

## ASSIGNMENT 1

### TICKET BOOKING SYSTEM

#### INSERTIONS:

insert into venue(venue\_name,address) values

('mumbai','marol andheri(w)'),

('chennai','IT Park'),

('pondicherry','state beach');

select \* from venue;

insert into customer(customer\_name,email,phone\_number) values

('harry potter','harry@gmail.com','45454545'),

('ronald weasley','ron@gmail.com','45454545'),

('hermoine granger','her@gmail.com','45454545'),

('draco malfoy','dracy@gmail.com','45454545'),

('ginny weasley','ginny@gmail.com','45454545'),

('severus snape','sev@gmail.com','56553678');

select \* from customer;

insert into

event(event\_name,event\_date,event\_time,total\_seats,available\_seats,ticket\_price,event\_type,venue\_id) values

('Late Ms.Lata Mangeshkar Musical','2021-09-12','20:00:00',320,270,600,'concert',3),

('CSK vs RCB','2024-04-11','19:30:00',23000,3,3600,'sports',2),

('CSK vs RR','2024-09-19','19:30:00',23000,10,3400,'sports',2),

('Conference Cup','2024-05-01','15:30:00',28000,99,8000,'sports',1);

select \* from event;

insert into

booking(event\_id,customer\_id,num\_tickets,total\_cost,booking\_date) values

```
(1,1,2,640,'2021-09-12'),  
(1,3,5,3000,'2024-03-15'),  
(1,4,3,960,'2021-09-12'),  
(2,1,3,10800,'2024-04-11'),  
(2,3,5,18000,'2024-04-10'),  
(3,5,10,34000,'2024-04-15'),  
(4,2,4,32000,'2024-05-01'),  
(4,6,1,8000,'2024-03-15');  
select * from booking;
```

### QUERIES:

```
/*TASK 2*/
```

```
/*2.query to list all events*/
```

```
select event_name from event;
```

### OUTPUT:

event_name
Late Ms.Lata Mangeshkar Musical
CSK vs RCB
CSK vs RR
Conference Cup

```
/*3.query to select events with available tickets*/
```

```
select event_name,available_seats from event;
```

### OUTPUT:

event_name	available_seats
Late Ms.Lata Mangeshkar Musical	270
CSK vs RCB	3
CSK vs RR	10
Conference Cup	99

/\*4.query to select event name partial match with 'cup' \*/

select event\_name from event where event\_name like '%cup';

**OUTPUT:**

event_name
Conference Cup

/\*5.query to select events with ticket price range between 1000 to 2500 no records\*/

select event\_name,ticket\_price from event where ticket\_price between 1000 and 10000;

**OUTPUT:**

event_name	ticket_price
CSK vs RCB	3600
CSK vs RR	3400
Conference Cup	8000

/\*6.query to retrieve events with specific date range\*/

select event\_name, event\_date from event where event\_date <= '2024-01-01';

**OUTPUT:**

event_name	event_date
Late Ms.Lata Mangeskar Musical	2021-09-12

/\*7.query to retrieve events with tickets that also have concert in their name\*/

select event\_name,available\_seats,event\_type

from event

where event\_type = 'concert';

**OUTPUT:**

event_name	available_seats	event_type
Late Ms.Lata Mangeshkar Musical	270	concert

/\*8.query to retrieve users in batches of 5 starting from the 6th user\*/

select \* from customer limit 5,5;

**OUTPUT:**

customer_id	customer_name	email	phone_number
6	severus snape	sev@gmail.com	56553678

/\*9.query to retrieve bookings deatils contains booked no of ticket more than 4\*/

select \* from booking where num\_tickets > 4;

**OUTPUT:**

event_id	customer_id	booking_id	num_tickets	total_cost	booking_date
1	3	20	5	3000	2024-03-15
2	3	23	5	18000	2024-04-10
3	5	24	10	34000	2024-04-15

/\*10.query to retrieve customer info whose phone num end with 000(45)\*/

select \* from customer where phone\_number like '%545';

**OUTPUT:**

customer_id	customer_name	email	phone_number
1	harry potter	harry@gmail.com	45454545
2	ronald weasley	ron@gmail.com	45454545
3	hermoine granger	her@gmail.com	45454545
4	draco malfoy	dracy@gmail.com	45454545
5	ginni weasley	ginni@gmail.com	45454545

```
/*11.query to retrieve the events in order whose seat capacity more than 15000*/
```

```
select event_name, total_seats from event where total_seats > 15000;
```

