Binary Bits 1

locked

Problem Submissions Leaderboard Discussions

In this challenge, you will use logical bitwise operators. All data is stored in its binary representation. The logical operators, use 1 to represent true and 0 to represent false. The logical operators compare bits in two numbers and return true or false, 0 or 1, for each bit compared.

Bitwise AND operator & The output of bitwise AND is 1 if the corresponding bits of two operands is 1. If either bit of an operand is 0, the result of corresponding bit is evaluated to 0. It is denoted by &.

Bitwise OR operator | The output of bitwise OR is 1 if at least one corresponding bit of two operands is 1. It is denoted by |.

Bitwise XOR (exclusive OR) operator ^ The result of bitwise XOR operator is 1 if the corresponding bits of two operands are opposite.

For example, for integers 3 and 5,

```
3 = 00000011 (In Binary)
5 = 00000101 (In Binary)

AND operation        OR operation         XOR operation
  00000011             00000011             00000011
& 00000101           | 00000101           ^ 00000101
  --------             --------             --------
  00000001  = 1        00000111  = 7        00000110  = 6
```

Now task is, you will be given 2 integers and a thershold k. find the maximum value between bitwise and, or and xor. the maximum should not greater than the thershold k.

default maximum value is zero.

Optional: also try to solve without conditional statements(if-else etc)

Input Format

The first line contains 2 space-separated integers.
second line having integer thershold k.

Constraints

None

Output Format

print maximum integer from all operation.

Sample Input 0

```
3 5
3
```

Sample Output 0

```
1
```

Sample Input 1

```
1 2
2
```

Sample Output 1

```
0
```

Submissions: 248
Max Score: 10
Difficulty: Medium

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Python 3

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