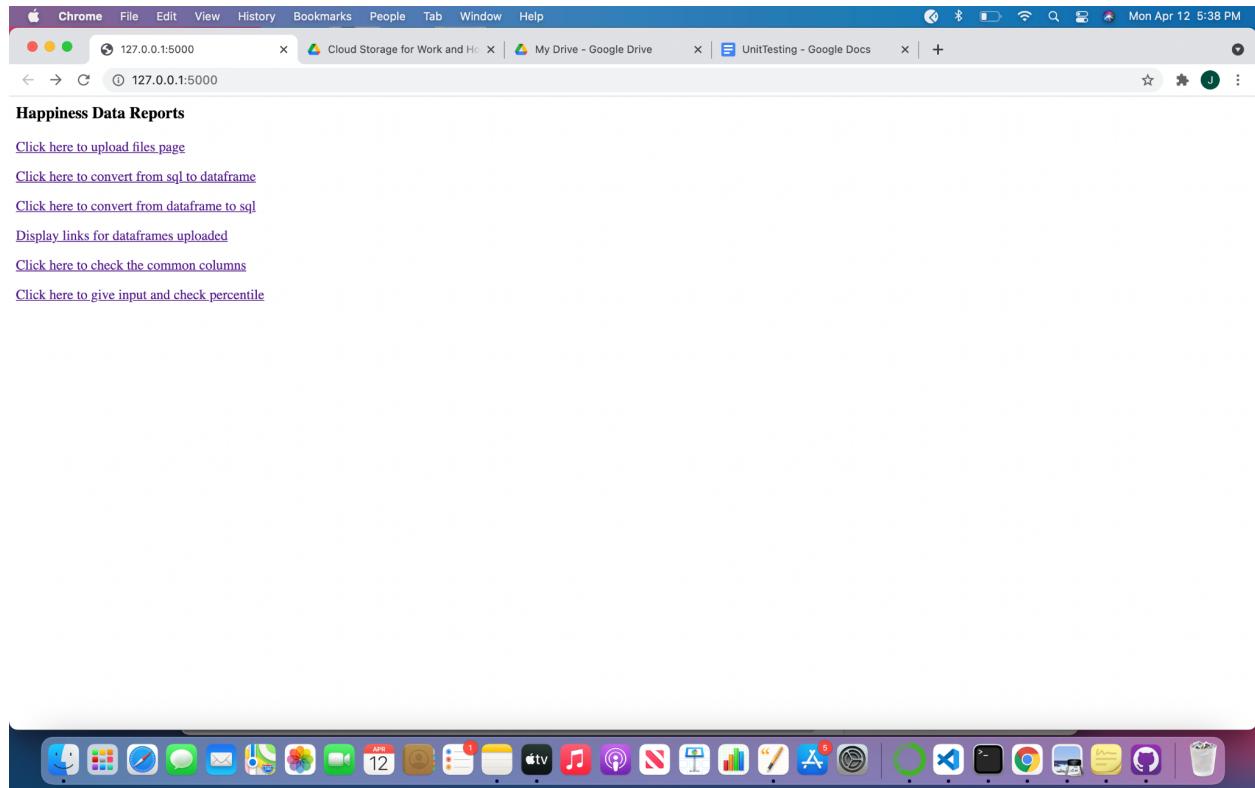


Assignment : Summer Internship - Jagruti Mohanty , San Jose State University

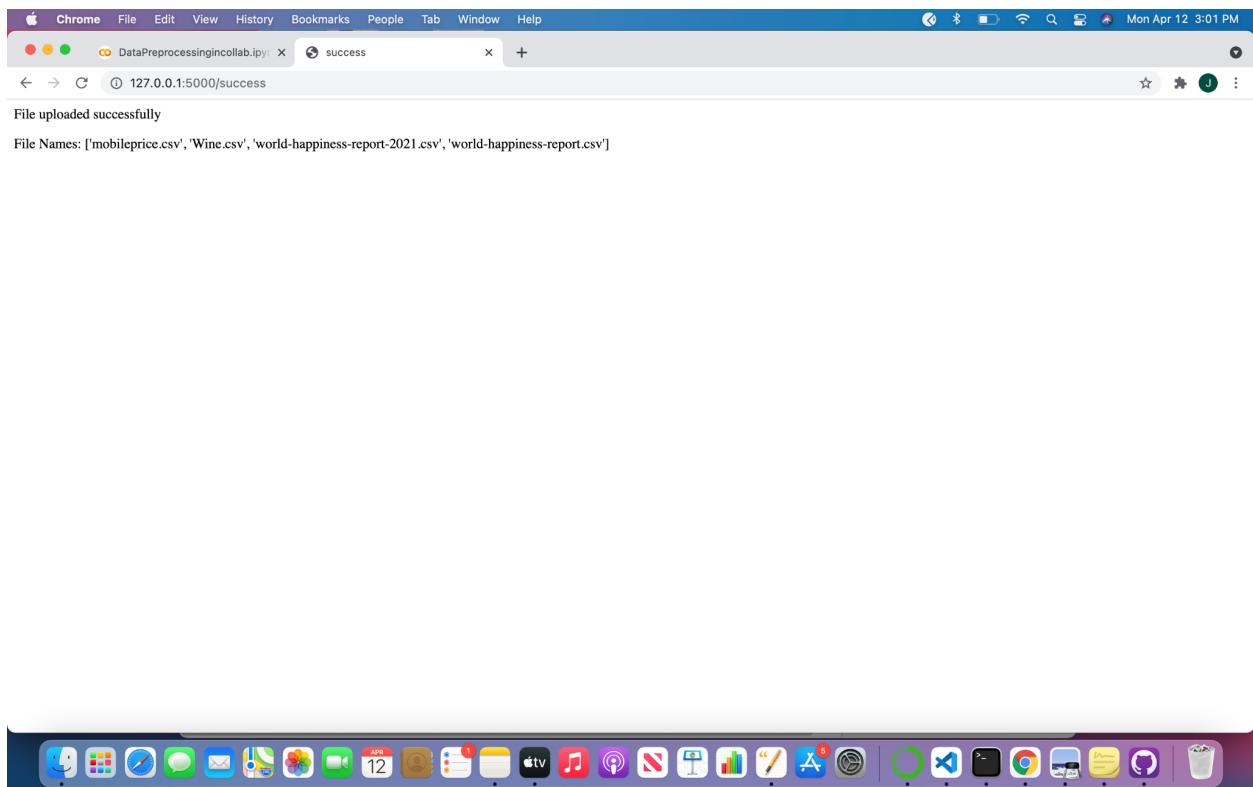
Unit testing Screenshots :

