In the `void Student::input()` function, you must read 5 scores from stdin and save them to your $scores$ instance variable.

Constraints

$1 \leq n \leq 100$

$0 \leq examscore \leq 50$

Output Format

In the `int Student::calculateTotalScore()` function, you must return the student's total grade (the sum of the values in $scores$).

The locked code in the editor will determine how many scores are larger than Kristen's and print that number to the console.

Sample Input

The first line contains n, the number of students in Kristen's class. The n subsequent lines contain each student's 5 exam grades for this semester.

```
3
30 40 45 10 10
40 40 40 10 10
50 20 30 10 10
```

Sample Output

```
1
```

Explanation

Kristen's grades are on the first line of grades. Only 1 student scored higher than her.

You have earned 20.00 points!

You are now 85 points away from the gold level for your c++ badge.

15% 165/250

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

- Test case 0
- Test case 1
- Test case 2
- Test case 3
- Test case 4
- Test case 5
- Test case 6

Compiler Message

Success

Input (stdin) Download

```
3
30 40 45 10 10
40 40 40 10 10
50 20 30 10 10
```

Expected Output Download

```
1
```

the base class Triangle called Isosceles.

```
class Isosceles : public Triangle{
   public:
      void isosceles(){
         cout<<"I am an isosceles triangle\n";
      }
};
```

Now we can create a derived class object and use it to access the functions of the base class.

```
int main(){
   Isosceles isc;
   isc.isosceles();
   isc.triangle();
   return 0;
}
```

This code will print:

```
I am an isosceles triangle
I am a triangle
```

Now write a function in Isosceles class such that the output is as given below.

Sample Output

```
I am an isosceles triangle
In an isosceles triangle two sides are equal
I am a triangle
```

29

Line: 29 Col: 1

Upload Code as File Test against custom input Run Code Submit Code

C++ CPP

You have earned 20.00 points!

You are now 15 points away from the 4th star for your c++ badge.

81% 135/150

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Compiler Message

Success

Expected Output Download

```
I am an isosceles triangle
In an isosceles triangle two sides are equal
I am a triangle
```

Input Format

Input will consist of four lines.

The first line will contain an integer, representing the age. The second line will contain a string, consisting of lower-case Latin characters ('a'-'z'), representing the first_name of a student.

The third line will contain another string, consisting of lower-case Latin characters ('a'-'z'), representing the last_name of a student.

The fourth line will contain an integer, representing the standard of student.

Note: The number of characters in first_name and last_name will not exceed 50.

Output Format

The code provided by HackerRank will use your class members to set and then get the elements of the Student class.

Sample Input

```
15
john
carmack
10
```

Sample Output

```
15
carmack, john
10

15,john,carmack,10
```

74

Line: 74 Col: 1

Upload Code as File | Test against custom input | Run Code | Submit Code

C++ CPP

You have earned 10.00 points!

You are now 5 points away from the 4th star for your c++ badge.

94% 145/150

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Test case 1

Test case 2

Test case 3

Compiler Message

Success

Input (stdin) Download

1 15

2 john

This code prints the contents of string s, a single space (" "), then the integer n. We end our line of output with a newline using endl. This results in the following output:

```
High 5
```

Task

Read 3 numbers from stdin and print their sum to stdout.

Input Format

One line that contains 3 space-separated integers: a, b, and c.

Constraints

- $1 \leq a, b, c \leq 1000$

Output Format

Print the sum of the three numbers on a single line.

Sample Input

```
1 2 7
```

Sample Output

```
10
```

Explanation

The sum of the three numbers is $1 + 2 + 7 = 10$.

Line: 10 Col: 1

Upload Code as File | Test against custom input | Run Code | Submit Code

C++ CPP

You have earned 5.00 points!

You are now 5 points away from the 2nd star for your c++ badge.

83% 35/40

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Test case 1

Test case 2

Test case 3

Compiler Message

Success

Input (stdin) Download

1 1 2 7

Complete the update function in the editor below.

update has the following parameters:

- int *a: an integer
- int *b: an integer

Returns

- The function is declared with a `void` return type, so there is no value to return. Modify the values in memory so that a contains their sum and b contains their absoluted difference.
- $a' = a + b$
- $b' = |a - b|$

Input Format

Input will contain two integers, a and b, separated by a newline.

