

## **Master of Technology Orientation Programme 2018**

## **Large-Scale Programming Exercise**

Design an application to do performance analysis of a set of algorithms. Use the concepts of "Large-Scale Programming" discussed in class.

Following table gives you guidance on organizing your multi-file programming project. The given structure is specific to C programming but the principles are applicable for all large-scale software.

S. No.	File Name	Description
1.	datadef.h	<ul> <li>Contains macros</li> <li>Contains struct definitions</li> </ul>
2.	myalgos.h	Contains function prototypes of all the algorithms being implemented.
3.	myalgos.c	<ul> <li>Contains all global variable definitions</li> <li>Contains the function implementations of all algorithms declared in myalgos.h</li> </ul>
4.	myutils.h	<ul> <li>Contains load generators</li> <li>Contains function prototypes general purpose utilities (like printing the contents of a data structure, etc.)</li> </ul>
5.	myutils.c	Contains function implementations of all functions declared in myutils.h
6.	perftest.c	<ul> <li>Contains the main program that calls different functions from myutils and myalgos to comprehensively test which algorithm gives what performance for different types of workload.</li> </ul>
7.	Perftest.mk	Makefile for this project
8.	perftest	The final executable generated by makefile