Homepage of the application

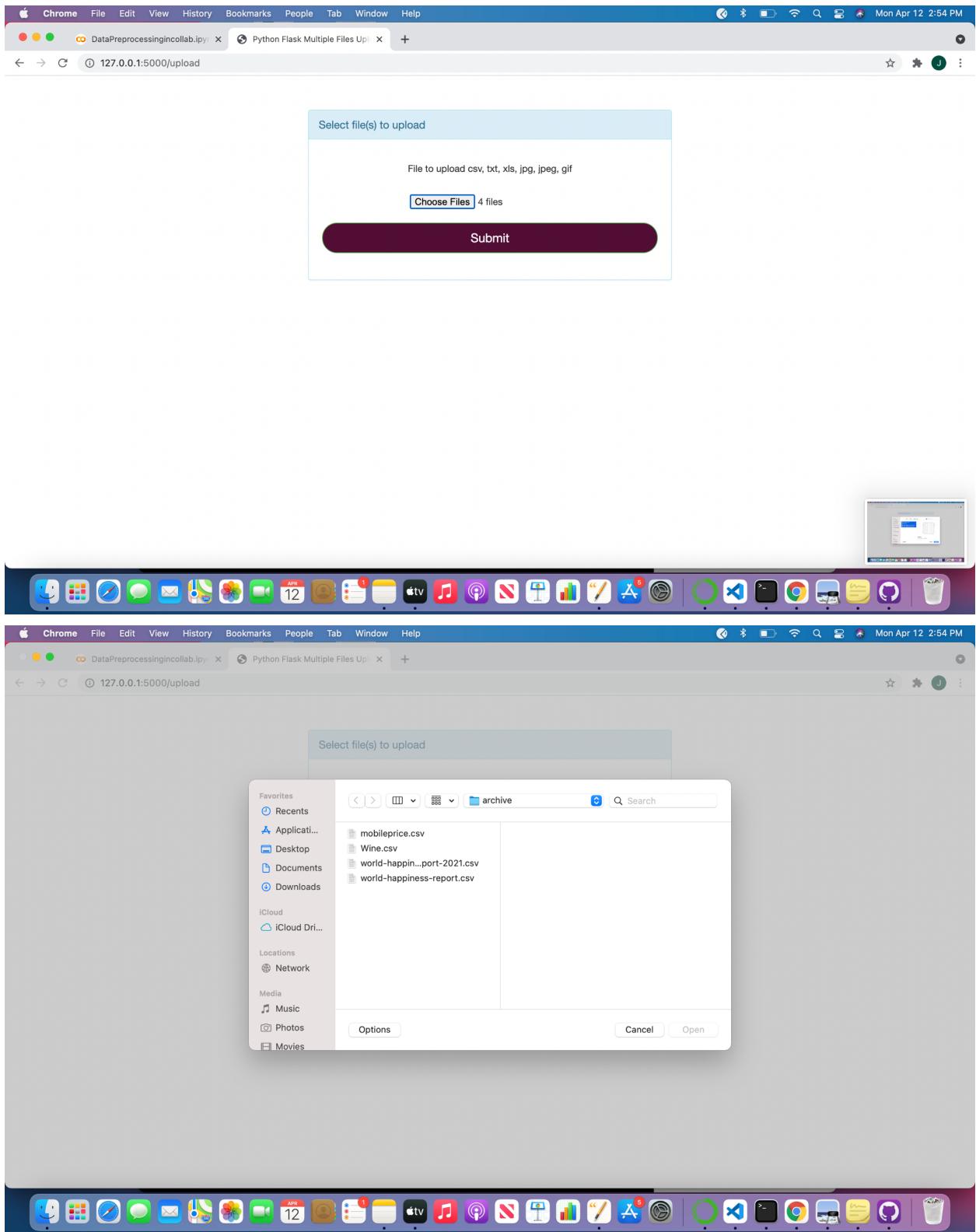


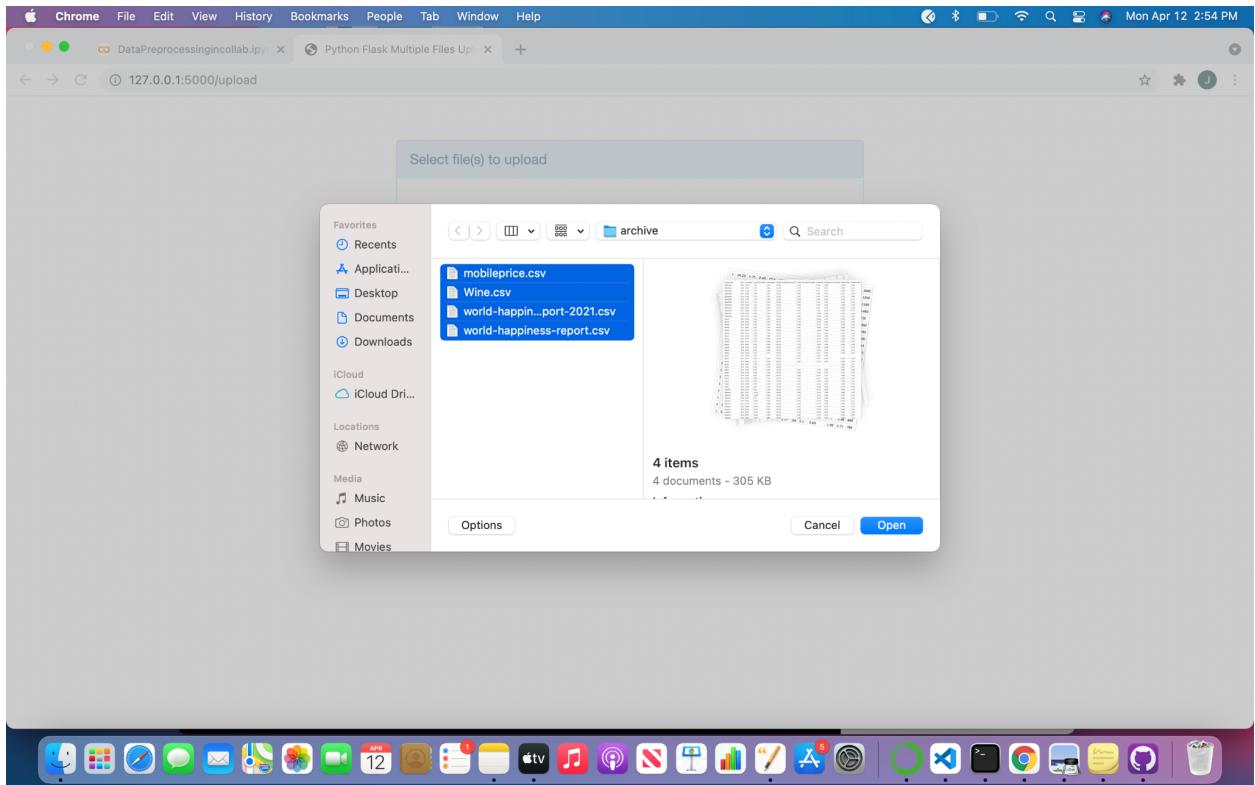
All the hyperlinks navigate to the required functions.

