

The Fight against Terror

Problem:

The brave soldiers of India guard our borders 24x7 against threats to national security. To aid them in the cause, our intelligence agency, Research and Analysis Wing, listens for all possible sources of terror. Recently, they received some encrypted coordinates of terror camps. However, the encryption key is hidden inside a string S, which is known.

S contains only digits from 0 to 9. The hidden key is the **maximum** sum that can be formed by inserting '+' sign in between the characters of S and evaluating the resulting expression.

You can add as many '+' signs as possible, possibly 0, just keeping in mind that no two '+' signs are consecutive.

Can you help our agents in cracking the code?

Input:

- Single String S

Output:

- Print the sum of the evaluated value over all possible formulas.

Constraints:

- $1 \leq |S| \leq 10$
- All letters in S are digits between '1' and '9', inclusive.

Example:

Input:

132

Output:

186

Problem Setter:

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