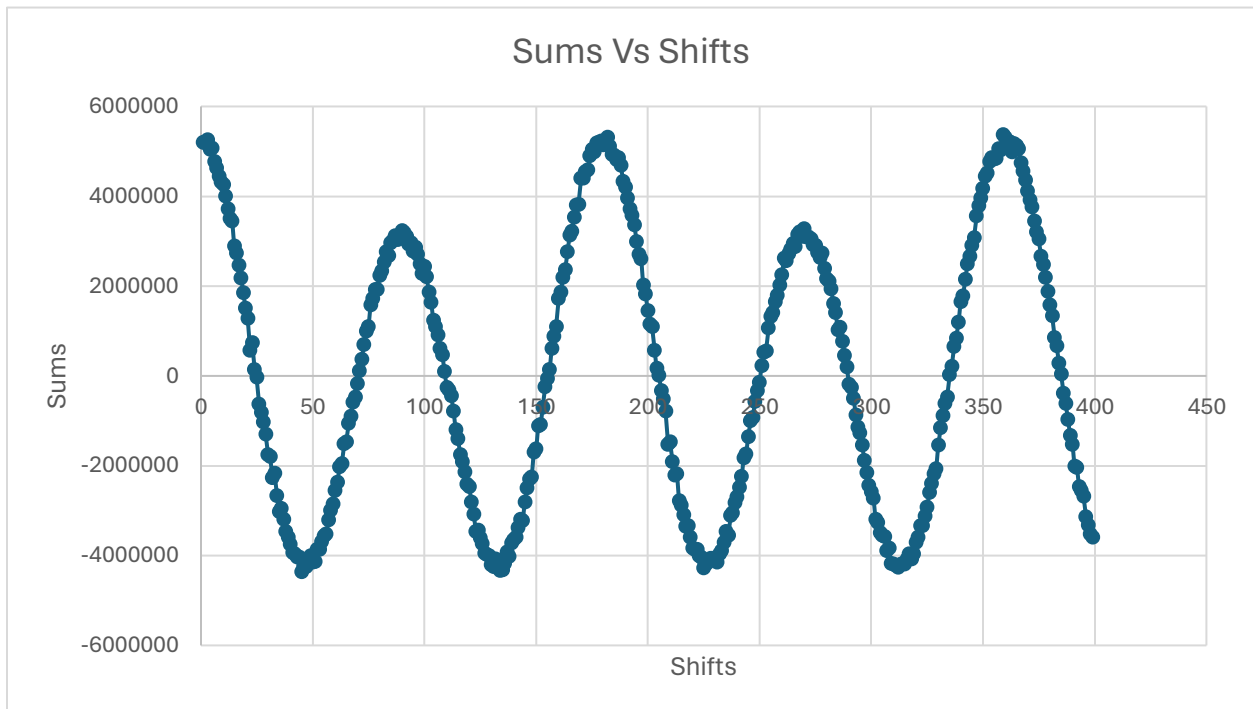


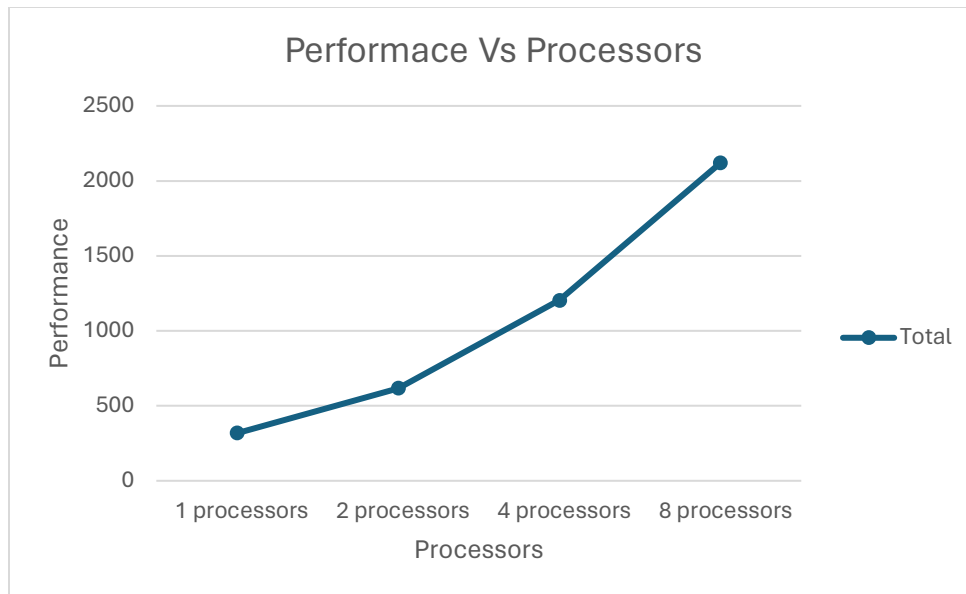
1. Show the Sums{1} ... Sums[399] vs. shift scatterplot.



2. State what the two secret sine-wave periods are.

The two successive large humps were 183 and 362 so the distance between them is 179. The distance between a small hump 271 and the next larger hump 362 is 91.

3. Show your graph of Performance vs. Number of Processors used.



4. What patterns are you seeing in the performance graph?

The performance graph shows that as the number of processors increases, the performance also increases geometrically. The graph shows a linear relationship between the number of processors and performance, showing that adding more processors leads to a considerable improvement in performance.

5. Why do you think the performances work this way?

The performance improves with the addition of more processors because of parallel processing. When more processors are used, the load is divided among them, reducing the amount of processing each processor must do. This parallelism leads to faster computation and better overall performance. This linear trend tells us that with the increase in the processors, the program scales efficiently using the available computational resources.