

# Complementing a Strand of DNA

## Problem

In [DNA strings](#), symbols 'A' and 'T' are complements of each other, as are 'C' and 'G'.

The **reverse complement** of a [DNA string](#) S is the string c formed by reversing the symbols of S, then taking the complement of each symbol (e.g., the reverse complement of "GTCA" is "TGAC").

### Given:

A DNA string S of length at most 1000 [bp](#).

### Return:

The reverse complement C of S.

### HINT:

Use dictionaries with keys as the Nucleotides and the corresponding values to be their complementary nucleotide

## Sample Dataset

```
AAAACCCGGT
```

## Sample Output

```
ACCGGGTTTT
```