

All my timings were for the different types of heaps are shown below. First is all the leftist timings then the skew heap timings. Usually we have something else to write here but I don't see that said anywhere in the lab instructions for this lab.

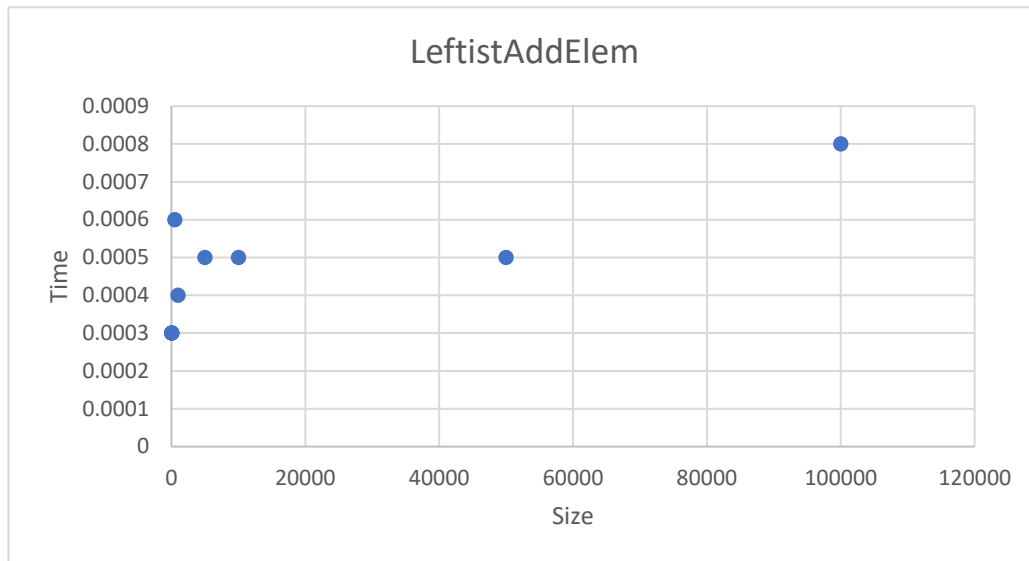
Leftist Heap

Add

Size	10	50	100	500	1000	5000	10000	50000
Trial no.1	0	0.000001	0	0.000001	0.000001	0	0	0.000001
2	0	0	0	0.000001	0	0.000001	0.000001	0.000001
3	0	0	0	0.000001	0	0.000001	0	0.000001
4	0.000001	0	0.000001	0.000001	0	0.000001	0	0.000001
5	0.000001	0.000001	0	0	0.000001	0	0.000001	0.000001
6	0	0	0	0	0.000001	0	0.000001	0
7	0	0	0.000001	0	0.000001	0.000001	0.000001	0
8	0.000001	0.000001	0.000001	0	0	0.000001	0.000001	0
9	0	0	0	0.000001	0	0	0	0
10	0	0	0	0.000001	0	0	0	0
		100000						
		0.000001						
		0.000001						
		0						
		0						
		0.000001						
		0.000001						
		0.000001						
		0.000001						
		0.000001						
		0.000001						

Average

size	Time	Time in ms
10	3.00E-07	0.0003
50	3.00E-07	0.0003
100	3.00E-07	0.0003
500	6.00E-07	0.0006
1000	4.00E-07	0.0004
5000	5.00E-07	0.0005
10000	5.00E-07	0.0005
50000	5.00E-07	0.0005
100000	8.00E-07	0.0008



