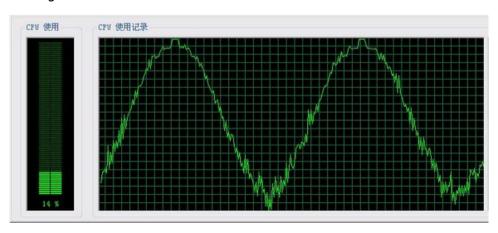
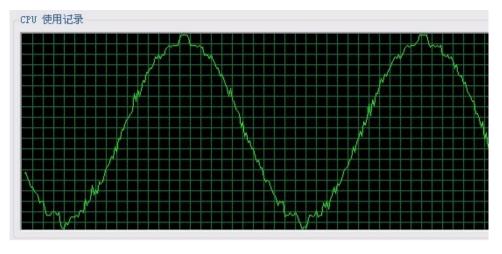
## Write a program to keep CPU usage as sin funcion

Ø

Imported from: renren.

It is said that this is a problem from interview of Microsoft. Write a program, which makes the CPU usage curve in Windows Task Manager shows a Sin function.





The program below is written in java:

```
public class sincpu {
1
2
       private static final int cycle=1024,tick = 2
56:
       public static void main (String[] args) thro
3
ws InterruptedException {
            for(int i = 0::i++){}
4
5
                work(calcNextSleep(i % cycle));
                sleep(tick - calcNextSleep(i % cycle
6
));
           }
7
       }
8
9
        private static long calcNextSleep(long i){
10
            return (int)(Math.sin((double)i * 2 * M
11
ath.PI / cycle) * tick + tick) / 2;
        }
12
13
14
        private static void sleep (long sleepTime)
throws InterruptedException
15
        {
            if(sleepTime < 2)</pre>
16
17
                Thread.yield();
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):
26
                if(System.currentTimeMillis() - sta
rt >= period)
27
                    break;
28
            }
        }
29
30 }
```

Be careful you need to turn off other cores if you have multi-core

## CPU.

