1 usefull links for this lab

- http://www.cplusplus.com
- http://www.mingw.org/wiki/MinGW_for_First_Time_Users_HOWTO
- https://www.geeksforgeeks.org/c-data-types/

2 problem set

Problem A. 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 $a + b$.

Examples

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

Problem B. 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 ($1 \leqslant n \leqslant 1\,000$) - age of the contestant. The second line contains non-negative number k ($100 \leqslant k \leqslant 1\,000$) — random number.

Output

Calculate the sum of the numbers n and m.

Examples

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

Problem C. 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.

Problem D. 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.

Examples

standard input	standard output
10	3.1622776602
20	4.4721359550
9	3.0000000000
82499	287.2263915451
9752	98.7522151650
78985	281.0427013818

3 lab contest

All given task 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.

4 solutions

problem 37267

```
1  #include <iostream>
2
3  using namespace std;
4
5  int main(){
6
7   int a, b;
8
9   cin >> a >> b;
10
11  cout << a + b;
12
13  return 0;
14 }
```

problem 71697

```
1  #include <iostream>
2
3  using namespace std;
4
5  int n, k;
6
7  int main() {
8
9   cin>>n>>k;
10
11  cout<<n + (k % 10 + k / 100);
12
13  return 0;
14 }
```

problem 51447

```
1  #include <iostream>
```

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

problem 51191

```
1  #include <iostream>
2  #include <cmath>
3
4  using namespace std;
5
6  int main(){
7
8   int x;
9
10  cin >> x;
11
12  cout << sqrt(x);
13
14  return 0;
15 }
```

5 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 in russian