**Database file link:**https://drive.google.com/file/d/15ehp3FtyuYqExne3FaFcWHB4TFI\_vtSR/view?usp=sharing

**Table structure**

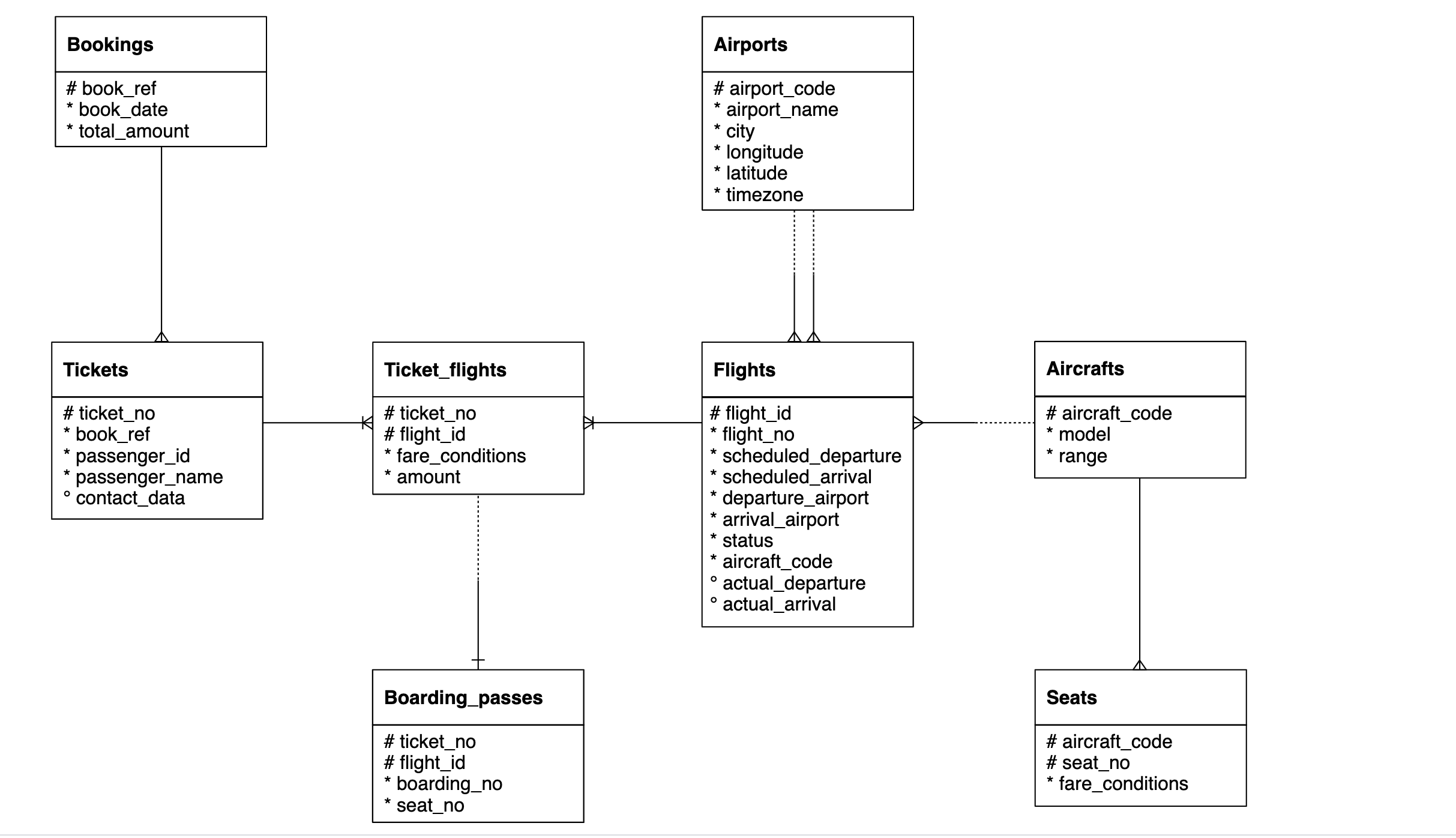


Table names has “**booking.”** as prefix. For example, bookings.tickets, bookings.boarding\_passes

