# Percentile

### **Example: Placement data analysis**

We have a list of 215 students details like marks(percentage), course details, work experience, placement details like placed/ not placed and salary.

With the above details we took the Quantitative(numeric) columns and found the Q1:25%, Q2:50%, Q3:75%, Q4:100% percentage from the Placement list.

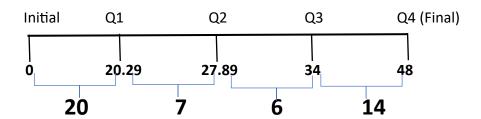
Below screenshot has the min, max, Q1:25%, Q2:50%, Q3:75%, 99%, Q4:100% values found from the Placement list.

	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
Min	1	40.89	37.0	50.0	50.0	51.21	200000.0
Max	215	89.4	97.7	91.0	98.0	77.89	940000.0
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
99%	212.86	87.0	91.86	83.86	97.0	76.1142	NaN
Q4:100%	215.0	89.4	97.7	91.0	98.0	77.89	940000.0

## SSC\_P:

- Min marks scored by the student was 40.89 and max was 89.4.
- 25% of students scored between 40.89 to 60.6 (approx. there is difference of 20.29 marks between the students)
- 50% of students scored between 40.89 to 67.0 (approx. there is difference of 27.89 marks between the students)
- 75% of students scored between 40.89 to 75.7 (approx. there is difference of 34 marks between the students)
- 99% of students scored between 40.89 to 87.0 (approx. there is difference of 46 marks between the students)

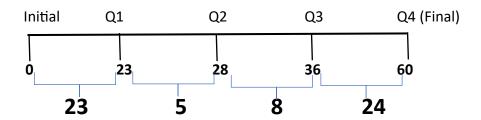
- 100% of students scored between 40.89 to 89.4 (approx. there is difference of 48 marks between the students)
- Approximately there is a difference of 2 marks between 99% and 100%.



• On the above diagram we can see there is a little high difference from Q3 and Q4. So there is a change of outlets present in the placement data for ssc p marks.

### HSC\_P:

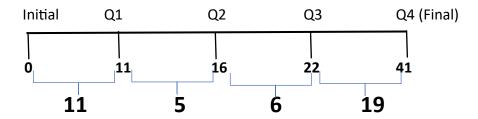
- Min marks scored by the student was 37.0 and max was 97.7.
- 25% of students scored between 37.0 to 60.9 (approx. there is difference of 23 marks between the students)
- 50% of students scored between 37.0 to 65.0 (approx. there is difference of 28 marks between the students)
- 75% of students scored between 37.0 to 73.0 (approx. there is difference of 36 marks between the students)
- 99% of students scored between 37.0 to 91.86 (approx. there is difference of 54 marks between the students)
- 100% of students scored between 37.0 to 97.7 (approx. there is difference of 60 marks between the students)
- Approximately there is a difference of 5 marks between 99% and 100%.



On the above diagram we can see there is a little high difference from Q3 and Q4. So
there is a change of outlets present in the placement data for hsc\_p marks.

#### Degree\_P:

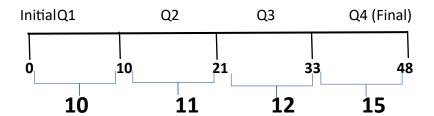
- Min marks scored by the student was 50.0 and max was 91.0.
- 25% of students scored between 50.0 to 61 (approx. there is difference of 11 marks between the students)
- 50% of students scored between 50.0 to 66.0 (approx. there is difference of 16 marks between the students)
- 75% of students scored between 50.0 to 72.0 (approx. there is difference of 22 marks between the students)
- 99% of students scored between 50.0 to 83.86 (approx. there is difference of 33 marks between the students)
- 100% of students scored between 50.0 to 91 (approx. there is difference of 41 marks between the students)
- Approximately there is a difference of 8 marks between 99% and 100%.



• On the above diagram we can see there is a little high difference from Q3 and Q4. So there is a change of outlets present in the placement data for degree p marks.

### Etest\_P:

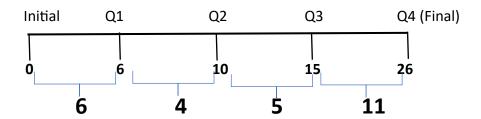
- Min marks scored by the student was 50.0 and max was 98.0.
- 25% of students scored between 50.0 to 60 (approx. there is difference of 10 marks between the students)
- 50% of students scored between 50.0 to 71.0 (approx. there is difference of 21 marks between the students)
- 75% of students scored between 50.0 to 83.5 (approx. there is difference of 33 marks between the students)
- 99% of students scored between 50.0 to 97.0 (approx. there is difference of 47 marks between the students)
- 100% of students scored between 50.0 to 98 (approx. there is difference of 48 marks between the students)
- Approximately there is a difference of 1 marks between 99% and 100%.



• On the above diagram we can see there is no much difference between each quadrants. So there is no outlets present in Etest\_p marks.

#### MBA\_P:

- Min marks scored by the student was 51.21 and max was 77.89.
- 25% of students scored between 51.21 to 57.945 (approx. there is difference of 6 marks between the students)
- 50% of students scored between 51.21 to 62.0 (approx. there is difference of 10 marks between the students)
- 75% of students scored between 51.21 to 66.255 (approx. there is difference of 15 marks between the students)
- 99% of students scored between 51.21 to 76.11 (approx. there is difference of 24 marks between the students)
- 100% of students scored between 51.21 to 77.89 (approx. there is difference of 26 marks between the students)
- Approximately there is a difference of 2 marks between 99% and 100%.



• On the above diagram we can see there is no much difference between each quadrants. So there is no outlets present in mba\_p marks.

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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
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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
99%	212.86	87.0	91.86	83.86	97.0	76.1142	NaN
Q4:100%	215.0	89.4	97.7	91.0	98.0	77.89	940000.0

## Salary:

- If students scored average marks around 60% there expected salary might range between 240000 Rs.
- If students scored average marks around 65% 70% there expected salary might range between 265000 Rs.
- If students scored good marks around 75% there expected salary might range between 300000 Rs.
- If students scored High marks above 90% there expected salary might range between 940000 Rs.