

# 191. Number of 1 Bits

[Add to List ▼](#)[Question](#)[Editorial Solution](#)[My Submissions \(/problems/number-of-1-bits/submissions/\)](/problems/number-of-1-bits/submissions/)Total Accepted: **129762** Total Submissions: **336916** Difficulty: **Easy** Contributors: **Admin**

Write a function that takes an unsigned integer and returns the number of '1' bits it has (also known as the Hamming weight ([http://en.wikipedia.org/wiki/Hamming\\_weight](http://en.wikipedia.org/wiki/Hamming_weight))).

For example, the 32-bit integer '11' has binary representation 00000000000000000000000001011 , so the function should return 3.

## Credits:

Special thanks to @ts (<https://oj.leetcode.com/discuss/user/ts>) for adding this problem and creating all test cases.

[Subscribe \(/subscribe/\)](/subscribe/) to see which companies asked this question

[Show Tags](#)[Show Similar Problems](#)Have you met this question in a real interview? [Yes](#) [No](#)[Discuss \(https://discuss.leetcode.com/category/199\)](https://discuss.leetcode.com/category/199)[Top Solutions](#)[Pick One \(/problems/random-one-question/\)](/problems/random-one-question/)[Notes](#)[Python](#)

```
1 class Solution(object):
2     def hammingWeight(self, n):
3         """
4         :type n: int
5         :rtype: int
6         """
7         count=0
8         digits=0
9         while n!=0 or digits<=31:
10             if n%2==1:
11                 count=count+1
12                 n=n//2
13             else:
14                 n=n//2
15                 digits=digits+1
16         return count
```

[Submit Solution](#)[Frequently Asked Questions \(/faq/\)](#) | [Terms of Service \(/tos/\)](#)[Privacy](#)

✉ [Send Feedback \(mailto:admin@leetcode.com?subject=Feedback\)](mailto:admin@leetcode.com?subject=Feedback)  
Copyright © 2017 LeetCode

 Notes