1. Represent the “book\_date” column in “yyyy-mmm-dd”. User Bookings table

*Expected output*



ANSWER 1

select

book\_ref,

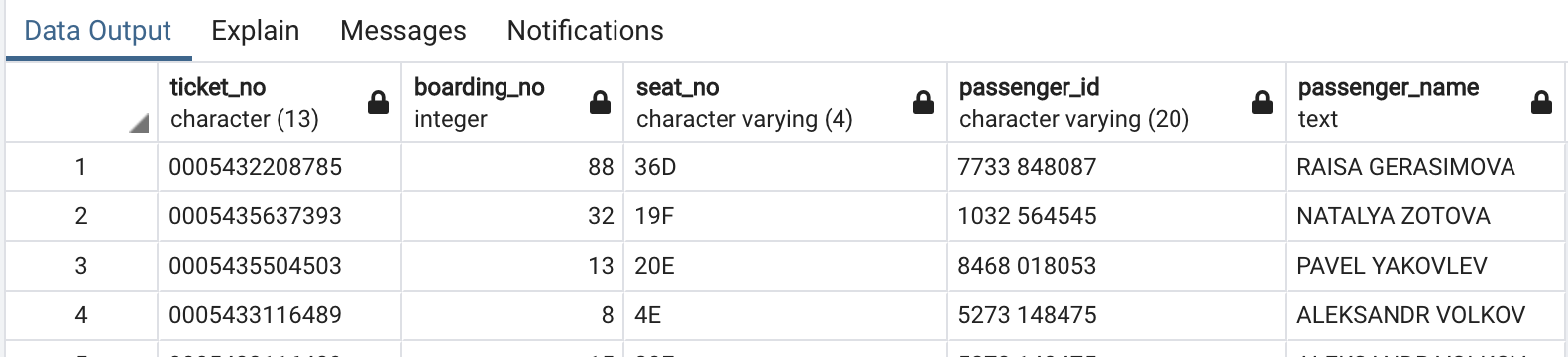
to\_char(book\_date,'YYYY-Mon-DD') as book\_date,

total\_amount

from bookings.bookings

1. Create a table having ticket\_no, boarding\_no, seat\_number, passenger\_id, passenger\_name.

*Expected output*



ANSWER

CREATE TABLE passenger\_\_detail(

ticket\_no char(13) not null,

boarding\_no integer,

seat\_no varchar (4),

passenger\_id varchar(20),

passenger\_name text

)

insert into passenger\_\_detail(ticket\_no ,boarding\_no,seat\_no,passenger\_id,passenger\_name)

values('0005432208785',88,'36D','7733848087','RAISA GRASIMOVA')

select \* from passenger\_\_detail

1. Which seat number is least allocated among all the seats?

ANSWER

SELECT

aircraft\_code,

count(seat\_no)

from bookings.seats

group by aircraft\_code

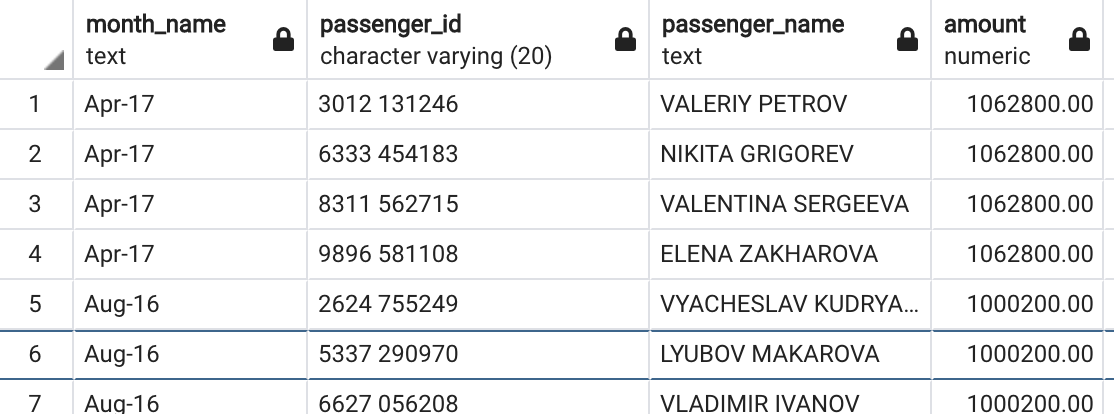
order by count(seat\_no) asc

limit 1

OUTPUT: CN1 = 12

1. In the database, identify the month wise highest paying passenger name and passenger id

*Expected output*



ANSWER

with table1 as(

select

to\_char(b.book\_date,'Mon-YY') month\_name,

t.passenger\_id,

t.passenger\_name,

sum(b.total\_amount) as total\_amount

from bookings.tickets t

left join bookings.bookings b

on t.book\_ref = b.book\_ref

group by 1,2,3

order by 4 desc),

table2 as (

select \*,

rank() over ( partition by month\_name order by total\_amount desc) as ran\_amount

