

Database

Ozioma Aguegboh

Homework #5

SQL: MULTI-TABLE QUERIES

Provide downloads of query outputs

1. For each reservation, list the reservation ID, trip ID, customer number, and customer last name. Order the results by customer last name.

```
1 SELECT RESERVATION.RESERVATION_ID, RESERVATION.TRIP_ID,
2 RESERVATION.CUSTOMER_NUM, CUSTOMER.LAST_NAME FROM RESERVATION LEFT JOIN
3 CUSTOMER ON RESERVATION.CUSTOMER_NUM=CUSTOMER.CUSTOMER_NUM
4 ORDER BY CUSTOMER.LAST_NAME;
```

Results Explain Describe Saved SQL History

RESERVATION_ID	TRIP_ID	CUSTOMER_NUM	LAST_NAME
1600024	38	121	Bretton-Borak
1600016	11	121	Bretton-Borak
1600018	38	126	Brown
1600026	12	126	Brown

ozioma.aguegboh@gmail.com Copyright © 1999, 2022, Oracle and/or its affiliates. Oracle APEX 22.1.3
oaguegboh1 en

Here are the downloads of my query outputs

RESERVATION_ID	TRIP_ID	CUSTOMER_NUM	LAST_NAME
1600024	38	121	Bretton-Borak
1600016	11	121	Bretton-Borak
1600018	38	126	Brown
1600026	12	126	Brown
1600020	28	124	Busa
1600019	25	124	Busa
1600009	38	109	Caron
1600022	21	119	Chau
1600014	12	119	Chau

1600029	4	120	Gernowski
1600015	10	120	Gernowski
1600030	15	104	Goff
1600004	26	104	Goff
1600017	39	122	Hefferson
1600021	32	112	Jones
1600003	28	103	Kasuma
1600007	22	107	Marchand
1600005	39	105	McLean
1600006	32	106	Morontoia
1600013	8	116	Murakami
1600001	40	101	Northfold
1600002	21	101	Northfold
1600011	3	102	Ocean
1600010	2	102	Ocean
1600025	38	125	Peterson
1600008	28	108	Rulf
1600012	1	115	Vaccari

- For each reservation for customer Ryan Goff, list the reservation ID, trip ID, and number of persons.

```

1  SELECT RESERVATION.RESERVATION_ID, RESERVATION.NUM_PERSONS,
2  RESERVATION.TRIP_ID, CUSTOMER.CUSTOMER_NUM FROM RESERVATION
3  INNER JOIN CUSTOMER ON RESERVATION.CUSTOMER_NUM=CUSTOMER.CUSTOMER_NUM WHERE
4  CUSTOMER.CUSTOMER_NUM = 104;

```

Results Explain Describe Saved SQL History

RESERVATION_ID	NUM_PERSONS	TRIP_ID	CUSTOMER_NUM
1600004	4	26	104
1600030	6	15	104

2 rows returned in 0.01 seconds [Download](#)

ozioma.aguegboh@gmail.com Copyright © 1999, 2022, Oracle and/or its Oracle APEX 22.1.3
oaguegboh1 en affiliates.

Here are the downloads of my query outputs

RESERVATION_ID	NUM_PERSONS	TRIP_ID	CUSTOMER_NUM
1600004	4	26	104
1600030	6	15	104

3. List the trip name of each trip that has Miles Abrams as a guide.

The screenshot shows the Oracle APEX SQL editor interface. The SQL editor contains the following query:

```
1 select trip.trip_name,guide.last_name,guide.first_name
2 from guide , trip , trip_guides
3 where
4 guide.guide_num = trip_guides.guide_num
5 and trip.trip_id = trip_guides.trip_id
6 and guide.guide_num = 'AM01';
```

Below the editor, the 'Results' tab is selected, displaying the following table:

TRIP_NAME	LAST_NAME	FIRST_NAME
Mt Ascutney - North Peak	Abrams	Miles
Long Pond	Abrams	Miles
McLennan Reservation Hike	Abrams	Miles

Below the table, it states '3 rows returned in 0.06 seconds' and provides a 'Download' link. The footer of the interface includes the user 'ozioma.agueboh@gmail.com', the session 'oagueboh1', the language 'en', the copyright notice 'Copyright © 1999, 2022, Oracle and/or its affiliates.', and the version 'Oracle APEX 22.1.3'.

