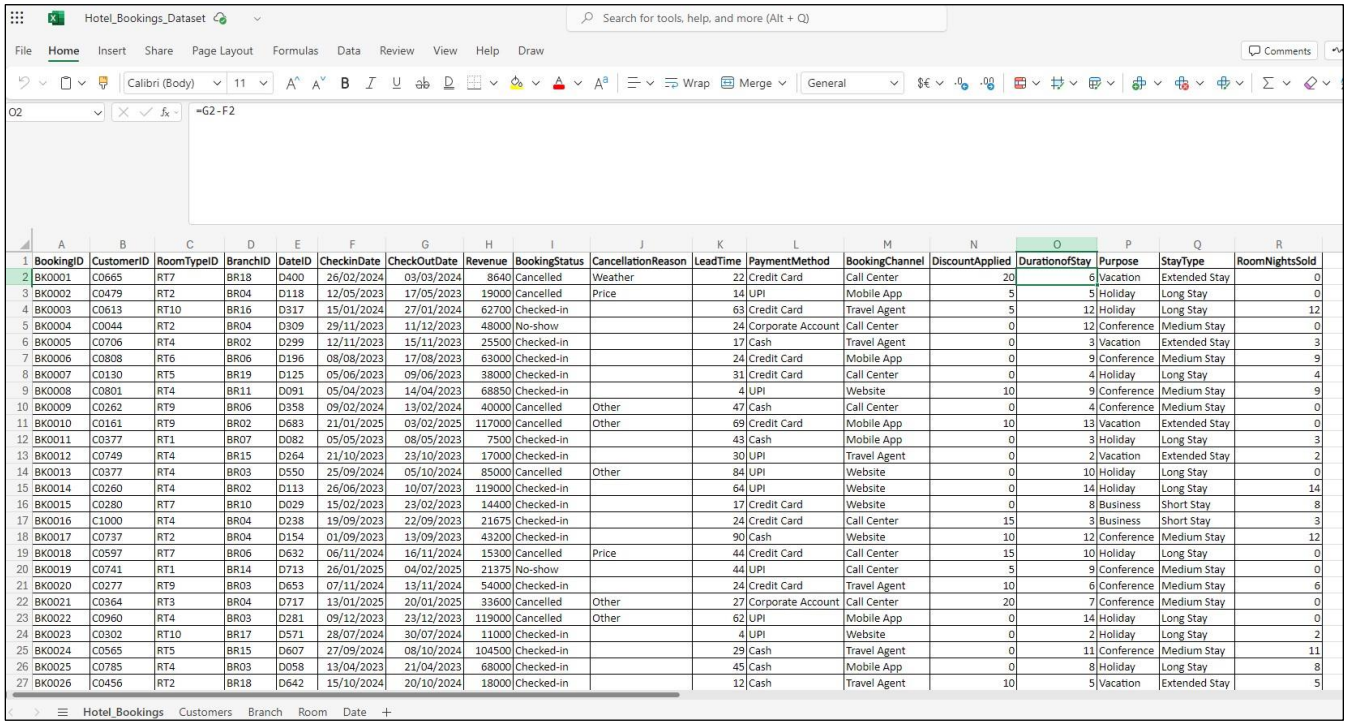
Module 1 - Data Modeling and Ingestion

Calculated Columns

