CS2443 HW One
Deadline: Feb 16, 2025

1. Given an array A of n integers, find the number of inversions in A, i.e. the number of pairs (i, j) such that $i < j$ and $A[i] > A[j]$.

   Input Format: The input consists of a csv file, with each line containing a single integer in the range $[-10^7, 10^7]$. The number of integers is guaranteed to be at most 10^6.

   Output: The number of inversions in the sequence given in the file.

   Accept the name of the file as input.

   For the sample input files list1.csv and list2.csv, the outputs are 10 and 2495513672 respectively.

   Submit a single file (one program file or one zip file with multiple program files) and name your submission file with your roll number.