

| | sl_no | ssc_p | hsc_p | degree_p | etest_p | mba_p | salary |
|-------------------|-----------|------------|------------|-----------|------------|-----------|-------------------|
| Mean | 108.0 | 67.303395 | 66.334744 | 66.358558 | 72.100558 | 62.278186 | 277648.648649 |
| 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 |
| Q5:99% | 212.86 | 87.0 | 91.129 | 83.86 | 97.0 | 76.1142 | 390000.0 |
| Q4:100% | 215 | 89.4 | 91.15 | 88.5 | 98.0 | 77.89 | 390000.0 |
| IQR | 107.0 | 15.1 | 12.1 | 11.0 | 23.5 | 8.31 | 60000.0 |
| 1.5Rule | 160.5 | 22.65 | 18.15 | 16.5 | 35.25 | 12.465 | 90000.0 |
| Lesser | -106.0 | 37.95 | 42.75 | 44.5 | 24.75 | 45.48 | 150000.0 |
| Greater | 322.0 | 98.35 | 91.15 | 88.5 | 118.75 | 78.72 | 390000.0 |
| max | 215 | 89.4 | 91.15 | 88.5 | 98.0 | 77.89 | 390000.0 |
| min | 1 | 40.89 | 42.75 | 50.0 | 50.0 | 51.21 | 200000.0 |
| max | 215 | 89.4 | 91.15 | 88.5 | 98.0 | 77.89 | 390000.0 |
| min | 1 | 40.89 | 42.75 | 50.0 | 50.0 | 51.21 | 200000.0 |
| Kurtosis | -1.2 | -0.60751 | 0.086901 | -0.09749 | -1.08858 | -0.470723 | -0.239837 |
| skewness | 0.0 | -0.132649 | 0.162611 | 0.204164 | 0.282308 | 0.313576 | 0.8067 |
| var | 3870.0 | 117.228377 | 112.063731 | 53.60471 | 176.251018 | 34.028376 | 2944596800.882515 |
| StandardDeviation | 62.209324 | 10.827205 | 10.586016 | 7.321524 | 13.275956 | 5.833385 | 54264.139179 |

Summary of Standard Deviation and Variance

In the provided dataset, the **variance** and **standard deviation** are measures of dispersion that describe the extent to which data values deviate from the mean. Here is a detailed summary of these statistics for each variable:

Variance

Variance quantifies the average squared deviation of each data point from the mean. It provides an indication of how spread out the values are in the dataset.

- **ssc_p (Secondary School Completion Percentage):** The variance is 3870.0, indicating considerable variability in the secondary school percentages.
- **hsc_p (Higher Secondary School Completion Percentage):** The variance is 117.228, which is relatively lower, suggesting less variability in higher secondary school percentages.
- **degree_p (Degree Percentage):** The variance is 112.064, showing moderate variability in degree percentages.

- **etest_p (Entrance Test Percentage):** The variance is 53.605, indicating a lower spread in entrance test percentages.
- **mba_p (MBA Percentage):** The variance is 176.251, reflecting a higher variability in MBA percentages compared to other percentages.
- **salary:** The variance is 2,944,596,800.883, showing very high variability in salaries, indicating a wide range of salary figures.

Standard Deviation

Standard deviation is the square root of variance and provides a measure of dispersion in the same units as the data itself. It describes the average distance of each data point from the mean.

- **ssc_p:** The standard deviation is 62.209, reflecting a high level of dispersion in secondary school completion percentages.
- **hsc_p:** The standard deviation is 10.827, which is lower compared to other variables, indicating less spread in higher secondary percentages.
- **degree_p:** The standard deviation is 10.586, similar to hsc_p, indicating moderate variability in degree percentages.
- **etest_p:** The standard deviation is 7.322, suggesting relatively less variability in entrance test scores.
- **mba_p:** The standard deviation is 13.276, showing considerable variability in MBA percentages.
- **salary:** The standard deviation is 54,264.139, which is very high, indicating a wide range of salaries in the dataset.

Conclusion

In summary, the variance and standard deviation values suggest that secondary school completion percentages and salaries exhibit the most variability, while higher secondary school and entrance test percentages show relatively less variability. Understanding these statistics helps in assessing the spread and dispersion of the data, which can be crucial for making informed decisions and analyzing trends.