**Problem B. Binary/Decimal Palindromes**

Binary/decimal Palindromes are unique numbers. They are palindromic (read the same backwards and forward) both as binary and decimal. For example 0 (**0**), 1 (**1**), 9 (**1001**), 33 (**100001**), 585 (**1001001001**) and 5071705 (**10011010110001101011001**) are some of these numbers.

**Input**

The standard input contains no more than 25 tests cases. For each case there are two integers ***a*** and ***b*** – endpoints of the closed interval [***a***, ***b***], 0 ≤ ***a*** ≤ ***b*** < 232.

**Output**

For each test case output on a new line the number of binary/decimal palindromes in the given interval.

**Examples**

|  |  |
| --- | --- |
| **Input** | **Output** |
| 0 100 | 8 |