Strong Tpcc80 consistency check

TPC-C pages 48-50

Note the queries are simple because joining was taking up a lot of space in the cmd line which only has space for 255 characters

SQL> select from \_Tables

|----------|----|------|-------|----|

|Name |Cols|Rows |Indexes|Uid |

|----------|----|------|-------|----|

|WAREHOUSE |9 |1 |1 |0 |

|DISTRICT |11 |10 |2 |133 |

|CUSTOMER |21 |30000 |1 |333 |

|HISTORY |8 |30000 |0 |704 |

|ORDER |8 |30295 |1 |832 |

|NEW\_ORDER |3 |9295 |1 |984 |

|ITEM |5 |100000|1 |1059|

|STOCK |17 |100000|3 |1148|

|ORDER\_LINE|10 |287011|1 |1477|

|DELIVERY |5 |33 |1 |1687|

|----------|----|------|-------|----|

# Check 1 Failed

SQL> select W\_YTD from WAREHOUSE

|----------|

|W\_YTD |

|----------|

|1173837.59|

|----------|

SQL> select SUM(D\_YTD) from DISTRICT

|---------|

|col1 |

|---------|

|917848.84|

|---------|

# Check 2 Passed

SQL> select D\_ID, D\_NEXT\_O\_ID from DISTRICT

|----|-----------|

|D\_ID|D\_NEXT\_O\_ID|

|----|-----------|

|1 |3030 |

|2 |3034 |

|3 |3030 |

|4 |3034 |

|5 |3037 |

|6 |3037 |

|7 |3040 |

|8 |3029 |

|9 |3033 |

|10 |3001 |

|----|-----------|

SQL> select max(O\_ID) FROM ORDER

|----|

|col1|

|----|

|3039|

|----|

SQL> select max(NO\_O\_ID) from NEW\_ORDER

|----|

|col1|

|----|

|3039|

|----|

select max(NO\_O\_ID) from NEW\_ORDER where NO\_D\_ID=1

|----|

|col1|

|----|

|3029|

|----|

# Check 3 Passed

select max(NO\_O\_ID) - min(NO\_O\_ID) + 1 from NEW\_ORDER where NO\_D\_ID=1

|----|

|col1|

|----|

|929 |

|----|

select count(NO\_O\_ID) from NEW\_ORDER where NO\_D\_ID=1

|----|

|col1|

|----|

|929 |

|----|

SQL> select max(NO\_O\_ID) - min(NO\_O\_ID) + 1 from NEW\_ORDER where NO\_D\_ID=6

|----|

|col1|

|----|

|936 |

|----|

SQL> select count(NO\_O\_ID) from NEW\_ORDER where NO\_D\_ID=6

|----|

|col1|

|----|

|936 |

|----|

# Check 4 Failed

select SUM(O\_OL\_CNT) from ORDER where O\_D\_ID =3

|-----|

|col1 |

|-----|

|24320|

|-----|

select count(OL\_O\_ID) from ORDER\_LINE where OL\_D\_ID=3

|-----|

|col1 |

|-----|

|28703|

|-----|

SQL> select SUM(O\_OL\_CNT) from ORDER

|------|

|col1 |

|------|

|244000|

|------|

# Check 5 Passed

select O\_CARRIER\_ID from ORDER where O\_CARRIER\_ID IS NULL and (O\_D\_ID, O\_ID) NOT IN ( NO\_D\_ID, NO\_O\_ID)

|------------|

|O\_CARRIER\_ID|

|------------|

|------------|

# Check 6 Failed

# SQL> select count(OL\_O\_ID), OL\_D\_ID from ORDER\_LINE groupby OL\_D\_ID orderby OL\_D\_ID

# |-----|-------|

# |col1 |OL\_D\_ID|

# |-----|-------|

# |28556|1 |

# |29037|2 |

# |28703|3 |

# |28699|4 |

# |28761|5 |

# |28638|6 |

# |28863|7 |

# |28605|8 |

# |28726|9 |

# |28423|10 |

# |-----|-------|

# SQL> select SUM(O\_OL\_CNT), O\_D\_ID from ORDER groupby O\_D\_ID orderby O\_D\_ID

# |-----|------|

# |col1 |O\_D\_ID|

# |-----|------|

# |24322|1 |

# |24591|2 |

# |24320|3 |

# |24416|4 |

# |24202|5 |

# |24643|6 |

# |24303|7 |

# |24241|8 |

# |24555|9 |

# |24407|10 |

# |-----|------|Check 7 Not verified

select OL\_D\_ID, COUNT(OL\_O\_ID) from ORDER\_LINE INNER JOIN ORDER ON (O\_D\_ID=OL\_D\_ID and OL\_O\_ID=O\_ID) where ((OL\_DELIVERY\_D IS NULL ) and NOT(O\_CARRIER\_ID IS NULL) ) groupby OL\_D\_ID

