06. Message from Space

Condition:

You have received an encrypted message from space. Your task is to decrypt the message, following these simple rules:

- The message string will consist only of uppercase letters, numbers, and parentheses.
- When there is a block of code inside the brackets, like [10AB], it means you need to repeat the letters AB 10 times.
- The message can be nested in multiple layers of blocks.
- The final decrypted message will consist of only uppercase letters.

Create a program that accepts an encrypted message and returns the decrypted message.

Input:

The encrypted message is accepted on one line, as a string.

Output:

• The decrypted message should be output in uppercase only.

Examples:

Input	Output
AC[2BG]OP[1VG]OO[ACBGBGBGOPVGOOPP
3PP]O	PPPPO