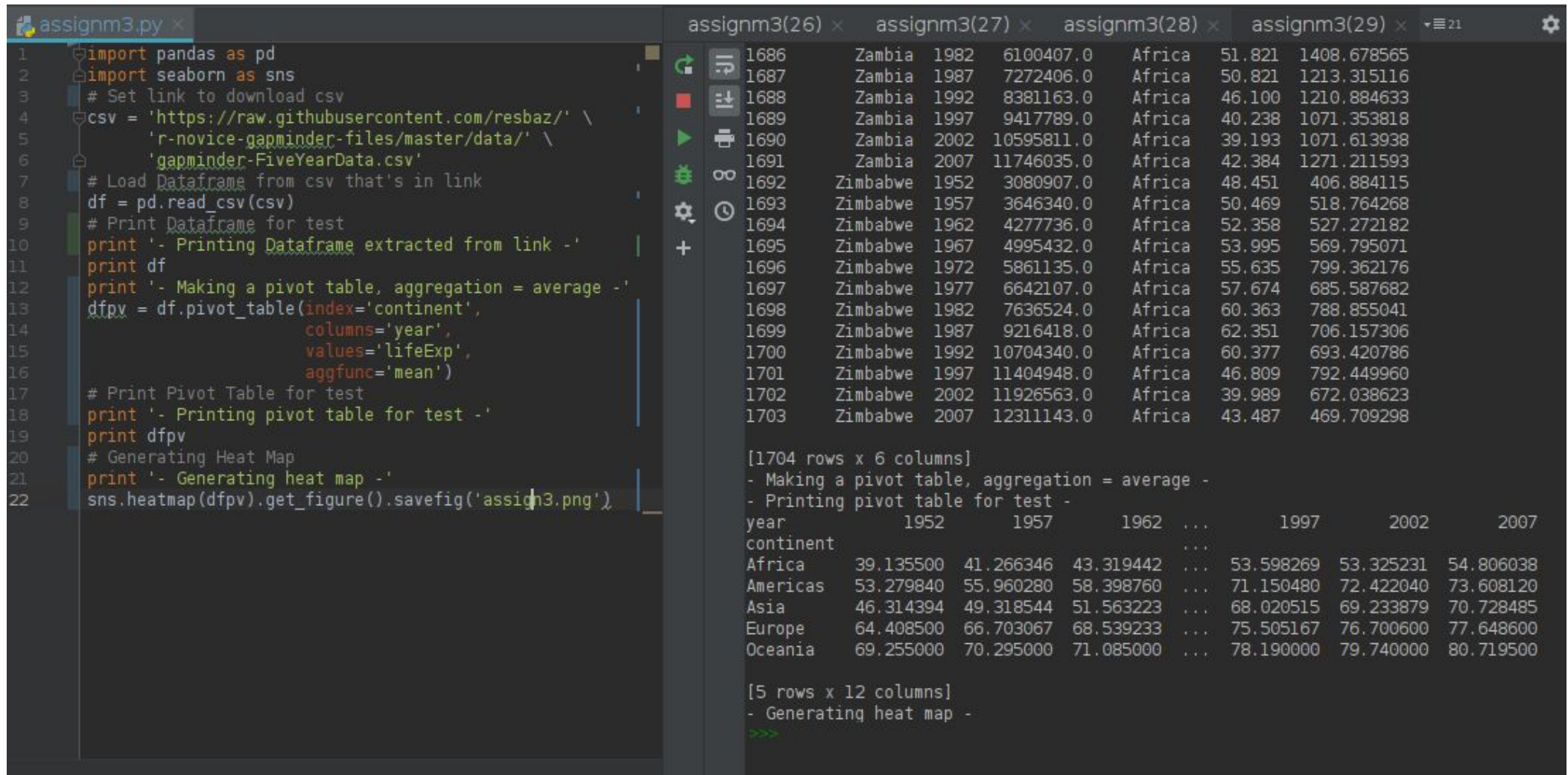


Assignment #3

It keeps simple: Download csv as dataframe, and make pivot table, after render this data with seaborn.



The screenshot displays a Jupyter Notebook interface with a code editor on the left and a console output on the right. The code in the editor performs the following steps:

- Imports `pandas` as `pd` and `seaborn` as `sns`.
- Defines a CSV link: `csv = 'https://raw.githubusercontent.com/resbaz/' \ 'r-novice-gapminder-files/master/data/' \ 'gapminder-FiveYearData.csv'`
- Loads the data into a DataFrame: `df = pd.read_csv(csv)`
- Prints the DataFrame for testing: `print df`
- Creates a pivot table with 'continent' as the index, 'year' as columns, and 'lifeExp' as values, using 'mean' for aggregation: `dfpv = df.pivot_table(index='continent', columns='year', values='lifeExp', aggfunc='mean')`
- Prints the pivot table for testing: `print dfpv`
- Generates a heatmap: `sns.heatmap(dfpv).get_figure().savefig('assign3.png')`

The console output shows the execution of these steps, including the DataFrame printout and the pivot table structure. The pivot table has 5 rows (continents) and 12 columns (years from 1952 to 2007). The heatmap is saved as `assign3.png`.

continent	1952	1957	1962	1967	1972	1977	1982	1987	1992	1997	2002	2007
Africa	39.135500	41.266346	43.319442	44.358269	45.325231	46.306038	47.284850	48.260600	49.233879	50.205151	51.175000	52.149500
Americas	53.279840	55.960280	58.398760	60.539233	62.505167	64.408500	66.295000	68.190000	69.740000	71.150480	72.422040	73.608120
Asia	46.314394	49.318544	51.563223	53.598269	55.325231	56.806038	58.260600	59.728485	61.175000	62.603818	64.020515	65.420786
Europe	64.408500	66.703067	68.539233	70.265630	71.926563	73.587682	75.248760	76.909600	78.570000	80.230000	81.890000	83.550000
Oceania	69.255000	70.295000	71.085000	71.926563	72.767682	73.608120	74.449960	75.291900	76.133800	76.975700	77.817600	78.659500

A pivot table is an aggregation method to summarize info from several dimensions as rows and columns.

Rendering of heatmap: Expected Lifetime.

