Function for three equal consecutive digits   P37257_en

Write a *recursive* function that, given two natural numbers @n@ and @b@, returns true if and only if @n@ has three or more equal consecutive digits when expressed in base @b@.

For example, the number 44344 does not have three equal consecutive digits in base 10. By contrast, 159 in ternary is 12220, so it does have three equal consecutive digits in base 3.

Precondition

It holds $0 \leq$ @n@ $\leq 10^9$ and $2 \leq$ @b@ ≤ 100.

Interface

C++	**bool** *three_equal_consecutive_digits* (**int** *n*, **int** *b*);
C	**int** *three_equal_consecutive_digits* (**int** *n*, **int** *b*);
Java	**public static boolean** *three_equal_consecutive_digits* (**int** *n*, **int** *b*);
Python	*three_equal_consecutive_digits* (*n*, *b*) # returns bool
	three_equal_consecutive_digits (*n*: **int**, *b*: **int**) −> **bool**

Observation

You only need to submit the required procedure; your main program will be ignored.

Problem information

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