plots

November 16, 2021

```python
from collections import defaultdict, Counter
import matplotlib.pyplot as plt
import os

def plot(dat, title):
    data = defaultdict(int)
    denom = Counter(dat[0])
    for s,t in zip(dat[0], dat[1]):
        data[s] += t/denom[s]

    lists = sorted(data.items())
    x, y = zip(*lists)
    print("total requests:", len(dat[0]))
    # print(sorted(y)[:10])
    plt.plot(x,y)
    plt.title(title)
    plt.ylabel("Average wait time [ns]")
    plt.xlabel("Block size")
    # plt.show()

def plot_all(filename):
    with open(filename) as f:
        lines = f.readlines()
        for i in range(len(lines)):
            lines[i] = list(map(lambda x: int(x), lines[i][1:-2].
 replace(",","").split(" ")))
        producers = lines[:2]
        consumers = lines[2:]
    plt.subplot(1,2,1)
    plot(producers, filename + " -- Producers")
    plt.subplot(1,2,2)
    plot(consumers, filename + " -- Consumers")
    plt.rcParams['figure.figsize'] = [50/2.54, 16/2.54]
    plt.show()
```
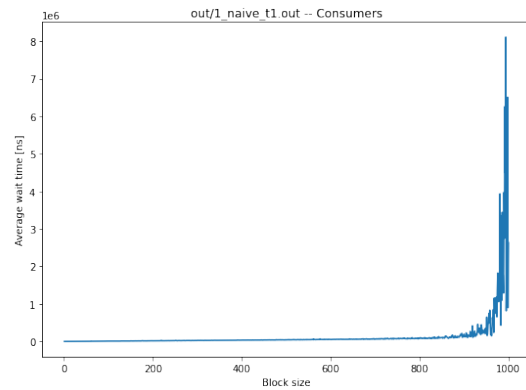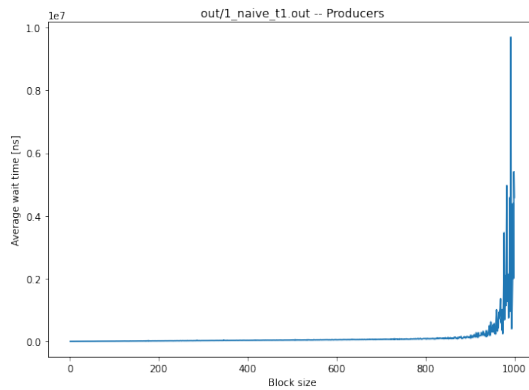
1 Wykresy

W tytułach wykresów, t1, t2, oraz t3 to kolejne testy z zasugerowanych w treści zadania, czyli:
"Przykładowy zestaw testow: M rowne 1000, 10k, 100k Konfiguracji P-K: 10P+10K, 100P+100K,
1000P+1000K"

```
folder = "out/"
for f in sorted(os.listdir(folder)):
    plot_all(os.path.join(folder, f))
```
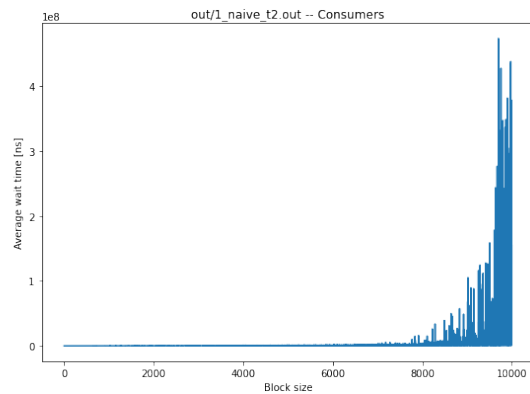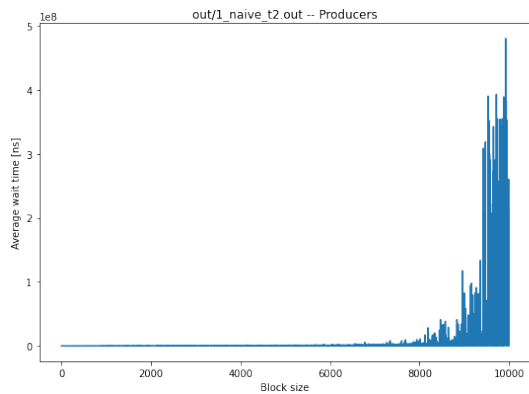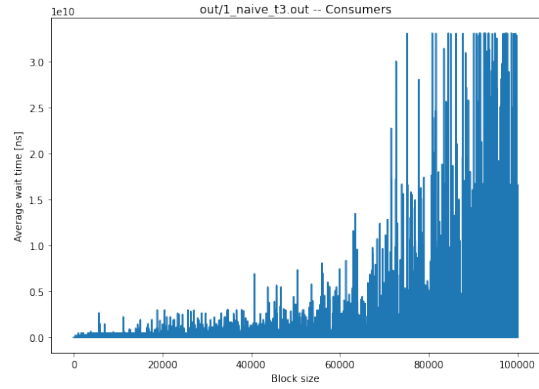
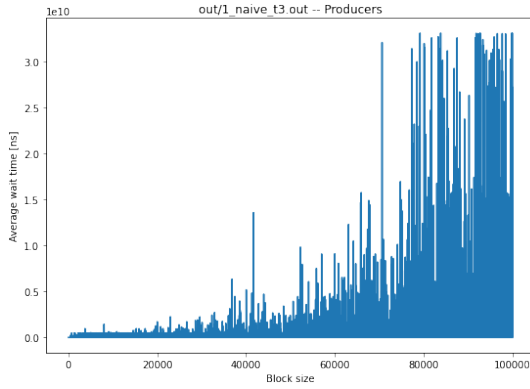total requests: 2246773
total requests: 2248927
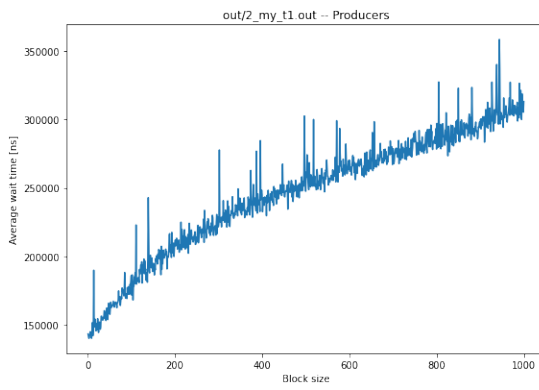

