Experiment Number: 07

Aim:

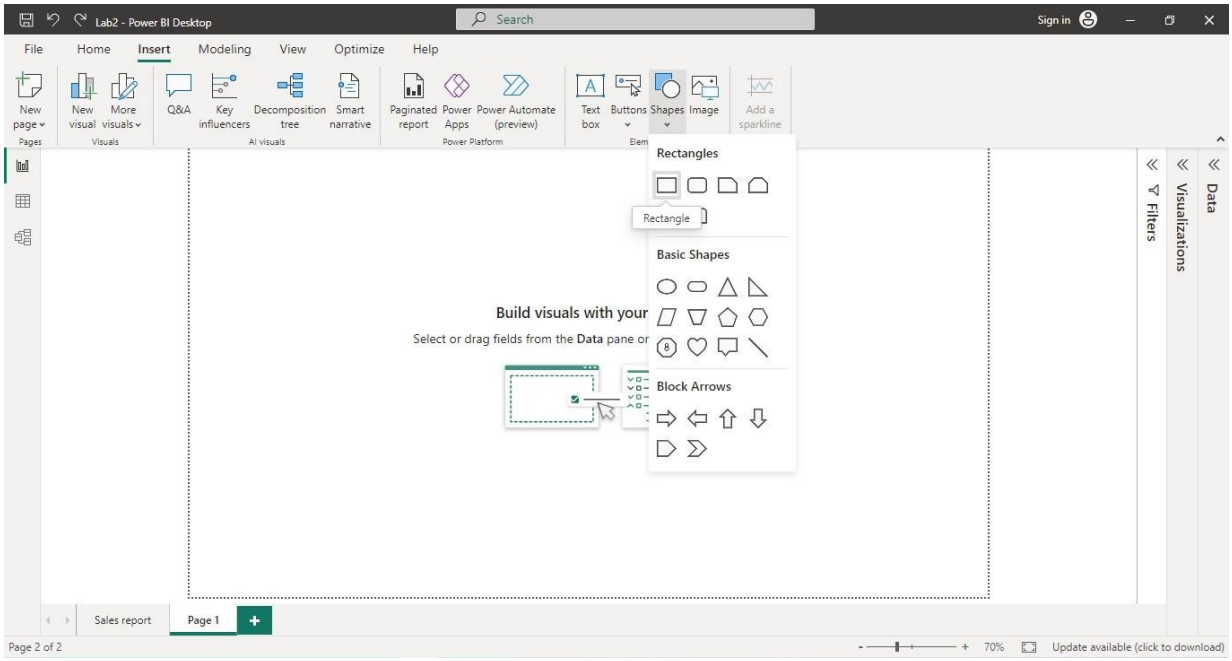
Create reports using caluculations based on dates and times.

Procedure:

1. Importing the Dataset:

- Launch Power BI Desktop.
- Click on "Get Data" in the Home tab of the ribbon.
- Select the appropriate data source option "Excel" and follow the prompts to import your sample dataset into Power BI.

2. Insert Rectangle Shape:



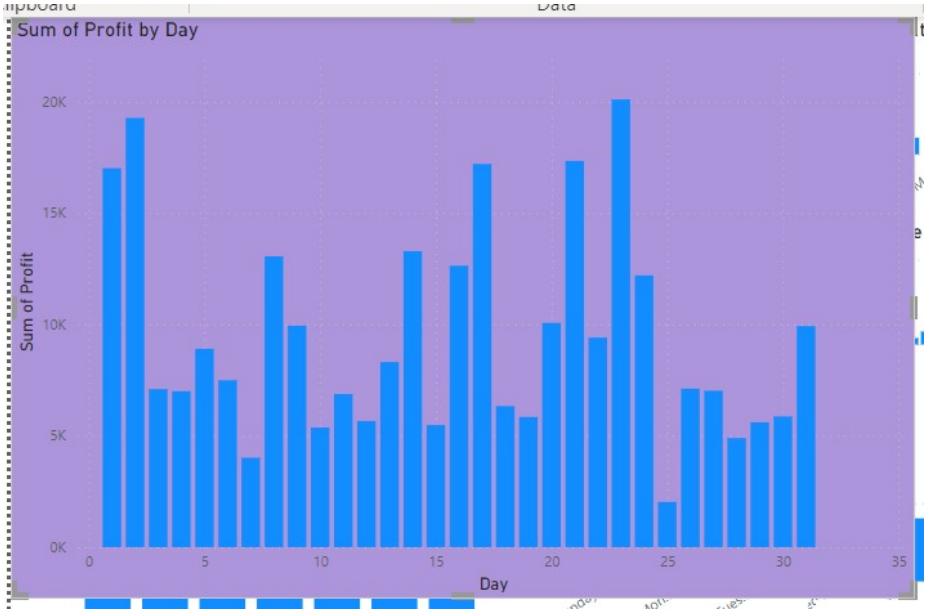
- Click on "Format tab" on right side and perform changes on visual.
- Shape > Style > #E66C37
- Shape > Text >Text = "Dates and Time" , Font Size = 46, Horizontal Alignment = "Center"

3. Create Stacked Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit”
- Visualizations >Build Visuals >Fields > X-Axis =”day”
- For day data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
Day = DAY(Orders[Order Date].[Date])
```

- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit by day”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #5C2D91



4. Create Stacked Column Chart:

Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit”

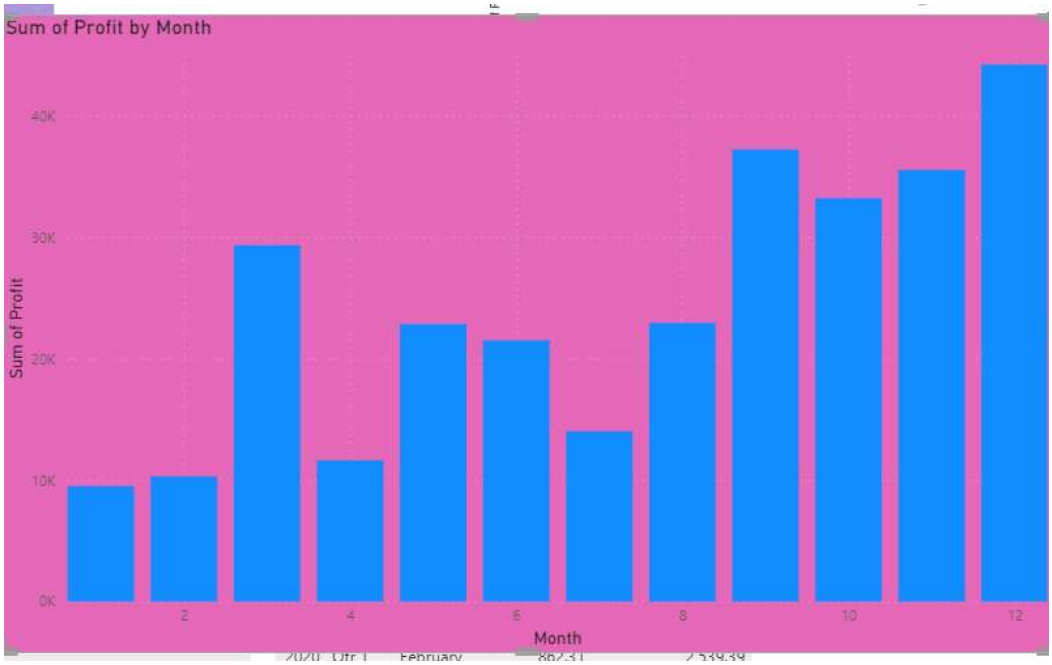
- Visualizations >Build Visuals >Fields > X-Axis =”month”
- For month data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
Month = MONTH(Orders[Order Date].[Date])
```

