REPORT - FIRST

Table 1.1 - Average Execution time for Reentrant, Filter & Bakery Lock for {1, 2, 4, …. 16} threads in nanoseconds (seconds)

Threads	Java Reentrant Lock	Filter Lock	Bakery Lock
1	1,682,341	1,023,802	1,257,121
2	8,25,432	1,605,451	2,075,577
4	1,382,092	4,825,102	3,406,449
6	1,224,304	3,332,547	2,406,467
8	3,476,351	9,418,921	2,158,813
10	1,033,444	18,830,317	3,148,547
12	880,351	16,060,050	4,545,093
14	503,711	40,278,632	7,233,434
16	591,700	47,814,037	4,101,813

Table 1.2 - Overall mean and standard deviation of every lock

Lock Algorithms	Mean	Standard Deviation
Bakery	3,370,368	2,765,893
Filter	15,909,873	21,618,032
Reentrant (JavaLock)	1,288,858	1,607,279

Conclusion -

Java lock has lower execution time compared to the other two - which is expected as it has hardware support.