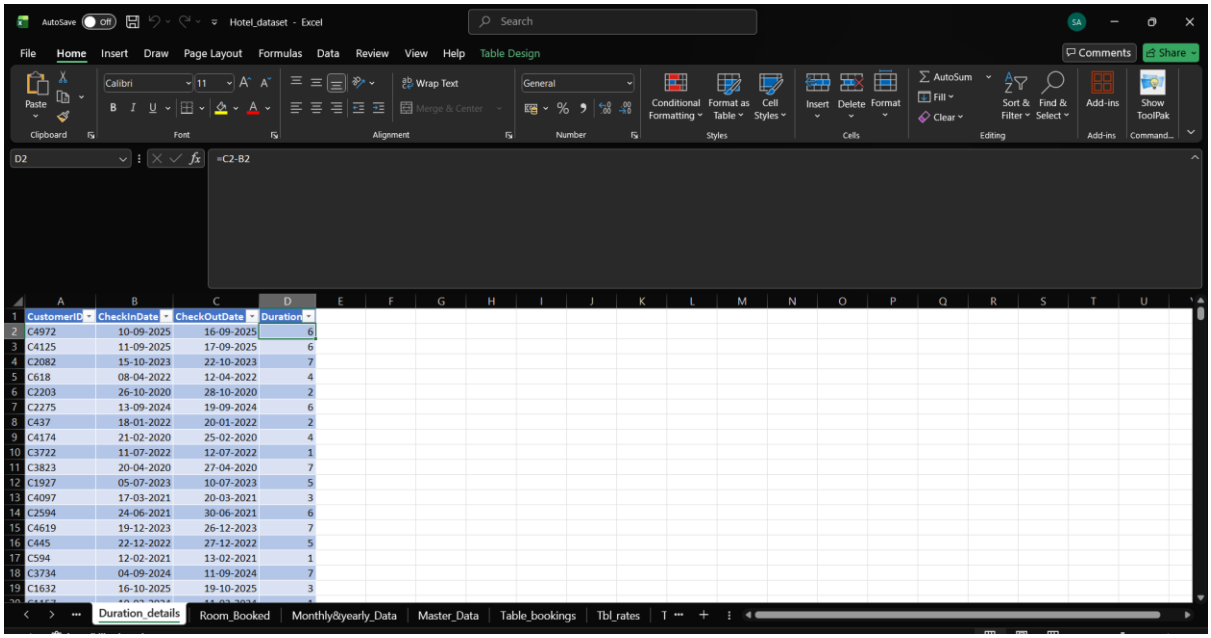
Module 2: Custom Columns, Pivot Table and Master Data

1. Created Duration Details sheet using Customer_ID, Checkin_Date, Checkout_Date and Duration



CustomerID	CheckInDate	CheckOutDate	Duration
C4972	10-09-2025	16-09-2025	6
C4125	11-09-2025	17-09-2025	6
C2082	15-10-2023	22-10-2023	7
C618	08-04-2022	12-04-2022	4
C2203	26-10-2020	28-10-2020	2
C2275	13-09-2024	19-09-2024	6
C437	18-01-2022	20-01-2022	2
C4174	21-02-2020	25-02-2020	4
C3722	11-07-2022	12-07-2022	1
C3823	20-04-2020	27-04-2020	7
C1927	05-07-2023	10-07-2023	5
C4097	17-03-2021	20-03-2021	3
C2594	24-06-2021	30-06-2021	6
C4619	19-12-2023	26-12-2023	7
C445	22-12-2022	27-12-2022	5
C594	12-02-2021	13-02-2021	1
C3734	04-09-2024	11-09-2024	7
C1632	16-10-2025	19-10-2025	3

2. Created Stay_Date column using Custom Column in the Power Query Editor

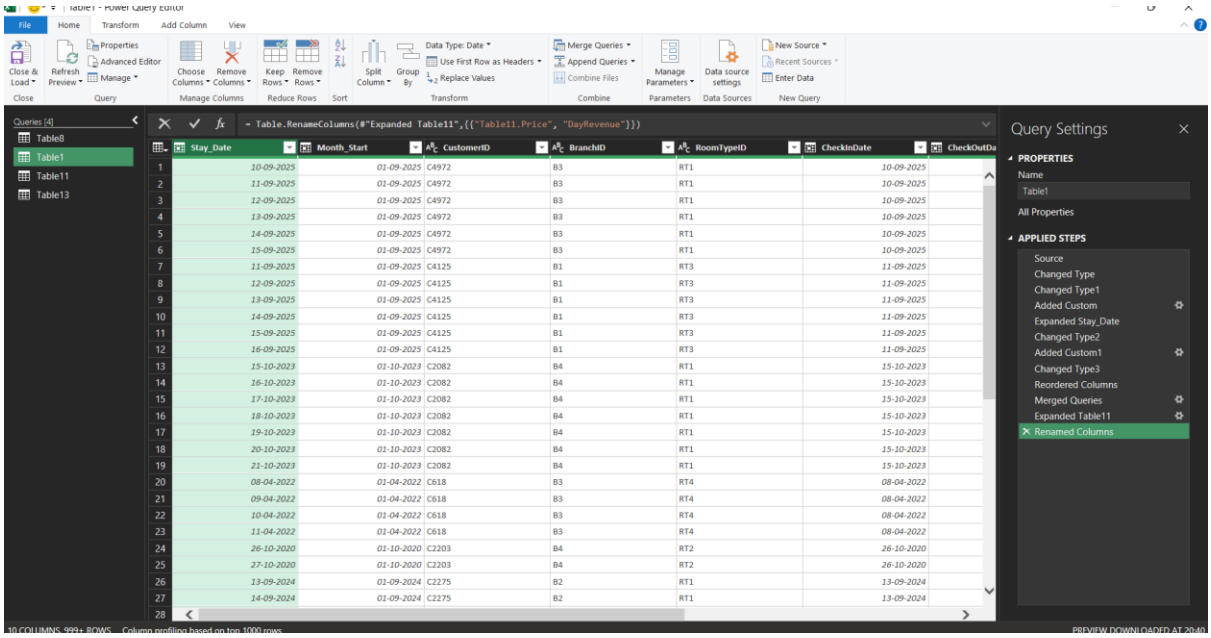
Using for Formula:

= if [CheckInDate] <> null and [CheckOutDate] <> null then

List.Dates(Date.From([CheckInDate]), Duration.Days([CheckOutDate] - [CheckInDate]), #duration(1,0,0,0))