Visualizations >Format Visuals> Y-axis> Values >Color = #374649

- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D

- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit by month”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #e6b999



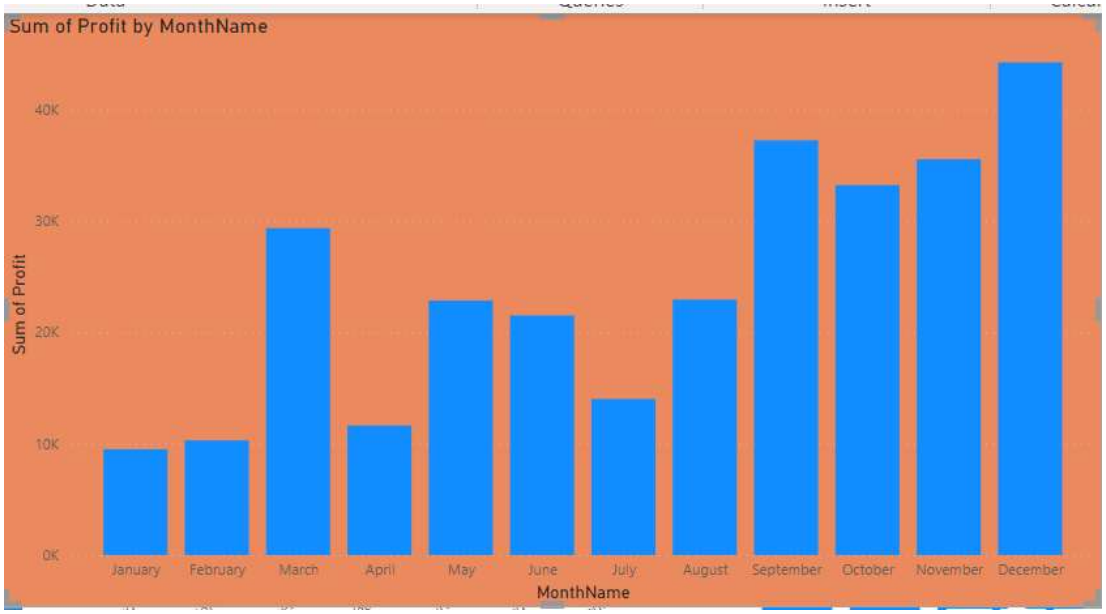
5. Create Stacked Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit”
- Visualizations >Build Visuals >Fields > X-Axis =”month name”
- For monthname data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
MonthName = Orders[Order Date].[Month]
```

Visualizations >Format Visuals> Y-axis> Values >Color = #374649

- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit by month name”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #ebf89f

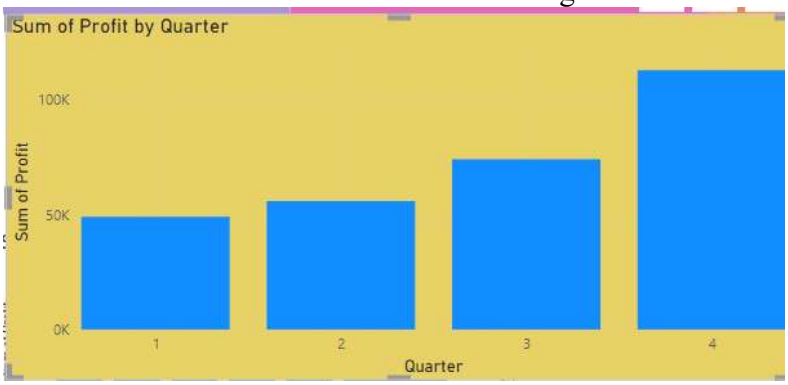


6. Create Stacked Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit”
- Visualizations >Build Visuals >Fields > X-Axis =”quarter”
- For quarer data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
Quarter = QUARTER(Orders[Order Date].[Date])
```

- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit by quarter”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #e8d166

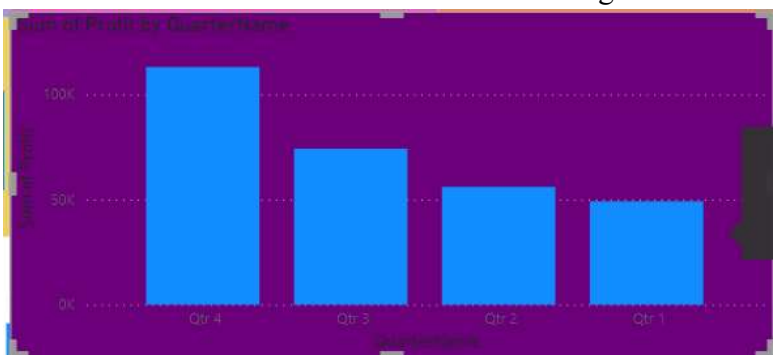


7. Create Stacked Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit”
- Visualizations >Build Visuals >Fields > X-Axis =”quarter name”
- For quartername data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
QuarterName = Orders[Order Date].[Quarter]
```

- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit by quarter name”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #6b0010

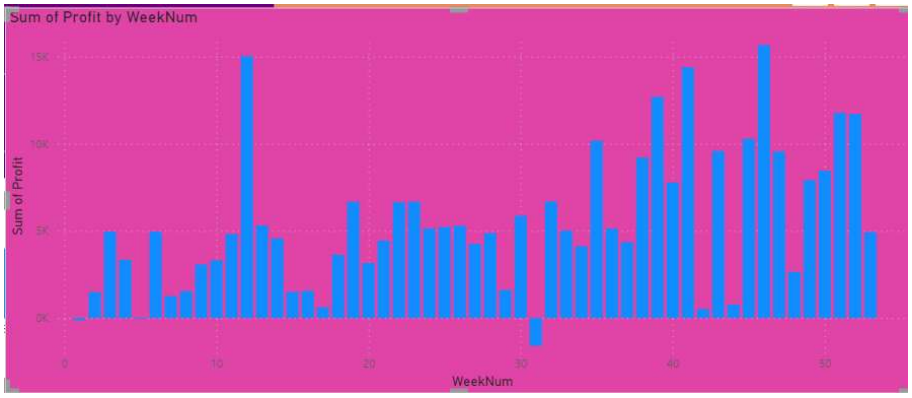


8. Create Stacked Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit”
- Visualizations >Build Visuals >Fields > X-Axis =”week number”
- For weeknum data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
WeekNum = WEEKNUM(Orders[Order Date].[Date])
```

- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit by week num”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #EO0047

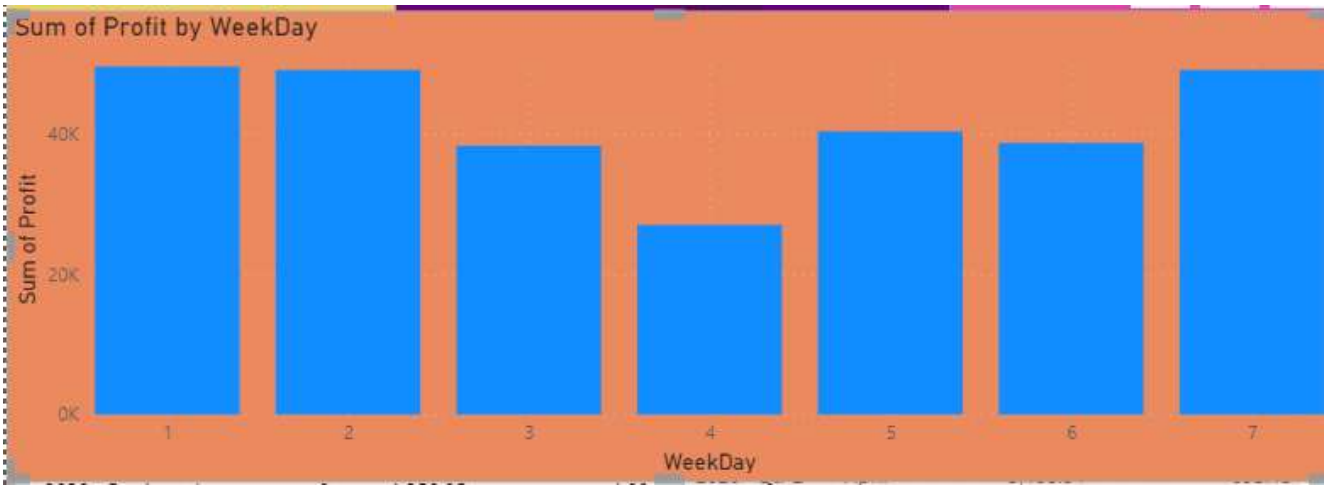


9. Create Stacked Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit”
- Visualizations >Build Visuals >Fields > X-Axis =”week day”
- For weekday data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
WeekDay = WEEKDAY(Orders[Order Date].[Date])
```

- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit by week day”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #ebf567

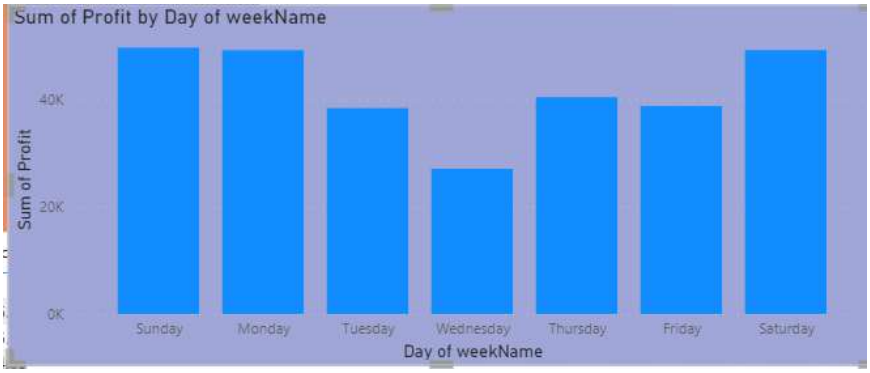


10. Create Stacked Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit”
- Visualizations >Build Visuals >Fields > X-Axis =”day of week name”
- For weekname data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
Day of weekName = FORMAT(Orders[Order Date],"dddd")
```

- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit by day of week name”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #a0A078



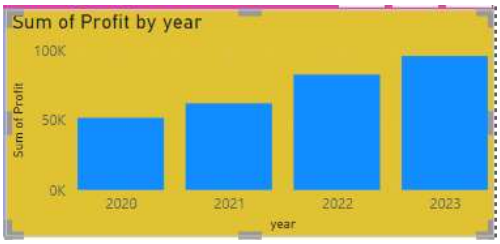
11. Create Stacked Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit”
- Visualizations >Build Visuals >Fields > X-Axis =”year”
- For year data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:
-

```
year = YEAR(Orders[Order Date].[Date])
```

- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit by year”

- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #a0A078



12. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>profit>previousYear Profit
- Orders->NewColumn->and enter the below dax formula:

```
previousDayProfit = CALCULATE(SUM(Orders[Profit]),PREVIOUSDAY(Orders[Order Date].[Date]))
```

Year	Quarter	Month	Day	Sum of Profit	previousDayProfit
2020	Qtr 1	January	3	5.55	
2020	Qtr 1	January	4	-65.99	5.55
2020	Qtr 1	January	5	4.88	-65.99
2020	Qtr 1	January	6	1,358.05	4.88
2020	Qtr 1	January	7	-71.96	1,358.05
2020	Qtr 1	January	8		-71.96
2020	Qtr 1	January	9	10.92	
2020	Qtr 1	January	10	22.65	10.92
2020	Qtr 1	January	11	3.08	22.65
2020	Qtr 1	January	12		3.08
2020	Qtr 1	January	13	673.64	
2020	Qtr 1	January	14	-53.29	673.64
2020	Qtr 1	January	15	65.98	-53.29
2020	Qtr 1	January	16	-5.93	65.98
2020	Qtr 1	January	17		-5.93
2020	Qtr 1	January	18	6.49	
2020	Qtr 1	January	19	-288.00	6.49
2020	Qtr 1	January	20	584.37	-288.00
Total				**2,92,296.81**	

13. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>profit>previousMonthProfit
- Orders->NewColumn->and enter the below dax formula:

```
previousMonthProfit = CALCULATE(SUM(Orders[Profit]),PREVIOUSMONTH(Orders[Order Date].[Date]))
```

