

## 46. Permutations

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]]`

### Constraints:

$1 \leq \text{nums.length} \leq 6$

$-10 \leq \text{nums}[i] \leq 10$

All the integers of `nums` are *unique*.