Parallel Programming Exercise 4 - 6

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(If you and your team member contribute equally, you can use (co-first author), after each name.)

1 Problem and Proposed Approach

(Brief your problem, and give your idea or concept of how you design your program.)

Get the rank of process using `MPI_Comm_rank` and print it. No inter-process communication is needed.

1

2 Theoretical Analysis Model

(Try to give the time complexity of the algorithm, and analyze your program with iso-efficiency metrics)

3 Performance Benchmark

4 Conclusion and Discussion

(Discuss the following issues of your program

- 1. What is the speedup respect to the number of processors used?
- 2. How can you improve your program further more
- 3. How does the communication and cache affect the performance of your program?
- 4. How does the Karp-Flatt metrics and Iso-efficiency metrics reveal?

Appendix(optional):

(If something else you want to append in this file, like picture of life game)

```
[u1167044@clogin1 4-6]$ cat parallel_hello_world.o8581599
/home/u1167044/109-1-PP/basics/4-6
Fri Oct 16 11:22:29 CST 2020
hello, world, from process <0>
hello, world, from process <1>
hello, world, from process <2>
hello, world, from process <3>
hello, world, from process <4>
hello, world, from process <5>
hello, world, from process <5>
hello, world, from process <6>
hello, world, from process <7>
```

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