



# Birla Institute of Technology & Science, Pilani

Pilani Campus

## II SEMESTER 2025-2026 TAKE HOME EXERCISE-2

**Course No.:** CS F422

**Deadline:** As per Canvas

**Course Title:** Parallel Computing

**Maximum Marks:** 20M

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Consider the [given code](#) for computing heat diffusion implemented in pthreads.:

- (a) For all 3 code files, modify the program from using pthreads to using OpenMP directives.
- (b) Add OpenMP directives in these files so that maximum parallelism can be achieved.
- (c) Measure the time taken for various schedules such as static, dynamic, guided and with various chunk sizes.

Files Expected: A tar file <idno>\_the2.zip containing openmp\_<idno>.c , video\_link.txt, makefile, readMe.txt.

Video\_link.txt should contain the URL of your video recording of your code explanation and demo along with your voice over: Terminal prompt (\$) should have your idno as the prompt. Record your explanation of code submitted. Video record your demonstration for (a)-(c) along with your explanation. Please upload video in your Google drive, share it as “anyone with the link” and provide url in video\_link.txt

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