

A Problem with Presidents

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I. Summary

This report is about analyzing the U.S. President's lifespan. The President who has the longest life is Jimmy Carter (98 years), and the shortest life is John F. Kennedy (46 years). In addition, the average U.S. President's lifespan is 72 years, and the median is 71 years.

II. Assumptions

1. The presidents who are still living are assigned death's date as today date (December 13, 2022) when calculating the lifespan.
2. The presidents' lived years are assigned as the weights for calculating the weighted average lived days.

III. Tools

1. Python 3
2. Jupyter Notebook
3. Pandas
4. Numpy
5. Matplotlib

IV. Tables and Graph

PRESIDENT	BIRTH DATE	BIRTH PLACE	DEATH DATE	LOCATION OF DEATH	year_of_birth	lived_days	lived_years	lived_months
Jimmy Carter	1924-10-01	Plains, Georgia			1924	35868	98	1195
George Bush	1924-06-12	Milton, Mass.	2018-11-30	Houston, Texas	1924	34504	94	1150
Gerald Ford	1913-07-14	Omaha, Nebraska	2006-12-26	Rancho Mirage, Cal.	1913	34133	93	1137
Ronald Reagan	1911-02-06	Tampico, Illinois	2004-06-05	Los Angeles, Cal.	1911	34088	93	1136
John Adams	1735-10-30	Quincy, Mass.	1826-07-04	Quincy, Mass.	1735	33119	90	1103
Herbert Hoover	1874-08-10	West Branch, Iowa	1964-10-20	New York, New York	1874	32943	90	1098
Harry S. Truman	1884-05-08	Lamar, Missouri	1972-12-26	Kansas City, Missouri	1884	32373	88	1079
James Madison	1751-03-16	Port Conway, Va.	1836-06-28	Orange Co., Va.	1751	31150	85	1038
Thomas Jefferson	1743-04-13	Albemarle Co., Va.	1826-07-04	Albemarle Co., Va.	1743	30397	83	1013
Richard Nixon	1913-01-09	Yorba Linda, Cal.	1994-04-22	New York, New York	1913	29688	81	989

Figure 1: U.S. Presidents Longest Lived

PRESIDENT	BIRTH DATE	BIRTH PLACE	DEATH DATE	LOCATION OF DEATH	year_of_birth	lived_days	lived_years	lived_months
John F. Kennedy	1917-05-29	Brookline, Mass.	1963-11-22	Dallas, Texas	1917	16978	46	565
James A. Garfield	1831-11-19	Cuyahoga Co., Ohio	1881-09-19	Elberon, New Jersey	1831	18202	49	606
James K. Polk	1795-11-02	Mecklenburg Co., N.C.	1849-06-15	Nashville, Tennessee	1795	19583	53	652
Abraham Lincoln	1809-02-12	LaRue Co., Kentucky	1865-04-15	Washington, D.C.	1809	20516	56	683
Chester Arthur	1829-10-05	Fairfield, Vermont	1886-11-18	New York, New York	1829	20863	57	695
Warren G. Harding	1865-11-02	Morrow County, Ohio	1923-08-02	San Francisco, Cal.	1865	21091	57	703
William McKinley	1843-01-29	Niles, Ohio	1901-09-14	Buffalo, New York	1843	21412	58	713
Theodore Roosevelt	1858-10-27	New York, New York	1919-01-06	Oyster Bay, New York	1858	21985	60	732
Calvin Coolidge	1872-07-04	Plymouth, Vermont	1933-01-05	Northampton, Mass.	1872	22099	60	736
Barack Obama	1961-08-04	Honolulu, Hawaii			1961	22412	61	747

Figure 2: U.S. Presidents Shorted Lived

	Mean	Weighted average	Median	Mode	Max	Min	Standard deviation
lived_days	26423.37778	27209.69725	26227	16978, 18202, 19583,...	35868	16978	4589.41832

Figure 3: Lived Days Descriptive Statistics

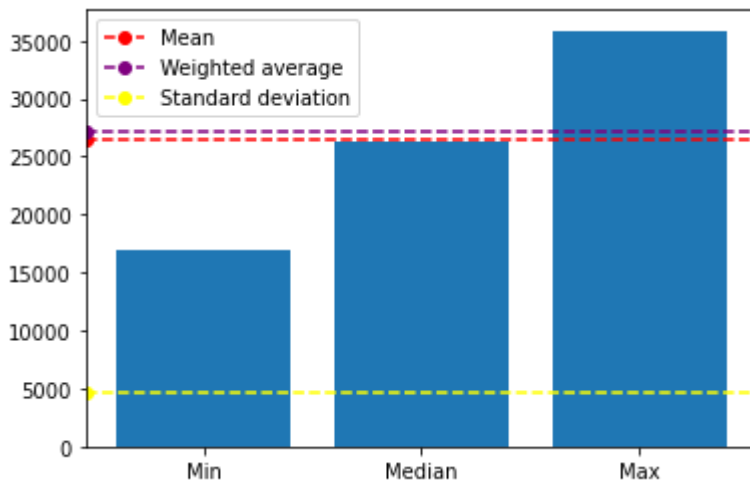


Figure 4: Descriptive Statistics Plot

IV. Conclusion

We cannot conclude much with this short analysis; further analysis needs to be conducted to have more insight. However, we can say that most U.S. Presidents have a lifespan of 71 years.