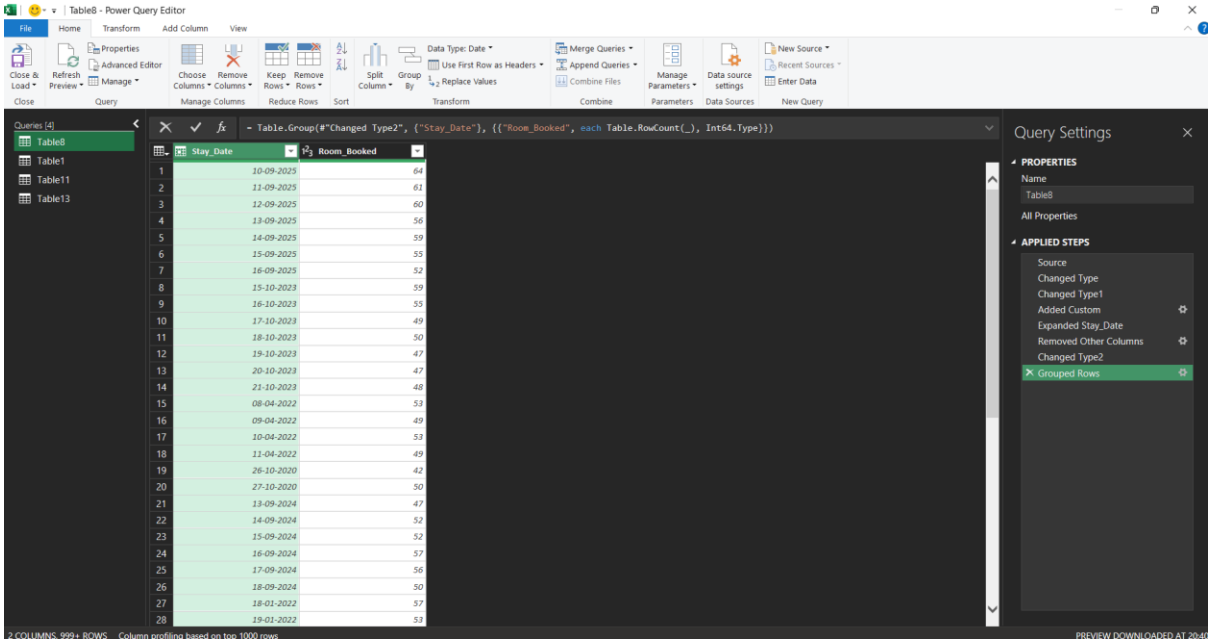
else

null

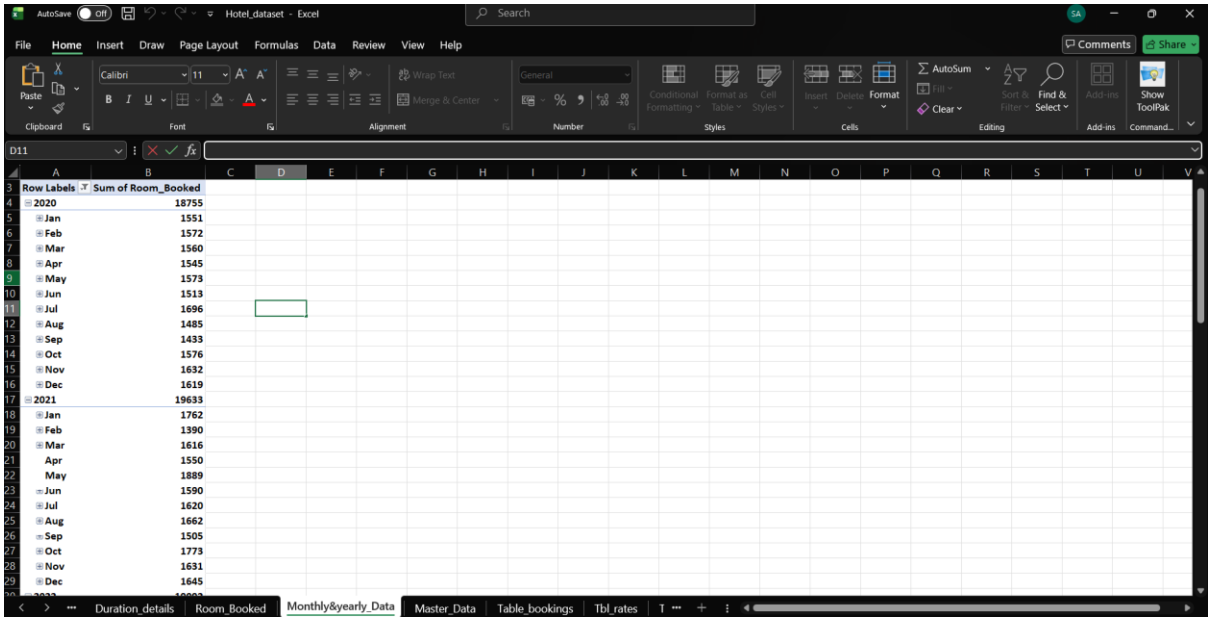


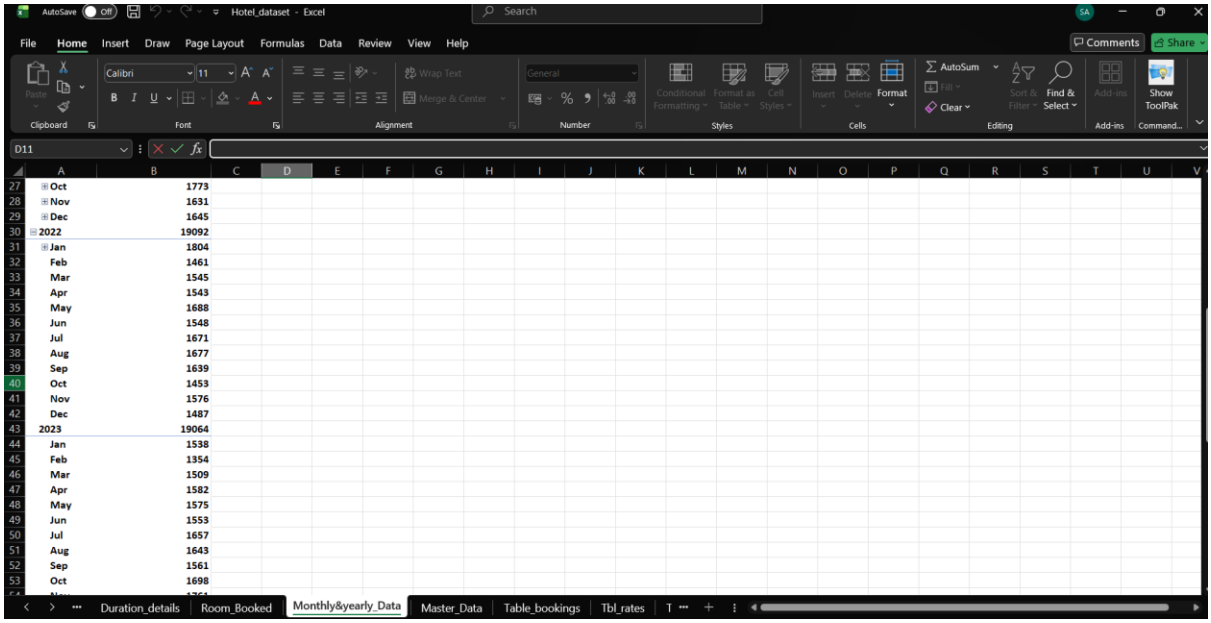
Stay_Date	Month_Start	CustomerID	BranchID	RoomTypeID	CheckInDate	CheckOutDa
10-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	
11-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	
12-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	
13-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	
14-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	
15-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	
11-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	
12-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	
13-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	
14-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	
15-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	
16-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	
15-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	
16-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	
17-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	
18-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	
19-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	
20-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	
21-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	
08-04-2022	01-04-2022	C618	B3	RT4	08-04-2022	
09-04-2022	01-04-2022	C618	B3	RT4	08-04-2022	
10-04-2022	01-04-2022	C618	B3	RT4	08-04-2022	
11-04-2022	01-04-2022	C618	B3	RT4	08-04-2022	
26-10-2020	01-10-2020	C2203	B4	RT2	26-10-2020	
27-10-2020	01-10-2020	C2203	B4	RT2	26-10-2020	
13-09-2024	01-09-2024	C2275	B2	RT1	13-09-2024	
14-09-2024	01-09-2024	C2275	B2	RT1	13-09-2024	

