Ans 4) select

     to\_char(b.book\_date, 'mmm-yy')as month\_name,

     t.passenger\_id,

     t.passenger\_name,

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

     from bookings b

     join tickets t

     on b.book\_ref = t.book\_ref

     group by 1,2,3

    order by total\_amount desc

    limit 1;

answer 5 =  select

              to\_char(b.book\_date, 'mmm-yy')as month\_name,

     t.passenger\_id,

     t.passenger\_name,

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

     from bookings b

     join tickets t

     on b.book\_ref = t.book\_ref

     group by 1,2,3

    order by total\_amount asc

    limit 1;

ANSWER 6) SELECT

t.passenger\_id,

t.passenger\_name,

tf.ticket\_no,66666

COUNT(tf.flight\_id) AS flight\_count

FROM

tickets t

JOIN

ticket\_flights tf

ON

t.ticket\_no = tf.ticket\_no

GROUP BY

t.passenger\_id,

t.passenger\_name,

tf.ticket\_no

HAVING

COUNT(tf.flight\_id) > 1;

ANSWER 7) SELECT

COUNT(\*) AS tickets\_without\_boarding\_pass

FROM

tickets t

LEFT JOIN

boarding\_passes bp

ON

t.ticket\_no = bp.ticket\_no

WHERE

bp.ticket\_no IS NULL;

ANSWER 8) SELECT

    flight\_no,

    departure\_airport,

    arrival\_airport,

    aircraft\_code,

    (actual\_arrival - actual\_departure) AS duration

FROM

    flights

WHERE

    actual\_arrival IS NOT NULL AND actual\_departure IS NOT NULL

ORDER BY

    duration DESC

    limit 1;

ANSWER 9) SELECT

    flight\_id,

    flight\_no,

    scheduled\_departure,

    scheduled\_arrival,

    scheduled\_departure AS timings

FROM

    flights

WHERE

    EXTRACT(HOUR FROM scheduled\_departure) BETWEEN 6 AND 11

ORDER BY

    scheduled\_departure;

ANSWER 10) WITH EarlyFlights AS (

    SELECT

        flight\_id,

        flight\_no,

        scheduled\_departure,

        scheduled\_arrival,

        departure\_airport,

        scheduled\_departure AS timings,

        ROW\_NUMBER() OVER (PARTITION BY departure\_airport ORDER BY scheduled\_departure) AS rn

    FROM

        flights

    WHERE

        EXTRACT(HOUR FROM scheduled\_departure) BETWEEN 2 AND 6

)

SELECT

    flight\_id,

    flight\_no,

    scheduled\_departure,

    scheduled\_arrival,

    departure\_airport,

    timings

FROM EarlyFlights

WHERE

    rn = 1

ORDER BY

    departure\_airport;

ANSWER 11)= SELECT

    airport\_code

FROM

    airports

WHERE

    timezone = 'Europe/Moscow';

ANSWER 12)= SELECT

aircraft\_code,

fare\_conditions,

COUNT(seat\_no) AS seat\_count

FROM

Seats

GROUP BY

aircraft\_code,

fare\_conditions;

ANSWER 13)= SELECT

COUNT(DISTINCT aircraft\_code) AS aircraft\_count

FROM

Seats

WHERE

fare\_conditions = 'Business';

ANSWER 14)= SELECT

a.airport\_name

FROM

airports a

JOIN

flights f

ON

a.airport\_code = f.departure\_airport

GROUP BY

a.airport\_name

ORDER BY

COUNT(f.flight\_no) DESC

LIMIT 1;

ANSWER 15)= SELECT

a.airport\_name

FROM

airports a

JOIN

flights f

ON

a.airport\_code = f.departure\_airport

GROUP BY

a.airport\_name

ORDER BY

COUNT(f.flight\_no) ASC

Limit 1;

ANSWER 16)= SELECT

COUNT(\*) AS flight\_count

FROM

flights

WHERE

departure\_airport = 'DME'

AND actual\_arrival IS NULL;

ANSWER 17)= select

f.flight\_no,

f.aircraft\_code,

a.range

FROM

flights f

JOIN

Aircrafts a

ON

f.aircraft\_code = a.aircraft\_code

WHERE

a.range BETWEEN 3000 AND 6000;

ANSWER 18)= SELECT

COUNT(\*) AS flight\_count

FROM

flights

WHERE

(departure\_airport = 'URS' AND arrival\_airport = 'KUF')

OR

(departure\_airport = 'KUF' AND arrival\_airport = 'URS');

ANSWER 19)= SELECT

COUNT(\*) AS flight\_count

FROM

flights

WHERE

departure\_airport IN ('NOZ', 'KRR');

