Uva problem number: 1124
Problem Name: Celebrity jeopardy.

Problem logic:

In this problem, I have to find out a simplest equation of a solution that will be given. If input is n=m, output will be n=m because n=m is the simplest equation of this solution. So for any solution(input), simplest equation(output) will be the given solution (input).

Accepted code:

```
#include<iostream>

#include<stdio.h>

using namespace std;

int main()

{

   char y;

   while((y=getchar())!=EOF)

   {

     cout<<y;

   }

}
```

Uva problem number: 10079
Problem name: Pizza Cutting

Problem logic:

In this problem, I have to find out the maximum number of pizza pieces where the number of cuts will be given that I can produce. Here is a logic that I used to solve this problem given bellow…….

cutting number:	maximum pieces:
0	1
1	(1+1)=2
2	(2+2)=4
3	(4+3)=7
4	(7+4)=11
….	…….

so the logic is "cutting number + previous maximum pieces= present maximum number" but here is a condition that "A negative number terminates the input".

Accepted Code:

```
#include<iostream>
using namespace std;
int main()
{
   long long int n,i,r;
   while(cin>>n)
   {
      if(n>=0)
      {
         r=1;
         for(i=0;i<=n;i++)
         {
            r=r+i;
         }
         cout<<r<<"\n";
      }
      else
         break;
   }
}
```

Uva problem number: 11150
Problem Name: Cola

Problem logic:

In this problem, I have to count the total number of bottles of coca cola that I can enjoy. If I have 4 full bottles I can enjoy 4 and for 4 empty bottles I can enjoy 2 coca cola, so the maximum bottles is 4+2 so out put is 6. Accordingly for…….

bottles	bottles that I can enjoy
6	9=6+(6/2)
7	10=7+(7-1)/2
8	12=8+(8/2)

so here is a logic that if n is a even number output will be n+(n/2)
and if n is a odd number output is n+(n-1)/2

Accepted code:

```
#include<iostream>
using namespace std;
int main()
{
   int N;

   while(cin>>N)

   {

      int a,b;

      a=N/2;

      b=N+a;

      if(N>=1 && N<=200)

      {

         cout<<b<<"\n";

      }

    }

}
```

Uva problem number: 11172
Problem Name: Relational Operators

Problem logic:

In this problem, our job is just find out the relationship between two operators follwing the input. The most important fact is first input that indicates the number of operators checking that we want to chech? For this condition, I used for loop at first. And for next input for each line I print,

- ">" if the first one is greater than last one.
- "<" if the last one is greater than first one and
- "=" if they are equal.

Accepted code:

```
#include<iostream>
using namespace std;
int main()
{
   int a,b,c;
   cin>>c;
   for(int i=1;i<=c;i++)
   {
      cin>>a>>b;
      if(a>b)
         cout<<">"<<"\n";
      else if(a<b)
         cout<<"<"<<"\n";
      else if(a==b)
         cout<<"="<<"\n";
   }
}
```

Uva problem number: 11636
Problem Name: Hello World .

Problem logic:

In this problem, my job is just to count that how many time I copy-paste a sentence. Suppose I want to write "Hello World" 16th time, so the procedure is given bellow……..

1……..2…….4……..8…….16

1 + 1 + 1 + 1 =4th time

so the logic is that if input is 16 then after dividing 16 by 2 in 4th time I get 16, so the output will be 4. For any integer number quotient must be taken at integer part.

Accepted code:

```
#include<iostream>
using namespace std;
int main()
{
   long long int n,s,v=1,r;
   float m;
   while(cin>>n)
   {
      if(n<0)
         break;
      s=0;
      m=n;
      for( ; ; )
      {
         if(m<=1)
         {
            cout<<"Case "<<v++<<": "<<s<<"\n";
            break;
         }
         m=m/2;
         s=s+1;
      }

   }

}
```

Uva problem number: 11877
Problem Name: The Coca Cola Store

Problem logic:

In this problem, I have to count the number of bottles of coca cola that I can drink for each 3 empty bottles. The procedure to get coca cola is given bellow for n=10

empty bottles	full bottles	extra empty bottles
10	3	1
3+1	1	1

here, if I get 1 bottle borrow then I can get 1 full bottle so;

1+1+1	1	1

here 1 extra bottle is present that I should back to the store. So the full bottles is 5.
so the logic is n/2, but if n is a odd number the out put is (n-1)/2

Accepted code:

```
#include<iostream>
using namespace std;
int main()
{
   for(int i=1;i<=10;i++)
   {
      int n,a;
      cin>>n;
      if(n==0)
         break;
      else
      {
         a=n/2;
         cout<<a<<"\n";
      }
   }
}
```

Uva problem number: 12372
Problem Name: packing for Holiday

Problem logic:

In this problem, I have to judge that if the box (which length, wide and height is given) is set into a suitcase(which W, L and H is 20 inches that measured from inside. If the in put is less than or equal 20 then output will be “good” otherwise “bad”.

Accepted code:

```
#include<iostream>

using namespace std;

int main()

{

   int a,b,c,d,f=1;

   cin>>d;

   while(d--)

   {

      cin>>a>>b>>c;

      if(a<=20 && b<=20 && c<=20)

         cout<<"Case "<<f++<<": good\n";

      else

         cout<<"Case "<<f++<<": bad\n";

   }

}
```

Uva problem number: 12468
Problem Name: Zapping

Problem logic:

In this problem, I have to count the lowest steps of zapping from present to my expected channel. if I want to go to n no channel (where present channel is m) normally the lowest steps is (n-m) where n>m, otherwise m-n. if (n-m) or (m-n) is greter than 50 then output is (n-m)-50 or (m-n)-50 where n and m is input.

Accepted code:

```
#include<iostream>
using namespace std;
int main()
{
   long long int n,m,s;
   while(cin>>n>>m)
   {
       if(n<0 && m<0)
          break;
      if(n>=m)
          s=n-m;
      if(m>n)
          s=m-n;
      if(s>50)
          cout<<100-s<<"\n";
      if(s<=50)
          cout<<s<<"\n";
   }
}
```