

# Machine Learning Course | Arabic

## Data Preprocessing

Level - 01

**Link to Lecture on Youtube**

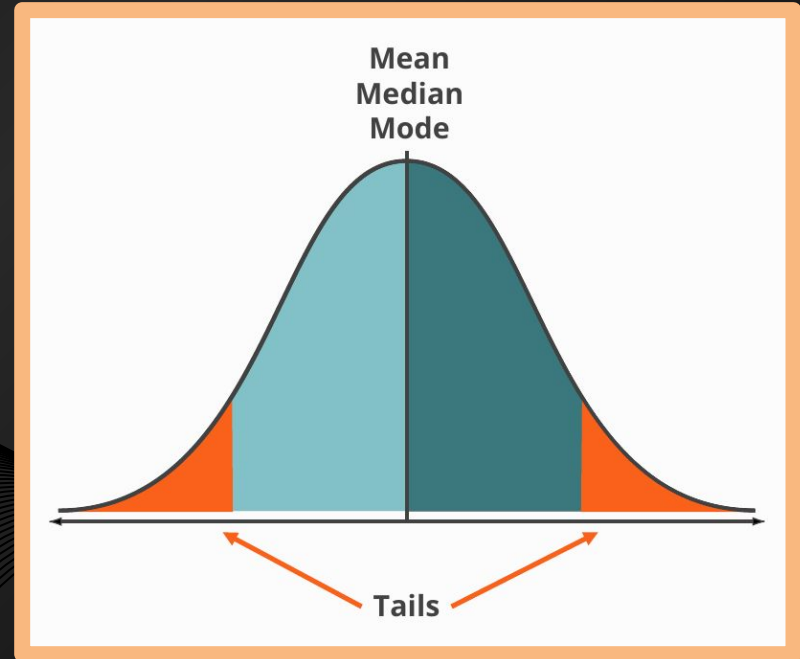
05

**Normal  
Distribution  
and  
Standardization**

# Normal Distribution

## Properties:

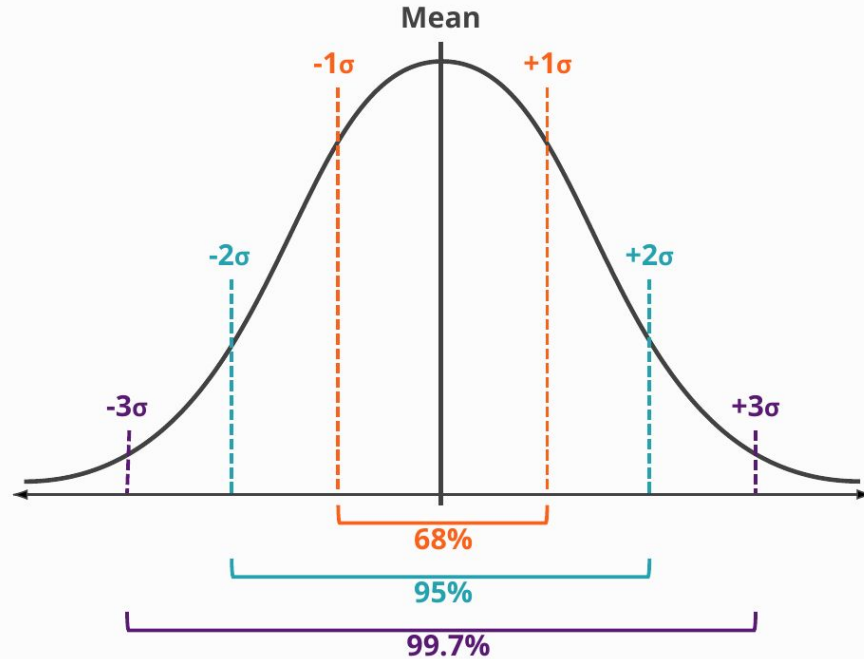
- Symmetrical.
- Mean = Mode = Median.
- Tails tends to zero at infinite.
- Satisfied the empirical rule.
- Data that is close to the mean is more frequent.



# Empirical Rule

Remember !

