MA453/553 – Homework/Lab 2.
Python Code Optimization: 2D Heat Equation using Cython
Due: 10/14/2024

---

1. Rewrite the Python code `heat2d.py` for for 2D heat equation using Cython. Use `numexpr` in the code `heat2d.py` to get the optimal performance. Compare performances of the original code, NumPy version, Cython version, Numexpr version, and the Fortran version. Use `graphics = False` while timing and profiling.

2. Prepare a small report (it need not be fancy!) showing your results, zip all the files as `your_name_hw2.zip` and submit it through Canvas.