



Figure 6-16. Bellman-Ford fact sheet

Benchmark data

It is difficult to generate “random graphs.” In Table 6-2, we show the performance on graphs with $V=k^2+2$ vertices and $E=k^3-k^2+2k$ edges in a highly stylized graph construction (for details, see the code implementation in the repository). Note that the number of edges is roughly $n^{1.5}$ where n is the number of vertices in V . The best performance comes from using the priority queue implementation of DIJSKTRA’S ALGORITHM but BELLMAN-FORD is not far behind. Note how the variations optimized for dense graphs perform poorly.