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Activity 3. [Explanation for complexity]

N	sum
20	0.37 ms
25	2.67 ms
30	17.00 ms
35	221.05 ms

Since the table reduces the number of possible paths as it traverses the graph, (node excluded when its visited) the algorithm will do the following:

- m1·m2· ... ·mn nodes at level 1
- m2·m3 nodes at level 2
- mn nodes at level n

We can see the algorithm has a factorial complexity $O(n!)$ in the worst case scenario and an $O(n)$ complexity in case of being able to traverse the graph at the very first try on every node.