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| **GE 2318 Homework #6 2024**  **Name: Student ID:**  **Q1:** Compare "Domino effect" with "Butterfly effect":  Similarities:(1) Sensitive to initial conditions  (2) Cascading spreading  Differences:(1) Domino eventually collapses; chaos evolves forever and never stops  (2) Domino is long-term predictable; chaos is long-term un-predictable  **Q2:** List 3 most important properties of Chaos  (1) Sensitive to initial conditions  (2) Not convergent, not divergent, not periodic  (3) Long-term un-predictable  **Q3:** Consider the time series data of Covid-19 from USA, where the red-curve is a certain averaged data curve for better visualization:  C:\Users\eegchen\OneDrive - City University of Hong Kong\Desktop\covid-19.JPG  Is the red curve chaotic? Yes or No, explain why you think so.  **Answer:** Yes, in the sense that it never converges, never diverges and is not periodic. |