3. Create the Rooms_Booked column using the Group By function in the Power Query Editor and change the data type of Stay_Date column from Text to Date

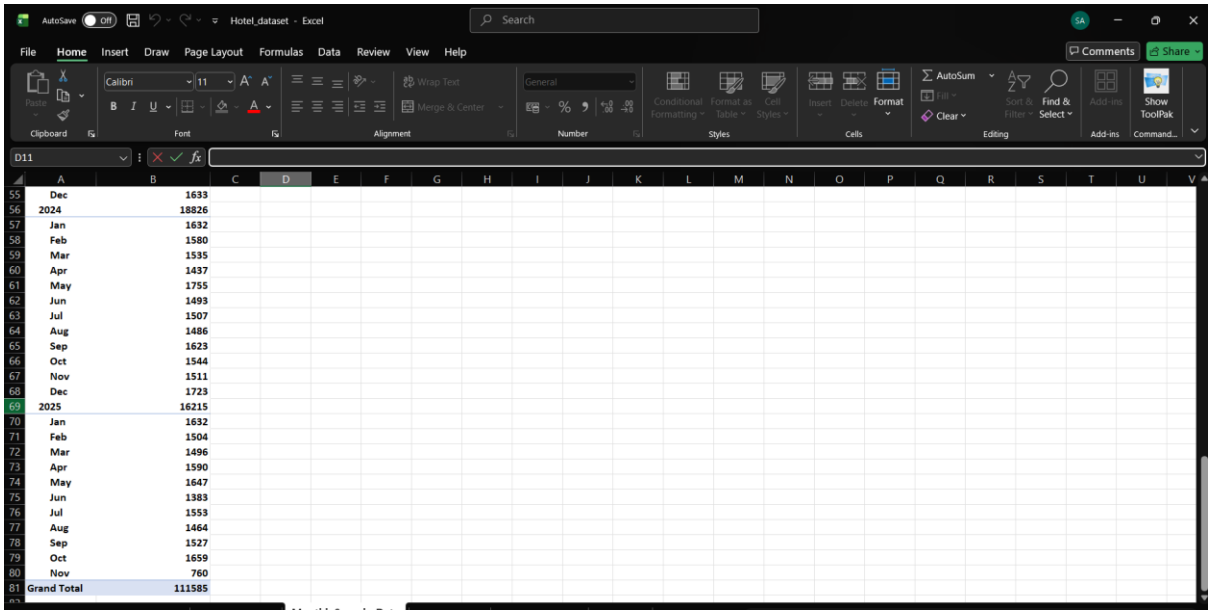


4. Created Pivot Table using the Stay_Date and Rooms_Booked Columns from the Rooms Booked sheet to fetch the Yealy & Monthly Bookings Data





	A	B
27	Oct	1773
28	Nov	1631
29	Dec	1645
30	2022	19092
31	Jan	1804
32	Feb	1461
33	Mar	1545
34	Apr	1543
35	May	1688
36	Jun	1548
37	Jul	1671
38	Aug	1677
39	Sep	1639
40	Oct	1453
41	Nov	1576
42	Dec	1487
43	2023	19064
44	Jan	1538
45	Feb	1354
46	Mar	1509
47	Apr	1582
48	May	1575
49	Jun	1553
50	Jul	1657
51	Aug	1643
52	Sep	1561
53	Oct	1698



	A	B
55	Dec	1633
56	2024	18826
57	Jan	1632
58	Feb	1580
59	Mar	1535
60	Apr	1437
61	May	1755
62	Jun	1493
63	Jul	1507
64	Aug	1486
65	Sep	1623
66	Oct	1544
67	Nov	1511
68	Dec	1723
69	2025	16215
70	Jan	1632
71	Feb	1504
72	Mar	1496
73	Apr	1590
74	May	1647
75	Jun	1383
76	Jul	1553
77	Aug	1464
78	Sep	1527
79	Oct	1659
80	Nov	760
81	Grand Total	111585

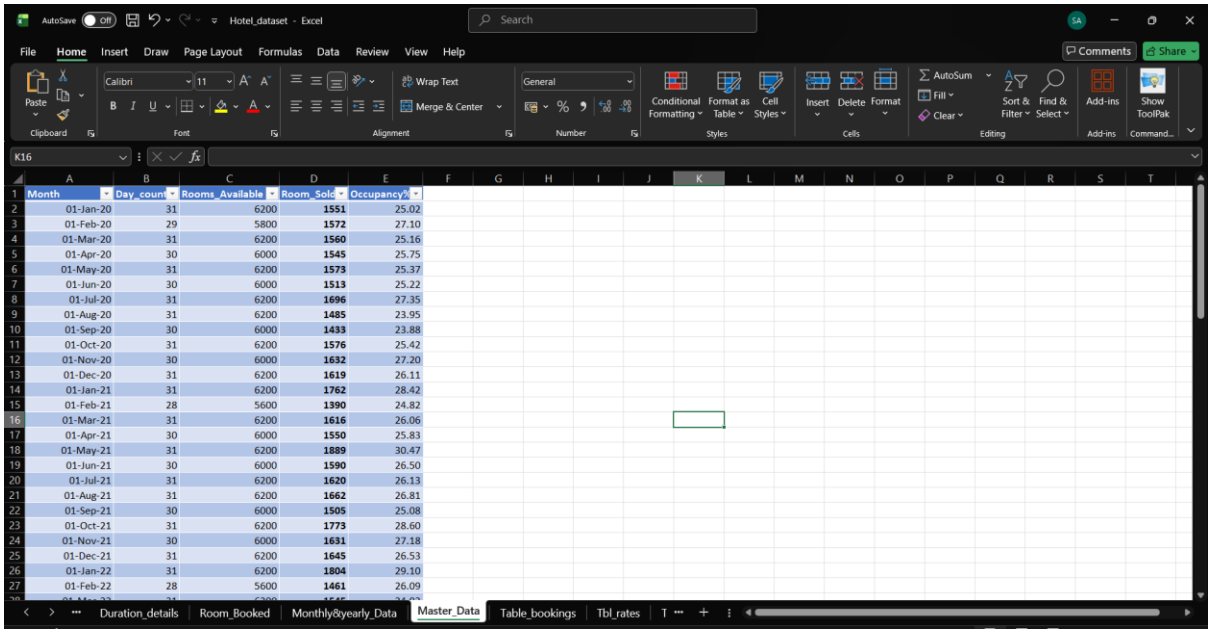
5.Created the Master Data sheet with Month, Day_Count, Rooms_Avalable, Rooms_Sold and Occupancy_% columns

