```
// NOIP 2017
#include <stdio.h>
#include <string.h>

int main()
{
    int t[256];
    char s[10];
    int i;
    scanf("%s", s);

    for(i = 0; i < 256; i++)
        t[i] = 0;

    for(i = 0; i < strlen(s); i++)
        t[s[i]]++;

    for(i = 0; i < strlen(s); i++)
        if(t[s[i]] == 1)
        {
            printf("%c\n", s[i]);
            return 0;
        }

    printf("no\n");

    return 0;
}
```

输入： xyzxyw
输出：_____.

```
#include <stdio.h>

int g(int m, int n, int x)
{
    int ans=0;
    int i;

    if(n == 1)
        return 1;

    for(i = x; i <= m / n; i++)
        ans += g(m - i, n - 1, i);

    return ans;
}

int main()
{
    int t, m, n;
    scanf("%d%d", &m, &n);
    printf("%d\n", g(m, n, 0));

    return  0;
```

```
}
```

输入： 7 3
输出：__________.

```
#include <stdio.h>
#include <string.h>

int main()
{
    char ch[200];
    int a[200];
    int b[200];
    int n, i, t, res;

    scanf("%s", ch);
    n = strlen(ch);
    for(i = 0; i < 200; i++)
        b[i] = 0;

    for(i = 1; i <= n ; i++)
    {
        a[i] = ch[i-1] - '0';
        b[i] = b[i-1] + a[i];
    }

    res = b[n];
    t = 0;

    for(i = n; i > 0; i--)
    {
        if(a[i] == 0)
            t++;

        if(b[i-1] + t < res)
            res = b[i-1] + t;
    }

    printf("%d\n", res);

    return 0;
}
```

输入： 10011010110011011010111110001
输出：_____________________________.

```
#include <stdio.h>

int main()
{
    int n, m;
    scanf("%d%d", &n, &m);

    int x = 1;
    int y = 1;
    int dx = 1;
    int dy = 1;
    int cnt = 0;
```

```
    int myCnt = 0;

    while(cnt != 2)
    {
        myCnt++;
        cnt = 0;
        x = x + dx;
        y = y + dy;

        if(x == 1 || x == n)
        {
            ++cnt;
            dx = -dx;
        }

        if(y == 1 || y == m)
        {
            ++cnt;
            dy = -dy;
        }
    }

    printf("%d %d\n", x, y);

    return  0 ;
}
```

输入1： 4 3
输出1： _____（3分）

输入2：2017 1014
输出 2： _____ (5分)

```
//2018 NOIP

1.
#include <stdio.h>
char st[100];
int main() {
    scanf("%s", st);
    for (int i = 0; st[i]; ++i) {
        if ('A' <= st[i] && st[i] <= 'Z')
            st[i] += 1;
    }
    printf("%s\n", st);
    return 0;
}
```

输入：QuanGuoLianSai
输出：_____

```
2.
#include <stdio.h>
int main() {
    int x;
    scanf("%d", &x);
    int res = 0;
```

```
    for (int i = 0; i < x; ++i) {
        if (i * i % x == 1) {
            ++res;
        }
    }
    printf("%d", res);
    return 0;
}
```

输入：15
输出：_____

3.

```
    #include <iostream>
    using namespace std;
    int n, m;

    int findans(int n, int m) {
        if (n == 0) return m;
        if (m == 0) return n % 3;
        return findans(n - 1, m) - findans(n, m - 1) + findans(n - 1, m - 1);
    }

    int main(){
        cin >> n >> m;
        cout << findans(n, m) << endl;
        return 0;
    }
```

输入：5 6
输出：_____

4.

```
#include <stdio.h>
int n, d[100];
bool v[100];

int main() {
    scanf("%d", &n);
    for (int i = 0; i < n; ++i) {
        scanf("%d", d + i);
        v[i] = false;
    }

    int cnt = 0;
    for (int i = 0; i < n; ++i) {
        if (!v[i]) {
            for (int j = i; !v[j]; j = d[j]) {
                v[j] = true;
            }
            ++cnt;
        }
    }
    printf("%d\n", cnt);
    return 0;
}
```

输入：10 7 1 4 3 2 5 9 8 0 6

输出：_____

2016 NOIP

1. 以下关于字符串的判定语句中正确的是： A. 字符串是一种特殊的线性表 B. 串的长度必须大于0 C. 字符串不可以用数组来表示 D. 空格字符组成的串就是空串
2. 若有如下程序段，其中s, a, b, c均定义为整形变量，且a, c均已赋值(c大于0)

```
s = a;
for (b = 1; b <= c; b++)
    s = s + 1
```

则与上述程序段修改s值的功能等价的赋值语句是：

```
A. s = a + b;
B. s = a + c;
C. s = s + c;
D. s = b + c;
```

1. 有以下程序

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

int main() {
    int k = 4, n = 0;
    while (n < k) {
        n++;
        if (n %3 != 0)
            continue;
        k--;
    }
    cout << k << "," <<  << endl;
    return 0;
}
```

输出结果是：

```
A. 2,2
B. 2,3
C. 3,2
D. 3,3
```

三、阅读程序写结果（共4题，每题8分，共计32分）

```
1.

#include <iostream>
using namespace std;

int main() {
    int max, min, sum, count = 0;
    int tmp;
    cin >> tmp;
    if (tmp == 0)
        return 0;

    max = min = sum = tmp;
```

```
    count++;
    while(tmp != 0) {
        cin >> tmp;
        if (tmp != 0) {
            sum += tmp;
            count++;
            if (tmp > max)
                max = tmp;
            if (tmp < min)
                min = tmp;
        }
    }
    cout << max << "," << min << "," << sum / count << endl;
    return 0;
}
```

输入： 1 2 3 4 5 6 0 7
输出：_____

2.

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

int main() {
    int i = 100, x = 0, y = 0;
    while (i > 0) {
        i--;
        x = i % 8;
        if (x == 1)
            y++;
    }
    cout << y <<endl;
    return 0;
}
```

输出：_____

3.

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

int main() {
    int a[6] = {1, 2, 3, 4, 5, 6};
    int pi = 0;
    int pj = 5;
    int t, i;
    while (pi < pj) {
        t = a[pi];
        a[pi] = a[pj];
        a[pj] = t;
        pi++;
        pj--;
    }
    for (i = 0; i < 6; i++)
        cout << a[i] << ",";
    cout << endl;
    return 0;
```

```
}
```

输出：_____

4.

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

int main() {
    int i, length1, length2;
    string s1, s2;
    s1 = "I have a dream.";
    s2 = "I Have A Dream.";
    length1 = s1.size();
    length2 = s2.size();
    for (i = 0; i < length1; i++)
        if (s1[i] >= 'a' && s1[i] <= 'z')
            s1[i] -= 'a' - 'A';

    for (i = 0; i < length2; i++)
        if (s2[i] >= 'a' && s2[i] <= 'z')
            s2[i] -= 'a' - 'A';

    if (s1 == s2)
        cout << "=" << endl;
    else if (s1 > s2)
        cout << ">" << endl;
    else
        cout << "<" << endl;

    return 0;
}
```

输出:_____