

Aaryan Manni 2023300001 Comp A - A

Aim Find running time of insertion sort and selection sort.

In this experiment, I learnt about the chrono library and used it to get the time taken for each sorting algorithm.

Then, I generated 10000 random numbers and stored into input.txt

Now, we wrote the code for a sample set of values.

Then we ran a loop and clocked the runtime.

It was very hectic and time consuming as time complexity of both are  $O(n^2)$ .

Also, Space complexity is  $O(1)$  as it is an in-place sorting algorithm.