Armstrong number

Program:

#include <iostream>

#include <cmath>

using namespace std;

int main() {

int num, originalNum, remainder, n = 0, result = 0;

cout << "Enter a positive integer: ";

cin >> num;

originalNum = num;

while (originalNum != 0) {

originalNum /= 10;

++n;

}

originalNum = num;

while (originalNum != 0) {

remainder = originalNum % 10;

result += pow(remainder, n);

originalNum /= 10;

}

if (result == num)

cout << num << " is an Armstrong number." << endl;

else

cout << num << " is not an Armstrong number." << endl;

return 0;

}

Output:

