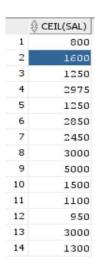
```
show user;
grant connect, resource to tanujadb;
alter session set current_schema=tanujadb;
           NUMERICFUNCTIONS
SELECT ceil(24.567) FROM dual;
O/P: 25
SELECT floor(24.567) FROM dual;
O/P: 24
SELECT round(24.567) FROM dual;
O/P: 25
SELECT round(24.567,1) FROM dual;
O/P: 24.6
SELECT round(24.567,-1) FROM dual;
O/P: 20
SELECT trunc(24.567,1) FROM dual;
O/P: 24.5
SELECT power(5,2) FROM dual;
O/P: 25
SELECT sqrt(64) FROM dual;
O/P: 8
SELECT mod(5,2) FROM dual;
O/P: 1
SELECT ceil(sal) FROM emp;
```



DATEFUNCTIONS

SELECT ename, lpad('*', length(ename), '*') as e FROM emp;

O/P:



SELECT sysdate FROM dual;

O/P: 06-12-21

SELECT current_date FROM dual;

O/P: 06-12-21

SELECT sysdate+7 FROM dual;

O/P: 13-12-21

SELECT sysdate-7 FROM dual;

O/P: 29-11-21

SELECT ADD_MONTHS(sysdate,3) FROM dual;

O/P: 06-03-22

```
SELECT MONTHS_BETWEEN(sysdate,'20-MAY-2014') FROM dual;
```

O/P: 90.56370445041816009557945041816009557945

SELECT LAST_DAY(sysdate) FROM dual;

O/P: 31-12-21

SELECT NEXT_DAY(sysdate,3) FROM dual;

O/P: 07-12-21

SELECT NEXT_DAY(sysdate,1) FROM dual;

O/P: 12-12-21

SELECT NEXT DAY(sysdate,2) FROM dual;

O/P: 13-12-21

SELECT NEXT_DAY(sysdate,7) FROM dual;

O/P: 11-12-21

SELECT NEXT_DAY(sysdate,'friday') FROM dual;

O/P: 10-12-21

SELECT NEXT_DAY(sysdate, 'wednesday') FROM dual;

O/P: 08-12-21

SELECT NEXT_DAY(sysdate+30,'wednesday') FROM dual;

O/P: 12-01-22

SELECT EXTRACT(year FROM sysdate) FROM dual;

O/P: 2021

SELECT EXTRACT(month FROM sysdate) FROM dual;

O/P: 12

SELECT EXTRACT(day FROM sysdate) FROM dual;

O/P: 6

CONVERSIONFUNCTIONS

SELECT TO_CHAR(2560,'\$9,999.0') FROM dual;

O/P: \$2,560.0

SELECT TO_CHAR(2560,'\$0,00,000.00') FROM dual;

O/P: \$0,02,560.00

SELECT TO_CHAR(sal,'\$9,999.00') FROM emp;

O/P:

| | \$\text{TO_CHAR(SAL,'\$9,999.00')} |
|----|------------------------------------|
| 1 | \$800.00 |
| 2 | \$1,600.00 |
| 3 | \$1,250.00 |
| 4 | \$2,975.00 |
| 5 | \$1,250.00 |
| 6 | \$2,850.00 |
| 7 | \$2,450.00 |
| 8 | \$3,000.00 |
| 9 | \$5,000.00 |
| 10 | \$1,500.00 |
| 11 | \$1,100.00 |
| 12 | \$950.00 |
| 13 | \$3,000.00 |
| 14 | \$1,300.00 |

SELECT TO_CHAR(sysdate,'DD MONTH YYYY') FROM dual;

O/P: 06 DECEMBER 2021

SELECT TO_CHAR(sysdate,'DDth MONTH YY') FROM dual;

O/P: 06TH DECEMBER 21

SELECT TO_CHAR(sysdate,'DDspth MONTH YY') FROM dual;

O/P: SIXTH DECEMBER 21

SELECT TO_DATE ('May 22,2014','Month DD, YYYY') FROM dual;

O/P: 22-05-14

SELECT TO_CHAR(sysdate,'D') FROM dual;

O/P: 2

SELECT TO_CHAR(sysdate,'d') FROM dual;

O/P: 2

SELECT TO_CHAR(sysdate,'DD') FROM dual;

O/P: 06

CHARACTERFUNCTIONS

SELECT lower('Oracle') FROM dual;

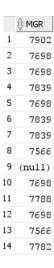
O/P: oracle

SELECT upper('Oracle') FROM dual;

