Compile y ejecute el programa. Observe cómo ahora hay envío y recepción de mensajes basado en el ID de proceso (rank). Comente y discuta sus observaciones

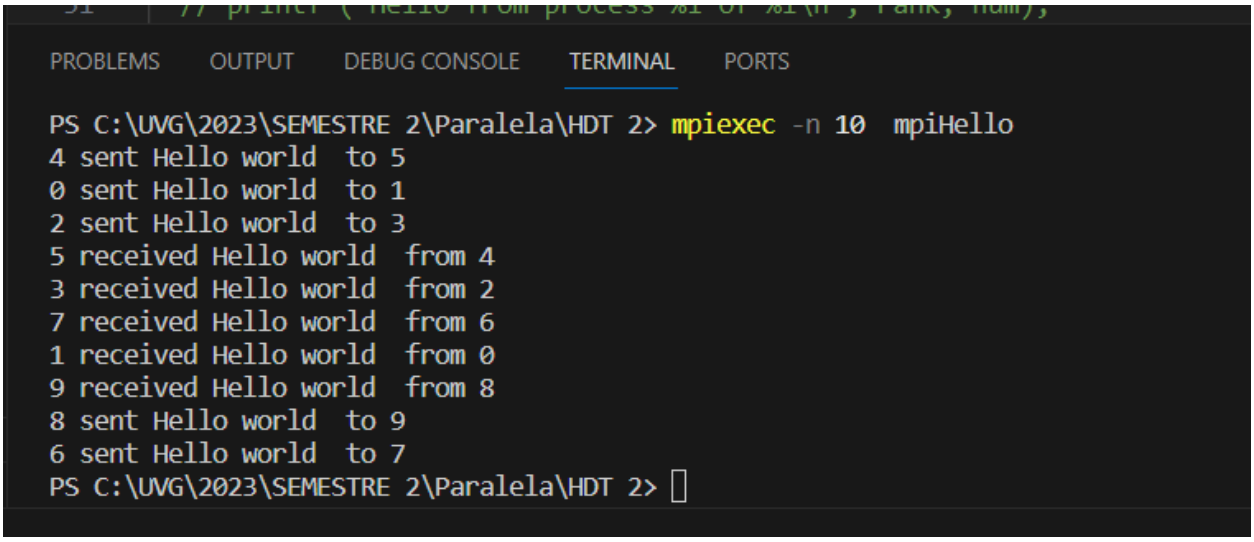
```
//----(2) CAPTURA DE DATOS DEL COMUNICADOR----//
int rank, num, i;
MPI_Comm_rank (MPI_COMM_WORLD, &rank);
MPI_Comm_size (MPI_COMM_WORLD, &num);

//----(3) DISTRIBUCION DEL TRABAJO----//
if (rank ==0)
{
  char mess[] ="Hello world";
  printf("%i sent %s \n",rank , mess);
  for (i = 1; i <num; i++)
  {
    MPI_Send(mess, strlen(mess) +1 , MPI_CHAR,i,MESSTAG, MPI_COMM_WORLD);
    }
  }
else
{
  char mess[MAXLEN];
  MPI_Status status;
  MPI_Recv (mess,MAXLEN,MPI_CHAR,0,MESSTAG, MPI_COMM_WORLD, &status);
  printf("%i received %s \n", rank , mess);
}
```

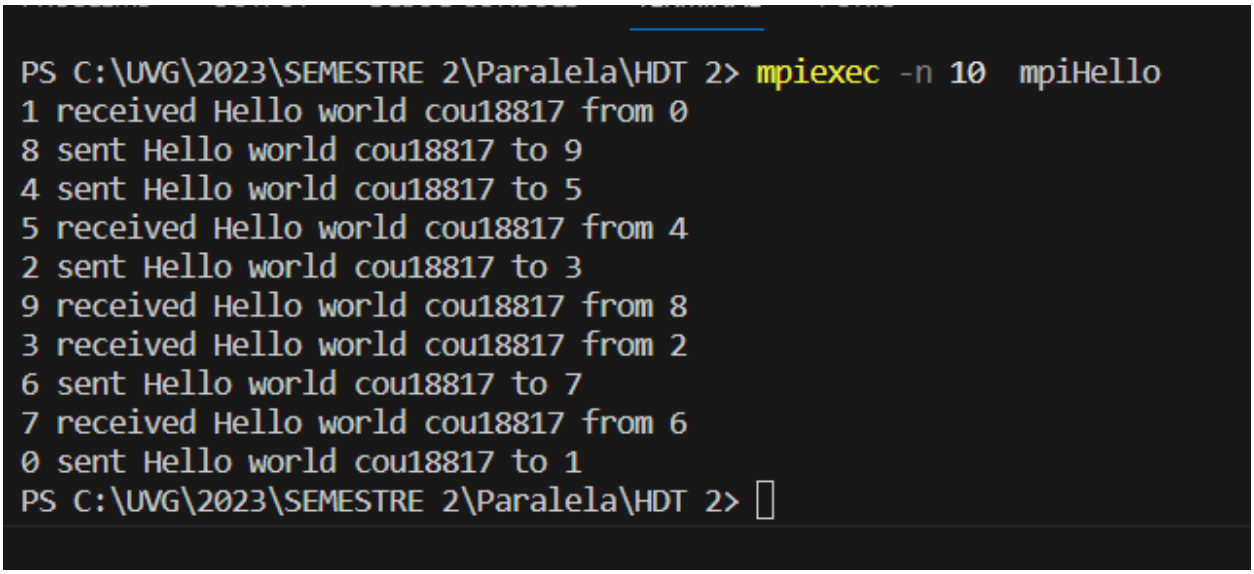
Una vez hechas las modificaciones vemos que se USA MPI_Recv y MPI_Send para comunicar la información del hilo master a los hilos workers

Después de haber hecho los cambios , se queda congelado

```
8 received Hello world
3 received Hello world
0 sent Hello world
PS C:\UVG\2023\SEMESTRE 2\Paralela\HDT 2> mpiexec -n 10  mpiHello
```


PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
PS C:\UVG\2023\SEMESTRE 2\Paralela\HDT 2> mpiexec -n 10 mpiHello
4 sent Hello world to 5
0 sent Hello world to 1
2 sent Hello world to 3
5 received Hello world from 4
3 received Hello world from 2
7 received Hello world from 6
1 received Hello world from 0
9 received Hello world from 8
8 sent Hello world to 9
6 sent Hello world to 7
PS C:\UVG\2023\SEMESTRE 2\Paralela\HDT 2>

Con nombre :


PS C:\UVG\2023\SEMESTRE 2\Paralela\HDT 2> mpiexec -n 10 mpiHello
1 received Hello world cou18817 from 0
8 sent Hello world cou18817 to 9
4 sent Hello world cou18817 to 5
5 received Hello world cou18817 from 4
2 sent Hello world cou18817 to 3
9 received Hello world cou18817 from 8
3 received Hello world cou18817 from 2
6 sent Hello world cou18817 to 7
7 received Hello world cou18817 from 6
0 sent Hello world cou18817 to 1
PS C:\UVG\2023\SEMESTRE 2\Paralela\HDT 2>