重复字符串

人员

刘祺、齐振玮、夏志赫、武敬哲、秦显森、徐浩然、高健桓、李青默、辛帅辰、夏硕承、方俊喆、董浩桢、郑泽楷、程梓豪、赵熙羽、郭骐嘉 到课，牛同泽、谢亚锴 线上

作业检查

上周作业链接: https://www.luogu.com.cn/contest/217571

2024-1201周日10:30

报名　编辑比赛

题目数 6　报名人数 20

比赛说明　题目列表　**排行榜**

名次	参赛者	总分	A	B	C	D	E	F
#1	刘祺	600 (7.33d)	100 (27.72min)	100 (7.76h)	100 (1.71h)	100 (7.86h)	100 (9.64h)	100 (6.18d)
#2	谢亚锴	580 (19.79d)	100 (7.08min)	100 (58.62min)	100 (1.73h)	100 (6.29d)	100 (6.39d)	80 (7.00h)
#3	秦显森	540 (14.42d)	100 (25.25min)	60 (38.02min)	100 (1.81h)	100 (1.33d)	100 (6.48d)	80 (6.49d)
#4	武敬哲	500 (18.64d)	100 (28.08min)	100 (6.19d)	100 (1.78h)	100 (6.17d)	100 (6.18d)	
#5	徐浩然	500 (18.83d)	100 (34.40min)	100 (6.23d)	100 (1.78h)	100 (6.24d)	100 (6.26d)	
#6	夏硕承	500 (19.07d)	100 (16.33min)	100 (6.04d)	100 (1.73h)	100 (6.03d)	100 (6.92d)	
#7	辛帅辰	500 (19.61d)	100 (7.00min)	100	100 (1.88h)	100 (6.51d)	100 (6.51d)	100 (6.51d)
#8	赵熙羽	500 (24.86d)	100 (5.91d)		100 (5.91d)	100 (5.93d)	100 (5.93d)	100 (6.00d)
#9	高健桓	410 (9.11d)	100 (28.67min)	100 (4.45d)	100 (1.71h)	100 (1.89h)	10 (4.49d)	
#10	牟茗	400 (4.72h)	100 (7.17min)	100 (57.20min)	100 (1.66h)	100 (1.99h)		
#11	夏志赫	400 (6.02h)	100 (25.57min)		100 (1.81h)	100 (1.83h)	100 (1.95h)	
#12	程梓豪	400 (18.00h)			100 (4.21h)	100 (4.46h)	100 (4.63h)	100 (4.71h)
#13	牛同泽	400 (6.49d)	100 (26.83min)	100 (1.68h)	100 (1.81h)	100 (6.33d)		
#14	齐振玮	400 (10.74d)	100 (24.58min)	100 (5.32d)	100 (1.78h)	100 (5.32d)		
#15	郑泽楷	300 (4.21h)	100 (31.07min)		100 (1.75h)	100 (1.94h)		
#16	方俊喆	200 (1.85h)	100 (3.97min)		100 (1.78h)			
#17	董浩桢	200 (12.83d)				100 (6.42d)	100 (6.42d)	
#18	李青默	100 (30.93min)	100 (30.93min)					

