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CSC 453 Section 810

Assignment 2

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1)

The screenshot displays a SQL query execution interface. At the top, the 'Query Builder' tab is active, showing the query: `select distinct rentalcompany from bycar where (mileage >= 27);`. Below the query editor, the 'Query Result' tab is selected, indicating 'All Rows Fetched: 1 in 0.114 seconds'. The result is displayed in a table with one column, 'RENTALCOMPANY', and one row, '1 Personal'. At the bottom, the 'SQL History' tab is active, showing a table with columns: SQL, Connection, TimeStamp, Type, Executed, and Duration(se...). The history table contains one entry for the executed query.

SQL	Connection	TimeStamp	Type	Executed	Duration(se...)
select distinct rentalcompany from bycar where (mileage >= 27);	CSC452	10-FEB-19 0...	SQL	2	0.114

2)

Worksheet Query Builder

```
select tid from trips where (travelmode = 'Train' and fare > 150);
```

Query Result x

SQL | All Rows Fetched: 5 in 0.058 seconds

	TID
1	4
2	6
3	10
4	12
5	24

SQL History

SQL	Connection	TimeStamp	Type	Executed	Duration(se...)
select tid from trips where (travelmode = 'Train' and fare > 150);	CSC452	10-FEB-19 0...	SQL	1	0.058

3)

Worksheet Query Builder

```
select tid, fare from trips where tripstate = 'Non-US';
```

Query Result x

SQL | All Rows Fetched: 8 in 0.03 seconds

	TID	FARE
1	5	2300
2	7	5000
3	10	229
4	11	4500
5	12	258
6	14	138
7	17	3700
8	22	40

SQL History

SQL	Connection	TimeStamp	Type	Executed	Duration(se...)
select tid, fare from trips where tripstate = 'Non-US';	CSC452	10-FEB-19 0...	SQL	2	0.03

4)

Worksheet Query Builder

```
select distinct byplane.tid from trips, byplane where byplane.class = 'Business' and trips.fare > 1000;
```

Query Result x

All Rows Fetched: 1 in 0.014 seconds

TID
3

SQL History

SQL	Connection	TimeStamp	Type	Executed	Duration(se...)
select distinct byplane.tid from trips, byplane where byplane.class = 'Bu...	CSC452	10-FEB-19 0...	SQL	3	0.014

5)

Worksheet Query Builder

```
select tid from trips where travelmode = 'Car' and fare > any (select fare from trips where travelmode = 'Train');
```

Query Result x

SQL | All Rows Fetched: 8 in 0.022 seconds

	TID
1	9
2	15
3	21
4	25
5	1
6	18
7	20
8	16

SQL History

SQL	Connection	TimeStamp	Type	Executed	Duration(se...)
select tid from trips where travelmode = 'Car' and fare > any (select far...	CSC452	10-FEB-19 0...	SQL	4	0.022

6)

Worksheet

Query Builder

```

select tid1.tid, tid2.tid
  from (select * from bycar) tid1 inner join (select * from bycar) tid2 on tid1.mileage = tid2.mileage
 where tid1.tid < tid2.tid order by tid1.tid;

```

Query Result x

	TID	TID_1
1	1	9
2	1	25
3	9	25
4	15	18

SQL History

SQL	Connection	TimeStamp	Type	Executed	Duration(se...)
select tid1.tid, tid2.tid from (select * from bycar) tid1 inner join (se...	CSC452	10-FEB-19 0...	SQL	2	0.023

7)

Worksheet

Query Builder

```

select tid1.tid, tid2.tid
  from (select * from bytrain) tid1 inner join (select * from bytrain) tid2 on tid1.trainspeed != tid2.trainspeed
 where tid1.tid < tid2.tid order by tid1.tid;

```

Query Result x

	TID	TID_1
1	4	6
2	4	10
3	4	12
4	4	14
5	4	22
6	4	24
7	6	8
8	6	10
9	6	12
10	6	14
11	6	22
12	6	24
13	8	10
14	8	12
15	8	14
16	8	22
17	8	24
18	10	12
19	10	22
20	10	24
21	12	14
22	12	22
23	12	24
24	14	22

SQL History

SQL	Connection	TimeStamp	Type	Executed	Duration(se...)
select tid1.tid, tid2.tid from (select * from bytrain) tid1 inner join (s...	CSC452	10-FEB-19 0...	SQL	1	0.027

8)

Worksheet

Query Builder

```

select tid1.tid, tid2.tid
  from (select * from trips) tid1 inner join (select * from trips) tid2
    on tid1.tripstate = tid2.tripstate and tid1.travelmode = tid2.travelmode
  
```

Query Result x

SQL | All Rows Fetched: 26 in 0.027 seconds

	TID	TID_1
1	1	16
2	1	15
3	1	20
4	1	21
5	3	19
6	4	24
7	5	11
8	5	7
9	5	17
10	7	17
11	7	11
12	9	18
13	10	22
14	10	14
15	10	12
16	11	17
17	12	22
18	12	14
19	13	23
20	14	22
21	15	20
22	15	16
23	15	21
24	16	21

SQL History

SQL	Connection	TimeStamp	Type	Executed	Duration(se...)
select tid1.tid, tid2.tid from (select * from trips) tid1 inner join (sel...	CSC452	10-FEB-19 0...	SQL	2	0.027



9)

The screenshot shows a SQL Query Builder window with a 'Worksheet' tab and a 'Query Builder' tab. The query is as follows:

```
select distinct t1.tripstate from trips t1, trips t2, trips t3
where (t1.tid < t2.tid and t2.tid < t3.tid)
and (t1.tripstate = t2.tripstate and t2.tripstate = t3.tripstate)
and (t1.travelmode != t2.travelmode and t2.travelmode != t3.travelmode);
```

Below the query editor, the 'Query Result' tab is active, showing 'All Rows Fetched: 3 in 0.029 seconds'. The results are displayed in a table with the following data:

TRIPSTATE
1 MD
2 IL
3 Non-US

At the bottom, the 'SQL History' tab is active, showing a table of executed queries:

SQL	Connection	TimeStamp	Type	Executed	Duration(se...)
select distinct t1.tripstate from trips t1, trips t2, trips t3 where (t1....	CSC452	10-FEB-19 0...	SQL	2	0.029

10)

a.

Worksheet Query Builder

```
select tid from trips minus select t1.tid from trips t1, trips t2 where t1.fare != t2.fare and t1.fare < t2.fare;
```

Query Result x

All Rows Fetched: 1 in 0.047 seconds

TID
7

SQL History

SQL	Connection	TimeStamp	Type	Executed	Duration(se...)
select tid from trips minus select t1.tid from trips t1, trips t2 where t1.fare...	CSC452	10-FEB-19 0...	SQL	2	0.047

b.

Worksheet Query Builder

```
select tid from trips minus select t1.tid from trips t1, trips t2 where t1.fare != t2.fare and t1.fare > t2.fare;
```

Query Result x

All Rows Fetched: 1 in 0.017 seconds

TID
1

SQL History

SQL	Connection	TimeStamp	Type	Executed	Duration(se...)
select tid from trips minus select t1.tid from trips t1, trips t2 where t1.fare...	CSC452	10-FEB-19 0...	SQL	2	0.017