I first import the libraries I will use in running this code to produce the pivot table and then heatmap which includes:

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| from matplotlib import pyplot  import pandas as pd  import seaborn as sns |

I then assign the web address containing the dataset to a variable named ‘url’

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| url = 'https://raw.githubusercontent.com/resbaz/r-novice-gapminder-files/master/data/gapminder-FiveYearData.csv' |

Next, I call the function that reads the file as a csv file and pass the variable named ‘url’ as an argument to the function; and then assign it to a variable named ‘df1’

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| df1 = pd.read\_csv(url) |

I then display it on the screen using print function in order to confirm the process executed properly. I passed in the variable named ‘df1’ to the print function

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| print(df1) |

I call the csv save function to save the csv file to my computer and pass the desired file name 'Dataset.csv' and ‘index=False’ as arguments to the csv save function. The ‘index=False’ removes the labeled index created by python dataframe so it won’t save as part of the csv file

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| df1.to\_csv('Dataset.csv',index = False) |

I then create a pivot table dataframe and assign it to a variable named ‘df2’, I pass the arguments (df1 containing the dataset, index='continent', which is the y-axis and columns='year' which is the x-axis, and values=lifeExp)

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| df2 = pd.pivot\_table(df1,values='lifeExp',index='continent',columns='year') |

I then display pivot table dataframe on the screen using print function in order to confirm the process executed properly. I passed in the variable named ‘df2’ to the print function

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| print(df2) |

Next, I call the figure function from pyplot and pass the argument as (figsize=(15,10)) which represents width and height in inches respectively to increase the size of the heatmap to be plotted

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| pyplot.figure(figsize = (15,10)) |

I then use the ‘sns.heatmap()’ function inorder to plot the heatmap, and then pass the ‘df2’ variable, ‘annot=True’, to display the lifeExp values as figures on the heatmap and ‘fmt=".2f" ’ to format the figure to two decimal places all as arguments

Next, I apply the .getfig() function and the savefig() function to save it as ‘Seaborn\_HeatMap.png’

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| sns.heatmap(df2,annot=True,fmt=".2f").get\_figure().savefig('Seaborn\_HeatMap.png') |

The heatmap shows the average life expectancy for each year and each continent also in the Tableau heatmap I plotted