File upload successfully screenshot :



Multiple file upload screenshot process:





Intersection or common columns in both the dataframes screenshot as shown below:

A screenshot of a browser window showing the output of a Python script. The browser has multiple tabs open, including "DataPreprocessingincollab.ipynb", "Python Flask Multiple Files Up...", and "127.0.0.1:5000/commoncols".

First Dataframe columns

```
[‘Country name’, ‘Regional indicator’, ‘Ladder score’, ‘Standard error of ladder score’, ‘upperwhisker’, ‘lowerwhisker’, ‘Logged GDP per capita’, ‘Social support’, ‘Healthy life expectancy’, ‘Freedom to make life choices’, ‘Generosity’, ‘Perceptions of corruption’, ‘Ladder score in Dystopia’, ‘Explained by: Log GDP per capita’, ‘Explained by: Social support’, ‘Explained by: Healthy life expectancy’, ‘Explained by: Freedom to make life choices’, ‘Explained by: Generosity’, ‘Explained by: Perceptions of corruption’, ‘Dystopia + residual’]
```

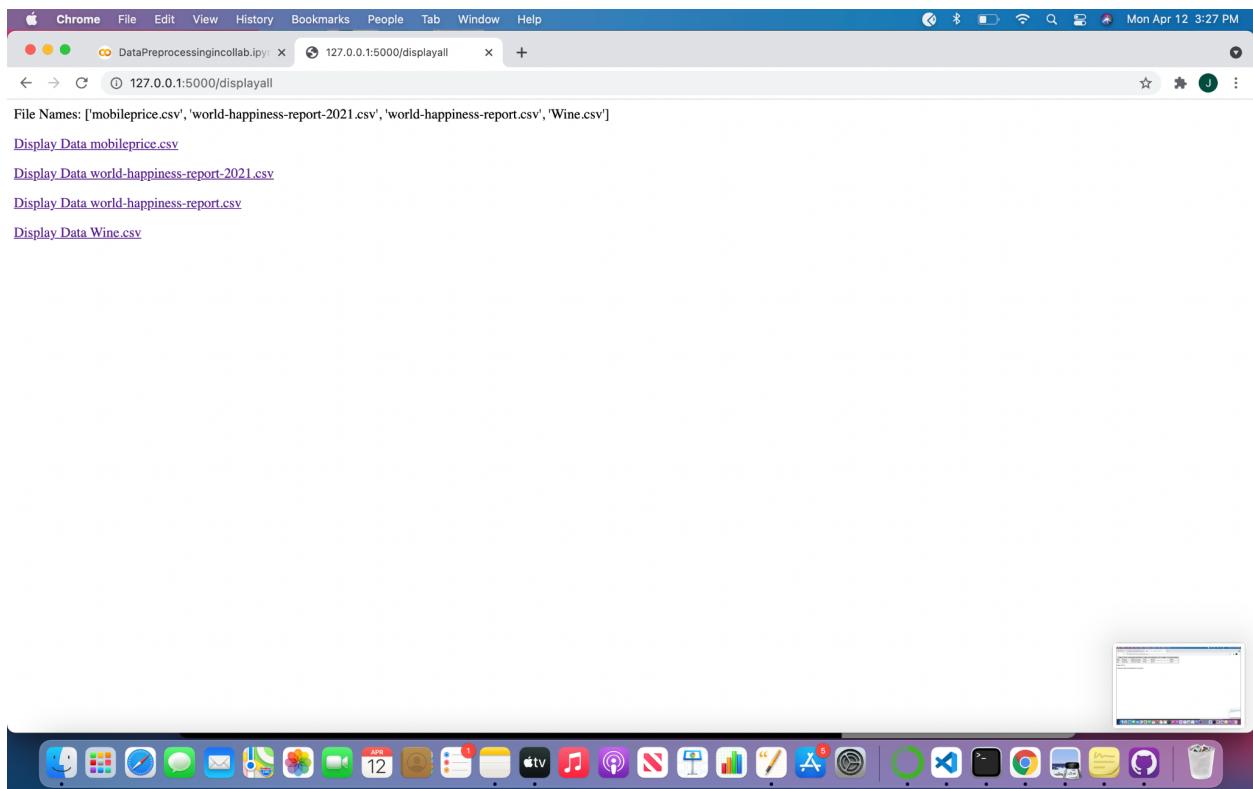
Second Dataframe columns

```
[‘Country name’, ‘year’, ‘Life Ladder’, ‘Log GDP per capita’, ‘Social support’, ‘Healthy life expectancy at birth’, ‘Freedom to make life choices’, ‘Generosity’, ‘Perceptions of corruption’, ‘Positive affect’, ‘Negative affect’]
```

