

# Problem 264: Ugly Number II

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 49.41%

**Paid Only:** No

**Tags:** Hash Table, Math, Dynamic Programming, Heap (Priority Queue)

## Problem Description

An \*\*ugly number\*\* is a positive integer whose prime factors are limited to `2`, `3`, and `5`.

Given an integer `n`, return \_the\_ `nth` \_\*\*ugly number\*\*\_.

**Example 1:**

**Input:** n = 10 **Output:** 12 **Explanation:** [1, 2, 3, 4, 5, 6, 8, 9, 10, 12] is the sequence of the first 10 ugly numbers.

**Example 2:**

**Input:** n = 1 **Output:** 1 **Explanation:** 1 has no prime factors, therefore all of its prime factors are limited to 2, 3, and 5.

**Constraints:**

\* `1 <= n <= 1690`

## Code Snippets

**C++:**

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

```
    }  
};
```

**Java:**

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

**Python3:**

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