



Oracle LAB 5

Part 1

Exercise 1:

- A) Write a query that displays the last name (with the first letter uppercase and all other letters lowercase) and the length of the last name for all employees whose name starts with the letters J, A, or M. Give each column an appropriate label. Sort the results by the employees' last names.

The Result:

The screenshot shows an Oracle SQL Window titled "SQL Window - SELECT INITCAP(last_name) 'Name', LENGTH(last_name)...". The SQL tab is active, displaying the following query:

```
SELECT      INITCAP(last_name) "Name", LENGTH(last_name) "Length"
FROM        employees
WHERE       last_name LIKE ('J%') or last_name LIKE ('A%') or last_name LIKE ('M%')
ORDER BY   last_name;
```

Below the query, the results are displayed in a table with two columns: "Name" and "Length". The results are sorted by last name. The status bar at the bottom indicates "12 rows selected in 0.078 seconds (more...)".

	Name	Length
1	Abel	4
2	Ande	4
3	Atkinson	8
4	Austin	6
5	Johnson	7
6	Jones	5
7	Mallin	6
8	Markle	6
9	Marlow	6
10	Marvins	7
11	Matos	5
12	Mavris	6



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Or:

SQL Window - SELECT INITCAP(last_name) "Name", LEN...

SQL Output Statistics

```
SELECT      INITCAP(last_name) "Name", LENGTH(last_name) "Length"
FROM        employees
WHERE       SUBSTR(last_name, 1, 1) IN ('J', 'A', 'M')
ORDER BY   last_name;
```

	Name	Length
1	Abel	4
2	Ande	4
3	Atkinson	8
4	Austin	6
5	Johnson	7
6	Jones	5
7	Mallin	6
8	Markle	6
9	Marlow	6
10	Marvins	7
11	Matos	5
12	Mavris	6

4:20 12 rows selected in 0.047 seconds (more...)



Exercise 2:

The HR department wants to find the length of employment for each employee. For each employee, display the last name and calculate the number of months between today and the date on which the employee was hired. Label the column MONTHS_WORKED. Order your results by the number of months employed. Round the number of months up to the closest whole number.

The Result:

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

```
SELECT last_name, ROUND((sysdate - hire_date)/30) "MONTHS_WORKED"
FROM employees
ORDER BY "MONTHS_WORKED";
```

Below the query is a toolbar with various icons. The results are displayed in a table with two columns: "LAST_NAME" and "MONTHS_WORKED". The table contains 13 rows of data, ordered by the number of months worked. The status bar at the bottom indicates "3:26" and "13 rows selected in 0.031 seconds (more...)".

	LAST_NAME	MONTHS_WORKED
1	Kumar	128
2	Banda	128
3	Ande	129
4	Lee	130
5	Markle	130
6	Marvins	131
7	Zlotkey	131
8	Philtanker	131
9	Geoni	131
10	Grant	132
11	Perkins	132
12	Johnson	132
13	Popp	133



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Or:

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

```
SELECT last_name, ROUND(MONTHS_BETWEEN(sysdate, hire_date)) "MONTHS_WORKED"
FROM employees
ORDER BY "MONTHS_WORKED";
```

Below the query, there is a toolbar with various icons for SQL operations. The results are displayed in a table with two columns: "LAST_NAME" and "MONTHS_WORKED". The table contains 13 rows of data, sorted by "MONTHS_WORKED" in ascending order.

	LAST_NAME	MONTHS_WORKED
1	Banda	126
2	Kumar	126
3	Ande	127
4	Markle	128
5	Lee	128
6	Geoni	129
7	Zlotkey	129
8	Marvins	129
9	Philtanker	129
10	Grant	130
11	Johnson	130
12	Gee	131
13	Popp	131

At the bottom of the window, a status bar shows the execution time: "3:26" and the message "13 rows selected in 0.047 seconds (more...)".



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Exercise 3:

Display each employee's last name, hire date, and salary review date, which is the first Monday after six months of service. Label the column REVIEW. Format the dates to appear in the format similar to "Monday, the Thirty-First of July, 2000."

