

# Problem 279: Perfect Squares

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 56.08%

**Paid Only:** No

**Tags:** Math, Dynamic Programming, Breadth-First Search

## Problem Description

Given an integer `n`, return \_the least number of perfect square numbers that sum to\_ `n`.

A \*\*perfect square\*\* is an integer that is the square of an integer; in other words, it is the product of some integer with itself. For example, `1`, `4`, `9`, and `16` are perfect squares while `3` and `11` are not.

**Example 1:**

**Input:** n = 12 **Output:** 3 **Explanation:**  $12 = 4 + 4 + 4$ .

**Example 2:**

**Input:** n = 13 **Output:** 2 **Explanation:**  $13 = 4 + 9$ .

**Constraints:**

\* `1 <= n <= 10^4`

## Code Snippets

**C++:**

```
class Solution {
public:
    int numSquares(int n) {
```

```
    }  
};
```

**Java:**

```
class Solution {  
public int numSquares(int n) {  
  
}  
}
```

**Python3:**

```
class Solution:  
def numSquares(self, n: int) -> int:
```