**OUTPUT:**

event_name	total_seats
CSK vs RCB	23000
CSK vs RR	23000
Conference Cup	28000

```
/*12.query to select events name not start with x,y,z*/
```

```
select event_name from event where event_name not like 'x%' and event_name not like 'y%' and event_name not like 'z%';
```

**OUTPUT:**

event_name
Late Ms.Lata Mangeshkar Musical
CSK vs RCB
CSK vs RR
Conference Cup

```
/*TASK3*/
```

```
/*1.query to list events and their average ticket prices*/
```

```
select e.event_name,avg(b.total_cost)
from event e, booking b
where e.event_id = b.event_id
group by event_name;
```

**OUTPUT:**

event_name	avg(b.total_cost)
Conference Cup	13546.6666666667
CSK vs RCB	14400
CSK vs RR	34000
Late Ms.Lata Mangeshkar Musical	1533.33333333333

/\*2.query to calculate total revenue generated by events\*/

```
select e.event_name, b.total_cost as total_revenue
from event e join booking b on e.event_id = b.event_id
group by event_name;
```

**OUTPUT:**

event_name	total_revenue
Conference Cup	640
CSK vs RCB	10800
CSK vs RR	34000
Late Ms.Lata Mangeshkar Musical	640

/\*3.query to find the event with the highest ticket sales\*/

```
select event_name, total_seats - available_seats as ticket_sold
from event group by event_name
limit 1;
```

**OUTPUT:**

event_name	ticket_sold
Conference Cup	27901

/\*4.query to find the total no of tickets sold for each event\*/

```
select event_name, total_seats - available_seats as ticket_sold
from event;
```

**OUTPUT:**

event_name	ticket_sold
Late Ms.Lata Mangeshkar Musical	50
CSK vs RCB	22997
CSK vs RR	22990

event_name	ticket_sold
Conference Cup	27901

```
/*5.query to find the events with no ticket sales*/
select event_name, total_seats - available_seats as ticket_sold
from event where total_seats - available_seats = 0;
```

```
/*6.query to find the user who has booked most tickets*/
select distinct c.customer_name,b.num_tickets
from customer c, booking b
where c.customer_id = b.customer_id group by b.num_tickets order by
b.num_tickets desc
limit 1;
```

**OUTPUT:**

customer_name	num_tickets
ginni weasley	10

```
/*7.query to list events and the total no of tickets sold for each month*/
select event_name,month(event_date) as month, total_seats - available_seats
as ticket_sold
from event
group by month(event_date);
```

**OUTPUT:**

event_name	month	ticket_sold
CSK vs RCB	4	22997
Conference Cup	5	27901
CSK vs RR	9	22990
Late Ms.Lata Mangeshkar Musical	9	50

/\*8.query to calculate the average ticket price for events in each venue\*/

```
select v.*,avg(e.ticket_price)
from venue v, event e
where v.venue_id = e.venue_id
group by v.venue_name;
```

**OUTPUT:**

venue_id	venue_name	address	avg(e.ticket_price)
2	chennai	IT Park	3500
1	mumbai	marol andheri(w)	8000
3	pondicherry	state beach	600

/\*9.query to calculate the total number of ticket sold for each event type\*/

```
select event_type,total_seats - available_seats as ticket_sold
from event
group by event_type;
```

**OUTPUT:**

event_type	ticket_sold
concert	50
sports	22997

/\*10.query to calculate the total revenue generated by events in each year\*/

```
select e.event_name, b.total_cost as total_revenue,year(e.event_date) as year
from event e join booking b on e.event_id = b.event_id
group by year(e.event_date);
```

**OUTPUT:**

event_name	total_revenue	year
Conference Cup	640	2024
CSK vs RCB	10800	2024



<b>event_name</b>	<b>total_revenue</b>	<b>year</b>
CSK vs RR	34000	2024
Late Ms.Lata Mangeshkar Musical	640	2021

/\*11.query to list users who have booked tickets for multiple events-----  
doubt\*/

```
select c.customer_id,c.customer_name
from booking b, customer c
where c.customer_id = b.customer_id
group by c.customer_id,c.customer_name
having count(b.customer_id)>1;
```

**OUTPUT:**

<b>customer_id</b>	<b>customer_name</b>
1	harry potter
3	hermoine granger

/\*12.query to calculate the revenue generated by events for each user\*/

```
select c.customer_name, b.total_cost as revenue
from customer c join booking b on c.customer_id = b.customer_id
            join event e on b.event_id = e.event_id
group by c.customer_name;
```

