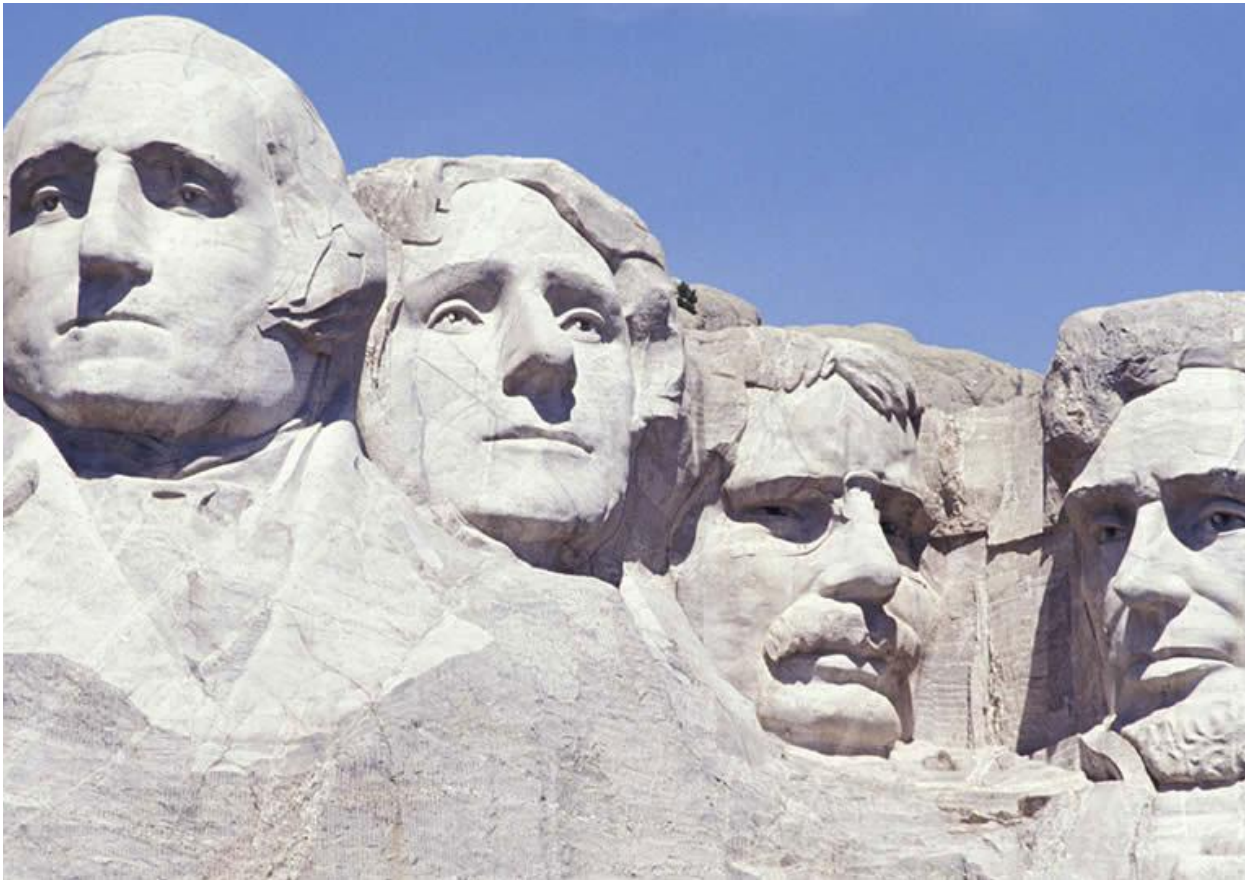


# A Problem with Presidents: Analysis



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CTS-IT

## SUMMARY

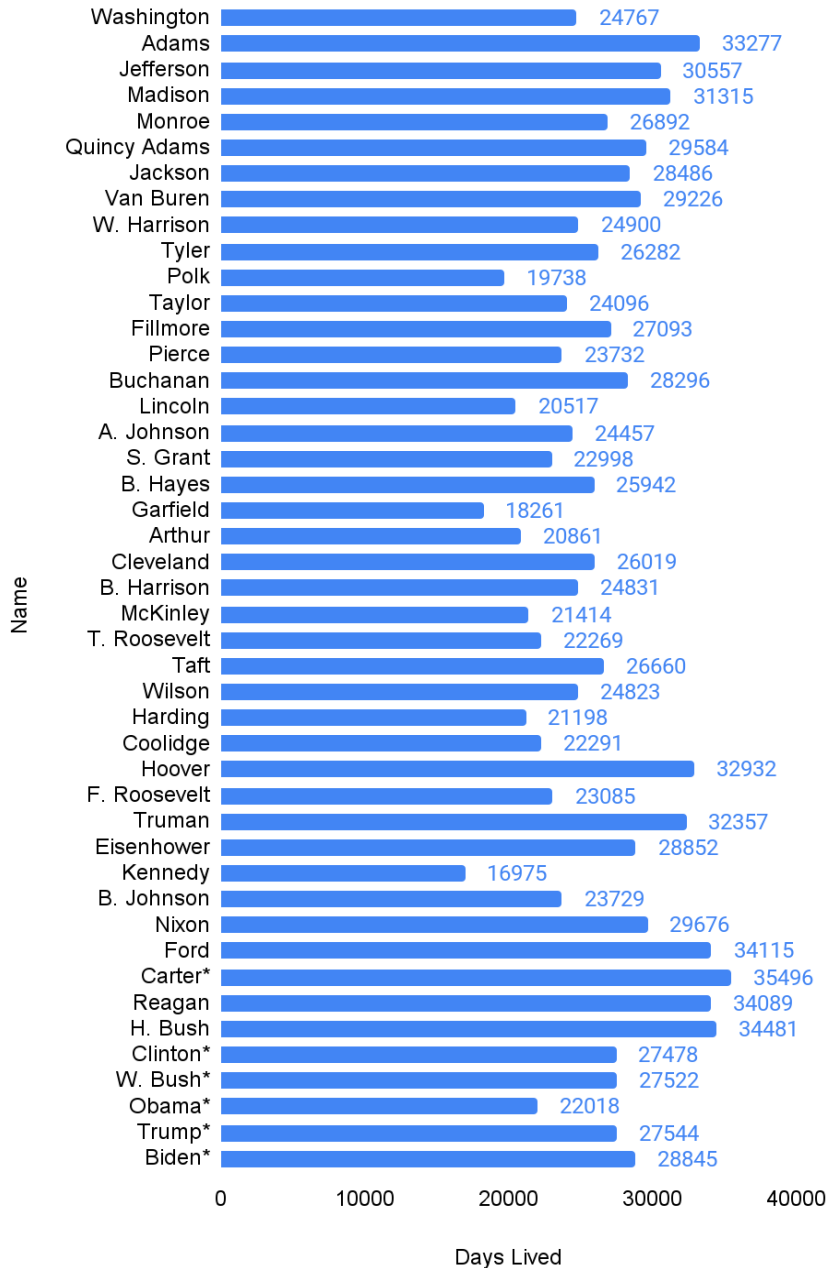
Through this data analysis exercise, I gathered statistical information regarding the U.S. Presidents. This data was given initially as a CSV file with their names, birth dates, and death dates. I was asked to find the top 10 longest living Presidents and the top 10 shortest living Presidents, as well as the mean, weighted mean, median, mode, maximum, minimum, and standard deviation of a set of data containing each President's number of lived days.

## COMMENTARY

To get these statistical values, I used the “statistics” Python package instead of doing the math myself. I did this because I felt that the package would give more accurate results based on the data. After calculating the values with the package, I rounded each value to 2 decimal places when necessary. I also decided not to account for leap years, as they wouldn't make too much of an impact on the data. This information takes into account the U.S. Presidents who are still alive: Jimmy Carter, Bill Clinton, George W. Bush, Barack Obama, Donald Trump, and Joe Biden. Because their lived days are still ongoing, this data uses the current date as the living President's death date. In the Top 10 tables, living Presidents are shown to have lived a certain amount of days “so far”.

