530 A7 report

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How to run the program?

1. Build the program in the directory A7/Build, use command:
   ~/scons/bin/scons-2.4.1
2. Start the database using the command:
   ./bin/sqlUnitTest catalop TPC-H/
3. Create tables after the prompt >MyDB using sql sentences in the file CreateTables-4-2.sql
4. Load tables from data in TPC-H using command like following:
   LOAD lineitem FROM
   /Users/yiwenchen/Documents/RiceCourses/2_530/A7/TPC-H/lineitem.tbl;
5. Copy sql command after prompt >MyDB
6. To quit the program, using command
   quit;

Results run on the laptop

1.

```
Query run time: 96 s.
The fist 30 records:
furiously ir|
Total number of records: 1
MyDB> 
```

2.

```
Query run time: 105 s.
The fist 30 records:
420|
547|
5895|
10917|
17701|
22182|
43045|
44741|
56866|
58052|
84003|
89059|
90912|
92198|
94439|
95075|
95845|
99392|
100481|
110279|
110530|
111425|
124290|
128865|
131525|
132993|
140418|
141381|
143524|
147301|
Total number of records: 1057
MyDB> 
```

3.

```
Query run time: 16 s.
The fist 30 records:
292098|3.620425|
Total number of records: 1
MyDB> 
```

4.

```
Query run time: 19 s.
The fist 30 records:
150835.974587|order priority was 5-LOW|
149861.679798|order priority was 4-NOT SPECIFIED|
150079.996233|order priority was 3-MEDIUM|
150799.842937|order priority was 2-HIGH|
150520.296940|order priority was 1-URGENT|
Total number of records: 5
MyDB>
```

5.

```
Query run time: 102 s.
The fist 30 records:
return flag was N|7826475|11731187444.120041|11144649274.750301|11590849811.731108|25.487758|38203.874855|0.04999
4|307068|
Total number of records: 1
```

6.

```
Query run time: 130 s.
The fist 30 records:
Total number of records: 0
MyDB>
```

7.

```
Query run time: 67 s.
The fist 30 records:
1|665.290000|
2|646.880000|
5|219.830000|
7|763.980000|
8|916.910000|
9|188.020000|
10|418.635000|
12|498.395000|
13|409.506667|
14|891.445000|
15|458.670000|
18|367.633333|
19|144.800000|
20|675.540000|
23|103.130000|
25|694.350000|
27|348.610000|
28|204.860000|
29|857.885000|
33|929.050000|
34|265.310000|
35|540.180000|
37|15.720000|
43|493.190000|
44|608.080000|
45|919.630000|
46|106.800000|
48|611.160000|
53|388.080000|
54|686.510000|
Total number of records: 119448
MyDB>
```

8.

```
Query run time: 534 s.
The fist 30 records:
SAUDI ARABIA|1996-01-02|18316.272000|
ARGENTINA|1995-10-23|30559.662400|
BRAZIL|1992-10-21|62029.220000|
MOZAMBIQUE|1995-05-25|16423.440000|
CANADA|1994-09-29|25808.715200|
ETHIOPIA|1992-10-02|9102.854800|
KENYA|1994-06-30|16469.250000|
MOROCCO|1996-10-01|12667.087500|
UNITED STATES|1993-05-08|16097.496800|
KENYA|1992-10-08|64422.019200|
IRAQ|1997-03-26|73932.740000|
RUSSIA|1993-08-29|32767.364000|
INDONESIA|1997-02-23|36191.040000|
ARGENTINA|1993-01-27|29435.542500|
GERMANY|1993-09-23|11956.376000|
IRAQ|1998-05-23|35616.753900|
JORDAN|1993-04-17|1054.100000|
IRAQ|1995-03-18|19184.499600|
EGYPT|1998-01-29|19752.800000|
JORDAN|1993-03-09|7511.914000|
PERU|1997-09-24|1373.122400|
INDIA|1993-09-05|2605.320300|
INDIA|1998-05-15|15207.480000|
JAPAN|1995-03-04|54104.179200|
RUSSIA|1998-07-30|40551.258000|
JORDAN|1998-07-30|291.942900|
GERMANY|1996-10-19|28146.728400|
ETHIOPIA|1996-08-15|9496.427600|
CANADA|1992-01-02|20866.500000|
ARGENTINA|1993-01-11|3262.050000|
Total number of records: 160089
MyDB>      >      > █
```

9.

Segment fault

10.

run unsuccessfully