Cube Free Numbers

A cube free number is a number who's none of the divisor is a cube number (A cube number is a cube of a integer like 8 (2 * 2 * 2) , 27 (3 * 3 * 3)). So cube free numbers are 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 17, 18 etc (we will consider 1 as cube free). 8, 16, 24, 27, 32 etc are not cube free number. So the position of 1 among the cube free numbers is 1, position of 2 is 2, 3 is 3 and position of 10 is 9. Given a positive number you have to say if its a cube free number and if yes then tell its position among cube free numbers.

Input

First line of the test case will be the number of test case T (1 <= T <= 100000) . Then T lines follows. On each line you will find a integer number n (1 <= n <= 1000000).

Output

For each input line, print a line containing "Case I: ", where I is the test case number. Then if it is not a cube free number then print "Not Cube Free". Otherwise print its position among the cube free numbers.

Example

Sample Input:
```
10
1
2
3
4
5
6
7
8
9
10
```

Sample Output:
```
Case 1: 1
Case 2: 2
Case 3: 3
Case 4: 4
Case 5: 5
Case 6: 6
Case 7: 7
Case 8: Not Cube Free
Case 9: 8
Case 10: 9
```