Skewness and Kurtosis



Skewness

pandas.DataFrame.skew



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• -0.5 to $0.5 \rightarrow Symmetric$



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pandas.DataFrame.skew

• -0.5 to $0.5 \rightarrow Symmetric$

• Less than $-0.5 \rightarrow \text{Negatively skewed}$



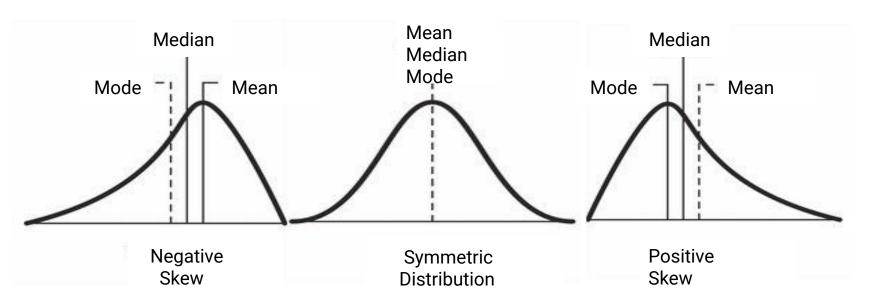
Skewness

pandas.DataFrame.skew

- -0.5 to $0.5 \rightarrow Symmetric$
- Less than -0.5 → Negatively skewed
- Greater than $0.5 \rightarrow Positively skewed$



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Kurtosis gives an idea of the tails of a distribution.



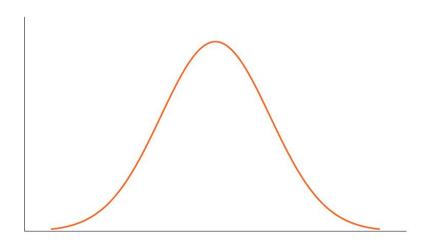
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 - Symmetric



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 - Symmetric:
 - K=0 (Mesokurtic)
 - Tails similar to normal distribution



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- High Presence of extreme values.



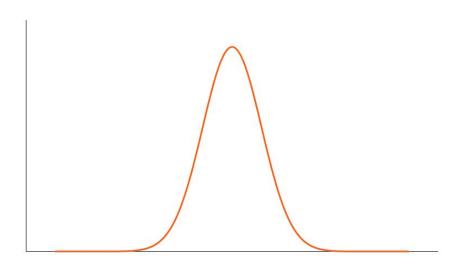
- Kurtosis gives an idea of the tails of a distribution.
- High Presence of extreme values.
 - K>0, (Leptokurtic)
 - Longer distribution, fatter tail



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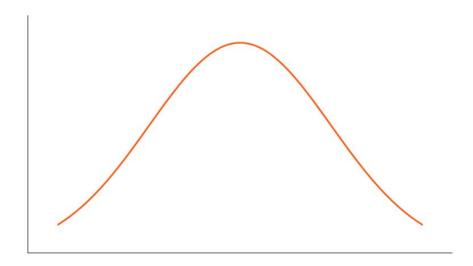
- Kurtosis gives an idea of the tails of a distribution.
- Low Presence of extreme values.



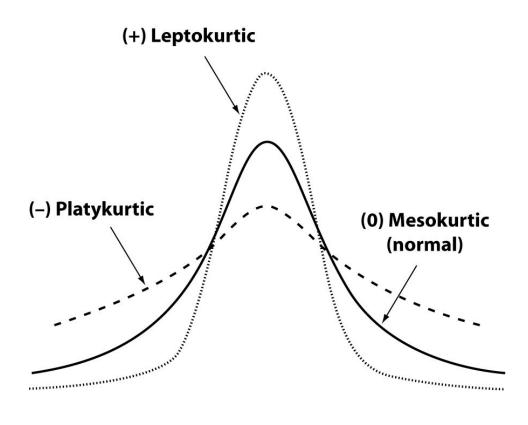
- Kurtosis gives an idea of the tails of a distribution.
- Low Presence of extreme values.
 - K<0, (Platykurtic)
 - Shorter distribution, thinner tail.



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Transforming Skewed into Normal

Power Transformation



Transforming Skewed into Normal

Power Transformation

Log Transformation



Transforming Skewed into Normal

Power Transformation

Log Transformation





Thank You!

