AMSTRONG

Problem | Submissions | Leaderboard | Discussions

Write a C program to check whether a given number is amstrong or not.

Note: Amstrong numbers are numbers that are equal to sum of cubes of its digits.

```
Eg: 153 is an amstrong number.
     153 = 1^3+5^3+3^3
```

Input Format

Input a number.

Constraints

Use the concept of functions in C.

Output Format

Depends on the input.

Sample Input 0

```
153
```

Sample Output 0

```
Amstrong
```

Sample Input 1

```
100
```

Sample Output 1

```
Not Amstrong
```


Current Buffer (saved locally, editable) C

```c

#include <stdio.h>
int power(int, int);

int main()
{
  int n, sum = 0, t, remainder, digits = 0;


  scanf("%d", &n);

```

```c
  t = n;

  while (t != 0) {
    digits++;
    t = t/10;
  }

  t = n;

  while (t != 0) {
    remainder = t%10;
    sum = sum + power(remainder, digits);
    t = t/10;
  }

  if (n == sum)
    printf("Amstrong");
  else
    printf("Not Amstrong");

  return 0;
}

int power(int n, int r) {
  int c, p = 1;

  for (c = 1; c <= r; c++)
    p = p*n;

  return p;
}
```

Line: 1 Col: 1

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

Testcase 0 ✔ | Testcase 1 ✔

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

```
153
```

Your Output (stdout)

```
Amstrong
```

Expected Output

```
Amstrong
```