

Business Questions and Answers

1. Number of meal-types

```
SELECT DISTINCT [Type_of_Meal]
FROM [dbo].[Invoices]
```

	Type_of_Meal
1	Lunch
2	Breakfast
3	Dinner

2. Number of sales representatives

```
SELECT COUNT(DISTINCT [Sales_Rep]) AS 'No. of Sales Reps'
FROM [dbo].[SalesTeam]
```

No. of Sales Reps
500

3. Total orders

```
SELECT FORMAT(COUNT( DISTINCT i.[Order_Id]), 'N0') AS Total_orders
FROM [dbo].[Invoices] i
JOIN[dbo].[OrderLeads] o
ON i.[Order_Id]=o.Order_Id
```

Total_orders
50,017

4. Participants by meal type

```
SELECT[Type_of_Meal],COUNT([No_of_participants]) AS Num_of_participants
FROM[dbo].[Invoices]
GROUP BY[Type_of_Meal]
ORDER BY Num_of_participants DESC
```

	Type_of_Meal	Num_of_participants
1	Dinner	16732
2	Breakfast	16663
3	Lunch	16622

5. No of converted orders by meal type

```
SELECT[Type_of_Meal], COUNT([No_of_participants]) AS converted_orders
FROM[dbo].[Invoices] i
JOIN[dbo].[OrderLeads] o
ON i.Order_Id=o.Order_Id
WHERE [Converted]='converted'
GROUP BY[Type_of_Meal]
ORDER BY converted_orders DESC
```

Type_of_Meal	converted_orders
Dinner	4270
Breakfast	4246
Lunch	3999

6. No. of 'not converted' orders by meal type

```
SELECT[Type_of_Meal], COUNT([No_of_participants]) AS orders_not_converted
FROM[dbo].[Invoices] i
JOIN[dbo].[OrderLeads] o
ON i.Order_Id=o.Order_Id
WHERE [Converted]='not converted'
GROUP BY[Type_of_Meal]
ORDER BY orders_not_converted DESC
```

Type_of_Meal	orders_not_converted
Lunch	12623
Dinner	12462
Breakfast	12417

7. Total revenue generated from meal sales

```
SELECT FORMAT (SUM([Order_Value]), 'N0') AS Total_revenue
FROM [dbo].[OrderLeads] o
JOIN [dbo].[Invoices] i
ON o.Order_Id=i.Order_Id
WHERE [Converted]='converted'
```

Total_revenue
62,564,896

8. How does revenue vary over the different meal types?

```
SELECT [Type_of_Meal],FORMAT (SUM([Order_Value]), 'N0') AS Revenue
FROM [dbo].[Invoices] i
JOIN [dbo].[OrderLeads] o
ON i.[Order_Id]=o.[Order_Id]
WHERE [Converted]='converted'
GROUP BY [Type_of_Meal]
ORDER BY revenue DESC
```

Type_of_Meal	Revenue
Breakfast	21,283,103
Dinner	21,208,848
Lunch	20,072,945

9. Total revenue for each year

```
SELECT i.[Year],SUM([Order_Value]) AS Revenue
FROM [dbo].[Invoices] i
JOIN [dbo].[OrderLeads] o
ON i.[Order_Id]=o.[Order_Id]
WHERE [Converted]='converted'
GROUP BY i.[Year]
ORDER BY revenue DESC
```

Year	Revenue
2015	14281623
2014	14142057
2016	13838590
2017	11131582
2018	9171044

10. How does the number of participants in meals vary over time?

```
SELECT [Year_DOM], SUM([No_of_participants]) AS Num_of_participants
FROM [dbo].[Invoices] i
JOIN [dbo].[OrderLeads] o
ON i.Order_Id=o.Order_Id
WHERE [Converted]='converted'
GROUP BY [Year_DOM]
ORDER BY Num_of_participants DESC
```

Year_DOM	Num_of_participants
2014	4749
2015	4581
2016	4487
2017	3740
2018	3020

11. How does conversion numbers vary overtime

```
SELECT i.[Year], COUNT([Converted]) AS Num_of_conversions
FROM [dbo].[Invoices] i
JOIN [dbo].[OrderLeads] o
ON i.[Order_Id]=o.[Order_Id]
WHERE [Converted]= 'converted'
GROUP BY I.[Year]
ORDER BY Num_of_conversions DESC
```

Year	Num_of_conversions
2014	2849
2015	2827
2016	2744
2017	2251
2018	1844

12. Which day of the week recorded the highest revenue?

```
SELECT [day_of_week],SUM([Order_Value]) AS Revenue
FROM [dbo].[Invoices] i
JOIN [dbo].[OrderLeads] o
ON i.[Order_Id]=o.[Order_Id]
WHERE [Converted]='converted'
GROUP BY [day_of_week]
ORDER BY revenue DESC
```

day_of_week	Revenue
Tuesday	9193899
Friday	9122603
Saturday	8978937
Monday	8971374
Thursday	8893487
Sunday	8880746
Wednesday	8523850

13. Trends or patterns in the conversion rates over time

```
SELECT
    i.[Year],
    COUNT(i.Order_Id) AS TotalOrders,
    SUM(CASE WHEN [Converted]= 'Converted' THEN 1 ELSE 0 END) AS ConvertedOrders,
    CAST(SUM(CASE WHEN [Converted] = 'Converted' THEN 1 ELSE 0 END) AS FLOAT) / COUNT(i.Order_Id) AS ConversionRate
FROM [dbo].[Invoices] i
JOIN [dbo].[OrderLeads] o
ON i.Order_Id=o.Order_Id
--WHERE i.[Year]= 2014
GROUP BY i.[Year]
ORDER BY ConvertedOrders DESC
```

Year	TotalOrders	ConvertedOrders	ConversionRate
2014	10069	2849	0.282947661138147
2015	10039	2827	0.281601753162666
2016	9857	2744	0.278380846099219
2017	9937	2251	0.226527120861427
2018	10115	1844	0.18230350963915

14. What is the conversion rate of leads to orders?

```
SELECT
    CAST(SUM(CASE WHEN [Converted] = 'Converted' THEN 1 ELSE 0 END) AS FLOAT) / COUNT(Order_Id) AS ConversionRate
FROM [dbo].[OrderLeads]
```

ConversionRate
0.17029

15. Which sales representative has the highest num of conversions

```
SELECT [Sales_Rep], COUNT([Converted]) AS Num_of_conversions
FROM [dbo].[SalesTeam] s
JOIN [dbo].[OrderLeads] o
ON s.Company_Id=o.Company_Id
WHERE [Converted]= converted
GROUP BY [Sales_Rep]
ORDER BY Num_of_conversions DESC
```

Sales_Rep	Num_of_conversions
Carol Miller	405