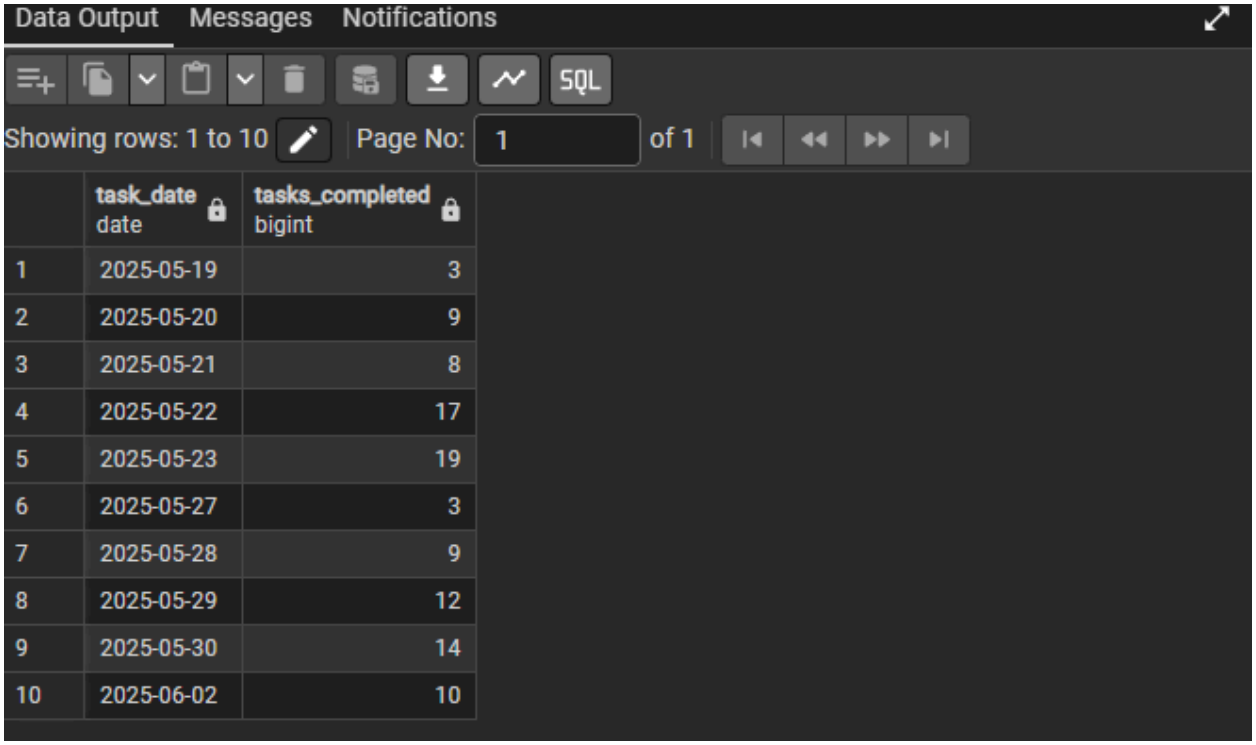
###Office Data Questions:

