Topic: Backtracking

Template

```python
result = []
def backtrack(path, choice_list):
    if meets_termination_condition:
        result.add(path)
        return

    for choice in choice_list:
        make_choice
        backtrack(path, choice_list)
        undo_choice
```

Tips

- Draw a small example decision tree to understand the how the path changes

Questions

1. Permutation (Leetcode 46, Medium):
   - Python list (path variable) is mutable, need to make a shallow copy at the time you append to the result list.