Accelerate Your Science:
An Introduction to High Performance Computing
Lab 5: Advanced OpenMP/OpenACC

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Task 1: Matrix-Matrix Multiplication

- Write a program that allocates two matrices \( a \) and \( b \) of type float with 1,000x1,000 elements. Calculate the matrix-matrix multiplication of both matrices on the GPU using OpenMP and OpenACC.
- Test the `collapse` clause to see the performance improvement.
Task 2: Jacobi method refined

- Set up your Jacobi code from lab4 to work with different vector and gang sizes. See how this changes performance. Also test the collapse clause.