

# 318. Maximum Product of Word Lengths

## Description

Given a string array `words`, return *the maximum value of* `length(word[i]) * length(word[j])` *where the two words do not share common letters*. If no such two words exist, return `0`.

### Example 1:

**Input:** `words = ["abcw","baz","foo","bar","xtfn","abcdef"]`

**Output:** 16

**Explanation:** The two words can be "abcw", "xtfn".

### Example 2:

**Input:** `words = ["a","ab","abc","d","cd","bcd","abcd"]`

**Output:** 4

**Explanation:** The two words can be "ab", "cd".

### Example 3:

**Input:** `words = ["a","aa","aaa","aaaa"]`

**Output:** 0

**Explanation:** No such pair of words.

### Constraints:

- `2 <= words.length <= 1000`
- `1 <= words[i].length <= 1000`
- `words[i]` consists only of lowercase English letters.

