# 모음사전

# Index	84512	
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☆ Status	Done	
<u>≔</u> Tags	Brute Force	Python
■ UpdatedAt	@September 28, 2022	

### References

```
https://school.programmers.co.kr/learn/courses/30/lessons/84512
```

#### References

- 1. Recursion
- 2. Geometric Sequence

## 1. Recursion

```
def solution(word):
    def search(prev):
        if prev == word:
            return [True, 0]

        if len(prev) > 4:
            return [False, 0]

        count = 0
        for v in ['A', 'E', 'I', '0', 'U']:
            count += 1
            is_done, cnt = search(prev + v)
            count += cnt
            if is_done:
                return [True, count]

        return [False, count]
```

# 2. Geometric Sequence

```
def solution(word):
    answer = 0
    dic={'A': 0, 'E': 1, 'I': 2, '0': 3, 'U': 4}

for i in range(len(word)):
    answer += 1 + dic[word[i]] * ((5 ** (5 - i) - 1) / 4)

return answer
```

• 등비수열의 합:  $\frac{a(r^n-1)}{r-1}$ 

모음사전 2