Aadarsh Baranwal
FYCS A

PRACTICAL 7

7	Perform queries using Math function:- abs(),ceil(),floor(),mod(),pow(),sqrt(),round()

==========

```
CREATE TABLE employees1400 (
   emp_id    NUMBER,
   emp_name  VARCHAR(10),
   salary    NUMBER(10,2),
   bonus     NUMBER(10,2)
);

INSERT INTO employees1400 VALUES (1, 'Krishna',  25400.75, 1500.50);
INSERT INTO employees1400 VALUES (2, 'Rahul',    -18300.40, 2500.00);
INSERT INTO employees1400 VALUES (3, 'Amit',     32000.00,  500.25);
INSERT INTO employees1400 VALUES (4, 'Sneha',    27550.30,  1200.00);
INSERT INTO employees1400 VALUES (5, 'Rohit',    -15000.80, 1000.00);

COMMIT;

SELECT emp_name, salary, ABS(salary) AS abs_salary
FROM employees1400;

SELECT emp_name, salary, CEIL(salary) AS ceil_salary
FROM employees1400;

SELECT emp_name, salary, FLOOR(salary) AS floor_salary
FROM employees1400;

SELECT emp_name, salary, MOD(salary, 1000) AS mod_salary_1000
FROM employees1400;

SELECT emp_name, salary, POWER(salary, 2) AS salary_squared
FROM employees1400;

SELECT emp_name, salary, SQRT(ABS(salary)) AS sqrt_abs_salary
FROM employees1400;

SELECT emp_name, salary, ROUND(salary) AS rounded_salary
FROM employees1400;
```

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SQL Plus

```
SQL> CREATE TABLE employees1400 (
  2      emp_id    NUMBER,
  3      emp_name  VARCHAR(10),
  4      salary    NUMBER(10,2),
  5      bonus     NUMBER(10,2)
  6  );

Table created.

SQL>
SQL> INSERT INTO employees1400 VALUES (1, 'Krishna',  25400.75, 1500.50);

1 row created.

SQL> INSERT INTO employees1400 VALUES (2, 'Rahul',    -18300.40, 2500.00);

1 row created.

SQL> INSERT INTO employees1400 VALUES (3, 'Amit',     32000.00,  500.25);

1 row created.

SQL> INSERT INTO employees1400 VALUES (4, 'Sneha',    27550.30,  1200.00);

1 row created.

SQL> INSERT INTO employees1400 VALUES (5, 'Rohit',    -15000.80, 1000.00);

1 row created.

SQL>
SQL> COMMIT;

Commit complete.
```

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SQL Plus

```
SQL> SELECT emp_name, salary, ABS(salary) AS abs_salary
  2  FROM employees1400;

EMP_NAME       SALARY ABS_SALARY
---------- ---------- ----------
Krishna      25400.75   25400.75
Rahul        -18300.4    18300.4
Amit            32000      32000
Sneha         27550.3    27550.3
Rohit        -15000.8    15000.8

SQL>
SQL> SELECT emp_name, salary, CEIL(salary) AS ceil_salary
  2  FROM employees1400;

EMP_NAME       SALARY CEIL_SALARY
---------- ---------- -----------
Krishna      25400.75       25401
Rahul        -18300.4      -18300
Amit            32000       32000
Sneha         27550.3       27551
Rohit        -15000.8      -15000

SQL>
SQL> SELECT emp_name, salary, FLOOR(salary) AS floor_salary
  2  FROM employees1400;

EMP_NAME       SALARY FLOOR_SALARY
---------- ---------- ------------
Krishna      25400.75        25400
Rahul        -18300.4       -18301
Amit            32000        32000
Sneha         27550.3        27550
Rohit        -15000.8       -15001

SQL>
SQL> SELECT emp_name, salary, MOD(salary, 1000) AS mod_salary_1000
  2  FROM employees1400;

EMP_NAME       SALARY MOD_SALARY_1000
---------- ---------- ---------------
Krishna      25400.75          400.75
Rahul        -18300.4          -300.4
Amit            32000               0
Sneha         27550.3           550.3
Rohit        -15000.8             -.8
```

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PRACTICAL 7

SQL Plus

```
SQL> SELECT emp_name, salary, POWER(salary, 2) AS salary_squared
  2  FROM employees1400;

EMP_NAME       SALARY SALARY_SQUARED
---------- ---------- --------------
Krishna      25400.75      645198101
Rahul        -18300.4      334904640
Amit            32000     1024000000
Sneha         27550.3      759019030
Rohit        -15000.8      225024001

SQL>
SQL> SELECT emp_name, salary, SQRT(ABS(salary)) AS sqrt_abs_salary
  2  FROM employees1400;

EMP_NAME       SALARY SQRT_ABS_SALARY
---------- ---------- ---------------
Krishna      25400.75      159.376127
Rahul        -18300.4      135.278971
Amit            32000      178.885438
Sneha         27550.3       165.98283
Rohit        -15000.8      122.477753

SQL>
SQL> SELECT emp_name, salary, ROUND(salary) AS rounded_salary
  2  FROM employees1400;

EMP_NAME       SALARY ROUNDED_SALARY
---------- ---------- --------------
Krishna      25400.75          25401
Rahul        -18300.4         -18300
Amit            32000          32000
Sneha         27550.3          27550
Rohit        -15000.8         -15001
```