Lab Assignment-4

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Consider the employee table:
Employee (employee_id varchar(15), ename varchar(20), date_of_birth date, salary numeric(9,2))

```sql
CREATE TABLE Employee (
    employee_id VARCHAR(15),
    ename VARCHAR(20),
    date_of_birth DATE,
    salary NUMERIC(9,2)
);
select * from Employee;
```

100% 27:16

Result Grid Filter Rows: Search

employee_id	ename	date_of_bir...	salary

Entries:

```sql
INSERT INTO Employee (employee_id, ename, date_of_birth, salary)
VALUES
    ('EMP001', 'John Doe', '1990-05-15', 50000.00),
    ('EMP002', 'Jane Smith', '1985-10-20', 60000.00),
    ('EMP003', 'Michael Johnson', '1988-03-25', 55000.00),
    ('EMP004', 'Emily Brown', '1992-07-12', 52000.00),
    ('EMP005', 'David Wilson', '1995-01-30', 48000.00);
select * from Employee;
```

100% 24:16

Result Grid Filter Rows: Search Export:

employee_id	ename	date_of_bir...	salary
EMP001	John Doe	1990-05-15	50000.00
EMP002	Jane Smith	1985-10-20	60000.00
EMP003	Michael Johnson	1988-03-25	55000.00
EMP004	Emily Brown	1992-07-12	52000.00
EMP005	David Wilson	1995-01-30	48000.00

1. Find the ceiling value for the salary of employees.

```
18  SELECT CEIL(salary) AS ceiling_salary FROM Employee;
19
```

100% 1:19

Result Grid Filter Rows: Search Export:

ceiling_salary
50000
60000
55000
52000
48000

2. Find the floor value for the salary of employees.

```
20  SELECT FLOOR(salary) AS floor_salary FROM Employee;
21
```

100% 1:21

Result Grid Filter Rows: Search Export:

floor_salary
50000
60000
55000
52000
48000

3. Round off the salary of employees to the nearest 2 places.

```
22  SELECT ROUND(salary, 2) AS rounded_salary FROM Employee;
23
```

100% 1:23

Result Grid Filter Rows: Search Export:

rounded_sala...
50000.00
60000.00
55000.00
52000.00
48000.00

4. Represent the value of salary raised to the power of 2.

```
24 •  SELECT POWER(salary, 2) AS salary_squared FROM Employee;
25
```

100% 1:25

Result Grid Filter Rows: Search Export:

salary_squared
2500000000
3600000000
3025000000
2704000000
2304000000

5. Represent the name of employees in lower case.

```
26 •  SELECT LOWER(ename) AS lower_case_name FROM Employee;
27
```

100% 1:27

Result Grid Filter Rows: Search Export:

lower_case_name
john doe
jane smith
michael johnson
emily brown
david wilson

6. Display the name of the employees along with the string length.

```
28 •  SELECT ename, LENGTH(ename) AS name_length FROM Employee;
29
```

100% 1:29

Result Grid Filter Rows: Search Export:

ename	name_length
John Doe	8
Jane Smith	10
Michael Johnson	15
Emily Brown	11
David Wilson	12

7. Pad the extra space of name of employees with '*' on the left.

```
30 •  SELECT LPAD(ename, LENGTH(ename) + 1, '*') AS padded_name FROM Employee;
31
```

100% 1:31

Result Grid | Filter Rows: Search | Export:

padded_name
*John Doe
*Jane Smith
*Michael Johnson
*Emily Brown
*David Wilson

8. Pad the extra space of name of employees with '*' on the right.

```
32 •  SELECT RPAD(ename, LENGTH(ename) + 1, '*') AS padded_name FROM Employee;
33
```

100% 1:33

Result Grid | Filter Rows: Search | Export:

padded_name
John Doe*
Jane Smith*
Michael Johnson*
Emily Brown*
David Wilson*

9. Right trim spaces (if any) from the name of employees.

```
34 •  SELECT RTRIM(ename) AS trimmed_name FROM Employee;
35
```

100% 1:35

Result Grid | Filter Rows: Search | Export:

trimmed_name
John Doe
Jane Smith
Michael Johnson
Emily Brown
David Wilson

10. Left trim spaces (if any) from the name of employees.

```
36  SELECT LTRIM(ename) AS trimmed_name FROM Employee;
37
```

100% 1:37

Result Grid | Filter Rows: Search | Export:

trimmed_name
John Doe
Jane Smith
Michael Johnson
Emily Brown
David Wilson

11. Pick 3 characters from the second position of the name of employees.

```
38  SELECT SUBSTRING(ename FROM 2 FOR 3) AS picked_characters FROM Employee;
39
```

100% 1:39

Result Grid | Filter Rows: Search | Export:

picked_charact...
ohn
ane
ich
mil
avi

12. Use the to_char function to format the date of birth field of employees.

```
1  SELECT to_char(date_of_birth, 'YYYY-MM-DD') AS formatted_date_of_birth FROM Employee;
2
```

Data Output | Messages | Notifications

	formatted_date_of_birth text
1	1990-05-15
2	1985-10-20
3	1988-03-25
4	1992-07-12
5	1995-01-30

13. SELECT to_date('20170103','YYYYMMDD');

```
2  SELECT to_date('20170103','YYYYMMDD');
3
```

Data Output | Messages | Notifications

	to_date date
1	2017-01-03

14. Suppose you want to convert the string 2017 Feb 10 to a date value, you can apply the pattern YYYY Mon DD as follows:

```
3  SELECT to_date('2017 Feb 10', 'YYYY Mon DD');
4
```

Data Output | Messages | Notifications

	to_date date
1	2017-02-10

15. Find the employees who celebrate their birthday in January.

```
7  WHERE EXTRACT(MONTH FROM date_of_birth) = 1;
8
```

Data Output | Messages | Notifications

	employee_id character varying (15)	ename character varying (20)	date_of_birth date	salary numeric (9,2)
1	EMP005	David Wilson	1995-01-30	48000.00