$$\begin{array}{l} \text{DIJKSTRA_GENERIC}(\oplus,\ \otimes,\ \overline{0},\ \overline{1},\ \mathbf{A},\ i) \\ \textbf{for each}\ q \in V\ \textbf{do}\ \mathbf{R}_0(i,\ q) \leftarrow \overline{0} \\ S_0 \leftarrow \{\};\ \mathbf{R}_0(i,\ i) \leftarrow \overline{1} \\ \textbf{for each}\ k = 1,2,\ldots,\mid V\mid\ \textbf{do} \\ \text{find}\ q_k \in V - S_{k-1}\ \text{with}\ \mathbf{R}_{k-1}(i,\ q) \leq_{\oplus}\text{-minimal} \\ S_k \leftarrow S_{k-1} \cup \{q_k\} \\ \textbf{for each}\ j \in V - S_k\ \textbf{do} \\ \mathbf{R}_k(i,\ j) \leftarrow \end{array}$$

 $\mathbf{R}_{k-1}(i, j) \oplus (\mathbf{R}_{k-1}(i, q_k) \otimes \mathbf{A}(q_k, j))$