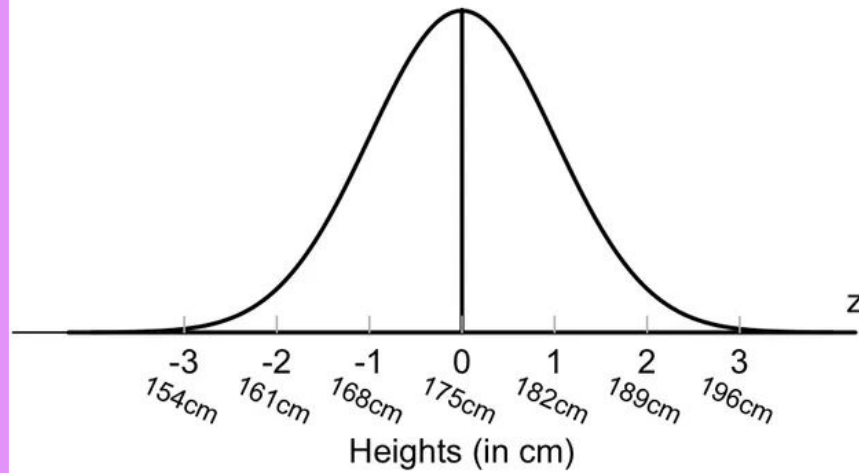
STD



**Ex.**

**Humans height:**

**STD = 5**

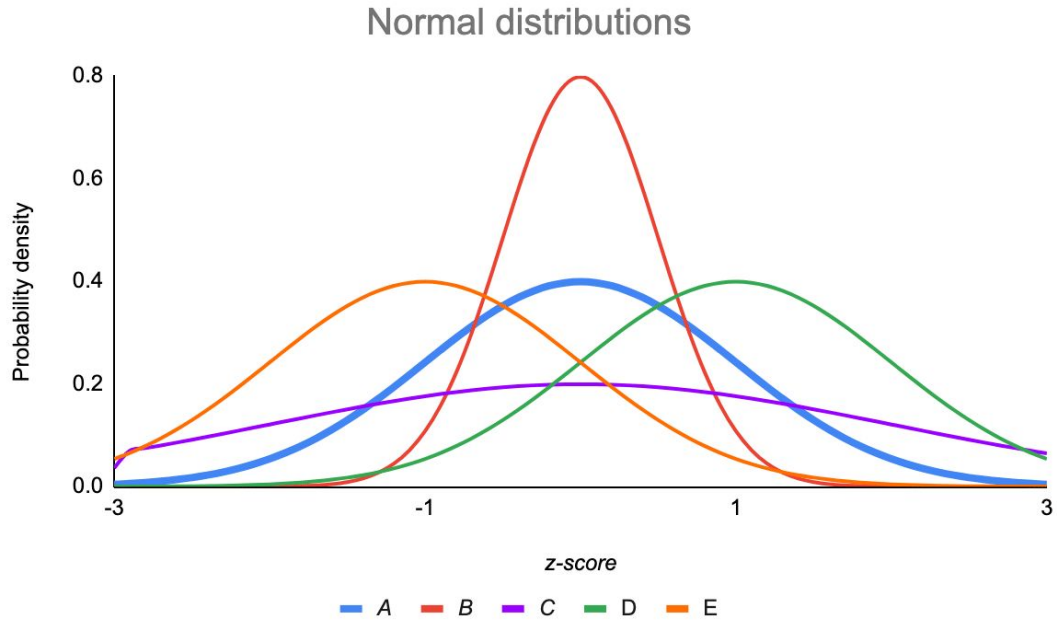


“

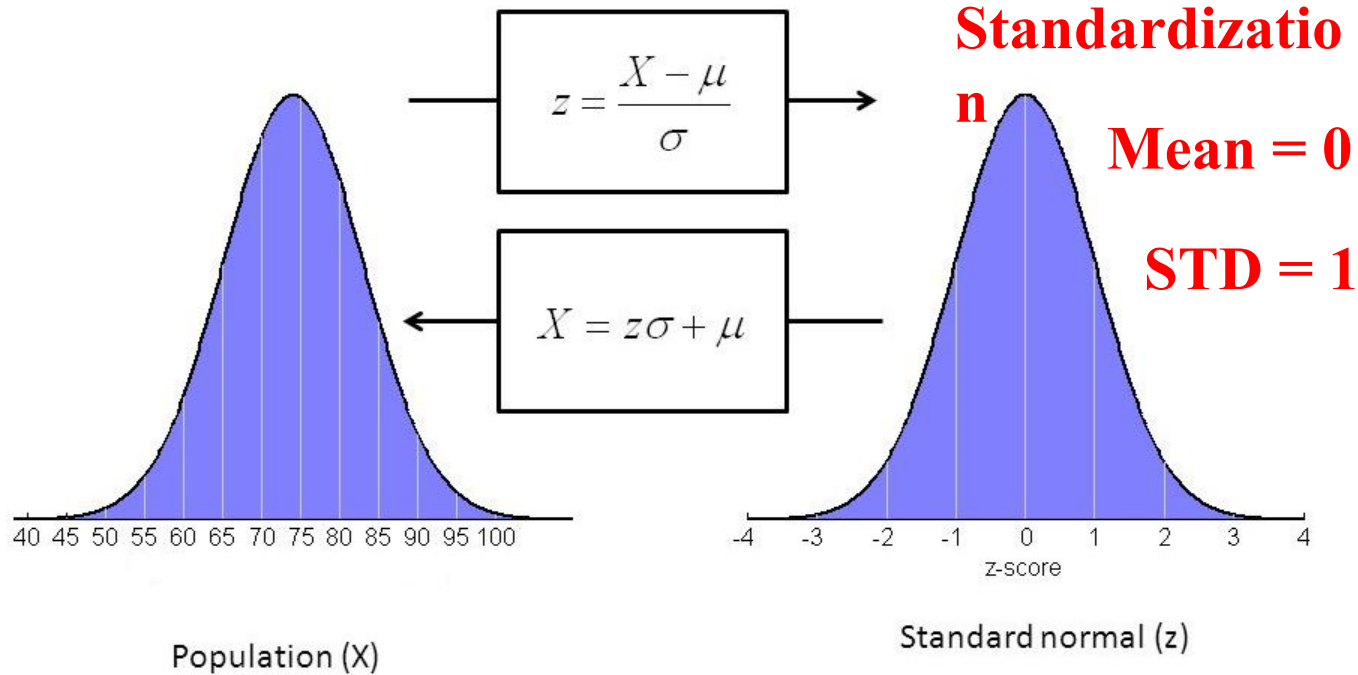
Has anyone noticed a problem with this distribution?

”

