1. The HR department need to find for all clerks who were hire after 1997.

EID	LName	FName	Email	Phone	Hire_date	Job_ID	Salary	Commission	Manager	Dept
101	AAA	BBB	AAA_BBB	12346	08-Mar-87	SA_CLERK	8000	null	124	50
118	CCC	DDD	Ccc_ddd	98765	01-JAN-95	ST_CLERK	6000	Null	124	50

```
SELECT *

FROM employees

WHERE EXTRACT(YEAR FROM hiredate)>1997 AND Job_ID LIKE '%CLERK%' ;
```

2. The HR department needs report of employees who earns commission. Show the last name, job, salary and commission of theses employees. Sort the data by salary in descending order.

Last_name	JOB_ID	Salary	Commission_pct
AAA	SA_REP	11000	0.3
BBB	SA_MAN	10500	0.2
CCC	SA_REP	8600	0.2

```
SELECT last_name,JOB_ID,Salary,Commission_pct

FROM employees

WHERE Commission_pct IS NOT NULL

ORDER BY salary ;
```

3. For budgeting purpose, the HR department needs a report on projection raises. The report should display those employees who have no commission but who have 10% raise in salary(round off the salary)

New Salary
The salary if AAA after a 10% raise is 4840
The salary if BBB after a 10% raise is 14300

```
SELECT ‘The salary of ‘ || LName || ' after a 10% raise is ' || round(salary + (salary * 0.1)) as "New Salary"
FROM employees;
```

4. Create a report of employees and their duration of employment. Show the last name of all employees together with the number of years and the number of complete months that they have been employed. Order the report by the duration job of their employment. The employee who has been employed the longest should appear at the top of the list.

LAST_NAME	**YEAR**	**MONTHS**

AAA	21	5
BBB	21	2
CCC	19	2
DDD	18	10
EEE	17	8

5. Show those employees who have a last name starting with the letter J,K,L or M

LAST_NAME
King
Kocher
Lorentz
Matos
Mourgos

SELECT *

FROM employees

WHERE LAST_NAME LIKE ‘J%’ OR ‘K%’ OR ‘L%’ OR ‘M%’ ;

6. Create a report that display all employees and indicate with the YES or NO whether they receive a commission. Use the DECODE expression in your query.

Last_name	Salary	Commission
AAA	5000	No
BBB	4000	Yes
CCC	4500	Yes
DDD	6000	No

SELECT Last_Name,salary, DECODE (commission,NULL,'No','Yes') AS “Commission “
FROM employees;

7. Create a report that display the department name, location, name, job title and salary of those employees who work in a specific location. Prompt the user for the location. For example, if the user enters 1800, then following are the result.

Department Name	Location ID	Last Name	Job id	Salary
Marketing	1800	AAA	MK_MAN	13000
Marketing	1800	BBB	MK_REP	600

SELECT *

FROM employees

WHERE &Location ID ;

8. Find the number of employees who have a last name that ends with the letter “n”, Create two Possible solution.

Last Name count with letter n
3

SELECT COUNT(*) AS “ Last Name count with Letter n”

FROM employees

WHERE LName LIKE '%n';

9. Create the report shows the last name, location and number of employees for each department. Make sure that the repost also includes departments with employees.

Department id	Department Name	Location ID	No of Emp
80	Sales	2500	3
110	Accounting	1700	2
10	Administration	1700	1
90	Executive	1700	3
190	Contracting	1700	0

SELECT LName, Location ID, No of Emp

FROM employees

GROUP BY Department Name;

10. The HR department find the Job title in each department 10 and 20. Create a report display the jobID for those departments.

Job_id
AD_ASST
MK_MAN
MK_REP

SELECT Job_id

FROM employees

WHERE Department ID = 10 OR Department ID = 20;

11. Create a report that display the job that are find in the Administration and Executive department. Also display the number of employees for these JOBs. Show the job with the highest number of employees first.

Job ID	Frequency
AD_VP	2
AD_PRES	1
AD_ASST	1

SELECT Job ID, COUNT(Emp ID) AS “Frequency”

FROM employees

WHERE Job ID LIKE 'AD%' OR JOB ID like '%Executive% OR Job ID LIKE ‘%Administration%’

ORDER BY Frequency;

12. Show all the employees who were hired in the first half of the month (before the 16th of the month)

LAST_NAME	HIRE_DATE
Higgins	07-JUN-94
De Haan	13-JAN-93
Matos	15-MAR-98
Vargas	01-JUL-98

SELECT *

FROM employees

WHERE EXTRACT(DAY FROM HIRE_DATE)<16;

13. Create a report that display the following for all employees: last_name, salary and salary expressed in terms of thousands of dollar.

Last Name	Salary	Thousands
Whalen	4400	4
Hartstein	13000	13
Fay	6000	6
Higgins	12000	12

SELECT last_name,salary,(salary/1000) AS “Thousands”

FROM employees;

14. Show all the employees who have manager with a salary higher then $15,000. Show the following data: employee name, manager name, manager salary and salary grade of the manager.

Last Name	Manager	Salary	Grade Level
Whalen	Kochhar	17000	E
Higgins	Kochhar	17000	E
Hunold	De Haan	17000	E
Kochhar	King	24000	E
De Haan	King	24000	E

SEELCT employee name,manager name,manager salary,salary grade

FROM employees

WHERE salary>15000;

15. Show the department number, name, number of employees and avg salary of all departments along with the names, salary and jobs of the employees working in each department.

Dept	Dept Name	Employees	AVG Salary	Last_name
10	Administration	1	4400	Whalen
20	Marketing	2	9500	Hartstein
20	Marketing	2	9500	Fay
50	Shipping	5	3500	Rajs
50	Shipping	5	3500	Matos
60	IT	3	6400	Hunold
(null)	(null)	0	No Average	Grant

SELECT Dept, Dept Name, COUNT(Dept) AS “Employees”,AVG(salary) AS “AVG Salary”,Last_name
FROM employees;