1C Find the Reverse Complement of a String

Reverse Complement Problem
Find the reverse complement of a DNA string.

Input: A DNA string *Pattern*.
Output: The reverse complement of the string *Pattern*.

Formatting

Input: A DNA string *Pattern*.
Output: A string representing $\overline{Pattern}$, the reverse complement of *Pattern*.

Constraints

- The length of *Pattern* will be between 1 and 10^4.
- *Pattern* will be a DNA string.

Test Cases

Case 1

Description: The sample dataset is not actually run on your code.

Input:
`AAAACCCGGT`

Output:
`ACCGGGTTTT`

Case 2

Description: This test dataset performs two checks. First, it makes sure that you didn't forget to complement *Pattern* (i.e. you reversed *Pattern*, but not complemented), which would have an output of `CACACA`. Then, it makes sure that you didn't forget to reverse *Pattern* (i.e. you complemented *Pattern*, but not reversed), which would have an output of `TGTGTG`.

Input:
`ACACAC`

Output:
`GTGTGT`

Case 3

Description: A larger dataset of the same size as that provided by the randomized autograder.