1. How many tasks were completed each day?

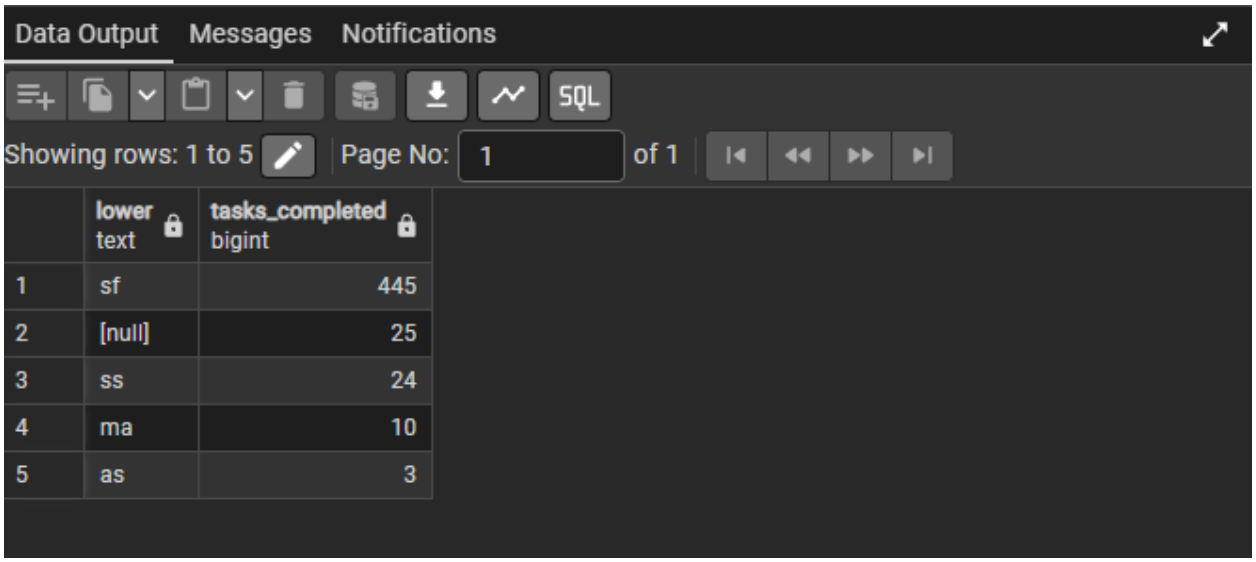
```
SELECT CAST(completion_time AS DATE) AS task_date, COUNT(*) AS
tasks_completed
FROM office1
GROUP BY CAST(completion_time AS DATE)
ORDER BY task_date
LIMIT 10
```



	task_date date	tasks_completed bigint
1	2025-05-19	3
2	2025-05-20	9
3	2025-05-21	8
4	2025-05-22	17
5	2025-05-23	19
6	2025-05-27	3
7	2025-05-28	9
8	2025-05-29	12
9	2025-05-30	14
10	2025-06-02	10

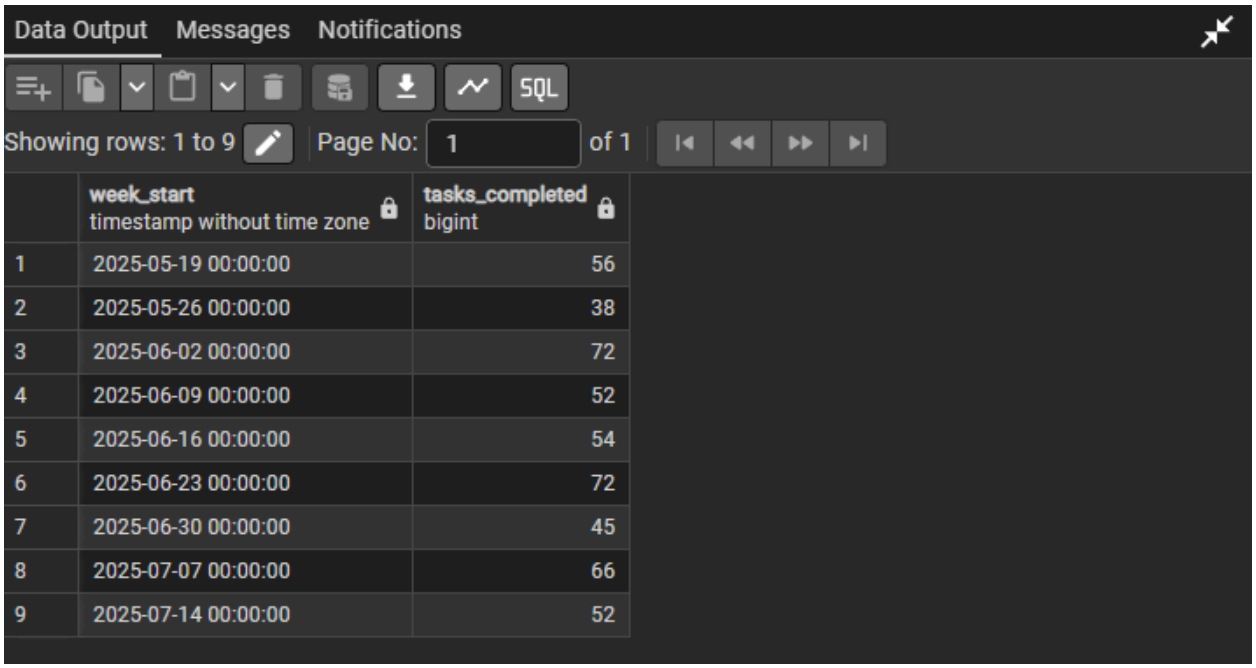
2. How many tasks has each employee completed?

-
```
SELECT LOWER(pc), COUNT(*) AS tasks_completed
FROM office1
GROUP BY LOWER(pc)
ORDER BY tasks_completed DESC
```



