

## LAB SHEET-3

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**1.list employee names and their hire dates sorted in the order of their experience.**

```
SELECT ENAME,HIREDATE,((months_between(sysdate,hiredate))/12) AS EXPERIENCE FROM  
EMP ORDER BY EXPERIENCE
```

ENAME	HIREDATE	EXPERIENCE
ADAMS	13-JUL-87	33.99557378783353245718837116686579052167
SCOTT	13-JUL-87	33.99557378783353245718837116686579052167
MILLER	23-JAN-82	39.46869206740342493030665073675826364
JAMES	03-DEC-81	39.60578884159697331740342493030665073675
FORD	03-DEC-81	39.60578884159697331740342493030665073675
KING	17-NOV-81	39.65148776632815611310234966148944643567
MARTIN	28-SEP-81	39.78858454052170450019912385503783353242
TURNER	08-SEP-81	39.84234798138191955396256471525288729592
CLARK	09-JUN-81	40.08965980933890880127439267224213460775
BLAKE	01-MAY-81	40.19449851901632815611310234966148944642
JONES	02-APR-81	40.27514368030665073675826363998407009158
WARD	22-FEB-81	40.38804690611310234966148944643568299483
ALLEN	20-FEB-81	40.39342325019912385503783353245718837117
SMITH	17-DEC-80	40.56815443299482277976901632815611310233

14 rows selected.

**2. List managers names and their joining dates completely spelled in alphabetical order of names.**

```
SELECT ENAME,TO_CHAR(HIREDATE,'DDSPTH MON YEAR') FROM EMP WHERE JOB='MANAGER'  
ORDER BY ENAME
```

```
ENAME TO_CHAR(HIREDATE,'DDSPTHMONYEAR')
```

```
BLAKE    FIRST MAY NINETEEN EIGHTY-ONE
CLARK    NINTH JUN NINETEEN EIGHTY-ONE
JONES    SECOND APR NINETEEN EIGHTY-ONE
```

3 rows selected.

### 3. List employee names and their experience in years with names arranged in

descending order.

```
SELECT ENAME,TO_CHAR(SYSDATE,'YYYY')-TO_CHAR(HIREDATE,'YYYY')EXPERIENCE FROM EMP
ORDER BY ENAME DESC
```

ENAME	EXPERIENCE
-------	------------

WARD	40
TURNER	40
SMITH	41
SCOTT	34
MILLER	39
MARTIN	40
KING	40
JONES	40
JAMES	40
FORD	40
CLARK	40
BLAKE	40
ALLEN	40
ADAMS	34

14 rows selected.

### 4. List employee names having a minimum of 2 years experience sorted on experience.

```
SELECT ENAME FROM EMP WHERE ((months_between(sysdate,hiredate))/12)>=2
```

ENAME
-------

KING
BLAKE
CLARK
JONES
SCOTT
FORD

SMITH

ALLEN

WARD

TURNER

ADAMS

JAMES

MILLER

MARTIN

14 rows selected.

**5. List employee names with all capital letters, with all small letters and with first letter only as Capital.**

**SELECT** UPPER(ENAME),LOWER(ENAME),INITCAP(ENAME) **FROM** EMP

UPPER(ENAME)	LOWER(ENAME)	INITCAP(ENAME)
--------------	--------------	----------------

KING	king	King
------	------	------

BLAKE	blake	Blake
-------	-------	-------

CLARK	clark	Clark
-------	-------	-------

JONES	jones	Jones
-------	-------	-------

SCOTT	scott	Scott
-------	-------	-------

FORD	ford	Ford
------	------	------

SMITH	smith	Smith
-------	-------	-------

ALLEN	allen	Allen
-------	-------	-------

WARD	ward	Ward
------	------	------

TURNER	turner	Turner
--------	--------	--------

ADAMS	adams	Adams
-------	-------	-------

JAMES	james	James
-------	-------	-------

MILLER	miller	Miller
--------	--------	--------

MARTIN	martin	Martin
--------	--------	--------

14 rows selected.

**6. List employee names with length of the name sorted on length.**

**SELECT** ENAME, LENGTH(ENAME) **AS** LENGTH **FROM** EMP **ORDER BY** LENGTH

ENAME	LENGTH
-------	--------

WARD	4
------	---

KING	4
------	---

FORD	4
SMITH	5
JONES	5
CLARK	5
BLAKE	5
ALLEN	5
SCOTT	5
JAMES	5
ADAMS	5
MILLER	6
TURNER	6
MARTIN	6

14 rows selected.

**7. List employee names appending Sri to the beginning and Garu to the end.**

```
SELECT CONCAT(CONCAT('SRI ',ENAME),' GARU') FROM EMP
```

```
CONCAT(CONCAT('SRI ',ENAME),' GARU')
```

SRI KING GARU  
 SRI BLAKE GARU  
 SRI CLARK GARU  
 SRI JONES GARU  
 SRI SCOTT GARU  
 SRI FORD GARU  
 SRI SMITH GARU  
 SRI ALLEN GARU  
 SRI WARD GARU  
 SRI TURNER GARU  
 SRI ADAMS GARU  
 SRI JAMES GARU  
 SRI MILLER GARU  
 SRI MARTIN GARU

14 rows selected.

