Documentation for Running the Scaling Code

- The python code uses **mpi4py** package for the parallelisation and hence require the softwares intelpython and intel MPI. Therefore, make sure that the above mentioned packages are installed apriori.

- Present code, for the scaling purpose, write data to a directory in each time step. For example, the initial data at tstep=0 will be saved in a directory named T_0, tstep=1 in T_1 and so on upto tstep=10. Therefore, all the directories upto T_10 has to be created in the same folder containing the code before the execution.

- One can change the number of steps by changing the parameter T in the code such that the total timesteps will be T/dt. Note that as the code saves data in each time step, directories should be created according to the total timesteps.

- The present code will run in a resolution N=384. Therefore, inorder to get a scaling curve (sample one is provided in the folder), use number of cores which are factors of 384, i.e 32, 64, 128, 192 and 384. Similarly to get a scaling for N=512, use cores as 32, 64, 128, 256 and 512.