



9/3/2024

[PERCENTILE]

[QUAN-NUMERICAL]

Hope Artificial Intelligence Pvt Ltd |
Learn Data Science

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WHAT IS PERCENTILE?



*IT'S TELL EXIST VALUES OF RANGE IS CALLED **PERCENTILE**

ex:["5","10","20","35"] in this range of values exist (5%,10%,15%)

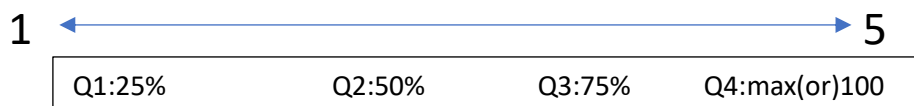
*How will you calculate **PERCENTILE**?or,what is the purpose of **PERCENTILE**?

1]Calculate the each part of **PERCENTILE** boundaries

*original dataset=[10,9,8,7,6,5,4,3,2,1,].....

*sorted dataset=[1,2,3,4,5,6,7,8,9,10].....change original dataset values to asending values[,

Initial value median highest value



$$i = k/100(n+1)$$

i=position of data value

k= **PERCENTILE**

N=number of dataset or observation

Why using **PERCENTILE**?

PERCENTILE provide into the distribution of data, statistical analysis and clear decision-making processes across.

	sl_no	ssc_p	hsc_p	degree_p	etest_p	mba_p	salary
mean	108.0	67.303395	66.333163	66.370186	72.100558	62.278186	288655.405405
median	108.0	67.0	65.0	66.0	71.0	62.0	265000.0
mode	1	62.0	63.0	65.0	60.0	56.7	300000.0
q1:25	54.5	60.6	60.9	61.0	60.0	57.945	240000.0
q2:50	108.0	67.0	65.0	66.0	71.0	62.0	265000.0
q3:75	161.5	75.7	73.0	72.0	83.5	66.255	300000.0
q4:100	215.0	89.4	97.7	91.0	98.0	77.89	940000.0

Each **PERCENTILE** represents a specific percentage of the data, now calculate each exist values between the range [Q1,Q2,Q3,Q4].

Overall SSC_P students percentage:

***Q1:25%=60.6**

***Q2:50%=67.0**

***Q3:75%=75.7**

***Q4:100%=89.4**

ssc_p ,In between Q1 to Q2:

position of Q1=7%

Position of Q2=8%

Position of Q3=14%

position of Q4=32.4%

Q4 corresponds to the 32.4% of 100th PERCENTILE of the data includes all the data points, position of Q4 or the full dataset,

Overall HSC_P students percentage:

***Q1:25%=60.9**

***Q2:50%=65.0**

***Q3:75%=73**

***Q4:100%=97.7**

HSC_P,In between Q1 to Q2:

position of Q1=5%

Position of Q2=8%

Position of Q3=24%

position of Q4=37.8%

Q4 corresponds to the 37.8 of 100th PERCENTILE of the data includes all the data points, position of Q4 or the full dataset,

Overall Degree_p students percentage:

***Q1:25%=61**

***Q2:50%=66**

***Q3:75%=72**

***Q4:100%=91**

Degree_p,In between Q1 to Q2:

position of Q1=5%

Position of Q2=6%

Position of Q3=19%

position of Q4=32.9 %

Q4 corresponds to the 32.9% of 100th PERCENTILE of the data includes all the data points, position of Q4 or the full dataset,

Overall etest_p students percentage:

***Q1:25%=60**

***Q2:50%=71**

***Q3:75%=83.5**

***Q4:100%=98**

etest_p,In between Q1 to Q2:

position of Q1=11%

Position of Q2=12.5%

Position of Q3=14.7%

position of Q4=38.97%

Q4 corresponds to the 38.97% of 100th PERCENTILE of the data includes all the data points, position of Q4 or the full dataset, it's not possible to determine the exact value for Q4.

Overall mba_p students percentage:

***Q1:25%=57.945**

***Q2:50%=62**

***Q3:75%=66.255**

***Q4:100%=77.89**

mba_p,In between Q1 to Q2:

position of Q1=4.5%

Position of Q2=4.2%

Position of Q3=11.605%

position of Q4=26.0%

Q4 corresponds to the 26.0% of 100th PERCENTILE of the data includes all the data points, position of Q4 or the full dataset, it's not possible to determine the exact value for Q4.

Overall best improvement percentage etest_p 38.97%