- -> notebooks from this lecture: https://github.com/ine-rmotr-curriculum/FreeCodeCamp-Pandas-Real-Life-Example
- ***-> reshaping the data and deriving it from other columns***
- ***-> reshaping the data***
  - -> we have data, and we want to reshape it
  - -> you can do this in Python a lot faster than you can in Excel <- dragging a column down compared to running a cell
  - -> plots can also be created a lot faster
- -> calculations can also be performed in Python using functions compared to Excel
- -> regression plot
- ***-> cost / loss profits***
  - -> calculated revenues
  - -> you can add 3% to all of the prices (performing price increases)
- ***-> quick filtering***
  - -> you can get all the sales from a certain state
  - -> filtering options in Python
  - -> getting the average revenue from a group -> he's doing examples where he's applying one equation to a group of data
- ***-> using a Sakila database***
  - -> reading data from an SQL database
  - -> pronounced 'sequel'
- ***-> loading data***
  - -> pulling the data from the database
  - -> MySQL
  - -> converting the outside data into a data frame
  - -> checking the shape / information / description of the data
  - -> you can also calculate the rental rate
    - -> the rentals being divided into three main categories
- ***-> creating graphs***
  - -> you can create pi charts
- ***-> column wrangling***
  - -> you can perform equations on the entire set of data in Python -> depending on the data you have
  - -> this can be used to analyse the mean and median of it
  - -> selection and indexing
  - -> this can be performed per city / state / category
  - -> you can see which films (in this example) have the highest replacement cost
  - -> we can use Python to filter the data
  - -> cleaning / reshaping data, creating new accounts
  - -> this can also be used to perform linear regressions
- ***-> next***
  - -> Jupyter notebooks
  - -> numpy
  - -> seaborne
  - -> matplotlib
- ***-> question***
  - What does the loc method allow you to do?
    - Retrieve a subset of rows and columns by supplying integer-location arguments.
    - Access a group of rows and columns by supplying label(s) arguments. <- This one
    - Returns the first n rows based on the integer argument supplied.