**1084: 函数01：素数**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 482  Solved: 314  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1084)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1084)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1084)]

**输入一组整数，其中第一个整数为个数n，后续为n个整数，输出其中素数的个数。要求将判断一个整数是否为素数用函数实现。**

**Input**

**Output**

**Sample Input**

**3 5 7 9**

**Sample Output**

**2**

#include <iostream>

using namespace std;

int f(int x)

{

  int p,z;

 p=0;

for(z=1;z<=x;z++)

 if(x%z==0) p++;

 if(p==2) p=1;

 else p=0;

return p;

}

int main()

{

int s,n,i,x;

s=0;

cin>>n;

for(i=1;i<=n;i++)

{cin>>x;

s+=f(x);}

cout<<s;

return 0;

}

**1085: 函数02：因数个数之和**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 482  Solved: 314  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1084)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1084)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1084)]

**Description**

**输入一组整数，计算这些整数的因数个数之和。其中第一个整数为个数n，后续为n个整数。要求计算一个整数的因数个数用函数实现。**

**如输入3 6 8 10，其中6的因数个数为4,8的因数个数为4,5的因数个数为2，所以计算结果为10。**

**Input**

**Output**

**Sample Input**

**3 6 8 5**

**Sample Output**

**10**

#include <iostream>

using namespace std;

int f(int x)

{

  int p,z;

 p=0;

for(z=1;z<=x;z++)

 if(x%z==0) p++;

return p;

}

int main()

{

int s,n,i,x;

s=0;

cin>>n;

for(i=1;i<=n;i++)

{cin>>x;

s+=f(x);}

cout<<s;

return 0;

}

**1086: 函数03：Fibonacci数列**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 530  Solved: 241  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1086)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1086)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1086)]

**Description**

**输入2 个正整数m和n(1<=m,n<=10000)，输出m 和n之间所有的Fibonacci数。**

**要求定义并调用函数fib(n)，它的功能是返回第n项Fibonacci数。**

**说明：Fibonacci 序列为1 1 2 3 5 8 13 21 ......**

**Input**

**Output**

**Sample Input**

**5 21**

**Sample Output**

**8 13**

#include <iostream>

using namespace std;

int f(int n,int m)

{

int a,b,i,c;

a=1;

b=1;

for(i=1;;i++)

{c=a+b;

 a=b;

 b=c;

 if(c>m&&c<n) cout<<c<<" ";

 if(c>=n) break;

}

return 0;

}

int main()

{

int n,m;

cin>>m>>n;

f(n,m);

return 0;

}

**1087: 函数04：最大值**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 329  Solved: 260  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1087)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1087)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1087)]

**Description**

**从键盘输入n对整数，求这些对整数间所有奇数之和的最大值。要求计算一对整数min、max（含min和max）之间所有奇数的和用函数实现，若min>max，函数返回值为0。输入格式：第一个整数为n，后续为n对整数。例如：输入数据为 3 10 20 17 31 40 45，表示输入3对整数，因为10~20间的奇数依次为11,13,15,17,19，奇数之和为75,17~31间的奇数依次为17,19,21,23,25,27,29,31，奇数之和为192，而40~45间的奇数依次为41,43,45，奇数之和为129，因此最大值为192，输出结果为192。**

**Input**

**Output**

**Sample Input**

**3 10 20 17 31 40 45**

**Sample Output**

**192**

#include <iostream>

using namespace std;

int f(int x,int y)

{

  int p,z;

 p=0;

for(z=x;z<=y;z++)

 if(z%2!=0) p+=z;

return p;

}

int main()

{

int s,n,i,x,y;

s=0;

cin>>n;

for(i=1;i<=n;i++)

{

cin>>x>>y;

if(s<f(x,y))

s=f(x,y);

}

cout<<s;

return 0;

}

**1088: 函数05：阶乘**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 467  Solved: 259  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1088)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1088)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1088)]

**Description**

**编写一个递归函数fac，该函数计算n的阶乘，如5的阶乘为5x4x3x2x1，0的阶乘为1。main函数中输入n个整数，计算这些整数的阶乘平均值。**

**Input**

**第一个整数位个数n，后续为n个整数。**

**Output**

**Sample Input**

**3 3 4 5**

**Sample Output**

**50**

#include <iostream>

using namespace std;

int fac(int x)