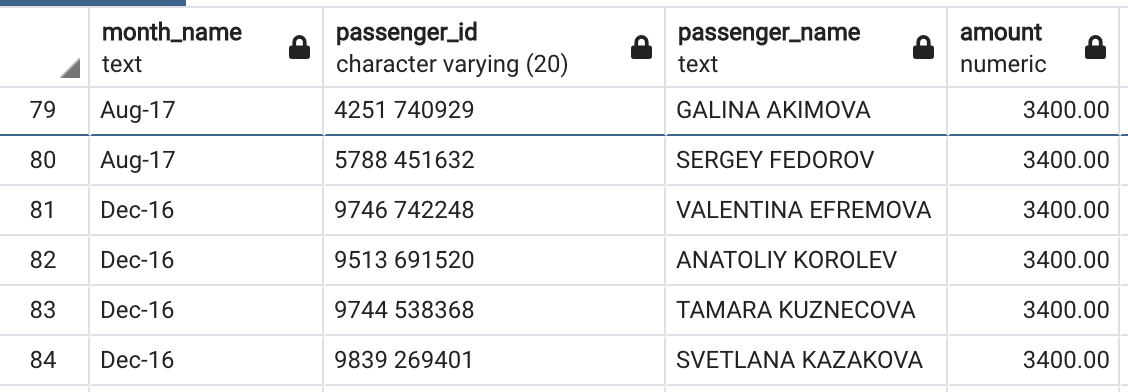
from table1)

select \* from table2

where ran\_amount = 1

1. In the database, identify the month wise least paying passenger name and passenger id?

*Expected output*



ANSWER

with table1 as(

select

to\_char(b.book\_date,'Mon-YY') month\_name,

t.passenger\_id,

t.passenger\_name,

sum(b.total\_amount) as total\_amount

from bookings.tickets t

left join bookings.bookings b

on t.book\_ref = b.book\_ref

group by 1,2,3

order by 4 asc),

table2 as (

select \*,

rank() over ( partition by month\_name order by total\_amount asc) as ran\_amount

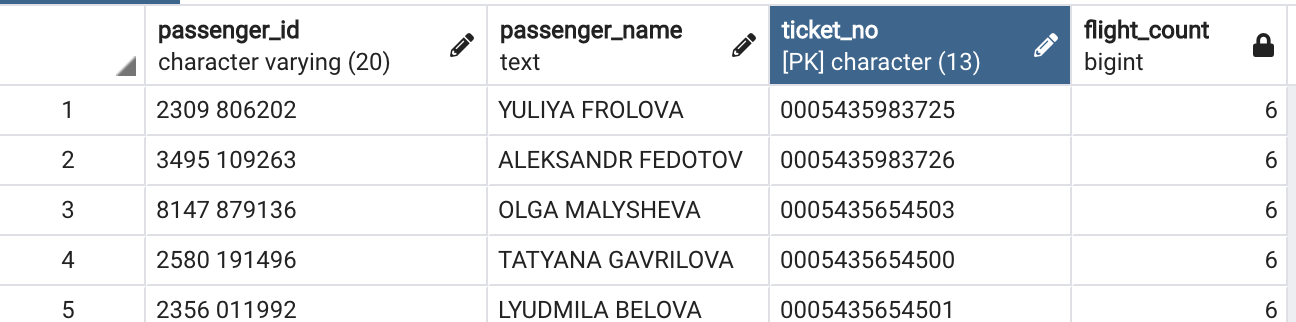
from table1)

