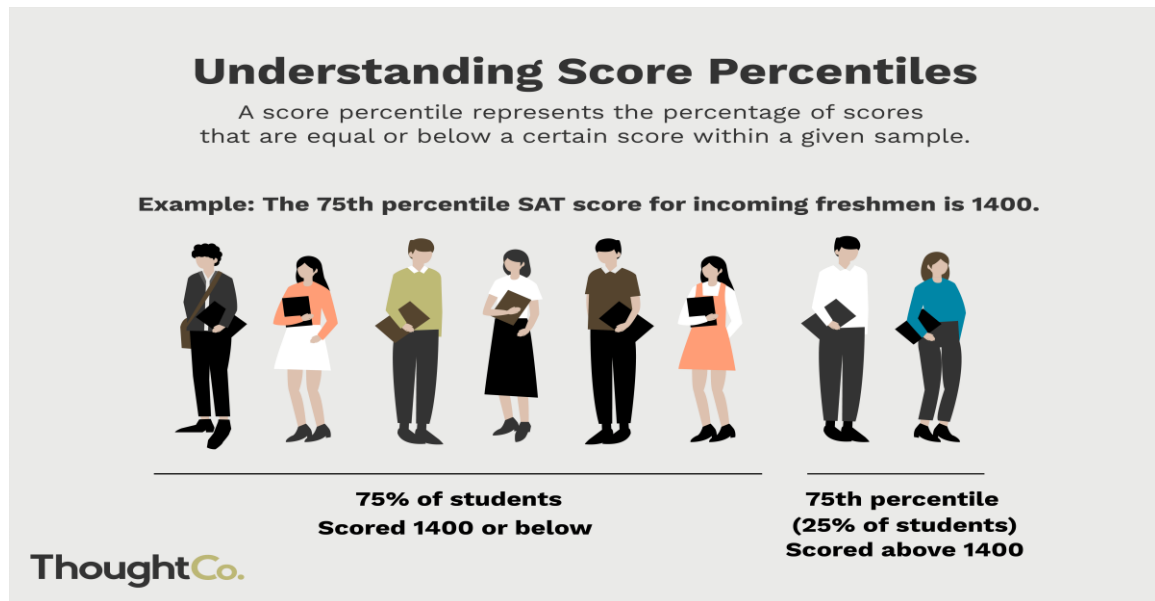


PERCENTILE

Numerical data can be sorted in increasing or decreasing order. Thus the values of a numerical data set have a rank order. A percentile is the value at a particular rank.



Formula for this is.

$$\begin{aligned}\text{Percentile Rank} &= \frac{\text{Percentile}}{100} \times (n + 1) \\ &= \frac{50}{100} \times (9 + 1) \\ &= 5\end{aligned}$$

Below is the result set for Percentile of Placement.csv file

	sl_no	ssc_p	hsc_p	degree_p	etest_p	mba_p	salary
Mean	108	67.3034	66.3332	66.3702	72.1006	62.2782	288655
Median	108	67	65	66	71	62	265000
Mode	1	62	63	65	60	56.7	300000
Q1:25%	54.5	60.6	60.9	61	60	57.945	240000
Q2:50%	108	67	65	66	71	62	265000
Q3:75%	161.5	75.7	73	72	83.5	66.255	300000
99%	212.86	87	91.86	83.86	97	76.1142	NaN
Q4:100%	215	89.4	97.7	91	98	77.89	940000

Let's see the increment growth difference of Q1:25%, Q2:50%, Q3:75%, 99%, Q4:100% for ssc_p, hsc_p, degree_p, etest_p, mba_p columns in Placement.csv file.

	ssc_p	hsc_p	degree_p	etest_p	mba_p
Q1:25% to Q2:50%	6.4%	4.1%	5%	11%	4.1%
Q2:50% to Q3:75%	8.7%	8%	6%	12.5%	4.3%
Q3:75% to 99%	11.3%	18.86%	11.86%	13.5%	9.85%
99% to Q4:100%	2.4%	5.84%	7.14%	1%	1.77%