



Oracle LAB 4

Part 1:

Exercise 1 :

IS the following SELECT statement executes successfully:

```
SELECT last_name, job_id, salary AS Sal  
FROM employees;
```

True/False

The Result:

The screenshot shows a SQL Window titled "SQL Window - SELECT last_name, j...". It has three tabs: "SQL", "Output", and "Statistics". The "SQL" tab is active, displaying the following query:

```
SELECT last_name, job_id, salary AS Sal  
FROM employees;
```

Below the query, there is a toolbar with various icons. The "Output" tab is selected, showing a table with 14 rows and 4 columns: LAST_NAME, JOB_ID, and SAL. The table data is as follows:

	LAST_NAME	JOB_ID	SAL
1	OConnell	SH_CLERK	2600.00
2	Grant	SH_CLERK	2600.00
3	Whalen	AD_ASST	4400.00
4	Hartstein	MK_MAN	80.00
5	Fay	MK_REP	6000.00
6	Mavris	HR_REP	6500.00
7	Baer	PR_REP	10000.00
8	Higgins	AC_MGR	12000.00
9	Gietz	AC_ACCOUNT	8300.00
10	King	AD_PRES	24000.00
11	Kochhar	AD_VP	17000.00
12	De Haan	AD_VP	17000.00
13	Hunold	IT_PROG	9000.00
14	Ernst	IT_PROG	6000.00

At the bottom of the window, a status bar shows "2:16" and "14 rows selected in 0.078 seconds (more...)"



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Exercise 2 :

The following SELECT statement executes successfully:

```
SELECT *  
FROM job_grades;  
True/False
```

Exercise 3 :

There are four coding errors in the following statement. Can you identify them?

```
SELECT employee_id, last_name  
sal x 12 ANNUAL SALARY  
FROM employees;
```

The Result:

	EMPLOYEE_ID	LAST_NAME	ANNUAL SALARY
1	198	OConnell	31200
2	199	Grant	31200
3	200	Whalen	52800
4	201	Hartstein	960
5	202	Fay	72000
6	203	Mavris	78000
7	204	Baer	120000
8	205	Higgins	144000
9	206	Gietz	99600
10	100	King	288000
11	101	Kochhar	204000
12	102	De Haan	204000



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Exercise 4:

The HR department needs a query to display all unique job codes from the EMPLOYEES table.

The Result:

The screenshot shows a SQL Window titled "SQL Window - SEL...". It has three tabs: "SQL", "Output", and "Statistics". The "SQL" tab is active, displaying the query: `SELECT DISTINCT job_id
FROM employees;`. Below the query, there is a toolbar with icons for grid, lock, zoom in, zoom out, execute, and refresh. The results are displayed in a table with two columns: "JOB_ID" and an index. The table contains 12 rows of unique job codes. At the bottom, a status bar shows the execution time as 2:16 and the message "12 rows selected in 0.063".

	JOB_ID
1	AC_ACCOUNT
2	AC_MGR
3	AD_ASST
4	AD PRES
5	AD_VP
6	FI_ACCOUNT
7	FI_MGR
8	HR REP
9	IT_PROG
10	MK MAN
11	MK REP
12	PR REP



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Exercise 5:

The HR department has requested a report of all employees and their job IDs. Display the last name concatenated with the job ID (separated by a comma and space) and name the column Employee and Title.

The Result:

The screenshot shows a SQL Window titled "SQL Window - SELECT last_name || ', ' || job_id AS 'E...". The SQL tab is active, displaying the query: `SELECT last_name || ', ' || job_id AS "Employee and Title" FROM employees;`. The Output tab shows the results of the query, which are 12 rows. The first row is selected. The status bar at the bottom indicates "2:16" and "12 rows selected in 0.031 seconds (more...)".

	Employee and Title
1	OConnell, SH_CLERK ...
2	Grant, SH_CLERK ...
3	Whalen, AD_ASST ...
4	Hartstein, MK_MAN ...
5	Fay, MK_REP ...
6	Mavris, HR_REP ...
7	Baer, PR_REP ...
8	Higgins, AC_MGR ...
9	Gietz, AC_ACCOUNT ...
10	King, AD_PRES ...
11	Kochhar, AD_VP ...
12	De Haan, AD_VP ...