Formulas:

Day_Count=DAY(EOMONTH(A2,0))

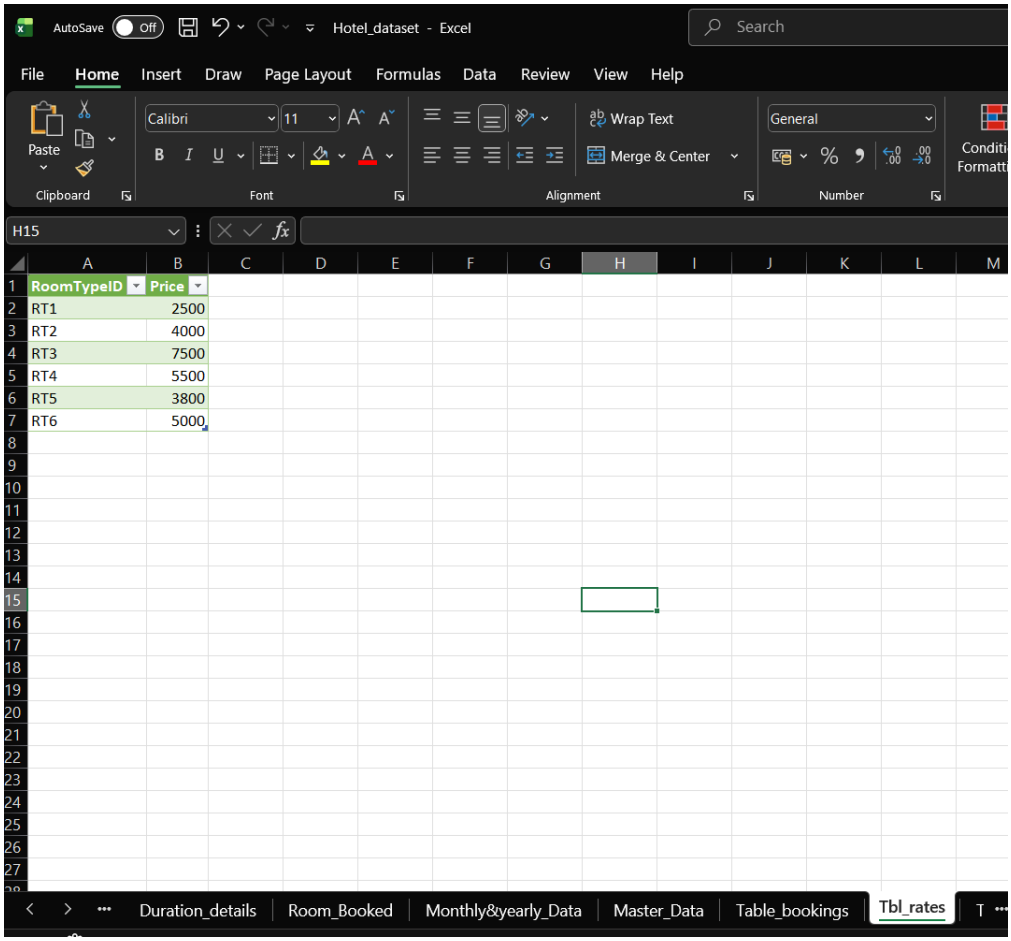
Rooms_available = =B2*200 where 200 is Total Room Count where B2 is DayCount

Occupancy Rate= =(D2/C2)*100 where D2 = Room Sold which taken from Pivot Table and C2 is Rooms_Available



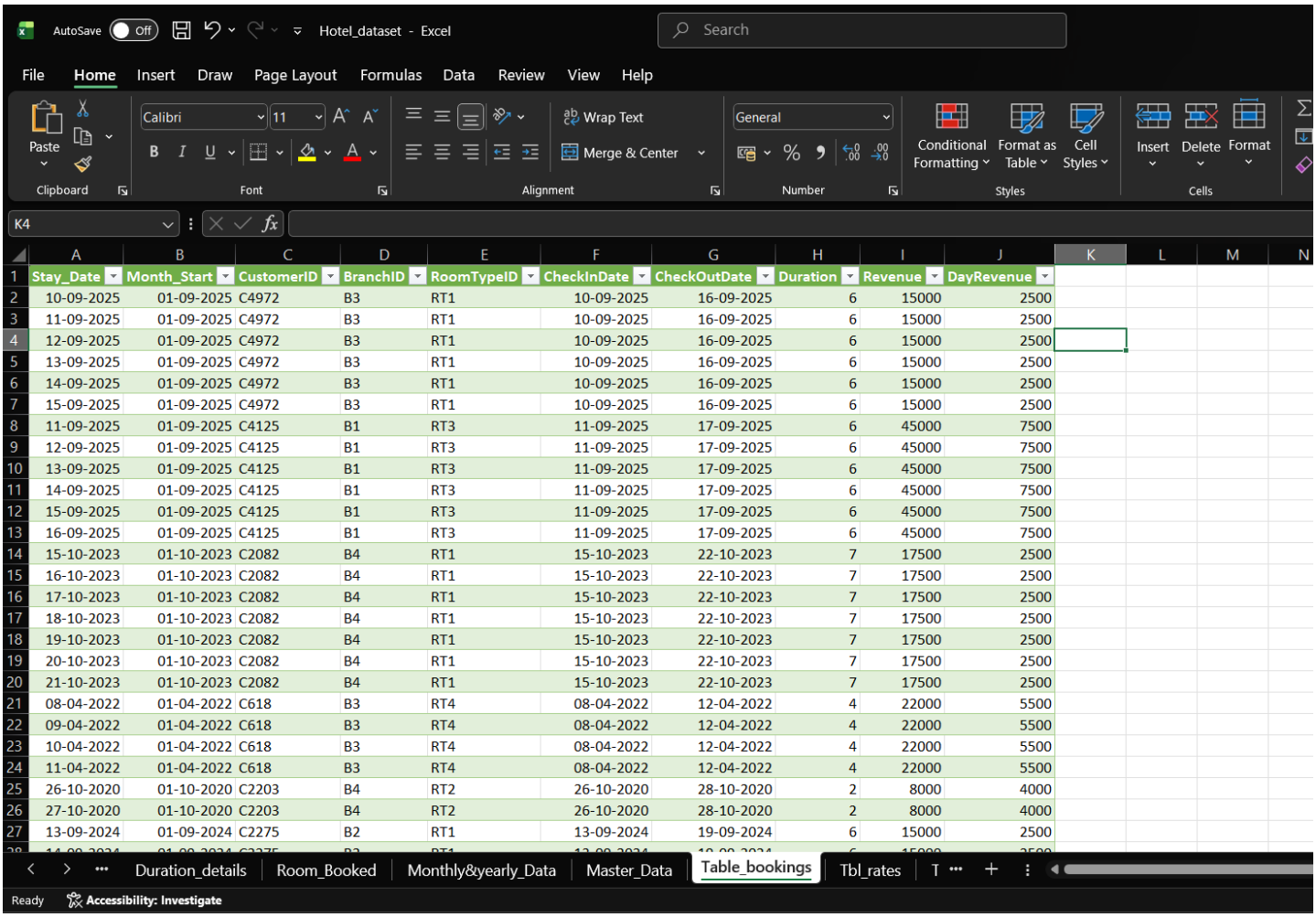
Month	Day_count	Rooms_Available	Room_Sold	Occupancy%
01-Jan-20	31	6200	1551	25.02
01-Feb-20	29	5800	1572	27.10
01-Mar-20	31	6200	1560	25.16
01-Apr-20	30	6000	1545	25.75
01-May-20	31	6200	1573	25.37
01-Jun-20	30	6000	1513	25.22
01-Jul-20	31	6200	1696	27.35
01-Aug-20	31	6200	1485	23.95
01-Sep-20	30	6000	1433	23.88
01-Oct-20	31	6200	1576	25.42
01-Nov-20	30	6000	1632	27.20
01-Dec-20	31	6200	1619	26.11
01-Jan-21	31	6200	1762	28.42
01-Feb-21	28	5600	1390	24.82
01-Mar-21	31	6200	1616	26.06
01-Apr-21	30	6000	1550	25.83
01-May-21	31	6200	1889	30.47
01-Jun-21	30	6000	1590	26.50
01-Jul-21	31	6200	1620	26.13
01-Aug-21	31	6200	1662	26.81
01-Sep-21	30	6000	1505	25.08
01-Oct-21	31	6200	1773	28.60
01-Nov-21	30	6000	1631	27.18
01-Dec-21	31	6200	1645	26.53
01-Jan-22	31	6200	1804	29.10
01-Feb-22	28	5600	1461	26.09

