

11/11/2025

DAY 9

#SQLWithIDC

[21 DAYS SQL CHALLENGE]

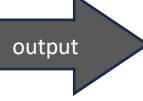


- Submitted By Divyanshi Doser
[INDIAN DATA CLUB]

PRACTICE QUESTIONS

1. Extract the year from all patients.

```
SELECT patient_id, YEAR(arrival_date)
AS arrival_year FROM patients;
```



```
209    -- 1.Extract the year from all patients arrival_dates.
210 •  SELECT patient_id, YEAR(arrival_date) AS arrival_year
211   FROM patients;
212
```

patient_id	arrival_year
PAT-003ce690	2025
PAT-00883d3c	2025
PAT-00b64d32	2025
PAT-029113eb	2025
PAT-02ae66da	2025
PAT-02P2a75d	2025
PAT-0307a640	2025
PAT-030f2b7d	2025
PAT-032160f4	2025
PAT-03a1bd78	2025
PAT-03ae75aa	2025
PAT-03ddfb53	2025
PAT-03f5abbe	2025
PAT-044ab304c	2025
PAT-0477a000	2025
PAT-04866ac6	2025
PAT-04a8031e	2025
PAT-04be60be	2025
PAT-06a8ea25	2025
PAT-06d975bc	2025
PAT-07a9ee88	2025

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

```
SELECT patient_id, name,
(departure_date - arrival_date) AS
stay_length FROM patients ;
```



```
214    -- 2.Calculate the length of stay for each patient(departure_date-arrival_date).
215 •  SELECT patient_id, name, (departure_date - arrival_date) AS stay_length
216   FROM patients;
217
```

patient_id	name	stay_length
PAT-003ce690	Larry Dixon	2
PAT-00883d3c	Victor Taylor	7
PAT-00b64d32	Abner Obrien	2
PAT-029113eb	Wendy Williams	9
PAT-02ae66da	Corey Whistler	83
PAT-02P2a75d	Thomas Atkins	74
PAT-0307a640	Steven Howard	1
PAT-030f2b7d	Chris Velazquez	5
PAT-032160f4	Angela Lin	5
PAT-03a1bd78	Melissa McFarland	10
PAT-03ae75aa	Jordan Williams	3
PAT-03ddfb53	Michelle Davis DVM	13
PAT-03f5abbe	Dean Donovan	82
PAT-044ab304c	George Harper	4
PAT-0477a000	Michael Wang	1
PAT-04866ac6	Scott Alexander	4
PAT-04a8031e	Jake Shaw	12
PAT-04be60be	Bradley Johnson...	84
PAT-06a8ea25	Alexander Gomez	2
PAT-06d975bc	Donald Medina	11

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

```
SELECT name, arrival_date FROM patients
WHERE MONTH(arrival_date) = 4;
```



```
219    -- 3.Find all patients who arrived in a specific month.
220 •  SELECT name, arrival_date FROM patients
221 WHERE MONTH(arrival_date) = 4;
```

name	arrival_date
Scott Alexander	2025-04-19
Alexander Gomez	2025-04-01
Monica Ellis	2025-04-24
Sandi Drake	2025-04-26
Marilyn Wang	2025-04-12
Derrick Anderson	2025-04-23
James Bradley	2025-04-14
Travis Tucker	2025-04-18
Christine Parker	2025-04-14
Mary Miller	2025-04-01
Paula Bradley	2025-04-06
William Jones	2025-04-16
Michele Smith	2025-04-19
Mary Kelly	2025-04-12
David Harris	2025-04-11
Jason Love	2025-04-23
Katherine Martinez	2025-04-19
Renee Melendez	2025-04-04
Frank Cordova	2025-04-12
Lance Simmons	2025-04-02
Carolyn Miller	2025-04-17
Arthur Hamilton MD	2025-04-19

DAILY CHALLENGE – DAY 9

1. Calculate the average length of stays(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.

```
SELECT service, COUNT(patient_id) AS patients_count,
       ROUND(AVG(DATEDIFF(departure_date, arrival_date)), 1) AS avg_stay_days
  FROM patients
 GROUP BY service
 HAVING avg_stay_days > 7
 ORDER BY avg_stay_days DESC ;
```



```
-- Daily Challenge - Day 9
-- Calculate the average length of stays(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.
227 •  SELECT service, COUNT(patient_id) AS patients_count,
228   ROUND(AVG(DATEDIFF(departure_date,arrival_date)),1) AS avg_stay_days
229   FROM patients
230   GROUP BY service
231   HAVING avg_stay_days > 7
232   ORDER BY avg_stay_days DESC;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

service	patients_count	avg_stay_days
surgery	254	7.9
ICU	241	7.6
emergency	263	7.2