

# Word Ladder I

Given two distinct words **startWord** and **targetWord**, and a list denoting **wordList** of unique words of equal lengths. Find the length of the shortest transformation sequence from startWord to targetWord.

Keep the following conditions in mind:

- A word can only consist of lowercase characters.
- Only one letter can be changed in each transformation.
- Each transformed word must exist in the wordList including the targetWord.
- startWord may or may not be part of the wordList

The second part of this problem can be found [here](#).

**Note:** If no possible way to transform sequence from startWord to targetWord **return 0**

## **Example 1:**

### **Input:**

```
wordList = {"des","der","dfr","dgt","dfs"}  
startWord = "der", targetWord= "dfs",
```

### **Output:**

3

### **Explanation:**

The length of the smallest transformation sequence from "der" to "dfs" is 3  
i,e "der" -> "dfr" -> "dfs".

## **Example 2:**

### **Input:**

```
wordList = {"geek", "gefk"}  
startWord = "gedk", targetWord= "geek",
```

**Output:**

2

**Explanation:**

gedk -> geek

### Example 3:

**Input:**

```
wordList = {"poon", "plee", "same",  
"poie", "plea", "plie", "poin"}  
startWord = "toon", targetWord= "plea",
```

**Output:** 7

**Explanation:**

toon -> poon -> poin -> poie -> plie -> plee -> plea

### Your Task:

You don't need to read or print anything, Your task is to complete the function **wordLadderLength()** which takes startWord, targetWord and wordList as input parameter and returns the length of the shortest transformation sequence from startWord to targetWord. If not possible return 0.

**Expected Time Complexity:**  $O(N^2 * M)$

**Expected Auxiliary Space:**  $O(N * M)$  where  $N$  = length of wordList and  $M = |\text{wordList}_i|$

**Constraints:**

$1 \leq N \leq 100$

$1 \leq M \leq 10$

