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Use Dijkstra’s algorithm to find the shortest path from a to z for each of the graphs in 13-16. In each case make tables similar to Table 10.7.1 to show the action of the algorithm.

 *b* 1 *c* 1 *d*

* •

 *a*• 7 8 •*z*

* •

*e* 1 *f* 1 *g*

Reference:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Step** | **V(T)** | **E(T)** | ***F*** | ***L(a)*** |
| 0123456 | {*a*}{*a*}{*a, b*}{*a, b, c*}{*a, b, c, e*}{*a, b, c, e, d*}{*a, b, c, e, d, z*} | $$∅$$$$∅$${{*a, b*}}{{*a, b*}, {*a, c*}}{{*a, b*}, {*a, c*}, {*c, e*}}{{*a, b*}, {*a, c*}, {*c, e*}, {e, d}}{{*a, b*}, {*a, c*}, {*c, e*}, {e, d}, {e, z}} | {*a*}{*b, c*}{*c, d, e*}{*d, e*}{*d, z*}{*z*} | 000000 |