

# 72. Edit Distance

Medium   Topics   Companies

Given two strings `word1` and `word2`, return *the minimum number of operations required to convert `word1` to `word2`*.

You have the following three operations permitted on a word:

- Insert a character
- Delete a character
- Replace a character

## Example 1:

```
Input: word1 = "horse", word2 = "ros"
Output: 3
Explanation:
horse -> rorse (replace 'h' with 'r')
rorse  -> rose  (remove 'r')
rose   -> ros  (remove 'e')
```

## Example 2:

```
Input: word1 = "intention", word2 = "execution"
Output: 5
Explanation:
intention -> inention (remove 't')
inention  -> enention (replace 'i' with 'e')
enention  -> exention (replace 'n' with 'x')
exention  -> exection (replace 'n' with 'c')
exection  -> execution (insert 'u')
```

## Constraints:

- `0 <= word1.length, word2.length <= 500`
- `word1` and `word2` consist of lowercase English letters.