Exercise Instructions for Students:

1) Before starting the exercises the students should review the C programming concepts and practices, the shared memory concepts, and the practices and applications of the OpenMP.
2) Review how to access, compile, and run C programs in the multicore computer.
3) Review the Calculus concepts for calculating the area under a curve by using the left boundary, right boundary, midpoint, and trapezoidal rule.
4) Write the algorithm how to calculate the area under the curve x^2 by using one of the rules.
5) Implement the algorithm in the single core C program, then parallelize to the multicore program with OpenMP.