Week 4 Sequences and Series Continued Lecture Note

Cornell Notes	Topic: Sequences and Series Continued	Course: BSc Computer Science
		Class: Computational Mathematics[Lecture]
		Date: May 01, 2020

Essential Question:

What is a series?

Questions/Cues:

- What is a series?

Notes

Series

- Consider again a generic sequence $\{a_n\}$ with $n=0,1,2....$ we can look at the sum of its elements
$$a_0, \quad a_0+a_1, \quad a_0+a_1+a_2, \quad a_0+a_1+a_2+a_3,...$$

- These sums define another sequence $\{s_n\}$ $n=0,1,2...$ with $\quad s_n=a_0+a_1+...a_n \quad \rightarrow \quad s_0=a_0, \, s_1=a_0+a_1, \, s_2=a_0+a_1+a_2 ,...$

- $\{s_n\}$ is called a series, it is a type of sequence that is obtained as sum of the elements of another sequence

- A series is also indicated with $\sum \quad \rightarrow \quad s_n= \sum_{i=0}^{n} a_i$

Summary

In this week, we learned about what a series and how it necessary to have an original sequence in order to construct a series.