

178. Given a string *s* and a dictionary of strings *wordDict*, return true if *s* can be segmented into a space-separated sequence of one or more dictionary words.

PROGRAM:

```
def word_break(s, wordDict):  
    word_set = set(wordDict)  
  
    dp = [False] * (len(s) + 1)  
  
    dp[0] = True  
  
    for i in range(1, len(s) + 1):  
        for j in range(i):  
            if dp[j] and s[j:i] in word_set:  
                dp[i] = True  
                break  
  
    return dp[len(s)]  
  
# Test Cases  
  
print(word_break("leetcode", ["leet", "code"])) # Output: True  
print(word_break("applepenapple", ["apple", "pen"])) # Output: True  
print(word_break("catsandog", ["cats", "dog", "sand", "and", "cat"])) # Output: False
```

OUTPUT:

```
True  
True  
False
```

```
=== Code Execution Successful ===
```

TIME COMPLEXITY: $O(N^2)$

