# IQR REPORT

	sl_no	ssc_p	hsc_p	degree_p	etest_p	mba_p	salary
Mean	103	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
IQR	107	15.1	12.1	11	23.5	8.31	60000
1.5rule	160.5	22.65	18.15	16.5	35.25	12.465	90000
Lesser	-106	37.95	42.75	44.5	24.75	45.48	150000
Greater	322	98.35	91.15	88.5	118.75	78.72	390000
Min	1	40.89	37	50	50	51.21	200000
Max	215	89.4	97.7	91	98	77.89	940000

## IQR (Interquartile Range)-

- Measures the spread of the middle 50% of the data.
- Indicates the variability in the dataset (Q3 Q1).

#### 1.5 Rule (Used to Detect Outliers)-

- Calculated as  $1.5 \times IQR$ .
- Helps determine boundaries beyond which values may be considered outliers.

#### Lesser Bound (Lower Outlier Threshold)-

 Values below this threshold are considered potential lower outliers.

## Greater Bound (Upper Outlier Threshold)

 Values above this threshold are considered potential upper outliers.

### Minimum (Observed)

• The **lowest** value in each column.

#### Maximum (Observed)

• The **highest** value in each column.

# Key Insights

- SSC\_P has a very wide outlier upper boundary (118.05), which is unusually high since the max observed is only 89.4—indicating no upper outliers but potential data skewness.
- Salary has a large IQR (400000) and high potential outlier boundaries, suggesting salary distribution is wide and might contain high-end outliers.
- MBA\_P has the narrowest IQR (8.31), showing less variation in MBA performance among candidates.
- No observed values fall below the "Lesser Bound" for any feature, indicating no **lower outliers**.
- Only salary might have upper outliers, as the maximum (940000) exceeds the upper bound of 900000.