

190. Reverse Bits

Reverse bits of a given 32 bits unsigned integer.

Example 1:

Input: 00000010100101000001111010011100

Output: 00111001011110000010100101000000

Explanation: The input binary string 00000010100101000001111010011100 represents the unsigned integer 43261596, so return 964176192 which its binary representation is 00111001011110000010100101000000.

Example 2:

Input: 1111111111111111111111111111101

Output: 10111111111111111111111111111111

Explanation: The input binary string 1111111111111111111111111111101 represents the unsigned integer 4294967293, so return 3221225471 which its binary representation is 10111111111111111111111111111111.

- 先右移到 bit 0 再左移到目標bit

```
1  uint32_t reverseBits(uint32_t n) {
2      uint32_t res = 0;
3
4      for (uint32_t i = 0; i < 32; ++i)
5          res |= (((n & (1u << i)) >> i) << (31u - i));
6      return res;
7  }
```