total requests: 857597
total requests: 857447

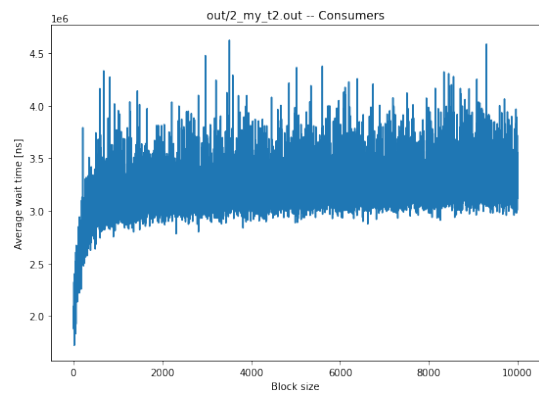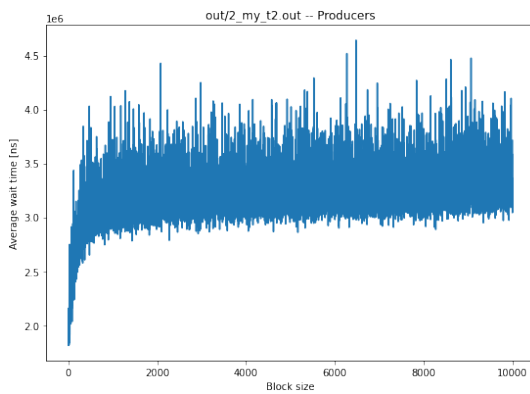
total requests: 124615
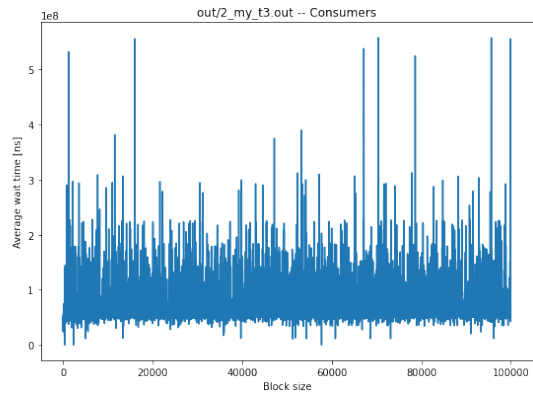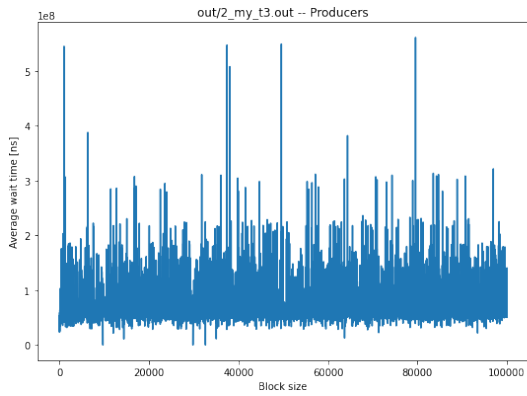total requests: 124800