Syntax error at **NOTNULL**

select COUNT(OL\_O\_ID) from ORDER\_LINE, ORDER where (OL\_DELIVERY\_D IS NULL and O\_CARRIER\_ID NOTNULL) and (O\_D\_ID=OL\_D\_ID and OL\_O\_ID=O\_ID) groupby OL\_D\_ID

# Check 8 Failed

SQL> select W\_YTD from WAREHOUSE

|----------|

|W\_YTD |

|----------|

|1173837.59|

|----------|

SQL> SELECT SUM(H\_AMOUNT) from HISTORY

|------|

|col1 |

|------|

|300000|

|------|

# Check 9 Failed

SQL> select D\_YTD from DISTRICT where D\_ID=2

|---------|

|D\_YTD |

|---------|

|110215.59|

|---------|

SQL> select SUM(H\_AMOUNT) from HISTORY where H\_D\_ID = 2

|-----|

|col1 |

|-----|

|30000|

|-----|

# Check 10 Not Verified

[select C\_ID, C\_BALANCE, (SUM(OL\_AMOUNT) – SUM(H\_AMOUNT)) from CUSTOMER INNER JOIN HISTORY ON ( C\_D\_ID=H\_C\_D\_ID and C\_ID=H\_C\_ID) INNER JOIN ORDER ON (O\_D\_ID= C\_D\_ID and O\_C\_ID= C\_ID) INNER JOIN ORDER\_LINE ON (OL\_D\_ID= O\_D\_ID and OL\_O\_ID=O\_ID)

where NOT(OL\_DELIVERY\_D IS NULL) groupby C\_ID, C\_BALANCE]

SQL> select C\_ID, C\_BALANCE, (SUM(OL\_AMOUNT) - SUM(H\_AMOUNT)) from CUSTOMER INNER JOIN HISTORY ON ( C\_D\_ID=H\_C\_D\_ID and C\_ID=H\_C\_ID) INNER JOIN ORDER ON (O\_D\_ID= C\_D\_ID and O\_C\_ID= C\_ID) INNER JOIN ORDER\_LINE ON (OL\_D\_ID= O\_D\_ID and OL\_O\_ID=O\_ID) where OL\_D

**Column matching expression expected**

# Check 11 Passed

SQL> select count(NO\_O\_ID) , NO\_D\_ID from NEW\_ORDER groupby NO\_D\_ID orderby NO\_D\_ID

|----|-------|

|col1|NO\_D\_ID|

|----|-------|

|929 |1 |

|933 |2 |

|929 |3 |

|933 |4 |

|936 |5 |

|936 |6 |

|939 |7 |

|928 |8 |

|932 |9 |

|900 |10 |

|----|-------|

SQL> select count(O\_ID) , O\_D\_ID from ORDER groupby O\_D\_ID orderby O\_D\_ID

|----|------|

|col1|O\_D\_ID|

|----|------|

|3029|1 |

|3033|2 |

|3029|3 |

|3033|4 |

|3036|5 |

|3036|6 |

|3039|7 |

|3028|8 |

|3032|9 |

|3000|10 |

|----|------|

# Check 12 Not Verified (does not appear to recognise NOTNULL OR NOT NULL)

select sum(OL\_AMOUNT), (C\_BALANCE+C\_YTD\_PAYMENT)from ORDER\_LINE INNER JOIN ORDER on OL\_O\_ID=O\_ID INNER JOIN CUSTOMER on O\_C\_ID=C\_ID where NOT(OL\_DELIVERY\_D IS NULL)groupby C\_ID,(C\_BALANCE+ C\_YTD\_PAYMENT)

select sum(OL\_AMOUNT), (C\_BALANCE + C\_YTD\_PAYMENT)from ORDER\_LINE INNER JOIN ORDER on OL\_O\_ID=O\_ID INNER JOIN CUSTOMER on O\_C\_ID=C\_ID where C\_ID = 1 groupby C\_ID,(C\_BALANCE+ C\_YTD\_PAYMENT)