II SEMESTER 2021-2022
TAKE HOME EXERCISE-3

Course No.: **CS F422**   Course Title: **Parallel Computing**
Deadline: **As per Canvas**   Maximum Marks: **20M**

Write a parallel program using MPI to compute the following series. Program should take N (no of terms) and number of processes.

$$\sum_{n=0}^{\infty} \frac{(-1)^n}{2n+1} = \frac{\pi}{4}$$

such that:

$$1 - \frac{1}{3} + \frac{1}{5} - \frac{1}{7} + \frac{1}{9} - \cdots = \frac{\pi}{4}$$

Files Expected: A tar file <idno>_the3.tar containing pi_mpi.c, makefile, readMe.txt. ReadMe should contain speedup achieved, and efficiency for n=1 to 100 where n is number of processes.

--&--