

# 50. Pow(x, n)

## Description

Implement `pow(x, n)`, which calculates `x` raised to the power `n` (i.e., `xn`).

### Example 1:

Input: `x = 2.00000`, `n = 10`  
Output: `1024.00000`

### Example 2:

Input: `x = 2.10000`, `n = 3`  
Output: `9.26100`

### Example 3:

Input: `x = 2.00000`, `n = -2`  
Output: `0.25000`  
Explanation:  $2^{-2} = 1/2^2 = 1/4 = 0.25$

### Constraints:

- $-100.0 < x < 100.0$
- $-2^{31} \leq n \leq 2^{31} - 1$
- `n` is an integer.
- Either `x` is not zero or `n > 0`.
- $-10^4 \leq x^n \leq 10^4$