Here are the downloads of my query outputs

TRIP_NAME	LAST_NAME	FIRST_NAME
Mt Ascutney - North Peak	Abrams	Miles
Long Pond	Abrams	Miles
McLennan Reservation Hike	Abrams	Miles

4. List the trip name of each trip that has the type Biking and that has Rita Boyers as a guide.

```

1  select trip_name,type,guide.last_name,guide.first_name,trip_guides.guide_num
2  from trip,trip_guides,guide
3  where trip.trip_id=trip_guides.trip_id
4  and trip_guides.guide_num=guide.guide_num
5  and type ='Biking' and guide.guide_num='BR01';

```

Results Explain Describe Saved SQL History

TRIP_NAME	TYPE	LAST_NAME	FIRST_NAME	GUIDE_NUM
Bradbury Mountain Ride	Biking	Boyers	Rita	BR01
Cadillac Mountain Ride	Biking	Boyers	Rita	BR01
Mount Battie Ride	Biking	Boyers	Rita	BR01
Westfield River Loop	Biking	Boyers	Rita	BR01

ozioma.aguegbah@gmail.com Copyright © 1999, 2022, Oracle and/or its affiliates. Oracle APEX 22.1.3

Here are the downloads of my query outputs

TRIP_NAME	TYPE	LAST_NAME	FIRST_NAME	GUIDE_NUM
Bradbury Mountain Ride	Biking	Boyers	Rita	BR01
Cadillac Mountain Ride	Biking	Boyers	Rita	BR01
Mount Battie Ride	Biking	Boyers	Rita	BR01
Westfield River Loop	Biking	Boyers	Rita	BR01

- For each reservation that has a trip date of July 23, 2016, list the customer's last name, the trip name, and the start location.

```

1  SELECT LAST_NAME, TRIP_NAME, START_LOCATION,
2  TRIP_DATE ,RESERVATION.TRIP_ID FROM (TRIP JOIN RESERVATION
3  ON RESERVATION.TRIP_ID=TRIP.TRIP_ID) JOIN CUSTOMER ON
4  CUSTOMER.CUSTOMER_NUM=RESERVATION.CUSTOMER_NUM
5  WHERE TRIP_DATE = '07/23/2016'

```

Results Explain Describe Saved SQL History

LAST_NAME	TRIP_NAME	START_LOCATION	TRIP_DATE	TRIP_ID
Gernowski	Mt. Cardigan - Firescrew	Orange	07/23/2016	10
Bretton-Borak	Chocorua Lake Tour	Tamworth	07/23/2016	11

2 rows returned in 0.01 seconds [Download](#)

ozioma.aguegbah@gmail.com Copyright © 1999, 2022, Oracle Oracle APEX 22.1.3

Here are the downloads of my query outputs

LAST_NAME	TRIP_NAME	START_LOCATION	TRIP_DATE	TRIP_ID
Gernowski	Mt. Cardigan - Firescrew	Orange	7/23/2016	10
Bretton-Borak	Chocorua Lake Tour	Tamworth	7/23/2016	11

6. List the reservation ID, trip ID, and trip date for reservations for a trip in Maine (ME). Use the IN operator in your query.
7. Repeat Exercise 6, but this time use the EXISTS operator in your query.
8. Find the guide last name and guide first name of all guides who can lead a paddling trip. (Note: The query results should include duplicate values.

```

1  select guide.last_name,guide.first_name,type
2  from trip,trip_guides,guide
3  where trip.trip_id=trip_guides.trip_id
4  and trip_guides.guide_num=guide.guide_num
5  and type='Paddling';

