BACK   Range Bit Count   ⌄

DESCRIPTION   SOLUTIONS 10422   COMMENTS 18   ❯   CODEWRITING   SCORE: 300/300

You are given two numbers `a` and `b` where $0 \le a \le b$. Imagine you construct an array of all the integers from `a` to `b` inclusive. You need to count the number of 1s in the binary representations of all the numbers in the array.

Example

For `a = 2` and `b = 7`, the output should be
`rangeBitCount(a, b) = 11`.

Given `a = 2` and `b = 7` the array is: `[2, 3, 4, 5, 6, 7]`. Converting the numbers to binary, we get `[10, 11, 100, 101, 110, 111]`, which contains `1 + 2 + 1 + 2 + 2 + 3 = 11` 1s.

Input/Output

- **[execution time limit] 4 seconds (js)**

- **[input] integer a**

  Guaranteed constraints:
  `0 ≤ a ≤ b`.

- **[input] integer b**

  Guaranteed constraints:
  `a ≤ b ≤ 10`.

- **[output] integer**

[JavaScript (ES6)] Syntax Tips

```
// Prints help message to the console
// Returns a string
function helloWorld(name) {
    console.log("This prints to the console when you Run Tests");
    return "Hello, " + name;
}
```

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