

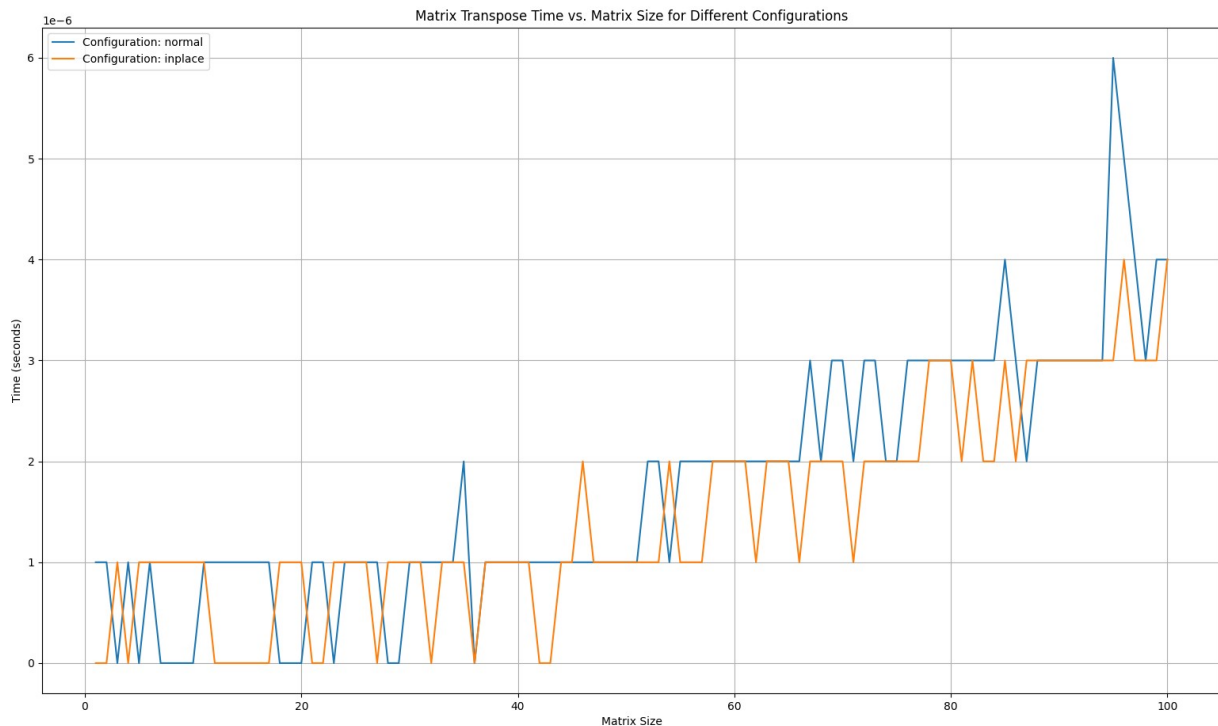
Matrix Transpose

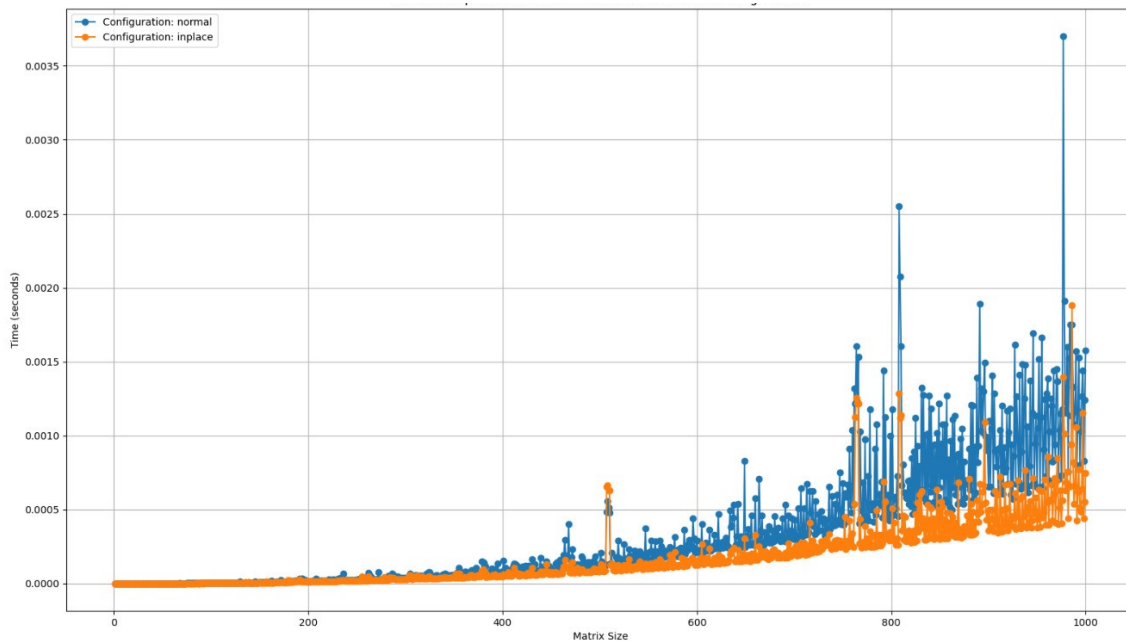
There are two similar graphs for transpose also and the reason for the split in the case of the transpose is also the same because of the cache size. So to calculate the cache size we perform the same calculation.

For tranpose the split occurs around $n=35$ so

cache size = $2(n*n)*4 = 9800$ bytes

The readings are a bit scattered so it is difficult to determine the cache size from transpose. Even after taking the average of readings (graph at last) it is difficult to see a precise separating point.





- One important observation is the sudden spikes that appear both in multiplication and transpose. These spikes are random and may go away if the readings are averaged out after performing it several times but since it does not pose much problem in determining the splitting point the graphs are plot bu just running the experiments once.
- This images are the averages of 5 and 10 random readings respectively formed for the same experiment and shows how averaging out the readings reduces the spike intensities.

