

**Assignment #3 - Queries and Views****Problem 1 -**

Using the following three tables create a final view to answer the given query. Make sure the four steps of the process are following for full credit (Step 1 - combine, Step 2 - copy and reject, Step 3 - remove redundant fields, Step 4 – Answer the Query. Only use the space you need in the blank tables to create your views.)

**Grading Rubric: (Total points)**

- 1 point for correctly combining each record in Step 1
  - 1 point for correctly combining each field in Step 1
- 1 point for correctly rejecting each record in Step 2
- 1 point for correctly listing the non-rejected records in Step 3
  - 1 point for correctly removing redundant fields in Step 3
- 3 points for answering the query correctly in Step 4

**Query: Give me the Fund Name and Email Address for the customer who donated \$50.00**

FundID	Fund_Name	Event_Date	Type
F15	Casino Night	05/11/2006	Office
F23	Fun Run	09/27/2007	Charity
F01	Party Planning	12/14/2006	Office

**Table A**

Donor_ID	Customer_Name	Email_Address
D20	Jim Halpert	james.halpert@gmail.com
D12	Pam Beesly	pamela.beesly@gmail.com
C15	Dwight Schrute	dwight.schrute@hotmail.com

**Table B**

FundID	Donor_ID	Amount_Donated
F01	D12	\$50.00
F23	D20	\$25.00

**Table C**

**Step1: Combined View (16 + 10)**

FundID	Fund_Name	Event_Date	Type	Donor_ID	Customer_Name	Email_Address	Fund ID	Donor_ID	Amount_Donated
F15	Casino Night	05/11/2006	Office	D20	Jim Halpert	james.halpert@gmail.com	F01	D12	\$50.00
F15	Casino Night	05/11/2006	Office	D20	Jim Halpert	james.halpert@gmail.com	F23	D20	\$25.00
F15	Casino Night	05/11/2006	Office	D12	Pam Beesly	pamela.beesly@gmail.com	F01	D12	\$50.00
F15	Casino Night	05/11/2006	Office	D12	Pam Beesly	pamela.beesly@gmail.com	F23	D20	\$25.00
F15	Casino Night	05/11/2006	Office	C15	Dwight Schrute	dwight.schrute@hotmail.com	F01	D12	\$50.00
F15	Casino Night	05/11/2006	Office	C15	Dwight Schrute	dwight.schrute@hotmail.com	F23	D20	\$25.00
F23	Fun Run	09/27/2007	Charity	D20	Jim Halpert	james.halpert@gmail.com	F01	D12	\$50.00
F23	Fun Run	09/27/2007	Charity	D20	Jim Halpert	james.halpert@gmail.com	F23	D20	\$25.00
F23	Fun Run	09/27/2007	Charity	D12	Pam Beesly	pamela.beesly@gmail.com	F01	D12	\$50.00
F23	Fun Run	09/27/2007	Charity	D12	Pam Beesly	pamela.beesly@gmail.com	F23	D20	\$25.00
F23	Fun Run	09/27/2007	Charity	C15	Dwight Schrute	dwight.schrute@hotmail.com	F01	D12	\$50.00
F23	Fun Run	09/27/2007	Charity	C15	Dwight Schrute	dwight.schrute@hotmail.com	F23	D20	\$25.00
F01	Party Planning	12/14/2006	Office	D20	Jim Halpert	james.halpert@gmail.com	F01	D12	\$50.00
F01	Party Planning	12/14/2006	Office	D20	Jim Halpert	james.halpert@gmail.com	F23	D20	\$25.00
F01	Party Planning	12/14/2006	Office	D12	Pam Beesly	pamela.beesly@gmail.com	F01	D12	\$50.00

F01	Party Planning	12/14/2006	Office	D12	Pam Beesly	pamela.beesly@gmail.com	F23	D20	\$25.00
F01	Party Planning	12/14/2006	Office	C15	Dwight Schrute	dwight.schrute@hotmail.com	F01	D12	\$50.00
F01	Party Planning	12/14/2006	Office	C15	Dwight Schrute	dwight.schrute@hotmail.com	F23	D20	\$25.00

