

sudoku_plot

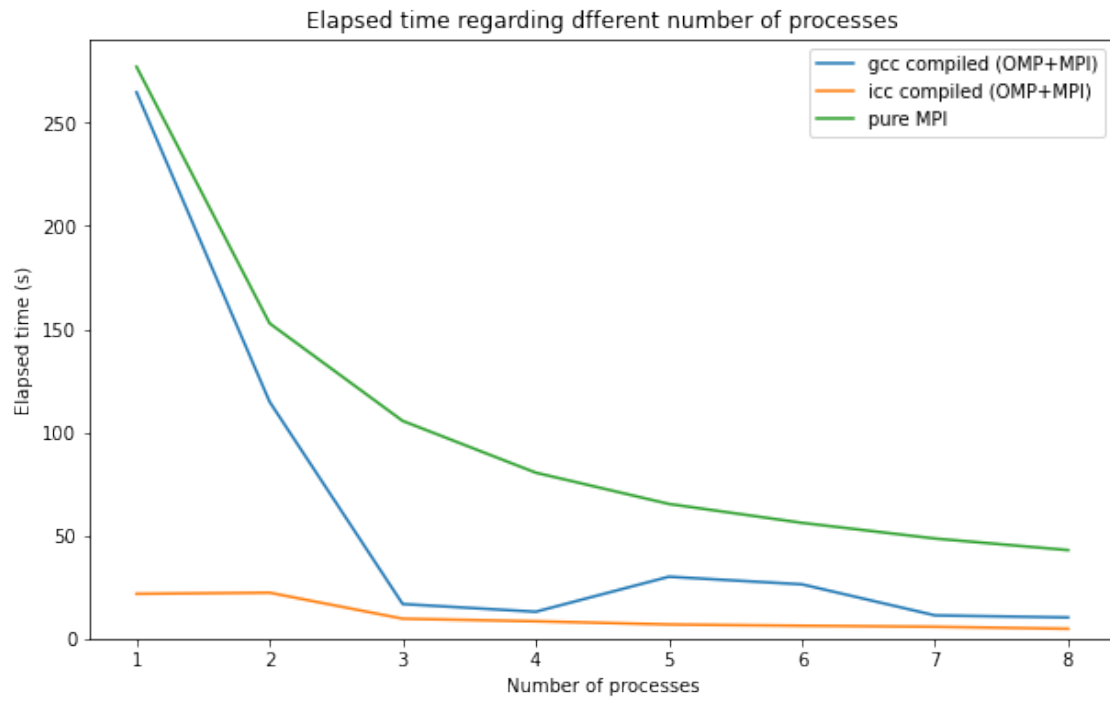
June 20, 2021

0.0.1 Plot regarding the elapsed time when using different number of processes

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[1]: import pandas as pd
import matplotlib.pyplot as plt
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[2]: data = {'# of proc':[1, 2, 3, 4, 5, 6, 7, 8],
            'elapsed time (gcc)':[264.772763, 114.808333, 16.807790, 13.065183, 30.
            ↳043027, 26.347295, 11.309733, 10.291587],
            'elapsed time (icc)':[21.757603, 22.293113, 9.701777, 8.440693, 6.
            ↳911957, 6.296359, 5.783551, 4.809045],
            'elapsed time (pure MPI)':[277.112206, 152.806974, 105.528073, 80.
            ↳440721, 65.296077, 56.145991, 48.531344, 42.924515]}
df = pd.DataFrame(data)
```

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[3]: plt.figure(figsize=(10,6))
plt.plot(df['# of proc'],df['elapsed time (gcc)'], label='gcc compiled_
↳ (OMP+MPI)')
plt.plot(df['# of proc'],df['elapsed time (icc)'], label='icc compiled_
↳ (OMP+MPI)')
plt.plot(df['# of proc'],df['elapsed time (pure MPI)'], label='pure MPI')
plt.ylim(ymin=0)
plt.title('Elapsed time regarding dfferent number of processes')
plt.xlabel('Number of processes')
plt.ylabel('Elapsed time (s)')
plt.legend()
plt.show()
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