select \* from table2

where ran\_amount = 1

1. Identify the travel details of non no stop journeys or return journeys (having more than 1 flight).

*Expected output*



ANSWER

select t.ticket\_no,t.passenger\_id,t.passenger\_name,

count(tf.flight\_id) flight\_count

from bookings.tickets t

left join bookings.ticket\_flights tf

on tf.ticket\_no = t.ticket\_no

group by t.ticket\_no,t.passenger\_id,t.passenger\_name

having count(tf.flight\_id) > 1

order by flight\_count desc

1. How many tickets are there without boarding passes?

ANSWER

with table1 as(

select \*

from bookings.tickets t

full outer join bookings.boarding\_passes bp

on t.ticket\_no = bp.ticket\_no)

select \* from table1

where table1.boarding\_no = null

1. Identify details of the longest flight (using flights table) ?

ANSWER

select \*,

(scheduled\_ARRIVAL - scheduled\_DEPARTURE) as long

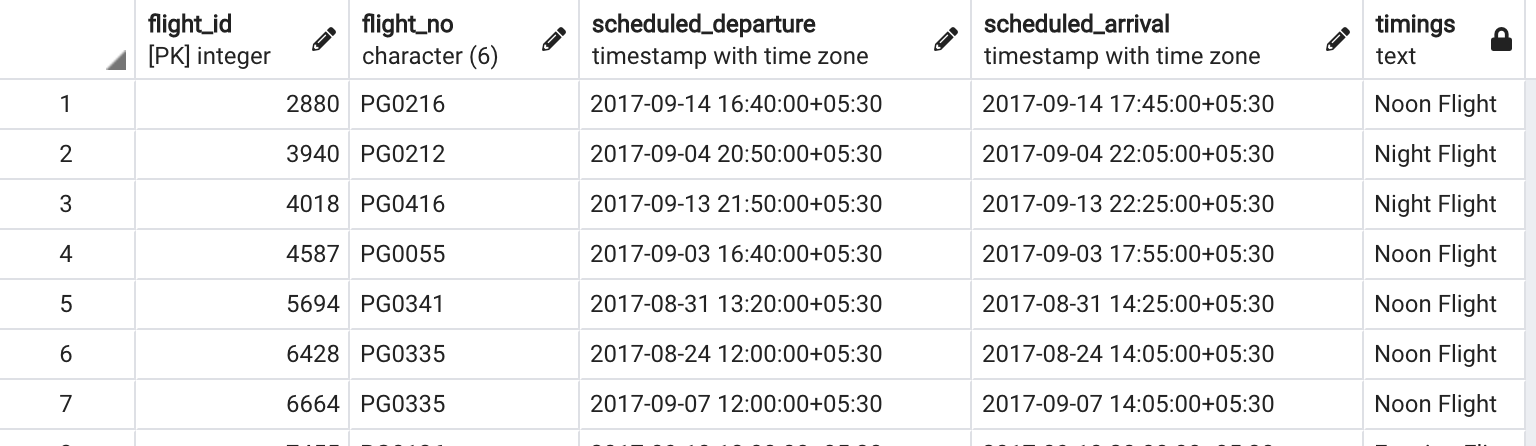
FROM BOOKINGS.FLIGHTS f

order by long desc

limit 1

1. Categorize flights using following logic (using flights table) :
   1. Early morning flights: 2 AM to 6AM
   2. Morning flights: 6 AM to 11 AM
   3. Noon flights: 11 AM to 4 PM
   4. Evening flights: 4 PM to 7 PM
   5. Night flights: 7 PM to 11 PM
   6. Late Night flights: 11 PM to 2 AM

*Expected output*

AANSWER

SELECT

FLIGHT\_ID,

FLIGHT\_NO,

SCHEDULED\_DEPARTURE,

SCHEDULED\_ARRIVAL,

CASE WHEN EXTRACT(HOUR FROM SCHEDULED\_DEPARTURE) BETWEEN 2 AND 5 THEN 'Early morning flights'

WHEN EXTRACT(HOUR FROM SCHEDULED\_DEPARTURE) BETWEEN 6 AND 10 THEN 'Morning flights'

WHEN EXTRACT(HOUR FROM SCHEDULED\_DEPARTURE) BETWEEN 11 AND 15 THEN 'Noon flights'

WHEN EXTRACT(HOUR FROM SCHEDULED\_DEPARTURE) BETWEEN 16 AND 20 THEN 'Evening flights'

WHEN EXTRACT(HOUR FROM SCHEDULED\_DEPARTURE) BETWEEN 21 AND 22 THEN 'Night flights'

ELSE 'Late Night flights'

