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Intermediate MPI Lab - Parallel Programming
Assignment: Intermediate MPI (Exercises 4, 8, 11 and 13)
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Exercise 11 - LAB 11: Reduce_scatter
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LAB 11: Reduce_scatter
Download the file example11_Reduce_scatter.c and execute the code using 4 processes.
Answer these questions:

* Explain how the function MPI_Reduce_scatter works in this example.
Essentially, the MPI_Reduce_scatter function performs a combination of reduction and scatter operations.
In this case, a reduction operation (MPI_SUM) is applied across all processes to combine corresponding elements from the sendbuf arrays of each process.
Then each process receives a portion of the reduced array into its recvbuf. After the reduction, the results are distributed (scattered) to the processes according to the recvcounts array.

* Fill in the next table with the sendbuf data and check if the obtained results are correct

Process 0	**Process 1**	**Process 2**	**Process 3**	**Result**
got 6 expected 6	got 10 expected 10	got 18 expected 18	got 14 expected 14	ok
got 6 expected 6	got 10 expected 10	got 14 expected 14	got 18 expected 18	ok
got 6 expected 6	got 10 expected 10	got 14 expected 14	got 18 expected 18	ok
got 6 expected 6	got 10 expected 10	got 14 expected 14	got 18 expected 18	ok