total requests: 1215618
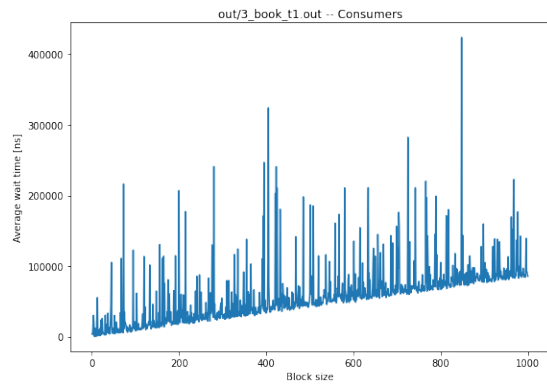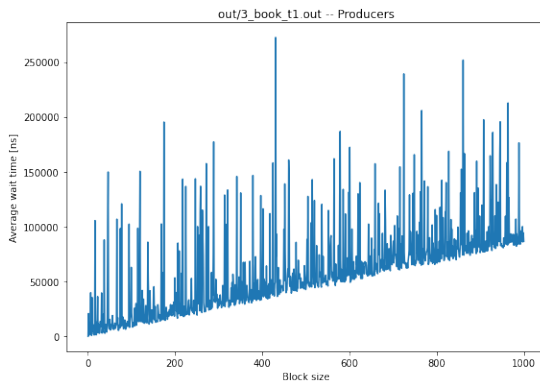total requests: 1214891
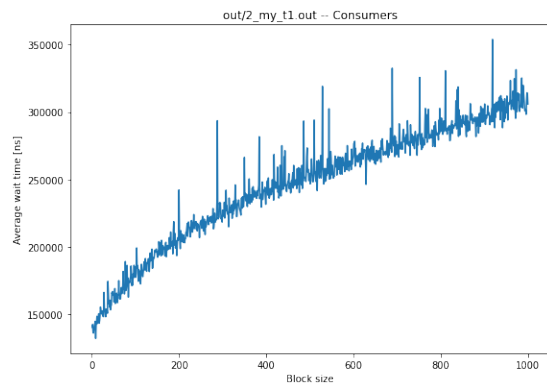
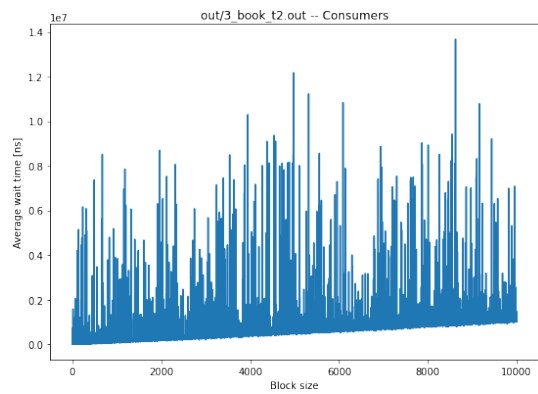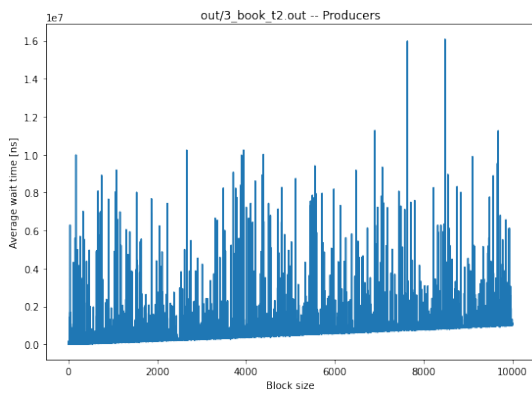total requests: 936595
total requests: 936825

```
total requests: 493654
total requests: 493976
```



```
total requests: 5011605
total requests: 5010453
```
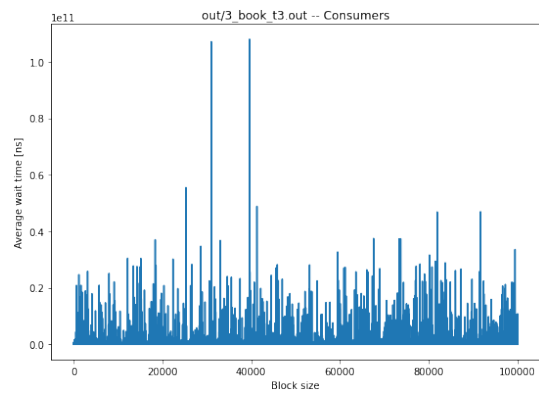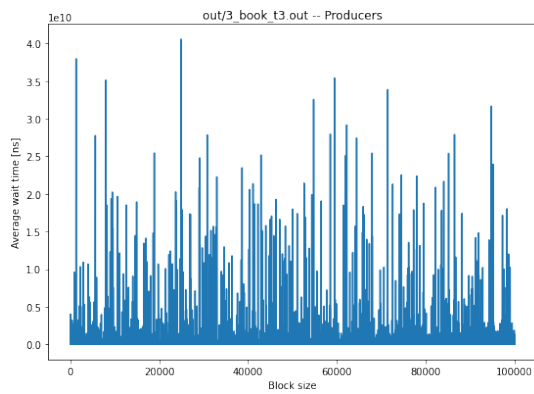


```
total requests: 4057858
total requests: 4055087
```

```
total requests: 438950
total requests: 437555
```



```
[ ]:
```