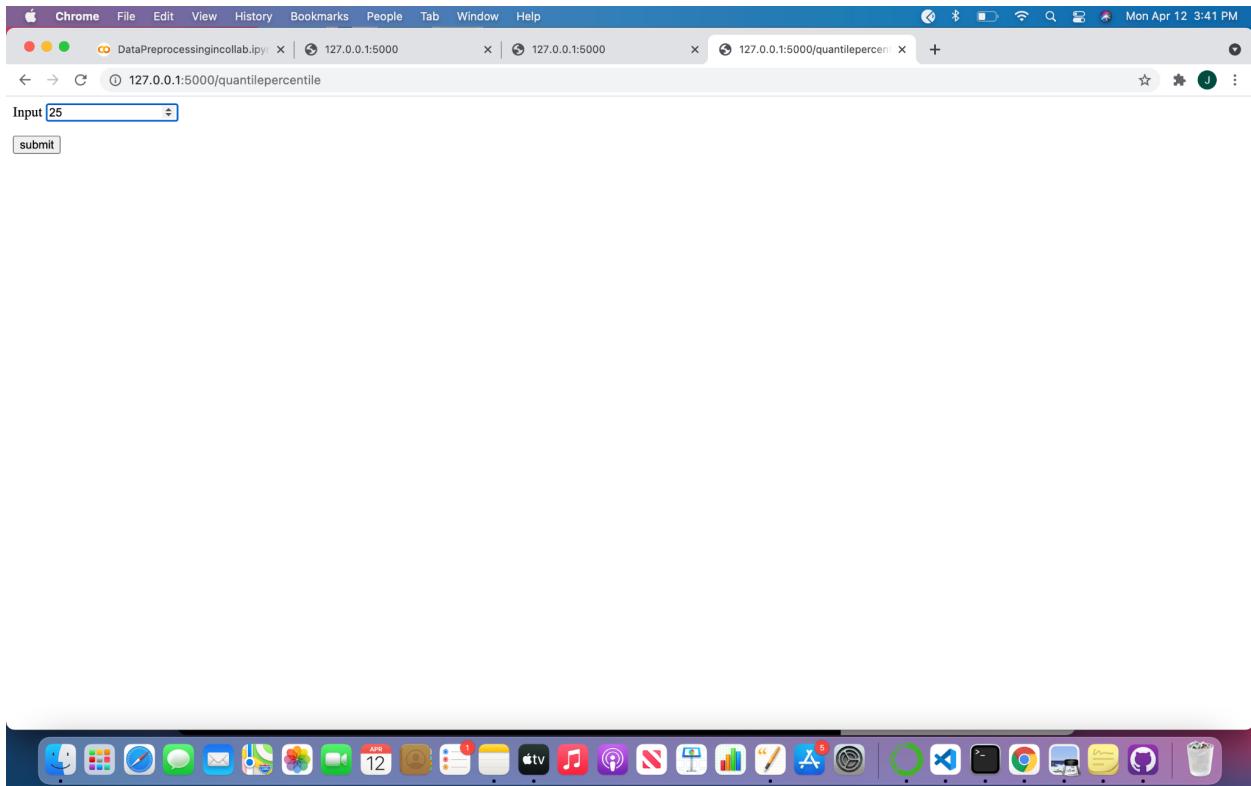
Common Columns

```
[‘Country name’, ‘Social support’, ‘Freedom to make life choices’, ‘Perceptions of corruption’, ‘Generosity’]
```

List of data display screenshot :



Nth percentile input from user with value ranging within 1 to 100 and then calculated the percentile based on it:



Output of the the calculated nth percentile for the numerical columns present in the dataframe:

	Ladder score	Standard error of ladder score	upperwhisker	lowerwhisker	Logged GDP per capita	Social support	Healthy life expectancy	Freedom to make life choices	Generosity	Perceptions of corruption	Ladder score in Dystopia	Explained by: Log GDP per capita	Explained by: Social support	Explained by: Healthy life expectancy	Explained by: Freedom to make life choices	Explained by: Generosity	Explained by: Perceptions of corruption	Dystopia + residual
0.25	4.852	0.043	4.991	4.706	8.541	0.75	59.802	0.718	-0.126	0.667	2.43	0.666	0.647	0.357	0.409	0.105	0.06	2.138

Output of the dataframes first two rows and shape:

A screenshot of a Mac OS X desktop. At the top is the Dock with various application icons. Below it is the Dock menu bar with standard Apple menu items. A Chrome browser window is open, showing the URL "127.0.0.1:5000/display/mobileprice.csv". The browser's address bar also shows "127.0.0.1:5000/display/mobileprice.csv". The main content area of the browser displays a table with the first two rows of data. The columns are labeled: type, battery_power, blue, clock_speed, dual_sim, fc, four_g, int_memory, m_dep, mobile_wt, n_cores, pc, px_height, px_width, ram, sc_h, sc_w, talk_time, three_g, touch_screen, wifi, and price_range. Row 0 (TRAIN) has values: 842, 0, 2.2, 0, 1, 0, 7, 0.6, 188, 2, 2, 20, 756, 2549, 9, 7, 19, 0, 0, 1, 1, 1. Row 1 (TRAIN) has values: 1021, 1, 0.5, 1, 0, 1, 53, 0.7, 136, 3, 6, 905, 1988, 2631, 17, 3, 7, 1, 1, 0, 2.

	type	battery_power	blue	clock_speed	dual_sim	fc	four_g	int_memory	m_dep	mobile_wt	n_cores	pc	px_height	px_width	ram	sc_h	sc_w	talk_time	three_g	touch_screen	wifi	price_range
0	TRAIN	842	0	2.2	0	1	0	7	0.6	188	2	2	20	756	2549	9	7	19	0	0	1	1
1	TRAIN	1021	1	0.5	1	0	1	53	0.7	136	3	6	905	1988	2631	17	3	7	1	1	0	2

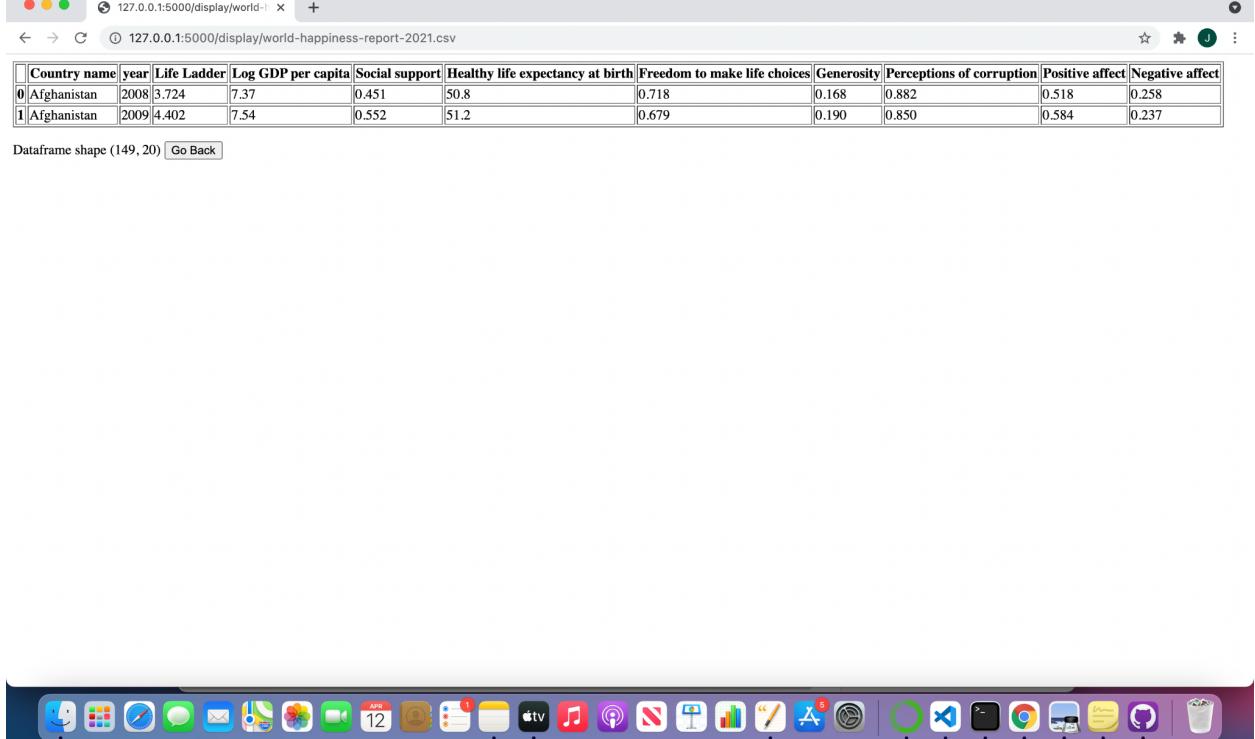
Dataframe shape (2000, 22) [Go Back](#)