Sample Input

```
4
5
```

Sample Output

```
9
1
```

Explanation

- $a' = 4 + 5 = 9$
- $b' = |4 - 5| = 1$

26

Line: 26 Col: 1

Upload Code as File | Test against custom input | Run Code | Submit Code

C++ CPP **

You have earned 10.00 points!

You are now 5 points away from the 3rd star for your c++ badge.

83% 65/70

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Test case 1

Test case 2

Test case 3

Compiler Message

Success

Input (stdin) Download

```
1 4
2 5
```

You are given a class - Complex.

```
class Complex
{
public:
   int a,b;
};
```

Operators are overloaded by means of operator functions, which are regular functions with special names. Their name begins with the operator keyword followed by the operator sign that is overloaded. The syntax is:

```
type operator sign (parameters) { /*... body ...*/ }
```

You need to overload operators + and << for the Complex class.

The operator + should add complex numbers according to the rules of complex addition:

```
(a+ib)+(c+id) = (a+c) + i(b+d)
```

Overload the stream insertion operator << to add "$a + ib$" to the stream:

```
cout<<c<<endl;
```

The above statement should print "$a + ib$" followed by a newline where $a = c.a$ and $b = c.b$.

Input Format

```
{
    Complex x,y;
    string s1,s2;
    cin>>s1;
    cin>>s2;
    x.input(s1);
    y.input(s2);
    Complex z=x+y;
    cout<<z<<endl;
}
```

Line: 34 Col: 1

Upload Code as File | Test against custom input | Run Code | Submit Code

You have earned 30.00 points!

You are now 45 points away from the 4th star for your c++ badge.

44% 105/150

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

If the >> operator returns a value, that is a true value for a conditional. Failure to return a value is false.

Given a string of comma delimited integers, return a vector of integers.

Function Description

Complete the parseInts function in the editor below.

parseInts has the following parameters:

- string str: a string of comma separated integers

Returns

- vector<int>: a vector of the parsed integers.

Note You can learn to push elements onto a vector by solving the first problem in the STL chapter.

Input Format

There is one line of n integers separated by commas.

Constraints

The length of str is less than 8×10^5.

Sample Input

```
23,4,56
```

Sample Output

```
23
4
56
```

33

Line: 33 Col: 1

Upload Code as File

Test against custom input

Run Code

Submit Code

C++ CPP ★★★★

You have earned 10.00 points!

You are now 19 points away from the gold level for your c++ badge.

81% 231/250

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Test case 1

Test case 2

Test case 3

Compiler Message

Success

Input (stdin) Download

1 23,4,56

like malloc(). If $n = 10$, `int arr[n]` will create an array with space for 10 integers.

Accessing elements of an array:

```
Indexing in arrays starts from 0.So the first element is stored
arr[0],the second element at arr[1] and so on through arr[9].
```

Line: 23 Col: 2

Upload Code as File | Test against custom input | Run Code | Submit Code

You will be given an array of N integers and you have to print the integers in the reverse order.

Input Format

The first line of the input contains N,where N is the number of integers.The next line contains N space-separated integers.

Constraints

$1 <= N <= 1000$

$1 <= A[i] <= 10000$, where $A[i]$ is the i^{th} integer in the array.

Output Format

Print the N integers of the array in the reverse order, space-separated on a single line.

Sample Input

```
4
1 4 3 2
```

Sample Output

```
2 3 4 1
```

You have earned 10.00 points!

You are now 75 points away from the gold level for your c++ badge.

25% 175/250

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0 | Test case 1 | Test case 2 | Test case 3

Compiler Message

Success

Hidden Test Case

Unlock this testcase for 5 hackos.

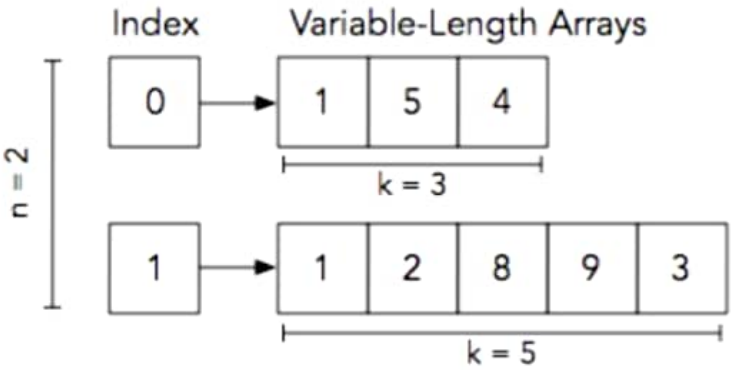
```
0 1
1 3
```

Sample Output

```
5
9
```

Explanation

The diagram below depicts our assembled Sample Input:



We perform the following $q = 2$ queries:

1. Find the array located at index $i = 0$, which corresponds to $a[0] = [1, 5, 4]$. We must print the value at index $j = 1$ of this array which, as you can see, is 5.
2. Find the array located at index $i = 1$, which corresponds to $a[1] = [1, 2, 8, 9, 3]$. We must print the value at index $j = 3$ of this array which, as you can see, is 9.

