

## Intuition

To convert the given **source** string to **target** string, we go character by character. We try to find the cheapest way to convert the  $i$ th character of **source** string to **target** string. To do this, we need to look for paths from **source**[ $i$ ] to **target**[ $i$ ] which are represented using the two strings **original** and **changed**, so representing these networks using graph should come to mind.

Since constraint on size of **source** string is upto  $10^5$ . It is clear that we need to do some precomputation and answer every transition from **source** to **target** in  $O(1)$ .

## Approach

Using simple bfs on every node of **original** string, we can calculate distance of each node from every other node (All Pair Shortest Path, can also be done using Floyd Warshall). We are able to do this because the constraint on size of **original** string and **changed** string is upto 2000.

After computing shortest distance from every letter to every other letter, we calculate our answer. If any distance comes out to be inf, it means there is no path between source and target, so we return -1.