(任选其一)

1. Bit Counting

Write a function that takes an (unsigned) integer as input, and returns the number of bits that are equal to one in the binary representation of that number.

Example: The binary representation of 1234 is 10011010010, so the function should return 5 in this case

2. Median of Two Sorted Arrays

There are two sorted arrays **nums1** and **nums2** of size m and n respectively.

Find the median of the two sorted arrays. The overall run time complexity should be O(log (m+n)).

You may assume **nums1** and **nums2** cannot be both empty.

Example 1:

```
nums1 = [1, 3]
nums2 = [2]
The median is 2.0
```

Example 2:

```
nums1 = [1, 2]
nums2 = [3, 4]
The median is (2 + 3)/2 = 2.5
```