```
from multiprocessing import Process
from multiprocessing import current_process
from multiprocessing import Value, Array

N = 8
def task(common, tid, turn):
    a = 0
    for i in range(100):
        print(f'{tid}-{i}: Non-critical Section')
        a += 1
        print(f'{tid}-{i}: End of non-critical Section')
        while turn.value!=tid:
            pass
        print(f'{tid}-{i}: Critical section')
        v = common.value + 1
        print(f'{tid}-{i}: Inside critical section')
        common.value = v
        print(f'{tid}-{i}: End of critical section')
        turn.value = (tid + 1) % N

def main():
    lp = []
    common = Value('i', 0)
    turn = Value('i', 0)
    for tid in range(N):
        lp.append(Process(target=task, args=(common, tid, turn)))
    print (f"Valor inicial del contador {common.value}")
    for p in lp:
        p.start()

    for p in lp:
        p.join()

    print (f"Valor final del contador {common.value}")
    print ("fin")


if __name__ == "__main__":
    main()
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from multiprocessing import Process
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N = 8

def is_anybody_inside(critical, tid):
    found = False
    i = 0
    while i<len(critical) and not found:
        found = tid!=i and critical[i]==1
        i += 1
    return found

def task(common, tid, critical):
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    for i in range(100):
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        while is_anybody_inside(critical, tid):
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        critical[tid] = 1
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        v = common.value + 1
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        common.value = v
        print(f'{tid}-{i}: End of critical section')
        critical[tid] = 0

def main():
    lp = []
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    critical = Array('i', [0]*N)
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        critical[tid] = 1
        while is_anybody_inside(critical, tid):
            critical[tid] = 0
            print(f'{tid}-{i}: Giving up')
            critical[tid] = 1
        print(f'{tid}-{i}: Critical section')
        v = common.value + 1
        print(f'{tid}-{i}: Inside critical section')
        common.value = v
        print(f'{tid}-{i}: End of critical section')
        critical[tid] = 0

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