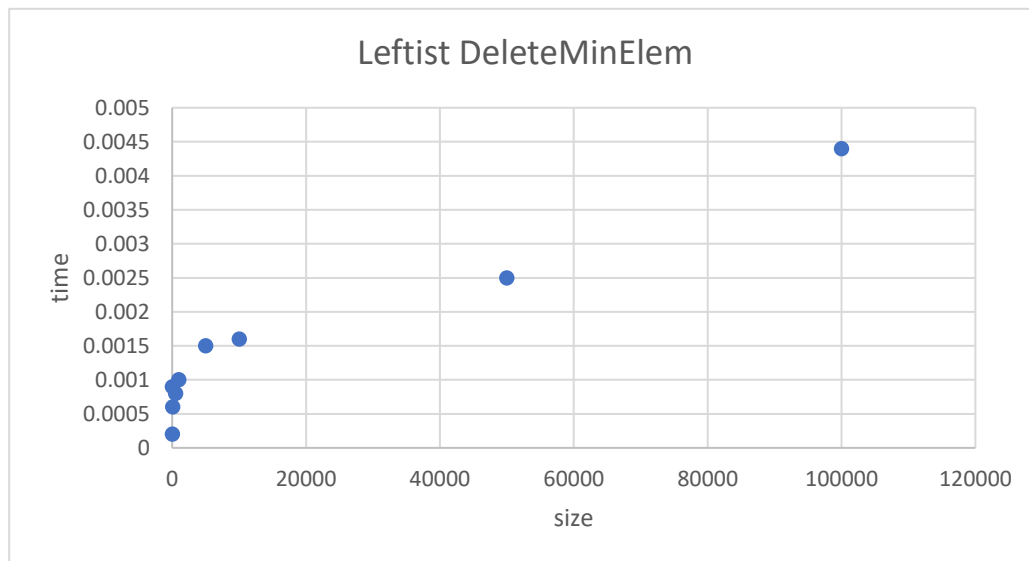
Leftist Heap

Delete min

Size	10	50	100	500	1000	5000	10000	50000
Trial no.1	0	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001	0.000004
2	0	0.000001	0	0.000001	0.000001	0.000001	0.000001	0.000003
3	0	0.000001	0.000001	0.000001	0.000001	0.000002	0.000001	0.000002
4	0.000001	0.000001	0.000001	0.000001	0.000001	0.000002	0.000002	0.000003
5	0	0.000001	0.000001	0	0.000001	0.000002	0.000002	0.000003
6	0	0	0	0.000001	0.000001	0.000001	0.000002	0.000002
7	0	0.000001	0	0.000001	0.000001	0.000001	0.000002	0.000002
8	0	0.000001	0.000001	0	0.000001	0.000002	0.000002	0.000002
9	0.000001	0.000001	0	0.000001	0.000001	0.000002	0.000001	0.000002
10	0	0.000001	0.000001	0.000001	0.000001	0.000001	0.000002	0.000002
		100000						
		0.000005						
		0.000004						
		0.000004						
		0.000005						
		0.000005						
		0.000005						
		0.000005						
		0.000004						
		0.000004						
		0.000003						

Average

size	Time	Time in ms
10	2.00E-07	0.0002
50	9.00E-07	0.0009
100	6.00E-07	0.0006
500	8.00E-07	0.0008
1000	1.00E-06	0.001
5000	1.50E-06	0.0015
10000	1.60E-06	0.0016
50000	2.50E-06	0.0025
100000	4.40E-06	0.0044



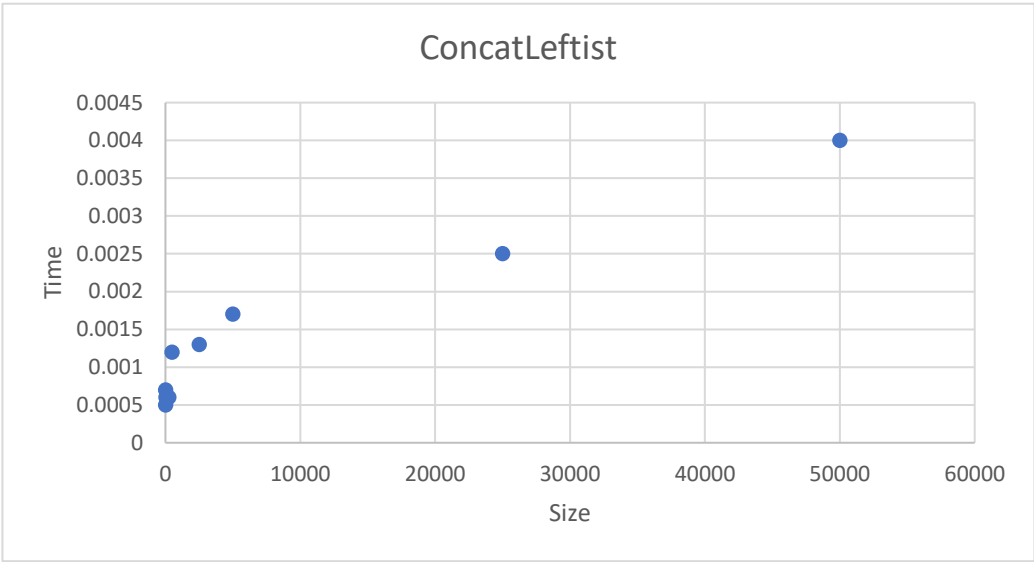
Leftist Heap
concat

Size	5	25	50	250	500	2500	5000	25000
Trial no.1	0.000001	0.000001	0.000001	0	0.000001	0.000002	0.000001	0.000003
2	0.000001	0	0.000001	0.000001	0.000001	0.000002	0.000002	0.000003
3	0	0.000001	0.000001	0.000001	0.000001	0.000002	0.000001	0.000001
4	0	0.000001	0	0.000001	0.000001	0.000001	0.000002	0.000002
5	0.000001	0.000001	0	0.000001	0.000001	0.000001	0.000002	0.000003
6	0.000001	0	0	0	0.000002	0.000001	0.000002	0.000003
7	0.000001	0.000001	0	0	0.000001	0.000001	0.000001	0.000003
8	0	0.000001	0.000001	0.000001	0.000001	0.000001	0.000002	0.000002
9	0	0	0.000001	0	0.000001	0.000001	0.000002	0.000003
10	0	0.000001	0.000001	0.000001	0.000002	0.000001	0.000002	0.000002
		50000						
		0.000004						

