Unit 10 March 9th Seminar

* Get makeup work done before the end of Unit 10
* Unit 10:
  + Seminar
  + Lab Homework
  + Discussion
  + Unit 10 Quiz
* Markov System is a spreadsheet that can compute your spreadsheet. IT is there to use, for discussion, quizzes, and exercises.
* Markov Chains named after Andrei Markov, he studied chains and sequences.
* Transition Diagrams – Model physical systems for the state they are in or their possible outcome.
* When we format so that the results are accurate and appropriate
  + First state of matrix: X1 = Px0
  + Second State Matrix: X2 = Px1 = P \* Px0 = P2x0
  + Kth State Matrix: xk = Pxk-1 = Pkx0
* Can tell if it is stabilized by how the numbers look.

Charis transition diagram is:

Chart, diagram, bubble chart

Description automatically generated

The transition matrix for my classmate’s Web Design and Maintenance service is P =

|  |  |
| --- | --- |
| .80 | .20 |
| .60 | .40 |

The initial distribution vector is 𝐯 =

|  |
| --- |
| .70 |
| .30 |

The state matrix after one period would be: S1 = 𝑃𝐯

|  |  |
| --- | --- |
| .80 | .20 |
| .60 | .40 |

|  |
| --- |
| .70 |
| .40 |

|  |
| --- |
| .56 |
| .44 |