



链滴

求助，java join 的原理

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原文链接: <https://ld246.com/article/1501995350129>

来源网站: [链滴](#)

许可协议: [署名-相同方式共享 4.0 国际 \(CC BY-SA 4.0\)](#)

Thread类中, join方法的实现:

```
public final synchronized void join(long millis)
    throws InterruptedException {
    long base = System.currentTimeMillis();
    long now = 0;

    if (millis < 0) {
        throw new IllegalArgumentException("timeout value is negative");
    }

    if (millis == 0) {
        while (isAlive()) {
            wait(0);
        }
    } else {
        while (isAlive()) {
            long delay = millis - now;
            if (delay <= 0) {
                break;
            }
            wait(delay);
            now = System.currentTimeMillis() - base;
        }
    }
}
```

比如:

```
public static void main(String[] args) throws InterruptedException {
    System.out.println(Thread.currentThread().getName() + " at begin ");
    Thread t1 = new Thread(new Runnable(){
        public void run() {
            System.out.println(" Thread t1 stats");
            try {
                Thread.sleep(5000);
            } catch (InterruptedException e) {
                e.printStackTrace();
            }
            System.out.println("Thread t1 ends");
        }
    });

    t1.start();
    t1.join();// t1调用join();t1会wait(0),那么t1是如何让main线程等待的呢

    System.out.println(Thread.currentThread().getName() + " at end ");
}
```