	lower text	tasks_completed bigint
1	sf	445
2	[null]	25
3	ss	24
4	ma	10
5	as	3

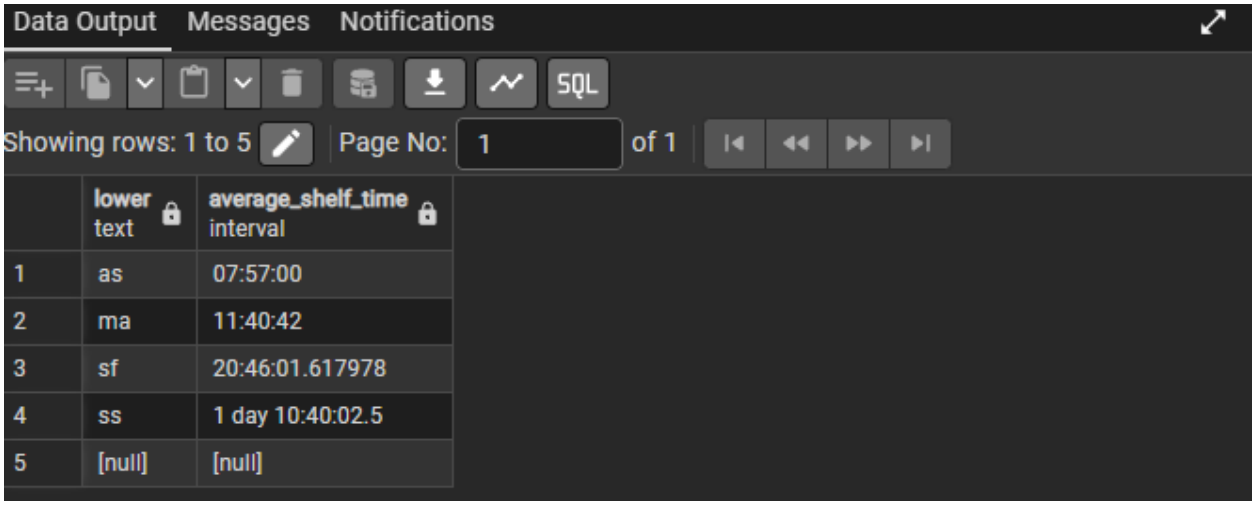
3. How has task volume trended over time(weekly)?
   - SELECT DATE_TRUNC('week', completion_time) AS week_start,
     COUNT(*) AS tasks_complete
     FROM office1
     GROUP BY week_start
     ORDER BY week_start



	week_start timestamp without time zone	tasks_completed bigint
1	2025-05-19 00:00:00	56
2	2025-05-26 00:00:00	38
3	2025-06-02 00:00:00	72
4	2025-06-09 00:00:00	52
5	2025-06-16 00:00:00	54
6	2025-06-23 00:00:00	72
7	2025-06-30 00:00:00	45
8	2025-07-07 00:00:00	66
9	2025-07-14 00:00:00	52