The Result:

SQL Window - SELECT last_name, hire_date, TO_CHAR(NEXT_DAY(AD...

SQL Output Statistics

```
SELECT last_name, hire_date, TO_CHAR(NEXT_DAY(ADD_MONTHS(hire_date, 6), 2),  
'Monday, the' fmDdspth 'of' Month, 'YYYY') "REVIEW"  
FROM employees;
```

	LAST_NAME	HIRE_DATE	REVIEW
1	OConnell	21/06/1999	Monday, the Twenty-Sixth of ١٩٩٩ ديسمبر
2	Grant	13/01/2000	Monday, the Sixteenth of ٢٠٠٠ يوليوس
3	Whalen	17/09/1987	Monday, the Twentieth of ١٩٨٨ مارس
4	Hartstein	17/02/1996	Monday, the Eighteenth of ١٩٩٦ اغسطس
5	Fay	17/08/1997	Monday, the Twenty-Second of ١٩٩٨ فيبراير
6	Mavris	07/06/1994	Monday, the Eleventh of ١٩٩٤ ديسمبر
7	Baer	07/06/1994	Monday, the Eleventh of ١٩٩٤ ديسمبر
8	Higgins	07/06/1994	Monday, the Eleventh of ١٩٩٤ ديسمبر
9	Gietz	07/06/1994	Monday, the Eleventh of ١٩٩٤ ديسمبر
10	King	17/06/1987	Monday, the Twentieth of ١٩٨٧ ديسمبر
11	Kochhar	21/09/1989	Monday, the Twenty-Fifth of ١٩٩٠ مارس
12	De Haan	13/01/1993	Monday, the Eighteenth of ١٩٩٣ يوليوس
13	Hunold	03/01/1990	Monday, the Eighth of ١٩٩٠ يوليوس
14	Ernst	21/05/1991	Monday, the Twenty-Fourth of ١٩٩١ نوفمبر

2.1 14 rows selected in 0.062 seconds (more...)



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Exercise 4:

Create a query that displays the employees' last names and commission amounts. If an employee does not earn commission, show "No Commission." Label the column COMM.

The Result:

SQL Window - SELECT last_name, NVL2(commission_pct, TO_CHAR(commission_...

SQL Output Statistics

```
SELECT last_name, NVL2(commission_pct, TO_CHAR(commission_pct), 'no commission') "COMM"  
FROM employees;
```

	LAST_NAME	COMM
1	OConnell	no commission
2	Grant	no commission
3	Whalen	no commission
4	Hartstein	no commission
5	Fay	no commission
6	Mavris	no commission
7	Baer	no commission
8	Higgins	no commission
9	Gietz	no commission
10	King	no commission
11	Kochhar	no commission
12	De Haan	no commission
13	Hunold	no commission
14	Ernst	no commission

2:16 14 rows selected in 0.047 seconds (more...)



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Exercise 5:

Using the DECODE function, write a query that displays the grade of all employees based on the value of the column JOB_ID, using the following data:

Job Grade

AD_PRES A
ST_MAN B
IT_PROG C
SA_REP D
ST_CLERK E
None of the above 0

The Result:

The screenshot shows a SQL window titled "SQL Window - ex6.sql" with three tabs: "SQL", "Output", and "Statistics". The "SQL" tab is active, displaying the following query:

```
SELECT job_id, DECODE(job_id ,
    'AD_PRES', 'A',
    'ST_MAN', 'B',
    'IT_PROG', 'C',
    'SA_REP', 'D',
    'ST_CLERCK', 'E',
    0 ) "GRA"
FROM employees;
```

Below the query, there is a toolbar with various icons. The results are displayed in a table with two columns: "JOB_ID" and "GRA".

	JOB_ID	GRA
1	AC_ACCOUNT	0
2	AC_MGR	0
3	AD_ASST	0
4	AD_PRES	A
5	AD_VP	0
6	AD_VP	0
7	FI_ACCOUNT	0
8	FI_ACCOUNT	0

At the bottom of the window, there is a status bar showing the time "8:16" and the message "SQL script saved successfully".