



Permutations

# Index	46
📅 CreatedAt	@September 28, 2022
👤 Person	 Ally Hyeseong Kim
🌟 Status	Done
🏷️ Tags	Graph Python
📅 UpdatedAt	@September 28, 2022

References

LeetCode - The World's Leading Online Programming Learning Platform
Level up your coding skills and quickly land a job. This is the best place to expand your knowledge and get prepared for your next interview.

 <https://leetcode.com/problems/letter-combinations-of-a-phone-number/>



파이썬 알고리즘 인터뷰

2021 세종도서 학술부문 선정작. 현업과 실무에 유용한 주요 알고리즘 이론을 깊숙이 이해하고, 파이썬의 핵심 기능과 문법까지 상세하게 이해할 수 있는 취업용 코딩 테스트를 위한 완벽 가이드다. 200여 개가 넘는...

 <https://www.aladin.co.kr/shop/wproduct.aspx?ItemId=245495826>



References

1. DFS
2. Python `itertools.permutations`

1. DFS

```
class Solution:
    def permute(self, nums: List[int]) -> List[List[int]]:
        def dfs(stack, path):
            if len(path) == len(nums):
                result.append(path)
                return

            for _ in range(len(stack)):
                n = stack.pop()
                dfs(stack, path + [n])
                stack.appendleft(n)

        result = []
        stack = collections.deque(nums)
        dfs(stack, [])
        return result
```

- Python list 값 복사
 - `list[:]`
 - `list.copy()`

- `copy.deepcopy(list)`

2. Python `itertools.permutations`

```
class Solution:
    def permute(self, nums: List[int]) -> List[List[int]]:
        return list(itertools.permutations(nums))
```