**8. List employee names and month names of joining.**

```
SELECT ENAME,TO_CHAR(HIREDATE,'MONTH') FROM EMP
```

ENAME	TO_CHAR(HIREDATE,'MONTH')
-------	---------------------------

KING	NOVEMBER
------	----------

BLAKE	MAY
-------	-----

CLARK	JUNE
-------	------

JONES	APRIL
-------	-------

SCOTT	JULY
-------	------

FORD	DECEMBER
------	----------

SMITH	DECEMBER
-------	----------

ALLEN	FEBRUARY
-------	----------

WARD	FEBRUARY
------	----------

TURNER	SEPTEMBER
--------	-----------

ADAMS	JULY
-------	------

JAMES	DECEMBER
-------	----------

MILLER	JANUARY
--------	---------

MARTIN	SEPTEMBER
--------	-----------

14 rows selected.

### 9. List employee names and year of joining in words.

```
SELECT ENAME,TO_CHAR(HIREDATE,'YEAR') FROM EMP
```

ENAME	TO_CHAR(HIREDATE,'YEAR')
-------	--------------------------

KING	NINETEEN EIGHTY-ONE
------	---------------------

BLAKE	NINETEEN EIGHTY-ONE
-------	---------------------

CLARK	NINETEEN EIGHTY-ONE
-------	---------------------

JONES	NINETEEN EIGHTY-ONE
-------	---------------------

SCOTT	NINETEEN EIGHTY-SEVEN
-------	-----------------------

FORD	NINETEEN EIGHTY-ONE
------	---------------------

SMITH	NINETEEN EIGHTY
-------	-----------------

ALLEN	NINETEEN EIGHTY-ONE
-------	---------------------

WARD	NINETEEN EIGHTY-ONE
------	---------------------

TURNER	NINETEEN EIGHTY-ONE
--------	---------------------

ADAMS	NINETEEN EIGHTY-SEVEN
-------	-----------------------

JAMES	NINETEEN EIGHTY-ONE
-------	---------------------

MILLER	NINETEEN EIGHTY-TWO
--------	---------------------

MARTIN	NINETEEN EIGHTY-ONE
--------	---------------------

14 rows selected.

**10. List employees names, job and salary with 5 hyphens in between.**

```
SELECT ENAME || '-----' || JOB || '-----' || SAL FROM EMP
```

```
ENAME||'-----'||JOB||'-----'||SAL
KING-----PRESIDENT-----5000
BLAKE-----MANAGER-----2850
CLARK-----MANAGER-----2450
JONES-----MANAGER-----2975
SCOTT-----ANALYST-----3000
FORD-----ANALYST-----3000
SMITH-----CLERK-----800
ALLEN-----SALESMAN-----1600
WARD-----SALESMAN-----1250
TURNER-----SALESMAN-----1500
ADAMS-----CLERK-----1100
JAMES-----CLERK-----950
MILLER-----CLERK-----1300
MARTIN-----SALESMAN-----1250
14 rows selected.
```

**11. List employee names and position of first occurrence of I in their name.**

```
SELECT ENAME, INSTR(ENAME, 'I') FROM EMP
```

ENAME	INSTR(ENAME, 'I')
KING	2
BLAKE	0
CLARK	0
JONES	0
SCOTT	0
FORD	0
SMITH	3
ALLEN	0
WARD	0
TURNER	0
ADAMS	0
JAMES	0
MILLER	2

MARTIN 5  
14 rows selected.

**12. List employee names and the string without first character and last character in their name.**

```
SELECT ENAME,SUBSTR(ENAME,2, LENGTH(ENAME)-2) FROM EMP
```

ENAME	SUBSTR(ENAME,2,LENGTH(ENAME)-2)
KING	IN
BLAKE	LAK
CLARK	LAR
JONES	ONE
SCOTT	COT
FORD	OR
SMITH	MIT
ALLEN	LLE
WARD	AR
TURNER	URNE
ADAMS	DAM
JAMES	AME
MILLER	ILLE
MARTIN	ARTI

14 rows selected.

**13. List employees who joined between Apr 81 and Apr 82.**

```
SELECT * FROM EMP WHERE HIREDATE BETWEEN '01-APR-81' AND '30-APR-82'
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	KING	PRESIDENT	-	17-NOV-81	5000	-	10
7698	BLAKE	MANAGER	7839	01-MAY-81	2850	-	30
7782	CLARK	MANAGER	7839	09-JUN-81	2450	-	10
7566	JONES	MANAGER	7839	02-APR-81	2975	-	20
7902	FORD	ANALYST	7566	03-DEC-81	3000	-	20
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30
7900	JAMES	CLERK	7698	03-DEC-81	950	-	30
7934	MILLER	CLERK	7782	23-JAN-82	1300	-	10
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30

9 rows selected.

14. List max sal, min sal and average sal of depts. 10,30.