**Step 2: Copy and Reject incorrect records (16)**

FundID	Fund_Name	Event_Date	Type	Donor_ID	Customer_Name	Email_Address	Fund ID	Donor_ID	Amount_Donated
F15	Casino Night	05/11/2006	Office	D20	Jim Halpert	james.halpert@gmail.com	F01	D12	\$50.00
F15	Casino Night	05/11/2006	Office	D20	Jim Halpert	james.halpert@gmail.com	F23	D20	\$25.00
F15	Casino Night	05/11/2006	Office	D12	Pam Beesly	pamela.beesly@gmail.com	F01	D12	\$50.00
F15	Casino Night	05/11/2006	Office	D12	Pam Beesly	pamela.beesly@gmail.com	F23	D20	\$25.00
F15	Casino Night	05/11/2006	Office	C15	Dwight Schrute	dwight.schrute@hotmail.com	F01	D12	\$50.00
F15	Casino Night	05/11/2006	Office	C15	Dwight Schrute	dwight.schrute@hotmail.com	F23	D20	\$25.00
F23	Fun Run	09/27/2007	Charity	D20	Jim Halpert	james.halpert@gmail.com	F01	D12	\$50.00
F23	Fun Run	09/27/2007	Charity	D20	Jim Halpert	james.halpert@gmail.com	F23	D20	\$25.00
F23	Fun Run	09/27/2007	Charity	D12	Pam Beesly	pamela.beesly@gmail.com	F01	D12	\$50.00
F23	Fun Run	09/27/2007	Charity	D12	Pam Beesly	pamela.beesly@gmail.com	F23	D20	\$25.00
F23	Fun Run	09/27/2007	Charity	C15	Dwight Schrute	dwight.schrute@hotmail.com	F01	D12	\$50.00

F23	Fun Run	09/27/2007	Charity	C15	Dwight Schrute	dwight.schrute@hotmail.com	F23	D20	\$25.00
F01	Party Planning	12/14/2006	Office	D20	Jim Halpert	james.halpert@gmail.com	F01	D12	\$50.00
F01	Party Planning	12/14/2006	Office	D20	Jim Halpert	james.halpert@gmail.com	F23	D20	\$25.00
F01	Party Planning	12/14/2006	Office	D12	Pam Beesly	pamela.beesly@gmail.com	F01	D12	\$50.00
F01	Party Planning	12/14/2006	Office	D12	Pam Beesly	pamela.beesly@gmail.com	F23	D20	\$25.00
F01	Party Planning	12/14/2006	Office	C15	Dwight Schrute	dwight.schrute@hotmail.com	F01	D12	\$50.00
F01	Party Planning	12/14/2006	Office	C15	Dwight Schrute	dwight.schrute@hotmail.com	F23	D20	\$25.00

**Step 3: Remove redundant fields (2 + 3)**

FundID	Fund_Name	Event_Date	Type	Donor_ID	Customer_Name	Email_Address	Fund ID	Donor_ID	Amount_Donated
F23	Fun Run	09/27/2007	Charity	D20	Jim Halpert	james.halpert@gmail.com	F23	D20	\$25.00
F01	Party Planning	12/14/2006	Office	D12	Pam Beesly	pamela.beesly@gmail.com	F01	D12	\$50.00

**Step 4: Answer Query (3)**

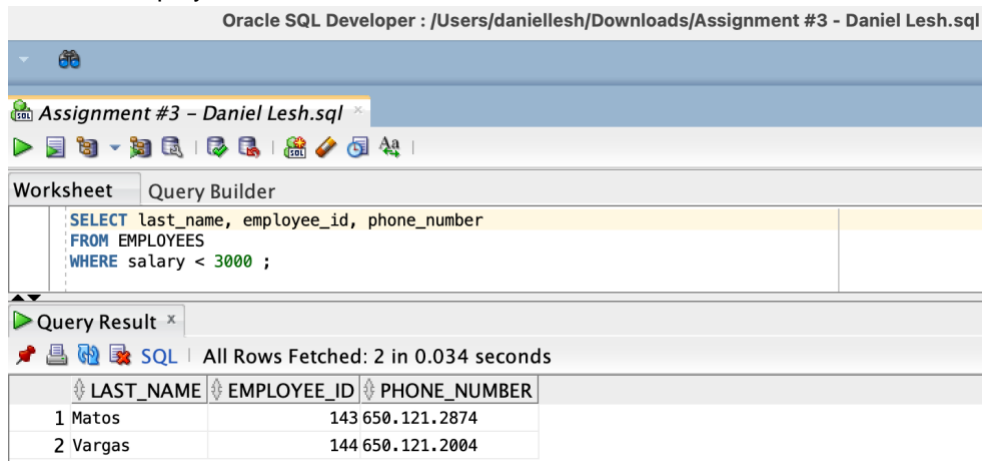
**Query: Give me the Fund Name and Email Address for the customer who donated \$50.00**