```

Results Explain Describe Saved SQL History

LAST_NAME	FIRST_NAME	TYPE
Devon	Harley	Paddling
Devon	Harley	Paddling
Devon	Harley	Paddling
Kiley	Susan	Paddling

 ozioma.aguegbogh@gmail.com
 oaguegbogh1  en

Copyright © 1999, 2022, Oracle and/or its affiliates. Oracle APEX 22.1.3

Here are the downloads of my query outputs

LAST_NAME	FIRST_NAME	TYPE
Devon	Harley	Paddling
Devon	Harley	Paddling
Devon	Harley	Paddling
Kiley	Susan	Paddling
Kiley	Susan	Paddling
Kiley	Susan	Paddling
Stevens	Lori	Paddling
Stevens	Lori	Paddling
Stevens	Lori	Paddling

Stevens	Lori	Paddling
Unser	Glory	Paddling
Unser	Glory	Paddling

9. 9. Repeat Exercise 8 but use aliases for the table names.

```
1 select g.last_name as Lname,g.first_name as Fname ,type as typeofevent
2 from trip t,trip_guides tg, guide g
3 where t.trip_id=tg.trip_id
4 and tg.guide_num=g.guide_num
5 and type='Paddling';
```

Results Explain Describe Saved SQL History

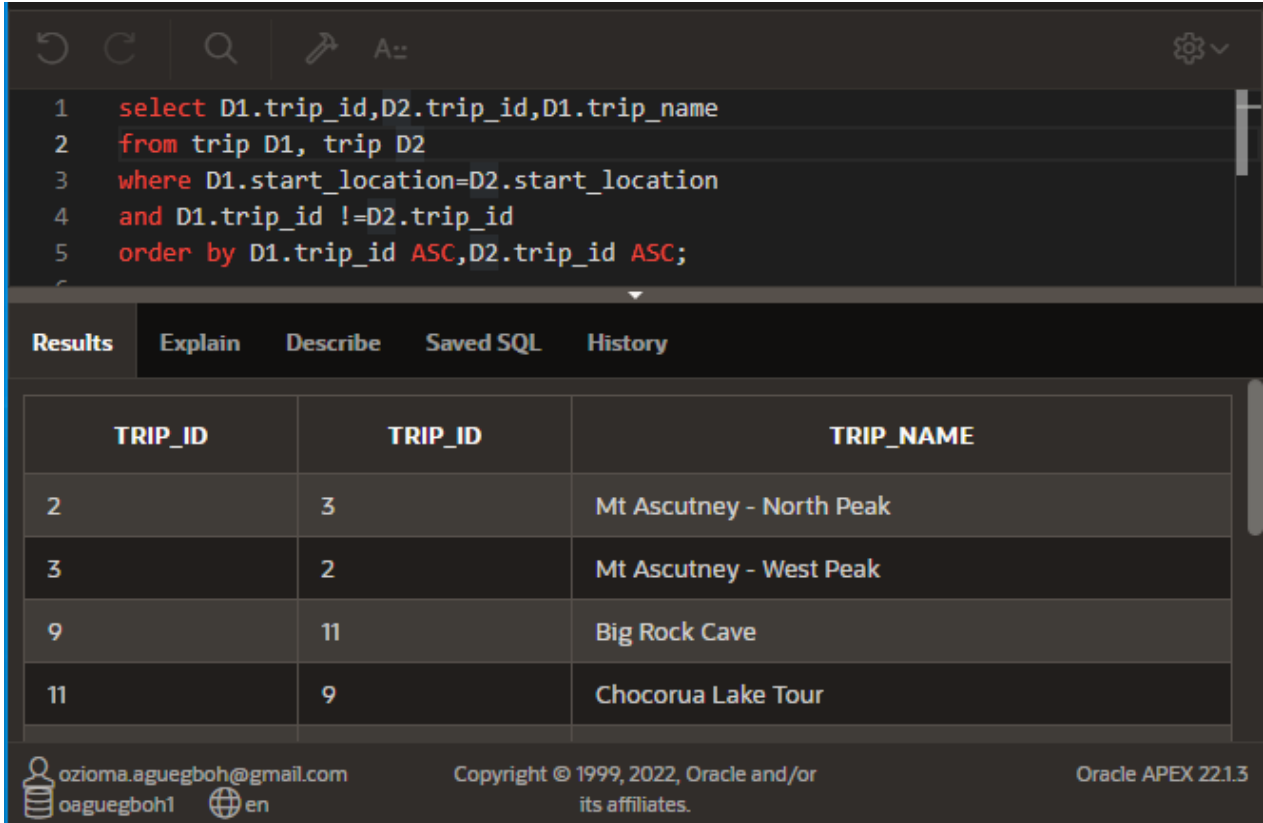
LNAME	FNAME	TYPEOFEVENT
Devon	Harley	Paddling
Devon	Harley	Paddling
Devon	Harley	Paddling
Kiley	Susan	Paddling

