1. Cab Numbers

Program Name: CabNumbers.java **Input File: cabnumbers.dat**

This is a story related by the mathematician Hardy when he visited the Indian mathematician Ramanujan:

I remember once going to see him when he was ill at Putney. I had ridden in taxi cab number 1729 and remarked that the number seemed to me rather a dull one, and that I hoped it was not an unfavorable omen. "No," he replied, "it is a very interesting number; it is the smallest number expressible as the sum of two positive cubes in two different ways."

There are many such numbers less than 1,000,000. Write a program that will print a given number of the smallest positive integers that can be expressed as the sum of two positive cubes in two different ways. For example, here are the first three smallest numbers:

$1729 = 1^3 + 12^3 = 9^3 + 10^3$
$4104 = 2^3 + 16^3 = 9^3 + 15^3$
$13832 = 2^3 + 24^3 = 18^3 + 20^3$

Input
The input will be a single integer `n` that indicates the number of integers that you will print that meet the criteria above.

Output
You will print the first `n` smallest positive integers that can be expressed as the sum of two positive cubes in two different ways. Print one integer to a line in ascending order.

Example Input File
```
3
```

Example Output to Screen
```
1729
4104
13832
```