Fund_Name	Email_Address
Party Planning	pamela.beesly@gmail.com

## Problem 2 - For the following problems screenshot your code and output (View)

### Grading Rubric: (Total 50 points)

- 5 points for each question
  - 1 point for posting view and output correctly
  - 4 points for parts of the query (partial points awarded)
- 1. The HR department needs your assistance in creating some queries. Display the last name, employee id and phone number of employees who earn less than 3000.



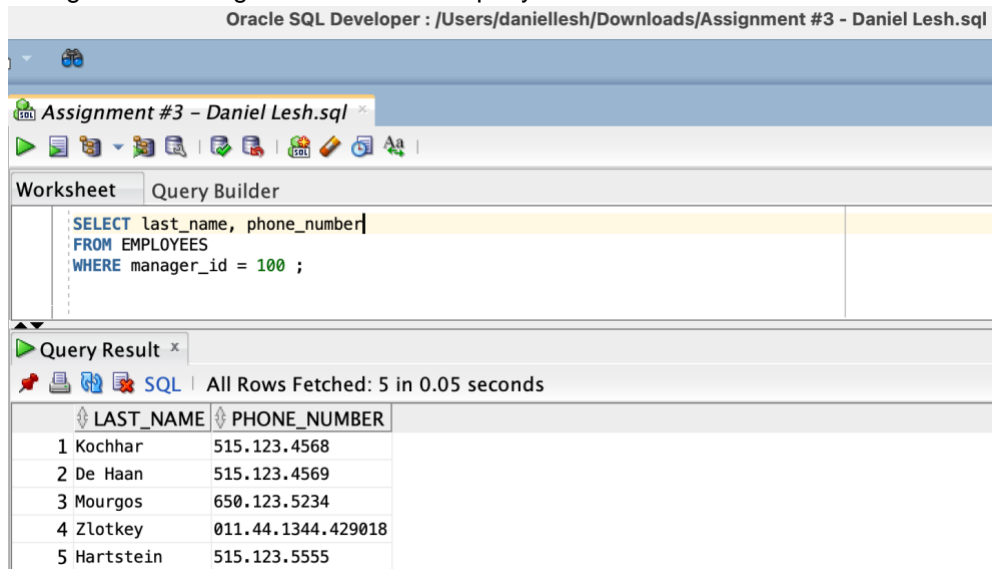
The screenshot shows the Oracle SQL Developer interface. The title bar indicates the file path: /Users/daniellesh/Downloads/Assignment #3 - Daniel Lesh.sql. The main window has a tab titled "Assignment #3 - Daniel Lesh.sql". Below the toolbar, the "Worksheet" tab is active, displaying the following SQL query:

```
SELECT last_name, employee_id, phone_number
FROM EMPLOYEES
WHERE salary < 3000 ;
```

Below the query editor, the "Query Result" tab is active, showing the results of the query. The status bar indicates "All Rows Fetched: 2 in 0.034 seconds". The results are displayed in a table with three columns: LAST\_NAME, EMPLOYEE\_ID, and PHONE\_NUMBER.

	LAST_NAME	EMPLOYEE_ID	PHONE_NUMBER
1	Matos	143 650.121.2874	
2	Vargas	144 650.121.2004	

- 2. Open a new SQL Worksheet. Create a report that displays the last name and phone number for Employees who have a manager with manager id 100. Run the query.



The screenshot shows the Oracle SQL Developer interface. The title bar indicates the file path: /Users/daniellesh/Downloads/Assignment #3 - Daniel Lesh.sql. The main window has a tab titled "Assignment #3 - Daniel Lesh.sql". Below the toolbar, the "Worksheet" tab is active, displaying the following SQL query:

```
SELECT last_name, phone_number
FROM EMPLOYEES
WHERE manager_id = 100 ;
```

Below the query editor, the "Query Result" tab is active, showing the results of the query. The status bar indicates "All Rows Fetched: 5 in 0.05 seconds". The results are displayed in a table with two columns: LAST\_NAME and PHONE\_NUMBER.

