```
 1 /**
 2  * Created by Grand Circus Student on 6/29/2017.
 3  */
 4 import java.util.Scanner;
 5
 6 /* 153  ---> 1       5      3
 7            1*1*1 + 5*5*5 + 3*3*3
 8              1   +  125  +  27
 9                    153       <---  ex. of an Armstrong
   number: whose sum of the cubes of the
10                                        numbers digit's is
    equal to the number itself
11 */
12
13
14 public class mathChallenge {
15
16     public static void main(String arg[]) {
17         Scanner scnr = new Scanner(System.in);
18
19         int n, temp, sum = 0, r;
20
21         System.out.println("Enter a Number : ");
22         n = scnr.nextInt();
23
24         temp = n;                                  // n
   being the sum of the cubes of each digit
25
26         while (temp!=0) {
27             r = temp % 10;
28             sum = sum + (r * r * r);               //
   finding the sum of the cubes of each digit
29             temp = temp / 10;
30         }
31             if (sum == n) {
32                 System.out.println("TRUE");       // if sum
    is equal to n, then the statement is true
33
34         }   else {
35
36             System.out.println("FALSE");          // if sum
    is not equal to n, then the statement is false
37             }
38
39         }
```

```
40
41      }
```