

```
1 def producer():
2     context = zmq.Context()
3     socket = context.socket(zmq.PUSH)      # create a push socket
4     socket.bind("tcp://127.0.0.1:12345")    # bind socket to address
5
6     while True:
7         workload = random.randint(1, 100)  # compute workload
8         socket.send(pickle.dumps(workload)) # send workload to worker
9         time.sleep(workload/NWORKERS)      # balance production by waiting
10
11 def worker(id):
12     context = zmq.Context()
13     socket = context.socket(zmq.PULL)      # create a pull socket
14     socket.connect("tcp://localhost:12345") # connect to the producer
15
16     while True:
17         work = pickle.loads(socket.recv())  # receive work from a source
18         time.sleep(work)                   # pretend to work
```