ozioma.aguegbah@gmail.com Copyright © 1999, 2022, Oracle and/or Oracle APEX 22.1.3
oaguegbah1 en its affiliates.

Here are the downloads of my query outputs

LNAME	FNAME	TYPEOFEVENT
Devon	Harley	Paddling
Devon	Harley	Paddling
Devon	Harley	Paddling
Kiley	Susan	Paddling
Kiley	Susan	Paddling
Kiley	Susan	Paddling
Stevens	Lori	Paddling
Stevens	Lori	Paddling
Stevens	Lori	Paddling
Stevens	Lori	Paddling
Unser	Glory	Paddling
Unser	Glory	Paddling

10. List the trip IDs and trip names for each pair of trips that have the same start location. (For example, one such pair would be trip ID 2 and trip ID 3, because the start location of both trips is Weathersfield.) The first trip ID listed should be the major sort key, and the second trip ID should be the minor sort key.



The screenshot shows an Oracle APEX SQL editor interface. The SQL query is as follows:

```

1 select D1.trip_id,D2.trip_id,D1.trip_name
2 from trip D1, trip D2
3 where D1.start_location=D2.start_location
4 and D1.trip_id !=D2.trip_id
5 order by D1.trip_id ASC,D2.trip_id ASC;

```

Below the query, the 'Results' tab is active, displaying a table with the following data:

TRIP_ID	TRIP_ID	TRIP_NAME
2	3	Mt Ascutney - North Peak
3	2	Mt Ascutney - West Peak
9	11	Big Rock Cave
11	9	Chocorua Lake Tour

At the bottom of the interface, the footer information includes the user 'ozioma.aguegboh@gmail.com', the copyright notice 'Copyright © 1999, 2022, Oracle and/or its affiliates.', and the version 'Oracle APEX 22.1.3'.

Here are the downloads of my query outputs

TRIP_ID	TRIP_ID	TRIP_NAME
2	3	Mt Ascutney - North Peak
3	2	Mt Ascutney - West Peak
9	11	Big Rock Cave
11	9	Chocorua Lake Tour
12	13	Cadillac Mountain Ride
12	17	Cadillac Mountain Ride
12	37	Cadillac Mountain Ride
13	12	Cadillac Mountain
13	17	Cadillac Mountain
13	37	Cadillac Mountain

17	12	Huguenot Head Hike
17	13	Huguenot Head Hike
17	37	Huguenot Head Hike
37	12	Seal Beach Harbor
37	13	Seal Beach Harbor
37	17	Seal Beach Harbor

11. Find the trip name of all reservations for hiking trips and sort the results by trip name in ascending order.

```
1 select trip_name
2 from trip,reservation
3 where trip.trip_id=reservation.trip_id
4 | and type='Hiking'
5 order by trip_name ASC;
```

Results Explain Describe Saved SQL History

TRIP_NAME
Arethusa Falls
Black Pond
Crawford Path Presidentials Hike
Long Pond

ozioma.agueboh@gmail.com Copyright © 1999, 2022, Oracle and/or Oracle APEX 22.1.3
oagueboh1 en its affiliates.

