import java.util.Scanner;

public class DudeneyNumber {

// Function to calculate the sum of digits of a number

public static int calculateSumOfDigits(int num) {

int sum = 0;

while (num > 0) {

int digit = num % 10;

sum += digit;

num /= 10;

}

return sum;

}

// Function to check if a number is a Dudeney number

public static boolean isDudeneyNumber(int num) {

int cubeRoot = (int) Math.cbrt(num); // Calculate the cube root of the number

int sumOfDigits = calculateSumOfDigits(num);

return sumOfDigits == cubeRoot;

}

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.print("Enter a number: ");

int num = scanner.nextInt();

if (isDudeneyNumber(num)) {

System.out.println(num + " is a Dudeney number.");

} else {

System.out.println(num + " is not a Dudney number.");

}

}

}