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# 29. Divide Two Integers

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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`, an 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: $[-2^{31}, 2^{31} - 1]$ 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`

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