Q1. Display the Name, manager Id, and hire date of all employees who are either clerk or works in dept 20. the date should be in the following format:
DATE_HIRED
Seventeenth December, 1980
Second April, 1981

SELECT ENAME, MGR, TO_CHAR(HIREDATE,'DDSPTH MONTH,YYYY') AS DATE_HIRED FROM EMP WHERE JOB = 'CLERK' OR DEPTNO = 20;

ENAME	MGR	DATE_HIRED
SMITH	7902	SEVENTEENTH DECEMBER ,1980
JONES	7839	SECOND APRIL ,1981
SCOTT	7566	NINETEENTH APRIL ,1987
ADAMS	7788	TWENTY-THIRD MAY ,1987
JAMES	7698	THIRD DECEMBER ,1981
FORD	7566	THIRD DECEMBER ,1981
MILLER	7782	TWENTY-THIRD JANUARY ,1982

Q2.List the employee name and old salary and new increased salary by 25% and expressed as a whole number.

```
SELECT
   ename AS "Employee Name",
   sal AS "Old Salary",
   ROUND(sal * 1.25) AS "New Salary"
FROM
   emp;
```

Employee Name	Old Salary	New Salary
SMITH	800	1000
ALLEN	1600	2000
WARD	1250	1563
JONES	2975	3719
MARTIN	1250	1563
BLAKE	2850	3563
CLARK	2450	3063
SCOTT	3000	3750
KING	5000	6250
TURNER	1500	1875
ADAMS	1100	1375
JAMES	950	1188

Q3. List the employee name and salary where name is displayed as left justified and salary with right justified.

SELECT

```
    RPAD(ename, 20) AS "Employee Name",
    LPAD(TO_CHAR(sal), 10) AS "Salary"
FROM
    emp;
```

Employee Name	Salary
SMITH	800
ALLEN	1600
WARD	1250
JONES	2975
MARTIN	1250
BLAKE	2850
CLARK	2450
SCOTT	3000
KING	5000
TURNER	1500
ADAMS	1100
JAMES	950

Q4.Produce the output as follows(for all employees)
ROLE OF THE EMPLOYEE
Name1 (<Job of Name 1>)
Name2 (<Job of Name 2>)
.....
Note: Only first character of Name and job will be in uppercase.

```
  SELECT
  INITCAP(LOWER(SUBSTR(ENAME, 1, 1))) || LOWER(SUBSTR(ENAME, 2)) ||
  ' (' ||
  INITCAP(LOWER(SUBSTR(JOB, 1, 1))) || LOWER(SUBSTR(JOB, 2)) ||
  ')' AS "ROLE OF THE EMPLOYEE"
FROM
  EMP;
```

ROLE OF THE EMPLOYEE
Smith (Clerk)
Allen (Salesman)
Ward (Salesman)
Jones (Manager)
Martin (Salesman)
Blake (Manager)
Clark (Manager)
Scott (Analyst)
King (President)

Q5.Give the details of an employees with job is clerk (enter the job value clerk as input).

```
SELECT * FROM EMP WHERE JOB = 'CLERK';
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	PHONENO	ADDRESS
7369	SMITH	CLERK	7902	17-DEC-80	800	-	20	-	-
7876	ADAMS	CLERK	7788	23-MAY-87	1100	-	20	-	-
7900	JAMES	CLERK	7698	03-DEC-81	950	-	30	-	-
7934	MILLER	CLERK	7782	23-JAN-82	1300	-	10	-	-

Q6.Display each employee name with hiredate and salary review date. Assume that date is one year after hiredate. Order the output in ascending review date order.

```
SELECT
   ENAME AS "Employee Name",
   HIREDATE AS "Hire Date",
   ADD_MONTHS(HIREDATE, 12) AS "Salary Review Date"
FROM
   EMP
ORDER BY
   "Salary Review Date" ASC;
```

Employee Name	Hire Date	Salary Review Date
SMITH	17-DEC-80	17-DEC-81
ALLEN	20-FEB-81	20-FEB-82
WARD	22-FEB-81	22-FEB-82
JONES	02-APR-81	02-APR-82
BLAKE	01-MAY-81	01-MAY-82
CLARK	09-JUN-81	09-JUN-82
TURNER	08-SEP-81	08-SEP-82
MARTIN	28-SEP-81	28-SEP-82
KING	17-NOV-81	17-NOV-82
JAMES	03-DEC-81	03-DEC-82
FORD	03-DEC-81	03-DEC-82
MILLER	23-JAN-82	23-JAN-83

Q7.Find the employees(s) who earn the highest salary in each job type sort in descending salary order(Use IN operator and subqueries)

```
SELECT *
FROM EMP
WHERE  SAL IN (
   SELECT  MAX(SAL)
   FROM EMP
   GROUP BY JOB
```

)
ORDER BY SAL DESC;

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	PHONENO	ADDRESS
7839	KING	PRESIDENT	-	17-NOV-81	5000	-	10	-	-
7788	SCOTT	ANALYST	7566	19-APR-87	3000	-	20	-	-
7902	FORD	ANALYST	7566	03-DEC-81	3000	-	20	-	-
7566	JONES	MANAGER	7839	02-APR-81	2975	-	20	-	-
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30	-	-
7934	MILLER	CLERK	7782	23-JAN-82	1300	-	10	-	-

Q8.Find the most recently hired employee in each department (give number only).

