PROBLEM STATEMENT:

QUERY:

```
1  CREATE TABLE emp AS SELECT * FROM hr.employees;
```

```
Table created.
```

1. List the Enames those are having five characters in their first names.

QUERY:

```
1 v SELECT FIRST_NAME || ' ' || LAST_NAME AS NAME
2   FROM EMP
3   WHERE LENGTH(FIRST_NAME) = 5
```

Kelly Chung
Sarah Bell
Vance Jones
Alana Walsh
Kevin Feeney
Susan Mavris

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35 rows selected.

2. List the Enames those are starting with ‘S’ and with five characters in their firstname.

QUERY:

```
SELECT FIRST_NAME || ' ' || LAST_NAME AS NAME
FROM EMP
WHERE LENGTH(FIRST_NAME) = 5 AND FIRST_NAME LIKE 'S%'
```

NAME
Sigal Tobias
Sarah Bell
Susan Mavris

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3 rows selected.

3. List the Five character names starting with ‘S’ and ending with ‘H’.

QUERY:

```
SELECT FIRST_NAME || ' ' || LAST_NAME AS NAME
FROM EMP
WHERE LENGTH(FIRST_NAME) = 5
AND FIRST_NAME LIKE 'S%h'
```

NAME
Sarah Bell

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4. Display the employee last_name concatenated with first_name, the length of the employee last_name .

QUERY:

```
SELECT LAST_NAME || ' ' || FIRST_NAME AS NAME, LENGTH(LAST_NAME) AS LAST_NAME_LENGTH
FROM EMP
```

Fay Pat	3
Mavris Susan	6
Baer Hermann	4
Higgins Shelley	7
Gietz William	5

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107 rows selected.

5. Display the numeric position of the letter ‘a’ in employee last name for all the employees who have the string REP contained in the jobid starting at the fourth position of the job id.

QUERY:

```
SELECT LAST_NAME, INSTR(LAST_NAME, 'a') AS POSITION
FROM EMP
WHERE JOB_ID LIKE '___REP%'
```

Grant	3
Johnson	0
Fay	2
Mavris	2
Baer	2

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33 rows selected.

6. Write a query that display the employee's last names with the first letter capitalized & all other letters lowercase & length of the names for all employees whose name stats with J, A or M. Also sort the results by employees last name.

QUERY:

```
SELECT CONCAT(UPPER(SUBSTR(last_name, 1, 1)), LOWER(SUBSTR(last_name, 2))) AS last_name,
    LENGTH(last_name) AS last_name_length
FROM emp
WHERE last_name LIKE 'J%' OR last_name LIKE 'A%' OR last_name LIKE 'M%'
ORDER BY last_name;
```

Mavris	6
Mccain	6
Mcewen	6
Mikkilineni	11
Mourgos	7

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16 rows selected.

7. Calculate the remainder of a salary after it is divided by 5000 for all employees whose job_id is SA_REP.

QUERY:

```
1 SELECT MOD(salary, 5000) AS salary_remainder, salary
2 FROM emp
3 WHERE job_id = 'SA_REP';
```

3800	8800
3600	8600
3400	8400
2000	7000
1200	6200

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30 rows selected.

8. For each employee, display the employee number, last_name & salary increased by 15% & expresses as a whole number.

QUERY:

```
SELECT employee_id, last_name, ROUND(salary * 1.15) AS increased_salary
FROM emp;
```

EMPLOYEE_ID	LAST_NAME	INCREASED_SALARY
100	King	27600
101	Kochhar	19550
102	De Haan	19550
103	Hunold	10350
104	Ernst	6900

9. Create a query to display the last name & salary for all employees. Format the salary to be 15 characters long, left padded with $. Label the column Salary.

QUERY:

```
SELECT last_name, LPAD(salary, 15, '$') AS Salary
FROM emp;
```

LAST_NAME	SALARY
King	$$$$$$$$$24000
Kochhar	$$$$$$$$$17000
De Haan	$$$$$$$$$17000
Hunold	$$$$$$$$$$9000
Ernst	$$$$$$$$$$6000

10. Calculate the job experience of all employees. Display it with hiredate and the new column heading Experience in months and experience in years.