Year	Quarter	Month	Sum of Profit	previousMonthProfit
2020	Qtr 1	January	2,539.39	
2020	Qtr 1	February	862.31	2,539.39
2020	Qtr 1	March	693.45	862.31
2020	Qtr 2	April	3,488.84	693.45
2020	Qtr 2	May	3,196.39	3,488.84
2020	Qtr 2	June	4,999.76	3,196.39
Total			**2,92,296.81**	

14. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>profit>previousqtrProfit
- Orders->NewColumn->and enter the below dax formula:

```
previousqtrProfit = CALCULATE(SUM(Orders[Profit]),PREVIOUSQUARTER(Orders[Order Date].[Date]))
```

Year	Quarter	previousqtrProfit	Sum of Profit
2020	Qtr 1		4,095.15
2020	Qtr 2	4,095.15	11,684.99
2020	Qtr 3	11,684.99	13,517.37
2020	Qtr 4	13,517.37	22,386.79
2021	Qtr 1	22,386.79	9,554.66
2021	Qtr 2	9,554.66	12,200.19
2021	Qtr 3	12,200.19	16,880.30
2021	Qtr 4	16,880.30	23,385.82
2022	Qtr 1	23,385.82	11,628.49
2022	Qtr 2	11,628.49	16,594.68
2022	Qtr 3	16,594.68	16,247.49
2022	Qtr 4	16,247.49	38,194.55
2023	Qtr 1	38,194.55	23,858.60
2023	Qtr 2	23,858.60	15,503.91
2023	Qtr 3	15,503.91	27,545.38
2023	Qtr 4	27,545.38	29,018.46
Total			**2,92,296.81**

15. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>profit>previousyearprofit
- Orders->NewColumn->and enter the below dax formula:

```
previousyearProfit = CALCULATE(SUM(Orders[Profit]),PREVIOUSYEAR(Orders[Order Date].[Date]))
```

Year	Sum of Profit	previousyearProfit
2020	51,684.30	
2021	62,020.97	51,684.30
2022	82,665.20	62,020.97
2023	95,926.35	82,665.20
Total	**2,92,296.81**	

16. Create Clustered Column Chart:

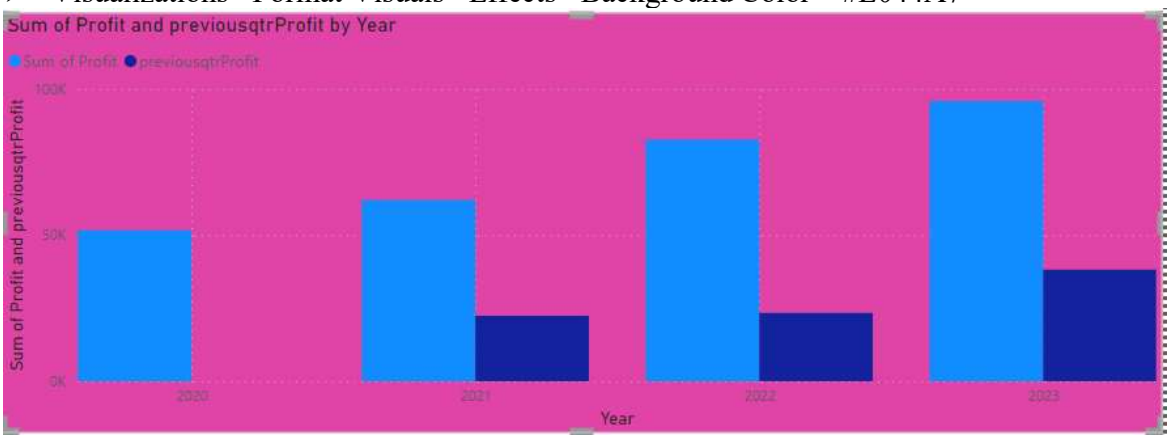
- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit,previousyearprofit”
- Visualizations >Build Visuals >Fields > X-Axis =”order date”

- For previousyearprofit data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
previousyearProfit = CALCULATE(SUM(Orders[Profit]),PREVIOUSYEAR(Orders[Order Date].[Date]))
```

- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All

- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit and previousprofit by year”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #E044A7

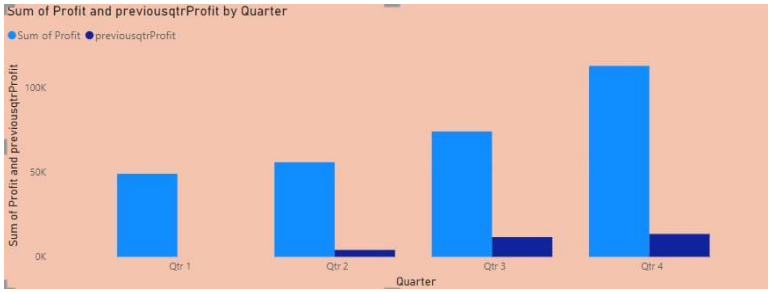


17. Create Clustered Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit,previousqtrprofit”
- Visualizations >Build Visuals >Fields > X-Axis =”order date”
- For previousqtrprofit data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
previousqtrProfit = CALCULATE(SUM(Orders[Profit]),PREVIOUSQUARTER(Orders[Order
                                    Date].[Date]))
```

  - Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit and previousqtrprofit by quarter”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #fc67e9



18. Create Clustered Column Chart:

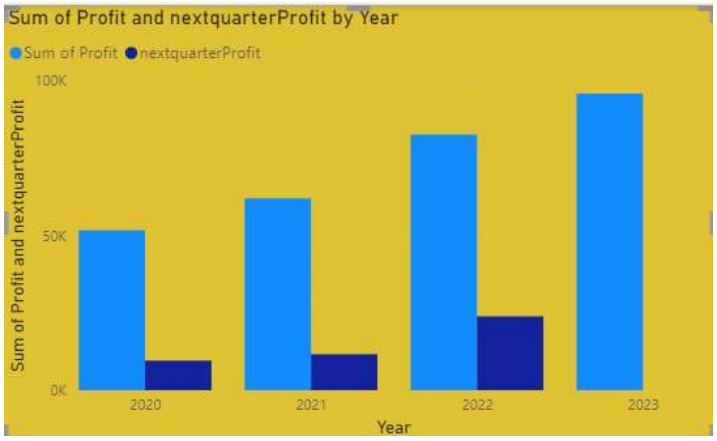
- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit,nextqtrprofit”
- Visualizations >Build Visuals >Fields > X-Axis =”order date”
- For nextqtrprofit data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
nextquarterProfit = CALCULATE(SUM(Orders[Profit]),NEXTQUARTER(Orders[Order Date].[Date]))
```

Visualizations >Format Visuals> Y-axis> Values >Color = #374649

- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit and nextqtrprofit by year”
- Visualizations >Format Visuals> Title> Font Size =20

Visualizations >Format Visuals> Effects> Background Color = #e1c233



19. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>profit>nextmonthprofit
- Visualizations >Columns>orderDate>profit>nextquarterprofit
- Visualizations >Columns>orderDate>profit>nextyearprofit
- Orders->NewColumn->and enter the below dax formula:

