

Query Execution

```
-- Login - Customer
-- customer_email = "rahul.sharma@example.in"
-- customer_password = "Rahul@123"
SELECT * FROM Customer WHERE email = 'rahul.sharma@example.in' AND password = 'Rahul@123'; -- valid
```

customer_id	first_name	last_name	email	mobile_number	password
1	Rahul	Sharma	rahul.sharma@example.in	NULL	Rahul@123

```
-- Customer Past Booking History
SELECT * FROM Booking WHERE Customer_ID = 1;
```

booking_id	customer_id	payment_id	coupon_code	transport_type	status	booking_date
1	1	1	CPN001	Airplane	Confirmed	2025-01-10
31	1	31	CPN021	Train	Pending	2025-04-10

```
-- Payment Detail of a Booking ID
SELECT * FROM Payment WHERE Payment_ID = (SELECT Payment_ID FROM Booking WHERE Booking_ID = 1);
```

payment_id	amount	payment_method	payment_status
1	5000.00	Credit Card	Confirmed

```
-- Airplane Details from a Booking ID
SELECT *, TIMESTAMPDIFF ( minute, CONCAT(departure_date, " ", departure_time),
CONCAT(arrival_date, " ", arrival_time) ) AS 'travel_time (min)'
FROM A_Route_Follows NATURAL JOIN A_Book_Includes NATURAL JOIN AirplaneRoute
NATURAL JOIN Airplane WHERE Booking_ID = 1;
```

airplane_id	route_id	arf_pkey	price	available_seats	arrival_time	arrival_date	departure_time	departure_date	booking_id	tickets_booked	arrival_location	departure_location	name	capacity	provider_id	travel_time (min)
AI001	1	1	3000.00	150	10:00:00	2025-03-01	07:00:00	2025-03-01	1	1	New Delhi	Mumbai	Air India Express 101	180	1	180

-- Train Details from a Booking ID

```
SELECT * , TIMESTAMPDIFF ( minute, CONCAT(departure_date, " ",
departure_time), CONCAT(arrival_date, " ", arrival_time) ) AS 'travel_time
(min)'
FROM T_Route_Follows NATURAL JOIN T_Book_Includes NATURAL JOIN TrainRoute
NATURAL JOIN Train WHERE Booking_ID = 2;
```

train_id	route_id	trf_pkey	price	available_seats	arrival_time	arrival_date	departure_time	departure_date	booking_id	tickets_booked	arrival_location	departure_location	name	capacity	provider_id	travel_time (min)
IR002	2	2	550.00	750	07:00:00	2025-04-02	04:00:00	2025-04-02	2	2	Delhi	Agra	Shatabdi Express 202	600	17	180

-- Itinerary Details from a Booking ID

```
SELECT * , DATE_ADD( itinerary_start_date, INTERVAL duration_day DAY ) as
itinerary_end_date
FROM Itinerary NATURAL JOIN I_Book_Includes WHERE Booking_ID = 2;
```

itinerary_id	agency_id	description	duration_day	duration_night	price	destination_city	destination_state	destination_country	booking_id	itinerary_start_date	itinerary_end_date
2	2	Day 1: Mumbai city tour and Gateway of India visit	1	1	4000.00	Mumbai	Maharashtra	India	2	2025-06-02	2025-06-03

-- Hotel Details from a Booking ID

```
SELECT * FROM Hotel NATURAL JOIN H_Book_Includes WHERE Booking_ID = 1;
```

hotel_id	name	location	price_per_night	email	mobile_number	total_rooms	hotel_description	provider_id	booking_id	check_in_date	check_out_date	room_booked
1	Taj Palace	New Delhi	8000.00	tajpalace@hotel.in	9877000001	100	Luxurious hotel in heart of Delhi	1	1	2025-05-01	2025-05-03	1

-- Reviews for Hotel from Hotel ID

```
SELECT * FROM Reviews WHERE item_id = 1 AND item_type = 'Hotel';
```

review_id	comment	rating	booking_id	item_type	item_id
1	Excellent service and experience	5	1	Hotel	1
2	Okay service and experience	4	1	Hotel	1
3	Bad service and experience	3	1	Hotel	1
4	Worst service and experience	2	1	Hotel	1