1. Booking Duration:

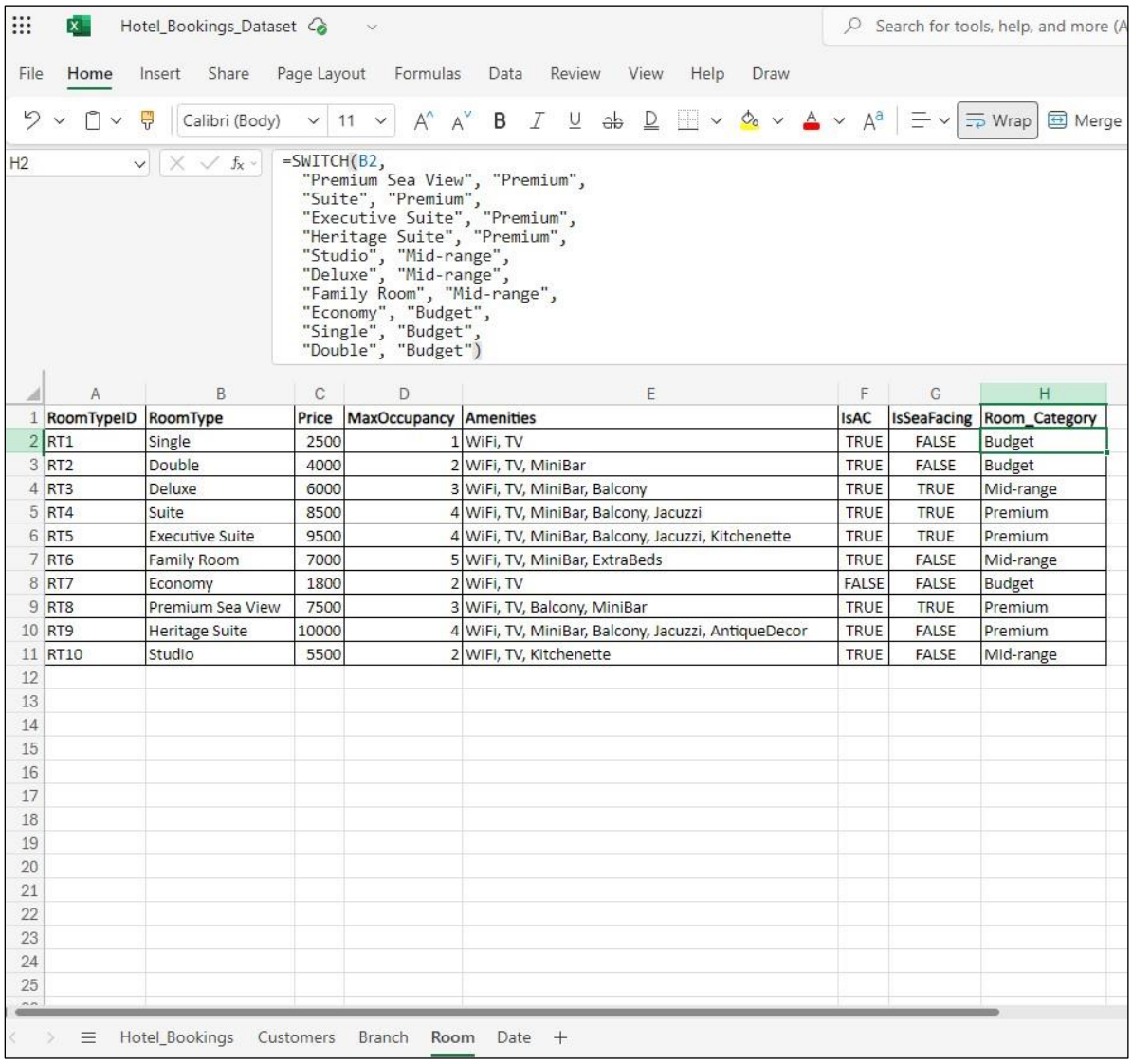
DurationOfStay: =G2 - F2 i.e. CheckOutDate – CheckInDate



