

Question 1. Calculate the average salary by department for all Analysts.

```
2  -- Question 1: Calculate the average salary by department for all Analysts.
3
4  WITH analyst_salary AS (
5      SELECT
6          e.firstname,
7          e.lastname,
8          e.salary,
9          e.unit
10     FROM
11         employeeerecords e
12     WHERE
13         e.designation = 'Analyst'
14 )
15 SELECT
16     unit,
17     ROUND(AVG(salary)) AS avg_salary
18 FROM
19     analyst_salary
20 GROUP BY
21     unit;
```

Data Output Messages Notifications

unit	avg_salary
character varying (100)	numeric
Finance	44915
Web	45200
Management	44975
IT	44798
Marketing	45054

✓ Successfully run. Total

2. List all employees who have used more than 10 leaves.

```
With leaver AS(  
    Select e.firstname,e.lastname,e.leavesused  
    FROM employeeRecords e  
    Where e.leavesused>10  
)  
  
select * from leaver
```

Data Output Messages Notifications

firstname character varying (50)	lastname character varying (50)	leavesused integer
TOMASA	ARMEN	24
OLIVE	ANCY	23
CHERRY	AQUILAR	22
LEON	ABOULAHOU	27
VICTORIA	[null]	20
ELLIOT	AGULAR	19
JACQUES	AKMAL	29
KATHY	ALSOP	20
LILIAN	APELA	15
BELLE	ARDS	22

3. Create a view to show the details of all Senior Analysts.

```
CREATE VIEW Senior_analyst AS  
    SELECT *  
    FROM employeerecords e  
    WHERE e.designation='Senior Analyst';
```

Data Output Messages Notifications											
	id integer	firstname character varying (50)	lastname character varying (50)	sex character	doj date	currentdate date	designation character varying (100)	age integer	salary numeric (10,2)	unit character va	
1	9	KATHY	ALSOP	F	2014-06-29	2016-01-07	Senior Analyst	28	63478.00	Operations	
2	29	SEYMOUR	ALBEN	M	2014-12-21	2016-01-07	Senior Analyst	25	57488.00	Operations	
3	33	FOSTER	ALDERMAN	M	2014-05-22	2016-01-07	Senior Analyst	26	68295.00	Operations	
4	54	CARI	ARENALES	F	2014-04-10	2016-01-07	Senior Analyst	28	66338.00	Web	
5	58	PAULINE	ALTSHULER	F	2014-12-13	2016-01-07	Senior Analyst	28	61647.00	Finance	
6	69	RILEY	AIKINS	M	2013-06-16	2016-01-07	Senior Analyst	25	60712.00	Finance	
7	73	MARYJANE	ARES	F	2012-08-24	2016-01-07	Senior Analyst	25	65212.00	Managemer	
8	76	MARY	ALMESTICA	F	2013-10-12	2016-01-07	Senior Analyst	27	53339.00	Finance	
9	83	WILMER	AKIONA	M	2014-05-30	2016-01-07	Senior Analyst	25	50739.00	IT	
10	91	ELOISA	ARGIE	F	2013-08-07	2016-01-07	Senior Analyst	28	52690.00	Marketing	

Question 4: Create a materialized view to store the count of employees by department

```
CREATE MATERIALIZED VIEW employee_count_by_departments AS
SELECT e.unit, Count(e.id)
FROM employeerecords e
GROUP BY e.unit;
```

Data Output Messages Notifications		
	unit character varying (100)	count bigint
1	Operations	438
2	Finance	446
3	Web	431
4	Management	425
5	IT	461
6	Marketing	438

Question 6: Create a procedure to update an employee's salary by their first name and last name.

```
CREATE OR REPLACE PROCEDURE update_employees_salary(
    fname VARCHAR(100),
    lname VARCHAR(100),
    new_salary INT
)
LANGUAGE plpgsql
AS $$
BEGIN

Update employeerecords
SET salary= new_salary
WHERE firstname=fname AND lastname=lname;
END;|
$$;

CALL update_employees_salary('TOMASA','ARMEN',20000);
```

Data Output

Messages









Notifications

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Question 7: Create a procedure to calculate the total number of leaves used across all departments.

```
CREATE OR REPLACE PROCEDURE calculate_total_leaves()
LANGUAGE plpgsql
AS $$
BEGIN
    CREATE OR REPLACE VIEW total AS
    SELECT SUM(leavesused)
    AS total_leaves
    FROM employeerecords;
END;
$$;

CALL calculate_total_leaves();
```

Data Output		Messages	Notifications
        			
	total_leaves bigint 		
1	59314		