







7/11/2024 - 7//2024

Goal:

- Compare Single and Double-precision BFBCG between CUDA and MATLAB

Achieved:

- Check device query whether double is available
https://github.com/keiakihito/Double_BFBCG_Comparison/blob/main/NCSA%20delta%20Device%20Query.txt
- Compare Double vs Float between CUDA and MATLAB
 - Case 1 Sparse 5 by 5, block 3
 -  Double-Case1_5by5by3
 -  Float-Case1_5by5by3
 - Case 2 Sparse 10 by 10, block 5
 -  Double-Case2_10by10by5
 -  Float-Case2_10by10by5
 - Case 3 Sparse 17 by 17, block 16
 -  Double-Case3_17by17by16
 -  Float-Case3_17by17by16

Note: I prefer double because it converges without becoming rank 0 for search direction P. Float goes to rank 0, then exits iteration with some residual value through validation.

TO DO

- Check the test cases
- Send the result to Dr. Ji

Issue