6. Create Table Rates Table



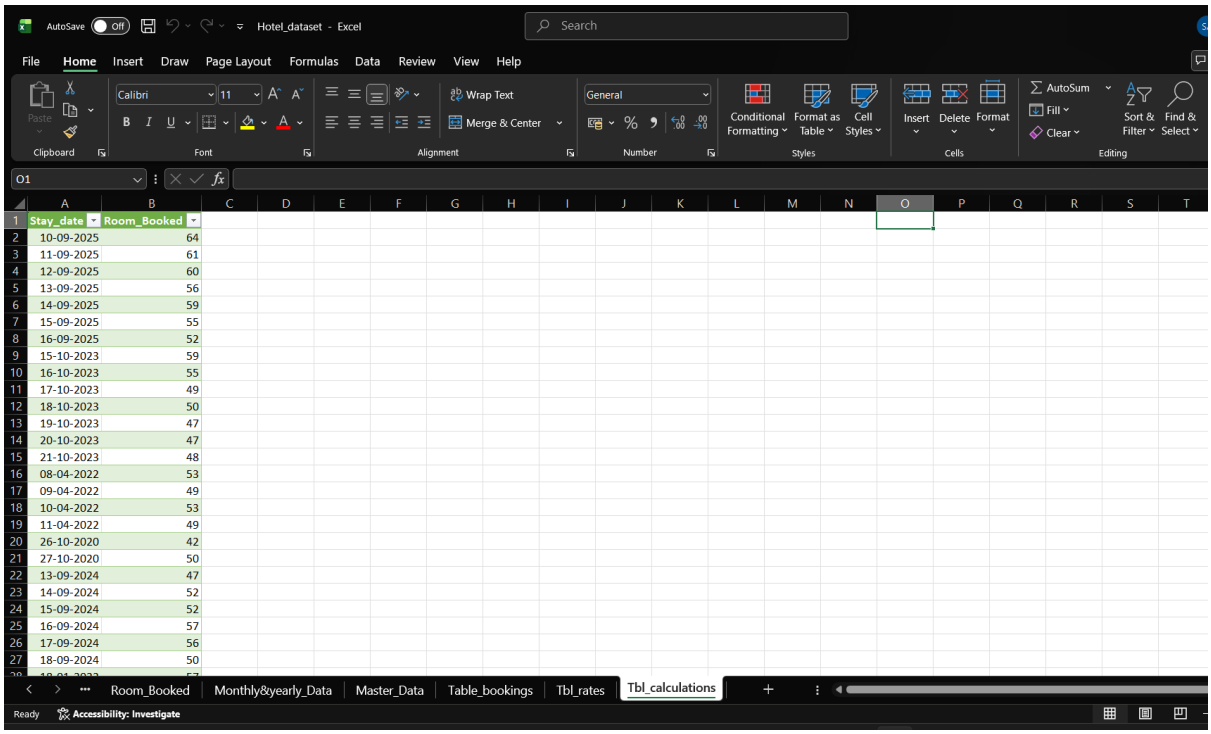
RoomTypeID	Price
RT1	2500
RT2	4000
RT3	7500
RT4	5500
RT5	3800
RT6	5000

7. Create Table_bookings table by taking information from Fact table Calculate DayRevenue From StayDate by mergies queries by taking help of table rates



