BT6270: Computational Neuroscience
Assignment 1

Submitted by
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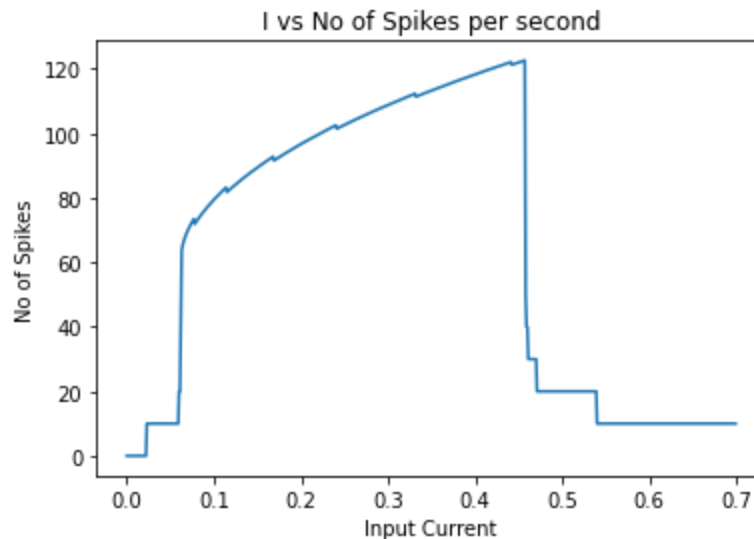BE17B023

Values of the required variables

No Action potential threshold current, I1 = 0.023 µAmp
Finite Action potential threshold current, I2 = 0.061 µAmp
Continuous firing and distorted Action potentials, I3 = 0.457 µAmp

Graphical depiction of Input current vs firing rate

Observations
1. Even though the firing rate has reduced drastically at around 0.5, there still exists a time window of Voltage peaks.
2. time_interval variable should be greater than a threshold value to get meaningful depictions. This can be explained partly by the above fact and also there are considerable peaks even in case of short discontinuous signals. So this factor has been taken into account and adjusted.

Attachments
BE17B023A1.zip
- be17b023A1report.pdf
- be17b023A1.py