

# 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
C3732	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

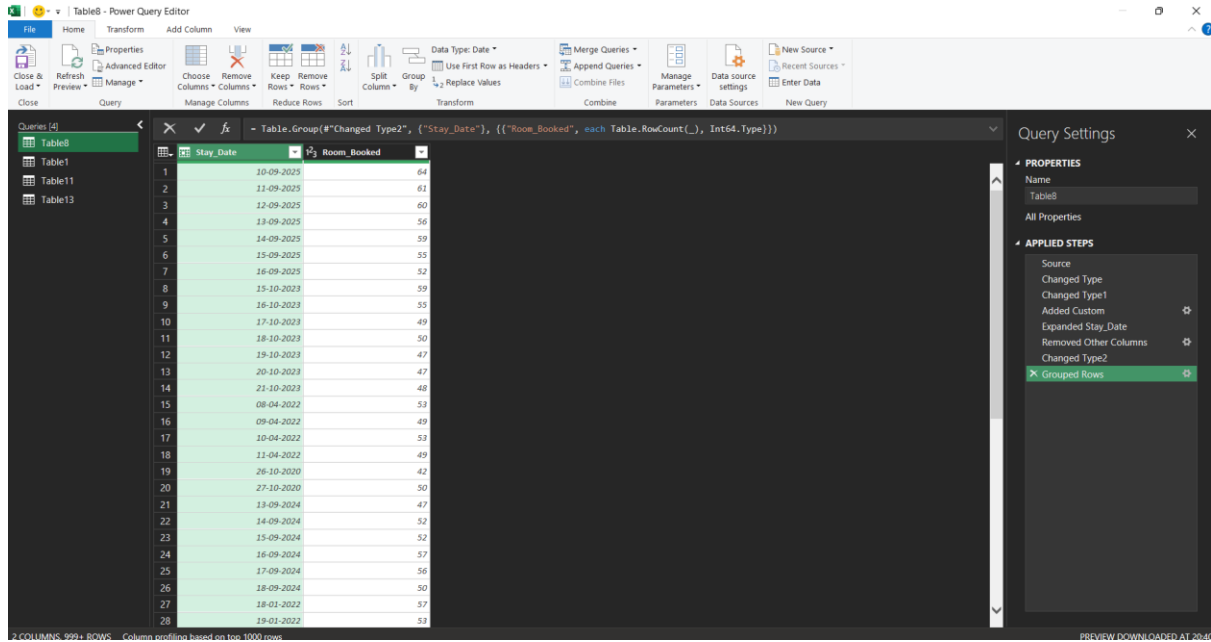
List.Dates(Date.From([CheckInDate]), Duration.Days([CheckOutDate] - [CheckInDate]), #duration(1,0,0,0))

