II SEMESTER 2024-2025
TAKE HOME EXERCISE-1

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

Consider "pth_mat_vect_rand_split.c" file in lab on pthreads. Modify this file for the following requirements:

(a)   Modify this file so that it will print GFlops/sec when t=1, t=2, t=4 and t=8 for the dimensions: 8000000x8, 8000x8000, 8x8000000

(b)   Make changes in file so that fasle sharing problem is avoided. Print the same stats without false sharing problem.

(c)   Introduce a barrier so that all thread wait after processing one row of matrix. Make changes to the file and print the same stats as in (a).

All output will be printed by executing the file "modified_pth_mat_vect_rand_split.c".

Files Expected: A tar file <idno>_the1.tar containing modified_pth_mat_vect_rand_split.c, makefile, readMe.txt.

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