您正在共享屏幕　结束共享

作业

https://www.luogu.com.cn/contest/218902

https://www.luogu.com.cn/contest/218929

课堂表现

今天的 B 题和 C 题, 是比较好的两道题, 同学们课下要好好复习一下这 2 道题。

课堂内容

U512584 competition

```cpp
#include <bits/stdc++.h>

using namespace std;

int a[10];

int main()
{
    cin >> a[1] >> a[2] >> a[3];
    int k;
    cin >> k;

    a[4] = a[1], a[5] = a[2];
    for (int i = 1; i <= 3; i++) {
        // a[i]: a[i+1], a[i+2]
        int sum = 0;
        if (a[i]>=a[i+1] && a[i]>=a[i+2]) sum = 4;
        else if (a[i]>=a[i+1] || a[i]>=a[i+2]) sum = 2;
        else sum = 1;

        if (a[i] > k) sum *= 2;
        cout << sum << " ";
    }
    return 0;
}
```
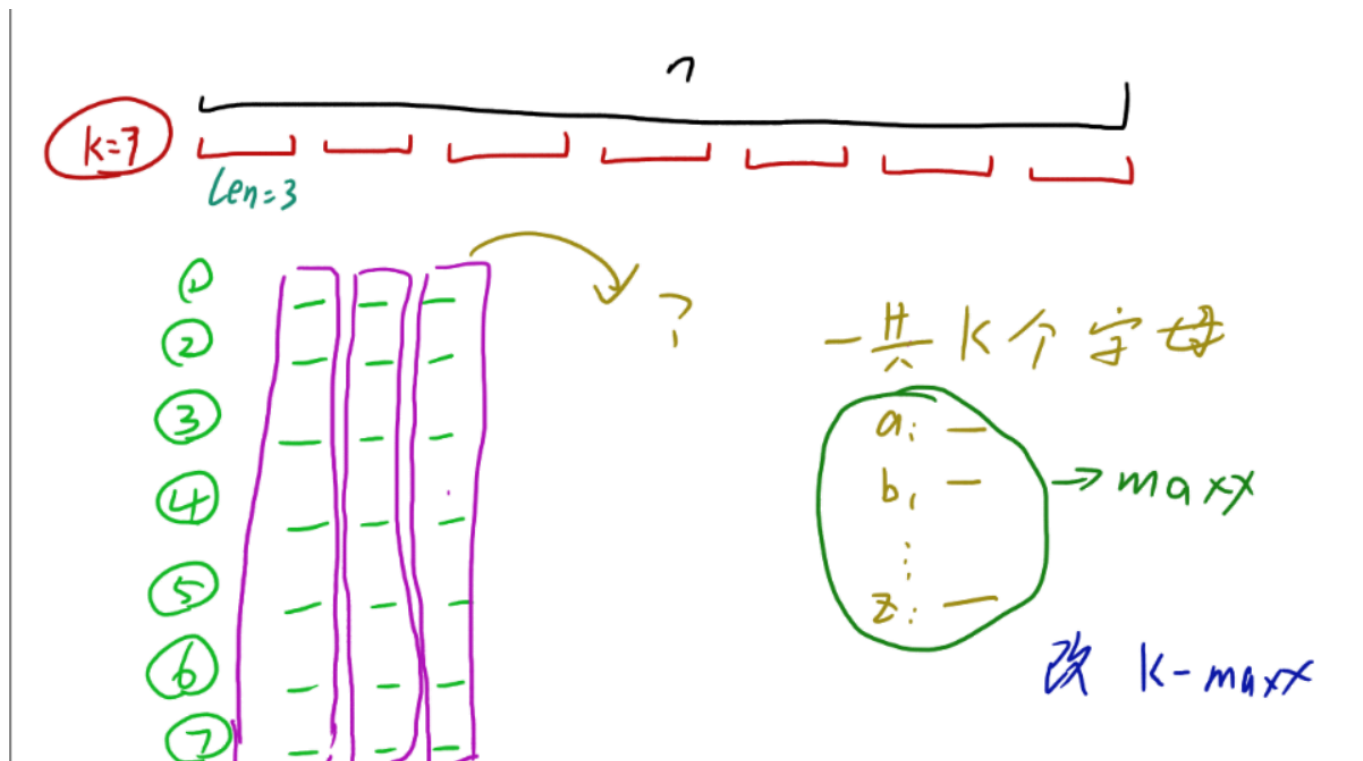
P8739 [蓝桥杯 2020 国 C] 重复字符串

```
n, k
if (n%k != 0) {
    cout << -1 << endl;
    return 0;
}

int len = n/k;   // 每一份的长度都是 len

for (int i = 1; i <= len; i++) {   // 第一份的第 i 个去跟后面对应
    // i: len+i, len+len+i, len+len+len+i, ..., 最终不能超过 n
    map<char, int> mp;
    int maxx = 0;
    for (int j = i; j <= n; j += len)  {
        mp[i]++;
        maxx = max(maxx, mp[i]);
    }

    // 原本有 vec.size() <-> k 个字母
    // 出现最多的那个出现了 maxx 次
    // 要修改 k - maxx 次
    sum += k-maxx;
}
```

P8672 [蓝桥杯 2018 国 C] 交换次数

```cpp
#include <bits/stdc++.h>

using namespace std;
```

```cpp
const int maxn = 1e5 + 5;
char s[maxn], s2[maxn];
int n;
map<char, int> mp;

int calc(char a, char b, char c) {
  int cnt_1 = mp[a], cnt_2 = mp[b];
  for (int i = 1; i <= n; ++i) s[i] = s2[i];

  int res = 0, cnt_b = 0;
  for (int i = 1; i <= cnt_1; ++i) {
    if (s[i] != a) {
      ++res;
      if (s[i] == b) cnt_b++;
    }
  }

  for (int i = cnt_1+1; i <= n; ++i) {
    if (s[i] == a) {
      if (cnt_b) s[i] = b, cnt_b--;
      else s[i] = c;
    }
  }

  for (int i = cnt_1+1; i <= cnt_1+cnt_2; ++i) {
    if (s[i] != b) res++;
  }

  return res;
}

int main()
{
  cin >> (s2+1);
  n = strlen(s2+1);
  for (int i = 1; i <= n; ++i) mp[s2[i]]++;

  int res = calc('A', 'B', 'T');
  res = min(res, calc('A', 'T', 'B'));
  res = min(res, calc('B', 'A', 'T'));
  res = min(res, calc('B', 'T', 'A'));
  res = min(res, calc('T', 'A', 'B'));
  res = min(res, calc('T', 'B', 'A'));

  cout << res << endl;
  return 0;
}
```