	LAST_NAME	PHONE_NUMBER
1	Kochhar	515.123.4568
2	De Haan	515.123.4569
3	Mourgos	650.123.5234
4	Zlotkey	011.44.1344.429018
5	Hartstein	515.123.5555

3. The HR department needs to find employees last name and salary who earn a salary between 6000 and 7000 or a salary between 8000 and 9000. Find a list of such employees in the descending order of their hire date.

Oracle SQL Developer : /Users/daniellesh/Downloads/Assignment #3 - Daniel Lesh.sql

Assignment #3 - Daniel Lesh.sql

SQL Worksheet History

Worksheet Query Builder

```
SELECT last_name, salary
FROM EMPLOYEES
WHERE (salary between 6000 and 7000) or (salary between 8000 and 9000)
ORDER BY hire_date DESC ;
```

Query Result x

SQL | All Rows Fetched: 6 in 0.042 seconds

	LAST_NAME	SALARY
1	Grant	7000
2	Taylor	8600
3	Fay	6000
4	Gietz	8300
5	Ernst	6000
6	Hunold	9000

4. Create a report to display the last name, job ID, and department id for employees whose last names end with 's'. Order the Query in descending order by the hire date.

Oracle SQL Developer : /Users/daniellesh/Downloads/Assignment #3 - Daniel Lesh.sql

Assignment #3 - Daniel Lesh.sql

SQL Worksheet History

Worksheet Query Builder

```
SELECT last_name, job_id, department_id
FROM EMPLOYEES
WHERE last_name like '%s'
ORDER BY hire_date DESC ;
```

Query R... x

SQL | All Rows Fetched: 6 in 0.053 seconds

	LAST_NAME	JOB_ID	DEPARTMENT_ID
1	Mourgos	ST_MAN	50
2	Vargas	ST_CLERK	50
3	Matos	ST_CLERK	50
4	Davies	ST_CLERK	50
5	Rajs	ST_CLERK	50
6	Higgins	AC_MGR	110

5. Display the last name, job id, and email for all employees with last name Kochhar, De Haan, or Rajs.

Oracle SQL Developer : /Users/daniellesh/Downloads/Assignment #3 - Daniel Lesh.sql

Assignment #3 - Daniel Lesh.sql

SQL Worksheet History

Worksheet Query Builder

```
SELECT last_name, job_id, email
FROM EMPLOYEES
WHERE last_name in ('Kochhar', 'De Haan', 'Rajs');
```

Query Result

All Rows Fetched: 3 in 0.042 seconds

	LAST_NAME	JOB_ID	EMAIL
1	Kochhar	AD_VP	NKOCHHAR
2	De Haan	AD_VP	LDEHAAN
3	Rajs	ST_CLERK	TRAJS

6. Display the first name, Commission percentage, and salary of all employees who earn a commission. Label the columns First Name, Commission percentage, and Monthly Salary, respectively.

Oracle SQL Developer : /Users/daniellesh/Downloads/Assignment #3 - Daniel Lesh.sql

Assignment #3 - Daniel Lesh.sql

SQL Worksheet History

Worksheet Query Builder

```
SELECT first_name "First Name", commission_pct
"Commission percentage", salary "Monthly Salary"
FROM EMPLOYEES
WHERE commission_pct is not null;
```

Query Result

All Rows Fetched: 4 in 0.048 seconds

	First Name	Commission percentage	Monthly Salary
1	Eleni	0.2	10500
2	Ellen	0.3	11000
3	Jonathon	0.2	8600
4	Kimberely	0.15	7000

7. The HR department needs a report that displays the first name, last name, and phone number of all employees who were hired in 1998. Label the columns F Name, L Name, and Phone #, respectively.