ANSWER 20)= SELECT

departure\_airport,

COUNT(\*) AS fcount\_of\_flights\_flying\_from\_these\_airports

FROM

flights

WHERE

departure\_airport IN ('KZN', 'DME', 'NBC', 'NJC', 'GDX', 'SGC', 'VKO', 'ROV')

GROUP BY

departure\_airport;

ANSWER 21)= SELECT

f.flight\_no,

f.aircraft\_code,

a.range,

f.departure\_airport

FROM

flights f

JOIN

Aircrafts a

ON

f.aircraft\_code = a.aircraft\_code

WHERE

a.range BETWEEN 3000 AND 6000

AND f.departure\_airport = 'DME';

ANSWER 22)= SELECT

f.flight\_id,

a.model AS aircraft\_model

FROM

flights f

JOIN

Aircrafts a

ON

f.aircraft\_code = a.aircraft\_code

WHERE

a.model LIKE '%Airbus%'

AND f.status IN ('Cancelled', 'Delayed');

ANSWER 24)= SELECT

a.airport\_name,

COUNT(f.flight\_id) AS cancelled\_count

FROM

flights f

JOIN

airports a

ON

f.arrival\_airport = a.airport\_code

WHERE

f.status = 'Cancelled'

GROUP BY

a.airport\_name

ORDER BY

cancelled\_count DESC

LIMIT 1;

ANSWER 25)= SELECT

f.flight\_id,

a.model AS aircraft\_model

FROM

flights f

JOIN

aircraft a

ON

f.aircraft\_code = a.aircraft\_code

WHERE

a.model LIKE '%Airbus%';

ANSWER 26)= WITH LastFlights AS (

SELECT

flight\_id,

flight\_no,

scheduled\_departure,

departure\_airport,

ROW\_NUMBER() OVER (PARTITION BY departure\_airport, DATE(scheduled\_departure) ORDER BY scheduled\_departure DESC) AS rn

FROM

flights

)

SELECT

flight\_id,

flight\_no,

scheduled\_departure,

departure\_airport

FROM

LastFlights

WHERE

rn = 1

ORDER BY

departure\_airport, scheduled\_departure DESC ;

ANSWEER 28)= WITH FirstCancelledFlights AS (

SELECT

flight\_id,

flight\_no,

scheduled\_departure,

departure\_airport,

ROW\_NUMBER() OVER (PARTITION BY departure\_airport, DATE(scheduled\_departure) ORDER BY scheduled\_departure) AS rn

FROM

flights

WHERE

status = 'Cancelled'

)

SELECT

flight\_id,

flight\_no,

scheduled\_departure,

departure\_airport

FROM

FirstCancelledFlights

WHERE

rn = 1

ORDER BY

departure\_airport, DATE(scheduled\_departure);

ANSWER 30)= SELECT

f.flight\_id,

a.range

FROM

flights f

JOIN

aircraft a

ON

f.aircraft\_code = a.aircraft\_code

ORDER BY

a.range DESC

LIMIT 1;

ANSWER 1)= select

    book\_ref,

    to\_char(book\_date,'YYY-mmm-dd'),

    total\_amount

    from bookings

ANSWER 2)= select

 t.ticket\_no,bp.boarding\_no,bp.seat\_no,

 t.passenger\_id,t.passenger\_name

 from tickets  t

 join boarding\_passes bp

 on t.ticket\_no = bp.ticket\_no

ANSWER 3)= select

 seat\_no

 from seats

 group by seat\_no

 order by count(\*) asc

 limit 1 ;

ANSWER 23)= SELECT

F.flight\_id,

A.model AS aircraft\_model

FROM

flights F

JOIN

aircrafts A ON F.aircraft\_code = A.aircraft\_code

WHERE

A.model LIKE '%Boeing%'

AND (F.status = 'Cancelled' OR F.status = 'Delayed');

ANSWER 25)= SELECT

F.flight\_id,

A.model AS aircraft\_model

FROM

flights F

JOIN

aircrafts A ON F.aircraft\_code = A.aircraft\_code

WHERE

A.model LIKE '%Airbus%';

ANSWER 27)= SELECT

T.passenger\_name,

SUM(B.total\_amount) AS total\_refund

FROM

bookings B

JOIN

tickets T ON B.book\_ref = T.book\_ref

GROUP BY

T.passenger\_name;

ANSWER 29)= SELECT

F.flight\_id

FROM

flights F

JOIN

aircrafts A ON F.aircraft\_code = A.aircraft\_code

WHERE

A.model LIKE '%Airbus%'

AND F.status = 'Cancelled';