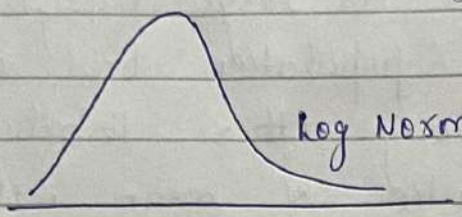
Log Normal Distribution

→ In probability theory, a log-normal distribution is a continuous probability distribution of a random variable where logarithm is normally distributed



Log Normal Distribution.

Suppose, X → random variable → log-normally distributed.
then, y = log(x) → Normally distributed.

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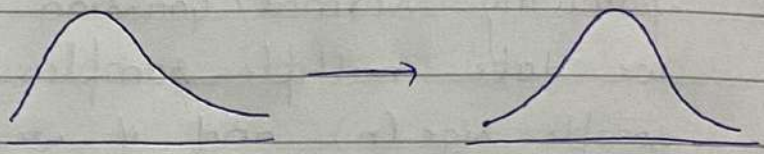
Another
Random variable



And, if X → Random variable → Normally distributed
then, y = exp(x) → log-normally distributed.

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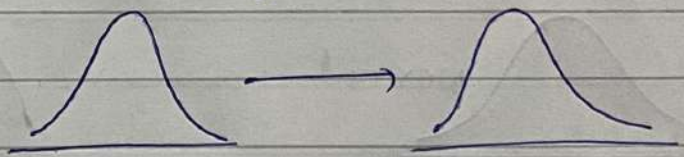
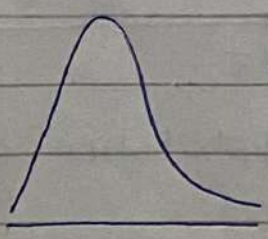
Another
Random variable

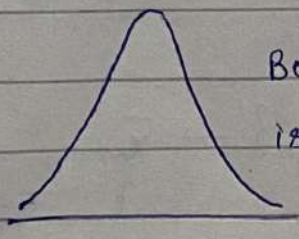


Eg: ① wealth Distribution
② comments on Youtube channel

→ Machine Learning Usecase : Simple Linear Regression



Logarithmic Transformation → $\log_e$



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Because, whenever our data is normally distributed, our model get trained efficiently