# 3492. Maximum Containers on a Ship

Solved ●

Easy Topics Hint

You are given a positive integer `n` representing an `n x n` cargo deck on a ship. Each cell on the deck can hold one container with a weight of **exactly** `w`.

However, the total weight of all containers, if loaded onto the deck, must not exceed the ship's maximum weight capacity, `maxWeight`.

Return the **maximum** number of containers that can be loaded onto the ship.

**Example 1:**

> **Input:** n = 2, w = 3, maxWeight = 15
>
> **Output:** 4
>
> **Explanation:**
>
> The deck has 4 cells, and each container weighs 3. The total weight of loading all containers is 12, which does not exceed `maxWeight`.

**Example 2:**

> **Input:** n = 3, w = 5, maxWeight = 20
>
> **Output:** 4
>
> **Explanation:**
>
> The deck has 9 cells, and each container weighs 5. The maximum number of containers that can be loaded without exceeding `maxWeight` is 4.

**Constraints:**

- `1 <= n <= 1000`
- `1 <= w <= 1000`
- `1 <= maxWeight <= 10^9`

Seen this question in a real interview before? 1/5

Yes No

Accepted 32.1K Submissions 43K Acceptance Rate 74.6%

Topics

Hint 1

Hint 2

Discussion (16)