INDIAN DATA CLUB

indiandataclub.com

DPDzero

21 DAYS

SQL CHALLENGE

DAY 09

Topic:

DATE functions, date arithmetic, EXTRACT

Challenge:

Calculate the average length of stay (in days) for each service, showing only services where the average stay is more than 7 days. Also show the count of patients and order by average stay descending.

#SQLWithIDC

INDIAN DATA CLUB

21 DAYS SQL CHALLENGE

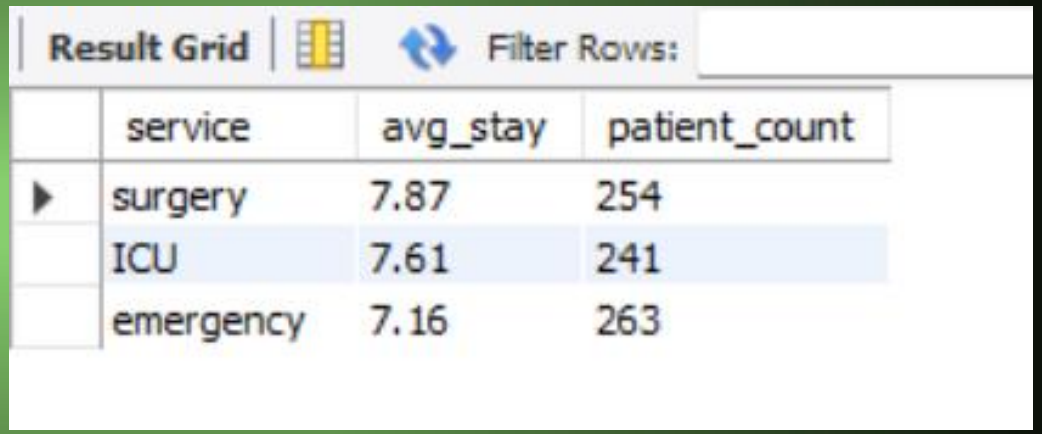
SPONSORED BY DPDzero

Day 9

QUERY:

```
SELECT service,
ROUND(AVG(datediff(departur
e_date,arrival_date)),2) as
avg_stay,
count(patient_id) as
patient_count
FROM patients
group by service
having avg_stay>7
order by avg_stay desc;
```

RESULT:



Result Grid | Filter Rows:

service	avg_stay	patient_count
surgery	7.87	254
ICU	7.61	241
emergency	7.16	263

Daily Challenge:

Question: Calculate the average length of stay (in days) for each service, showing only services where the average stay is more than 7 days. Also show the count of patients and order by average stay descending.

INDIAN DATA CLUB

21 DAYS SQL CHALLENGE

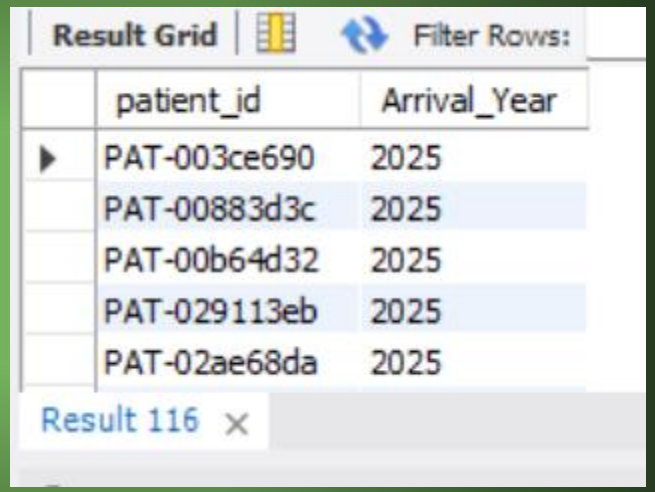
SPONSORED BY DPDzero

Day 9

QUERY:

```
SELECT
patient_id,year(arrival_date) as
Arrival_Year
FROM patients;
```

