PL-2022-C-Armstrong Number

locked

Problem Submissions Leaderboard Discussions

The k-digit number N is an Armstrong number if and only if the k-th power of each digit sums to N.

Given a positive integer N, return true if and only if it is an Armstrong number.

Input Format

-

Constraints

1 <= N <= 10^8

Output Format

-

Sample Input 0

```
153
```

Sample Output 0

```
true
```

Explanation 0

153 is a 3-digit number, and 153 = 1^3 + 5^3 + 3^3.

Sample Input 1

```
123
```

Sample Output 1

```
false
```

Explanation 1

123 is a 3-digit number, and 123 != 1^3 + 2^3 + 3^3 = 36.

Sample Input 2

```
1634
```

Sample Output 2

Submissions: 715
Max Score: 100
Difficulty: Medium

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```
true
```

C

```c
#include <stdio.h>
#include <string.h>
#include <math.h>
#include <stdlib.h>

int main() {

    /* Enter your code here. Read input from STDIN. Print output to STDOUT */
    int a,b,c,n,sum=0;
    scanf("%d",&a);
    b=a;
    int count=0;
    while(b!=0){
        b=b/10;
        ++count;
    }
    c=a;
    while(c>0){
        n=c%10;
        sum=sum+pow(n,count);
        c=c/10;
    }
    if(sum==a){
        printf("true");
    }
    else{
        printf("false");
;    }
    return 0;
}

```

Line: 1 Col: 1

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