

Summer Python '23

KNN Exercise

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Download the file `fruit_data_with_colors.txt` and load the data into Python the following code:

```
with open('fruit_data_with_colors.txt') as f:
    tab_reader = csv.reader(f, delimiter='\t')
    next(tab_reader, None) # skip the headers
    fruit_data = [LabeledPoint([float(row[3]),
                                float(row[4]),
                                float(row[5]),
                                float(row[6])),
                                row[1]) for row in tab_reader]
```

Utilize the KNN methods demonstrated in `lecture07_python.zip` to see if the method can classify the fruit type. Try it with both the approach in the languages-by-city example (i.e., a leave-one-out cross validation) and also the approach in the Iris Data example (i.e., a 70%-30% split into training and validation data).