```
#include<stdio.h>
#include<math.h>

 void main() {
  int number, sum = 0, rem = 0, nthPower = 0, digits = 0, temp;
  printf("Enter a number");
  scanf("%d", & number);
  temp = number;
  //to calculate the number of digits in the number
  while (number != 0) {
   number = number / 10;
   digits++;
  }
  number = temp;
  //to get the nth power of each digit and add it to the sum
  while (number != 0) {
   rem = number % 10;
   nthPower = pow(rem, digits);
   sum = sum + nthPower;
   number = number / 10;
  }
  //to check if obtained sum is equal to the original number
  if (sum == temp)
   printf("The given number is an Armstrong number");
  else
   printf("The given number is not an Armstrong number");
 }
```