31

Line: 31 Col: 1

Upload Code as File | Test against custom input | Run Code | Submit Code

C++ CPP

You have earned 30.00 points!

You are now 29 points away from the gold level for your c++ badge.

71% 221/250

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Test case 1

Test case 2

Test case 3

Compiler Message

Success

Hidden Test Case

Unlock this testcase for 5 hackos.

and printf.

Input Format

Input consists of the following space-separated values: int, long, char, float, and double, respectively.

Output Format

Print each element on a new line in the same order it was received as input. Note that the floating point value should be correct up to 3 decimal places and the double to 9 decimal places.

Sample Input

```
3 12345678912345 a 334.23 14049.30493
```

Sample Output

```
3
12345678912345
a
334.230
14049.304930000
```

Explanation

Print int 3.

followed by long 12345678912345.

followed by char a.

followed by float 334.23.

followed by double 14049.30493.

You have earned 10.00 points!

You are now 25 points away from the 3rd star for your c++ badge.

17% 45/70

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Test case 1

Test case 2

Test case 3

Compiler Message

Success

Input (stdin) Download

```
3 12345678912345 a 334.23 14049.30493
```

Expected Output Download

```
3
12345678912345
a
334.230
```

```
    sum += c;
    sum += d;
    return sum;
}
```

Write a function int max_of_four(int a, int b, int c, int d) which returns the maximum of the four arguments it receives.

```
+= : Add and assignment operator. It adds the right operand to
a += b is equivalent to a = a + b;
```

Input Format

Input will contain four integers - a, b, c, d , one per line.

Output Format

Return the greatest of the four integers.

PS: I/O will be automatically handled.

Sample Input

```
3
4
6
5
```

Sample Output

```
6
```

C++ CPP

You have earned 10.00 points!

You are now 75 points away from the 4th star for your c++ badge.

6% 75/150

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Test case 1

Test case 2

Test case 3

Test case 4

Compiler Message

Success

Input (stdin) Download

```
1 3
2 4
3 6
4 5
```

Expected Output Download

```
1 6
```

Constraints

- $1 \leq t \leq 1000$
- $1 \leq |u| \leq 100$
- The username consists only of uppercase and lowercase letters.

Output Format

You are not responsible for directly printing anything to stdout. If your code is correct, the locked stub code in your editor will print either `Valid` (if the username is valid), `Invalid` (if the username is invalid), or `Too short: n` (where n is the length of the too-short username) on a new line for each test case.

