5533. Minimum One Bit Operations to Make Integers Zero

issions (/contest/weekly-contest-209/problems/minimum-one-bit-operations-to-make-integers-zero/submissions/)

ontest (/contest/weekly-contest-209/)

Given an integer n, you must transform it into 0 using the following operations any number of times:

- Change the rightmost (0^{th}) bit in the binary representation of n .
- Change the i^{th} bit in the binary representation of n if the $(i-1)^{th}$ bit is set to 1 and the $(i-2)^{th}$ through 0^{th} bits are set to 0.

Return the minimum number of operations to transform n into 0.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Hard

Example 1:

```
Input: n = 0
Output: 0
```

Example 2:

```
Input: n = 3
Output: 2
Explanation: The binary representation of 3 is "11".
"11" -> "01" with the 2nd operation since the 0th bit is 1.
"01" -> "00" with the 1st operation.
```

Example 3:

```
Input: n = 6  
Output: 4  
Explanation: The binary representation of 6 is "110".  
"\underline{1}10" -> "\underline{0}10" with the 2nd operation since the 1st bit is 1 and 0th through 0th bits are "\underline{0}1\underline{0}" -> "\underline{0}1\underline{1}" with the 1st operation.  
"\underline{0}1" -> "\underline{0}01" with the 2nd operation since the 0th bit is 1.  
"\underline{0}01" -> "\underline{0}00" with the 1st operation.
```

Example 4:

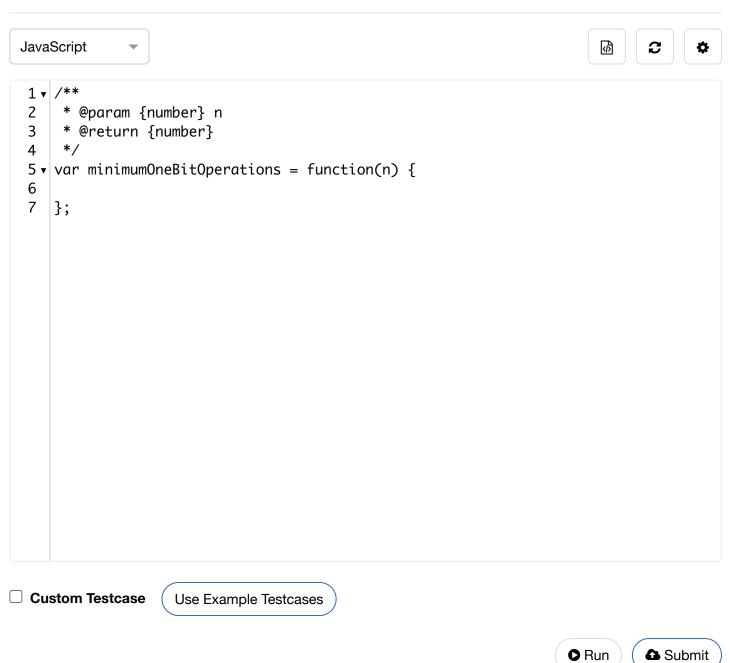
```
Input: n = 9
Output: 14
```

Example 5:

```
Input: n = 333
Output: 393
```

Constraints:

• $0 <= n <= 10^9$



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