BookingID	CustomerID	RoomTypeID	BranchID	DateID	CheckinDate	CheckOutDate	Revenue	BookingStatus	CancellationReason	LeadTime	PaymentMethod	BookingChannel	DiscountApplied	DurationofStay	Purpose	StayType	RoomNightsSold
BK0001	C0665	RT7	BR18	D400	26/02/2024	03/03/2024	8640	Cancelled	Weather	22	Credit Card	Call Center	20	6	Vacation	Extended Stay	0
BK0002	C0479	RT2	BR04	D118	12/05/2023	17/05/2023	19000	Cancelled	Price	14	UPI	Mobile App	5	5	Holiday	Long Stay	0
BK0003	C0613	RT10	BR16	D317	15/01/2024	27/01/2024	62700	Checked-in		63	Credit Card	Travel Agent	5	12	Holiday	Long Stay	12
BK0004	C0044	RT2	BR04	D309	29/11/2023	11/12/2023	48000	No-show		24	Corporate Account	Call Center	0	12	Conference	Medium Stay	0
BK0005	C0706	RT4	BR02	D299	12/11/2023	15/11/2023	25500	Checked-in		17	Cash	Travel Agent	0	3	Vacation	Extended Stay	3
BK0006	C0808	RT6	BR06	D196	08/08/2023	17/08/2023	63000	Checked-in		24	Credit Card	Mobile App	0	9	Conference	Medium Stay	9
BK0007	C0130	RT5	BR19	D125	05/06/2023	09/06/2023	38000	Checked-in		31	Credit Card	Call Center	0	4	Holiday	Long Stay	4
BK0008	C0801	RT4	BR11	D091	05/04/2023	14/04/2023	68850	Checked-in		4	UPI	Website	10	9	Conference	Medium Stay	9
BK0009	C0262	RT9	BR06	D358	09/02/2024	13/02/2024	40000	Cancelled	Other	47	Cash	Call Center	0	4	Conference	Medium Stay	0
BK0010	C0161	RT9	BR02	D683	21/01/2025	03/02/2025	117000	Cancelled	Other	69	Credit Card	Mobile App	10	13	Vacation	Extended Stay	0
BK0011	C0377	RT1	BR07	D082	05/05/2023	08/05/2023	7500	Checked-in		43	Cash	Mobile App	0	3	Holiday	Long Stay	3
BK0012	C0749	RT4	BR15	D264	21/10/2023	23/10/2023	17000	Checked-in		30	UPI	Travel Agent	0	2	Vacation	Extended Stay	2
BK0013	C0377	RT4	BR03	D550	25/09/2024	05/10/2024	85000	Cancelled	Other	84	UPI	Website	0	10	Holiday	Long Stay	0
BK0014	C0260	RT4	BR02	D113	26/06/2023	10/07/2023	119000	Checked-in		64	UPI	Website	0	14	Holiday	Long Stay	14
BK0015	C0280	RT7	BR10	D029	15/02/2023	23/02/2023	14400	Checked-in		17	Credit Card	Website	0	8	Business	Short Stay	8
BK0016	C1000	RT4	BR04	D238	19/09/2023	22/09/2023	21675	Checked-in		24	Credit Card	Call Center	15	3	Business	Short Stay	3
BK0017	C0737	RT2	BR04	D154	01/09/2023	13/09/2023	43200	Checked-in		90	Cash	Website	10	12	Conference	Medium Stay	12
BK0018	C0597	RT7	BR06	D632	06/11/2024	16/11/2024	15300	Cancelled	Price	44	Credit Card	Call Center	15	10	Holiday	Long Stay	0
BK0019	C0741	RT1	BR14	D713	26/01/2025	04/02/2025	21375	No-show		44	UPI	Call Center	5	9	Conference	Medium Stay	0
BK0020	C0277	RT9	BR03	D653	07/11/2024	13/11/2024	54000	Checked-in		24	Credit Card	Travel Agent	10	6	Conference	Medium Stay	6
BK0021	C0364	RT3	BR04	D717	13/01/2025	20/01/2025	33600	Cancelled	Other	27	Corporate Account	Call Center	20	7	Conference	Medium Stay	0
BK0022	C0960	RT4	BR03	D281	09/12/2023	23/12/2023	119000	Cancelled	Other	62	UPI	Mobile App	0	14	Holiday	Long Stay	0
BK0023	C0302	RT10	BR17	D571	28/07/2024	30/07/2024	11000	Checked-in		4	UPI	Website	0	2	Holiday	Long Stay	2
BK0024	C0565	RT5	BR15	D607	27/09/2024	08/10/2024	104500	Checked-in		29	Cash	Travel Agent	0	11	Conference	Medium Stay	11
BK0025	C0785	RT4	BR03	D058	13/04/2023	21/04/2023	68000	Checked-in		45	Cash	Mobile App	0	8	Holiday	Long Stay	8
BK0026	C0456	RT2	BR18	D642	15/10/2024	20/10/2024	18000	Checked-in		12	Cash	Travel Agent	10	5	Vacation	Extended Stay	5