RESULT:



Result Grid | Filter Rows:

patient_id	Arrival_Year
PAT-003ce690	2025
PAT-00883d3c	2025
PAT-00b64d32	2025
PAT-029113eb	2025
PAT-02ae68da	2025

Result 116

Practice Question:

1. Extract the year from all patient arrival dates.

INDIAN DATA CLUB

21 DAYS SQL CHALLENGE

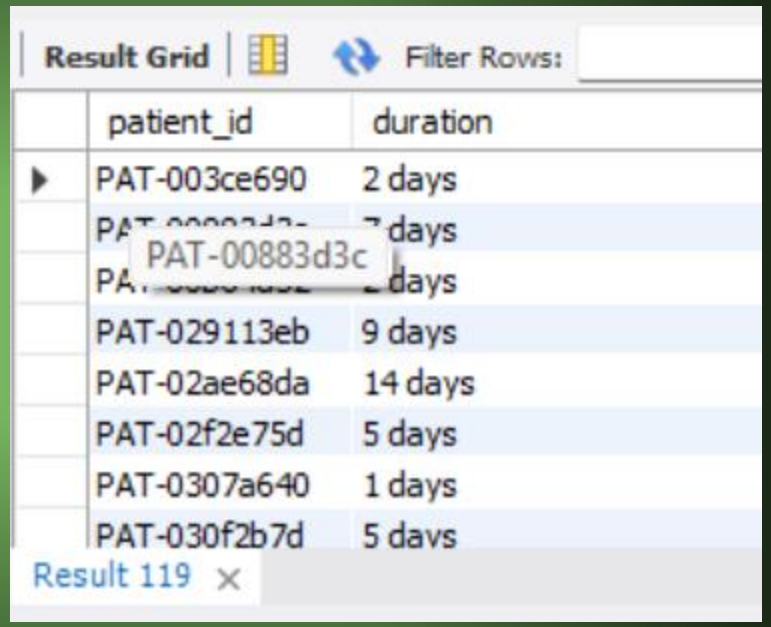
SPONSORED BY DPDzero

Day 9

QUERY:

```
SELECT
patient_id,CONCAT(DATEDIF
F(departure_date,arrival_date
),' days') as duration
FROM patients;
```

RESULT:



Result Grid | Filter Rows:

patient_id	duration
PAT-003ce690	2 days
PAT-00883d3c	7 days
PA...	2 days
PAT-029113eb	9 days
PAT-02ae68da	14 days
PAT-02f2e75d	5 days
PAT-0307a640	1 days
PAT-030f2b7d	5 days

Result 119

Practice Question:

2. Calculate the length of stay for each patient (departure_date - arrival_date).

INDIAN DATA CLUB

21 DAYS SQL CHALLENGE

SPONSORED BY DPDzero

Day 9

QUERY:

```
SELECT patient_id,
name,arrival_date
FROM patients
WHERE
DATE_FORMAT(arrival_date,
'%m') = '05';
```

RESULT:

Result Grid | Filter Rows:

patient_id	name	arrival_date
PAT-06d975bc	Donald Medina	2025-05-14
PAT-0812aab1	Bryan Gomez	2025-05-31
PAT-0865f855	Richard Stevens	2025-05-13
PAT-096760c2	Jeremy Sampson	2025-05-12
PAT-0d73fc32	Nancy Stewart	2025-05-09
PAT-0f73df9c	Jennifer Banks	2025-05-09
PAT-1112a754	Ashley Smith	2025-05-27
PAT-14171b1d	Gary Wells	2025-05-21
PAT-14da658e	Dennis Marshall	2025-05-20
PAT-15367ce5	Monica Miller	2025-05-18
PAT-1d5f8550	Curtis Watson	2025-05-18
PAT-1f221580	Robin Brown	2025-05-11

patients 120

Practice Question:

3. Find all patients who arrived in a specific month.