```
Ready to simulate the execution of the MPI program now!
There are 1 communicator groups involved
The param role name is MPI_COMM_WORLD
The actual roles for this param role are:
The role 0 is MPI_COMM_WORLD[0..N-1]
The role 1 is MPI_COMM_WORLD[3..6]
The role 2 is MPI COMM WORLD[5..5]
The role 3 is MPI_COMM_WORLD[6..6]
The role 4 is MPI_COMM_WORLD[3..4]
The role 5 is MPI_COMM_WORLD[0..2]
The role 6 is MPI_COMM_WORLD[7..N-1]
The role 7 is MPI_COMM_WORLD[7..7]
The role 8 is MPI_COMM_WORLD[0..6]
The role 9 is MPI_COMM_WORLD[8..N-1]
The role 10 is MPI_COMM_WORLD[22..22]
The role 11 is MPI_COMM_WORLD[0..21]
The role 12 is MPI_COMM_WORLD[23..N-1]
```