**OUTPUT:**

<b>customer_name</b>	<b>revenue</b>
draco malfoy	960
ginni weasley	34000
harry potter	640
hermoine granger	3000
ronald weasley	32000
severus snape	8000

/\*13.query to calculate the average ticket price for events in each category and venue\*/

```
select v.venue_name,e.event_type,avg(e.ticket_price)
from venue v,event e
where v.venue_id = e.venue_id
group by e.event_type , v.venue_name;
```

**OUTPUT:**

venue_name	event_type	avg(e.ticket_price)
pondicherry	concert	600
chennai	sports	3500
mumbai	sports	8000

/\*TASK 4\*/

/\*1.Average ticket price for events in each venue\*/

```
select v.venue_name,e.event_type,avg(e.ticket_price) as average_price
from venue v,event e
where v.venue_id = e.venue_id
group by v.venue_name;
```

**OUTPUT:**

venue_name	event_type	average_price
pondicherry	concert	600
chennai	sports	3500
mumbai	sports	8000

/\*2.find events with more than 50% of tickets sold using subquery\*/

```
select event_name,total_seats,(total_seats-available_seats) as ticket_sold
```

from event

where (total\_seats-available\_seats) > (total\_seats/2);

**OUTPUT:**

event_name	total_seats	ticket_sold
CSK vs RCB	23000	22997
CSK vs RR	23000	22990
Conference Cup	28000	27901

/\*3.calculate the total number of tickets sold for each event\*/

select event\_name,total\_seats - available\_seats as ticket\_sold

from event

group by event\_name;

**OUTPUT:**

event_name	ticket_sold
Conference Cup	27901
CSK vs RCB	22997
CSK vs RR	22990
Late Ms.Lata Mangeshkar Musical	50

/\*4.find customer who have not booked any tickets using a not exists subquery\*/

select \*

from customer

where customer\_id not in (select c.customer\_id

from customer c join booking b on c.customer\_id =  
b.customer\_id);

**OUTPUT:**

customer_id	customer_name	email	phone_number
-------------	---------------	-------	--------------

/\*5.list events with no ticket sales using a not in subquery\*/

select event\_name

from event

where event\_id not in (select e.event\_id

from event e join booking b on e.event\_id = b.event\_id);

/\*7.find events with ticket prices higher than the average ticket price using a subquery in the where clause\*/

select event\_name

from event

where ticket\_price > (select avg(ticket\_price) from event);

select avg(ticket\_price) from event;

**OUTPUT:**

**event\_name**

Conference Cup

/\*8.calculate the total revenue generated by events for each user using a correlated subquery\*/

select c.customer\_name,total\_cost

from booking b join customer c on b.customer\_id = c.customer\_id

group by c.customer\_name;

**OUTPUT:**

**customer\_name total\_cost**

draco malfoy 960

**customer\_name total\_cost**

ginni weasley 34000

harry potter 640

hermoine granger 3000

ronald weasley 32000

severus Snape 8000

/\*9.list users who have booked tickets for events in a given venue using a subquery in where clause\*/

select customer\_name

from customer

where customer\_id in (select customer\_id

from booking

where event\_id in (select event\_id

from event

where venue\_id in (select venue\_id

from venue where venue\_name ='chennai')));

**OUTPUT:**

**customer\_name**

harry potter

hermoine granger

ginni weasley

/\*10.calculate total number of tickets sold for each event category using a subquery with group by\*/

select event\_type,(total\_seats-available\_seats) as ticket\_sold

from event

group by event\_type;

**OUTPUT:****event\_type ticket\_sold**

concert	50
sports	22997

/\*11.find users who have booked tickets for events in each month using a subquery with date\_format\*/

```
select c.*,month(b.booking_date) as booking_month
from customer c join booking b on c.customer_id = b.customer_id
group by booking_month;
```

**OUTPUT:**

customer_id	customer_name	email	phone_number	booking_month
3	hermoine granger	her@gmail.com	45454545	3
1	harry potter	harry@gmail.com	45454545	4
2	ronald weasley	ron@gmail.com	45454545	5
1	harry potter	harry@gmail.com	45454545	9

/\*12.calculate the average ticket price for events in each venue using a subquery\*/

```
select venue_name, avg(ticket_price) as average_price
from venue v join event e on v.venue_id = e.venue_id
group by venue_name;
```

**OUTPUT:****venue\_name average\_price**

chennai	3500
mumbai	8000
pondicherry	600