Demo : https://youtu.be/_eJ6Lx8Qf-Q

1. Run command:
   ./client -n 15000 -p 15 -w 500 -b 100

```
osboxes@osboxes:~/CSCE313/PA5/PA5$ ./client -n 15000 -p 15 -w 500 -b 100
Patient threads finished
Event polling thread finished
Histogram threads are done. All client threads are now done
Took 16 seconds and 769287 micro seconds
--------------------------------------------------------------------------------------------
[-2.00,-1.60):     0    77    10     0    77     0     4     0   409     0  1979     0     4    75  3971
[-1.60,-1.20):     0   824   213     9   178     0    71     5   253     0   380     0   128   460   962
[-1.20,-0.80):   164  1527   827    14  1063    38   546   351  1701     0   925   395  1248   512   859
[-0.80,-0.40):  6395  5188  3236  1918  5611  7698  4908   431  5090  5431  3116  4444  4326  5543   917
[-0.40,-0.00):  6565  4629 10358 12869  5779  6534  9266 13375  4577  8598  2144  8924  8426  7195  1246
[-0.00, 0.40):   948  2072   347   190  1457   710   205   833  1675   549  2026  1233   524   486  1196
[ 0.40, 0.80):   723   613     9     0   468    20     0     5   439   391  1363     4   107   523  1068
[ 0.80, 1.20):   193    70     0     0   320     0     0     0   289    24  1670     0    78   200   592
[ 1.20, 1.60):    12     0     0     0    47     0     0     0   279     7   804     0    60     6   450
[ 1.60, 2.00):     0     0     0     0     0     0     0     0   288     0   593     0    99     0  3739
--------------------------------------------------------------------------------------------
[-2.00, 2.00): 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000
Server terminated
All Done!!!
```

2. Run command:
   ./client -n 15 -p 1 -w 100 -b 100

```
osboxes@osboxes:~/CSCE313/PA5/PA5$ ./client -n 15 -p 1 -w 100 -b 100
Patient threads finished
Event polling thread finished
Histogram threads are done. All client threads are now done
Took 0 seconds and 10435 micro seconds
--------------------
[-2.00,-1.60):      0
[-1.60,-1.20):      0
[-1.20,-0.80):      0
[-0.80,-0.40):      0
[-0.40,-0.00):      0
[-0.00, 0.40):      4
[ 0.40, 0.80):     11
[ 0.80, 1.20):      0
[ 1.20, 1.60):      0
[ 1.60, 2.00):      0
--------------------
[-2.00, 2.00):     15
Server terminated
All Done!!!
```

3. Run command:

```
./client -f handout.pdf -w 50
diff BIMDC/handout.pdf received/handout.pdf
```

```
osboxes@osboxes:~/CSCE313/PA5/PA5$ ./client -f handout.pdf -w 50
Event polling thread finished
Took 0 seconds and 17166 micro seconds
Server terminated
All Done!!!
osboxes@osboxes:~/CSCE313/PA5/PA5$ diff BIMDC/handout.pdf received/handout.pdf
osboxes@osboxes:~/CSCE313/PA5/PA5$
```

4. Run command:
   ./client -n 10000 -p 10 -w **X** -b 100

   Replace **X** with 100, 200, 300, 400, 500 in PA4 and PA5 respectively:
   Compare the results of PA4 with PA5 (seconds):

w	PA5	PA4
100	3.638600	3.055021
200	4.227838	3.233742
300	4.583350	3.713894
400	4.747818	3.998186
500	4.934134	4.317647

I am confused about the results. One possible reason I can think it up is : maybe the runtime environment is a little different.