11/15/2025

DAY 13
#SQLWithIDC

[21 DAYS SQL CHALLENGE]

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PRACTICE QUESTIONS

> 1. Join patients and staff based on their common service field
>   (Show patient and staff who work in same service).

```sql
SELECT p.name AS patient_name, s.staff_name, s.service

FROM patients AS p

INNER JOIN staff AS s

ON p.service = s.service;
```

output

```
337
338    -- 1.Join patients and staff based on their common service field( Show patient and staff who work in same service ).
339 ●  SELECT p.name AS patient_name, s.staff_name, s.service
340    FROM patients AS p
341    INNER JOIN staff AS s
342    ON p.service = s.service;
343
```

Result Grid			
patient_name	staff_name	service	
Larry Dixon	Cameron Parker	ICU	
Larry Dixon	Kenneth Scott	ICU	
Larry Dixon	Shannon Walker	ICU	
Larry Dixon	Anna Henderson	ICU	
Larry Dixon	Victor Baker	ICU	
Larry Dixon	Kelly Donovan	ICU	
Larry Dixon	Christopher Bass	ICU	
Larry Dixon	Shirley Suarez	ICU	
Larry Dixon	Crystal Johnson	ICU	
Larry Dixon	Lisa Barnes	ICU	
Larry Dixon	Matthew Mcmillan	ICU	
Larry Dixon	Rebecca Valencia	ICU	
Larry Dixon	Larry Dixon	ICU	
Larry Dixon	Garrett Lin	ICU	
Larry Dixon	Paul Jones	ICU	
Larry Dixon	Lisa Archer	ICU	
Larry Dixon	Evelyn Galvan	ICU	
Larry Dixon	Michael Evans	ICU	

2. Join services_weekly with staff to show weekly service data with staff information.

```sql
SELECT sw.week, sw.month, sw.service, sw.available_beds, sw.patients_request,
sw.patients_admitted, sw.patients_refused, sw.patients_satisfaction,
sw.staff_morale, sw.event, s.staff_id, s.staff_name, s.role
FROM services_weekly AS sw
LEFT JOIN staff AS s
ON sw.service = s.service;
```

output

```
343
344    -- 2.Join services_weekly with staff to show weekly service data with staff information.
345
346 •  SELECT sw.week, sw.month, sw.service, sw.available_beds, sw.patients_request,
347    sw.patients_admitted, sw.patients_refused, sw.patients_satisfaction,
348    sw.staff_morale, sw.event, s.staff_id, s.staff_name, s.role
349    FROM services_weekly AS sw
350    LEFT JOIN staff AS s
351    ON sw.service = s.service;
352
```

week	month	service	available_beds	patients_request	patients_admitted	patients_refused	patients_satisfaction	staff_morale	event	staff_id	staff_name	role
1	1	emergency	32	76	32	44	67	70	none	STF-fd4df1f4	Ethan Adams	nurse
1	1	emergency	32	76	32	44	67	70	none	STF-e51bdcb4	Jamie Arnold	nurse
1	1	emergency	32	76	32	44	67	70	none	STF-db5926dd	Margaret Hawkins DDS	nurse
1	1	emergency	32	76	32	44	67	70	none	STF-d8006e7c	Angie Henderson	doctor
1	1	emergency	32	76	32	44	67	70	none	STF-d7ab0c23	Monica Herrera	nurse
1	1	emergency	32	76	32	44	67	70	none	STF-ca932dea	Connie Lawrence	nurse
1	1	emergency	32	76	32	44	67	70	none	STF-bc4c419e	Zachary Hicks	nursing_assistant
1	1	emergency	32	76	32	44	67	70	none	STF-b9e859d8	Stephanie Ross	nursing_assistant
1	1	emergency	32	76	32	44	67	70	none	STF-b4fb711c	Lisa Jackson	nurse
1	1	emergency	32	76	32	44	67	70	none	STF-abec8336	Holly Wood	nurse
1	1	emergency	32	76	32	44	67	70	none	STF-a8e146c6	Justin Baker	nursing_assistant
1	1	emergency	32	76	32	44	67	70	none	STF-99227609	Patty Perez	nurse
1	1	emergency	32	76	32	44	67	70	none	STF-8cabb71f	Lisa Hensley	nurse
1	1	emergency	32	76	32	44	67	70	none	STF-768c9d6f	Brian Ramirez	nurse
1	1	emergency	32	76	32	44	67	70	none	STF-702887af	Gina Moore	nurse
1	1	emergency	32	76	32	44	67	70	none	STF-6f6535f8	Derek Zuniga	nurse
1	1	emergency	32	76	32	44	67	70	none	STF-5ca26577	Allison Hill	doctor
1	1	emergency	32	76	32	44	67	70	none	STF-4ed3b149	Judy Baker	nursing_assistant