2. Room Category:

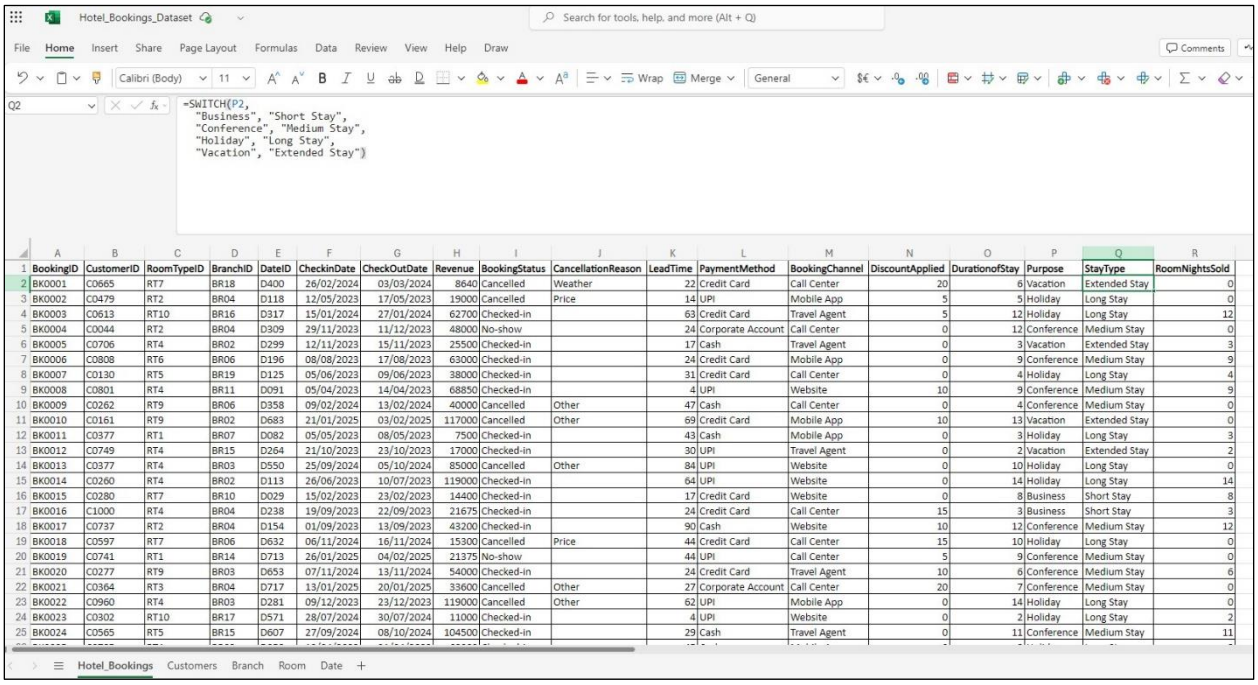
RoomCategory: =SWITCH(B2,
"Premium Sea View", "Premium",
"Suite", "Premium",
"Executive Suite", "Premium",
"Heritage Suite", "Premium",
"Studio", "Mid-range",
"Deluxe", "Mid-range",
"Family Room", "Mid-range",
"Economy", "Budget",
"Single", "Budget",
"Double", "Budget")



