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COURSE CODE: CT-261
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TASK: DBMS LAB#02**

Q1. Create a query to display the last name and salary of employees earning more than \$12,000.

SQL QUERY:

```
1  SELECT last_name, salary FROM HR.EMPLOYEES WHERE salary>12000;
2
3
4
```

OUTPUT:

Query result Script output DBMS output Explain Plan SQL history

↻ ① Download ▾ Execution time: 0.006 seconds

	LAST_NAME	SALARY
1	King	24000
2	Yang	17000
3	Garcia	17000
4	Gruenberg	12008
5	Singh	14000
6	Partners	13500
7	Martinez	13000
8	Higgins	12008

Q2. Create a query to display the employee last name and department number for employee number 176.

SQL QUERY:

```
1  SELECT last_name,department_id FROM HR.EMPLOYEES WHERE
2  employee_id = 176;
3
4
```

OUTPUT:

Query result Script output DBMS output Explain Plan SQL history

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	LAST_NAME	DEPARTMENT_ID
1	Taylor	80

Q3. Modify Q1 to display the last name and salary for all employees whose salary is not in the range of \$5,000 and \$12,000.

SQL QUERY:

```
1  SELECT last_name,salary FROM HR.EMPLOYEES WHERE SALARY NOT BETWEEN
2  5000 AND 12000;
3
4
```

OUTPUT:

Query result Script output DBMS output Explain Plan SQL history

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	LAST_NAME	SALARY
1	King	24000
2	Yang	17000
3	Garcia	17000
4	Williams	4800
5	Jackson	4800
6	Nguyen	4200
7	Gruenberg	12008
8	Khoo	3100

Q4. Display the employee last name, job ID, and start date of employees hired between February 20, 1998, and May 1, 1998. Order the query in ascending order by start date.

SQL QUERY:

```
1  SELECT last_name,job_id,hire_date FROM HR.EMPLOYEES
2  WHERE hire_date BETWEEN '20-FEB-98' AND '01-MAY-98'
3  ORDER BY hire_date;
4
```

OUTPUT:

Query result	Script output	DBMS output	Explain Plan	SQL history						
Download ▾ Execution time: 0.001 seconds										
<table border="1"><thead><tr><th>LAST_NAME</th><th>JOB_ID</th><th>HIRE_DATE</th></tr></thead><tbody><tr><td colspan="3">No items to display.</td></tr></tbody></table>					LAST_NAME	JOB_ID	HIRE_DATE	No items to display.		
LAST_NAME	JOB_ID	HIRE_DATE								
No items to display.										

Q5. Display the last name and department number of all employees in departments 20 and 50 in alphabetical order by name.

SQL QUERY:

```
1  SELECT last_name,department_id FROM HR.EMPLOYEES
2  WHERE department_id IN(20,50) ORDER BY last_name;
3
4
```

OUTPUT:

Query result			Script output	DBMS output	Explain Plan	SQL history
Delete Download ▾ Execution time: 0.008 seconds						
	LAST_NAME	DEPARTMENT_ID				
1	Atkinson	50				
2	Bell	50				
3	Bissot	50				
4	Bull	50				
5	Cabrio	50				
6	Chung	50				
7	Davies	50				

Q6. Modify Q3 to list 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.

SQL QUERY:

```
1  SELECT last_name AS "Employee",salary AS "Monthly Salary"
2  FROM HR.EMPLOYEES WHERE salary BETWEEN 5000 AND 12000
3  AND department_id IN(20,50);
4
5
```

OUTPUT:

Query result			Script output	DBMS output	Explain Plan	SQL history
Delete Download ▾ Execution time: 0.007 seconds						
	EMPLOYEE	MONTHLY SALARY				
1	Weiss	8000				
2	Fripp	8200				
3	Kaufling	7900				
4	Vollman	6500				
5	Mourgos	5800				
6	Davis	6000				

Q7. Display the last name and hire date of every employee who was hired in 1994.

SQL QUERY:

```
1  SELECT last_name,hire_date FROM HR.EMPLOYEES
2  WHERE hire_date BETWEEN '01-JAN-94' AND '31-DEC-94';
3
4
```

OUTPUT:

Query result	Script output	DBMS output	Explain Plan	SQL history				
Download ▾ Execution time: 0.001 seconds								
<table border="1"><thead><tr><th>LAST_NAME</th><th>HIRE_DATE</th></tr></thead><tbody><tr><td colspan="2">No items to display.</td></tr></tbody></table>		LAST_NAME	HIRE_DATE	No items to display.				
LAST_NAME	HIRE_DATE							
No items to display.								

Q8. Display the last name and job title of all employees who do not have a manager.

SQL QUERY:

```
1  SELECT last_name,job_id FROM HR.EMPLOYEES
2  WHERE manager_id IS NULL;
3
4
```

OUTPUT:

Query result	Script output	DBMS output	Explain Plan	SQL history						
Download ▾ Execution time: 0.005 seconds										
<table border="1"><thead><tr><th></th><th>LAST_NAME</th><th>JOB_ID</th></tr></thead><tbody><tr><td>1</td><td>King</td><td>AD_PRES</td></tr></tbody></table>			LAST_NAME	JOB_ID	1	King	AD_PRES			
	LAST_NAME	JOB_ID								
1	King	AD_PRES								

Q9. Display the last name, salary, and commission for all employees who earn commissions. Sort data in descending order of salary and commissions.

SQL QUERY:

```
1  SELECT last_name,salary,commission_pct
2  FROM HR.EMPLOYEES WHERE commission_pct IS NOT NULL
3  ORDER BY salary DESC,commission_pct DESC;
4
```

OUTPUT:

	LAST_NAME	SALARY	COMMISSION_PCT
1	Singh	14000	0.4
2	Partners	13500	0.3
3	Errazuriz	12000	0.3
4	Ozer	11500	0.25
5	Cambrault	11000	0.3
6	Abel	11000	0.3
7	Vishney	10500	0.25
8	Zlotkey	10500	0.2

Q10. Display the last names of all employees where the third letter of the name is an *a*.

SQL QUERY:

```
1  SELECT last_name FROM HR.EMPLOYEES
2  WHERE last_name LIKE '__a%';
3
4
```

OUTPUT:

Query result	Script output	DBMS output	Explain Plan	SQL history
Download ▾ Execution time: 0.004 seconds				
		LAST_NAME		
1	Grant			
2	Grant			
3	Whalen			

Q11. Display the last name of all employees who have an *a* and an *e* in their last name.

SQL QUERY:

```
1  SELECT last_name FROM HR.EMPLOYEES
2  WHERE last_name LIKE '%a%' AND last_name LIKE '%e%';
3
4
```

OUTPUT:

Query result	Script output	DBMS output	Explain Plan	SQL history
Download ▾ Execution time: 0.005 seconds				
	LAST_NAME			
1	Bates			
2	Colmenares			
3	Davies			
4	Faviet			
5	Fleaur			
6	James			
7	Markle			
8	Martinez			

Q12. Display the last name, job, and salary for all employees whose job is sales representative or stock clerk and whose salary is not equal to \$2,500, \$3,500, or \$7,000.

SQL QUERY:

```
1  /*Display the last name, job, and salary for all employees
2  whose job is sales representative or stock clerk and
3  whose salary is not equal to $2,500, $3,500, or $7,000.*/
4
5  SELECT last_name,job_id,salary FROM HR.EMPLOYEES
6  WHERE job_id IN('SA_REP','ST_CLERK')
7  AND salary NOT IN(2500,3500,7000);
8
```

OUTPUT:

Query result Script output DBMS output Explain Plan SQL history

Download ▾ Execution time: 0.001 seconds

	LAST_NAME	JOB_ID	SALARY
1	Nayer	ST_CLERK	3200
2	Mikkilineni	ST_CLERK	2700
3	Landry	ST_CLERK	2400
4	Markle	ST_CLERK	2200
5	Bissot	ST_CLERK	3300
6	Atkinson	ST_CLERK	2800
7	Olson	ST_CLERK	2100
8	Mallin	ST_CLERK	3300

Query result Script output DBMS output Explain Plan SQL history

Download ▾ Execution time: 0.001 seconds

	LAST_NAME	JOB_ID	SALARY
19	Hall	SA_REP	9000
20	Olsen	SA_REP	8000
21	Cambrault	SA_REP	7500
22	King	SA_REP	10000
23	Sully	SA_REP	9500
24	McEwen	SA_REP	9000
25	Smith	SA_REP	8000
26	Doran	SA_REP	7500

Q13. Modify Q6 to display the last name, salary, and commission for all employees whose commission amount is 20%.

SQL QUERY:

```
1  SELECT last_name AS "Employee",salary AS "Monthly Salary",
2  commission_pct FROM HR.EMPLOYEES
3  WHERE commission_pct=20/100;
4
```

OUTPUT:

Query result Script output DBMS output Explain Plan SQL history

Download ▾ Execution time: 0.001 seconds

	EMPLOYEE	MONTHLY SALARY	COMMISSION_PCT
1	Zlotkey	10500	0.2
2	Olsen	8000	0.2
3	Cambrault	7500	0.2
4	Bloom	10000	0.2
5	Fox	9600	0.2
6	Taylor	8600	0.2
7	Livingston	8400	0.2