```
SELECT MAX(SAL),MIN(SAL),AVG(SAL) FROM EMP WHERE DEPTNO IN (10,30)
```

MAX(SAL)	MIN(SAL)	AVG(SAL)
5000	950	2016.6666666666666666666666666667

**15. List the designation in dept 30 but not in 20.**

```
SELECT JOB FROM EMP WHERE DEPTNO IN 30
```

UNION

```
SELECT JOB FROM EMP WHERE DEPTNO NOT IN 20
```

**JOB**

CLERK

MANAGER

PRESIDENT

SALESMAN

4 rows selected.

**16. List the number of employees in each department along with dept numbers.**

```
SELECT COUNT(*) AS EMPLOYEES,DEPTNO FROM EMP GROUP BY DEPTNO
```

EMPLOYEES DEPTNO

6 30

3 10

5 20

3 rows selected.

**17. List number of employees joined year wise.**

```
SELECT COUNT(*) AS EMPLOYEES,TO_CHAR(HIREDATE,'YYYY')FROM EMP GROUP BY  
TO_CHAR(HIREDATE,'YYYY')
```

**EMPLOYEES TO CHAR(HIREDATE,'YYYY')**



4 rows selected.

```
SELECT COUNT(*) AS EMPLOYEES, JOB FROM EMP GROUP BY JOB
```

5 rows selected.

```
SELECT MAX(SAL),MIN(SAL),AVG(SAL),DEPTNO FROM EMP GROUP BY DEPTNO
```

3 rows selected.

```
SELECT MAX(SAL),MIN(SAL),AVG(SAL),JOB FROM EMP GROUP BY JOB
```

5 rows selected.

**21. List max sal, min sal for the jobs MANAGER and CLERK.**

```
SELECT MAX(SAL),MIN(SAL) FROM EMP WHERE JOB IN ('MANAGER','CLERK')
```

**MAX(SAL)    MIN(SAL)**

2975 800

22. List max sal, min sal AND average salary of the depts. Having a minimum 3 employees.

```
SELECT DEPTNO,MIN(SAL),MAX(SAL),AVG(SAL) FROM EMP GROUP BY DEPTNO HAVING
COUNT(*)>2
```

DEPTNO	MIN(SAL)	MAX(SAL)	AVG(SAL)
30	950	2850	1566.6666666666666666666666666667
10	1300	5000	2916.6666666666666666666666666667
20	800	3000	2175

3 rows selected.

**23. List the number of employees in each job in each department.**

```
SELECT COUNT(*) AS EMPLOYEES, JOB, DEPTNO FROM EMP GROUP BY JOB, DEPTNO
```

EMPLOYEES	JOB	DEPTNO
2	CLERK	20
1	MANAGER	20
1	MANAGER	30
1	MANAGER	10
1	PRESIDENT	10
4	SALESMAN	30
2	ANALYST	20
1	CLERK	30
1	CLERK	10

9 rows selected.

**24. List MGR and the number of employees report to them in the sorted order.**

```
SELECT COUNT(*) AS EMPLOYEES,MGR FROM EMP WHERE MGR IS NOT NULL GROUP BY MGR
ORDER BY EMPLOYEES
```

EMPLOYEES MGR

1	7788
1	7782
1	7902
2	7566
3	7839
5	7698

6 rows selected.

**25. List emp numbers of employees to whom a minimum of 3 people report.**

```
SELECT DISTINCT(MGR),COUNT(*) FROM EMP WHERE MGR IS NOT NULL GROUP BY MGR
HAVING COUNT(*)>2
```

MGR	COUNT(*)
-----	----------

7698	5
------	---

7839	3
------	---

2 rows selected.

**26. List dept numbers having a minimum of 3 persons.**

```
SELECT DEPTNO FROM EMP GROUP BY DEPTNO HAVING COUNT(*)>=3
```

DEPTNO
--------

30
----

20
----

2 rows selected.

**27. List names of jobs having a minimum of 3 persons in that job.**

```
SELECT JOB FROM EMP GROUP BY JOB HAVING COUNT(*)>=3
```

JOB
-----

CLERK
-------

SALESMAN
----------

MANAGER
---------

3 rows selected.

**28. List names of months in which a minimum of 3 persons joined.**

```
SELECT TO_CHAR(HIREDATE,'MONTH') FROM EMP GROUP BY TO_CHAR(HIREDATE,'MONTH')
HAVING COUNT(*)>=3
```

**TO\_CHAR(HIREDATE,'MONTH')**

DECEMBER

**29. List hiredates of employees having 2 or more employees having the same hiredate.**

**SELECT** HIREDATE **FROM** EMP **GROUP BY** HIREDATE **HAVING** COUNT(\*)>=2

**HIREDATE**

03-DEC-81

13-JUL-87

2 rows selected.

**30. List departments having minimum of 3 people having a minimum of 17**

**years of experience**

**SELECT** D.DNAME,COUNT(\*) **FROM** DEPT D,EMP E **WHERE** D.DEPTNO=E.DEPTNO **OR**

TO\_CHAR(SYSDATE,'YY')-TO\_CHAR(HIREDATE,'YY')>16

**GROUP BY** D.DNAME **HAVING** COUNT(\*)>2

DNAME	COUNT(*)
RESEARCH	5
SALES	6
ACCOUNTING	3

3 rows selected.