# Problem of Normal Distribution

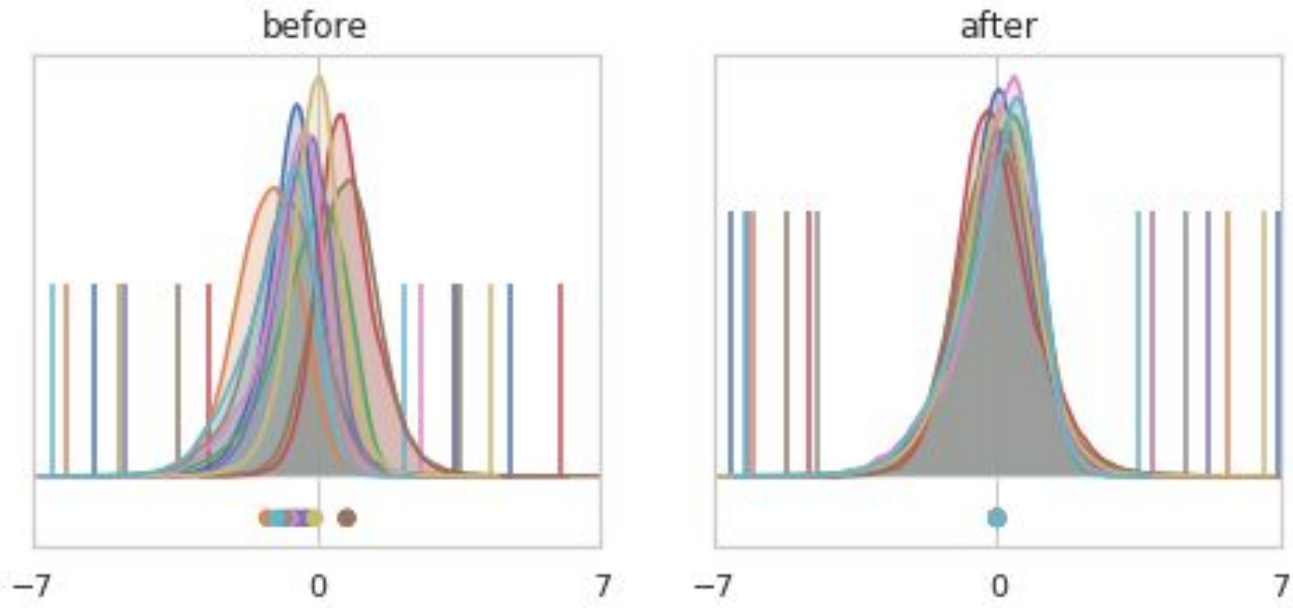


# Standard Normal Distribution





# Standard Normal Distribution



# Thank You!

## Do you have any questions?

Write them in the comments

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