{

  int p=1,z;

for(z=1;z<=x;z++)

   p\*=z;

return p;

}

int main()

{

int s,n,i,x;

s=0;

cin>>n;

for(i=1;i<=n;i++)

{

cin>>x;

s+=fac(x);

}

cout<<s\*1.0/n;

return 0;

}

**1089: 函数06：小牛问题**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 280  Solved: 232  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1089)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1089)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1089)]

**Description**

**编程求解问题。若一头小母牛，从出生起第四个年头开始每年生一头母牛，按此规律，第n年时有多少头母牛。（用递归函数方法求解）**

**Input**

**Output**

**Sample Input**

**7**

**Sample Output**

**6**

#include <iostream>

using namespace std;

int f(int n)

{   int p;

    if(n==1||n==2||n==3)

    {p=1;

    return p;}

    else

       return f(n-3)+f(n-1);

}

int main()

{

  int n;

cin>>n;

cout<<f(n);

  return 0;

}

**1090: 函数07：最大公约数**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 281  Solved: 231  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1090)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1090)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1090)]

**Description**

**输入n对整数，计算这n对整数最大公约数之和。其中计算一对整数的最大公约数用函数实现。**

**输入格式：第一个为对数n，后续为n对整数。**

**Input**

**Output**

**Sample Input**

**3 14 18 20 30 25 35**

**Sample Output**

**17**

#include <iostream>

using namespace std;

int f(int n,int m)

{   int p=0,i;

    for(i=1;i<=n||i<=m;i++)

        if(n%i==0&&m%i==0) p=i;

    return p;

}

int main()

{

    double n,a,i,s,m;

    s=0;

    cin>>a;

for(i=1;i<=a;i++)

    {

     cin>>n>>m;

     s+=f(n,m);

}

    cout<<s;

  return 0;

}

**1091: 函数08：幂函数**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 265  Solved: 227  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1091)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1091)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1091)]

**Description**

**设计一个递归函数，求x的n次幂，其中n为非负整数。在main函数中输入x和一个整数n，输出x的n次幂。**

**Input**

**Output**

**Sample Input**

**3.5 4**

**Sample Output**

**150.062**

#include <iostream>

using namespace std;

double f(double n,double x)

{

  if(n==0)

     return 1;

  if(n==1)

      return x;

  else

     return f(n-1,x)\*x;

 }

int main()

{

  double x,s,n;

   s=1;

  cin>>x>>n;

  s\*=f(n,x);

  cout<<s;

  return 0;

}

**1092: 函数09：幂函数**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 245  Solved: 217  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1092)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1092)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1092)]

**Description**

**定义运算n^k表示n的k次幂，从键盘输入整数n和k，计算1^k+2^k+……+n^k，其中求n^k用函数实现。**

**Input**

**Output**

**Sample Input**

**3 5**

**Sample Output**

**276**

#include <iostream>

using namespace std;

int f(double i,double k)

{   int p=1,a;

   for(a=1;a<=k;a++)

    p\*=i;

   return p;

}

int main()

{

    double k,n,i,s;

    s=0;

    cin>>n>>k;

   for(i=1;i<=n;i++)

    s+=f(i,k);

cout<<s;

  return 0;

}

**1117: 函数10：素数求和**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 320  Solved: 246  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1117)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1117)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1117)]

**Description**

**输入两个正整数min、max，计算[min,max]之间所有的素数之和。**

**将判断一个整数是否为素数用函数实现。**

**Input**

**Output**

**Sample Input**

**2 10**

**Sample Output**

**17**

#include <iostream>

using namespace std;

int f(int i)

{

  int z;

 for(z=2;z<i;z++)

{if(i%z==0) i=0;

else i=i;}

return i;

}

int main()

{

int min,max,s,i;

cin>>min>>max;

s=0;

for(i=min;i<=max;i++)

s+=f(i);

cout<<s;

return 0;

}

**1118: 函数11：最小公倍数之和**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 286  Solved: 235  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1118)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1118)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1118)]

**Description**

**输入n对整数，计算这n对整数最小公倍数之和。其中计算一对整数的最小公倍数用函数实现。**

**输入格式：第一个为对数n，后续为n对整数。**

**Input**

**Output**

**Sample Input**

**2 3 5 4 8**

**Sample Output**

**23**

#include <iostream>

using namespace std;

int f(int x,int y)