Here are the downloads of my query outputs

TRIP_NAME
Arethusa Falls
Black Pond
Crawford Path Presidentials Hike
Long Pond
Long Pond
Mount Cardigan Hike
Mount Garfield Hike
Mount Garfield Hike
Mount Garfield Hike
Mt Ascutney - North Peak
Mt Ascutney - West Peak
Mt. Cardigan - Firescrew
Wachusett Mountain
Welch and Dickey Mountains Hike
Welch and Dickey Mountains Hike

12. Display the trip ID, trip name, and reservation ID for all trips. All trips should be included in the result. For those trips that currently do not have reservations, the reservation ID should be left blank. Order the results by trip ID.



```

1  select trip.trip_id, trip.trip_name, reservation.reservation_id
2  from trip left outer join reservation
3  on trip.trip_id=reservation.trip_id
4  order by trip_id;

```

Results Explain Describe Saved SQL History

TRIP_ID	TRIP_NAME	RESERVATION_ID
1	Arethusa Falls	1600012
2	Mt Ascutney - North Peak	1600010
3	Mt Ascutney - West Peak	1600011
4	Bradbury Mountain Ride	1600029
5	Baldpate Mountain	-

 ozioma.aguegbogh@gmail.com
 oaguegbogh1  en
 Copyright © 1999, 2022, Oracle and/or its affiliates.
 Oracle APEX 22.1.3

Here are the downloads of my query outputs

TRIP_ID	TRIP_NAME	RESERVATION_ID
1	Arethusa Falls	1600012
2	Mt Ascutney - North Peak	1600010
3	Mt Ascutney - West Peak	1600011
4	Bradbury Mountain Ride	1600029
5	Baldpate Mountain	
6	Blueberry Mountain	
7	Bloomfield - Maidstone	
8	Black Pond	1600013
9	Big Rock Cave	
10	Mt. Cardigan - Firescrew	1600015
11	Chocorua Lake Tour	1600016

12	Cadillac Mountain Ride	1600014
12	Cadillac Mountain Ride	1600026
13	Cadillac Mountain	
14	Cannon Mtn	
15	Crawford Path Presidentials Hike	1600030
16	Cherry Pond	
17	Huguenot Head Hike	
18	Low Bald Spot Hike	
19	Mason's Farm	
20	Lake Mephremagog Tour	
21	Long Pond	1600002
21	Long Pond	1600022
22	Long Pond Tour	1600007
23	Lower Pond Tour	
24	Mt Adams	
25	Mount Battie Ride	1600019
26	Mount Cardigan Hike	1600004
27	Mt. Chocorua	
28	Mount Garfield Hike	1600008
28	Mount Garfield Hike	1600020
28	Mount Garfield Hike	1600003
29	Metacomet-Monadnock Trail Hike	
30	McLennan Reservation Hike	
31	Missisquoi River - VT	
32	Northern Forest Canoe Trail	1600021
32	Northern Forest Canoe Trail	1600006
33	Park Loop Ride	
34	Pontook Reservoir Tour	
35	Pisgah STATE Park Ride	
36	Pondicherry Trail Ride	
37	Seal Beach Harbor	
38	Sawyer River Ride	1600024
38	Sawyer River Ride	1600025
38	Sawyer River Ride	1600009
38	Sawyer River Ride	1600018
39	Welch and Dickey Mountains Hike	1600017
39	Welch and Dickey Mountains Hike	1600005

40	Wachusett Mountain	1600001
41	Westfield River Loop	