

armstrong.c

```
1  /**
2   * Write a C program to check whether a given number is an Armstrong number or not.
3   * An Armstrong number of three digits is an integer such that the sum of the cubes
4   * of its digits is equal to the number itself.
5   * For example, 153 is an Armstrong number since  $1^3 + 5^3 + 3^3 = 153$ .
6   */
7  #include <stdio.h>
8
9  int main() {
10     int num, originalNum, remainder, sum = 0;
11     printf("Enter an integer: ");
12     scanf("%d", &num);
13
14     originalNum = num;
15
16     // Calculating the sum of cubes of each digit
17     while (num != 0) {
18         remainder = num % 10;
19         sum += remainder * remainder * remainder;
20         num = num / 10;
21     }
22
23     if (originalNum == sum) {
24         printf("%d is an Armstrong number.\n", originalNum);
25     } else {
26         printf("%d is not an Armstrong number.\n", originalNum);
27     }
28
29     return 0;
30 }
```