

MPI_Reduce Operations



MPI_Reduce Operations



On this lecture we are going to see the operations we can perform with MPI_Reduce.

MPI_Reduce Operations



- `int MPI_Reduce(const void* sendbuf, void* recvbuf, int count, MPI_Datatype datatype, MPI_Op op, int root, MPI_Comm comm);`

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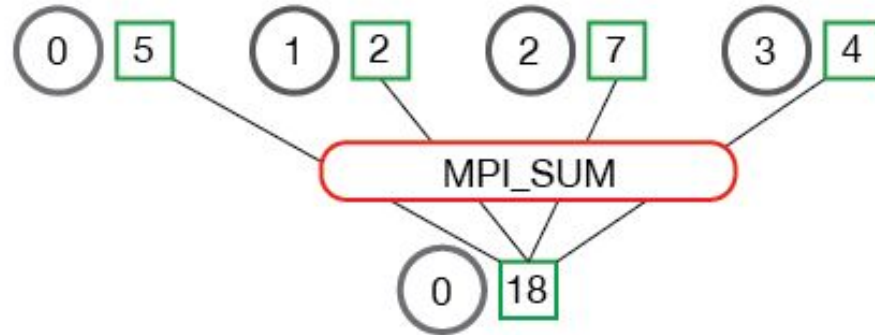


| Name | Meaning |
|------------|------------------------|
| MPI_MAX | maximum |
| MPI_MIN | minimum |
| MPI_SUM | sum |
| MPI_PROD | product |
| MPI_LAND | logical and |
| MPI_BAND | bit-wise and |
| MPI_LOR | logical or |
| MPI_BOR | bit-wise or |
| MPI_LXOR | logical xor |
| MPI_BXOR | bit-wise xor |
| MPI_MAXLOC | max value and location |
| MPI_MINLOC | min value and location |

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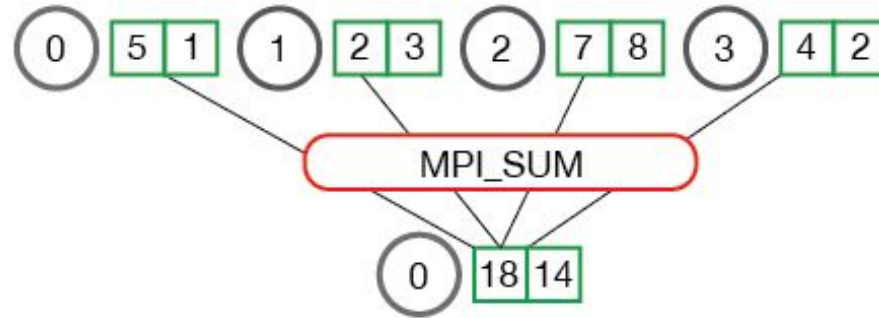
MPI_Reduce



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MPI_Reduce



Difference between Bitwise AND - Logical AND



MPI_BAND

6 10

1010

0110

0010 } 2

MPI_LAND

6 10

1 88 1

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