Sample Input

```
3
Peter
Me
Arxwwz
```

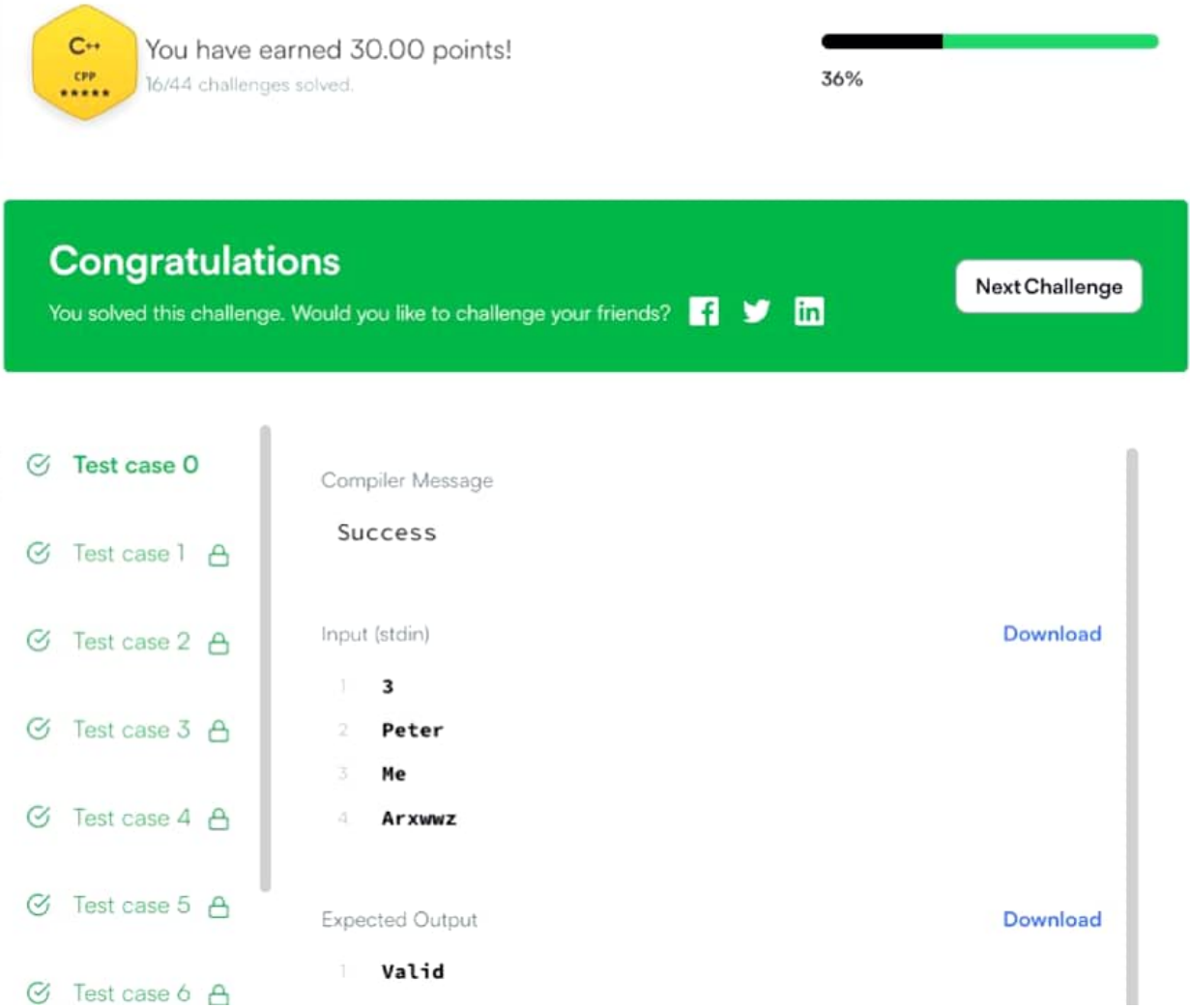
Sample Output

```
Valid
Too short: 2
Invalid
```

Explanation

Username `Me` is too short because it only contains 2 characters, so your exception prints `Too short: 2`.

All other validation is handled by the locked code in your editor.



Sample Output 0

five

Explanation 0

`five` is the English word for the number 5.

Sample Input 1

8

Sample Output 1

eight

Explanation 1

`eight` is the English word for the number 8.