Oracle SQL Developer : /Users/daniellesh/Downloads/Assignment #3 - Daniel Lesh.sql

Assignment #3 - Daniel Lesh.sql

SQL Worksheet History

Worksheet Query Builder

```
SELECT first_name "F Name", last_name "L Name",
phone_number "Phone #"
FROM EMPLOYEES
WHERE hire_date like '%98';
```

Query Result

All Rows Fetched: 3 in 0.042 seconds

	F Name	L Name	Phone #
1	Randall	Matos	650.121.2874
2	Peter	Vargas	650.121.2004
3	Jonathon	Taylor	011.44.1644.429265

8. Create a report to display the last name, department id and salary where job title is SA\_REP

Oracle SQL Developer : /Users/daniellesh/Downloads/Assignment #3 - Daniel Lesh.sql

Assignment #3 - Daniel Lesh.sql

SQL Worksheet History

Worksheet Query Builder

```
SELECT last_name, department_id, salary  
FROM EMPLOYEES  
WHERE JOB_ID like 'SA_REP' ;
```

Query Result

SQL | All Rows Fetched: 3 in 0.094 seconds

	LAST_NAME	DEPARTMENT_ID	SALARY
1	Abel	80	11000
2	Taylor	80	8600
3	Grant	(null)	7000

9. Create a report to display the last name, salary, and department id of all employees who have a 10 digit phone number. Sort the data in descending order first by salary and then department id. Use the column's numeric position in the ORDER BY clause.

- Set LENGTH equal to '12' because when examining the Data from EMPLOYEES table, must include the '.' separating the phone # characters.  
→ Example: ###.###.#### = 12 total characters for a 10-digit phone #

Oracle SQL Developer : /Users/daniellesh/Downloads/Assignment #3 - Daniel Lesh.sql

Assignment #3 - Daniel Lesh.sql

SQL Worksheet History

Worksheet Query Builder

```
SELECT last_name, salary, department_id  
FROM EMPLOYEES  
WHERE length(phone_number) = 12  
ORDER BY 2 DESC, 3 DESC ;
```

Query Result

SQL | All Rows Fetched: 16 in 0.045 seconds

	LAST_NAME	SALARY	DEPARTMENT_ID
1	King	24000	90
2	Kochhar	17000	90
3	De Haan	17000	90
4	Hartstein	13000	20
5	Higgins	12000	110
6	Hunold	9000	60
7	Gietz	8300	110
8	Ernst	6000	110
9	Fay	6000	20
10	Mourgos	5800	50
11	Whalen	4400	10
12	Lorentz	4200	60
13	Rajs	3500	50
14	Davies	3100	50
15	Matos	2600	50
16	Vargas	2500	50



10. Members of the HR department want to have more flexibility with the queries that you are writing. They would like a report that displays the last name, department id and salary of employees who earn less than an amount that the user specifies after a prompt. ENTER 10000 when prompted for a value in the dialog box. Screenshot the prompt box and the output (view) using that amount.

The screenshot shows the Oracle SQL Developer interface. The 'Worksheet' tab is active, displaying a query: `FROM EMPLOYEES WHERE salary < &sal_amount`. The 'Query Result' tab shows a table with 13 rows. A dialog box titled 'Enter Substitution Variable' is overlaid on the table, asking for a value for 'sal\_amount'. The value '10000' is entered in the text field. The 'OK' button is highlighted.

	LAST_NAME	DEPARTMENT_ID	SALARY
1	Hunold	60	9000
2	Ernst	110	6000
3	Lorentz	60	4200
4	Mourgos	50	5800
5	Rajs	50	3500
6	Davies	50	3100
7	Matos	50	2600
8	Vargas	50	2500
9	Taylor	80	8600
10	Grant	(null)	7000
11	Whalen	10	4400
12	Fay	20	6000
13	Gietz	110	8300

The screenshot shows the Oracle SQL Developer interface. The 'Worksheet' tab is active, displaying the full query: `SELECT last_name, department_id, salary FROM EMPLOYEES WHERE salary < &sal_amount`. The 'Query Result' tab shows a table with 13 rows, displaying the last name, department id, and salary for each employee.

	LAST_NAME	DEPARTMENT_ID	SALARY
1	Hunold	60	9000
2	Ernst	110	6000
3	Lorentz	60	4200
4	Mourgos	50	5800
5	Rajs	50	3500
6	Davies	50	3100
7	Matos	50	2600
8	Vargas	50	2500
9	Taylor	80	8600
10	Grant	(null)	7000
11	Whalen	10	4400
12	Fay	20	6000
13	Gietz	110	8300