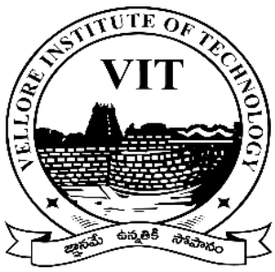

VIT®
AP

CSE2007 : Database Management Systems

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Date : 11 – 03 – 2021

Submitted to : Ms. Dhanavanthini madam

Single row and Group Function Queries

Find the query and output for the given group functions :

Create the table employee and insert the listed values

NAME	DOB	DOJ	GENDER	SKILL 1	SKILL 2	SALARY
ANITHA	30-JUN-60	28-APR-75	F	C++	ASP.NET	1000
KAMALA	28-APR-75	20-MAY-92	F	DBASE	C#.NET	2000
MARY	30-MAR-91	09-APR-05	F	C++	DBASE	2020
ANAND	02-JAN-89	20-APR-09	M	ORACLE	C	2100
KARTHICK	11-FEB-70	15-JUN-12	M	JAVA	C++	2500
VIJAY	29-OCT-82	15-JUN-12	M	C#.NET	C++	2520
JAGADESH	19-DEC-87	15-JUN-12	M	COBOL	C++	2500

Output :

```
Run SQL Command Line

SQL> CREATE TABLE employee(name VARCHAR2(10), dob DATE, doj DATE, gender VARCHAR2(1), skill1 VARCHAR2(10), skill2 VARCHAR2(10), salary NUMBER(5));

Table created.

SQL> DESC employee;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 NAME                                               VARCHAR2(10)
 DOB                                                DATE
 DOJ                                                DATE
 GENDER                                             VARCHAR2(1)
 SKILL1                                             VARCHAR2(10)
 SKILL2                                             VARCHAR2(10)
 SALARY                                             NUMBER(5)
```

```
SQL> INSERT INTO employee VALUES('ANITHA', '30-JUN-60', '28-APR-75', 'F', 'C++', 'ASP.NET', 1000);

1 row created.

SQL> INSERT INTO employee VALUES('KAMALA', '28-APR-75', '20-MAY-92', 'F', 'DBASE', 'C#.NET', 2000);

1 row created.

SQL> INSERT INTO employee VALUES('MARY', '30-MAR-91', '09-APR-05', 'F', 'C++', 'DBASE', 2020);

1 row created.

SQL> INSERT INTO employee VALUES('ANAND', '02-JAN-89', '20-APR-09', 'M', 'ORACLE', 'C', 2100);

1 row created.

SQL> INSERT INTO employee VALUES('KARTHICK', '11-FEB-70', '15-JUN-12', 'M', 'JAVA', 'C++', 2500);

1 row created.

SQL> INSERT INTO employee VALUES('VIJAY', '29-OCT-82', '15-JUN-12', 'M', 'C#.NET', 'C++', 2520);

1 row created.

SQL> INSERT INTO employee VALUES('JAGADESH', '19-DEC-87', '15-JUN-12', 'M', 'COBOL', 'C++', 2500);

1 row created.

SQL> SELECT * FROM employee;

NAME       DOB       DOJ       G SKILL1     SKILL2         SALARY
---------- --------- --------- - ---------- ---------- ----------
ANITHA     30-JUN-60 28-APR-75 F C++        ASP.NET          1000
KAMALA     28-APR-75 20-MAY-92 F DBASE      C#.NET           2000
MARY       30-MAR-91 09-APR-05 F C++        DBASE            2020
ANAND      02-JAN-89 20-APR-09 M ORACLE     C                2100
KARTHICK   11-FEB-70 15-JUN-12 M JAVA       C++              2500
VIJAY      29-OCT-82 15-JUN-12 M C#.NET     C++              2520
JAGADESH   19-DEC-87 15-JUN-12 M COBOL      C++              2500

7 rows selected.
```


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1. How many female programmers are there?

```
SQL> SELECT COUNT(gender) FROM employee WHERE gender='F';

COUNT(GENDER)
-------------
            3
```

2. What is the Average salary?

```
SQL> SELECT AVG(salary) FROM employee;

AVG(SALARY)
-----------
 2091.42857
```

3. How many programmers know either Cobol or Pascal?

```
SQL> SELECT COUNT(NAME) AS employee FROM employee WHERE skill1 IN ('COBOL' ,'PASCAL' ) OR skill2 IN ('COBOL' ,'PASCAL' );

  EMPLOYEE
---------
       1
```

