

A Report on a solution to the On Presidents

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Synopsis:- In the presented problem stated in the git ReadMe, We have been given data consisting of the details about the presidents of the United States of America[USA] consisting of information regarding their birthday and death day and loction of as such. The problem statement stated to add extra columns of days, months and years lived and I had to find some meaningful correlation amongst them. The calculated values are as follows:-

Data Type	Value
Mean	26409.377
Weighted Average	26409.377
Median	26471.0
Mode	24767.0
Max	35763.0
Min	16978.0
Standard Deviation	4582.94

Solution:- I have presented the solution in the python language, The main solution is in the file main.py, I have followed a very instructive and discrete procedure for the solution of the problem. The solution contains objects and a

modular approach to solve the given problem, I have focused on the readability of the code throughout the code, the functionality of the code is very basic and easy to understand. Solutions contain modular functions to print tables, plot graphs, and calculate mathematical values such as mean, mode, median and weighted averages.

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get[X]FromList
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The above line depicts the naming convention I have followed for the names of the helper and calculative functions.

Tables and Graphs: The given solution contains the following tables and graphs:-

1-Least Lived Presidents List:

PRESIDENT	BIRTH DATE	BIRTH PLACE	DEATH DATE	LOCATION OF DEATH	year_of_birth	lived_years	lived_months	lived_days
John F. Kennedy	May 29, 1917	Brookline, Mass.	Nov 22, 1963	Dallas, Texas	1917	46	357	26976
James A. Garfield	Nov 19, 1831	Cuyahoga Co., Ohio	Sep 19, 1881	Elberon, New Jersey	1831	49	598	16302
James K. Polk	Nov 2, 1795	Madisonburg Co., N.C.	Jun 15, 1849	Nashville, Tennessee	1795	53	663	19893
Abraham Lincoln	Feb 12, 1809	Lafayette Co., Kentucky	Apr 15, 1865	Washington, D.C.	1809	56	674	20516
Charles Arthur	Dec 5, 1828	Norfolk, Vermont	Nov 16, 1896	New York, New York	1828	67	695	20863
Warren G. Harding	Nov 2, 1865	Morrow County, Ohio	Aug 2, 1923	San Francisco, Cal.	1865	57	693	21891
William McKinley	Jan 29, 1843	Niles, Ohio	Sep 14, 1901	Buffalo, New York	1843	58	903	23412
Theodore Roosevelt	Oct 27, 1858	New York, New York	Jan 6, 1919	Oyster Bay, New York	1858	60	722	21965
Calvin Coolidge	Jul 4, 1897	Plymouth, Vermont	Jan 5, 1933	Northampton, Mass.	1897	35	356	22099
Barack Obama	Aug 6, 1961	Honolulu, Hawaii			1961	63	732	22957

Fig:1, Least Lived Presidents List

2-Most Lived Presidents List:

PRESIDENT	BIRTH DATE	BIRTH PLACE	DEATH DATE	LOCATION OF DEATH	year_of_birth	lived_years	lived_months	lived_days
Jimmy Carter	Oct 1, 1924	Plains, Georgia			1924	97	1174	35763
George Bush	Jun 12, 1924	Milton, Mass.	Nov 30, 2018	Houston, Texas	1924	94	1133	34504
Gerald Ford	Jul 14, 1913	Omaha, Nebraska	Dec 26, 2006	Rancho Mirage, Cal.	1913	93	1121	34133
Ronald Reagan	Feb 6, 1911	Tampico, Illinois	Jun 5, 2004	Los Angeles, Cal.	1911	93	1119	34088
John Adams	Oct 30, 1735	Quincy, Mass.	Jul 4, 1826	Quincy, Mass.	1735	90	1088	33119
Herbert Hoover	Aug 10, 1874	West Branch, Iowa	Oct 20, 1964	New York, New York	1874	90	1062	32943
Harry S. Truman	May 8, 1884	Lamar, Missouri	Dec 26, 1972	Kansas City, Missouri	1884	88	1063	32373
James Madison	Mar 16, 1751	Port Conway, Va.	Jun 28, 1836	Orange Co., Va.	1751	85	1023	31150
Thomas Jefferson	Apr 13, 1743	Albemarle Co., Va.	Jul 4, 1826	Albemarle Co., Va.	1743	83	998	30397
Richard Nixon	Jan 9, 1913	Yorba Linda, Cal.	Apr 22, 1994	New York, New York	1913	81	975	29688