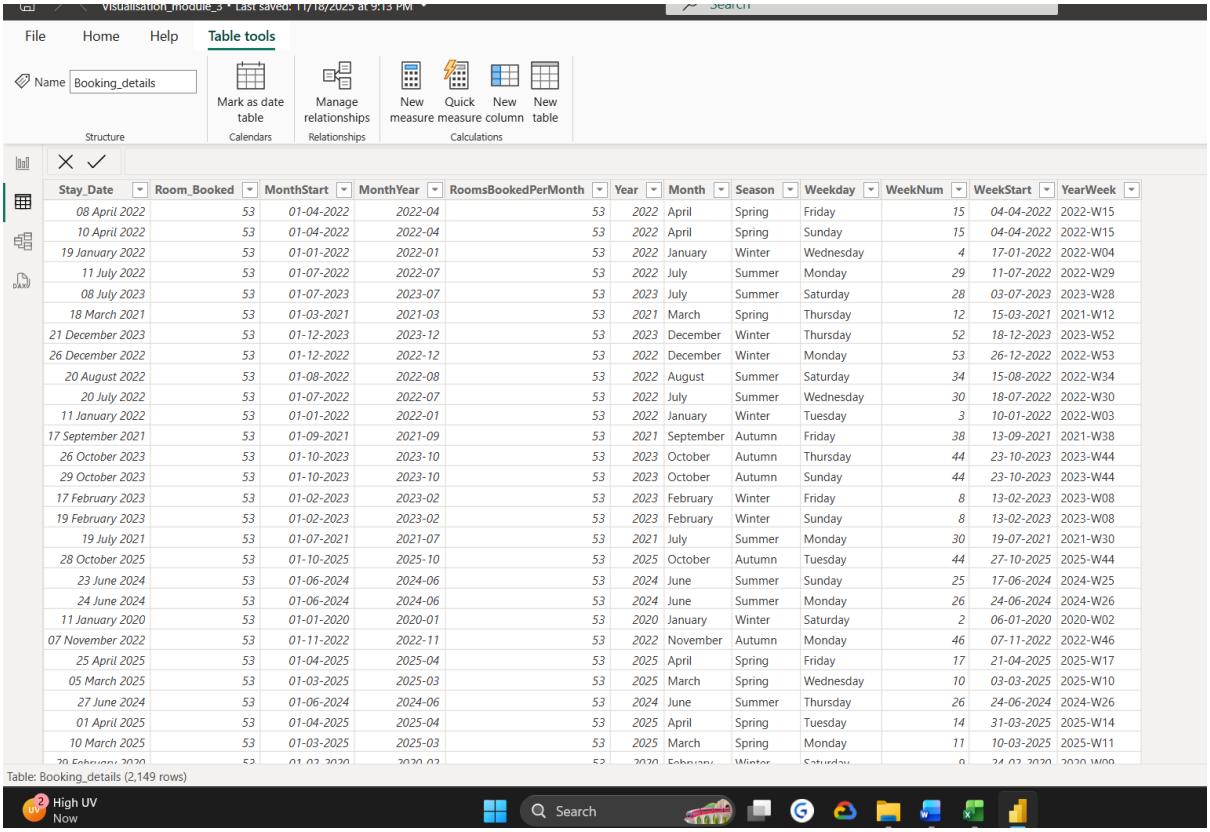
Stay_Date	Month_Start	CustomerID	BranchID	RoomTypeID	CheckInDate	CheckOutDate	Duration	Revenue	DayRevenue
10-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	16-09-2025	6	15000	2500
11-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	16-09-2025	6	15000	2500
12-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	16-09-2025	6	15000	2500
13-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	16-09-2025	6	15000	2500
14-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	16-09-2025	6	15000	2500
15-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	16-09-2025	6	15000	2500
11-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	17-09-2025	6	45000	7500
12-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	17-09-2025	6	45000	7500
13-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	17-09-2025	6	45000	7500
14-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	17-09-2025	6	45000	7500
15-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	17-09-2025	6	45000	7500
16-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	17-09-2025	6	45000	7500
15-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	22-10-2023	7	17500	2500
16-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	22-10-2023	7	17500	2500
17-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	22-10-2023	7	17500	2500
18-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	22-10-2023	7	17500	2500
19-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	22-10-2023	7	17500	2500
20-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	22-10-2023	7	17500	2500
21-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	22-10-2023	7	17500	2500
08-04-2022	01-04-2022	C618	B3	RT4	08-04-2022	12-04-2022	4	22000	5500
09-04-2022	01-04-2022	C618	B3	RT4	08-04-2022	12-04-2022	4	22000	5500
10-04-2022	01-04-2022	C618	B3	RT4	08-04-2022	12-04-2022	4	22000	5500
11-04-2022	01-04-2022	C618	B3	RT4	08-04-2022	12-04-2022	4	22000	5500
26-10-2020	01-10-2020	C2203	B4	RT2	26-10-2020	28-10-2020	2	8000	4000
27-10-2020	01-10-2020	C2203	B4	RT2	26-10-2020	28-10-2020	2	8000	4000
13-09-2024	01-09-2024	C2275	B2	RT1	13-09-2024	19-09-2024	6	15000	2500

8. Create the Table_Calculations table



9.In Power BI Create columns as Monthstart, MonthYear, Year, Season, WeekDay, WeekNum, WeekStart, YeatWeek Using Following Formulas

```
MonthYear = Booking_Details[Stay_Date].[Date]

MonthStart = DATE(YEAR([Stay_Date]), MONTH([Stay_Date]), 1)

Year = YEAR('Booking_details'[Stay_Date])

Month = FORMAT('Booking_details'[Stay_Date], "MMMM")

Season =

SWITCH(

   TRUE(),

   MONTH('Booking_details'[Stay_Date]) IN {12, 1, 2}, "Winter",

   MONTH('Booking_details'[Stay_Date]) IN {3, 4, 5}, "Spring",

   MONTH('Booking_details'[Stay_Date]) IN {6, 7, 8}, "Summer",

   MONTH('Booking_details'[Stay_Date]) IN {9, 10, 11}, "Autumn",

   "Unknown"

)

Weekday = FORMAT('Booking_details'[Stay_Date], "dddd")

WeekNum = WEEKNUM('Booking_details'[Stay_Date], 2)

WeekStart = 'Booking_details'[Stay_Date] - WEEKDAY('Booking_details'[Stay_Date], 2) + 1

YearWeek = VAR YearNum = YEAR('Booking_details'[Stay_Date])

VAR WeekNum = WEEKNUM('Booking_details'[Stay_Date], 2)

RETURN

YearNum & "-W" & FORMAT(WeekNum, "00")
```



