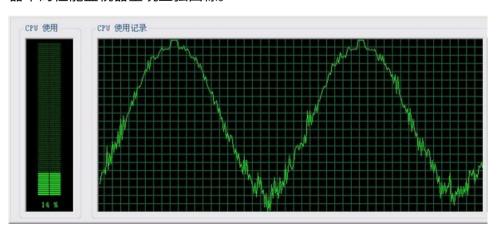
寫程序讓CPU佔用率保持 正弦函數 ^②

導入自 renren

據說是一道微軟的面試題。如題,寫程序,讓Windows的任務管理 器中的性能監視器呈現正弦曲線。



潛心鑽研良久,得代碼:(java)

```
public class sincpu {
 1
 2
      private static final int cycle=1024, tick = 256;
 3
      public static void main (String[] args) throws InterruptedExce
ption {
        for(int i = 0;; i++){
4
5
          work(calcNextSleep(i % cycle));
          sleep(tick - calcNextSleep(i % cycle));
 6
7
        }
8
      }
9
10
      private static long calcNextSleep(long i){
11
         return (int)(Math.sin((double)i * 2 * Math.PI / cycle) * tick + t
ick) / 2;
12
      }
13
      private static void sleep (long sleepTime) throws Interrupted
14
Exception
15
      {
        if(sleepTime < 2)
16
           Thread.yield();
17
18
         else
19
           Thread.sleep(sleepTime);
20
      }
21
22
      private static void work (long period) {
23
        long start = System.currentTimeMillis();
        for(;;){
24
25
           Math.sin(1);
           if(System.currentTimeMillis() - start >= period)
26
27
             break;
28
        }
29
      }
30 }
```

多核CPU上測試時要注意關掉一個CPU:

