

# 72. Edit Distance

## Description

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.

