Function to fatten numbers X50141_en

In this problem, given any natural number x with n digits $x_1 \dots x_n$, we say that $y = y_1 \dots y_n$ is the result of fattening x if, for every i between 1 and n, $y_i = \max\{x_1, \dots, x_i\}$. For instance, if we fatten 7 we get 7, if we fatten 32064781 we get 33366788, and if we fatten 9000000 we get 9999999.

Write a function

int *fatten* (**int** x);

to return the result of fattening @x@.

You cannot use vectors in the code. We suggest to think of a recursive solution. You may implement and use auxiliar procedures.

Your program should follow a right programming style. You should include the appropriate comments.

Precondition

It holds $0 <$ @x@ $< 10^9$.

Observation

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

Problem information

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