Lab 9 – Report

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1. Domains
    a. Done
    b. Done
    c. Done

2. Matrix multiplication
    a. Done. The output is as expected after the array partition into the locales.

3. Jacobi and Gauss – Seidel
    a. I have added a temp variable which saves the previous value of a[ij] before its updated to its new value. I am taking the difference of the temp value and the new a[ij] and comparing against the epsilon.
    However, these changes did not work. The output is not as expected. I'm not sure where I am going wrong. The iteration is ending and the output is always t = 1.

    I then referred this link and followed the same method. The output was as expected.
    https://github.com/vthomas1908/parallel_projects/blob/80030129b5bd480aeb31381a2d17c2a7a87d9398/04_laplace-shm.chpl#L42

    I have attached both version of the code

4. File IO
    a. For reading single byte I have changed int[32] to int[8]. When I pass in32 file, I am getting integer values between -127 to 128. However, the value of N = 32 and not 64.