

105. Word wrap problem

Code:

```
def wordWrap(words, maxWidth):
    n = len(words)
    dp = [float('inf')] * (n + 1)
    dp[n] = 0

    for i in range(n - 1, -1, -1):
        currentLineLength = -1
        for j in range(i, n):
            currentLineLength += len(words[j]) + 1
            if currentLineLength - 1 > maxWidth:
                break
            if j == n - 1:
                dp[i] = 0
            else:
                extraSpaces = maxWidth - (currentLineLength - 1)
                dp[i] = min(dp[i], extraSpaces ** 2 + dp[j + 1])

    return dp[0]

words = ["the", "quick", "brown", "fox", "jumps", "over", "the", "lazy", "dog"]
maxWidth = 16
print(wordWrap(words, maxWidth))
```

Output:

```
13
```

Time Complexity:

- $T(n) = O(n^2)$