A screenshot of a Mac OS X desktop. At the top is the Dock with various application icons. Below it is the Dock menu bar with standard Apple menu items. A Chrome browser window is open, showing the URL "127.0.0.1:5000/display/world-happiness-report.csv". The browser's address bar also shows "127.0.0.1:5000/display/world-happiness-report.csv". The main content area of the browser displays a table with the first two rows of data. The columns are labeled: Country name, year, Life Ladder, Log GDP per capita, Social support, Healthy life expectancy at birth, Freedom to make life choices, Generosity, Perceptions of corruption, Positive affect, and Negative affect. Row 0 (Afghanistan) has values: Afghanistan, 2006, 3.724, 7.37, 0.451, 50.8, 0.718, 0.168, 0.882, 0.518, 0.258. Row 1 (Afghanistan) has values: Afghanistan, 2009, 4.402, 7.54, 0.552, 51.2, 0.679, 0.190, 0.850, 0.584, 0.237.

	Country name	year	Life Ladder	Log GDP per capita	Social support	Healthy life expectancy at birth	Freedom to make life choices	Generosity	Perceptions of corruption	Positive affect	Negative affect
0	Afghanistan	2006	3.724	7.37	0.451	50.8	0.718	0.168	0.882	0.518	0.258
1	Afghanistan	2009	4.402	7.54	0.552	51.2	0.679	0.190	0.850	0.584	0.237

Dataframe shape (1949, 11) [Go Back](#)