else

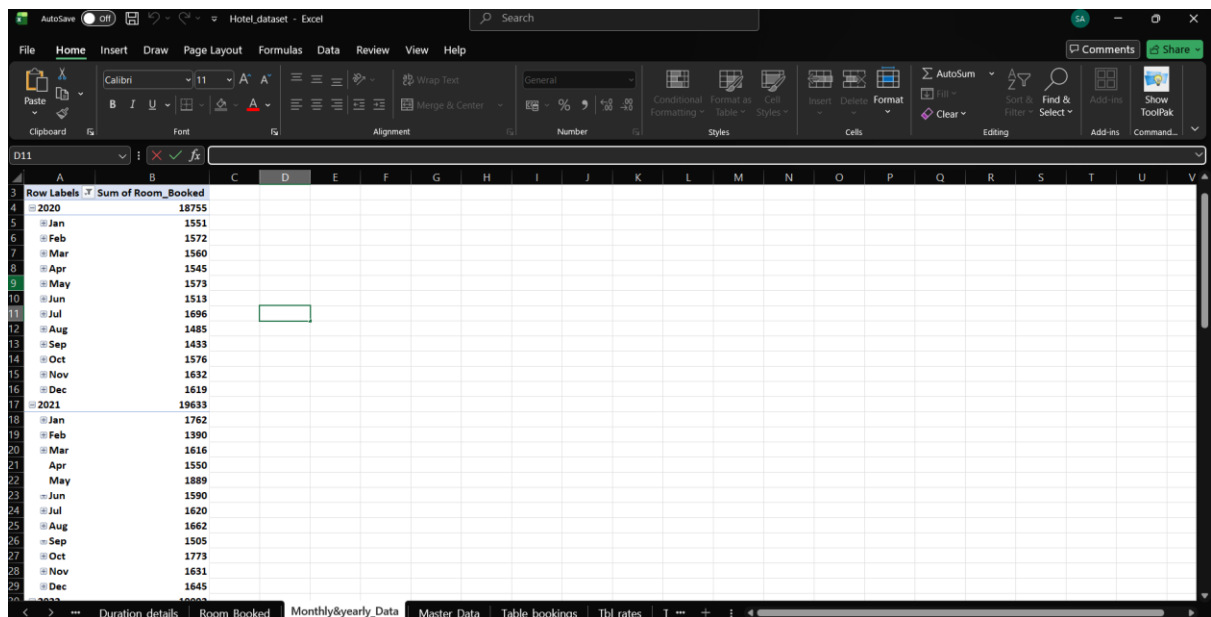
null

Stay_Date	Month_Start	CustomerID	BranchID	RoomTypeID	CheckInDate	CheckOutDate
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



Year	Month	Value
2022	Oct	1773
2022	Nov	1631
2022	Dec	1645
2022	Jan	19092
2022	Feb	1804
2022	Mar	1461
2022	Apr	1545
2022	May	1543
2022	Jun	1688
2022	Jul	1548
2022	Aug	1671
2022	Sep	1677
2022	Oct	1639
2022	Nov	1453
2022	Dec	1576
2023	Jan	1487
2023	Feb	19064
2023	Mar	1538
2023	Apr	1354
2023	May	1509
2023	Jun	1582
2023	Jul	1575
2023	Aug	1553
2023	Sep	1657
2023	Oct	1643
2023	Nov	1561
2023	Dec	1698

Year	Month	Value
2024	Dec	1633
2024	Jan	18826
2024	Feb	1632
2024	Mar	1580
2024	Apr	1535
2024	May	1437
2024	Jun	1755
2024	Jul	1493
2024	Aug	1507
2024	Sep	1486
2024	Oct	1623
2024	Nov	1544
2024	Dec	1511
2025	Jan	1723
2025	Feb	16215
2025	Mar	1632
2025	Apr	1504
2025	May	1496
2025	Jun	1590
2025	Jul	1647
2025	Aug	1383
2025	Sep	1553
2025	Oct	1464
2025	Nov	1527
2025	Dec	1659
2025	Grand Total	760
2025	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\_Avalable

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

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Stay_Date	Month_Start	CustomerID	BranchID	RoomTypeID	CheckInDate	CheckOutDate	Duration	Revenue	DayRevenue				
2	10-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	16-09-2025	6	15000	2500				
3	11-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	16-09-2025	6	15000	2500				
4	12-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	16-09-2025	6	15000	2500				
5	13-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	16-09-2025	6	15000	2500				
6	14-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	16-09-2025	6	15000	2500				
7	15-09-2025	01-09-2025	C4972	B3	RT1	10-09-2025	16-09-2025	6	15000	2500				
8	11-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	17-09-2025	6	45000	7500				
9	12-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	17-09-2025	6	45000	7500				
10	13-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	17-09-2025	6	45000	7500				
11	14-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	17-09-2025	6	45000	7500				
12	15-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	17-09-2025	6	45000	7500				
13	16-09-2025	01-09-2025	C4125	B1	RT3	11-09-2025	17-09-2025	6	45000	7500				
14	15-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	22-10-2023	7	17500	2500				
15	16-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	22-10-2023	7	17500	2500				
16	17-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	22-10-2023	7	17500	2500				
17	18-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	22-10-2023	7	17500	2500				
18	19-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	22-10-2023	7	17500	2500				
19	20-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	22-10-2023	7	17500	2500				
20	21-10-2023	01-10-2023	C2082	B4	RT1	15-10-2023	22-10-2023	7	17500	2500				
21	08-04-2022	01-04-2022	C618	B3	RT4	08-04-2022	12-04-2022	4	22000	5500				
22	09-04-2022	01-04-2022	C618	B3	RT4	08-04-2022	12-04-2022	4	22000	5500				
23	10-04-2022	01-04-2022	C618	B3	RT4	08-04-2022	12-04-2022	4	22000	5500				
24	11-04-2022	01-04-2022	C618	B3	RT4	08-04-2022	12-04-2022	4	22000	5500				
25	26-10-2020	01-10-2020	C2203	B4	RT2	26-10-2020	28-10-2020	2	8000	4000				
26	27-10-2020	01-10-2020	C2203	B4	RT2	26-10-2020	28-10-2020	2	8000	4000				
27	13-09-2024	01-09-2024	C2275	B2	RT1	13-09-2024	19-09-2024	6	15000	2500				

