

The event of zero and one

ACM Template



目录

1 String

1.1 Manacher

```

302f #include <bits/stdc++.h>
421c using namespace std;
571f const int MAX = 2e5+10000;
99d0 char s[MAX];
81d4 struct Manacher{
9ccd     int lc[MAX];
04f3     char ch[MAX];
d7af     int N;
053c     Manacher(char *s){init(s);manacher();}
44ca     /* s 1 bas */
e798     void init(char *s){
0de8         int n = strlen(s+1);
ad19         ch[n*2 +1] = '#';
ce0d         ch[0] = '@';
46cd         ch[n*2 +2] = '\0';
0c3f         for (int i=n;i>=1;i--){
6beb             ch[i*2] = s[i];ch[i*2 -1] = '#';
95cf         }
5991         N = 2* n +1;
95cf     }
6c5f     void manacher(){

```

```

a461         lc[1]=1; int k=1;
256b         for (int i=2;i<=N;i++){
7957             int p = k+lc[k]-1;
5e04             if (i<=p){
24a1                 lc[i]=min(lc[2*k-i],p-i+1);
87d6             }else{ lc[i]=1; }
aa80             while (ch[i+lc[i]]==ch[i-lc[i]])lc[i]++;
2b9a             if (i+lc[i]>k+lc[k])k=i;
95cf         }
95cf     }
56dd     void debug(){
b492         puts(ch);
cd0f         for (int i=1;i<=N;i++){
0d62             printf("lc[%d]=%d\n",i,lc[i]);
95cf         }
95cf     }
329b };
3117 int main(){
a275     scanf("%s",s+1);
382e     Manacher manacher(s);
9c07     manacher.debug();
7021     return 0;
95cf }

```