```
SELECT EMPNO
FROM EMP e
WHERE HIREDATE = (
    SELECT MAX(HIREDATE)
    FROM EMP
    WHERE DEPTNO = e.DEPTNO
);
```

EMPNO
7876
7900
7934

Q9.Show the name of the department and no of employees who works in that department. Sort in department number.

```
SELECT
    d.dname AS "Department Name",
    COUNT(e.empno) AS "Number of Employees"
FROM
    DEPT d
LEFT JOIN
```

```
   EMP e
ON
   d.deptno = e.deptno
GROUP BY
   d.dname, d.deptno
ORDER BY
   d.deptno;
```

Department Name	Number of Employees
ACCOUNTING	3
RESEARCH	5
SALES	6
OPERATIONS	0

Q10.Display the Id, name, salary and the salary grade for any employee who earns the maximum salary for their department. Sort in department number.

```
SELECT
   e.EMPNO AS "Employee ID",
   e.ENAME AS "Name",
   e.SAL AS "Salary",
   s.GRADE AS "Salary Grade"
FROM
   EMP e
JOIN
   SALGRADE s
ON
   e.SAL BETWEEN s.LOSAL AND s.HISAL
WHERE
   e.SAL = (
      SELECT MAX(e1.SAL)
      FROM EMP e1
      WHERE e1.DEPTNO = e.DEPTNO
   )
ORDER BY
   e.DEPTNO;
```

Employee ID	Name	Salary	Salary Grade
7839	KING	5000	5
7788	SCOTT	3000	4
7902	FORD	3000	4
7698	BLAKE	2850	4

Q11.In which year did most people join the company? Display the year and number of employees.

SELECT TO_CHAR(HIREDATE, 'YYYY') AS YEAR, COUNT(EMPNO) AS NO_OF_EMPLOYEES FROM EMP GROUP BY TO_CHAR(HIREDATE, 'YYYY') HAVING COUNT(EMPNO)=(SELECT MAX(COUNT(EMPNO)) FROM EMP GROUP BY TO_CHAR(HIREDATE, 'YYYY'));

YEAR	NO_OF_EMPLOYEES
1981	10

Q12.Show the every alternate row in employee table.

SELECT EMPNO, ENAME, JOB, MGR, HIREDATE,SAL, COMM, DEPTNO, PHONENO, ADDRESS FROM(SELECT EMPNO, ENAME,JOB, MGR, HIREDATE, SAL, COMM, DEPTNO, PHONENO, ADDRESS, ROWNUM RN FROM EMP) WHERE MOD(RN,2)=1;

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	PHONENO	ADDRESS
7369	SMITH	CLERK	7902	17-DEC-80	800	-	20	-	-
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30	-	-
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30	-	-
7782	CLARK	MANAGER	7839	09-JUN-81	2450	-	10	-	-
7839	KING	PRESIDENT	-	17-NOV-81	5000	-	10	-	-
7876	ADAMS	CLERK	7788	23-MAY-87	1100	-	20	-	-
7902	FORD	ANALYST	7566	03-DEC-81	3000	-	20	-	-

Q13.Display the total salary of all employees. Total salary = salary + commission.

SELECT EMPNO, ENAME, JOB, (SAL + NVL(COMM, 0)) AS TOTAL_SALARY
FROM EMP;

EMPNO	ENAME	JOB	TOTAL_SALARY
7369	SMITH	CLERK	800
7499	ALLEN	SALESMAN	1900
7521	WARD	SALESMAN	1750
7566	JONES	MANAGER	2975
7654	MARTIN	SALESMAN	2650
7698	BLAKE	MANAGER	2850
7782	CLARK	MANAGER	2450
7788	SCOTT	ANALYST	3000
7839	KING	PRESIDENT	5000
7844	TURNER	SALESMAN	1500
7876	ADAMS	CLERK	1100
7900	JAMES	CLERK	950

Q14.Display the department name and available jobs in that department.

```
SELECT DISTINCT(JOB) AS AVAILABLE_JOBS,DNAME
FROM EMP,DEPT
WHERE DEPT.deptno=EMP.deptno
ORDER BY DNAME
```

AVAILABLE_JOBS	DNAME
CLERK	ACCOUNTING
MANAGER	ACCOUNTING
PRESIDENT	ACCOUNTING
ANALYST	RESEARCH
CLERK	RESEARCH
MANAGER	RESEARCH
CLERK	SALES
MANAGER	SALES
SALESMAN	SALES

Q15.Display all the available departments and the employee(s) works under it.

```
SELECT DNAME,ENAME
FROM EMP,DEPT
WHERE DEPT.deptno=EMP.deptno
ORDER BY DNAME
```

DNAME	ENAME
ACCOUNTING	CLARK
ACCOUNTING	KING
ACCOUNTING	MILLER
RESEARCH	JONES
RESEARCH	FORD
RESEARCH	ADAMS
RESEARCH	SMITH
RESEARCH	SCOTT