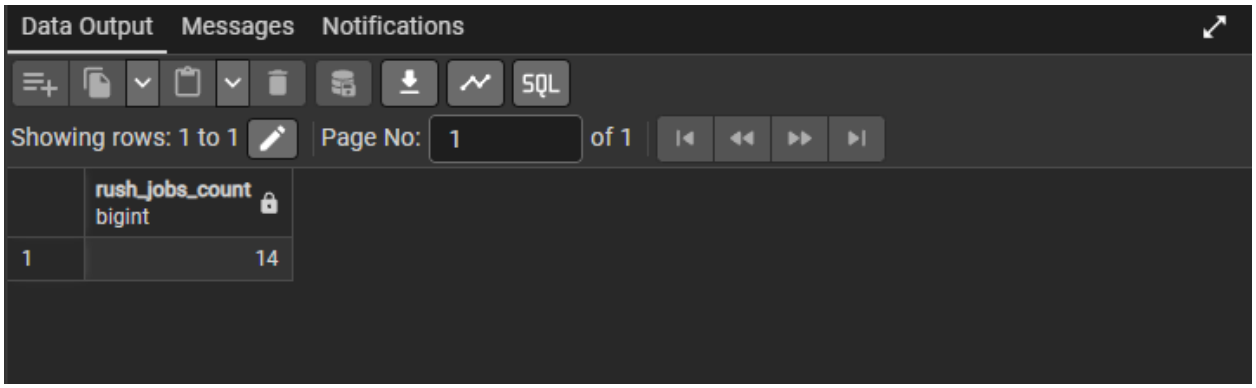
4. What's the average time it takes to pick up a sample?
   - SELECT LOWER(pc), AVG((login_date + timepc) - completion_time) AS average_shelf_time
     FROM office1

GROUP BY LOWER(PC)
ORDER BY average_shelf_time ASC



	lower text	average_shelf_time interval
1	as	07:57:00
2	ma	11:40:42
3	sf	20:46:01.617978
4	ss	1 day 10:40:02.5
5	[null]	[null]

5. How many rush jobs are being processed?
   - SELECT COUNT(*) AS rush_jobs_count
     FROM office1
     WHERE rush IS true



	rush_jobs_count bigint
1	14

6. Do rush jobs take longer or shorter to complete?
   - SELECT rush, AVG(((login_date + timepc) - completion_time) / 60) AS avg_minutes_to_complete
     FROM office1
     GROUP BY rush

Data Output | Messages | Notifications

Showing rows: 1 to 3 | Page No: 1 of 1

	rush boolean	avg_minutes_to_complete interval
1	false	00:27:27.477273
2	[null]	00:20:21.681579
3	true	00:04:18.857143

7. Which clients submit the most rush requests?
   - SELECT client_name, COUNT(*) AS rush_job_count
     FROM office1
     WHERE rush IS TRUE
     GROUP BY client_name
     ORDER BY rush_job_count DESC
     LIMIT 8

Data Output | Messages | Notifications

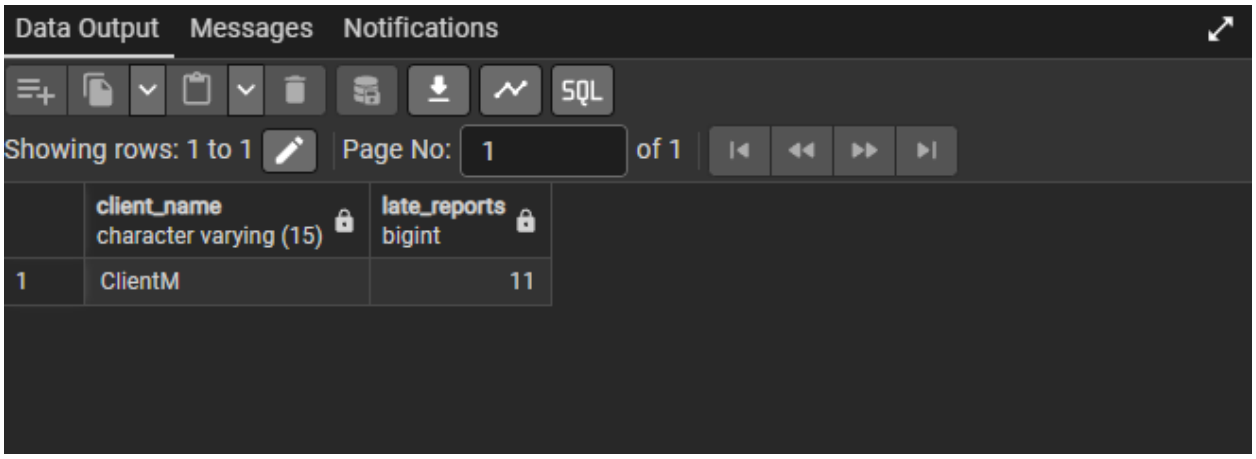
Showing rows: 1 to 8 | Page No: 1 of 1

	client_name character varying (200)	rush_job_count bigint
1	ClientH	1
2	ClientG	1
3	ClientZ	1
4	ClientQ	1
5	ClientL	1
6	ClientJ	1
7	ClientR	1
8	ClientI	1