O/P: ORACLE

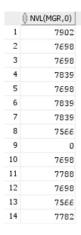
SELECT instr('Oracle','a') FROM dual;

```
SELECT concat('Oracle','for') FROM dual;
O/P: Oraclefor
SELECT concat('Oracle',' for'),' developers') FROM dual;
O/P: Oracle for developers
SELECT 'Oracle '||'for '||'Developers' FROM dual;
O/P: Oracle for Developers
SELECT substr('Oracle',2) FROM dual;
O/P: racle
SELECT substr('Oracle',2,2) FROM dual;
O/P: ra
SELECT length('Oracle for Developers') FROM dual;
O/P: 21
SELECT ltrim(' Oracle for Developers') FROM dual;
O/P: Oracle for Developers
SELECT rtrim(' Oracle for Developers
                                        ') FROM dual;
O/P: Oracle for Developers
SELECT lpad('Oracle',10,'*') FROM dual;
O/P: ****Oracle
SELECT rpad('Oracle',10,'*') FROM dual;
O/P: Oracle****
           MISCELLANEOUSFUNCTIONS
SELECT mgr FROM emp;
```



SELECT nvl(mgr,0) FROM emp;

O/P:



SELECT NVL2(mgr,0,1) FROM emp;

O/P:



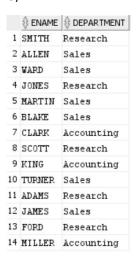
SELECT NULLIF(deptno,10) FROM emp;

| | NULLIF(DEPTNO, 10) |
|----|--------------------|
| 1 | 20 |
| 2 | 30 |
| 3 | 30 |
| 4 | 20 |
| 5 | 30 |
| 6 | 30 |
| 7 | (null) |
| 8 | 20 |
| 9 | (null) |
| 10 | 30 |
| 11 | 20 |
| 12 | 30 |
| 13 | 20 |
| 14 | (null) |

SELECT ename, DECODE (deptno, 10, 'Accounting', 20, 'Research', 30, 'Sales',

'Unknown') AS department FROM emp;

O/P:



SELECT ename, CASE deptno WHEN 10 THEN 'Accounting' WHEN 20 THEN 'Research' WHEN 30 THEN 'Sales' ELSE 'Unknown' END AS department FROM emp;



SELECT sal, CASE WHEN sal < 2000 THEN 'category 1' WHEN sal < 3000 THEN 'category 2' WHEN sal < 4000 THEN 'category 3' ELSE 'category 4' end FROM emp; O/P:

| | ∯ SAL | \$\$ CASEWHENSAL < 2000THEN'CATEGORY1'WHENSAL < 3000THEN'CATEGORY2'WHENSAL < 4000THEN'CATEGORY3'ELSE'CATEGORY4'END |
|----|-------|--|
| 1 | 800 | category 1 |
| 2 | 1600 | category 1 |
| 3 | 1250 | category 1 |
| 4 | 2975 | category 2 |
| 5 | 1250 | category 1 |
| 6 | 2850 | category 2 |
| 7 | 2450 | category 2 |
| 8 | 3000 | category 3 |
| 9 | 5000 | category 4 |
| 10 | 1500 | category 1 |
| 11 | 1100 | category 1 |
| 12 | 950 | category 1 |
| 13 | 3000 | category 3 |
| 14 | 1300 | category 1 |

GROUPFUNCTIONS

SELECT floor((sysdate-hiredate)/365) FROM emp;

O/P:

| | \$\psi\$ FLOOR((SYSDATE-HIREDATE)/365) |
|----|--|
| 1 | 40 |
| 2 | 40 |
| 3 | 40 |
| 4 | 40 |
| 5 | 40 |
| 6 | 40 |
| 7 | 40 |
| 8 | 39 |
| 9 | 40 |
| 10 | 40 |
| 11 | 38 |
| 12 | 40 |
| 13 | 40 |
| 14 | 39 |

SELECT (sysdate-hiredate)/365 FROM emp;

| 1 | 40.99874879502790461694571283612379502795 |
|----|---|
| 2 | 40.82066660324708269913749365804160324712 |
| 3 | 40.81518715119228817858954845256215119233 |
| 4 | 40.70833783612379502790461694571283612384 |
| 5 | 40.21792687721968543886352105530187721973 |
| 6 | 40.62888578132927447995941146626078132932 |
| 7 | 40.52203646626078132927447995941146626082 |
| 8 | 39.02066660324708269913749365804160324712 |
| 9 | 40.08094057584982242516489091831557584986 |
| 10 | 40.27272139776763064434297311009639776767 |
| 11 | 38.92751591831557584982242516489091831562 |
| 12 | 40.03710495941146626078132927447995941151 |
| 13 | 40.03710495941146626078132927447995941151 |
| 14 | 39.89737893201420598680872653475393201425 |

