

Corto 7

Ejecutando master y worker sin editar:

```
[imaglne@nobara-pc Corto7Paralela]$ mpirun -np 1 master : -np 3 worker
Node 3 says Awaiting your command
Node 2 says Awaiting your command
Node 1 says Awaiting your command
[imaglne@nobara-pc Corto7Paralela]$ mpirun -np 1 master : -np 3 worker
Node 2 says Hello
Node 3 says Hello
Node 1 says Hello
[imaglne@nobara-pc Corto7Paralela]$ mpirun -np 1 master : -np 3 worker
Node 3 says Hi
Node 1 says Hi
Node 2 says Hi
```

Con worker modificado: (Imprimir un mensaje diferente aleatorio y su Process ID (PID) además de su Rank)

```
^[[A[imaglne@nobara-pc Corto7Paralela]$ mpirun -np 1 master : -np 3 worker
Node 3 (PID: 10036) says Awaiting your command
Node 1 (PID: 10034) says Hello
Node 2 (PID: 10035) says Hi
```

mpi_trap1.c sin modificar:

```
-----
[imaglne@nobara-pc Corto7Paralela]$ mpirun -n 3 ./mpi_trap1
With n = 2048 trapezoids, our estimate
of the integral from 1.000000 to 100.000000 = 332367.176038542645983
```

corriendo mpi_trapIO.c:

Utilizando -n 2

```
[imaglne@nobara-pc Corto7Paralela]$ mpirun -n 2 ./mpi_trap1
Enter a, b, and n
1
100
2048
With n = 2048 trapezoids, our estimate
of the integral from 1.000000 to 100.000000 = 333333.038556218147278
[imaglne@nobara-pc Corto7Paralela]$ mpirun -n 2 ./mpi_trap1
Enter a, b, and n
1
100
2048
With n = 2048 trapezoids, our estimate
of the integral from 1.000000 to 100.000000 = 333333.038556218147278
[imaglne@nobara-pc Corto7Paralela]$ mpirun -n 2 ./mpi_trap1
Enter a, b, and n
1
100
2048
With n = 2048 trapezoids, our estimate
of the integral from 1.000000 to 100.000000 = 333333.038556218147278
```

Usando -n 4

```
[imaglne@nobara-pc Corto7Paralela]$ mpirun -n 4 ./mpi_trap1
Enter a, b, and n
1
100
2048
With n = 2048 trapezoids, our estimate
of the integral from 1.000000 to 100.000000 = 333333.038556218147278
[imaglne@nobara-pc Corto7Paralela]$ mpirun -n 4 ./mpi_trap1
Enter a, b, and n
1
100
2048
With n = 2048 trapezoids, our estimate
of the integral from 1.000000 to 100.000000 = 333333.038556218147278
[imaglne@nobara-pc Corto7Paralela]$ mpirun -n 4 ./mpi_trap1
Enter a, b, and n
1
100
2048
With n = 2048 trapezoids, our estimate
of the integral from 1.000000 to 100.000000 = 333333.038556218147278
[imaglne@nobara-pc Corto7Paralela]$
```

usando -n 8

```
[imaglne@nobara-pc Corto7Paralela]$ mpirun --oversubscribe -n 8 ./mpi_trap1
Enter a, b, and n
1
100
2048
With n = 2048 trapezoids, our estimate
of the integral from 1.000000 to 100.000000 = 333333.038556218147278
[imaglne@nobara-pc Corto7Paralela]$ mpirun --oversubscribe -n 8 ./mpi_trap1
Enter a, b, and n
1
100
2048
With n = 2048 trapezoids, our estimate
of the integral from 1.000000 to 100.000000 = 333333.038556218147278
[imaglne@nobara-pc Corto7Paralela]$ mpirun --oversubscribe -n 8 ./mpi_trap1
Enter a, b, and n
1
100
2048
With n = 2048 trapezoids, our estimate
of the integral from 1.000000 to 100.000000 = 333333.038556218147278
[imaglne@nobara-pc Corto7Paralela]$
```

Utilizando la cantidad de procesos de mi sistema:

Aquí utilizo `$(nproc)` El comando `$(nproc)` es una expansión de shell que ejecuta el comando `nproc`, que devuelve el número de procesadores disponibles en mi máquina.

```
[imaglne@nobara-pc Corto7Paralela]$ mpirun --oversubscribe -np $(nproc) ./mpi_trap1
Enter a, b, and n
1
100
2048
With n = 2048 trapezoids, our estimate
of the integral from 1.000000 to 100.000000 = 333333.038556218147278
[imaglne@nobara-pc Corto7Paralela]$ mpirun --oversubscribe -np $(nproc) ./mpi_trap1
Enter a, b, and n
1
100
2048
With n = 2048 trapezoids, our estimate
of the integral from 1.000000 to 100.000000 = 333333.038556218147278
[imaglne@nobara-pc Corto7Paralela]$ mpirun --oversubscribe -np $(nproc) ./mpi_trap1
Enter a, b, and n
1
100
2048
With n = 2048 trapezoids, our estimate
of the integral from 1.000000 to 100.000000 = 333333.038556218147278
[imaglne@nobara-pc Corto7Paralela]$
```