

ADS HW 5

Problem 5.1

c) For same n , all the different methods for generating fibonacci sequence return the same number except for closed method which for large n gives different values. The reason for this discrepancy is that using closed form we have to round the value as it is expressed as a power of rational numbers and as n increases the deviation increases which rounding is not able to offset. The difference is brought about by that. The others however yield the same results as they are just using simple arithmetic just in different ways.