Stay_Date	Room_Booked	MonthStart	MonthYear	RoomsBookedPerMonth	Year	Month	Season	Weekday	WeekNum	WeekStart	YearWeek
08 April 2022	53	01-04-2022	2022-04	53	2022	April	Spring	Friday	15	04-04-2022	2022-W15
10 April 2022	53	01-04-2022	2022-04	53	2022	April	Spring	Sunday	15	04-04-2022	2022-W15
19 January 2022	53	01-01-2022	2022-01	53	2022	January	Winter	Wednesday	4	17-01-2022	2022-W04
11 July 2022	53	01-07-2022	2022-07	53	2022	July	Summer	Monday	29	11-07-2022	2022-W29
08 July 2023	53	01-07-2023	2023-07	53	2023	July	Summer	Saturday	28	03-07-2023	2023-W28
18 March 2021	53	01-03-2021	2021-03	53	2021	March	Spring	Thursday	12	15-03-2021	2021-W12
21 December 2023	53	01-12-2023	2023-12	53	2023	December	Winter	Thursday	52	18-12-2023	2023-W52
26 December 2022	53	01-12-2022	2022-12	53	2022	December	Winter	Monday	53	26-12-2022	2022-W53
20 August 2022	53	01-08-2022	2022-08	53	2022	August	Summer	Saturday	34	15-08-2022	2022-W34
20 July 2022	53	01-07-2022	2022-07	53	2022	July	Summer	Wednesday	30	18-07-2022	2022-W30
11 January 2022	53	01-01-2022	2022-01	53	2022	January	Winter	Tuesday	3	10-01-2022	2022-W03
17 September 2021	53	01-09-2021	2021-09	53	2021	September	Autumn	Friday	38	13-09-2021	2021-W38
26 October 2023	53	01-10-2023	2023-10	53	2023	October	Autumn	Thursday	44	23-10-2023	2023-W44
29 October 2023	53	01-10-2023	2023-10	53	2023	October	Autumn	Sunday	44	23-10-2023	2023-W44
17 February 2023	53	01-02-2023	2023-02	53	2023	February	Winter	Friday	8	13-02-2023	2023-W08
19 February 2023	53	01-02-2023	2023-02	53	2023	February	Winter	Sunday	8	13-02-2023	2023-W08
19 July 2021	53	01-07-2021	2021-07	53	2021	July	Summer	Monday	30	19-07-2021	2021-W30
28 October 2025	53	01-10-2025	2025-10	53	2025	October	Autumn	Tuesday	44	27-10-2025	2025-W44
23 June 2024	53	01-06-2024	2024-06	53	2024	June	Summer	Sunday	25	17-06-2024	2024-W25
24 June 2024	53	01-06-2024	2024-06	53	2024	June	Summer	Monday	26	24-06-2024	2024-W26
11 January 2020	53	01-01-2020	2020-01	53	2020	January	Winter	Saturday	2	06-01-2020	2020-W02
07 November 2022	53	01-11-2022	2022-11	53	2022	November	Autumn	Monday	46	07-11-2022	2022-W46
25 April 2025	53	01-04-2025	2025-04	53	2025	April	Spring	Friday	17	21-04-2025	2025-W17
05 March 2025	53	01-03-2025	2025-03	53	2025	March	Spring	Wednesday	10	03-03-2025	2025-W10
27 June 2024	53	01-06-2024	2024-06	53	2024	June	Summer	Thursday	26	24-06-2024	2024-W26
01 April 2025	53	01-04-2025	2025-04	53	2025	April	Spring	Tuesday	14	31-03-2025	2025-W14
10 March 2025	53	01-03-2025	2025-03	53	2025	March	Spring	Monday	11	10-03-2025	2025-W11

10. Create Nationality Column in Customer_data table

Using Formula:

=CHOOSE(RANDBETWEEN(1,45),"India",

"United States",

"United Kingdom",

"Canada",

"Australia",

"Germany",

"France",

"Italy",

"Spain",

"Brazil",

"Mexico",

"China",

"Japan",

"South Korea",

"Russia",

"South Africa",

"Nigeria",

"Egypt",

"Kenya",

"Argentina",

"Chile",

"Colombia",

"Peru",

"Netherlands",

"Sweden",

"Norway",

"Denmark",

"Finland",

"Poland",

"Turkey",

"Saudi Arabia",

"United Arab Emirates",

"Israel",

"Thailand",

"Vietnam",

"Indonesia",

"Malaysia",

"Singapore",

"Philippines",

"New Zealand",

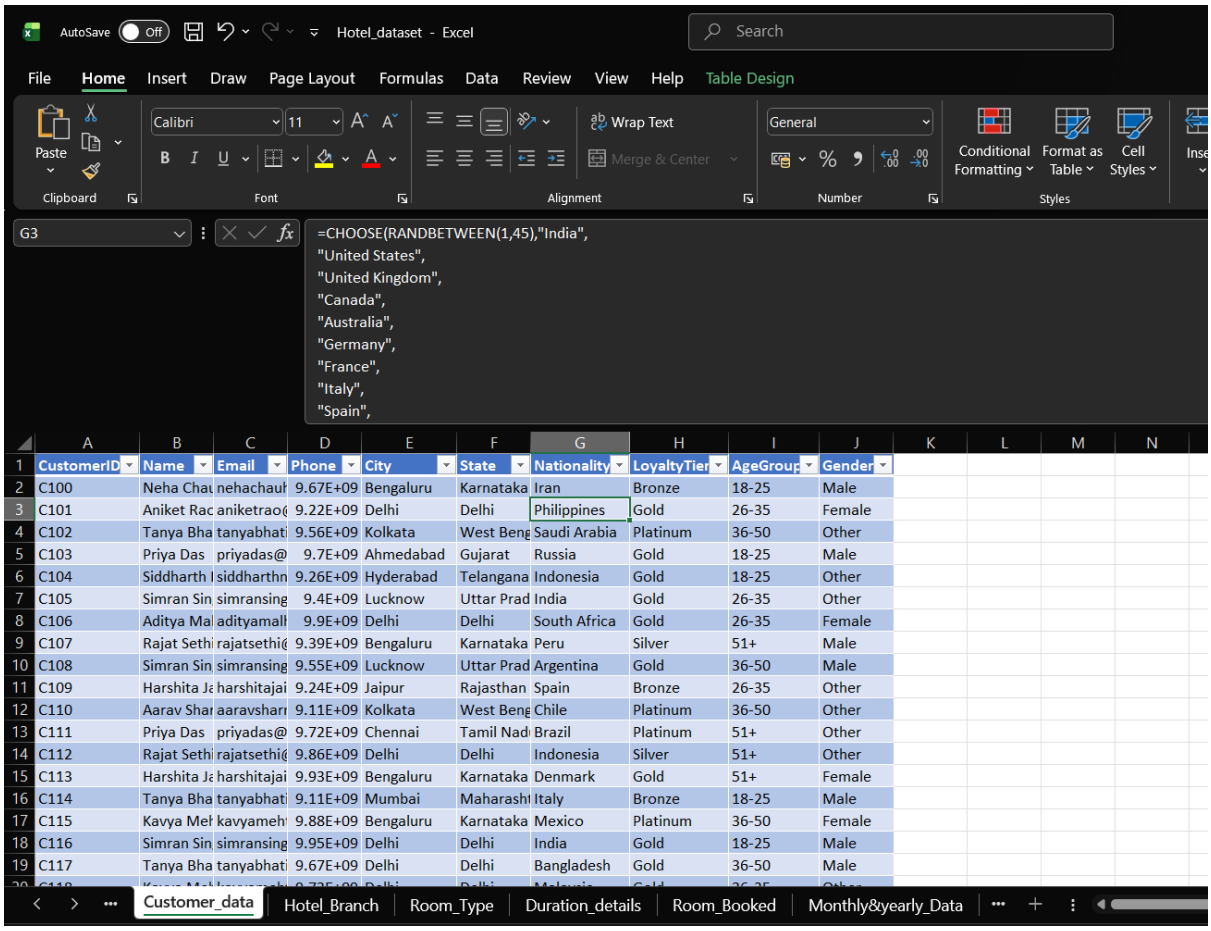
"Pakistan",

"Bangladesh",

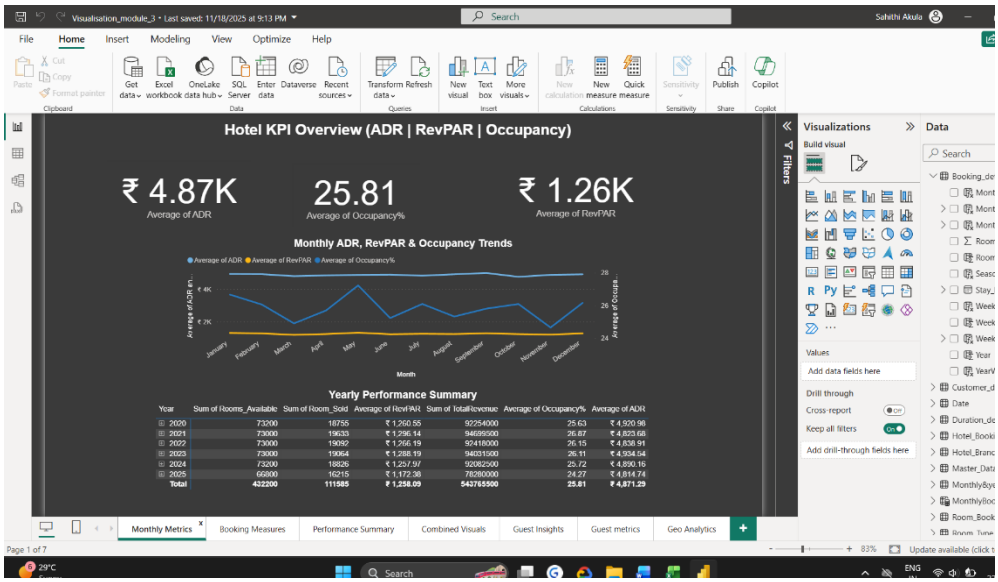
"Sri Lanka",

"Nepal",

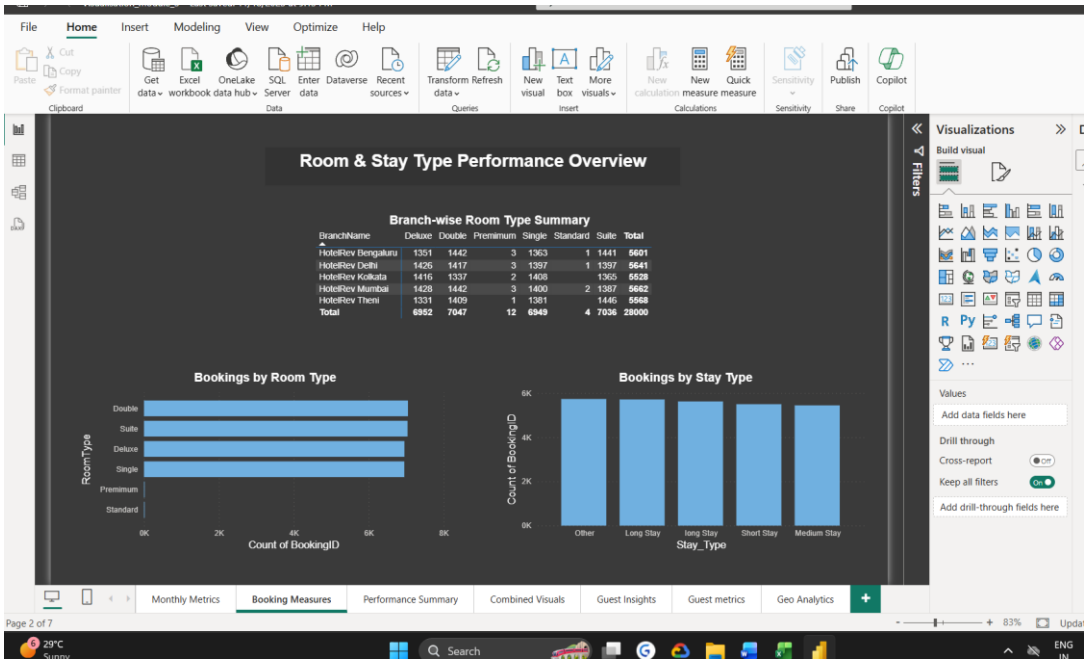
"Iran")



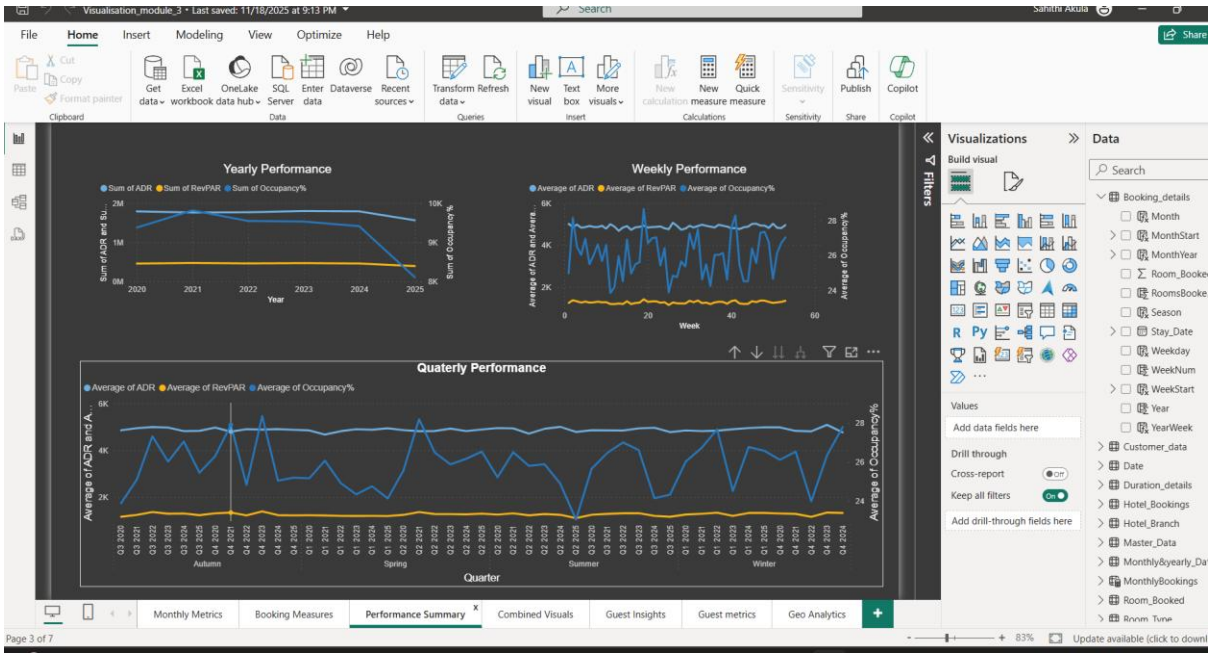
11. Create Visuals for Monthly trends: KPI Cards: Average of ADR, average of occupancy%, Average of RevPAR and Monthly and Yearly Performance



12.Room& Stay_Type Performance m & stay type Performance Visuals



13.Create Visuals Based Performance Summary specifying by Yearly, Weekly, Quaterly Performance



13. Create Annual Trends