###Lab Data Questions:

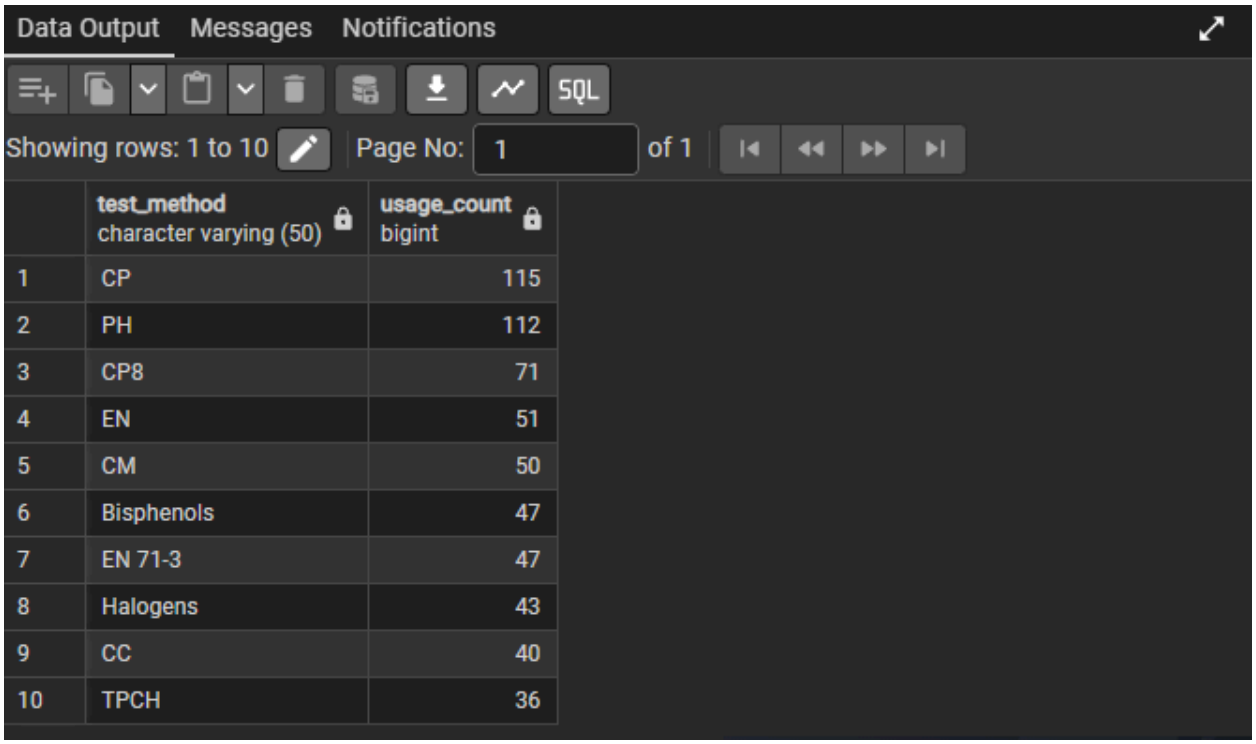
1. What is the average TAT for all folders?
    - SELECT AVG(reported - received) AS avg_tat_days
      FROM lab1

2. Which client has the highest number of late reports?
    - SELECT client_name, COUNT(*) AS late_reports
      FROM lab1
      WHERE reported > due_date
      GROUP BY client_name
      ORDER BY late_reports DESC
      LIMIT 1



3. Which test methods are used most often?
    - SELECT test_method, COUNT(*) AS usage_count
      FROM lab1
      GROUP BY test_method
      ORDER BY usage_count DESC

LIMIT 10



	test_method character varying (50)	usage_count bigint
1	CP	115
2	PH	112
3	CP8	71
4	EN	51
5	CM	50
6	Bisphenols	47
7	EN 71-3	47
8	Halogens	43
9	CC	40
10	TPCH	36

4. What's the TAT by test method?
   - SELECT test_method, AVG(reported - received) AS avg_tat_days
     FROM lab1
     GROUP BY test_method
     ORDER BY avg_tat_days DESC
     LIMIT 12

