

# Perfect Squares

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:**

- $1 \leq n \leq 10^4$