VVIMP_QUES

MULTI-ROW SUB-QUERY

• If, inner query returns more than one output to the outer query, we call it as Muti-row Sub query.

• We can achieve multi-row sub-query by using 'ALL' & 'ANY' operator.

1] WAQTD details of an employee who are earning more than all the 'SALESMAN'.

    SELECT *
    FROM EMP
    WHERE SAL > ALL (SELECT SAL
                FROM EMP
                WHERE JOB = 'SALESMAN');

2] WAQTD names of an employee hired after all the 'MANAGER' & earning more than all the 'CLERK'.

    SELECT ENAME
    FROM EMP
    WHERE HIREDATE > ALL (SELECT HIREDATE
                    FROM EMP

WHERE JOB = 'MANAGER') AND

SAL > ALL (SELECT SAL

FROM EMP

WHERE JOB = 'CLERK');

3] WAQTD name & salary of an employee if they are earning more than at least a 'MANAGER'.

SELECT ENAME, SAL

FROM EMP

WHERE SAL > ANY (SELECT SAL

FROM EMP

WHERE JOB = 'MANAGER');

4] WAQTD details of the employees working as 'CLERK' & hired before at least a 'SALESMAN'.

SELECT *

FROM EMP

WHERE JOB = 'CLERK' AND

HIREDATE < ANY (SELECT HIREDATE

FROM EMP

WHERE JOB = 'SALESMAN');

5] WAQTD 3rd record from EMP table. (Conceptual Question)

```
SELECT *
FROM (SELECT ROWNUM AS SLNO, EMP.*
      FROM EMP)
WHERE SLNO = 3;
```

(HERE IN QUES THEY MIGHT ASK ANY NUMBER OF RECORD YOU SHOULD USE THE ABOVE METHODE TO SOLVE THESE KIND OF PROBLEMS)

6] WAQTD last 3 records from EMP table. (Important)

```
SELECT *
FROM (SELECT ROWNUM SLNO, EMP.*
      FROM EMP
      ORDER BY SLNO DESC)
WHERE ROWNUM<=3;
```

Syntax for Nth MAX(SAL)

```
SELECT SAL
FROM (SELECT ROWNUM SLNO, SAL
       FROM (SELECT DISTINCT SAL
             FROM EMP
             ORDER BY SAL DESC))
WHERE SLNO = N;
```

Syntax for Nth MIN(SAL)

```
SELECT SAL
FROM (SELECT ROWNUM SLNO, SAL
       FROM (SELECT DISTINCT SAL
             FROM EMP
             ORDER BY SAL ASC))
WHERE SLNO = N;
```

7] WAQTD first character of names of all the employees.(USING SRF)

```
SELECT SUBSTR (ENAME, 1, 1)
FROM EMP;
```

8] WAQTD first 3 characters of the name of all the employees.

SELECT SUBSTR (ENAME, 1, 3)

FROM EMP;

9] WAQTD details of an employee whose name starts with character 'A' using single row function.

SELECT *

FROM EMP

WHERE SUBSTR (ENAME, 1, 1) = 'A';

10] WAQTD details of an employee whose designation ends with character 'N'.

SELECT *

FROM EMP

WHERE SUBSTR (JOB, -1, 1) = 'N';

11] WAQTD names of an employee whose name starts with character 'A' or 'S'.

SELECT ENAME

FROM EMP

WHERE SUBSTR (ENAME, 1, 1) IN ('A', 'S');

12] WAQTD details of an employee whose name starts with vowels.

    SELECT *
    FROM EMP
    WHERE SUBSTR (ENAME, 1, 1) IN ('A', 'E', 'I', 'O', 'U');

13] WAQTD names of an employee along with number of characters they are having in their name.

    SELECT ENAME, LENGTH ('ENAME')
    FROM EMP;

14] WAQTD number of employees having exactly 4 characters in his name using single row function.

    SELECT COUNT (*)
    FROM EMP
    WHERE LENGTH (ENAME) = 4;

15] WAQTD name in uppercase, designation in lowercase if their name has five characters & getting 3-digit salary.

    SELECT UPPER (ENAME), LOWER (JOB)
    FROM EMP

WHERE LENGTH (ENAME) = 5 AND LENGTH (SAL) = 3;

16] WAQTD first character & last character of employee name in uppercase & rest of the characters in lowercase.

(VERY MOST IMP)

SELECT UPPER(SUBSTR(ENAME,1,1)) ||
LOWER(SUBSTR(ENAME,2,LENGTH(ENAME)-2)) ||

UPPER(SUBSTR(ENAME,-1,1))

FROM EMP;

17] WAQTD first half of employee name in uppercase & second half in lowercase & reverse.

SELECT UPPER(SUBSTR(ENAME,1,2)) ||
REVERSE(LOWER(SUBSTR(ENAME,3,LENGTH(ENAME)-1)))

FROM EMP;

18] WAQTD details of an employee hired on SATURDAY.

SELECT *

FROM EMP

WHERE TO_CHAR (HIREDATE, 'DY') = 'SAT';

19] WAQTD details of an employee hired on FRIDAY, SATURDAY &
SUNDAY.

SELECT *

FROM EMP

WHERE TO_CHAR (HIREDATE, 'DY') IN ('FRI', 'SAT', 'SUN');

20] WAQTD details of an employee hired in a month of OCTOBER,
NOVEMBER & DECEMBER.

SELECT *

FROM EMP

WHERE TO_CHAR (HIREDATE, 'MON') IN ('OCT', 'NOV',
'DEC');

OR,

SELECT *

FROM EMP

WHERE TO_CHAR (HIREDATE, 'MM') IN (10, 11, 12);

21] WAQTD details of an employee if their name having character 'A' using Single Row Function.

```
SELECT *
FROM EMP
WHERE INSTR (ENAME, 'A', 1, 1) > 0;
```

22] WAQTD details of an employee who is having at least two 'A' in his name using single row function.

```
SELECT *
FROM EMP
WHERE INSTR (ENAME, 'A', 1, 2) > 0;
```

23] WAQTD total salary given to each employee.

```
SELECT ENAME, SAL, COMM, SAL+NVL (COMM, 0)
FROM EMP;
```

24] WAQTD 2ND MAX SAL IN EACH DEPTNO.

```
SELECT E1.DEPTNO,MAX(E1.SAL)
FROM EMP E1, EMP E2
WHERE E1.SAL < (SELECT MAX(SAL)
                FROM EMP E2
```

```
                    WHERE E1.DEPTNO = E2.DEPTNO)
          GROUP BY E1.DEPTNO;
```

25] WAQTD FIRST HALF RECORDS IN EMP TABLE.

```
      SELECT *
      FROM (SELECT ROWNUM SLNO, EMP.*
            FROM EMP)
            WHERE SLNO <= (SELECT COUNT(*)/2
                      FROM EMP);
```

26] WAQTD SECOND HALF RECORDS IN EMP TABLE.

```
      SELECT *
      FROM (SELECT ROWNUM SLNO, EMP.*
            FROM EMP)
      WHERE SLNO > (SELECT COUNT(*)/2
                FROM EMP);
```

27] WAQTD LAST 5 RECORDS IN EMP TABLE.

```
SELECT *
FROM (SELECT ROWNUM SLNO, EMP.*
      FROM EMP
      ORDER BY SLNO DESC)
WHERE ROWNUM < 6;
```