1093. Count PAT's (25)

时间限制

120 ms

内存限制

65536 kB

代码长度限制

16000 B

判题程序

Standard

作者

CAO, Peng

The string *APPAPT* contains two *PAT*'s as substrings. The first one is formed by the 2nd, the 4th, and the 6th characters, and the second one is formed by the 3rd, the 4th, and the 6th characters.

Now given any string, you are supposed to tell the number of *PAT*'s contained in the string.

**Input Specification:**

Each input file contains one test case. For each case, there is only one line giving a string of no more than 105 characters containing only P, A, or T.

**Output Specification:**

For each test case, print in one line the number of *PAT*'s contained in the string. Since the result may be a huge number, you only have to output the result moded by 1000000007.

**Sample Input:**

APPAPT

**Sample Output:**

2

[提交代码](https://www.patest.cn/contests/pat-a-practise/1093)

这次的失误在于不知道变通，单纯只想到了一种求值模式而没去思考其他的可能模式，这类变通题一直是我的弱项，希望以后解题时可以从各方面考虑。

#include**<iostream>**

#include**<string>**

#include**<algorithm>**

#include**<queue>**

#include**<vector>**

#include**<sstream>**

#include**<stack>**

**using** **namespace** std;

**int** main()

{

**string** temp;

getline(cin, temp);

**int** size = temp.size();

**long** **long** cnt = 0, P = 0, A = 0, T = 0;

**for** (**int** i = 0; i < size; i++)

{

/\*if (temp[i] == 'P')

P++;\*/

**if** (temp[i] == 'A')

A++;

**if** (temp[i] == 'T')

T++;

}

**for** (**int** i = 0; i < size; i++)

{

**if** (temp[i] == 'A')

cnt+= P\*T;

**if** (temp[i] == 'P')

P++;

**if** (temp[i] == 'T')

T--;

}

cout << cnt % 1000000007;

}