	A	B	C	D	E	F	G	H
1	RoomTypeID	RoomType	Price	MaxOccupancy	Amenities	IsAC	IsSeaFacing	Room_Category
2	RT1	Single	2500	1	WiFi, TV	TRUE	FALSE	Budget
3	RT2	Double	4000	2	WiFi, TV, MiniBar	TRUE	FALSE	Budget
4	RT3	Deluxe	6000	3	WiFi, TV, MiniBar, Balcony	TRUE	TRUE	Mid-range
5	RT4	Suite	8500	4	WiFi, TV, MiniBar, Balcony, Jacuzzi	TRUE	TRUE	Premium
6	RT5	Executive Suite	9500	4	WiFi, TV, MiniBar, Balcony, Jacuzzi, Kitchenette	TRUE	TRUE	Premium
7	RT6	Family Room	7000	5	WiFi, TV, MiniBar, ExtraBeds	TRUE	FALSE	Mid-range
8	RT7	Economy	1800	2	WiFi, TV	FALSE	FALSE	Budget
9	RT8	Premium Sea View	7500	3	WiFi, TV, Balcony, MiniBar	TRUE	TRUE	Premium
10	RT9	Heritage Suite	10000	4	WiFi, TV, MiniBar, Balcony, Jacuzzi, AntiqueDecor	TRUE	FALSE	Premium
11	RT10	Studio	5500	2	WiFi, TV, Kitchenette	TRUE	FALSE	Mid-range

3. Stay Type

StayType: =SWITCH(P2,
"Business", "Short Stay",
"Conference", "Medium Stay",
"Holiday", "Long Stay",
"Vacation", "Extended Stay")



