

# Manual Test Plan

In this test plan, we'll test all data analysis and visualization requirements are met.

## Test: Data Visualization

When run the `built_graph_visualization()` function, a png file named `graph.png` should be created in the local folder.

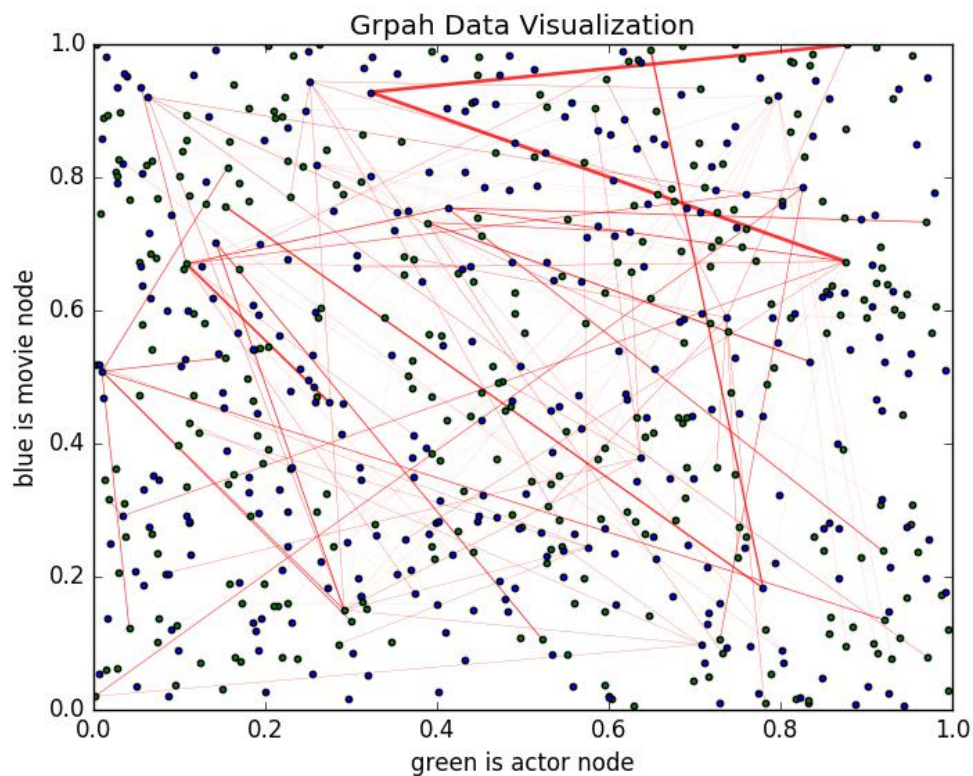
green is actor node; blue is movie node;

the connections between each movie and actor are clearly linked by red edges

The thickness of the edge represents the wight of grossing value

The age information is represented by `get_actor_age()`

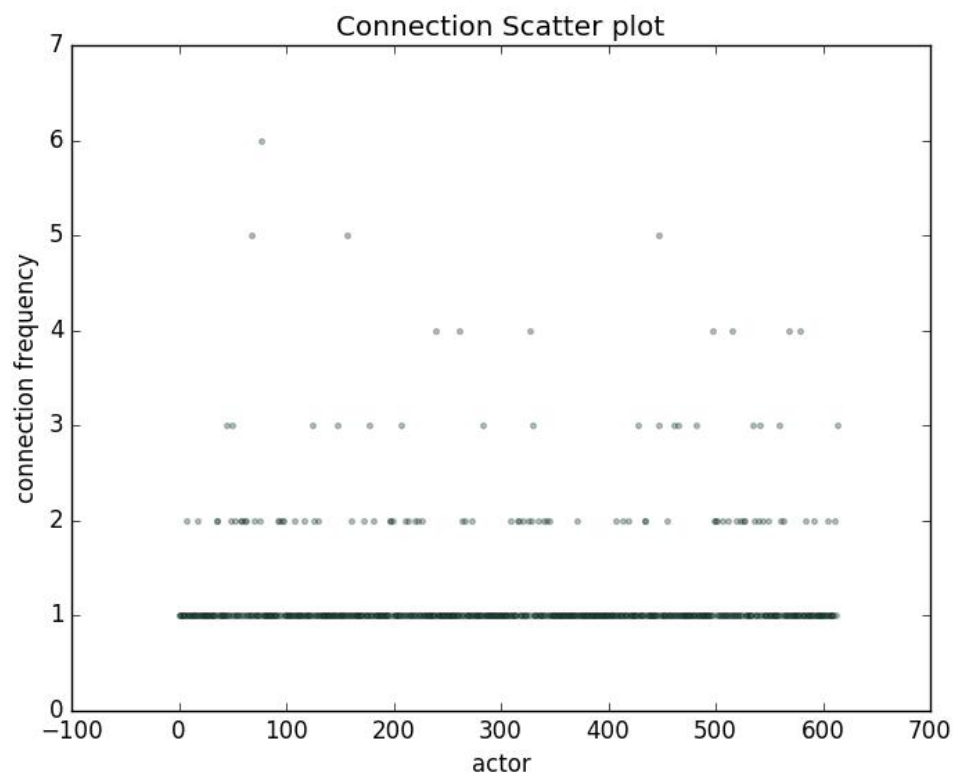
The total grossing value of each movie is represented by `find_movie_grossed()`