QUERY:

```
SELECT hire_date,
       TRUNC(MONTHS_BETWEEN(SYSDATE, hire_date)) AS "Experience in months",
       TRUNC(MONTHS_BETWEEN(SYSDATE, hire_date) / 12) AS "Experience in years"
FROM emp;
```

HIRE_DATE	Experience in months	Experience in years
17-JUN-03	239	19
21-SEP-05	211	17
13-JAN-01	268	22
03-JAN-06	208	17
21-MAY-07	191	15

11. Display the employee number, hiredate, number of months employed, six month review date, first Friday after hire date and last day of the hiremonth for all employees.

QEURY:

```
SELECT employee_id,
       hire_date,
       TRUNC(MONTHS_BETWEEN(SYSDATE, hire_date)) AS months_employed,
       ADD_MONTHS(hire_date, 6) AS six_month_review_date,
       NEXT_DAY(hire_date, 'FRIDAY') AS first_friday_after_hiredate,
       LAST_DAY(hire_date) AS last_day_of_hiremonth
FROM emp;
```

EMPLOYEE_ID	HIRE_DATE	MONTHS_EMPLOYED	SIX_MONTH_REVIEW_DATE	FIRST_FRIDAY_AFTER_HIREDATE	LAST_DAY_OF_HIREMONTH
100	17-JUN-03	239	17-DEC-03	20-JUN-03	30-JUN-03
101	21-SEP-05	211	21-MAR-06	23-SEP-05	30-SEP-05
102	13-JAN-01	268	13-JUL-01	19-JAN-01	31-JAN-01
103	03-JAN-06	208	03-JUL-06	06-JAN-06	31-JAN-06
104	21-MAY-07	191	21-NOV-07	25-MAY-07	31-MAY-07

12. Display the employees last name & calculate the number of months between today & Date the employee was hired. Label This column as months_worked.

QUERY:

```
SELECT last_name, TRUNC(MONTHS_BETWEEN(SYSDATE, hire_date)) AS months_worked
FROM emp;
```

LAST_NAME	MONTHS_WORKED
King	239
Kochhar	211
De Haan	268
Hunold	208
Ernst	191

13. Display the names & hiredate along with the time of all the employees who joined on May 24,1999.

QUERY:

```
SELECT first_name || ' ' || last_name as employee_name, hire_date
FROM emp
WHERE hire_date = '24-MAY-99';
```

no data found

14. To find employees hired before 1990.

QUERY;

```
SELECT *
FROM emp
WHERE hire_date < '01-JAN-90';
```

no data found

15. Display each employee last name, hire date & day of the week on which the employee started. Order the results y the day of the week .

QUERY:

```
SELECT last_name, hire_date, TO_CHAR(hire_date, 'DAY') AS day_of_week
FROM emp
ORDER BY TO_CHAR(hire_date, 'D');
```

LAST_NAME	HIRE_DATE	DAY_OF_WEEK
Pataballa	05-FEB-06	SUNDAY
Landry	14-JAN-07	SUNDAY
Grant	13-JAN-08	SUNDAY
Tucker	30-JAN-05	SUNDAY
McEwen	01-AUG-04	SUNDAY

16. Create a query that display the employees last name & comm. Amounts. If an employee does not earn commission put, ”No commission”.

QUERY:

```
SELECT last_name,
       NVL(TO_CHAR(salary * commission_pct/100), 'No commission') AS comm_amount
FROM emp;
```

Matos	No commission
Vargas	No commission
Russell	56
Partners	40.5
Errazuriz	36

17. Create a query to calculate the annual salary and annual compensation of all the employees.

QUERY:

```
SELECT employee_id,
       salary * 12 AS annual_salary,
       NVL((salary * commission_pct/100) * 12, 0) AS annual_compensation
FROM emp;
```

143	31200	0
144	30000	0
145	168000	672
146	162000	486
147	144000	432

18. Create a query that display the employees last name & manager_id . If an employee does not have manager display , ”No manager”.

QUERY:

```
SELECT last_name, NVL(TO_CHAR(manager_id), 'No manager') AS manager_id
FROM emp;
```

LAST_NAME	MANAGER_ID
King	No manager
Kochhar	100
De Haan	100
Hunold	102
Ernst	103