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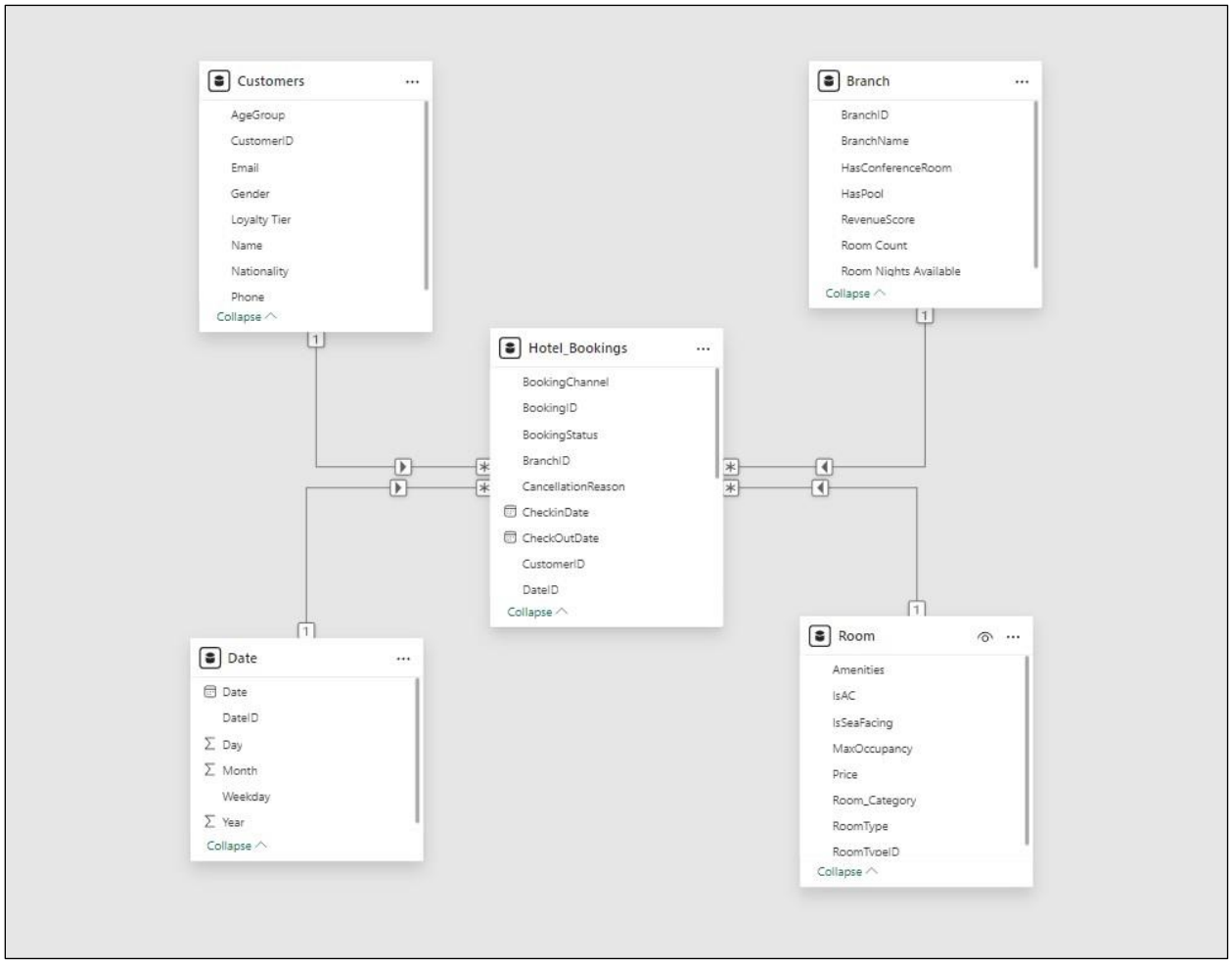
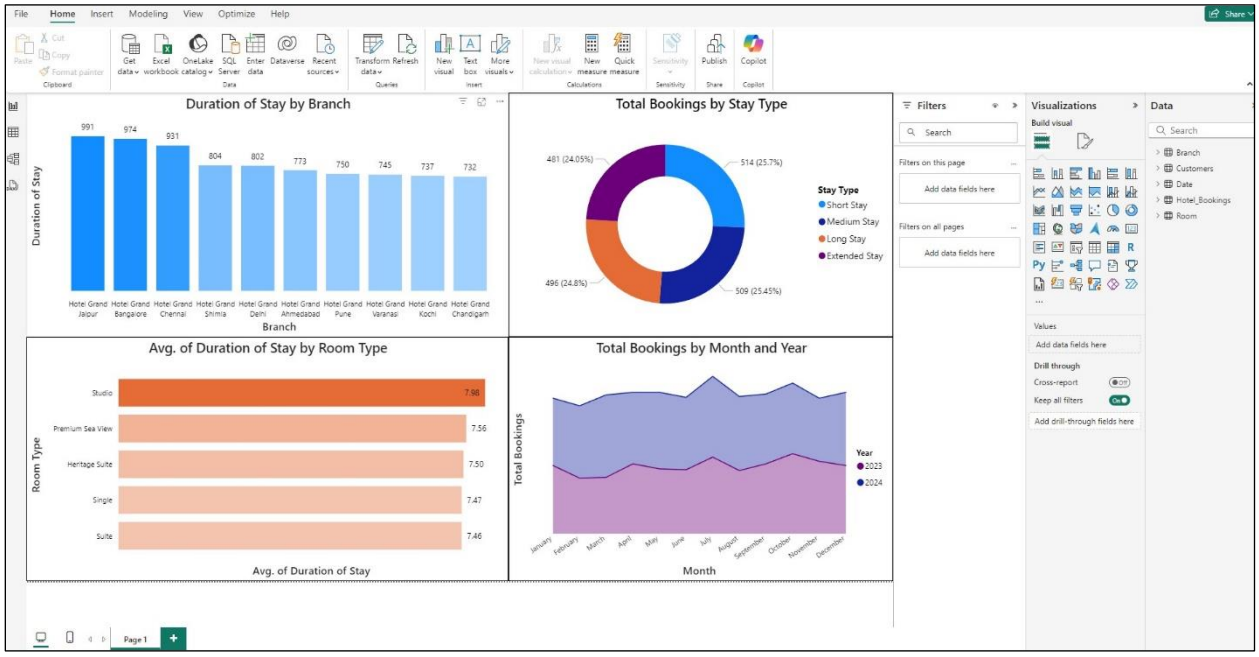
BK0023	C0302	RT10	BR17	D571	28/07/2024	30/07/2024	11000	Checked-in		4	UPI	Website	0	2	Holiday	Long Stay	2
BK0024	C0565	RT5	BR15	D607	27/09/2024	08/10/2024	104500	Checked-in		29	Cash	Travel Agent	0	11	Conference	Medium Stay	11

Data Modeling

Entity-Relationship Diagram:



Power BI Visualization: