

Parallel Sum Calculation



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You need to use the functions `MPI_Gather` and `MPI_Scatter`.

For this problem you can assume $N = 100$ and $P = 4$.

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Also assume for this problem that the array contains all the integers from 1 to 100 , thus:

1,2,3, ..., 97,98,99,100

Arithmetic Series Formula

$$S_n = n \left(\frac{a_1 + a_n}{2} \right)$$

n = the number of terms being added

a_1 = the first term

a_n = the nth term (last term)

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$$100 \times (101 / 2) \rightarrow 5050$$