## DATA

### Days Lived vs. Name



<sup>1</sup> Note: Presidents with an asterisk (\*) by their name are alive as of 10/27/2021.

## DATA CONT.

(a)

Top 10 Longest Living Presidents:	
1.	Jimmy Carter has lived 35,496 days so far!
2.	George Bush lived 34,481 days!
3.	Gerald Ford lived 34,115 days!
4.	Ronald Reagan lived 34,089 days!
5.	John Adams lived 33,277 days!
6.	Herbert Hoover lived 32,932 days!
7.	Harry S. Truman lived 32,357 days!
8.	James Madison lived 31,315 days!
9.	Thomas Jefferson lived 30,557 days!
10.	Richard Nixon lived 29,676 days!

(b)

Top 10 Shortest Living Presidents	
1.	John F. Kennedy lived 16,975 days!
2.	James A. Garfield lived 18,261 days!
3.	James K. Polk lived 19,738 days!
4.	Abraham Lincoln lived 20,517 days!
5.	Chester Arthur lived 20,861 days!
6.	Warren G. Harding lived 21,198 days!
7.	William McKinley lived 21,414 days!
8.	Barack Obama has lived 22,018 days so

	far!
9.	Theodore Roosevelt lived 22,269 days!
10.	Calvin Coolidge lived 22,291 days!

(c)

Statistics of Lived Days	
Mean:	26,443.21
Weighted mean:	25,661.64
Median:	26,282
Mode:	24,767
Maximum:	35,496
Minimum:	16,975
Standard Deviation:	4,554.58

Figure (a) contains the Top 10 Presidents who have lived the longest amount of days, with Jimmy Carter at number one.

Figure (b) contains the Top 10 Presidents who have lived the shortest amount of days, with John F. Kennedy at number one.

Figure (c) contains statistics regarding all Presidents' amount of lived days, including the mean, weighted mean, median, mode, maximum, minimum, and standard deviation.

## CONCLUSIONS

This analysis is a practical way to see everything you need to know about the U.S. Presidents' lifespan statistics. Some interesting data I learned is that out of all of the Top 10 Shortest Living Presidents (Figure (b)), 4 out of the 10 were assassinated (Abraham Lincoln, James A. Garfield, William McKinley, and John F. Kennedy), 5 out of the 10 died of illness. It is worth noting that the only living President on the Top 10 Shortest Living Presidents list (Figure (b)), Barack Obama, was the fifth youngest President to be sworn into office. I also found it interesting that the number one longest living President is still

alive today. It is also worth noting that the two oldest Presidents at the time of their inauguration (who are also the two most recent Presidents) are not on the Top 10 Longest Living Presidents list (Figure (a)): Joe Biden (age 78 at inauguration) and Donald Trump (age 70 at inauguration). I learned that the average lifespan of a U.S. President is about 70 years old (Figure (c)). Obviously, there are outliers to this estimated lifespan like John F. Kennedy and other assassinated Presidents. However, when you take into consideration that the average person had a much shorter life expectancy at the time George Washington took office, and healthcare has made huge strides since then, an estimated 70 year lifespan appears to be an accurate representation of the data.

## REFERENCES

1. Cover picture: [https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.presidential.com%2F&psig=AOvVaw3WNBqCet7AR\\_KCRDA5nCiZ&ust=1635444722854000&source=images&cd=vfe&ved=0CAgQjRxqFwoTCIC\\_hsCY6\\_MCFQAAAAAdAAAAABAW](https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.presidential.com%2F&psig=AOvVaw3WNBqCet7AR_KCRDA5nCiZ&ust=1635444722854000&source=images&cd=vfe&ved=0CAgQjRxqFwoTCIC_hsCY6_MCFQAAAAAdAAAAABAW)
2. General President Information: <https://www.presidentsusa.net/>