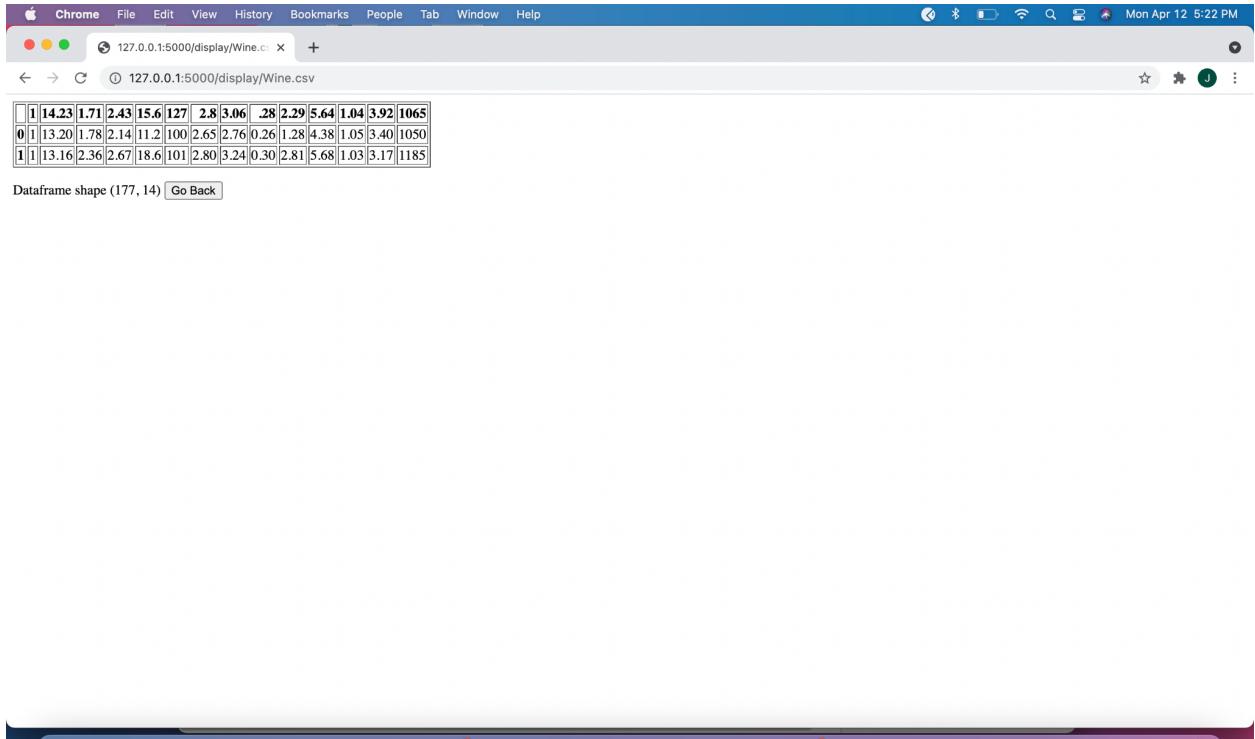




A screenshot of a Mac OS X desktop. The Dock at the bottom features various application icons. Above the Dock, the system tray shows icons for battery, signal strength, and network. The top menu bar includes 'Chrome', 'File', 'Edit', 'View', 'History', 'Bookmarks', 'People', 'Tab', 'Window', and 'Help'. A sub-menu bar shows the URL '127.0.0.1:5000/display/world-happiness-report-2021.csv' and the date 'Mon Apr 12 5:22 PM'. The main content area displays a table with 149 rows and 20 columns. The first few columns are labeled: 'Country name', 'year', 'Life Ladder', 'Log GDP per capita', 'Social support', 'Healthy life expectancy at birth', 'Freedom to make life choices', 'Generosity', 'Perceptions of corruption', 'Positive affect', and 'Negative affect'. The table shows data for Afghanistan across two years: 2008 and 2009.

	Country name	year	Life Ladder	Log GDP per capita	Social support	Healthy life expectancy at birth	Freedom to make life choices	Generosity	Perceptions of corruption	Positive affect	Negative affect
0	Afghanistan	2008	3.724	7.37	0.451	50.8	0.718	0.168	0.882	0.518	0.258
1	Afghanistan	2009	4.402	7.54	0.552	51.2	0.679	0.190	0.850	0.584	0.237

Dataframe shape (149, 20) [Go Back](#)



A screenshot of a Mac OS X desktop. The Dock at the bottom features various application icons. Above the Dock, the system tray shows icons for battery, signal strength, and network. The top menu bar includes 'Chrome', 'File', 'Edit', 'View', 'History', 'Bookmarks', 'People', 'Tab', 'Window', and 'Help'. A sub-menu bar shows the URL '127.0.0.1:5000/display/Wine.csv' and the date 'Mon Apr 12 5:22 PM'. The main content area displays a table with 177 rows and 14 columns. The first few columns are labeled: 'Alcohol', 'Aldh', 'Aldh2', 'Aldh2n', 'Aldh2l', 'Aldh2l2', 'Aldh2l3', 'Aldh2l4', 'Aldh2l5', 'Aldh2l6', 'Aldh2l7', 'Aldh2l8', 'Aldh2l9', and 'Aldh2l10'. The table shows data for wine across 177 samples.

	Alcohol	Aldh	Aldh2	Aldh2n	Aldh2l	Aldh2l2	Aldh2l3	Aldh2l4	Aldh2l5	Aldh2l6	Aldh2l7	Aldh2l8	Aldh2l9	Aldh2l10