```
nextmonthProfit = CALCULATE(SUM(Orders[Profit]),NEXTMONTH(Orders[Order Date].[Date]))
nextquarterProfit = CALCULATE(SUM(Orders[Profit]),NEXTQUARTER(Orders[Order Date].[Date]))
nextyearProfit = CALCULATE(SUM(Orders[Profit]),NEXTYEAR(Orders[Order Date].[Date])
```

Year	Quarter	Month	Sum of Profit	nextmonthProfit
2020	Qtr 4	November	9,362.96	9,554.66
2020	Qtr 4	December	9,554.66	-3,189.80
2021	Qtr 1	January	-3,189.80	2,813.85
2021	Qtr 1	February	2,813.85	9,930.61
2021	Qtr 1	March	9,930.61	4,187.50
2021	Qtr 2	April	4,187.50	4,677.14
2021	Qtr 2	May	4,677.14	3,335.56
2021	Qtr 2	June	3,335.56	3,288.65
2021	Qtr 3	July	3,288.65	5,371.63
2021	Qtr 3	August	5,371.63	8,220.03
2021	Qtr 3	September	8,220.03	2,817.97
2021	Qtr 4	October	2,817.97	13,474.79
Total			2,92,296.81	

Year	Quarter	Sum of Profit	nextquarterProfit
2020	Qtr 1	4,095.15	11,684.99
2020	Qtr 2	11,684.99	13,517.37
2020	Qtr 3	13,517.37	22,386.79
2020	Qtr 4	22,386.79	9,554.66
2021	Qtr 1	9,554.66	12,200.19
2021	Qtr 2	12,200.19	16,880.30
2021	Qtr 3	16,880.30	23,385.82
2021	Qtr 4	23,385.82	11,628.49
2022	Qtr 1	11,628.49	16,594.68
2022	Qtr 2	16,594.68	16,247.49
2022	Qtr 3	16,247.49	38,194.55
2022	Qtr 4	38,194.55	23,858.60
Total		2,92,296.81	

Year	Sum of Profit	nextyearProfit
2020	51,684.30	62,020.97
2021	62,020.97	82,665.20
2022	82,665.20	95,926.35
2023	95,926.35	
Total	**2,92,296.81**	

20. Create Clustered Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit,nextyearprofit”
- Visualizations >Build Visuals >Fields > X-Axis =”order date”
- For nextqtrprofit data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
nextyearProfit = CALCULATE(SUM(Orders[Profit]),NEXTYEAR(Orders[Order Date].[Date]))
```

Visualizations >Format Visuals> Y-axis> Values >Color = #374649

- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit and nextyearprofit by year,quarter,month and day”
- Visualizations >Format Visuals> Title> Font Size =20

Visualizations >Format Visuals> Effects> Background Color = #f5ac4af

21. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>profit>`3daysaheadprofit`
- Visualizations >Columns>orderDate>profit>`3daysbackprofit`
- Orders->NewColumn->and enter the below dax formula:

```
3daysaheadprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],3,DAY))
3DaysBackprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],-3,DAY))
```

Year	Quarter	Month	Day	Sum of Profit	3daysaheadprofit	3DaysBackprofit
2020	Qtr 1	January	1		-181.41	
2020	Qtr 1	January	2		-207.05	
2020	Qtr 1	January	3	5.55	704.28	
2020	Qtr 1	January	4	-65.99		
2020	Qtr 1	January	5	4.88		
2020	Qtr 1	January	6	1,358.05	15.52	5.55
2020	Qtr 1	January	7	-71.96	758.72	-65.99
2020	Qtr 1	January	8		80.37	4.88
2020	Qtr 1	January	9	10.92	-228.74	1,358.05
2020	Qtr 1	January	10	22.65		-71.96
2020	Qtr 1	January	11	3.08		
2020	Qtr 1	January	12		-1,101.52	10.92
Total				**2,92,296.81**	**95,926.35**	**2,91,485.89**

22. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>profit>`3monthsaheadprofit`
- Visualizations >Columns>orderDate>profit>`3monthsbackprofit`
- Orders->NewColumn->and enter the below dax formula:

```
3monthsaheadprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order
Date].[Date],3,MONTH))
3monthsBackprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],-
3,MONTH))
```

Year	Quarter	Month	3monthsaheadprofit	3monthsBackprofit	Sum of Profit
2020	Qtr 1	January	7,231.64		2,539.39
2020	Qtr 1	February	1,613.87		862.31
2020	Qtr 1	March	15,013.09		693.45
2020	Qtr 2	April	957.53	2,539.39	3,488.84
2020	Qtr 2	May	6,299.81	862.31	3,196.39
2020	Qtr 2	June	8,246.57	693.45	4,999.76
2020	Qtr 3	July	7,006.50	3,488.84	-841.48
2020	Qtr 3	August	9,488.07	3,196.39	5,765.23
2020	Qtr 3	September	11,050.80	4,999.76	8,593.63
2020	Qtr 4	October	10,670.53	-841.48	3,469.17
2020	Qtr 4	November	9,692.10	5,765.23	9,362.96
2020	Qtr 4	December	8,655.83	8,593.63	9,554.66
2021	Qtr 1	January		3,469.17	-3,189.80
2021	Qtr 1	February		9,362.96	2,813.85
2021	Qtr 1	March		9,554.66	9,930.61
2021	Qtr 2	April		-3,189.80	4,187.50
2021	Qtr 2	May		2,813.85	4,677.14
Total			**95,926.35**	**2,63,278.35**	**2,92,296.81**

23. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>profit>`3quarteraheadprofit`
- Visualizations >Columns>orderDate>profit>`3quarterbackprofit`

- Orders->NewColumn->and enter the below dax formula:

```
3quartersaheadprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],3,QUARTER))
3quartersBackprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],-3,QUARTER))
```

Year	Quarter	Sum of Profit	3quarterBackprofit	3quartersaheadprofit
2022	Qtr 1	11,628.49	12,200.19	
2021	Qtr 1	9,554.66	11,684.99	
2022	Qtr 4	38,194.55	11,628.49	
2021	Qtr 4	23,385.82	9,554.66	
2020	Qtr 4	22,386.79	4,095.15	29,018.46
2020	Qtr 1	4,095.15		23,858.60
2020	Qtr 2	11,684.99		15,503.91
2020	Qtr 3	13,517.37		27,545.38
Total		**2,92,296.81**	**2,20,229.07**	**95,926.35**

24. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>profit>`3yearsaheadprofit`
- Visualizations >Columns>orderDate>profit>`3yearsbackprofit`
- Orders->NewColumn->and enter the below dax formula:

```
3yearsaheadprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],3,year))
3yearsBackprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],-3,year))
```

Year	Sum of Profit	3yearsaheadprofit	3yearsBackprofit
2020	51,684.30	95,926.35	
2021	62,020.97		
2022	82,665.20		
2023	95,926.35		51,684.30
Total	**2,92,296.81**	**95,926.35**	**51,684.30**

25. Create Clustered Column Chart:

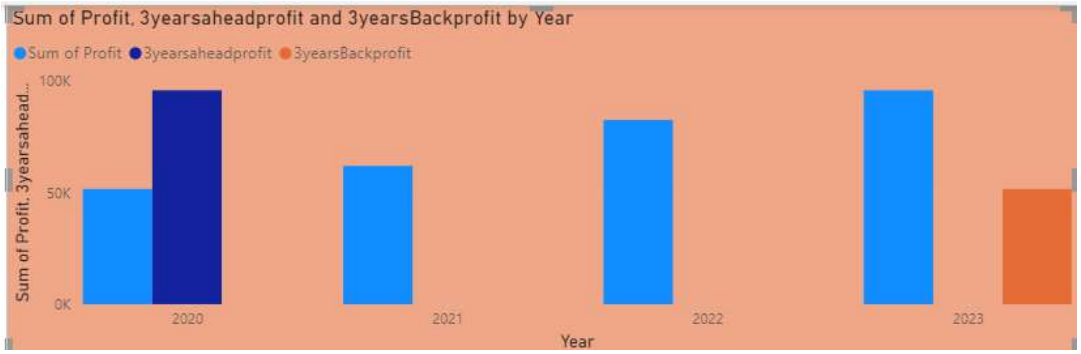
- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit,3yearsbackprofit,3yearsaheadprofit”
- Visualizations >Build Visuals >Fields > X-Axis =”order date”
- For `3yearsaheadprofit`, `3yearsBackprofit` data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
3yearsaheadprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],3,year))
3yearsBackprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],-3,year))
```

Visualizations >Format Visuals> Y-axis> Values >Color = #374649

- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All

- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit ,3yearsaheadprofit and 3yearsbackprofit by year.
- Visualizations >Format Visuals> Title> Font Size =20
  Visualizations >Format Visuals> Effects> Background Color = #f0af87



26. Create Clustered Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit,3quartersbackprofit,3quarteraheadprofit”
- Visualizations >Build Visuals >Fields > X-Axis =”order date”
- For `3yearsaheadprofit` , `3yearsBackprofit` data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
3quartersaheadprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],3,QUARTER))
```

```
3quartersBackprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],-3,QUARTER))
```

Visualizations >Format Visuals> Y-axis> Values >Color = #374649

- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit ,3yearsaheadprofit and 3yearsbackprofit by year.
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = # E044A7

Z

27. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>profit>sameperiodlastyearprofit
- Orders->NewColumn->and enter the below dax formula:

```
sameperiodlastyearprofit = CALCULATE(SUM(Orders[Profit]),SAMEPERIODLASTYEAR(Orders[Order Date].[Date]))
```

Year	Sum of Profit	sameperiodlastyearprofit
2020	51,684.30	
2021	62,020.97	51684
2022	82,665.20	62021
2023	95,926.35	82665
Total	**2,92,296.81**	**196370**

