2024-04-06 - Handout – Permutation Combination

Q1. Permutations

Link: https://leetcode.com/problems/permutations/

Given an array nums of distinct integers, return *all the possible permutations*. You can return the answer in **any order**.

Constraints:

- 1 <= nums.length <= 6
- -10 <= nums[i] <= 10
- All the numbers of nums are unique

Q2. Permutations II

Link: https://leetcode.com/problems/permutations-ii/

Given a collection of numbers, nums, that might contain duplicates, return all possible unique permutations in any order.

```
Example 1:
Input: nums = [1]
Output: [[1]]
```

```
Example 2:
Input: nums = [1,2,3]
Output: [[1,2,3], [1,3,2], [2,1,3], [2,3,1], [3,1,2], [3,2,1]]
```

Constraints:

- 1 <= nums.length <= 8
- -10 <= nums[i] <= 10

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Example 1:
Input: nums = [1,1,2]

Output: [[1,1,2], [1,2,1], [2,1,1]]
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Input: nums = [1,2,3]

Output:
[[1,2,3],[1,3,2],[2,1,3],[2,3,1],[3,1,2],[3,2,1]]
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Q3. Subsets

Link: https://leetcode.com/problems/subsets/description/

Given an integer array nums of unique elements, return all possible subsets (the power set). The solution set must not contain duplicate subsets. Return the solution in any order.

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Input: nums = [0]
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