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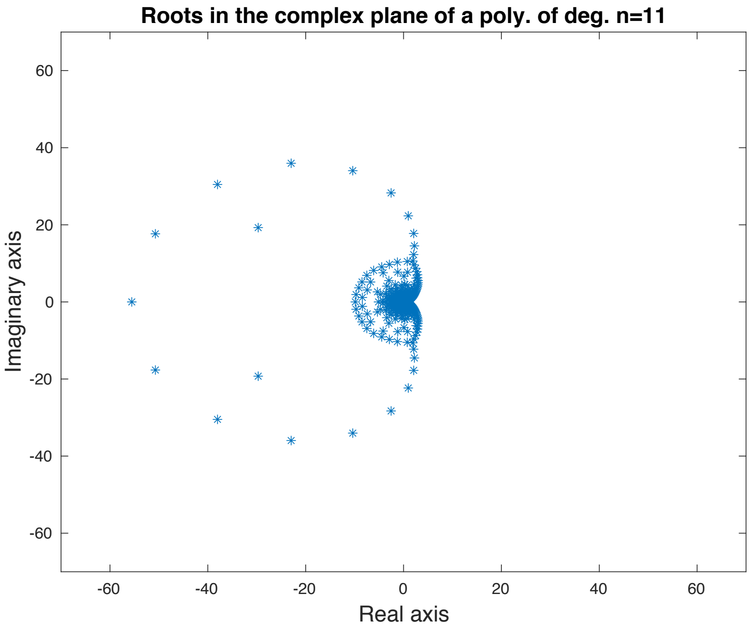

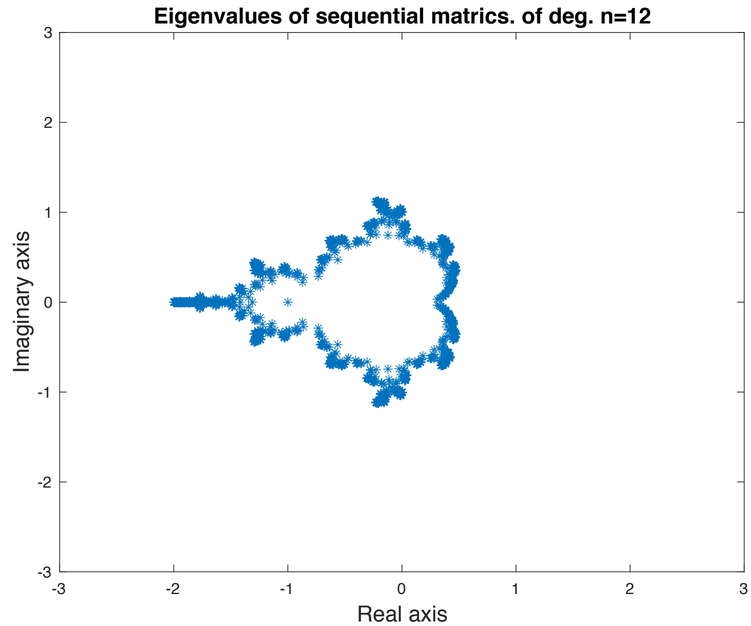

a) This computation is not as robust when compare with solving the eigenvalue of the sequential matrix. For the input value of coefficient vector gets losing to machine epsilon, the outputted root is spreading out largely. Also, this method could not take value larger than 11 because coefficient vector will be too small to be calculated on Matlab.

b) I believe part (b) appears to be more robust than part (a) for several reasons. Firstly, the input value of the sequential matrix is a square matrix rather than a value that might involve with rounding error. Secondly, this method could solve a polynomial with higher degree than n equals 11. Because finite machine representation, the coefficient A could not be calculated after n is larger than 11. Part (b) method, however, could solve the root of polynomial with higher degree. Lastly, the computed output value appears tone more concentrated and focus in a relatively small range in both of the real axis and imaginary axis. This could be a indicator that this method has a better accuracy compare than method one.