

# Problem 254: Factor Combinations

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 50.42%

**Paid Only:** Yes

**Tags:** Backtracking

## Problem Description

Numbers can be regarded as the product of their factors.

\* For example, `8 = 2 x 2 x 2 = 2 x 4`.

Given an integer `n`, return \_all possible combinations of its factors\_. You may return the answer in **any order**.

**Note** that the factors should be in the range `[2, n - 1]`.

**Example 1:**

**Input:** n = 1 **Output:** []

**Example 2:**

**Input:** n = 12 **Output:** [[2,6],[3,4],[2,2,3]]

**Example 3:**

**Input:** n = 37 **Output:** []

**Constraints:**

\* `1 <= n <= 10^7`

## Code Snippets

### C++:

```
class Solution {
public:
vector<vector<int>> getFactors(int n) {

}
};
```

### Java:

```
class Solution {
public List<List<Integer>> getFactors(int n) {

}
}
```

### Python3:

```
class Solution:
def getFactors(self, n: int) -> List[List[int]]:
```