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### 8. Create the Table\_Calculations table

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Hotel\_dataset - Excel

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Stay_date	Room_Booked																		
2	10-09-2025	64																		
3	11-09-2025	61																		
4	12-09-2025	60																		
5	13-09-2025	56																		
6	14-09-2025	59																		
7	15-09-2025	55																		
8	16-09-2025	52																		
9	15-10-2023	59																		
10	16-10-2023	55																		
11	17-10-2023	49																		
12	18-10-2023	50																		
13	19-10-2023	47																		
14	20-10-2023	47																		
15	21-10-2023	48																		
16	08-04-2022	53																		
17	09-04-2022	49																		
18	10-04-2022	53																		
19	11-04-2022	49																		
20	26-10-2020	42																		
21	27-10-2020	50																		
22	13-09-2024	47																		
23	14-09-2024	52																		
24	15-09-2024	52																		
25	16-09-2024	57																		
26	17-09-2024	56																		
27	18-09-2024	50																		
28	19-09-2024	57																		

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Room\_BookedMonthly&yearly\_DataMaster\_DataTable\_bookingsTbl\_ratesTbl calculations

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9. In Power BI Create columns as Monthstart, MonthYear, Year, Season, WeekDay, WeekNum, WeekStart, YearWeek 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")
```

Visualisation module\_3 • Last saved: 11/18/2025 at 9:13 PM

File Home Help **Table tools**

Name:

Mark as date table  
 Calendars

Manage relationships  
 Relationships

New measure  
 Calculations

Quick measure column  
 Calculations

New table  
 Calculations

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
20 February 2020	53	01-02-2020	2020-02	53	2020	February	Winter	Saturday	8	24-01-2020	2020-W08

Table: Booking\_details (2,149 rows)

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Search

## 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",



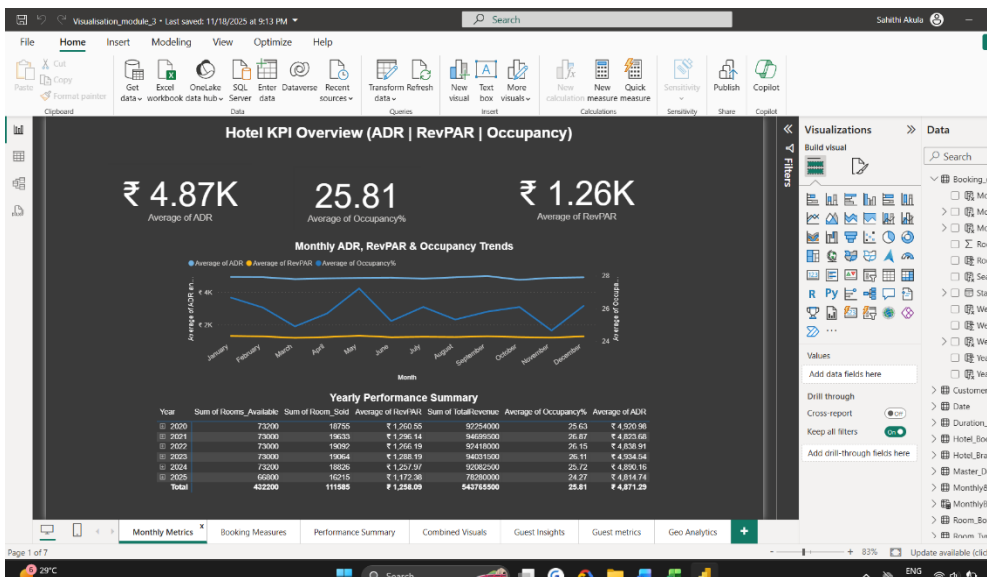
"South Korea",  
"Russia",  
"South Africa",  
"Nigeria",  
"Egypt",  
"Kenya",  
"Argentina",  
"Chile",  
"Colombia",  
"Peru",  
"Netherlands",  
"Sweden",  
"Norway",  
"Denmark",  
"Finland",  
"Poland",  
"Turkey",  
"Saudi Arabia",  
"United Arab Emirates",  
"Israel",  
"Thailand",  
"Vietnam",  
"Indonesia",  
"Malaysia",  
"Singapore",  
"Philippines",  
"New Zealand",  
"Pakistan",  
"Bangladesh",  
"Sri Lanka",

"Nepal",

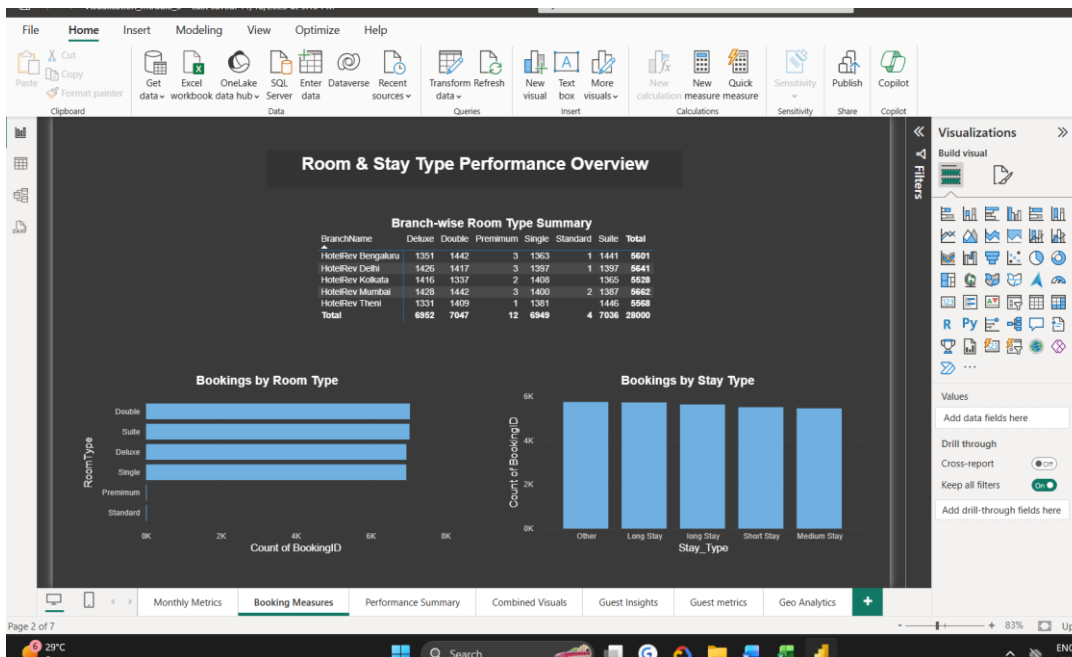
"Iran")

CustomerID	Name	Email	Phone	City	State	Nationality	LoyaltyTier	AgeGroup	Gender
C100	Neha Chai	nehachau@	9.67E+09	Bengaluru	Karnataka	Iran	Bronze	18-25	Male
C101	Aniket Rac	aniketrao@	9.22E+09	Delhi	Delhi	Philippines	Gold	26-35	Female
