

test show python source code in pdf
here comes the code

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import queue
import threading
import sys
import time
import urllib

#thread obj in thread pool
class MyThread(threading.Thread):
    def __init__(self, workQueue, resultQueue, timeout=2):
        threading.Thread.__init__(self)
        self.timeout = timeout#time that a thread wait for a
        queue
        self.setDaemon(True)#stop with main thread
        self.workQueue = workQueue
        self.resultQueue = resultQueue
        self.start()
    def run(self):
        #continuously run until workQueue empty
        while True:
            try:
                #get a job from workQueue, do it and add res to
                resultQueue
                callable, args=self.workQueue.get(timeout=self.
                    timeout)
                print('{}_running, _job={},_parameters={}'.format(
                    self.getName(), callable, args))
                res = callable(args)
                #self.resultQueue.put(res+" | "+self.getName())
            except queue.Empty:
                break
            except :
                print(sys.exc_info())

class ThreadPool:
    def __init__(self, num_of_threads=10):
        self.workQueue = queue.Queue()
        self.resultQueue = queue.Queue()
        self.threads = []
        self._createThreadPool(num_of_threads)
    def _createThreadPool(self, num_of_threads):
        for i in range(num_of_threads):
            thread = MyThread(self.workQueue, self.resultQueue
                )
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        self.threads.append(thread)
def wait_for_complete(self):
    while len(self.threads):
        thread = self.threads.pop()
        if thread.isAlive():
            thread.join()
def add_job(self, callable, *args):
    self.workQueue.put( (callable, args) )

def getNet1(rid):
    time.sleep(0.1)
    #print('getNet1 of {}'.format(rid[0]))
    return rid

def test():
    #test data:10 jobs,3 threads
    nJob=11
    nThread=3
    tp = ThreadPool(nThread)
    start=time.time()
    for i in range(nJob):
        tp.add_job(getNet1, i)
    stop=time.time()
    print('{}_cost_to_add_{}_jobs'.format(stop-start, nJob))
    tp.wait_for_complete()

if __name__=='__main__':
    test()

```