

Background

Integer types in C++ have certain ranges. Unlike in python, an overflow of integers at runtime does not give a warning.

Description

Enter two integers of type `int` (within the range of `int`), output their sum. An error message should be generated in case of overflow.

Hint: the maximal and minimal values of integers are defined in `limits.h`. An example using these values is shown below:

```
#include <iostream>
#include <limits.h>
using namespace std;

int main(){
    cout<<INT_MAX<<endl; // print the maximal value of int
    cout<<INT_MIN<<endl; // print the minimal value of int
}
```

Input Form

Two integers of type `int` (within the range of `int`).

Output Form

Output the sum of the inputs. An error message should be generated in case of overflow.

Examples

Input: `1 1`

The desired output: `2`

Input: `1234567890 987654321`

The desired output: `ERROR`