

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

Example 1:

Input: nums = [1,2,3]

Output: [[1,2,3],[1,3,2],[2,1,3],[2,3,1],[3,1,2],[3,2,1]]

Example 2:

Input: nums = [0,1]

Output: [[0,1],[1,0]]

Example 3:

Input: nums = [1]

Output: [[1]]

PROGRAM:-

```
from itertools import permutations
```

```
def permute(nums):  
    return list(permutations(nums))
```

```
# Example  
nums = [1, 2, 3]  
print(permute(nums))
```

OUTPUT:-

```
[(1, 2, 3), (1, 3, 2), (2, 1, 3), (2, 3, 1), (3, 1, 2), (3, 2, 1)]  
  
=== Code Execution Successful ===
```

TIME COMPLEXITY:- $O(n \cdot n!)$