# SUM-OF-SQUARES.CPP source

```cpp
/*
 * Program to display the sum of squares of N natural numbers
 * without using equations
 */

#include <iostream>
using namespace std;

int main() {

   int n, sum_of_sqrs = 0;

   cout<<"Enter the number:";
   cin>>n;

   //the following code will be executed for all values of i
   //from 1 to n
   //ie, sum_of_sqrs+=1*1; sum_of_sqrs+=2*2; ... sum_of_sqrs+=n*n;
   for(int i=1;i<=n;i++) {
     sum_of_sqrs+=i*i;
   }

   cout<<"Sum of squares of "<<n<<" natural numbers:"<<sum_of_sqrs<<endl;

   return 0;

}
```

# SUM-OF-SQUARES.CPP output

```
1: Enter the number:10
2: Sum of squares of 10 natural numbers:385
3:
```