# ELEC 425 – Assignment 3

## 1 – Calculate Joint Probabilities in HMM

## 2 - Viterbi algorithm

Please find the manually filled out Viterbi algorithm tables below. Please note, as requested, the original values for the V matrix were used, not the log values.

Table 1 - The V Matrix

|  |  |  |  |
| --- | --- | --- | --- |
|  | *t = 1* | *t = 2* | *t = 3* |
| *K = 1 (Fair)* |  |  |  |
| *K = 2 (Loaded)* |  |  |  |
| ***Observation*** | ***“1”*** | ***“2”*** | ***“6”*** |

Table 2 - The Ptr Matrix

|  |  |  |  |
| --- | --- | --- | --- |
|  | *t = 1* | *t = 2* | *t = 3* |
| *K = 1 (Fair)* |  |  |  |
| *K = 2 (Loaded)* |  |  |  |
| ***Observation*** | ***“1”*** | ***“2”*** | ***“6”*** |

## 3 – Feed Forward Neural Networks

Please find the relevant files in the submitted *.zip* folder.