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Pruebas realizadas con 5 millones

serial:

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pablo@pablo-Legion-Y540-15IRH-PG0: ~/Desktop/fpjavamo...
46049, 135301852344706746049, 135301852344706746049, 135301852344706746049, 135
301852344706746049, 135301852344706746049, 135301852344706746049, 1353018523447
06746049, 135301852344706746049, 135301852344706746049, 135301852344706746049,
135301852344706746049, 135301852344706746049, 135301852344706746049, 1353018523
44706746049, 135301852344706746049, 135301852344706746049, 13530185234470674604
9, 135301852344706746049, 135301852344706746049, 135301852344706746049, 1353018
52344706746049, 135301852344706746049, 135301852344706746049, 13530185234470674
6049, 135301852344706746049, 135301852344706746049, 135301852344706746049, 1353
01852344706746049, 135301852344706746049, 135301852344706746049, 13530185234470
6746049, 135301852344706746049, 135301852344706746049, 135301852344706746049, 1
35301852344706746049, 135301852344706746049, 135301852344706746049, 13530185234
4706746049, 135301852344706746049, 135301852344706746049, 135301852344706746049
, 135301852344706746049, 135301852344706746049, 135301852344706746049, 13530185
2344706746049, 135301852344706746049, 135301852344706746049, 135301852344706746
049, 135301852344706746049, 135301852344706746049, 135301852344706746049, 13530
1852344706746049, 135301852344706746049, 135301852344706746049, 135301852344706
746049, 135301852344706746049, 135301852344706746049, 135301852344706746049, 13
5301852344706746049, 135301852344706746049, 135301852344706746049]

real    0m13.080s
user    0m14.492s
sys     0m0.734s
pablo@pablo-Legion-Y540-15IRH-PG0:~/Desktop/fpjavamodel$
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paralela:

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pablo@pablo-Legion-Y540-15IRH-PG0: ~/Desktop/fpjavamo...
706746049, 135301852344706746049, 135301852344706746049, 135301852344706746049,
135301852344706746049, 135301852344706746049, 135301852344706746049, 135301852
344706746049, 135301852344706746049, 135301852344706746049, 1353018523447067460
49, 135301852344706746049, 135301852344706746049, 135301852344706746049, 135301
852344706746049, 135301852344706746049, 135301852344706746049, 1353018523447067
46049, 135301852344706746049, 135301852344706746049, 135301852344706746049, 135
301852344706746049, 135301852344706746049, 135301852344706746049, 1353018523447
06746049, 135301852344706746049, 135301852344706746049, 135301852344706746049,
135301852344706746049, 135301852344706746049, 135301852344706746049, 1353018523
44706746049, 135301852344706746049, 135301852344706746049, 13530185234470674604
9, 135301852344706746049, 135301852344706746049, 135301852344706746049, 1353018
52344706746049, 135301852344706746049, 135301852344706746049, 13530185234470674
6049, 135301852344706746049, 135301852344706746049, 135301852344706746049, 1353
01852344706746049, 135301852344706746049, 135301852344706746049, 13530185234470
6746049, 135301852344706746049, 135301852344706746049, 135301852344706746049, 1
35301852344706746049, 135301852344706746049, 135301852344706746049, 13530185234
4706746049, 135301852344706746049, 135301852344706746049, 135301852344706746049
, 135301852344706746049, 135301852344706746049, 135301852344706746049]

real    0m10.502s
user    0m14.097s
sys     0m0.855s
pablo@pablo-Legion-Y540-15IRH-PG0:~/Desktop/fpjavamodel$
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¿Mejora el tiempo de ejecución? ¿Porqué?

Si mejora el tiempo debido a que cuando se hace de manera serial las tareas no se dividen por lo que solo se utiliza un núcleo con un único hilo mientras cuando utilizamos de manera paralela la Stream API se encarga de dividir la tarea por bloques, asignarlos en distintos hilos y núcleos para que se distribuya la tarea y esta se termine más rápido.