

The run time of implementations of Prim's algorithm

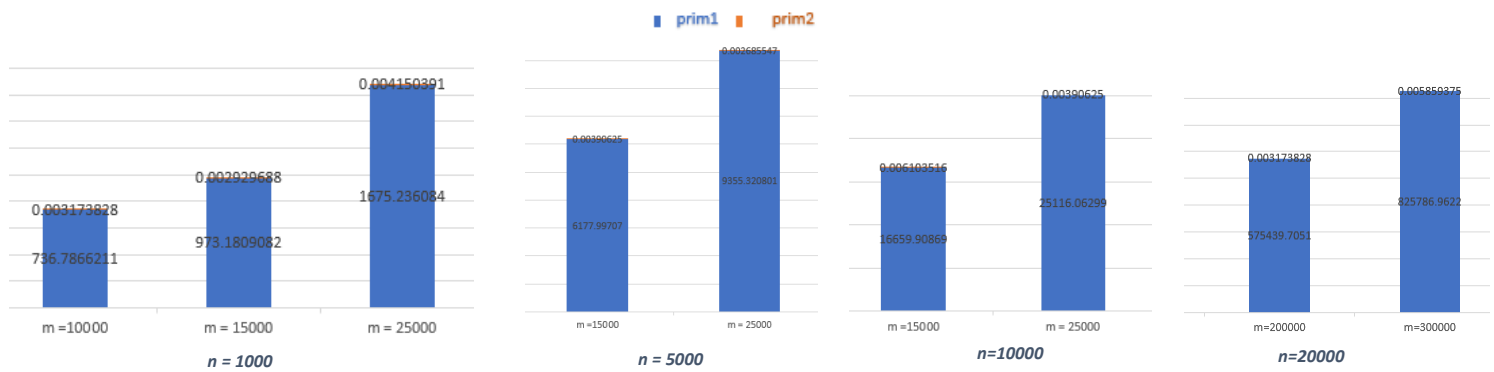


Figure : 1

Although, we weren't complete the run of the last case ($n=50000$ whit $m=1,000,000$), because it takes a very long time... the result of rest cases showed that, use of pq for implementation of Prim's algorithm better than use the first implementation. Basically, the result look like the theoretical expectation, since the efficiency of first imp. is $O(n^3)$ and the efficiency of second imp. is $O(n^2)$.