

# 890. Find and Replace Pattern

Given a list of strings `words` and a string `pattern`, return *a list of* `words[i]` *that match* `pattern`. You may return the answer in **any order**.

A word matches the pattern if there exists a permutation of letters `p` so that after replacing every letter `x` in the pattern with `p(x)`, we get the desired word.

Recall that a permutation of letters is a bijection from letters to letters: every letter maps to another letter, and no two letters map to the same letter.

## Example 1:

Input: `words = ["abc", "deq", "mee", "aqq", "dkd", "ccc"], pattern = "abb"`

Output: `["mee", "aqq"]`

Explanation: `"mee"` matches the pattern because there is a permutation `{a -> m, b -> e, ...}`.

`"ccc"` does not match the pattern because `{a -> c, b -> c, ...}` is not a permutation, since `a` and `b` map to the same letter.

## Example 2:

Input: `words = ["a", "b", "c"], pattern = "a"`

Output: `["a", "b", "c"]`

## Constraints:

- `1 <= pattern.length <= 20`
- `1 <= words.length <= 50`
- `words[i].length == pattern.length`
- `pattern` and `words[i]` are lowercase English letters.

```
class Solution:
    def findAndReplacePattern(self, words: List[str], pattern: str) ->
List[str]:
    freq = {}
    for i, ele in enumerate(pattern):
        if ele in freq:
            continue
        else:
            freq[ele] = i
    patternCode = ''
```

```
for ele in pattern:
    patternCode = patternCode + '#' + str(freq[ele])
# print(patternCode)
ans = []
for ele in words:
    code = self.getCode(ele)
    if code==patternCode:
        ans.append(ele)
return ans
```

```
def getCode(self,word):
    freq = {}
    for i,ele in enumerate(word):
        if ele in freq:
            continue
        else:
            freq[ele] = i
    patternCode = ''

    for key in word:
        patternCode = patternCode + '#' + str(freq[key])
    return patternCode
```