Program-28

A disarium number is a number in which the sum of the digits to the power of their  
respective position is equal to the number itself.  
Example: 135 = 11 + 32 + 53  
Hence, 135 is a disarium number.  
Design a class Disarium to check if a given number is a disarium number or not. Some  
of the members of the class are given below:  
  
Class name : Disarium  
Data members/instance variables:  
int num : stores the number  
int size : stores the size of the number  
  
Methods/Member functions:  
  
Disarium(int nn) : parameterized constructor to initialize the data members n = nn and size = 0  
  
void countDigit( ) : counts the total number of digits and assigns it to size  
  
int sumofDigits(int n, int p) : returns the sum of the digits of the number(n)  
  
void check( ) : checks whether the number is a disarium number and displays the result with an appropriate message  
  
Specify the class Disarium giving the details of the constructor( ), void countDigit( ), int sumofDigits(int, int) and void check( ). Define the main( ) function to create an object and call the functions accordingly to enable the task.