Data Output | Messages | Notifications

Showing rows: 1 to 12 | Page No: 1 of 1

	test_method character varying (50)	avg_tat_days interval
1	CP-Phosphorus	11 days 06:17:00
2	Benzene Toluene Hexane	6 days 23:06:00
3	EN-Artifical Sweat	6 days 19:40:48
4	PFAS GC	6 days 19:20:08.571428
5	DMFa Fa DMAC NMP	6 days 19:10:00
6	ID by XRF	6 days 17:07:54
7	ISO (Leather)	6 days 12:40:41.052631
8	177.1520-PP Co	5 days 35:00:50
9	177.164	6 days 07:18:00
10	177.1520-PE Homo	5 days 22:49:30
11	177.121	5 days 22:04:50
12	APEO	5 days 21:10:30

5. How many jobs were completed late?
   - SELECT COUNT(*) AS late_jobs
     FROM lab1
     WHERE reported > due_date

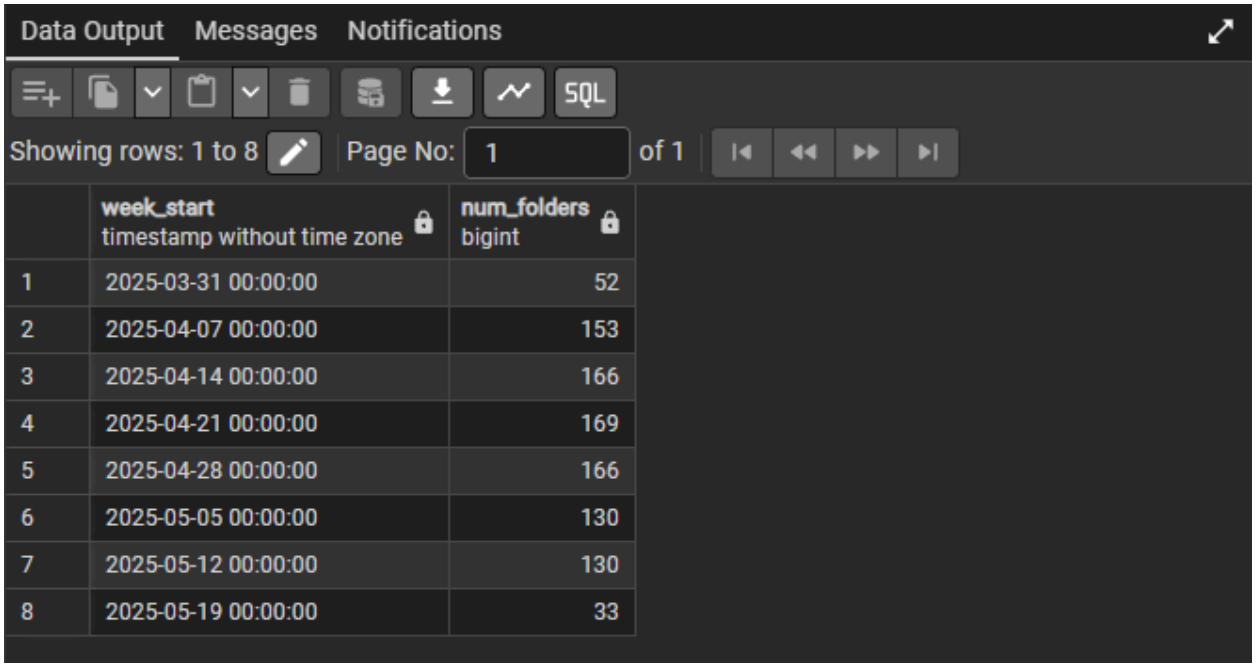
Showing rows: 1 to 1 | Page No: 1 of 1

	late_jobs bigint
1	208

6. What is the average delay for late jobs?
   - SELECT AVG(reported - due_date) AS avg_delay_days
     FROM lab1
     WHERE reported > due_date