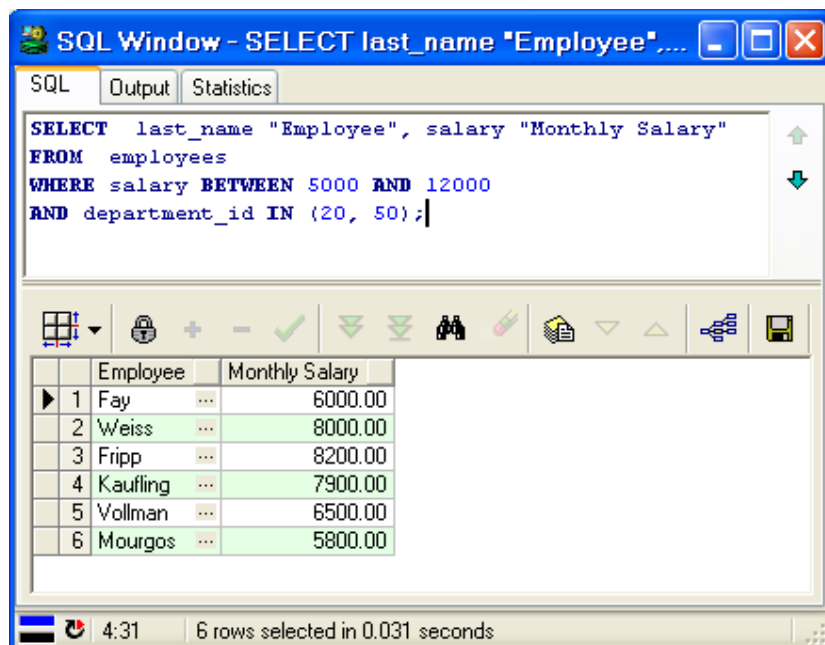


Part 2:

Exercise 1:

The HR departments needs to find high-salary and low-salary employees. display the last name and salary of employees who earn between \$5,000 and \$12,000 and are in department 20 or 50. Label the columns Employee and Monthly Salary, respectively.

The Result:



The screenshot shows an SQL Window titled "SQL Window - SELECT last_name 'Employee',...". The window has three tabs: "SQL", "Output", and "Statistics". The "SQL" tab is active, displaying the following query:

```
SELECT last_name "Employee", salary "Monthly Salary"
FROM employees
WHERE salary BETWEEN 5000 AND 12000
AND department_id IN (20, 50);
```

Below the query, there is a toolbar with various icons for SQL operations. The results of the query are displayed in a table with two columns: "Employee" and "Monthly Salary". The table contains six rows of data:

	Employee	Monthly Salary
1	Fay	6000.00
2	Weiss	8000.00
3	Fripp	8200.00
4	Kaufling	7900.00
5	Vollman	6500.00
6	Mourgos	5800.00

At the bottom of the window, a status bar shows the time "4:31" and the message "6 rows selected in 0.031 seconds".



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Exercise 2:

Create a report to display the last name, salary, and commission of all employees who earn commissions. Sort data in descending order of salary and commissions.

The Result:

SQL Window - SELECT last_name, sal...

SQL Output Statistics

```
SELECT last_name, salary, commission_pct
FROM employees
WHERE commission_pct IS NOT NULL
ORDER BY salary DESC, commission_pct DESC;
```

	LAST_NAME	SALARY	COMMISSION_PCT
1	Russell	14000.00	0.40
2	Partners	13500.00	0.30
3	Errazuriz	12000.00	0.30
4	Ozer	11500.00	0.25
5	Cambrault	11000.00	0.30
6	Abel	11000.00	0.30
7	Vishney	10500.00	0.25
8	Zlotkey	10500.00	0.20
9	King	10000.00	0.35
10	Tucker	10000.00	0.30

4:43 10 rows selected in 0.046 seconds (more...)



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Exercise 3:

Display the last name of all employees who have both an a and an e in their last name.

The Result:

The screenshot shows a SQL window titled "SQL Window - SELE...". It has three tabs: "SQL", "Output", and "Statistics". The "SQL" tab is active, displaying the following query:

```
SELECT last_name
FROM employees
WHERE last_name LIKE '%a%'
AND last_name LIKE '%e%';
```

Below the query editor is a toolbar with icons for grid, lock, zoom in, zoom out, execute, and refresh. Below the toolbar is a table with 10 rows and 2 columns. The first column is an index from 1 to 10, and the second column is the last name. The last names are: Baer, Bates, Colmenares, Davies, De Haan, Faviet, Fleaur, Gates, Hartstein, and Markle. The last names "Bates", "Davies", "Faviet", "Gates", and "Markle" are highlighted in green. The status bar at the bottom shows "4:26" and "10 rows selected in 0.032 s".

	LAST_NAME
1	Baer
2	Bates
3	Colmenares
4	Davies
5	De Haan
6	Faviet
7	Fleaur
8	Gates
9	Hartstein
10	Markle



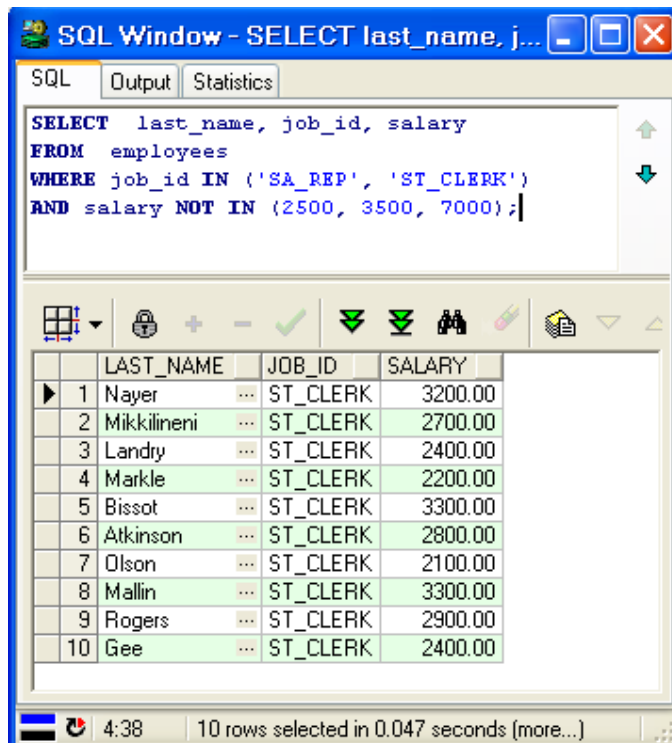
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Exercise 4:

Display the last name, job, and salary for all employees whose job is SA_REP or ST_CLERK and whose salary is not equal to \$2,500, \$3,500, or \$7,000.

The Result:



The screenshot shows a SQL Window titled "SQL Window - SELECT last_name, j...". The window has three tabs: "SQL", "Output", and "Statistics". The "SQL" tab is active, displaying the following query:

```
SELECT last_name, job_id, salary
FROM employees
WHERE job_id IN ('SA_REP', 'ST_CLERK')
AND salary NOT IN (2500, 3500, 7000);
```

Below the query, there is a toolbar with various icons. The results are displayed in a table with the following columns: LAST_NAME, JOB_ID, and SALARY. The table contains 10 rows of data, all of which are ST_CLERKs with salaries ranging from 2100.00 to 3300.00. The status bar at the bottom indicates "10 rows selected in 0.047 seconds (more...)" and the time "4:38".

	LAST_NAME	JOB_ID	SALARY
1	Nayer	ST_CLERK	3200.00
2	Mikkilineni	ST_CLERK	2700.00
3	Landry	ST_CLERK	2400.00
4	Markle	ST_CLERK	2200.00
5	Bissot	ST_CLERK	3300.00
6	Atkinson	ST_CLERK	2800.00
7	Olson	ST_CLERK	2100.00
8	Mallin	ST_CLERK	3300.00
9	Rogers	ST_CLERK	2900.00
10	Gee	ST_CLERK	2400.00