4. What is the average age of female programmers?

```
SQL> SELECT AVG(FLOOR((SYSDATE - dob)/365)) "Average Age" FROM employee WHERE gender = 'F';

Average Age
-----------
 44.6666667
```

ALTERING TABLE to add column PACKAGES

```
SQL> ALTER TABLE employee ADD packages NUMBER(3);

Table altered.

SQL> DESC employee;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------
 NAME                                               VARCHAR2(10)
 DOB                                                DATE
 DOJ                                                DATE
 GENDER                                             VARCHAR2(1)
 SKILL1                                             VARCHAR2(10)
 SKILL2                                             VARCHAR2(10)
 SALARY                                             NUMBER(5)
 PACKAGES                                           NUMBER(3)
```


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```
Run SQL Command Line

SQL> UPDATE employee set packages = 3 WHERE name='ANITHA';

1 row updated.

SQL> UPDATE employee set packages = 1 WHERE name='KAMALA';

1 row updated.

SQL> UPDATE employee set packages = 4 WHERE name='MARY';

1 row updated.

SQL> UPDATE employee set packages = 4 WHERE name='ANAND';

1 row updated.

SQL> UPDATE employee set packages = 5 WHERE name='KARTHICK';

1 row updated.

SQL> UPDATE employee set packages = 0 WHERE name='VIJAY';

1 row updated.

SQL> UPDATE employee set packages = 2 WHERE name='JAGADESH';

1 row updated.

SQL> SELECT * FROM employee;

NAME       DOB       DOJ       G SKILL1     SKILL2         SALARY   PACKAGES
---------- --------- --------- - ---------- ---------- ---------- ----------
ANITHA     30-JUN-60 28-APR-75 F C++        ASP.NET          1000          3
KAMALA     28-APR-75 20-MAY-92 F DBASE      C#.NET           2000          1
MARY       30-MAR-91 09-APR-05 F C++        DBASE            2020          4
ANAND      02-JAN-89 20-APR-09 M ORACLE     C                2100          4
KARTHICK   11-FEB-70 15-JUN-12 M JAVA       C++              2500          5
VIJAY      29-OCT-82 15-JUN-12 M C#.NET     C++              2520          0
JAGADESH   19-DEC-87 15-JUN-12 M COBOL      C++              2500          2

7 rows selected.
```

5. Display the NUMBER of packages developed by EACH programmer.

```
SQL> SELECT name, packages from employee;

NAME          PACKAGES
---------- ----------
ANITHA                3
KAMALA                1
MARY                  4
ANAND                 4
KARTHICK              5
VIJAY                 0
JAGADESH              2

7 rows selected.
```


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6. Display THE NUMBER OF male and female programmer.

```
SQL> SELECT count(gender) "Male, Female" from employee GROUP BY gender;

Male, Female
------------
           4
           3
```

7. Display the programmer's name and their packages.

```
SQL> SELECT name, packages from employee;

NAME          PACKAGES
---------- ----------
ANITHA                3
KAMALA                1
MARY                  4
ANAND                 4
KARTHICK              5
VIJAY                 0
JAGADESH              2

7 rows selected.
```

8.How many employees were paid 5000 to 10000?

```
SQL> SELECT name from employee WHERE salary>5000 AND salary<10000;

no rows selected
```

9.Give the average salary paid for the employee who have the C++ skill.

```
SQL> SELECT AVG(salary) AS Average FROM employee WHERE skill1 IN ('C++') OR skill2 IN ('C++');

   AVERAGE
----------
      2108
```

10. Which employee paid the highest salary with their skills name ?

```
SQL> SELECT name,skill1,skill2 FROM employee WHERE salary IN (SELECT MAX(salary) FROM employee);

NAME       SKILL1     SKILL2
---------- ---------- ----------
VIJAY      C#.NET     C++
```


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11. Which employee paid the lowest salary?

```
SQL> SELECT name FROM employee WHERE salary IN (SELECT MIN(salary) FROM employee);

NAME
----------
ANITHA
```

12. Give the total salary paid for the skill C#.net

```
SQL> SELECT sum(salary) AS Sum FROM employee WHERE skill1 IN ('C#.NET') OR skill2 IN ('C#.NET');

       SUM
----------
      4520
```
