FASTER-APSP(W, n)

1 let L and M be new $n \times n$ matrices
2 $L = W$
3 $r = 1$
4 **while** $r < n - 1$
5      $M = \infty$ // initialize M
6   EXTEND-SHORTEST-PATHS(L, L, M, n)   // compute $M = L^2$
7      $r = 2r$
8      $L = M$ // ready for the next iteration
9 **return** L