{

  int z,i;

 for(z=2;;z++)

     if(z%x==0&&z%y==0)

break;

return z;

}

int main()

{

int n,s,i,x,y;

cin>>n;

s=0;

for(i=1;i<=n;i++)

{cin>>x>>y;

s+=f(x,y);}

cout<<s;

return 0;

}

**1119: 函数12：逆序求和**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 255  Solved: 223  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1119)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1119)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1119)]

**Description**

**从键盘输入一组整数（以0结束），计算这组整数逆序后之和。**

**其中将一个整数逆序用函数实现，整数123逆序为321、整数-345逆序为-543。**

**Input**

**Output**

**Sample Input**

**234 894 -94 736 0**

**Sample Output**

**1518**

#include <iostream>

using namespace std;

int f(int n)

{

int p;

p=0;

while(n!=0)

{p=p\*10+n%10;

 n=n/10;}

return p;

}

int main()

{

int s,n;

s=0;

while(n)

{cin>>n;

s+=f(n);}

cout<<s;

return 0;

}

**1120: 函数13：数位计算**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 296  Solved: 235  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1120)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1120)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1120)]

**Description**

**输入一组正整数（以0结束），输出其中数位之和为奇数的整数。**

**其中求一个数的数位之和用函数实现。**

**Input**

**Output**

**Sample Input**

**12 22 45 88 0**

**Sample Output**

**12 45**

#include <iostream>

using namespace std;

int f(int n)

{

  int p,i,s;

 s=0;

 p=n;

 while(n>0)

 {s+=n%10;

 n=n/10;}

if(s%2!=0)

 return p;

}

int main()

{

int n;

 while(n)

{cin>>n;

if(f(n)>0)

cout<<f(n)<<" ";}

return 0;

}

**1121: 函数14：数值计算**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 255  Solved: 220  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1121)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1121)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1121)]

**Description**

**输入2个正整数a和n，求a+aa+aaa+aa…a(n个a)之和。**

**例如，输入2和3，则计算2+22+222，输出246。**

**将求i个a组成的数用函数实现，即函数int f（int a，int i）的返回值为i个a的值，例如f（3，2）值为33。**

**Input**

**Output**

**Sample Input**

**2 3**

**Sample Output**

**246**

#include <iostream>

using namespace std;

int f(int a,int i)

{

  int z,s;

 s=0;

   for(z=1;z<=i;z++)

 s=s\*10+a;

return s;

}

int main()

{

int i,a,p,n;

p=0;

cin>>a>>n;

for(i=1;i<=n;i++)

p=p+f(a,i);

cout<<p;

return 0;

}

**1122: 函数15：累加和**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 262  Solved: 246  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1122)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1122)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1122)]

**Description**

**编写一个函数f(n)=1+2+...+n。main函数从键盘输入m、n，利用该函数计算并输出f(m)+f(n)。**

**Input**

**Output**

**Sample Input**

**10 5**

**Sample Output**

**70**

#include <iostream>

using namespace std;

int main()

{

   double n,x,y,m;

   cin>>n>>m;

   x=(1+n)\*n/2;

   y=(1+m)\*m/2;

   cout<<x+y;

     return 0;

}

**1153: 函数16：利用函数计算平均值**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 245  Solved: 209  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1153)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1153)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1153)]

**Description**

**编写一个函数f（x），若x>0函数返回值为1，若x<0函数返回值为-1，若x=0函数返回值为0，利用该函数实现计算输入的n个整数中正整数的平均值。**

**输入格式中第一个为整数个数n，后续为n个整数。**

**Input**

**Output**

**Sample Input**

**5 2 5 -5 3 -3**

**Sample Output**

**3.33333**

#include <iostream>

using namespace std;

double f(int n)

{   int p;

    if(n>0)

    p=1;

    if(n==0) p=0;

    if(n<0)

       p=-1;

    return p;

}

int main()

{

    double n,a,i,s,x;

    x=0;

    s=0;

    cin>>a;

for(i=1;i<=a;i++)

    {

     cin>>n;

     if(f(n)==1)

     { s+=n;

     x++;}

    }

 cout<<s/x;

  return 0;

}

**1154: 函数17：数根问题递归求解**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 217  Solved: 176  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1154)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1154)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1154)]

