- 1 Lab work 1
- 2 usefull links for this lab
- 3 problem set

37267. A+B

Input file: standard input
Output file: standard output

Time limit: 2 seconds Memory limit: 64 megabytes

You are given two integers a and b. Print a+b.

Input

The only line of the input contains integers a and b $(-10000 \le a, b \le 10000)$.

Output

Print a + b.

standard input	standard output
1 2	3
15	29
14	
894	1091
197	
8581	14639
6058	
289	310
21	

71697. Code

Input file: standard input
Output file: standard output

Time limit: 1 second Memory limit: 256 megabytes

Almat is the KBTU student. Recently he managed to get to the ACM finals, but in order to be registered at the finals he needs a secret code which consists of only digits. Code is constructed from two numbers n and m. The first number - age of the contestant. The second number - sum of the first and the last digits of the 3-digit random number k given by administration of the finals. Help Almat to construct the code.

Input

The first line contains non-negative number n ($1 \le n \le 1000$) - age of the contestant. The second line contains non-negative number k ($100 \le k \le 1000$) — random number.

Output

Calculate the sum of the numbers n and m.

standard input	standard output
18	22
123	
17	21
391	
0	1
100	
505	506
100	
1000	1018
999	

51447. Bits

Input file: standard input
Output file: standard output

Time limit: 2 seconds Memory limit: 64 megabytes

You are given integer number N, guaranteed that the number has exactly 4 bits in binary representation. reverse the number in binary representation and print out it.

Input

One integer number N

Output

Reversed number

Examples

standard input	standard output
12	3
11	13
13	11
9	9
10	5

Note

reverse example: 12 in binary representation is 1100, 0011 is reversed number, it means you should output 3.

51191. Root

Input file: standard input Output file: standard output

Time limit: 2 seconds Memory limit: 64 megabytes

You are given integer number. Print out its square root value.

Input

One integer number.

Output

One double number.

standard input	standard output
10	3.1622776602
20	4.4721359550
9	3.000000000
82499	287.2263915451
9752	98.7522151650
78985	281.0427013818

51445. Value of bit

Input file: standard input Output file: standard output

 $\begin{array}{ll} \text{Time limit:} & 2 \text{ seconds} \\ \text{Memory limit:} & 64 \text{ megabytes} \end{array}$

Input

Given integer number n and i.

Output

Output value of i - th bit of the number n, that is 0 or 1.

standard input	standard output
179 0	1
4242 13	0
3086 28	0
9226 19	0
8071 2	1
2910 11	1

4 lab contest

All given tasks are emplaced in automated checker system for lab1: http://acm.kbtu.kz/cgi-bin/new-register?action=211&contest_id=125
Feel free to submit your solutions without attempt count penalty.

5 solutions

```
1 #include <iostream>
3
  using namespace std;
5
  int main(){
7
    int a, b;
9
    cin >> a >> b;
10
11
    cout << a + b;
12
13
    return 0;
14
1 #include <iostream>
3 using namespace std;
5
  int n, k;
   int main() {
9
    cin >> n >> k;
10
    cout << n + (k \% 10 + k / 100);
11
12
13
    return 0;
14 }
1 #include <iostream>
 2 #include <cmath>
  using namespace std;
```

```
int main() {
7
    int n;
    \mathrm{cin} >> \mathrm{n}\,;
8
9
    int m = 0;
10
    int k = 1;
    for (int i = 3; i >= 0; i--) {
11
12
     if ((n \& (1 << i)) > 0)  {
13
      m = m + k;
14
15
     k = 2;
16
    }
17
    cout << m;
18
    return 0;
19 }
1 #include <iostream>
2 #include <cmath>
4 using namespace std;
6 int main(){
7
8
    int x;
9
10
    cin >> x;
11
12
    cout \ll sqrt(x);
13
14
    return 0;
15 }
1 #include <iostream>
3 using namespace std;
5 int main(){
7
    int n, i;
8
9
    cin >> n >> i;
10
    cout << ( (n >> i) & 1 );
11
12
13
    return 0;
14 }
```

6 Additional tasks for this lab

You can solve problems starting from A to J from the link below: https://informatics.msk.ru/mod/statements/view.php?id=2296 note: statements are in russian