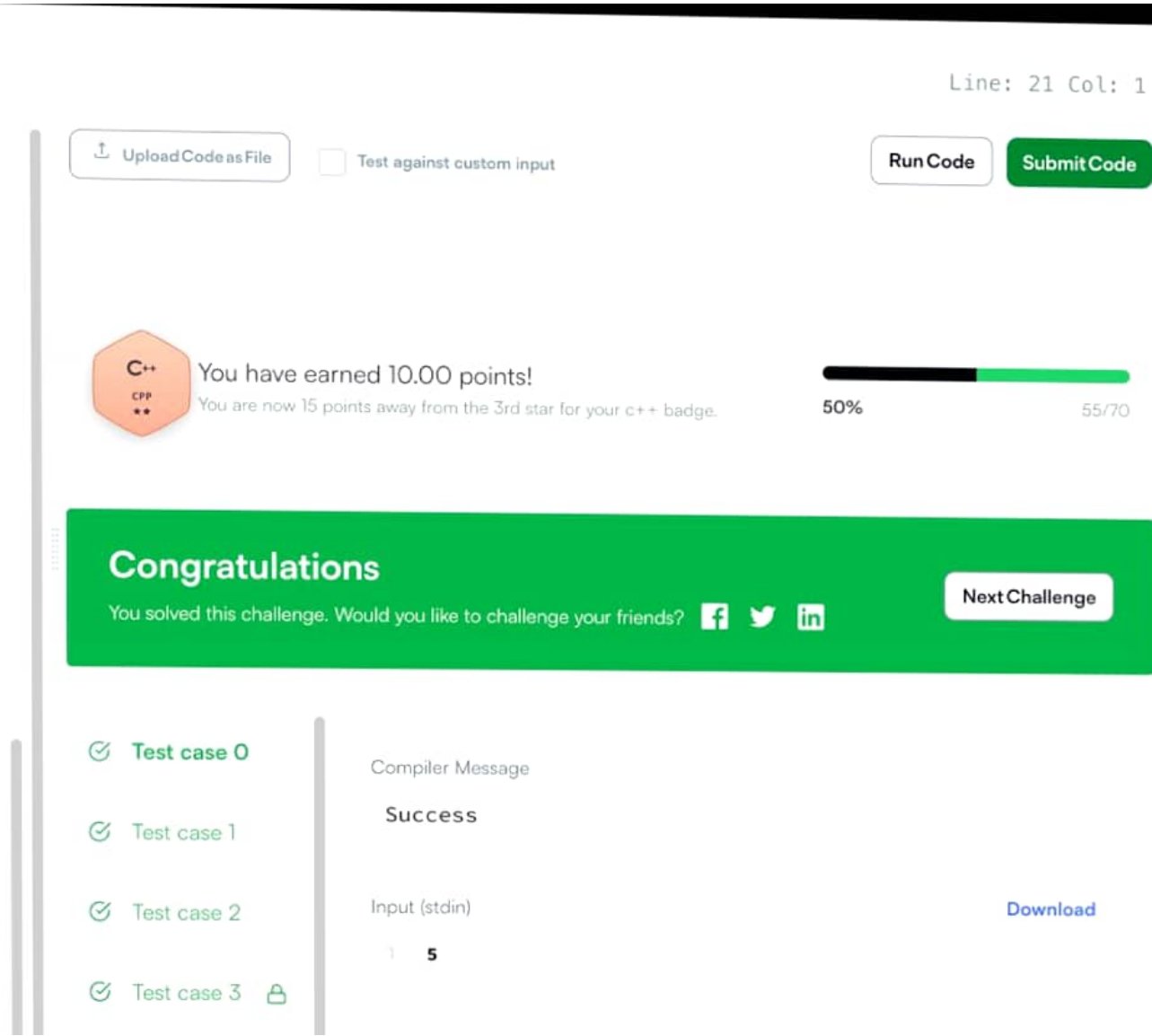
Sample Input 2

44

Sample Output 2

Greater than 9

Explanation 2



Objective

This is a simple challenge to help you practice printing to stdout. You may also want to complete Solve Me First in C++ before attempting this challenge.

We're starting out by printing the most famous computing phrase of all time! In the editor below, use either printf or cout to print the string `Hello, World!` to stdout.

The more popular command form is `cout`. It has the following basic form:

```
cout<<value_to_print<<value_to_print;
```

Any number of values can be printed using one command as shown.

The `printf` command comes from C language. It accepts an optional format specification and a list of variables. Two examples for printing a string are:

```
printf("%s", string); printf(string);
```

Note that neither method adds a newline. It only prints what you tell it to.

Output Format

Print `Hello, World!` to stdout.

Sample Output

```
Hello, World!
```

Line: 8 Col: 2

Upload Code as File Test against custom input Run Code Submit Code

C++ CPP

You have earned 5.00 points!

You are now 10 points away from the 2nd star for your c++ badge.

67% 30/40

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

lower case Latin characters ('a'-'z').

Output Format

In the first line print two space-separated integers, representing the length of a and b respectively.

In the second line print the string produced by concatenating a and b ($a + b$).

In the third line print two strings separated by a space, a' and b'. a' and b' are the same as a and b, respectively, except that their first characters are swapped.

Sample Input

```
abcd
ef
```

Sample Output

```
4 2
abcdef
ebcd af
```

Explanation

- a = "abcd"
- b = "ef"
- $|a| = 4$
- $|b| = 2$
- $a + b$ = "abcdef"
- a' = "ebcd"
- b' = "af"

```
    string b2 = b;

    char temp = a2[0];
    a2[0] = b2[0];
    b2[0] = temp;

    cout << a2 << " " << b2 << endl;

    return 0;
}
```

Line: 27 Col: 1

Upload Code as File | Test against custom input | Run Code | Submit Code

C++ CPP

You have earned 10.00 points!

You are now 35 points away from the 4th star for your c++ badge.

56% 115/150

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge