Home Assignment 1 (10 points)

Due on: 11 pm, September. 25th, 2020 (Eastern Time)

Late policy: late submission will **not** be marked

# Description

To learn how to use Perceptron for simple classification problem

# Requirement

* (5 points) Repeat the computer experiment mentioned in the class, this time, however, positioning the two moons Figure to be on the edge of separability, that is, d=0. Determine the classification error rate produced by the algorithm over 2,000 test data points.
* (5 points) Download one of the UCI dataset, reuse your own perceptron codes to get the testing accuracy of the selected dataset. The UCI dataset is available at <https://archive.ics.uci.edu/ml/datasets.php?format=&task=cla&att=&area=&numAtt=&numIns=&type=&sort=nameUp&view=table>
* The codes may upload to Moss(https://theory.stanford.edu/~aiken/moss/) to check the similarity. If high similarity rate is found, the assignment will be marked as zero. The instructor will also report it to the Departmental Chair for a further penalty.
* Hand in material: 1) Codes (Python or Matlab). 2) PDF report including the selected dataset, training accuracy, and testing accuracy,