

Assignment #1: 自主学习

Updated 0110 GMT+8 Sep 20, 2024

2024 fall, Compiled by ==曾弘倓 物院 2400011513==

1. 题目

02733: 判断闰年

<http://cs101.openjudge.cn/practice/02733/>

思路：基于题目所给过程，直接写出程序。耗时可能大约1~2分钟。

代码

```
#include<iostream>
using namespace std;
int main()
{
    int a;
    cin >> a;
    if ((a % 4 == 0 && a % 100 != 0) || (a % 400 == 0 && a % 3200 != 0))
    {
        cout << "Y" << endl;
    }
    else cout << "N" << endl;
    return 0;
}
```

代码运行截图 ====

状态: Accepted

源代码

```
#include<iostream>
using namespace std;
int main()
{
    int a;
    cin >> a;
    if ((a % 4 == 0 && a % 100 != 0) || (a % 400 == 0 && a % 3200 != 0))
    {
        cout << "Y" << endl;
    }
    else cout << "N" << endl;
    return 0;
}
```

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基本信息

#: 46007680
题目: 02733
提交人: xieyixu
内存: 252kB
时间: 2ms
语言: G++
提交时间: 2024-09-05 20:39:14

[English](#) [帮助](#) [关于](#)

02750: 鸡兔同笼

<http://cs101.openjudge.cn/practice/02750/>

思路：同上，也是基于题目所给过程直接写出程序。耗时也是大约1~2分钟。

代码

```
#include<iostream>
using namespace std;
int main()
{
    int a, b, c;
    cin >> a;
    if (a % 4 == 0)
    {
        b = a / 2;
        c = a / 4;
        cout << c << " " << b << endl;
    }
    else if (a % 2 == 0)
    {
        b = a / 2;
        c = (a - 2) / 4 + 1;
        cout << c << " " << b << endl;
    }
    else
    {
        cout << 0 << " " << 0 << endl;
    }
    return 0;
}
```

代码运行截图 ====

状态: Accepted

源代码

```
#include<iostream>
using namespace std;
int main()
{
    int a, b, c;
    cin >> a;
    if (a % 4 == 0)
    {
        b = a / 2;
        c = a / 4;
        cout << c << " " << b << endl;
    }
    else if (a % 2 == 0)
    {
        b = a / 2;
        c = (a - 2) / 4 + 1;
        cout << c << " " << b << endl;
    }
    else
    {
        cout << 0 << " " << 0 << endl;
    }
    return 0;
}
```

基本信息

#: 46003517
题目: 02750
提交人: xieyixu
内存: 248kB
时间: 2ms
语言: G++
提交时间: 2024-09-04 21:42:21

50A. Domino piling

greedy, math, 800, <http://codeforces.com/problemset/problem/50/A>

思路：基于题目所给过程直接写出程序。耗时1分钟

代码

```
m,n=map(int,input().split())
s=m*n
print(int(s/2))
```

代码运行截图 ====

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS HACKS ROOM STANDINGS CUSTOM INVOCATION

General

#	Author	Problem	Lang	Verdict	Time	Memory	Sent	Judged		
280562112	Practice: xieyixu	50A - 14	Python 3	Accepted	154 ms	12 KB	2024-09-10 14:14:12	2024-09-10 14:14:12	★	Compare

→ Source Copy

m, n=map(int, input().split())
s=m*n
print(int(s/2))

Click to see test details

1A. Theatre Square

math, 1000, <https://codeforces.com/problemset/problem/1/A>

思路：铺上的地砖的总长要大于等于广场的长，总宽大于等于广场的宽。耗时大约3分钟。

代码

```
import math
n,m,a=map(int,input().split())
s=(math.ceil(n/a))*(math.ceil(m/a))
print(s)
```

代码运行截图 ====

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

General

#	Author	Problem	Lang	Verdict	Time	Memory	Sent	Judged		
280566492	Practice: xieyixu	1A - 10	Python 3	Accepted	77 ms	20 KB	2024-09-10 14:47:19	2024-09-10 14:47:19	☆	<button>Compare</button>

→ Source Copy

```
import math
n,m,a=map(int,input().split())
s=(math.ceil(n/a))*(math.ceil(m/a))
print(s)
```

[Click](#) to see test details

112A. Petya and Strings

implementation, strings, 1000, <http://codeforces.com/problemset/problem/112/A>

思路：直接依据题目给出代码。耗时1分钟

代码

```
a1=input()
a2=input()
a1=a1.lower()
a2=a2.lower()
if a1<a2:
    print(-1)
elif a1>a2:
    print(1)
else:
    print(0)
```

代码运行截图 ====

General

#	Author	Problem	Lang	Verdict	Time	Memory	Sent	Judged		
281931037	Practice: xieyixu	112A - 11	Python 3	Accepted	156 ms	28 KB	2024-09-20 06:16:32	2024-09-20 06:16:32	☆	Compare

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Copy

```
a1=input()
a2=input()
a1=a1.lower()
a2=a2.lower()
if a1<a2:
    print(-1)
elif a1>a2:
    print(1)
else:
    print(0)
```

[Click](#) to see test details

231A. Team

bruteforce, greedy, 800, <http://codeforces.com/problemset/problem/231/A>

思路：耗时大约3分钟

代码

```
a=int(input())
i=0
m=0
while i<a:
    p,v,n=map(int,input().split())
    i+=1
    if p+v+n>1:
        m=m+1

print(m)
```

代码运行截图 ====

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS HACKS ROOM STANDINGS CUSTOM INVOCATION

General

#	Author	Problem	Lang	Verdict	Time	Memory	Sent	Judged		
280568553	Practice: xieyixu	231A - 11	Python 3	Accepted	154 ms	16 KB	2024-09-10 15:02:18	2024-09-10 15:02:18	☆	Compare

→ Source

Copy

```
a=int(input())
i=0
m=0
while i<a:
    p,v,n=map(int,input().split())
    i+=1
    if p+v+n>1:
        m=m+1

print(m)
```

[Click](#) to see test details

2. 学习总结和收获

=====

学习了python的基本编程语法，可以使用python编写较基础的程序。复习巩固了C++。

做了cs101计概（计算机基础1）中的一部分编程题目。