**COMP 642 Assignment --- MODULE 10**

1. These statements describe the advantages and disadvantages of RNN, mark each statement as True or False and give an explanation.
2. Basic RNN can access information from a long time ago.
3. Basic RNN can not only take into account historical information but also future information.
4. Weights of RNN are shared across time.
5. The model will be increasing with size of input.
6. Unlike traditional neural network, RNN can process input of any length.
7. In the lecture the forward process of LSTM was outlined. GRU is a “simpler version” of LSTM. In this problem you’ll practice stepping through the forward process of GRU. Calculate value of the output state and each gate for t1 and t2 as was done for LSTM in lecture. (calculation should be rounded to four decimals)

Recall:

|  |  |  |  |
| --- | --- | --- | --- |
| Time Step | X\_0 | X\_1 | y |
| T1 | 0.23 | 0.12 | 0.8 |
| T2 | 0.48 | 0.98 | 0.3 |

1. Execute hw\_10.ipynb.