## Dijkstra's Algorithm Example:

The following example shows how we can run Dijkstra's algorithm over a graph.
The start vertex is ST.
$\% \rightarrow$ stands for infinity

- $\rightarrow$ stands for no predecessor
$[\mathrm{x}, \mathrm{y}] \rightarrow \mathrm{x}$ represents the cost of reaching the node and y the predecessor.
Red Area $\rightarrow$ represents the set $S$ (shortest paths are known for nodes in $S$ )


After selecting $1^{\text {st }}$ Node (ST)


After selecting $2^{\text {nd }}$ Node (B)


