

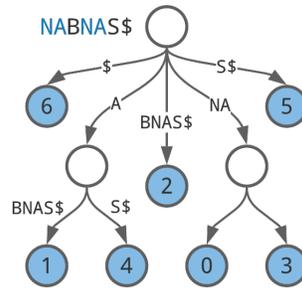
9D Find the Longest Repeat in a String

Longest Repeat Problem

Find the longest repeat in a string.

Input: A string *Text*.

Output: A longest substring of *Text* that appears in *Text* more than once.



Formatting

Input: A string *Text*.

Output: The longest substring that appears more than once in *Text*.

Constraints

- The length of *Text* will be between 1 and 10^3 .

Test Cases

Case 1

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

Input:

panamabanananas

Output:

ana

Case 2

Description: The longest repeating sequence in *Text* overlaps with another instance of itself.

Input:

GAGAGAG

Output:

GAGAG

Case 3

Description: Multiple repeats occur with the same frequency in *Text* and are the same length.

Input:

AGAGCTCT

Output:

AG or CT (*you will not be penalized for having one over the other, but make sure you only output one*).

Case 4

Description: Repeats that occur at the beginning and end of *Text*.

Input:

AAGCTGAA

Output:

AA

Case 5

Description: There are no repeats in *Text*.

Input:

ABCDEFGG

Output:

Case 6

Description: A larger dataset of the same size as that provided by the randomized autograder. Check input/output folders for this dataset.