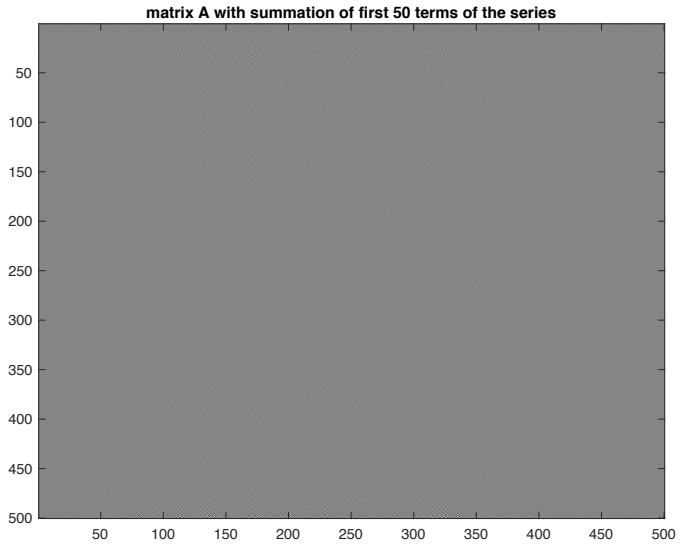
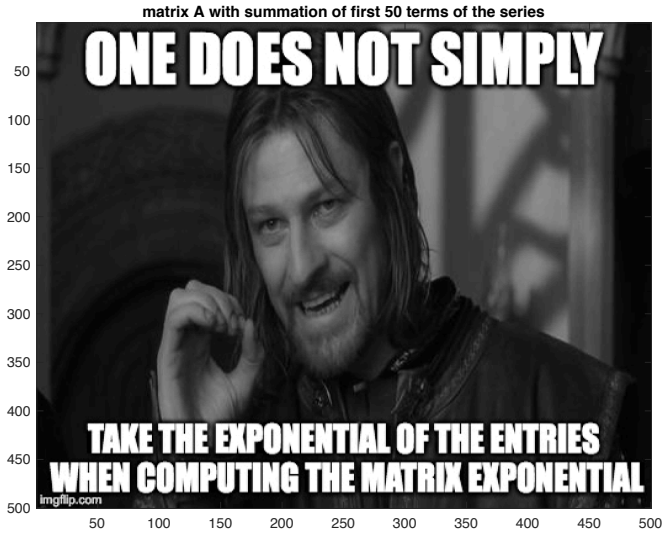
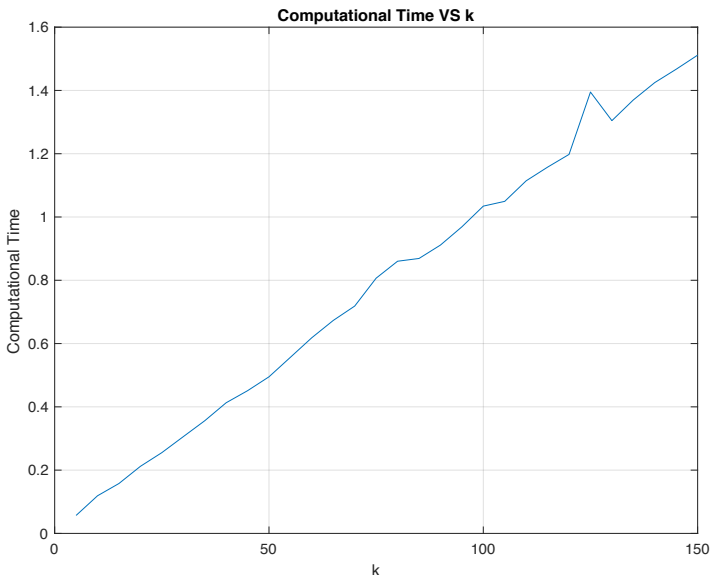
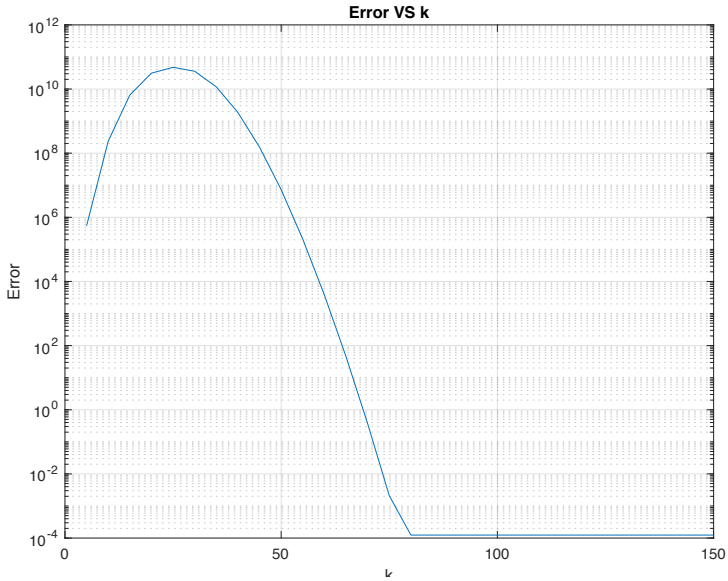




The figure on the left doesn't really show anything. And on the mean time, I got this peculiar figure from running the code. I think the accuracy of the algorithm should gets better when the size of K increased.





The computational time versus k seems growing linearly as shown on the figure on the left. But I don't know why exactly this is the case.

As shown on the figure from the right, the error of approximation is get really big within 0 to 40. But the error start to decrease down to 10^-4 when k reaches about 70. The outcome is reasonable as Taylor series expansion should proximate the result better as k gets large enough. The algorithm is relatively accurate when k is greater than 70. I think the system is not consider so much as robust because the best accuracy it can attain is 10^-4.