C102	Tanya Bha	tanyabhat@	9.56E+09	Kolkata	West Beng	Saudi Arabia	Platinum	36-50	Other
C103	Priya Das	priyadas@	9.7E+09	Ahmedabad	Gujarat	Russia	Gold	18-25	Male
C104	Siddharth	siddharthn	9.26E+09	Hyderabad	Telangana	Indonesia	Gold	18-25	Other
C105	Simran Sin	simransin@	9.4E+09	Lucknow	Uttar Prad	India	Gold	26-35	Other
C106	Aditya Ma	adityamal@	9.9E+09	Delhi	South Africa		Gold	26-35	Female
C107	Rajat Sethi	rajatsethi@	9.39E+09	Bengaluru	Karnataka	Peru	Silver	51+	Male
C108	Simran Sin	simransin@	9.55E+09	Lucknow	Uttar Prad	Argentina	Gold	36-50	Male
C109	Harshita J	harshitaj@	9.24E+09	Jaipur	Rajasthan	Spain	Bronze	26-35	Other
C110	Aarav Sha	aaravshar@	9.11E+09	Kolkata	West Beng	Chile	Platinum	36-50	Other
C111	Priya Das	priyadas@	9.72E+09	Chennai	Tamil Nad	Brazil	Platinum	51+	Other
C112	Rajat Sethi	rajatsethi@	9.86E+09	Delhi	Delhi	Indonesia	Silver	51+	Other
C113	Harshita J	harshitaj@	9.93E+09	Bengaluru	Karnataka	Denmark	Gold	51+	Female
C114	Tanya Bha	tanyabhat@	9.11E+09	Mumbai	Maharash	Italy	Bronze	18-25	Male
C115	Kavya Me	kavyameh@	9.88E+09	Bengaluru	Karnataka	Mexico	Platinum	36-50	Female
C116	Simran Sin	simransin@	9.95E+09	Delhi	Delhi	India	Gold	18-25	Male
C117	Tanya Bha	tanyabhat@	9.67E+09	Delhi	Delhi	Bangladesh	Gold	36-50	Male

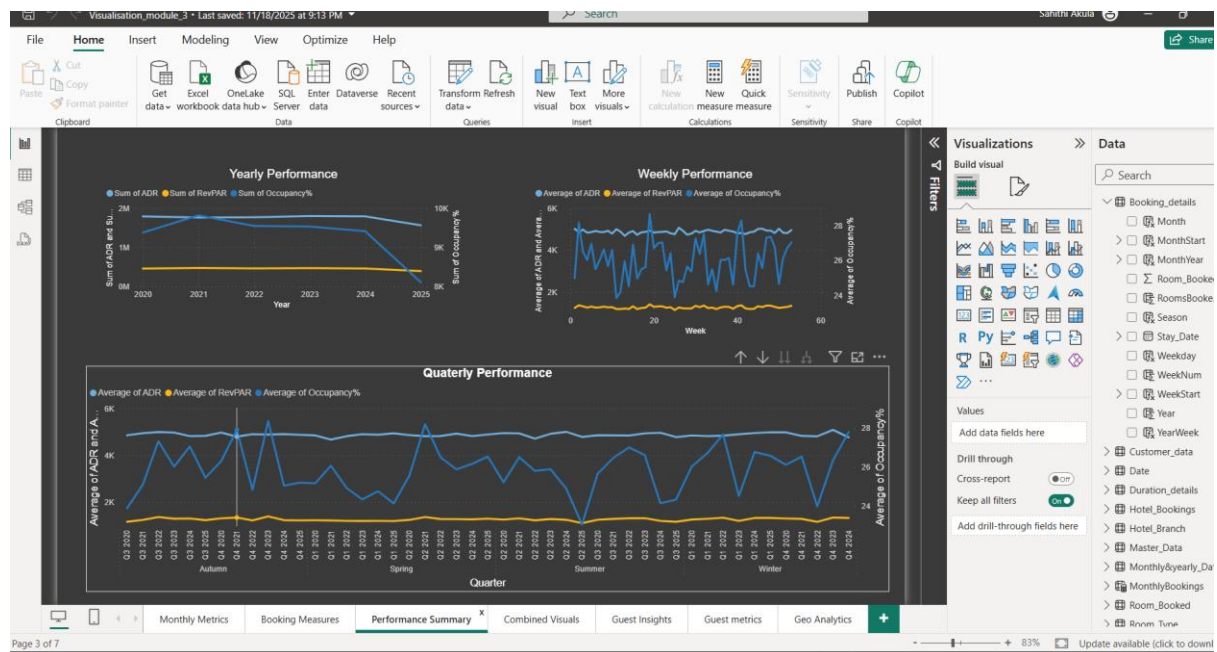
11. Create Visuals for Monthly trends: KPI Cards: Average of ADR, average of occupancy%, Average of RevPAR and Monthly and Yearly Performance



## 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