Fig:2, Most Lived Presidents List

3-Statistics from the Given Data:

Type	Value
Mean	26409.377777777778
Weighted Avg	26409.377777777777
Median	26471.0
Mode	24767.0
Max	35763.0
Min	16978.0
Standard Deviation	4582.940770295903

Fig:3, Statistics from the Given Data

4-Graph: Days Lived by the Presidents in graphical format:-

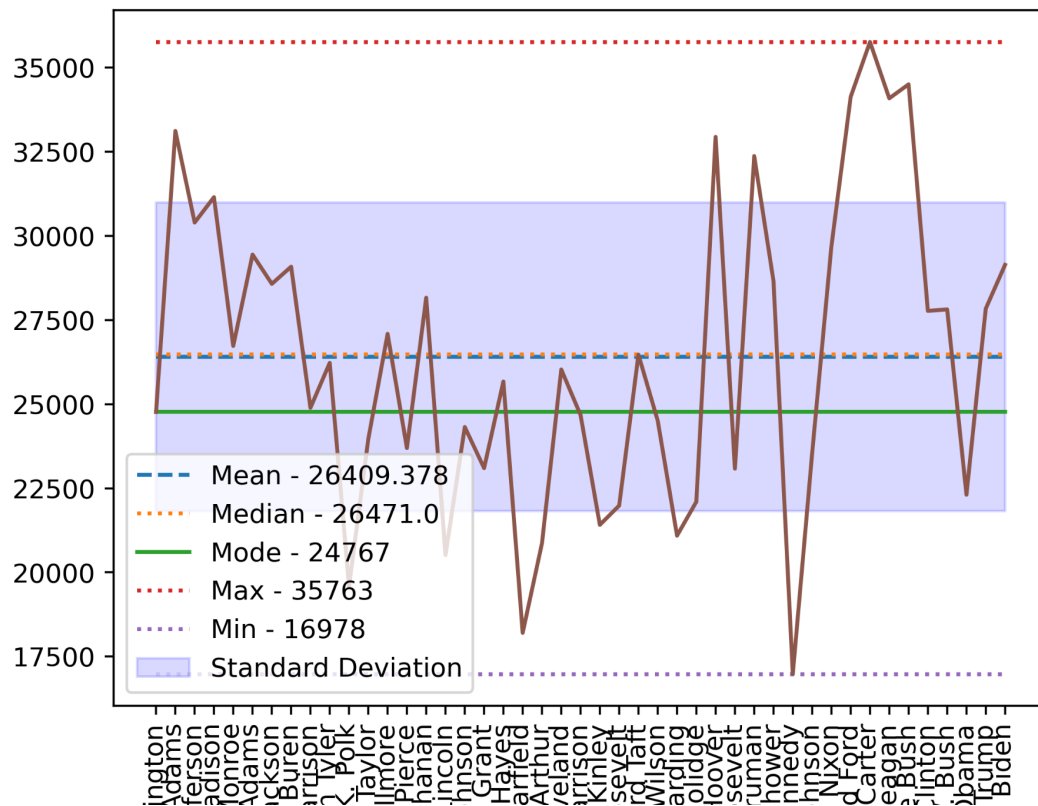


Fig:4, Days Lived by the Presidents in graphical format

Conclusion The given CSV data contains very meaningful information if extracted properly, This may tell us the ages and its derivatives of the USA's presidents till 2022. The Range of the min and max age of those presidents lies between 46-97 years, making Carter the oldest yet alive. I have also plotted a meaningful graph with the days and other informative data from the CSV. I had worked on python in 2013-2015 back in my senior year at college but this project gave me a bit of more experimental practice on python programming practices. I have worked as a full-stack developer and front-end developer from 2016-2021. I am excited to explore this given chance and get as much as experience can get from this. I would love to hear from you of all people very soon.

Thanks.