-- Reviews for Itinerary from Itinerary ID

```
SELECT * FROM Reviews WHERE item_id = 2 AND item_type = 'Itinerary';
```

review_id	comment	rating	booking_id	item_type	item_id
5	Good value for money	4	2	Itinerary	2
6	Okay value for money	3	2	Itinerary	2
7	Bad value for money	2	2	Itinerary	2
8	Poor value for money	1	2	Itinerary	2

```
-- Rooms Available from start date, end date, hotel id
SELECT total_rooms - COALESCE(occupied_rooms, 0) as rooms_available
FROM
(SELECT total_rooms FROM Hotel WHERE hotel_id = 1) as h1,
(SELECT SUM(room_booked) as occupied_rooms
FROM H_Book_Includes
WHERE hotel_id = 1
AND ( check_in_date BETWEEN '2025-04-29' AND '2025-05-02'
      OR check_out_date BETWEEN '2025-04-29' AND '2025-05-02' )
) as h2;
```

rooms_available
99

```
-- Average rating and number of reviews for Hotel ID
SELECT AVG(rating), COUNT(rating) FROM Reviews WHERE item_id = 1 AND item_type
= 'Hotel';
```

AVG(rating)	COUNT(rating)
3.5000	4

```
-- Average rating and number of reviews for Itinerary ID
SELECT AVG(rating), COUNT(rating) FROM Reviews WHERE item_id = 2 AND item_type
= 'Itinerary';
```

AVG(rating)	COUNT(rating)
2.5000	4

```
-- Find all trains for arrival location, departure location, departure date
SELECT * , TIMESTAMPDIFF ( minute, CONCAT(departure_date, " ",
```

```
departure_time), CONCAT(arrival_date, " ", arrival_time) ) AS 'travel_time
(min)'
```

```
FROM T_Route_Follows NATURAL JOIN TrainRoute NATURAL JOIN Train
WHERE departure_date = '2025-04-01' AND departure_location = 'Surat' AND
arrival_location = 'Mumbai';
```

train_id	route_id	trf_pkey	price	available_seats	arrival_time	arrival_date	departure_time	departure_date	arrival_location	departure_location	name	capacity	provider_id	travel_time (min)
IR001	1	1	500.00	800	06:30:00	2025-04-01	03:00:00	2025-04-01	Mumbai	Surat	Rajdhani Express 101	800	16	210

```
-- Find all airplane for arrival location, departure location, departure date
SELECT * , TIMESTAMPDIFF ( minute, CONCAT(departure_date, " ",
departure_time), CONCAT(arrival_date, " ", arrival_time) ) AS 'travel_time
(min)'
```

```
FROM A_Route_Follows NATURAL JOIN AirplaneRoute NATURAL JOIN Airplane
WHERE departure_date = '2025-03-01' AND departure_location = 'Mumbai' AND
arrival_location = 'New Delhi';
```

airplane_id	route_id	arf_pkey	price	available_seats	arrival_time	arrival_date	departure_time	departure_date	arrival_location	departure_location	name	capacity	provider_id	travel_time (min)
AI001	1	1	3000.00	150	10:00:00	2025-03-01	07:00:00	2025-03-01	New Delhi	Mumbai	Air India Express 101	180	1	180

```
-- Get coupons
SELECT * FROM Coupon WHERE expiry_date > CURDATE() ORDER BY
discount_percentage DESC;
```

coupon_code	discount_percentage	expiry_date
CPN004	20	2025-09-30 23:59:59
CPN008	20	2025-05-31 23:59:59
CPN016	20	2025-09-30 23:59:59
CPN020	20	2025-05-31 23:59:59
CPN028	20	2025-09-30 23:59:59
CPN006	15	2025-07-31 23:59:59
CPN010	15	2025-03-31 23:59:59
CPN014	15	2025-11-30 23:59:59
CPN018	15	2025-07-31 23:59:59
CPN022	15	2025-03-31 23:59:59
CPN026	15	2025-11-30 23:59:59
CPN030	15	2025-07-31 23:59:59
CPN005	10	2025-08-31 23:59:59
CPN009	10	2025-04-30 23:59:59
CPN013	10	2025-12-31 23:59:59
CPN017	10	2025-08-31 23:59:59
CPN021	10	2025-04-30 23:59:59
CPN025	10	2025-12-31 23:59:59
CPN029	10	2025-08-31 23:59:59
CPN003	5	2025-10-31 23:59:59
CPN007	5	2025-06-30 23:59:59
CPN015	5	2025-10-31 23:59:59
CPN019	5	2025-06-30 23:59:59
CPN027	5	2025-10-31 23:59:59