28. Create Line Chart:

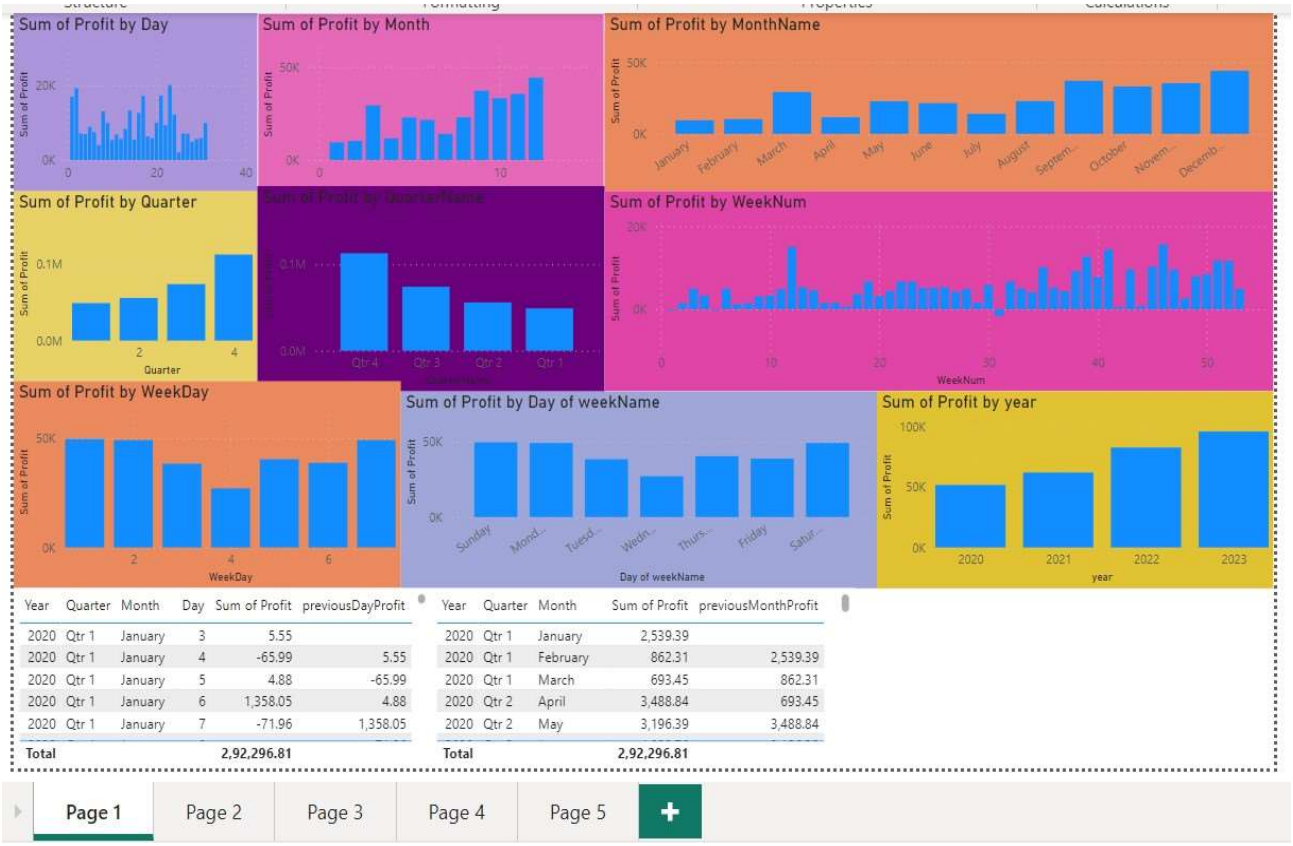
- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit,”
- Visualizations >Build Visuals >Fields >Seconadray- Y –Axis =sameperiodlastyear”
- Visualizations >Build Visuals >Fields > X-Axis =”order date”
- For sameperiodlastyear data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
sameperiodlastyearprofit = CALCULATE(SUM(Orders[Profit]),SAMEPERIODLASTYEAR(Orders[Order Date].[Date]))
```

Visualizations >Format Visuals> Y-axis> Values >Color = #374649

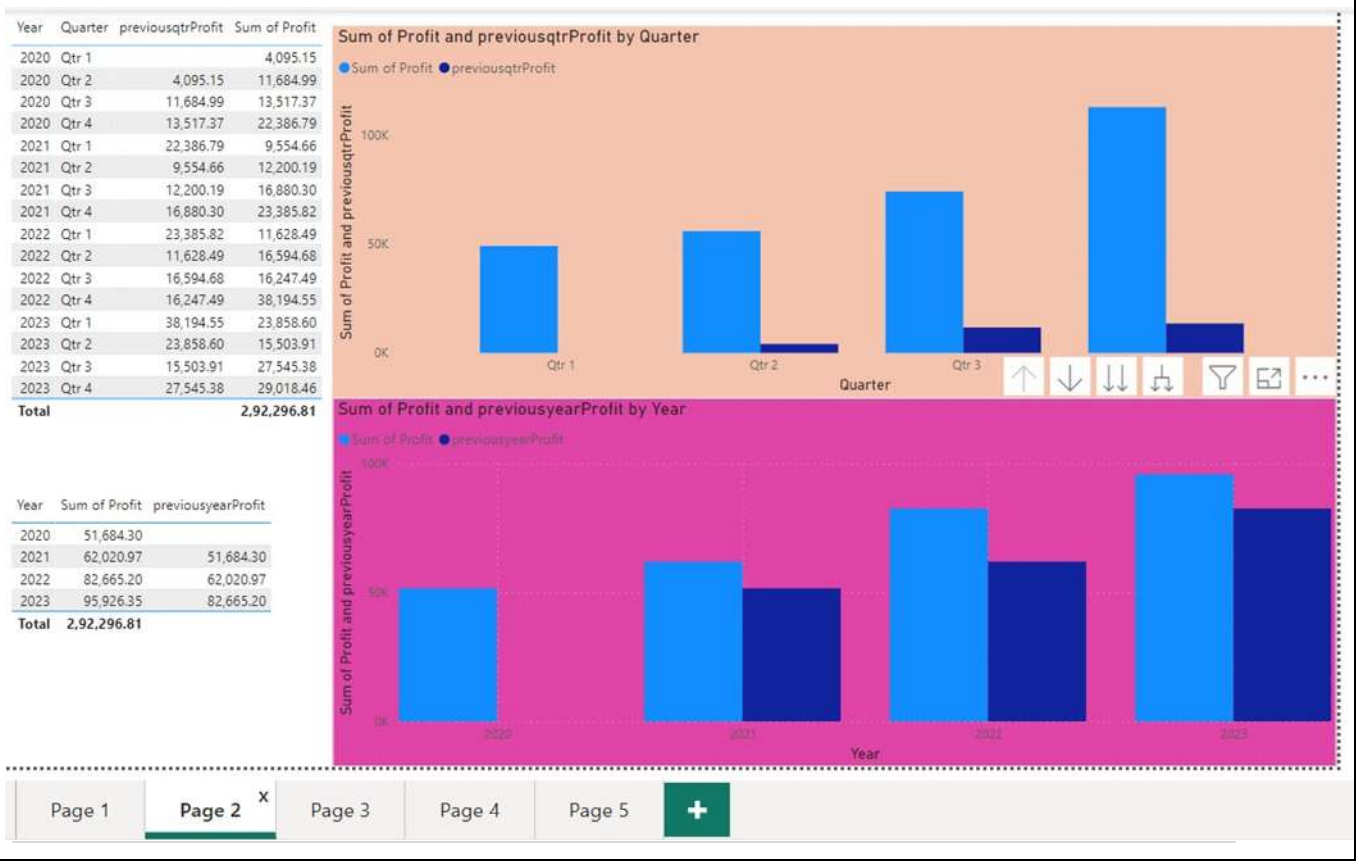
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit and sameperiodlastyearprofit by year and month”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = # Ef567w

Final Output:



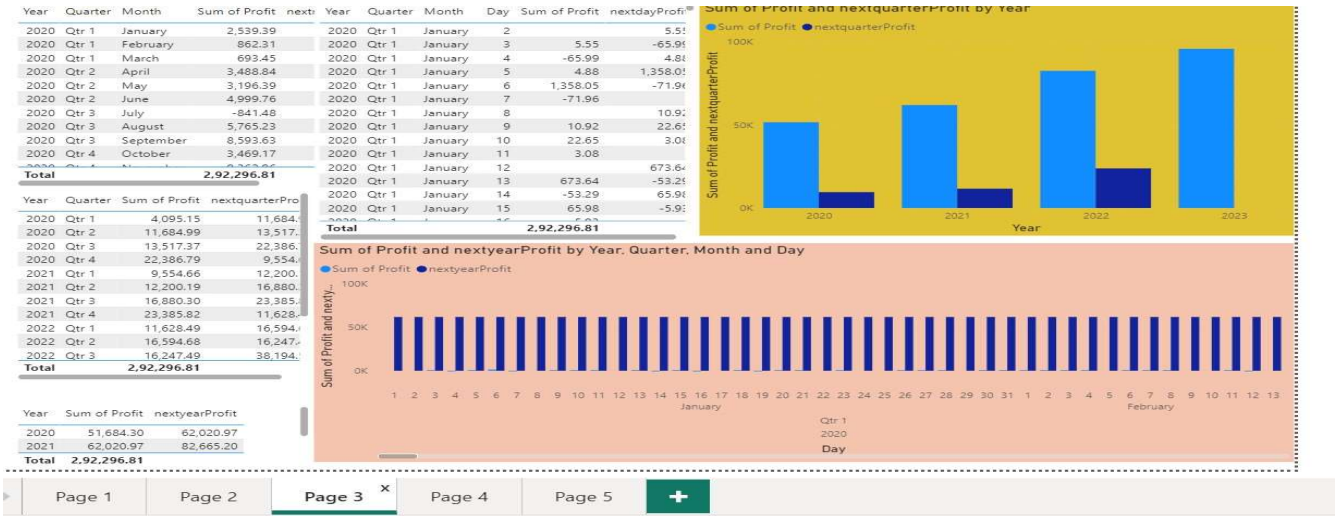
Year	Quarter	Month	Day	Sum of Profit	previousDayProfit
2020	Qtr 1	January	3	5.55	
2020	Qtr 1	January	4	-65.99	5.55
2020	Qtr 1	January	5	4.88	-65.99
2020	Qtr 1	January	6	1,358.05	4.88
2020	Qtr 1	January	7	-71.96	1,358.05
Total				2,92,296.81	

Year	Quarter	Month	Sum of Profit	previousMonthProfit
2020	Qtr 1	January	2,539.39	
2020	Qtr 1	February	862.31	2,539.39
2020	Qtr 1	March	693.45	862.31
2020	Qtr 2	April	3,488.84	693.45
2020	Qtr 2	May	3,196.39	3,488.84
Total			2,92,296.81	



