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CS471-PARALLEL PROGRAMMING

SHORTEST PATH PROJECT

AVERAGE RESULTS		
	OPTIMIZED	NOT OPTIMIZED
SEQUENTIAL TIME	1642	1562
PARALLEL TIME	648	1321
PROCESSORS	4	2
SPEED UP	2.53	1.18
EFFICIENCY	63.35%	29.56

NOTE: The execution time is in milliseconds.

Without the addition of the “if condition” before the lock, the lock will not only lock to the condition “newdist < mindst[w]” but also will lock “newdist >= mindst[w]”. The later occurs more. Therefore putting it after the If clause will result in fewer execution of locks. The performance increases more than 100% and makes a huge difference.