

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 ≤ 104`

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:
```