

Project 7B

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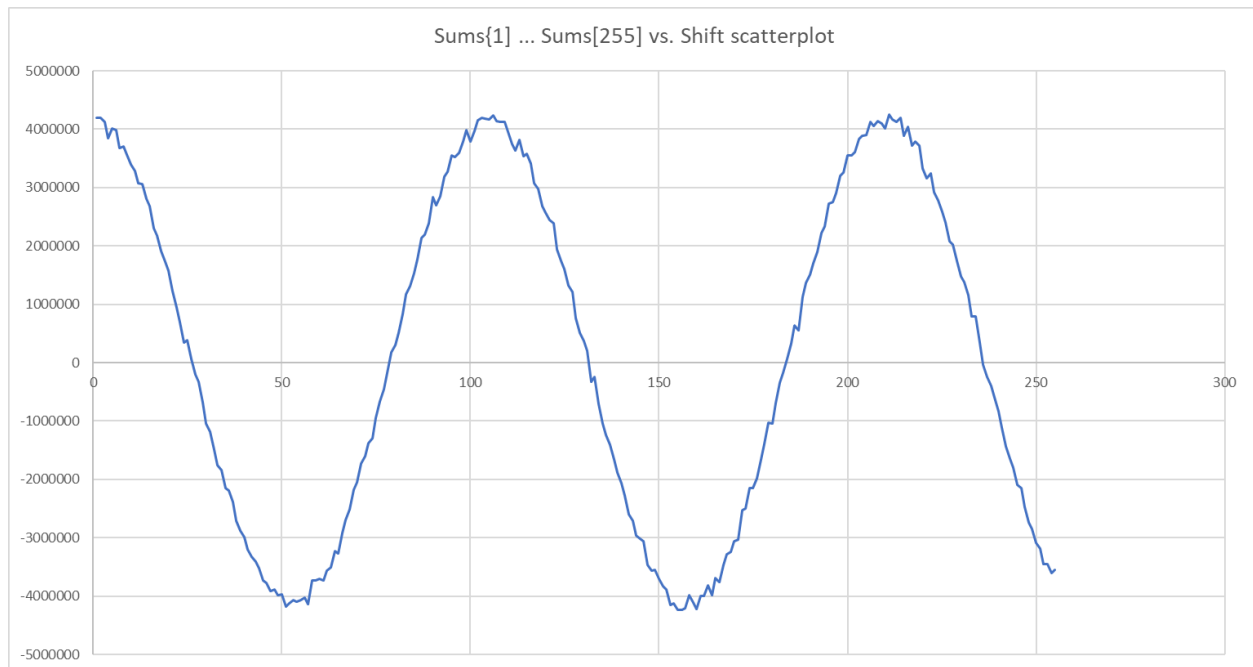
Class: CS_575

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1. Show the Sums{1} ... Sums[255] vs. shift scatterplot.

Ans:



2. State what the secret sine-wave period is, i.e., what change in shift gets you one complete sine wave?

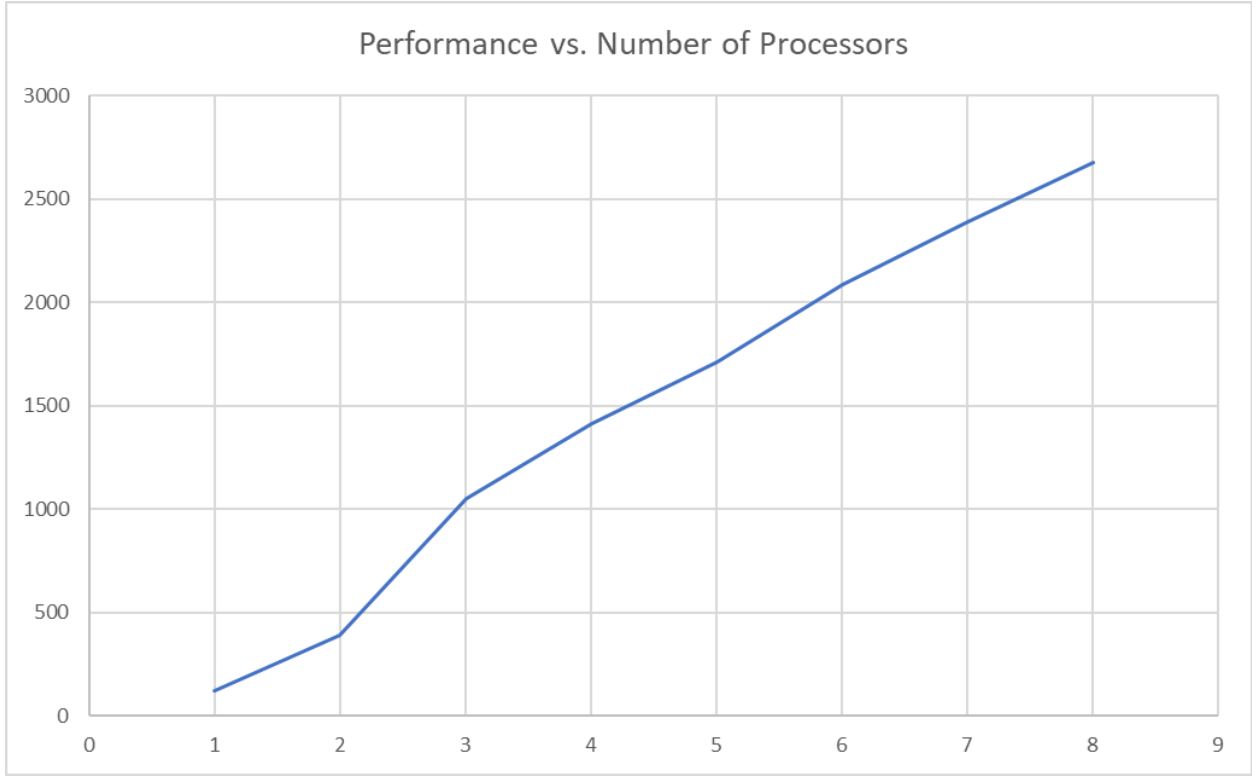
Ans:

The secret sine-wave period is between the peak of one wave to the other in my case
Difference between 106 to 211 which is $211 - 106 = 105$

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

Ans:

Processors	Elements	Mega-autocorrelations computed per second
1	8388608	121.41
2	8388608	392.58
3	8388608	1054.01
4	8388608	1410.9
5	8388608	1708.91
6	8388608	2086.79
7	8388608	2388.7
8	8388608	2675.3



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

Ans.

As the number of processes increases the performance is also increasing.

By this, we can say that performance is directly proportional to the number of processors.

Performance.

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

Ans.

This can be understood in this way if one person constructs the house it will take 10 years to complete. Same way if 2 persons work on it the construction will take less than 10 years, maybe like 5 years. If the 4 people work on it, time reduces more. The same happens with the number of processors and performance. If the number of processors increases then the time taken to do a process will decrease which results in better performance.