
Bicolor numbers

T80784_en

We define a *bicolor* number as a natural number n with only two different digits that are repeated in two blocks (or “colors”). More formally, the sequence of digits of n is $d_1d_2 \dots d_k e_1e_2 \dots e_l$, where d and e are the two digits and, $d \neq e$, $k > 0$ and $l > 0$.

Examples of bicolor numbers: 7722, 44111, 666699, 277, and 45.

Examples of number which are **not** bicolor: 121, 113311, 7878, 1234, 7, 99910.

Implement a **function** `is_bicolor` that receives a natural number and determines if it is bicolor. The function receives a number $n > 0$ and returns `true` if it is bicolor and `false` otherwise.

The function header must be exactly:

```
/**
 * @pre n >= 0
 * @post returns true if n is bicolor, false otherwise
 */
bool is_bicolor(int n);
```

Observation

You only need to submit the requested function; the main program will be ignored.

Problem information

Author: PRO1

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