

## Programming Assignment 2

**Due: Nov 15<sup>th</sup> 2020**

You need to implement the algorithm for counting inversions. You need to read from the standard input (i.e, the terminal) and output to the standard output (i.e, the screen).

- Input format: The first line of the input contains one positive integers  $n$ ,  $1 \leq n \leq 106$ . The next  $n$  lines contain the  $n$  integers  $A[1], A[2], \dots, A[n]$ ; every integer is between 0 and 108.
- Output format: Just output 1 line, which is total number of inversions.

Example Input:	Example Output:	
6 7 3 20 16 5 8	7	The pairs are (7, 3),(7, 5),(20, 16),(20, 5),(20, 8), (16, 5),(16, 8)