

Input/Output

Exercise 1: The sum of square of the first N positive integers

Write a program which reads the first N positive integers from the file **data.txt** of the following format:

```
# Values
1
2

3
4
5
6
7
```

in which the character **#** represent a line to be ignored (the header of the file).

1. The file contains a list with the first N positive integers. Sum the squares of these values and print the result on the standard output.
2. Write a function that given an integer N returns the value

$$S = \frac{N(N+1)(2N+1)}{6}.$$

3. Compare the two obtained results.