

- No "Collaborative" effort allowed. Students are expected to work themselves.
 - Its okay to discuss, but not okay to share code or ask others to code for you!!!
 - Penalty for late submissions.
 - *Severe penalty for academic dishonesty.*
1. Consider a function $f(x) = \sin(x)$ in the interval $[0, \pi]$. Write serial and OpenMP parallel codes to numerically integrate the function using the
 - (a) Trapezoidal Rule
 - (b) Montecarlo Method
 2. Perform a convergence study, using different numbers of divisions (or sampling points), by comparing the integral obtained the numerical method with the analytical integral.
 3. Perform a timing study using 2,4,6 and 8 OpenMP threads. Be sure to report average times of at least 5 runs of the code.
 4. Write a report of results obtained. Only PDF copies of report and codes are to be uploaded to moodle in a single zip / tar file.