END AS TIMINGS

FROM BOOKINGS.FLIGHTS

1. Identify details of all the morning flights (morning means between 6AM to 11 AM, using flights table) ?

ANSWER

with table1 as (

SELECT \*,

CASE WHEN EXTRACT(HOUR FROM SCHEDULED\_DEPARTURE) BETWEEN 6 AND 11 THEN 'Morning flights'

END AS TIMINGS

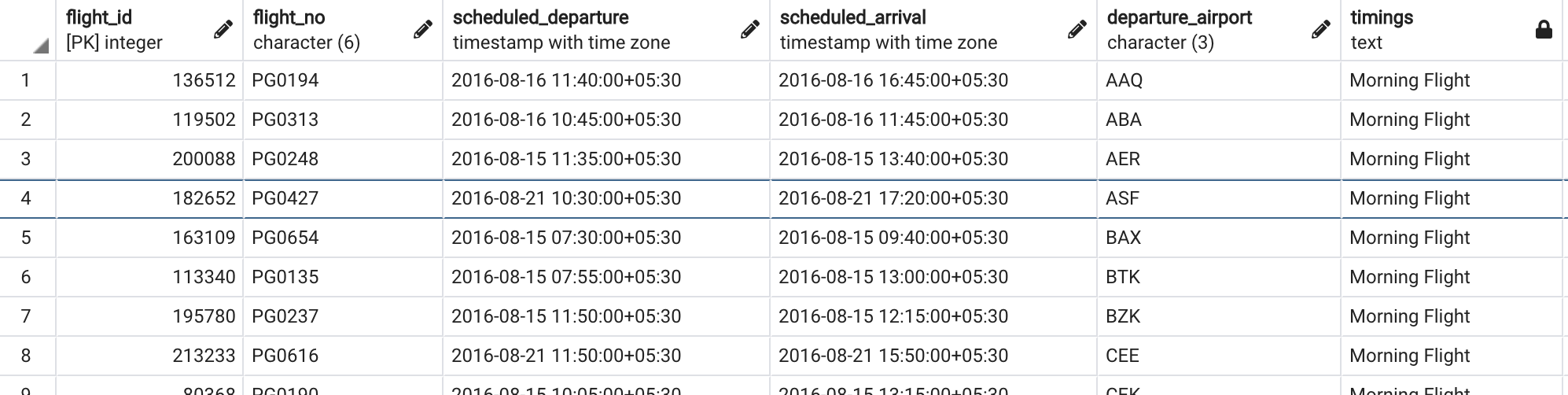
FROM BOOKINGS.FLIGHTS)

select \* from table1

WHERE TIMINGS = 'Morning flights'

1. Identify the earliest morning flight available from every airport.

*Expected output*



ANSWER

WITH TABLE\_1 AS (SELECT

FLIGHT\_ID,

FLIGHT\_NO,

SCHEDULED\_DEPARTURE,

SCHEDULED\_ARRIVAL,

DEPARTURE\_AIRPORT,

RANK()OVER(PARTITION BY DEPARTURE\_AIRPORT ORDER BY SCHEDULED\_DEPARTURE) AS ORDER\_OF\_DEPARTURE,

CASE WHEN EXTRACT(HOUR FROM SCHEDULED\_DEPARTURE) BETWEEN 2 AND 5 THEN 'Early morning flights'

    WHEN EXTRACT(HOUR FROM SCHEDULED\_DEPARTURE) BETWEEN 6 AND 10 THEN 'Morning flights'

    WHEN EXTRACT(HOUR FROM SCHEDULED\_DEPARTURE) BETWEEN 11 AND 15 THEN 'Noon flights'

    WHEN EXTRACT(HOUR FROM SCHEDULED\_DEPARTURE) BETWEEN 16 AND 20 THEN 'Evening flights'

    WHEN EXTRACT(HOUR FROM SCHEDULED\_DEPARTURE) BETWEEN 21 AND 22 THEN 'Night flights'

    ELSE 'Late Night flights'

    END AS TIMINGS

FROM BOOKINGS.FLIGHTS)

SELECT

FLIGHT\_ID,

FLIGHT\_NO,

SCHEDULED\_DEPARTURE,

SCHEDULED\_ARRIVAL,

DEPARTURE\_AIRPORT,

TIMINGS

FROM TABLE\_1

WHERE ORDER\_OF\_DEPARTURE = 1 AND TIMINGS = 'Morning flights'