**Part 2 Discussions**

In the Jacobi Method, the role of n plays an important part when decoding algorithms, because n represents the number of iterations that must occur to get to the closest approximation.  Thus, a higher n value tends to lead to more iterations before the method converges.  The results for this method usually ends up being larger in size.   It took roughly double the number of iterations to obtain the desired precision while using the Jacobi method that it took to solve Gauss-Seidel. Meanwhile, with Gauss-Seidel Method, the role of n when decoding algorithms tells a very different story.  Just like the higher n value leads to more iterations, less iterations show an increase in efficiency by using less iterations. The results for the Gauss-Seidel Method, therefore, usually ends up having a lower n and better efficiency rate. It took half the number of iterations to obtain the desired precision while using the Gauss-Seidel method than were necessary for the Jacobi method.  Considering these factors, the length of the initial stream n is absolutely important, because in order to understand the benefits of the Gauss-Seidel method in computer programming, one must understand that n is vital to the efficiency factor of the method.  Indeed, n definitely has an effect on the number of iterations required to achieve the error tolerance.