Assignment #5

* **Due date and time: October 12, 2020, 23:59**
* You keep losing 10% of your grade for every 24-hour delay.
* Use your name as filename, like ysk.ipynb

[Your jobs to do]

1. Classify the iris data with SVM (linear, poly, and rbs kernels), KNN, RandomForest (RF). and Decision Tree (DT). Summarize their accuracy in a table and copy/paste confusion matrix in a MS word file.
2. Classify the MNIST data with SVM (linear, poly, and rbs kernels), KNN, DT, and RF. Summarize their accuracy in a table and copy/paste confusion matrix in a MS word file. MNIST datasets are composed of two datasets: mnist\_train.csv and mnist\_test.csv. Train dataset has 60,000 samples and test data 10,000 samples. The first column is the label and the remaining columns of 784 are features with the maximum value of 256. If accuracy rate is not high, you better to scale all features by dividing them by 256. 60,000 samples are too big so use first 10% of datasets.
3. Submit a single word file for 1 and 2, and two ipynb files for each 1 and 2.