**Percentile:** A **percentile** is a statistical measure that indicates the value below which a given percentage of observations in a group of data falls. It helps understand how a particular value compares to the rest of the data. In simple words, percentiles are a way to express the relative standing of a value within a dataset, indicating what percentage of the data falls below that value.

## Findings regarding placement dataset:

| Percentile | ssc_p | hsc_p | degree_p | etest_p | mba_p  | salary |
|------------|-------|-------|----------|---------|--------|--------|
| Q1:25%     | 60.6  | 60.9  | 61       | 60      | 57.945 | 240000 |
| Q2:50%     | 67    | 65    | 66       | 71      | 62     | 265000 |
| Q3:75%     | 75.7  | 73    | 72       | 83.5    | 66.255 | 300000 |
| Q4:100%    | 89.4  | 97.7  | 91       | 98      | 77.89  | 940000 |

## **SSC Performance**

- Range: 60.6 89.4
- Strong steady growth across percentiles, showing consistent improvement in foundational education.

#### **HSC Performance**

- Range: 60.9 97.7
- Highest variability across education levels.
- **Observation:** Top 25% (Q3–Q4) students show a sharp rise from 73% → 97.7%, indicating major differentiation in higher secondary education.
- This stage might be a **strong filter for academic excellence**.

### **Degree Performance**

- Range: 61 91
- Moderate progression with percentiles; increase flattens after 75th percentile, suggesting limited separation among top performers.
- Insight: Degree marks less variable, implying standardized grading or smaller impact on performance spread.

#### **E-Test Performance**

- Range: 60 98
- Steep rise from Q2 (71) to Q3 (83.5) and up to 98 at top percentiles.
- Indicates **etesting performance**, possibly influenced by preparation levels.
- Strong upward pattern correlates with high salaries at upper quartiles.

# **MBA Performance**

- Range: 57.9 77.89
- More stable growth between Q3 and Q4.

# **Salary Distribution**

- Range: 240,000 940,000
- Median (Q2) = 265,000
- Upper quartile (Q3) = 300,000
- Top salary (Q4) =  $940,000 \rightarrow$  more than  $3 \times$  increase from median.