0.000005
0.000004
0.000004
0.000004
0.000003
0.000004
0.000005
0.000004
0.000003

Average

size	Time	Time in ms
5	5.00E-07	0.0005
25	7.00E-07	0.0007
50	6.00E-07	0.0006
250	6.00E-07	0.0006
500	1.20E-06	0.0012
2500	1.30E-06	0.0013
5000	1.70E-06	0.0017
25000	2.50E-06	0.0025
50000	4.00E-06	0.004



Skew Heap
Add

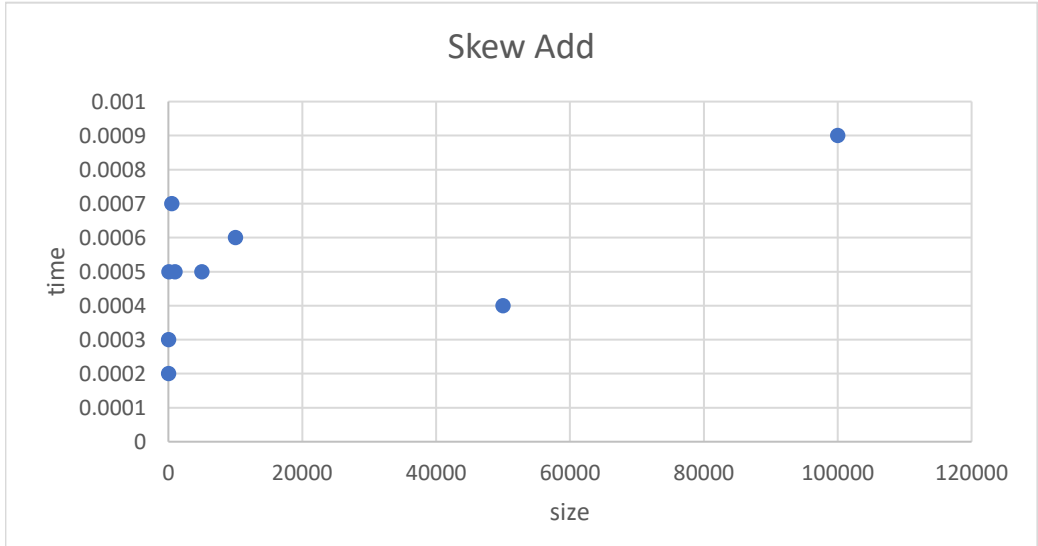
Size	10	50	100	500	1000	5000	10000	50000
Trial no.1	0	0	0.000001	0	0.000001	0	0	0.000001
2	0	0	0	0	0	0.000001	0.000001	0

3	0	0.000001	0	0	0	0	0	0.000001
4	0.000001	0.000001	0.000001	0.000001	0.000001	0	0.000001	0.000001
5	0	0.000001	0.000001	0.000001	0.000001	0.000001	0	0.000001
6	0	0	0	0.000001	0.000001	0.000001	0.000001	0
7	0	0	0	0.000001	0	0.000001	0.000001	0
8	0	0	0	0.000001	0	0	0.000001	0
9	0.000001	0	0.000001	0.000001	0	0	0.000001	0
10	0	0	0.000001	0.000001	0.000001	0.000001	0	0

100000
0.000001
0.000001
0
0.000001
0.000001
0.000001
0.000001
0.000001
0.000001
0.000001
0.000001

Average

size	Time	Time in ms
10	2.00E-07	0.0002
50	3.00E-07	0.0003
100	5.00E-07	0.0005
500	7.00E-07	0.0007
1000	5.00E-07	0.0005
5000	5.00E-07	0.0005
10000	6.00E-07	0.0006
50000	4.00E-07	0.0004
100000	9.00E-07	0.0009

