In [ ]:
```python
import threading
var=0
def f1():
    global var
    var=var+1
def f2():
    for v in range(100000000):
        f1()
def f3():
    global var
    var=0
    threading.Thread(target=f2).start()
    threading.Thread(target=f2).start()


for v in range(15):
    f3()
    print("var value:{}".format(var))
```

In [8]:
```python
import threading

var=0
def f1():
    global var
    var=var+1
def f2():
    for v in range(10):
        f1()
def f3():
    global var
    var=0
    threading.Thread(target=f2).start()
    threading.Thread(target=f2).start()


for v in range(15):
    f3()
    print("var value:{}".format(var))
```

```
var value:31965567
var value:32155298
var value:32295815
var value:32655937
var value:32742167
var value:32820396
var value:845184
var value:1132522
var value:896451
var value:1288518
var value:1475324
var value:529683
var value:784816
var value:1343201
var value:1661076
```

```
In [ ]:  # create a resource              Lobj=threading.Lock()
         #  lock  - Thread entered -       Lobj.acquire()
         #                      |               cs code block
         # unlock                          Lobj.release()

         #  T1  T2   T3
         #  |  |   |            Lock
         #  ( execution  )
         #    Crititcal section - relase

         t1 t2 t3 .. t20//active state
                [ ]
         c=1   [tx]
         c-=1
         c=0 -> c=0 -[tx]-
                   [ ]
         c+=1
         c=1 ------ [ ]....[tx1]
         c-=1
         c=0 ------>[tx1]
                   |_release
         c+=1 ----->[]
         c=0,1
           ----
```

```python
import threading

var=0
def f1():
    global var
    var=var+1
def f2(Lobj):
    for v in range(10000):
        Lobj.acquire() # lock
        f1()
        Lobj.release() # unlock
def f3():
    global var
    var=0
    Lobj=threading.Lock()
    threading.Thread(target=f2,args=(Lobj,)).start()
    threading.Thread(target=f2,args=(Lobj,)).start()


for v in range(10):
    f3()
    print("var value:{}".format(var))
```

```
var value:13902078
var value:265166
var value:291099
var value:173064
var value:414553
var value:532528
var value:615632
var value:597531
var value:109820
var value:380291
```