

### Project 3: Concurrency using Unix processes and threads

This project will help you to understand concurrent execution of processes and use Posix Pthread library for concurrency.

#### Project explanation

1. Submit a README file that lists the files you have submitted along with a one sentence explanation. Call it Prj3README.txt.
2. MergesortSingle.c: Mergesort is an efficient algorithm for sorting large data set. Implement mergesort using a single threaded program
3. MergesortMulti.c: Implement mergesort with multiple threads (one of each divided component) using Pthreads.
4. Compare the times of the two implementations in Prj3README.txt.
5. Copy your programs' outputs into Output.txt

#### 6. Submission Notes:

Use the given names for files as given in Project explanation above and as listed below, and put files into Prj3\_YourID folder. Compress the Prj3\_YourID folder as Prj3\_YourID.tar.gz with the command below. Submit through platindys.

**tar -czvf Prj3\_YourID.tar.gz Prj3\_YourID**

Prj3\_YourID.tar.gz should include the files below:

Prj3README.txt  
Prj3header.h  
MergesortSingle.c  
MergesortMulti.c  
Output.txt

7. Due date: 22.05.2020, submit before midnight.

#### Late policy

For every day the assignment is late after the due date, you will lose 4 points from your assignment score. Assignments will not be accepted after they are five days late.