

Operating System Assignment #4

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1 Problem 4.1

This result is from coin_flipping.c

coins: 0000000000XXXXXXXXXX (start - global lock)

coins: XXXXXX00000XX0XX0000 (end - global lock)

100 threads x 10000 flips: 585.480000 ms

coins: XXXXXX00000XX0XX0000 (start - iteration lock)

coins: 000XXXXXX0000X000XXX (end - iteration lock)

100 threads x 10000 flips: 3712.980000 ms

coins: 000XXXXXX0000X000XXX (start - coin lock)

coins: X000X0X000XXX0X0000X (end - coin lock)

100 threads x 10000 flips: 18953.795000 ms

From the above observation, the more locks being locked and released, the more time a program needs.