**Description**

**输入n个正整数（输入格式中第一个为整数个数n，后续为n个整数），输出各个数的数根。要求计算一个数的数根部分利用递归函数实现。数根的定义：对于一个正整数n，我们将它的各个位相加得到一个新的数字，如果这个数字是一位数，我们称之为n的数根，否则重复处理直到它成为一个一位数，这个一位数也算是n的数根。例如：考虑24，2+4=6，6就是24的数根。考虑39，3+9=12，1+2=3，3就是39的数根。**

Input

Output

**Sample Input**

5 23 424 98 632 12345

**Sample Output**

5 1 8 2 6

#include <iostream>

using namespace std;

int f(int n)

{   int s=0;

  if(n<=9) s=n;

  else

    while(n)

{

    while(n)

    {

    s+=n%10;

    n/=10;

    }

   if(s<10) break;

    if(s>9)

    {n=s;

    s=0;}

    }

     return s;

}

int main()

{

    double n,a,i;

    cin>>a;

for(i=1;i<=a;i++)

    {

     cin>>n;

     cout<<f(n)<<" ";

}

return 0;

}

**1155: 函数18：奇数判断**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 221  Solved: 192  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1155)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1155)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1155)]

**Description**

**输入若干个正整数（输入时以0结束），输出其中所有的奇数及奇数个数。要求判断一个数num的奇偶写成函数bool isodd（num），奇数返回true，否则返回false。**

Input

Output

**Sample Input**

23 4 235 3 52 30 19 11 0

**Sample Output**

23 235 3 19 11 5

#include<iostream>

using namespace std;

int f(int num)

{ int p=0;

  if(num%2==1)

  {cout<<num<<" ";

  p=1;}

   return p;

}

int main()

{ int num,i=0,n;

  while(1)

  {

      cin>>num;

      if(num==0)

        break;

      n=f(num);

      if(n==1)

      i++;

  }

  cout<<i;

  return 0;

}

**1156: 函数19：利用一个自定义函数解决完数和素数问题**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 230  Solved: 169  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1156)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1156)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1156)]

**Description**

**编写一个函数求一个数的所有因子之和。主函数中输入两个整数m、n，利用该函数依次实现下列问题：1)找出n以内所有完数； 2）找出m~n间所有素数 提示：完数定义为除自身外的所有因子之和等于它本身的数；素数定义为除了能被1和自身整数外，不能被其它数整数。注意：完数和素数分2行显示。**

Input

Output

**Sample Input**

50 100

**Sample Output**

6 28

53 59 61 67 71 73 79 83 89 97

#include <iostream>

using namespace std;

int f(int n,int m)

{   int s,x,i;

for(x=1;x<=m;x++)

  for(s=0,i=1;i<x;i++)

  {if(x%i==0) s+=i;

    if(s==x&&i==x-1) {cout<<x<<" ";

  break;}

   if(i==x-1) break;

  }

 cout<<endl;

return 0;

}

int main()

{

    int n,m,s,p,c,t;

    cin>>n>>m;

   s=f(n,m);

   if(n>m)

   {t=n;n=m;m=t;}

   else

 for(p=n;p<=m;p++)

     for(c=2;c<=p;c++)

     {

         if(p==2) {cout<<p<<" "; break;}

         if(p%c==0) break;

     if(c==p-1) cout<<p<<" ";}

 return 0;

}

**1157: 函数20：fibonacci数列倒数求和**

Time Limit: 1 Sec  Memory Limit: 128 MB  
Submit: 229  Solved: 164  
[[Submit](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/submitpage.php?id=1157)][[Status](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/problemstatus.php?id=1157)][[Web Board](http://221.203.21.203:8000/rewriter/USTL/http/489629629022/OnlineJudge/bbs.php?pid=1157)]

**Description**

**计算1+1+1/2+1/3+1/5+1/8+…，当最后一项小于e（用户输入）时结束。提示各项的分母为fibonacci数列：1,1,2,3,5,8,13，。。。，要求：求fibonacci数列第n项写成递归函数。**

Input

Output

**Sample Input**

0.01

**Sample Output**

3.3417

#include <iostream>

using namespace std;

double f(double num)

{

  if(num==0||num==1)

     return 1;

  else

     return f(num-1)+f(num-2);

 }

int main()

{ double s,e,num;

   s=0;

   num=0;

  cin>>e;

  while(1)

  {    if(1/f(num)<e)

        break;

     s+=1/f(num);

      num++;

  }

  cout<<s;

  return 0;

}