```sql
--1. Calculate the Average Ticket Price for Events in Each Venue Using a Subquery.

select venue_name, (select avg(ticket_price) from event e where e.venue_id
  v.venue_id) as avg_ticket_price  from venue v;
```

	venue_name	avg_ticket_price
1	Wankhede Stadium	2000.000000
2	Bangalore Palace	1600.000000
3	Sathyam Cinemas	600.000000
4	EKA Arena	1000.000000
5	Music Academy	1200.000000
6	Eden Gardens	3000.000000
7	IMAX Theatre	2400.000000
8	DY Patil Stadium	1400.000000
9	National Stadium	1200.000000
10	Habitat Centre	800.000000

```sql
--2. Find Events with More Than 50% of Tickets Sold using subquery.
select event_name from event  where (total_seats - available_seats) > (total_seats
  * 0.5);
```

event_name

```sql
--3. Calculate the Total Number of Tickets Sold for Each Event.
select event_name, (select sum(num_tickets) from booking b where b.event_id =
  e.event_id) as total_tickets_sold  from event e;
```

	event_name	total_tickets_sold
1	IPL Match	2
2	Bollywood Concert	4
3	Tamil Movie Premiere	1
4	Kabaddi League	3
5	Carnatic Music Night	2
6	Cricket Test Match	5
7	Drama Play	2
8	Coldplay	4
9	Hockey Tournament	1
10	Comedy Show	3

```sql
--4. Find Users Who Have Not Booked Any Tickets Using a NOT EXISTS Subquery.
select customer_name from customer c  where not exists (select 1 from booking b where
  b.customer_id = c.customer_id);
```

customer_name

```sql
--5. List Events with No Ticket Sales Using a NOT IN Subquery.
select event_name from event  where event_id not in (select distinct event_id from
  booking);
```

event_name

```sql
--6. Calculate the Total Number of Tickets Sold for Each Event Type Using a
  Subquery in the FROM Clause.
select  subquery.event_type,  subquery.total_tickets_sold
```

```
from (    select e.event_type, sum(b.num_tickets) as total_tickets_sold   from
  booking b  join event e on b.event_id = e.event_id  group by e.event_type ) as
  subquery;
```

	event_type	total_tickets_sold
1	concert	10
2	movie	6
3	sports	11

```
--7. Find Events with Ticket Prices Higher Than the Average Ticket Price Using a
  Subquery in the WHERE Clause.
select event_name, ticket_price from event
where ticket_price > (select avg(ticket_price) from event);
```

	event_name	ticket_price
1	IPL Match	2000.00
2	Bollywood Concert	1600.00
3	Cricket Test Match	3000.00
4	Drama Play	2400.00

```
--8. Calculate the Total Revenue Generated by Events for Each User Using a
  Correlated Subquery.
select c.customer_name,  (select sum(b.total_cost) from booking b where
  b.customer_id = c.customer_id) as total_revenue
from customer c;
```

	customer_name	total_revenue
1	Amit	200.00
2	Priya	320.00
3	Rahul	30.00
4	Sita	150.00
5	Vikram	120.00
6	Neha	750.00
7	Rohan	240.00
8	Kavita	280.00
9	Arjun	60.00
10	Divya	120.00

```
--9. List Users Who Have Booked Tickets for Events in a Given Venue Using a
  Subquery in the WHERE Clause.
select customer_name from customer
where customer_id in (select distinct b.customer_id from booking b  join event e on
  b.event_id = e.event_id  where e.venue_id = 1); -- Change '1' to the specific
  venue_id
```

	customer_name
1	Amit

```
--10. Calculate the Total Number of Tickets Sold for Each Event Category Using a
  Subquery with GROUP BY.
select event_type, sum(b.num_tickets)as total_tickets_sold from event e join booking b
on  e.event_id = b.event_id group by event_type;
```

	event_type	total_tickets_sold
1	concert	10
2	movie	6
3	sports	11

```
--11. Find Users Who Have Booked Tickets for Events in each Month Using a Subquery
  with DATE_FORMAT.
select distinct c.customer_name  from customer c  where c.customer_id in (select
  b.customer_id from booking b  where month(b.booking_date) = 4 and year
  (b.booking_date) = 2025);
```

	customer_name
1	Arjun
2	Divya

```
--12. Calculate the Average Ticket Price for Events in Each Venue Using a Subquery.

select venue_name, (select avg(ticket_price) from event  e where e.venue_id =
  v.venue_id) as avg_ticket_price  from venue v;
```

	venue_name	avg_ticket_price
1	Wankhede Stadium	2000.000000
2	Bangalore Palace	1600.000000
3	Sathyam Cinemas	600.000000
4	EKA Arena	1000.000000
5	Music Academy	1200.000000
6	Eden Gardens	3000.000000
7	IMAX Theatre	2400.000000
8	DY Patil Stadium	1400.000000
9	National Stadium	1200.000000
10	Habitat Centre	800.000000