

**Update 중**

## **Data Quality Score matrix**

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# Table score

- Data Quality Score
  - $Q_i$  = Data quality issues identified for a column
  - $T_i$  = Total row number
  - $C_i$  = Number of columns in table
  - $P_n$  = if the column required Y then have weight. The weight is proportion of completeness

$$QS = \frac{\left(1 - \sum_{i=1}^n \frac{Q_i}{T_i}\right) * \left(1 - \sum_{i=1}^n \frac{P_i}{T_i}\right)}{N}$$

# 예시)

- Data Quality Score

Table 1. Data quality score with rules calculation

Column 1*	Column 1 quality dimensions	Column 2	Column 2 quality dimensions	Column 3	Column 3 quality dimensions
555-123-4567		17 King Way		<u>555-123-4567</u>	Duplicate value
555-456-1234		22 B Street		555-123-4568	
<u>4567</u>	Rule violation	45 H Lane		555-123-4569	
555-0236-8565		6 Villa Drive		555-123-4520	
555-236-8596		4 Parker Road		<u>555-123-4567</u>	Duplicate value
555-897-5632		<u>NULL</u>	Missing value	555-123-4530	
<u>Renee</u>	<ul style="list-style-type: none"><li>• Suspect value</li><li>• Rule violation</li></ul>	<u>NULL</u>	Missing value	<u>NULL</u>	Missing value
<u>NULL</u>	<ul style="list-style-type: none"><li>• Missing value</li><li>• Rule violation</li></ul>		Missing value	555-123-4545	
555-897-8523		<u>555-123-4567</u>	Suspect value	<u>NULL</u>	Mission value
<u>3</u>	Rule violation	<u>09876</u>	Suspect value	555-123-4555	

- **Column 1:** 4/10 data quality issues identified for a column quality score of 60 percent.
- **Column 2:** 5/10 data quality issues identified for a column quality score of 50 percent.
- **Column 3:** 4/10 data quality issues identified for a column quality score of 60 percent.
- **Data set quality score:**  $(60+50+60) / 3 = 57$  percent.

- Column 1: 4/10 data quality issues identified for a column score of 60%
- Column 2: 5/10 data quality issues identified for a column score of 50% and Penalty value 3/10
- Column 3: 4/10 data quality issues identified for a column score of 60%
- Data set quality score:  $(1 - 4/10) + ((1 - 3/10) * (2/10)) + (1 - 4/10) / 3 = 0.45$