

# CASE STUDY 1

## OYO BUSINESS

### Creation of Database and Insertion of Data:

```
CREATE DATABASE CaseStudy1;
USE CaseStudy1;

CREATE TABLE Oyo_City( Hotel_ID INT, City VARCHAR(20));
BULK INSERT Oyo_City
FROM 'D:\Victus Laptop\Downloads\Oyo_City.csv'
WITH (
    FORMAT = 'CSV',
    FIRSTROW = 2,
    FIELDTERMINATOR = ',',
    ROWTERMINATOR = '\n',
    TABLOCK
);

SELECT * FROM Oyo_City;
```

```
CREATE TABLE Oyo_Sales( booking_id INT, customer_id INT, status VARCHAR(20), check_in DATE, check_out DATE, no_of_rooms INT, hotel_id INT, amount INT, discount INT, date_of_booking DATE);
BULK INSERT Oyo_Sales
FROM 'D:\Victus Laptop\Downloads\Oyo_Sales.csv'
WITH (
    FORMAT = 'CSV',
    FIRSTROW = 2,
    FIELDTERMINATOR = ',',
    ROWTERMINATOR = '\n',
    TABLOCK
);
SELECT * FROM Oyo_Sales;
```

## 1. Find the average room rates of different cities

```
-- Average Room Rate of different Cities
SELECT oc.city, AVG(os.amount) AS "Average Room Rate"
FROM Oyo_City oc
LEFT JOIN Oyo_Sales os
ON oc.Hotel_ID = os.hotel_id
GROUP BY oc.City
ORDER BY AVG(os.amount) DESC;
```

100 %

Results Messages

	city	Average Room Rate
1	Mumbai	7764
2	Pune	5122
3	Kolkata	5104
4	Chennai	4680
5	Hyderabad	4557
6	Delhi	4456
7	Bangalore	4427
8	Jaipur	3648
9	Noida	3447
10	Gurgaon	2914

## 2. No of bookings of different cities in the months – Jan, Feb, Mar

```
-- No of bookings of different cities in Jan Feb Mar Months
SELECT oc.city, COUNT(os.booking_id) AS "Number Of Bookings"
FROM Oyo_City oc
LEFT JOIN Oyo_Sales os
ON oc.Hotel_ID = os.hotel_id
WHERE MONTH(os.date_of_booking) IN (1,2,3) AND os.status != 'Cancelled'
GROUP BY oc.City
ORDER BY COUNT(os.booking_id) DESC;
```

100 %

Results Messages

	city	Number Of Bookings
1	Gurgaon	592
2	Bangalore	378
3	Delhi	371
4	Noida	143
5	Mumbai	121
6	Pune	92
7	Hyderabad	79
8	Jaipur	76
9	Chennai	69
10	Kolkata	15

### 3. Frequency of early bookings prior to check-in the hotel

```
-- Frequency of early bookings prior to check-in the hotel
SELECT COUNT(*) AS "Frequency of Early Bookings" FROM Oyo_Sales WHERE date_of_booking < check_in;
SELECT datediff(day, date_of_booking, check_in) AS "Number Of days in advance" , COUNT(*) AS "Frequency of Early Bookings"
FROM Oyo_Sales
WHERE date_of_booking < check_in AND status != 'Cancelled'
GROUP BY datediff(day, date_of_booking, check_in);

-- Frequency of bookings of no of rooms in Hotel
SELECT hotel_id, COUNT(no_of_rooms) AS "No of Rooms" FROM Oyo_Sales WHERE status != 'Cancelled' GROUP BY hotel_id;

-- New customers in Feb month
SELECT COUNT(customer_id) AS "New customers in Feb Month" FROM Oyo_Sales WHERE MONTH(date_of_booking) = 2 AND status != 'Cancelled';
```

100 %

Results Messages

	Frequency of Early Bookings
1	1489

100 %

Results Messages

	Number Of days in advance	Frequency of Early Bookings
1	1	403
2	2	132
3	3	72
4	4	50
5	5	36
6	6	17
7	7	16
8	8	17
9	9	12
10	10	11
11	11	12
12	12	9
13	13	7
14	14	4
15	15	2

Query executed successfully. LAPTOP-AFAAUBJ2\SQLEXPRESS ... LA

### 4. Frequency of bookings of no of rooms in Hotel

```
-- Frequency of bookings of no of rooms in Hotel
SELECT hotel_id, COUNT(no_of_rooms) AS "No of Rooms" FROM Oyo_Sales WHERE status != 'Cancelled' GROUP BY hotel_id;
```

100 %

Results Messages

	hotel_id	No of Rooms
1	261	11
2	570	5
3	687	1
4	238	3
5	355	2
6	378	3
7	879	1
8	401	1
9	192	3
10	69	1
11	856	1
12	501	3
13	92	1
14	756	5
15	161	16

## 5. New customers in Feb Month

```
-- New customers in Feb month
SELECT COUNT(customer_id) AS "New customers in Feb Month"
FROM Oyo_Sales
WHERE MONTH(date_of_booking) = 2 AND status != 'Cancelled' AND customer_id NOT IN
(SELECT customer_id
FROM Oyo_Sales
WHERE date_of_booking < '2022-02-01');
```

100 %

Results Messages

	New customers in Feb Month
1	475

## 6. Net revenue to company (due to some bookings cancelled)

```
-- Net revenue to company (due to some bookings cancelled)
SELECT CASE WHEN GROUPING(hotel_id) = 1 THEN 'Net Revenue'
ELSE CAST(hotel_id AS VARCHAR(10))
END AS hotel_id,
SUM(amount) AS "Revenue"
FROM Oyo_Sales
WHERE status != 'Cancelled'
GROUP BY ROLLUP(hotel_id);
```

100 %

Results Messages

	hotel_id	Revenue
312	932	12730
313	933	1780
314	938	2469
315	944	35154
316	953	3509
317	955	41339
318	960	17264
319	965	4027
320	975	44067
321	978	23393
322	979	33658
323	984	2469
324	996	23325
325	997	23261
326	Net Revenue	7381411

## 7. Gross revenue to company

```
-- Gross revenue to company
SELECT CASE WHEN GROUPING(hotel_id) = 1 THEN 'Gross Revenue'
ELSE CAST(hotel_id AS VARCHAR(10))
END AS hotel_id,
SUM(amount) AS "Revenue"
FROM Oyo_Sales
GROUP BY ROLLUP(hotel_id);
```

100 %

Results Messages

	hotel_id	Revenue
344	944	64633
345	953	3509
346	955	79965
347	956	21700
348	960	37632
349	965	8054
350	975	44067
351	978	67907
352	979	33658
353	984	2469
354	995	9422
355	996	36709
356	997	49447
357	998	19363
358	Gross Revenue	11917...