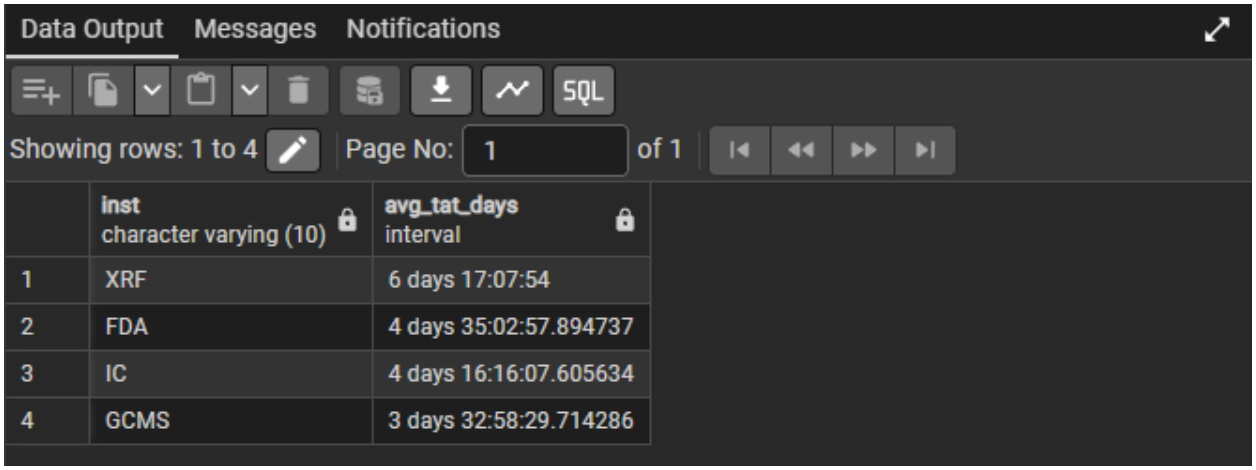
	avg_delay_days interval
1	1 day 11:02:10.961538

7. What's the weekly trend of the number of folders received?
   - SELECT DATE_TRUNC('week', received) AS week_start, COUNT(*) AS num_folders
     FROM lab1
     GROUP BY week_start
     ORDER BY week_start



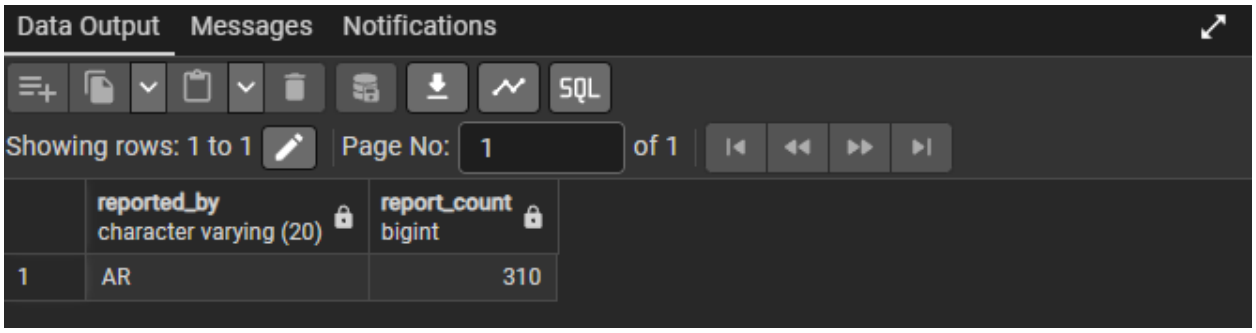
	week_start timestamp without time zone	num_folders bigint
1	2025-03-31 00:00:00	52
2	2025-04-07 00:00:00	153
3	2025-04-14 00:00:00	166
4	2025-04-21 00:00:00	169
5	2025-04-28 00:00:00	166
6	2025-05-05 00:00:00	130
7	2025-05-12 00:00:00	130
8	2025-05-19 00:00:00	33

8. Which instrument is associated with the longest average TAT?
   - SELECT inst, AVG(reported - received) AS avg_tat_days
     FROM lab1
     GROUP BY inst
     ORDER BY avg_tat_days DESC
     LIMIT 4



	inst character varying (10)	avg_tat_days interval
1	XRF	6 days 17:07:54
2	FDA	4 days 35:02:57.894737
3	IC	4 days 16:16:07.605634
4	GCMS	3 days 32:58:29.714286

9. Who reports the most folders?
   - SELECT reported_by, COUNT(*) AS report_count
     FROM lab1
     GROUP BY reported_by
     ORDER BY report_count DESC
     LIMIT 1



	reported_by character varying (20)	report_count bigint
1	AR	310