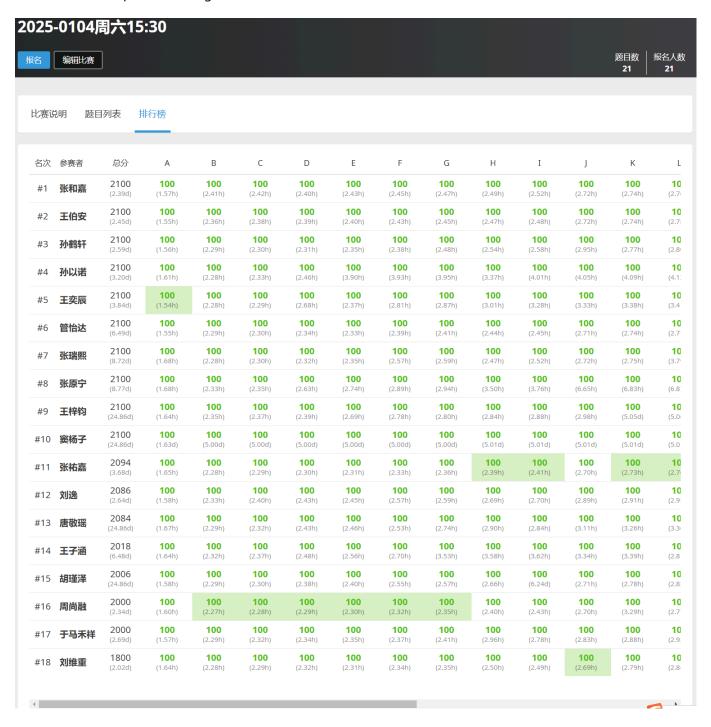
for 循环练习

人员

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作业检查

上周作业链接: https://www.luogu.com.cn/contest/223284



作业

https://www.luogu.com.cn/contest/224348 (课上讲了 A~F 题, 课后作业是 G、H 两道题目)

课堂表现

同学们整体课上做题都很积极,有一两位同学课上讲话比较多被老师严厉批评了,希望以后引起重视进行改正。

课堂内容

U519443 等差数

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

using namespace std;

int main()
{
    int n, m; cin >> n >> m;
    for (int i = n; i <= m; ++i) {
        if (i<=999) {
            int a = i/100, b = (i/10)%10, c = i%10;
            if (b-a == c-b) cout << i << endl;
        } else {
            int a = i/1000, b = (i/100)%10, c = (i/10)%10, d = i%10;
            if (b-a == c-b && c-b == d-c) cout << i << endl;
        }
    }
    return 0;
}</pre>
```

U519444 奇怪的数?

```
#include<bits/stdc++.h>
using namespace std;

int main(){
    int n;
    cin>>n;
    for(int i=1000;i<=n;i++){
        int a=i/1000,b=i/100%10,c=i/10%10,d=i%10;
        if(a==c&&b==d&&i%2==1){
            cout<<i<<endl;
        }
    }
    return 0;
}</pre>
```

U519446 山形数

```
#include <iostream>
using namespace std;

int main() {
    for (int i=100;i<=999;i++) {
        int ge=i%10;
        int shi=(i/10)%10;
        int bai=i/100;
        if (shi>ge && shi>bai) {
            printf("%d\n",i);
        }
    }
    return 0;
}
```

U519447 特殊的数字四十

```
#include <iostream>
using namespace std;

int main() {
    for (int i = 1000; i <= 9999; i++) {
        int ge = i%10;
        int shi = (i/10)%10;
        int bai = (i/100)%10;
        int qian = i/1000;
        if (ge+shi+bai+qian==10) {
            cout<<i<<endl;
        }
    }
    return 0;
}</pre>
```

累加、累乘、计数器

```
1. 累加
int sum = 0; // 非常重要
for (int i = 1; i <= 100; i++) {
    if (i%3==1) {
        sum += i;
    }
}
cout << sum << endl;</pre>
2. 累乘
```

```
int a = 1;  // 非常重要
for (int i = 1; i <= 100; i++) {
    if (i%3==1) {
        a *= i;
    }
}
cout << a << endl;

3. 计数器的使用
int cnt = 0;  // 非常重要
for (int i = 100; i <= 999; i++) {
    int a = i/100, b = (i/10)%10, c = i%10;
    if (b>a && b>c) {
        cnt++;
    }
}
cout << cnt << endl;</pre>
```

U522818 阶乘

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

using namespace std;

int main()
{
    int n;
    cin >> n;
    long long res = 1;
    for (int i = 1; i <= n; i++) {
        res *= i;
    }
    cout << res << endl;
    return 0;
}</pre>
```

U522834 输出字母表

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

using namespace std;

int main()
{
   for (char i = 'a'; i <= 'z'; i++) {
      cout << i << " ";
   }
   cout << endl;</pre>
```

```
for (char i = 'A'; i <= 'Z'; i++) {
    cout << i << " ";
}
cout << endl;
return 0;
}</pre>
```

U522814 完全平方数

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

using namespace std;

int main()
{
   for (int i = 1; i*i <= 1000; i++) {
      cout << i*i << endl;
   }
   return 0;
}</pre>
```

noi 1.5 02:财务管理

```
#include <iostream>
#include <iomanip>

using namespace std;

int main()
{
    double x;
    double sum = 0;
    for (int i = 1; i <= 12; i++) {
        cin >> x;
        sum += x;
    }
    cout << "$";
    cout << fixed << setprecision(2) << sum/12 << endl;
    return 0;
}</pre>
```

noi 1.5 07:奥运奖牌计数

```
#include <iostream>
#include <iomanip>
```

```
using namespace std;
int main()
{
    int n, a, b, c;
    cin >> n;
    int suma=0, sumb=0, sumc=0;
    for (int i = 1; i <= n; i++) {
        cin >> a >> b >> c;
        suma += a;
        sumb += b;
        sumc += c;
    }
    cout << suma << " " << sumb << " " << sumc << " " << suma+sumb+sumc << endl;
    return 0;
}</pre>
```