# 29. Divide Two Integers

Medium 3244 11039 Add to List Share

Given two integers `dividend` and `divisor`, divide two integers **without** using multiplication, division, and mod operator.

The integer division should truncate toward zero, which means losing its fractional part. For example, `8.345` would be truncated to `8`, and `-2.7335` would be truncated to `-2`.

Return *the **quotient** after dividing* `dividend` *by* `divisor`.

**Note:** Assume we are dealing with an environment that could only store integers within the **32-bit** signed integer range: $[-2^{31}, 2^{31} - 1]$. For this problem, if the quotient is **strictly greater than** $2^{31} - 1$, then return $2^{31} - 1$, and if the quotient is **strictly less than** $-2^{31}$, then return $-2^{31}$.

**Example 1:**

```
Input: dividend = 10, divisor = 3
Output: 3
Explanation: 10/3 = 3.33333.. which is truncated to 3.
```

**Example 2:**

```
Input: dividend = 7, divisor = -3
Output: -2
Explanation: 7/-3 = -2.33333.. which is truncated to -2.
```

**Constraints:**

- $-2^{31} <= dividend, divisor <= 2^{31} - 1$
- `divisor != 0`

Accepted 516,984 Submissions 2,956,775

Seen this question in a real interview before? Yes No

Companies

Related Topics