M03S01 [Arrays and Strings]: Exercise 08

CS110: Computing Lab
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Problem Description

A particular region of length n in a bacterial genome contains only 'A' and 'T' nucleotides. Some biologists are interested in finding a sub-region of maximum length containing equal number of A's and T's within this genomic region. Write a program to help those biologists. Your program can assume the genomic region of interest is given and cannot be longer than 100 characters.

Your program should output the following:

- start index of the sub-region

- end index of the sub-region and

- print the sub-region.

Example 1:
Input Genomic region: ATAAATT
Expected Output: Start-index = 1, End-index = 6, sub-region = TAAATT