Year	Quarter	previousqtrProfit	Sum of Profit
2020	Qtr 1		4,095.15
2020	Qtr 2	4,095.15	11,684.99
2020	Qtr 3	11,684.99	13,517.37
2020	Qtr 4	13,517.37	22,386.79
2021	Qtr 1	22,386.79	9,554.66
2021	Qtr 2	9,554.66	12,200.19
2021	Qtr 3	12,200.19	16,880.30
2021	Qtr 4	16,880.30	23,385.82
2022	Qtr 1	23,385.82	11,628.49
2022	Qtr 2	11,628.49	16,594.68
2022	Qtr 3	16,594.68	16,247.49
2022	Qtr 4	16,247.49	38,194.55
2023	Qtr 1	38,194.55	23,858.60
2023	Qtr 2	23,858.60	15,503.91
2023	Qtr 3	15,503.91	27,545.38
2023	Qtr 4	27,545.38	29,018.46
Total			2,92,296.81

Year	Sum of Profit	previousyearProfit
2020	51,684.30	
2021	62,020.97	51,684.30
2022	82,665.20	62,020.97
2023	95,926.35	82,665.20
Total	2,92,296.81	


Sum of Profit and nextquarterProfit by Year
Sum of Profit and nextyearProfit by Year, Quarter, Month and Day
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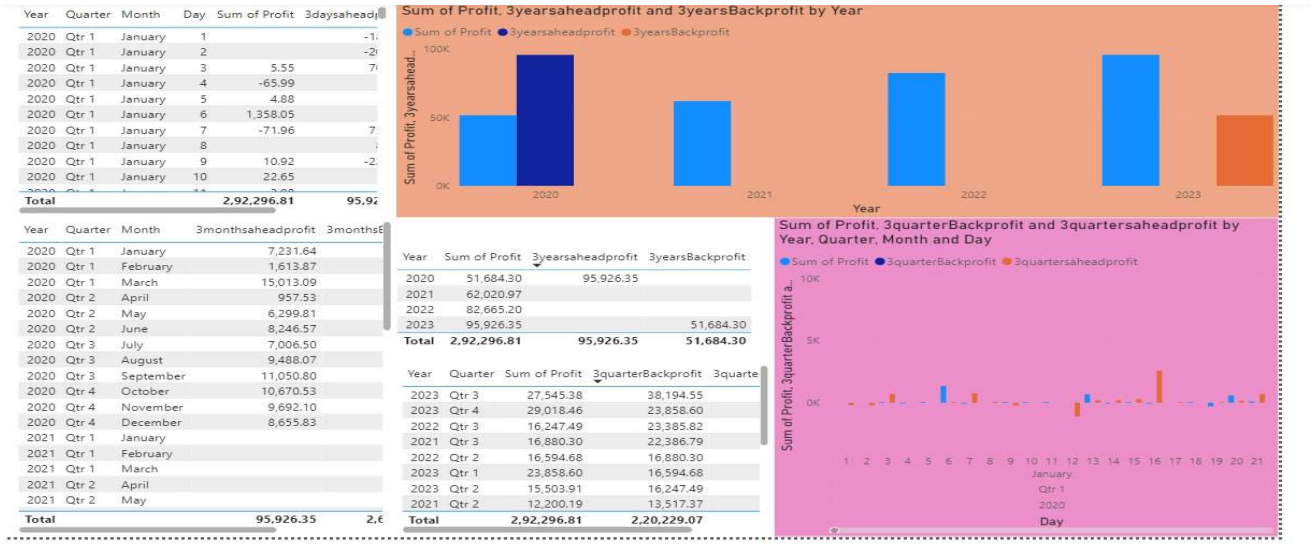
Sum of Profit, 3yearsaheadprofit and 3yearsBackprofit by Year
Sum of Profit, 3quarterBackprofit and 3quartersaheadprofit by Year, Quarter, Month and Day
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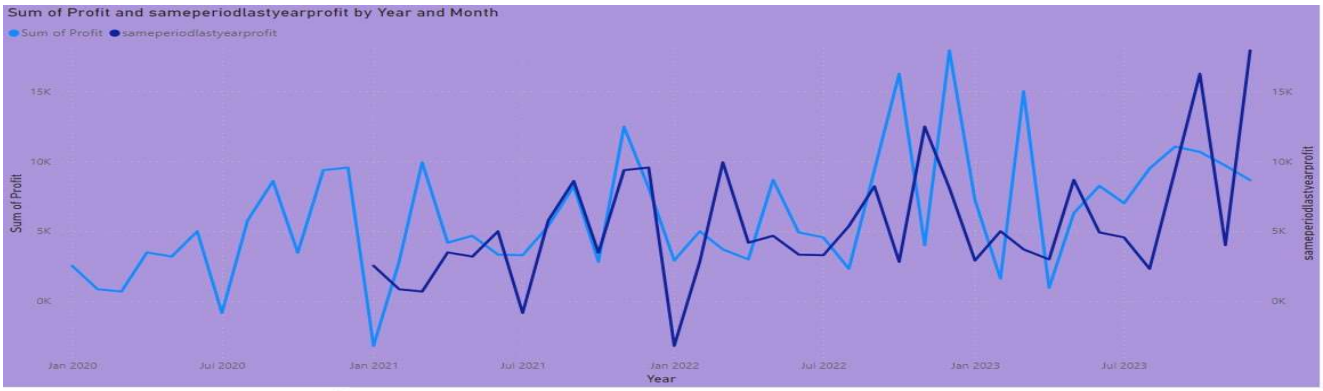
Sum of Profit and sameperiodlastyearprofit by Year and Month
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