

The contest is in progress. It ends about 16 hours from now.

Contests > IEEEExtreme Programming Competition 7.0 >

## IEEE HKN Problem

Problem

☰ Submissions



Leaderboard



Discussions

Members of IEEE HKN wanted to challenge the world, they released on their facebook page the following problem:

Write a program to determine the number of binary palindromes in a given range  $[a;b]$ . A binary palindrome is a number whose binary representation is reading the same in either forward or reverse direction (leading zeros not accounted for). Example: the decimal number 5 (binary 101) is palindromic.

**Caution: the execution time is limited to 3 seconds.**

### Input:

The lower and upper bound of the range as positive 32-bit decimal integer numbers, separated by a comma: "a,b";  $0 \leq a$ ;  $a \leq b$ ;  $b \leq 2^{32}-1$

### Output:

Decimal integer, the number of binary palindromes in the given range (including the bounds)

#### Sample Input 1:

9,18

#### Sample output 1:

3

hint:

Dec	Bin	Palindromic
9	1001	x
10	1010	
11	1011	
12	1100	
13	1101	
14	1110	
15	1111	x
16	10000	
17	10001	x
18	10010	

Problem Author: IEEE

Suggest Edits

EmacsNormalVim

Select Language: C++

save code

```
1 #include <cmath>
2 #include <cstdio>
3 #include <vector>
4 #include <iostream>
5 #include <algorithm>
6 using namespace std;
7
8
9 int main() {
10     /* Enter your code here. Read input from STDIN. Print output to STDOUT */
11     return 0;
12 }
13
```

Line: 1 Col: 1 Count: 227

☐ Use a custom test case

 Upload Code as File

Compile & Test

Submit Code