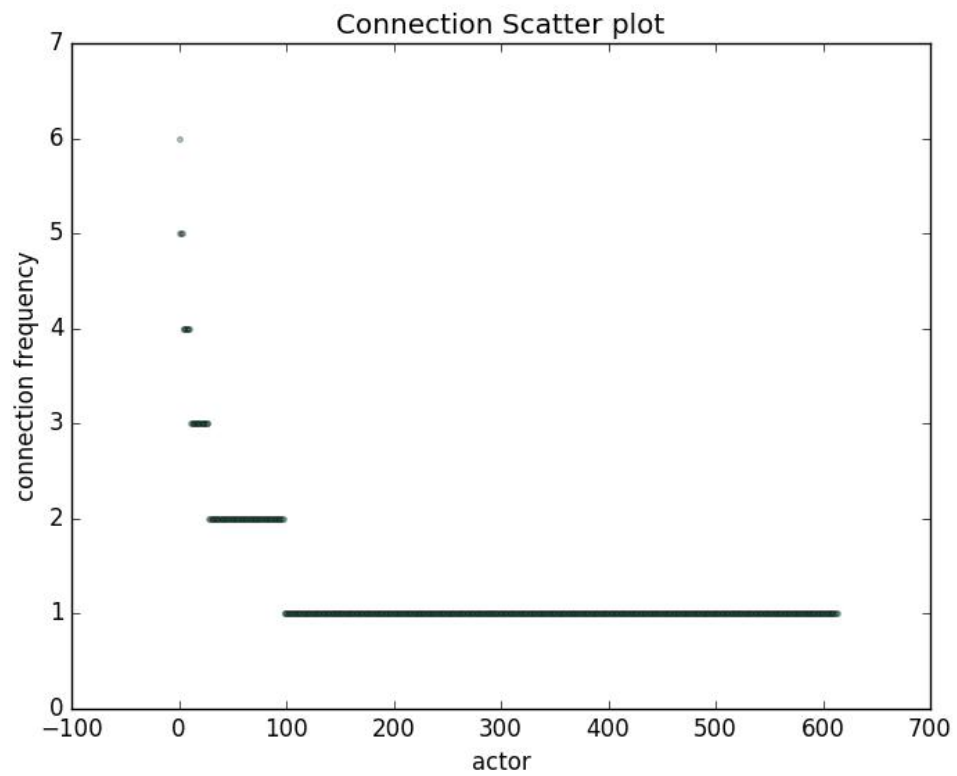
Test: movie actor conection

The `find_hub_actor()` function will help you find out the top k actors that have the most connections with other actors. Two actors have a connection if they have acted in the same movie together. In the console, a ordered python list will be print out to the screen.

Also, a `connection.png` file will be generated with `built_hub_plot()` which will visualize the hub frequency.



A sorted version



Test: Is there an age group that generates the most amount of money?

What does the correlation between age and grossing value look like?

The `built_age_gross_plot()` function will help you generate a correlation plot called `data-analysis-age-gross-correlation.png` in local folder.

X axis is the age group; y axis is the grossing

In this JSON data records, 30--40 age group generates the most amount of money.

