Educational Codeforces Round 93 (Rated for Div. 2)

A. Bad Triangle

题意：判断一组排序后的数中是否有三个数可以构成三角形三边，并输出三个数

思路：等价于判断最大的数是否可以和最小的两个数构成三角形三边

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

using namespace std;
typedef long long LL;
int a[100000];
int main(){
    int t = 0;
    cin>>t;
    while(t--){
        int n;
        scanf("%d", &n);
        for (int i = 1; i <= n; ++i) {
            scanf("%d", a+i);
        }

        if(a[1] + a[2] <= a[n])printf("1 2 %d\n", n);
        else printf("-1\n");
    }
}
```

B. Substring Removal Game

题意：

思路：

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

using namespace std;
typedef long long LL;

int num[1005], tot;

int main() {
    int t;
```

```
    cin >> t;
    while (t--) {
        string s;
        cin >> s;
        tot = 0;
        int tt = 0;
        int n = s.length();
        for (int i = 0; i < n; i++) {
            if (s[i] == '1') {
                tt++;
                continue;
            }
            if (tt != 0) {
                num[tot] = tt;
                tot++;
                tt = 0;
            }
        }
        if (tt != 0) {
            num[tot] = tt;
            tot++;
        }
        sort(num, num + tot);
        int ans = 0;
        for (int i = tot - 1; i >= 0; i -= 2) {
            ans += num[i];
        }
        printf("%d\n", ans);
    }
    return 0;
}
```

C. Bad Triangle

题意：求子串内字符值和与子串下标差相等的子串个数

思路：求前缀和后，减去当前下标，符合要求的子串的首位下表对应的值相等

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

using namespace std;
typedef long long LL;
int a[100005];
int sum[100005];
int cnt[2000005];

int main() {
```

```
    int t = 0;
    cin >> t;
    while (t--) {
        int n;
        cin >> n;
        string s;
        cin >> s;
        for (int i = 0; i < n; ++i) {
            a[i] = s[i] - '0';
        }
        sum[0] = a[0];
        for (int j = 1; j < n; ++j) {
            sum[j] = sum[j - 1] + a[j];
        }
        for (int i = 0; i < n; ++i) {
            sum[i] -= i + 1;
        }
        memset(cnt, 0, sizeof(int) * n * 10 * 2 + 2);
        cnt[0 + n * 10] = 1;
        LL ans = 0;
        for (int i = 0; i < n; ++i) {
            if(cnt[sum[i] + n * 10]){
                ans += cnt[sum[i] + n * 10];
            }
            cnt[sum[i] + n * 10]++;
        }
        cout<<ans<<endl;
    }
}
```

D. Bad Triangle

题意：略

思路：dp

```
```