2361. Minimum Costs Using the Train Line

Description

A train line going through a city has two routes, the regular route and the express route. Both routes go through the **same** n + 1 stops labeled from 0 to n. Initially, you start on the regular route at stop 0.

You are given two **1-indexed** integer arrays regular and express, both of length n. regular[i] describes the cost it takes to go from stop [i - 1] to stop [i using the regular route, and express[i] describes the cost it takes to go from stop [i - 1] to stop [i using the express route.

You are also given an integer expressCost which represents the cost to transfer from the regular route to the express route.

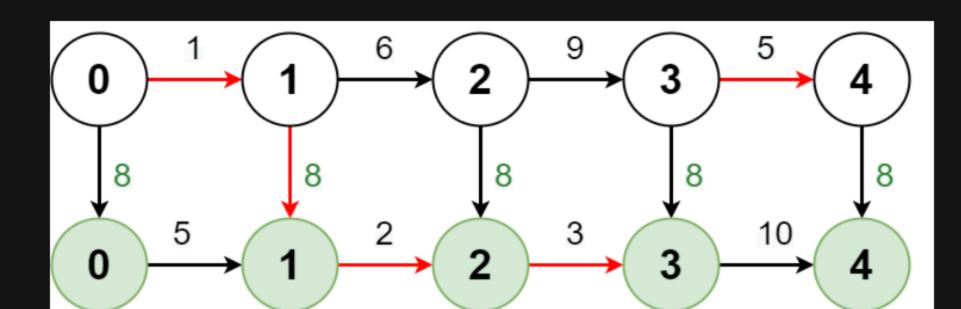
Note that:

- There is no cost to transfer from the express route back to the regular route.
- You pay expressCost every time you transfer from the regular route to the express route.
- There is no extra cost to stay on the express route.

Return a 1-indexed array costs of length n, where costs[i] is the minimum cost to reach stop i from stop 0.

Note that a stop can be counted as **reached** from either route.

Example 1:



```
Input: regular = [1,6,9,5], express = [5,2,3,10], expressCost = 8
Output: [1,7,14,19]
Explanation: The diagram above shows how to reach stop 4 from stop 0 with minimum cost.

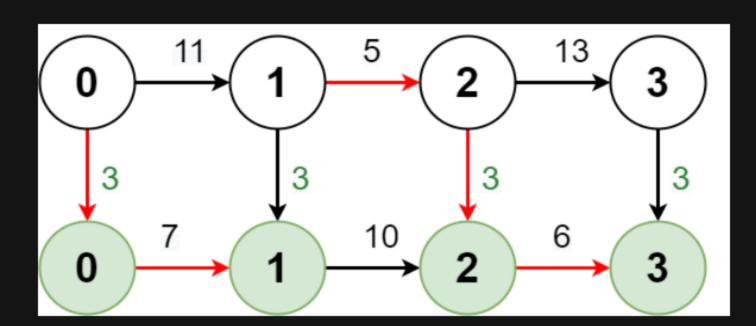
- Take the regular route from stop 0 to stop 1, costing 1.

- Take the express route from stop 1 to stop 2, costing 8 + 2 = 10.

- Take the express route from stop 2 to stop 3, costing 3.

- Take the regular route from stop 3 to stop 4, costing 5.
The total cost is 1 + 10 + 3 + 5 = 19.
Note that a different route could be taken to reach the other stops with minimum cost.
```

Example 2:



```
Input: regular = [11,5,13], express = [7,10,6], expressCost = 3
Output: [10,15,24]
Explanation: The diagram above shows how to reach stop 3 from stop 0 with minimum cost.
- Take the express route from stop 0 to stop 1, costing 3 + 7 = 10.
- Take the regular route from stop 1 to stop 2, costing 5.
- Take the express route from stop 2 to stop 3, costing 3 + 6 = 9.
The total cost is 10 + 5 + 9 = 24.
Note that the expressCost is paid again to transfer back to the express route.
```

Constraints:

- n == regular.length == express.length
- 1 <= n <= 10⁵
- 1 <= regular[i], express[i], expressCost <= 10 ⁵