0	13.20	1.78	2.14	11.2	100	2.65	2.76	0.26	1.28	4.38	1.05	3.40	1050	
1	13.16	2.36	2.67	18.6	101	2.80	3.24	0.30	2.81	5.68	1.03	3.17	1185	

Dataframe shape (177, 14) [Go Back](#)



Table created from dataframe : This has 5 columns

A screenshot of a Mac desktop environment. At the top, a Chrome browser window is open, showing a table with five columns: Country name, Regional indicator, Ladder score, Standard error of ladder score, and upperwhisker. The table has two rows, indexed 0 and 1, showing data for Finland and Denmark respectively. Below the browser, the Mac OS X Dock is visible, featuring a horizontal row of icons for various applications like Mail, Safari, and Finder.

	Country name	Regional indicator	Ladder score	Standard error of ladder score	upperwhisker
0	Finland	Western Europe	7.842	0.032	7.904
1	Denmark	Western Europe	7.620	0.035	7.687

shape (149, 5)
Creation of Table from Dataframe is successful

Dataframe created from table : has 6 columns including index as a column

The screenshot shows a Mac desktop environment. At the top, a Chrome browser window is open, displaying a table with two rows of data. The table has columns: index, Country name, Regional indicator, Ladder score, Standard error of ladder score, and upperwhisker. The first row (index 0) shows Finland with a Ladder score of 7.842 and an upperwhisker of 7.904. The second row (index 1) shows Denmark with a Ladder score of 7.620 and an upperwhisker of 7.687. Below the table, the message "Creation of Dataframe from SQL Table is successful" is visible. The browser's address bar shows the URL 127.0.0.1:5000/createddffromsql/. The system tray at the top right indicates the date as Mon Apr 12 5:46 PM. At the bottom, the Dock contains icons for various Mac applications like Finder, Mail, Safari, and others.

index	Country name	Regional indicator	Ladder score	Standard error of ladder score	upperwhisker
0	Finland	Western Europe	7.842	0.032	7.904
1	Denmark	Western Europe	7.620	0.035	7.687

shape (149, 6)

Creation of Dataframe from SQL Table is successful