EX 5	PROGRAM TO CHECK WHETHER A GIVEN NUMBER IS ARMSTRONG NUMBER OR NOT?
DATE:	

EX 5: AIM:

Program to check whether the given number is Armstrong number or not

ALGORITHM:

Step 1: Start

Step 2: Declare Variable sum, temp, num

Step 3: Read num from User

Step 4: Initialize Variable sum=0 and temp=num

Step 5: Repeat Until num>=0 5.1 sum=sum + cube of last digit i.e [(num%10)*(num%10)*(num%10)] 5.2 num=num/10

Step 6: IF sum==temp Print "Armstrong Number" ELSE Print "Not Armstrong Number"

Step 7: Stop

PROGRAM:

```
#include<stdio.h> int
main()
{  int  num,copy_of_num,sum=0,rem;
  printf("\nEnter  a  number:");
  scanf("%d",&num);  while  (num  !=
  0)
  { rem = num % 10; sum = sum +
    (rem*rem*rem); num = num /
    10;
  } if(copy_of_num ==
  sum)
    printf("\n%d is an Armstrong Number",copy_of_num); else
    printf("\n%d is not an Armstrong Number",copy_of_num);
  return(0);
```

```
}
```

OUTPUT:

```
Enter a number: 370
370 is an Armstrong Number
```

RESULT:

Thus the C Program to check whether a given number is Armstrong or not has been executed and the output was verified.