SELECT sal as salary FROM emp;

O/P:

| 1 | 800 |
|----|------|
| 2 | 1600 |
| 3 | 1250 |
| 4 | 2975 |
| 5 | 1250 |
| 6 | 2850 |
| 7 | 2450 |
| 8 | 3000 |
| 9 | 5000 |
| 10 | 1500 |
| 11 | 1100 |
| 12 | 950 |
| 13 | 3000 |
| 14 | 1300 |

SELECT sum(sal) as TotalSalary FROM emp;

O/P: 29025

SELECT min(sal) FROM emp;

O/P: 800

SELECT max(sal) FROM emp;

O/P: 5000

SELECT avg(sal) FROM emp;

O/P: 2073.214285714285714285714285714285

SELECT sum(sal)*12 as TotalSalary FROM emp;

O/P: 348300

SELECT count(*) FROM emp;

SELECT count(mgr) FROM emp;

O/P: 13

SELECT count(*) FROM emp;

O/P: 14

SELECT count(deptno) FROM emp;

O/P: 14

SELECT count(*) FROM emp GROUP BY deptno;

O/P:



SELECT count(*), deptno FROM emp GROUP BY deptno;

O/P:

| | ⊕ COUNT(*) | |
|---|------------|----|
| 1 | 6 | 30 |
| 2 | 5 | 20 |
| 3 | 3 | 10 |

SELECT count(*), deptno FROM emp GROUP BY deptno ORDER BY 2;

O/P:

| | ⊕ COUNT(*) | |
|---|------------|----|
| 1 | 3 | 10 |
| 2 | 5 | 20 |
| 3 | 6 | 30 |

SELECT count(*), deptno FROM emp GROUP BY deptno, sal ORDER BY 2;

| | ⊕ COUNT(*) | ⊕ DEPTNO |
|----|------------|----------|
| 1 | 1 | 10 |
| 2 | 1 | 10 |
| 3 | 1 | 10 |
| 4 | 1 | 20 |
| 5 | 1 | 20 |
| 6 | 1 | 20 |
| 7 | 2 | 20 |
| 8 | 1 | 30 |
| 9 | 2 | 30 |
| 10 | 1 | 30 |
| 11 | 1 | 30 |
| 12 | 1 | 30 |

SELECT count(*), deptno FROM emp GROUP BY deptno HAVING count(*)>2 ORDER BY 2;

O/P:

| | <pre>⊕ COUNT(*)</pre> | ⊕ DEPTNO |
|---|-----------------------|----------|
| 1 | 3 | 10 |
| 2 | 5 | 20 |
| 3 | 6 | 30 |

SELECT count(*), job FROM emp GROUP BY job HAVING min(sal)>1500;

O/P:

| | ⊕ COUNT(*) | ∯ JOB |
|---|------------|-----------|
| 1 | 1 | PRESIDENT |
| 2 | 3 | MANAGER |
| 3 | 2 | ANALYST |

DEMO

set linesize 300 column sal format A4

SELECT empno, ename FROM emp WHERE sal>3000;

SELECT empno, ename, sal FROM emp WHERE sal>3000;

column sal format A30;

SELECT empno, ename FROM emp WHERE sal>3000;

SELECT empno as Employeenumber, ename "Employee Name" FROM emp WHERE sal>3000;

column "Employee Name" format A30

SELECT * from emp;

SELECT ename FROM emp WHERE ename like '%S';

SELECT ename FROM emp WHERE ename like 'k%';

SELECT ename FROM emp WHERE ename like 'K%';

SELECT ename FROM emp WHERE ename like 'SMI_H';

SELECT ename FROM emp WHERE ename like 'ALL_N' escape '\';

SELECT job FROM emp;

SELECT DISTINCT job FROM emp;

SELECT ename, sal as salary FROM emp;

SELECT ename, sal as salary FROM emp ORDER BY sal;

SELECT ename, sal as salary FROM emp ORDER BY sal desc;

SELECT ename, sal as salary FROM emp ORDER BY 2 desc;

SELECT floor((sysdate-hiredate)/365) FROM emp ORDER BY 1;

SELECT ename FROM emp ORDER BY 1;

SELECT ename, sal as salary FROM emp ORDER BY 2 desc;

SELECT ename, sal as salary FROM emp ORDER BY 2 desc, ename desc;

SELECT sal+comm FROM emp;

SELECT sal||''|| comm FROM emp;