

1M Implement NumberToPattern

NumberToPattern Problem

Convert a number to its corresponding DNA string.

Input: Integers *index* and *k*.

Output: NUMBERTOPATTERN(*index*, *k*).

$$33 \longrightarrow \overset{\text{G}}{(2*4^2)} + \overset{\text{A}}{(0*4^1)} + \overset{\text{C}}{(1*4^0)} \longrightarrow \text{GAC}$$

Formatting

Input: Space-separated integers *index* and *k*.

Output: A string representing the output of *NumberToPattern*(*index*, *k*).

Constraints

- The integer *index* will be between 1 and 10^4 .
- The integer *k* will be between 1 and 10^1 .

Test Cases

Case 1

Description: The sample dataset is not actually run on your code.

Input:

45 4

Output:

AGTC

Case 2

Description: k is small.

Input:

1 8

Output:

G

Case 3

Description: k codes for an empty string

Input:

0 0

Output:

Case 4

Description: k is large.

Input: Space-separated integers k and d followed by a space-separated list of paired k -mer strings *PairedReads* where individual k -mers within the pair are separated by a "|" character.

Input:

60 4

Output:

ATTA

Case 5

Description: A larger dataset of the same size as that provided by the randomized autograder. Check input/output folders for this dataset.