void work (long period) {
23        long start = System.currentTimeMillis();
24        for(;;){
25            Math.sin(1);
26            if(System.currentTimeMillis() - start >= period)
27                break;
28        }
29    }
30 }
```

多核CPU上测试时要注意关掉一个CPU：

