# Bit Copy

Write a program that reads a number **n** (an integer number) and **p** (a bit position). The program should take the bit at position **p** from number **n** and **copy** it to position **2**.

Example: We are given the number **4** and position **0.** In binary format, **4** is **00000100**. We take the bit from position **0** – **00000100**, and copy it to position **2** - **00000000**. Finally, we print the **resulting number**.

## Input

The input data is read from the console.

* The input consists of 2 lines:
  + On the first line you will receive the number **n**
  + On the second line you will receive theposition **p**
* The input data will always be valid and in the format described. There is no need to check it explicitly.

## Output

The output data must be printed on the console and should consist of only one line – the resulting number.

## Constraints

* The number **n** will be an integer number in the range [-2147483648..2147483647].
* The position **p** will be an integer number in the range [0..31].
* Time limit: 0.1 seconds.
* Allowed memory: 16 MB.

## Examples

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Binary Representation** |
| 4  0 | 0 | 00000000 00000000 00000000 00000**1**0**0**  00000000 00000000 00000000 00000000 |
| **Input** | **Output** | **Binary Representation** |
| 13  1 | 9 | 00000000 00000000 00000000 00001**10**1  00000000 00000000 00000000 00001001 |
| **Input** | **Output** | **Binary Representation** |
| 243  10 | 243 | 00000000 00000000 00000**0**00 11110**0**11  00000000 00000000 00000000 11110011 |