一维数组练习

人员

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上周作业检查

上周作业链接: https://cppoj.kids123code.com/contest/2682

王向东老师周六三点半C++穷举法学习

⟳ 刷新

#	用户名	姓名	编程分	时间	A	B	C	D	E	F	G	H	I
1	cuixiaoze	崔孝泽	900	63	100	100	100	100	100	100	100	100	100
2	chenyiqi	陈奕圻	900	125	100	100	100	100	100	100	100	100	100
3	maxinyi	马欣怡	900	244	100	100	100	100	100	100	100	100	100
4	zhaotingshu	赵庭澍	900	288	100	100	100	100	100	100	100	100	100
5	hepeiyu	何佩瑜	888	161	100	100	100	100	100	100	100	88	100
6	quyuxuan	屈钰轩	788	33	100	100	100	100	100	100	100	88	
7	zhangjiarui	张嘉芮	748	210	100	60	100	100	100	100	100	88	0
8	liuchenxi123	刘晨锡	688	189			100	100	100	100	100	88	100
9	wangchunshuo	王纯硕	100	7			100						

作业

https://cppoj.kids123code.com/contest/2899 (作业是 A ~ I 题必做)

课堂表现

今天针对一维数组的内容给同学们进行了一些题目的练习, 大部分同学课上做题表现都不错。

课堂内容

Filter

```cpp
#include<bits/stdc++.h>
using namespace std;
int a[109];
int main(){
    int n,m;
    cin>>n;
    for(int i=1;i<=n;i++){
        cin>>a[i];
    }
    for(int i=1;i<=n;i++){
        if(a[i]%2==0){
            cout<<a[i]<<" ";
        }
    }
```

```
        }
        return 0;
    }
```

求n个数的最大值和最小值

```cpp
#include<bits/stdc++.h>
using namespace std;
int a[109];
int main(){
    long long n,maxx=0,minn=32767;
    cin>>n;
    for(int i=1;i<=n;i++){
        cin>>a[i];
    }
    for(int i=1;i<=n;i++){
        if(minn>a[i]){
            minn=a[i];
        }
        if(maxx<a[i]){
            maxx=a[i];
        }
    }
    cout<<maxx<<" "<<minn;
    return 0;
}
```

最贵商品和最便宜商品分别有几个

```cpp
#include<bits/stdc++.h>
using namespace std;
int a[1000];
int main(){
    long long n,maxx=0,minn=32767,cnt=0,cnt1=0;
    cin>>n;
    for(int i=1;i<=n;i++){
        cin>>a[i];
    }
    for(int i=1;i<=n;i++){
        if(minn>a[i]){
            minn=a[i];
        }
        if(maxx<a[i]){
            maxx=a[i];
        }
    }
    for(int i=1;i<=n;i++){
        if(a[i]==maxx){
```

```
            cnt++;
        }
        if(a[i]==minn){
            cnt1++;
        }
    }
    cout<<cnt<<" "<<cnt1;
    return 0;
}
```

最后一次出现该数的位置

```cpp
#include<bits/stdc++.h>
using namespace std;
int a[1000];
int main(){
    long long n,m;
    cin>>n;
    for(int i=1;i<=n;i++){
        cin>>a[i];
    }
    cin>>m;
    for(int i=n;i>=1;i--){
        if(m==a[i]){
            cout << i << endl;
            return 0;
        }
    }
    cout << -1;
    return 0;
}
```

Intersection

```cpp
#include <bits/stdc++.h>
using namespace std;
int a[105];
int main()
{
    int l1,r1,l2,r2,cnt=0;
    cin>>l1>>r1>>l2>>r2;
    for (int i=l1;i<=r1;i++)
    {
        a[i]++;
    }
    for (int i=l2;i<=r2;i++)
    {
        a[i]++;
```

```
    }
    for (int i=0;i<=100;i++)
    {
        if (a[i]==2)
        {
            cnt++;
        }
    }
    if (cnt==0)
    {
        cout<<0;
    }
    else
    {
        cout<<cnt-1;
    }
    return 0;
}
```

马里奥花银币

```
#include<bits/stdc++.h>
using namespace std;
int a[1000];
int main(){
    long long n,maxx=0,minn=32767,sum=0,cnt=0;
    cin>>n;
    for(int i=1;i<=n;i++){
        cin>>a[i];
        sum+=a[i];
    }
    sort(a+1,a+n+1);
    cnt+=a[n];
    for(int i=1;i<=n;i++){
        if(a[i]==a[1]){
            cnt+=a[i];
        }
    }
    cout<<cnt<<endl;
    cout<<sum-cnt;
    return 0;
}
```

奇偶数选大王

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

using namespace std;
```

```cpp
int a[1005];

int main()
{
    int n, maxx1 = 0, maxx2 = 0;
    cin >> n;
    for (int i = 1; i <= n; i++) {
        cin >> a[i];
        if (a[i]%2 == 1) {
            if (a[i] > maxx1) {
                maxx1 = a[i];
            }
        }
        else {
            if (a[i] > maxx2) {
                maxx2 = a[i];
            }
        }
    }
    cout << maxx1 << " " << maxx2 << endl;
    sort(a+1, a+n+1);
    for (int i = 1; i <= n; i++) {
        cout << a[i] << " ";
    }
    cout << endl;
    return 0;
}
```

采摘活动

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

using namespace std;

int a[1005];

int main()
{
    int n;
    cin >> n;
    for (int i = 1; i <= n; i++) {
        cin >> a[i];
    }
    sort(a+1, a+n+1);
    int sum = 0, cnt = 0;
    for (int i = 1; i <= n; i++) {
        if (a[i]!=a[1] && a[i]!=a[n]) {
            sum += a[i];
            cnt++;
        }
```

```
        }
        cout << sum << endl;
        cout << fixed << setprecision(1) << 1.0*sum/cnt << endl;
        return 0;
    }
```

Shift

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

using namespace std;

const int maxn = 100 + 5;
int w[maxn];

int main()
{
    int n, K; cin >> n >> K;
    for (int i = 1; i <= n; ++i) cin >> w[i];
    if (K >= n) {
        for (int i = 1; i <= n; ++i) cout << 0 << " ";
        cout << endl;
    } else {
        for (int i = K+1; i <= n; ++i) cout << w[i] << " ";
        for (int i = 1; i <= K; ++i) cout << 0 << " ";
        cout << endl;
    }
    return 0;
}
```