Final Project Part 2

1)The main difference between the classical gram-schmidt algorithm and the modified gram-schmidt is how the upper triangular matrix is formed. In the classical algorithm the matrix is formed by reorthogonalization of the column matrices, the modern algorithm does not need to be reorthogonalization and is formed using row vectors. This is necessary as it is easier to compute and yields nearly the same values.

3) Conditioning allows us to measure changes in a problem and how they affect the solution, in other words, as the function accounts for larger variables how off is the answer? Stability allows us to see if an algorithm is which is not exact gives us an answer that is close or same to the actual answer and determines whether the function is precise or accurate. These are important concepts as it allows us to asses’ error in an algorithm and determine whether the algorithm is usable or whether it needs to be rewritten.