3. Create a report showing patient information along with staff assigned to their service.

```sql
SELECT p.patient_id, p.name AS patient_name, p.age,
p.arrival_date, p.departure_date, p.service, p.satisfaction,
s.staff_id, s.staff_name, s.role
FROM patients AS p
LEFT JOIN staff AS s
ON p.service = s.service;
```

output

```
354    -- 3.Create a report showing patient information along with staff assigned to their service.
355  • SELECT p.patient_id, p.name AS patient_name, p.age,
356    p.arrival_date, p.departure_date, p.service, p.satisfaction,
357    s.staff_id, s.staff_name, s.role
358    FROM patients AS p
359    LEFT JOIN staff AS s
360    ON p.service = s.service;
361
362
```
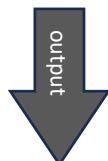
Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

patient_id	patient_name	age	arrival_date	departure_date	service	satisfaction	staff_id	staff_name	role
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-fdc1ae8e	Cameron Parker	nurse
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-e983db1d	Kenneth Scott	nursing_assistant
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-e573be71	Shannon Walker	nurse
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-e328da72	Anna Henderson	nurse
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-ddd99f9e	Victor Baker	nursing_assistant
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-dd7b8861	Kelly Donovan	doctor
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-d77b1013	Christopher Bass	nurse
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-d7371c06	Shirley Suarez	nurse
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-cf9225db	Crystal Johnson	nurse
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-cb0c3c50	Lisa Barnes	doctor
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-cacb7290	Matthew Mcmillan	nurse
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-c479af96	Rebecca Valencia	nursing_assistant
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-b00ed3e2	Larry Dixon	nursing_assistant
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-abfdc900	Garrett Lin	nurse
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-ab59db32	Paul Jones	doctor
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-a94474ff	Lisa Archer	nurse
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-a8c30e00	Evelyn Galvan	nursing_assistant
PAT-003ce690	Larry Dixon	29	2025-01-19	2025-01-21	ICU	60	STF-a1659ed6	Michael Evans	doctor

DAILY CHALLENGE – DAY 13

1. Create a comprehensive report showing patient_id, patient_name, age, service, and the total number of staff members available in their service.
   - Only include patients from services that have more than 5 staff members.
   - Order by member of staff descending, then by patient name.

```sql
WITH staff_count AS (

SELECT service, COUNT(*) AS total_staff

FROM staff

GROUP BY service

HAVING COUNT(*) > 5 )

SELECT p.patient_id, p.name AS patient_name, p.age, p.service, sc.total_staff

FROM patients AS p

JOIN staff_count AS sc

ON p.service = sc.service

ORDER BY sc.total_staff DESC, p.name ASC;
```

output

```sql
364   -- Create a comprehensive report showing patient_id, patient_name, age, service, and the total number of staff members available in their service.
365   -- Only include patients from services that have more than 5 staff members.
366   -- Order by member of staff descending, then by patient name.
367 • WITH staff_count AS(
368     SELECT service, COUNT(*) AS total_staff
369     FROM staff
370     GROUP BY service
371     HAVING COUNT(*) > 5
372   )
373   SELECT p.patient_id, p.name AS patient_name, p.age, p.service, sc.total_staff
374   FROM patients AS p
375   JOIN staff_count AS sc
376   ON p.service = sc.service
377   ORDER BY sc.total_staff DESC, p.name ASC;
378
```

patient_id	patient_name	age	service	total_staff
PAT-1cc7c1b5	Adam Vaughan	2	ICU	48
PAT-bf1b13b6	Alejandro Deleon	14	ICU	48
PAT-d78122d6	Alexa Buck	73	ICU	48
PAT-f316dd98	Alexander Collins	17	ICU	48
PAT-615c986b	Alexandra Dominguez	80	ICU	48
PAT-ddd92df7	Alison Brown	50	ICU	48
PAT-c012faab	Allison Hickman	6	ICU	48
PAT-d4fc50d8	Allison Spencer	84	ICU	48
PAT-4275a12b	Alyssa Day	69	ICU	48
PAT-c1717ebc	Alyssa Haynes	82	ICU	48
PAT-12523d2c	Amanda Sullivan MD	65	ICU	48
PAT-91fbb614	Amy Kelley	79	ICU	48