Join our classroom IDE tool.

Under Projects you will see three options: Python, Java, and C++. Choose whichever template you would like to use to begin your project. Note: In the template if you would like to switch the order of "Main Program" and "Static Methods" or "Functions" you may, I just want the different sections clearly indicated and everything well documented.

Programming Project 01 - Unary Number

Binary numbers are common, but what about **Unary numbers**? A unary number representation of a positive integer **n** consists of `n-1` ones (`1`) followed by a zero (`0`).

For example:

- The decimal number `5` is represented in unary as **`11110`**.
- The decimal number `1` is represented as **`0`**.
- The decimal number `3` is represented as **`110`**.

Task

Write a program that:

1. Reads a sequence of **positive integers** (1 ≤ n ≤ 76), one per line, until the end of input.
2. Converts each integer to its **unary representation**.
3. Outputs the original number followed by a space and then its unary form.

Output Format

For each number, output a single line with:

<decimal number> <unary representation>

Submit "ready for grading" along with which language you used (C++, Java, Python) in the text box here when you are done with the project. Copy paste your code in the text box or up load a pdf.

Sample Input
76
37
5
28

14
8
1
Sample Output
76 11111111111111111111111111111111111111111111111111111111111111111111111111110
37 1111111111111111111111111111111110
5 11110
28 11111111111111111111111110
14 11111111111110
8 11111110
1 0

Unary-SampleInput.txt

Download Unary-SampleInput.txt

Unary-SampleOutput.txt