

Exercise 168:-

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: str, wordDict: [str]) -> bool:
```

```
    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)]
```

```
s = "leetcode"
```

```
wordDict = ["leet", "code"]
```

```
print(word_break(s, wordDict))
```

Output:-

```
C:\Users\afree\PycharmProjects\pythonProject\.venv\Scripts\python.exe C:\Users\afree\PycharmProjects\pythonProject\0.py
True

Process finished with exit code 0
```

Time complexity:- $O(n^2)$