

Hi, RODRIGO JESUS SANTISTEBAN PACHARI
rsantisteban@unsa.edu.pe



LIVE
What others are solving.

LIST
List all your submissions.

TRIED
Problems not solved yet.

FAQS
Need help using the tool?

SOURCE CODE

EDIT & SUBMIT

VISUALIZE THE SOURCE CODE OF YOUR SUBMISSION, PLUS SOME EXTRA DETAILS.

SUBMISSION # 25746197

PROBLEM: 1530 - How Many Substrings?
ANSWER: Accepted
LANGUAGE: C++17 (g++ 7.3.0, -std=c++17 -O2 -lm) [+0s]
RUNTIME: 1.271s
FILE SIZE: 1.73 KB
MEMORY: -
SUBMISSION: 12/23/21, 4:22:59 AM

SOURCE CODE

```
1 #include <bits/stdc++.h>
2 using namespace std;
3
4 #define rep(i,a,b) for(int i = int(a); i < int(b) ; i++)
5 #define pb push_back
6 #define mp make_pair
7 #define F first
8 #define S second
9
10 typedef long long int ll;
11 typedef pair < int, int > ii;
12
13 struct state{
14     int len, link;
15     pair <int, int> next;
16
17     int MAXN = 999999;
18     int st[2*MAXN];
19
20     int sz;
```

We use cookies to personalize your experience in our website. By continuing to visit beecrowd you agree to our use of cookies.

GOT IT Read Cookie Policy

FORUM

Get help to solve problems.

```
23 void sa_init(){
24     sz = 1;
25     last = 0;
26     st[0].len = 0;
27     st[0].link = -1;
28     st[0].next.clear();
29 }
30
31 void sa_extend (int c, ll &ans){
32     int cur = sz++;
33     st[cur].len = st[last].len + 1;
34     st[cur].next.clear();
35     int p;
36     for(p=last; p!=-1 && !st[p].next.count(c); p=st[p].link){
37         st[p].next[c] = cur;
38     }
39     if(p == -1){
40         st[cur].link = 0;
41         ans+=st[cur].len;
42     }
43
44     else{
45
46         int q = st[p].next[c];
47         if(st[p].len + 1 == st[q].len){
48             st[cur].link = q;
49         }else{
50             int clone = sz++;
51             st[clone].len = st[p].len + 1;
52             st[clone].next = st[q].next;
53             st[clone].link = st[q].link;
54             for(; p!=-1 && st[p].next[c]==q; p=st[p].link){
55                 st[p].next[c] = clone;
56             }
57             st[q].link = st[cur].link = clone;
58         }
59         ans+=st[cur].len-st[st[cur].link].len;
60     }
61
62     last = cur;
```

We use cookies to personalize your experience in our website. By continuing to visit beecrowd you agree to our use of cookies.

GOT IT

[Read Cookie Policy](#)

```
usca_automato(int m, string p){
    t i, pos=0;
    for( i=0 ; i<m ; i++ ){
        if( st[pos].next.count(p[i])==0 ){
            return false;
        }
    }
}
```

```

72     }
73     }
74     return true;
75 }
76
77 long long conta_substrings(){
78     long long ret=0;
79     for( int i=1 ; i<sz ; i++ ){
80         ret+=st[i].len-st[st[i].link].len;
81     }
82     return ret;
83 }
84
85 int main(){
86     char s[MAXN];
87     while(scanf("%s", s) !=EOF){
88         sa_init();
89         int tam=strlen(s); ll ans=0;
90         rep(i, 0, tam){
91             if(s[i]=='?'){
92                 printf("%lld\n", ans);
93             }else{
94                 sa_extend(s[i], ans);
95             }
96         }
97     }
98
99     return 0;
100
101 }

```

We use cookies to personalize your experience in our website. By continuing to visit beecrowd you agree to our use of cookies.

GOT IT

[Read Cookie Policy](#)