

Algorithms → Graphs → [Prim's algorithm](#)

Prim's algorithm → The running time

Medium 1 minute

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Depending on a representation of a graph and a data structure used to find an edge with the smallest weight, Prim's algorithm may have different running time. Match the boxes with representations of a graph and data structures (on the left) with the corresponding running time (on the right).

Report a typo

↕ Match the items from left and right columns

An adjacency list, a priority queue	$O(m\log n)$		
An adjacency matrix, no additional data structure	$O(n^3)$		
An adjacency matrix, a list or an array	$O(n^2)$		

✓ Correct.

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