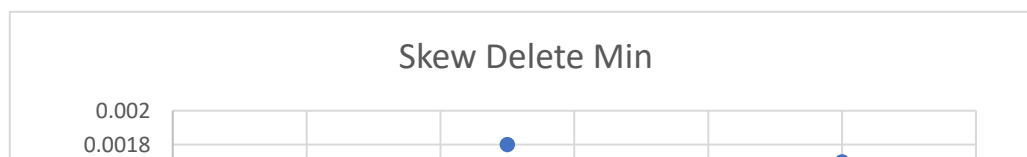


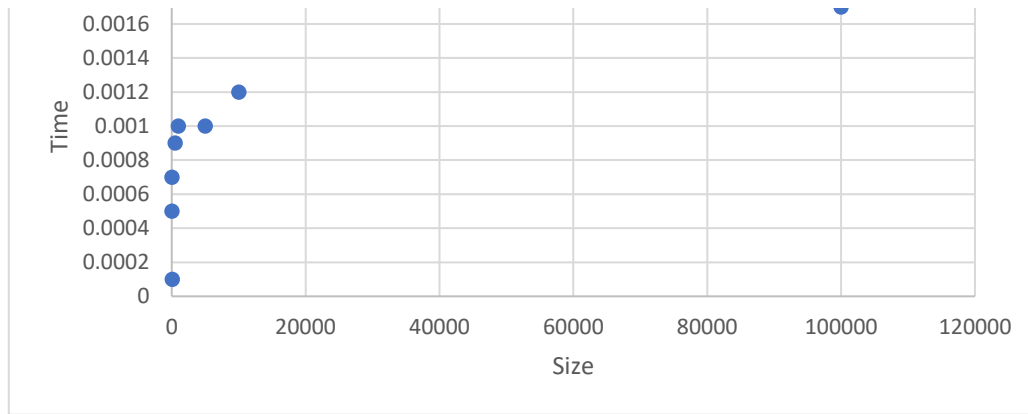
Skew Heap Delete min

Size	10	50	100	500	1000	5000	10000	50000
Trial no.1	0.000002	0.000001	0	0.000001	0.000001	0.000001	0.000002	0.000003
2	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001	0.000002
3	0.000001	0.000001	0	0.000002	0.000001	0.000001	0.000001	0.000002
4	0	0.000001	0	0.000001	0.000001	0	0.000002	0.000002
5	0	0.000001	0	0.000001	0.000001	0.000001	0.000001	0.000002
6	0	0	0	0.000001	0.000001	0.000001	0.000001	0.000001
7	0	0	0	0.000001	0.000001	0.000002	0.000001	0.000002
8	0	0	0	0	0.000001	0.000001	0.000001	0.000001
9	0.000001	0.000001	0	0	0.000001	0.000001	0.000001	0.000001
10	0	0.000001	0	0.000001	0.000001	0.000001	0.000001	0.000002
		100000						
		0.000002						
		0.000001						
		0.000001						
		0.000002						
		0.000001						
		0.000001						
		0.000002						
		0.000002						
		0.000003						
		0.000002						

Average

size	Time	Time in ms
10	5.00E-07	0.0005
50	7.00E-07	0.0007
100	1.00E-07	0.0001
500	9.00E-07	0.0009
1000	1.00E-06	0.001
5000	1.00E-06	0.001
10000	1.20E-06	0.0012
50000	1.80E-06	0.0018
100000	1.70E-06	0.0017





Skew Heap concat

Size	5	25	50	250	500	2500	5000	25000
Trial no.1	0.000002	0.000001	0	0	0.000002	0.000001	0.000002	0.000003
2	0.000001	0.000001	0	0.000001	0.000001	0.000001	0.000002	0.000003
3	0.000001	0.000001	0	0	0	0.000002	0.000002	0.000002
4	0	0.000001	0	0	0.000001	0.000002	0.000002	0.000002
5	0	0	0	0	0.000001	0.000001	0.000001	0.000002
6	0	0	0.000001	0.000001	0.000001	0.000002	0.000002	0.000002
7	0.000001	0	0.000001	0.000001	0.000001	0.000002	0.000001	0.000002
8	0	0	0.000001	0.000001	0.000001	0.000001	0.000002	0.000002
9	0	0.000001	0	0	0.000001	0.000001	0.000003	0.000002
10	0.000001	0.000001	0.000001	0.000001	0.000001	0.000002	0.000002	0.000003
		50000						
		0.000004						
		0.000004						
		0.000003						
		0.000005						
		0.000004						
		0.000005						
		0.000004						
		0.000005						
		0.000004						
		0.000003						

Average

size	Time	Time in ms
5	6.00E-07	0.0006
25	6.00E-07	0.0006
50	4.00E-07	0.0004

250	5.00E-07	0.0005
500	1.00E-06	0.001
2500	1.50E-06	0.0015
5000	1.90E-06	0.0019
25000	2.30E-06	0.0023
50000	4.10E-06	0.0041

