San Francisco crimes pandas exercise

# Preliminaries

* Read the file. The index should be the *Dates* column, and it should be a *DateTimeIndex* type.
* Remove records of the categories 'OTHER OFFENSES' and 'NON-CRIMINAL', and also categories with less than 100 records.
* Draw a scatter plot of X and Y, and remove the outliers based on the graph.
  + Challenge: Color the districts

# Simple questions

* How many unique values are there in each column?
* Sort the categories by their frequency.
* Create a DataFrame, counting for each category (index) the various resolutions (columns).
* Make a bar plot showing how many Vandalism crimes happened in each day of the week.
* Make a Pivot table showing for each day-of-week and hour-of-day the number of vehicle thefts. Plot it.

# Interesting questions

* Use a bar plot to show for each category how many crimes had been on a street corner and many had not. Then find the category with the highest ratio of street-corner crimes
* The resolution of some crimes was 'PSYCHOPATHIC CASE'. Sort the categories by the ratio of such cases from the entire category.
* What is the street with the highest number of burgleries?
* For the 5 most frequent categories, draw a plot of the number of cases per month.
  + Note: To answer this question you should explore and use the DatetimeIndex capabilities. Use the method [Series.resample()](https://pandas.pydata.org/pandas-docs/stable/generated/pandas.Series.resample.html).