

import pandas as pd

```
df = pd.read_excel("Cleaning-Data-2.xlsx","RAW DATA-2")
# df.style.applymap(lambda x: 'background : red' if pd.isna(x) else '')
df
```

41 to 50 of 53 entries 

Filter

?

index	S.No.	president	prior	party	vice	salary	date updated	date created
40	41	George H. W. Bush	43rd Vice President of the United States	Republican	Dan Quayle	NaN	2021-07-14 00:00:00	2012-03-04 00:00:00
41	42	Bill Clinton	40th & 42nd Governor of Arkansas (1979â€"1981 & 1983â€"1992)	Democratic	Al Gore	365000.0	2021-07-14 00:00:00	2012-03-04 00:00:00
42	43	George W. Bush	46th Governor of Texas ( 1995â€"2000 )	Republican	Dick Cheney	375000.0	2021-07-14 00:00:00	2012-03-04 00:00:00
43	44	Barack Obama	U.S. Senator ( Class 3 ) from Illinois ( 2005â€"2008 )	Democratic	Joe Biden	395000.0	2021-07-14 00:00:00	2012-03-04 00:00:00
44	45	Donald Trump	Chairman of The Trump Organization ( 1971â€"present )	Republican	Mike Pence	405000.0	2021-07-14 00:00:00	2020-02-01 00:00:00
45	38	Gerald Ford	40th Vice President of the United States	Republican	Office vacant	325000.0	2021-07-14 00:00:00	2012-03-04 00:00:00
46	39	Jimmy Carter	76th Governor of Georgia (1971â€"1975)	Democratic	Walter Mondale	NaN	2021-07-14 00:00:00	2012-03-04 00:00:00
					George H. W.		2021-07-14	2012-03-04

```
df = df.drop_duplicates()
df
```

41 to 46 of 46 entries 

Filter

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index	S.No.	president	prior	party	vice	salary	date updated	date created
40	41	George H. W. Bush	43rd Vice President of the United States	Republican	Dan Quayle	NaN	2021-07-14 00:00:00	2012-03-04 00:00:00
41	42	Bill Clinton	40th & 42nd Governor of Arkansas (1979â€"1981 & 1983â€"1992)	Democratic	Al Gore	365000.0	2021-07-14 00:00:00	2012-03-04 00:00:00
42	43	George W. Bush	46th Governor of Texas ( 1995â€"2000 )	Republican	Dick Cheney	375000.0	2021-07-14 00:00:00	2012-03-04 00:00:00
43	44	Barack Obama	U.S. Senator ( Class 3 ) from Illinois ( 2005â€"2008 )	Democratic	Joe Biden	395000.0	2021-07-14 00:00:00	2012-03-04 00:00:00
44	45	Donald Trump	Chairman of The Trump Organization ( 1971â€"present )	Republican	Mike Pence	405000.0	2021-07-14 00:00:00	2020-02-01 00:00:00

```
pd.options.mode.chained_assignment = None
df['salary']=df['salary'].fillna(df.groupby('party')['salary'].transform(lambda x: x.shift().expanding().mean()))
df
```



1 to 10 of 46 entries 

Filter

?

index	S.No.	president	prior	party	vice	salary	date updated	date created
0	1	George Washington	Commander-in-Chief of the Continental Army ( 1775â€"1783 )	Nonpartisan	John Adams	5000.0	2021-07-14 00:00:00	2012-03-04 00:00:00
1	2	John Adams	1st Vice President of the United States	Federalist	Thomas Jefferson	12000.0	2021-07-14 00:00:00	2012-03-04 00:00:00
2	3	Thomas Jefferson	2nd Vice President of the United States	Democratic- Republican	Aaron Burr	15000.0	2021-07-14 00:00:00	2012-03-04 00:00:00
3	4	James Madison	5th United States Secretary of State (1801â€"1809)	Democratic- Republican	George Clinton	20000.0	2021-07-14 00:00:00	2012-03-04 00:00:00
4	5	James Monroe	7th United States Secretary of State (1811â€"1817)	Democratic- Republican	Daniel D. Tompkins	17500.0	2021-07-14 00:00:00	2012-03-04 00:00:00
5	6	John Quincy Adams	8th United States Secretary of State (1817â€"1825)	Democratic- Republican	John C. Calhoun	30000.0	2021-07-14 00:00:00	2012-03-04 00:00:00
6	7	Andrew Jackson	U.S. Senator ( Class 2 ) from Tennessee (1823â€"1825)	Democratic	John C. Calhoun	35000.0	2021-07-14 00:00:00	2012-03-04 00:00:00
7	8	Martin Van Buren	8th Vice President of the United States	Democratic	Richard Mentor Johnson	40000.0	2021-07-14 00:00:00	2012-03-04 00:00:00
8	9	William Henry Harrison	United States Minister to Colombia (1828â€"1829)	Whig	John Tyler	45000.0	2021-07-14 00:00:00	2012-03-04 00:00:00
9	10	John Tyler	10th Vice President of the United States	Whig	Office vacant	45000.0	2021-07-14 00:00:00	2012-03-04 00:00:00

Show 

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