All Permutations I

```python
class Solution(object):
  def permutations(self, input):
    """
    input: string input
    return: string[]
    """
    # write your solution here
    answers = []
    nums = list(input)
    self.bt(answers, 0, len(nums), nums)
    return answers

  def bt(self, answers, current_position, N, nums):
    if current_position == N:
      answers.append(".join(nums[:]))
      return
    for i in range(currrent_position, N):
      nums[current_position], nums[i] = nums[i], nums[current_position]
      self.bt(answers, current_position + 1, N, nums)
      nums[current_position], nums[i] = nums[i], nums[current_position]
    return
```