Applied Data Science – 1 7PAM2000

Visualization: ADS 1

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Link of Data Set

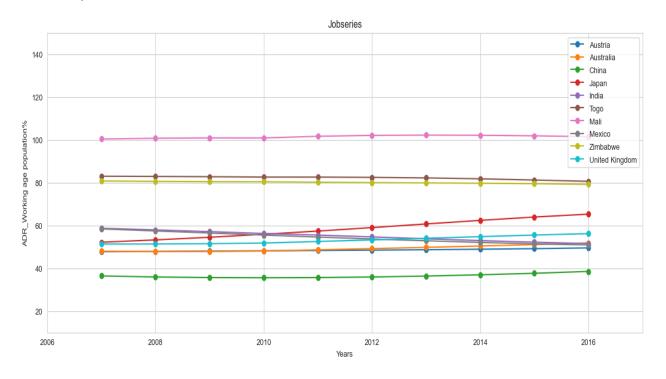
https://databank.worldbank.org/source/jobs

The above-mentioned link dataset is taken from the given World Bank Open Data portal. This data is of the age tendency ration of working age-population of 10 countries for a period of 10 years from 2006 to 2016.

Diagram 1

Through the given instructions, created a line chart in the first one, which is based on several columns of the data set with appropriate labels and a clear name.

Line Graph



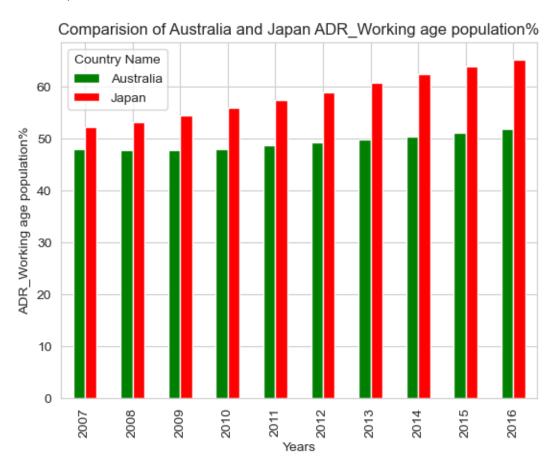
Picture 1

Ending:

Picture 1 displays a line plot as its type of graph. This graph shows the percentage of the working population that is dependent on employment in ten different nations from 2006 to 2016. Mali ranks highest among the remaining nations, while China, Togo, Zimbabwe, and Zimbabwe nearly stable. The working age population in Japan and the UK is rapidly growing, while the working age population in India is rapidly declining. Over time, the remaining nations may see a rise or drop from 2006 to 2016.

Diagram 2

Bar Graph



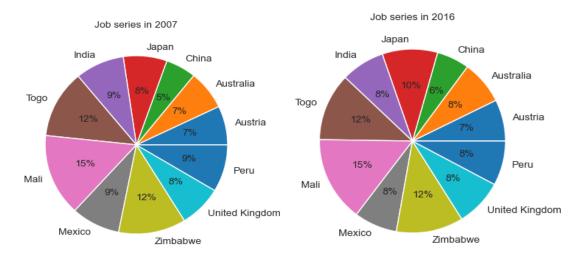
Picture 2

Ending:

A bar graph is used to display the data in Picture 2 above. The average dependency ratio of the working-age population (%) between Australia and Japan is compared in the data above for the years 2007 and 2016. Australia and Japan were chosen as comparative countries in order to display a novel variation in the graph that has a continuous peak and growth. Australia exhibits a continuous increase over the aforementioned span, whereas Japan is the only country to demonstrate a significant gain in the provided period.

Diagram 3

Pie Graph



Picture 3

Ending:

I've plotted the data from the aforementioned dataset using a pie chart in Pic. 3. Because it distinguishes between plots in terms of percentages of working population ratio between 2007 and 2016, the pie chart is excellent for plotting and simple for everyone to grasp. Nations such as Austria, the United Kingdom, Zimbabwe, Mali, and Togo have demonstrated stability in recent years. Between 2007 and 2016, the working population grew by 2% in Japan and by 1% in China and Australia, but it declined by 1% in nations like Peru, Mexico, and India.

Books to refer online:

 $Curties, \qquad M. (2023) \qquad https://ia601509.us.archive.org/22/items/python-for-data-analysis-data-wrangling-with-pandas-num-py-and-ipython$

Madan, K. (2023) *Matplotlib Pie Chart*. Scaler Topics. [Online] [Accessed on November 2, 2023]https://www.scaler.com/topics/matplotlib/matplotlib-pie-chart/.

John Hunter, Darren Dale, Eric Firing, Michael Doretta boom and the Matplotlib development team;2012-2023 The Matplotlib development team. How to make bar plot of two variables. [Online][Accessedon November 05,2023].https://matplotlib.org/stable/tutorials/pyplot.html