

Lesson-16

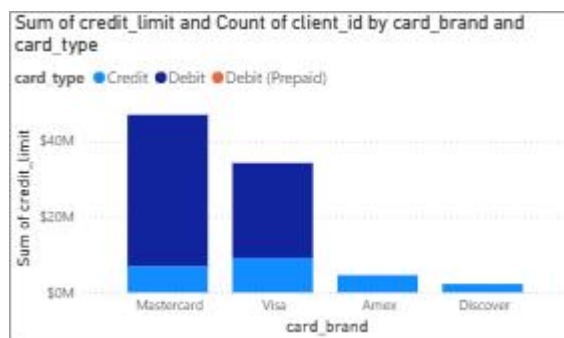
Topic: Advanced Charting Techniques

Prerequisites: Download Card_data.csv file and disable Auto DateTime options by Options in Current File and create new DATE table by using Calendarauto and Format functions.

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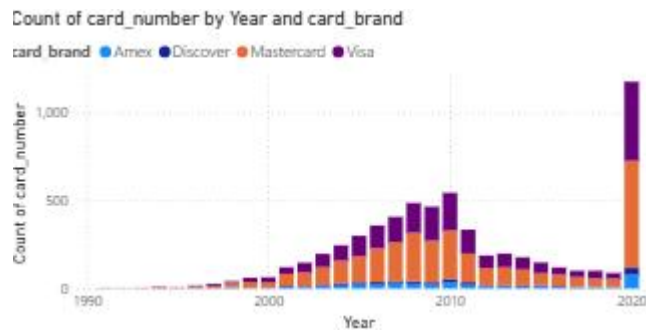
Total Card Limit by Card Brand and Card Type (Stacked Column Chart)

- - X-axis: card_brand (e.g., Visa, Mastercard, Amex)
 - Y-axis: Sum of card_limit
 - Legend: card_type (e.g., Credit, Debit, Prepaid)
 - Tooltip: client_id count (i.e., number of clients using this brand/type combo)



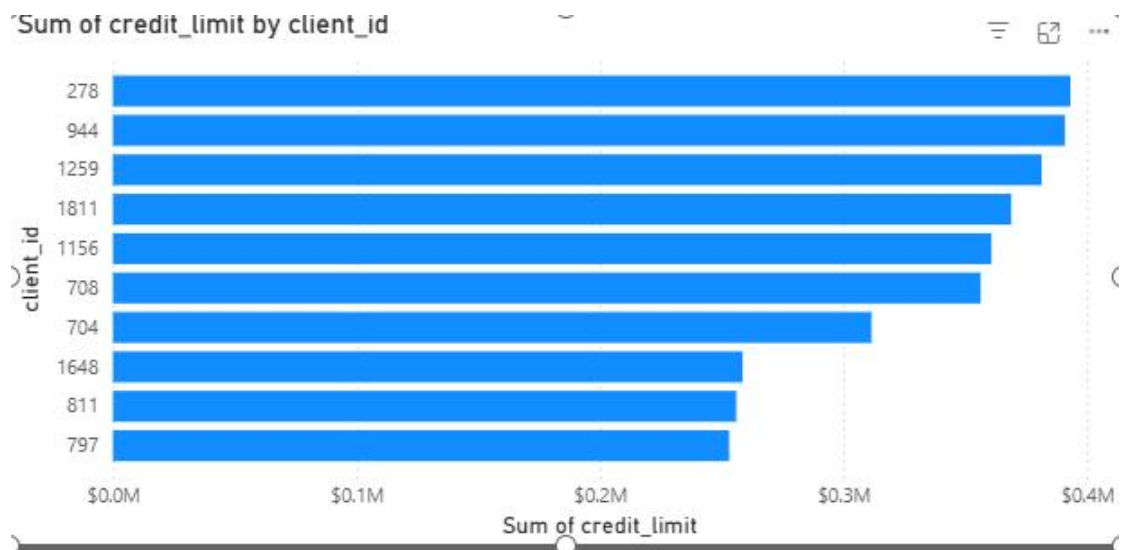
Drill Down into Monthly Trends (Drill Down Feature)

- Create a drill-down chart for analyzing card issues by time:
 - Hierarchy: Year → Month (from account_opened_date)
 - Values: Count of card_number
 - Chart type: Stacked Column Chart
 - Enable drill down/up to move between years and months.



Top 10 Clients by Total Card Limit (Bar Chart)

- - Axis: client_id
 - Value: Total card_limit
 - Filter: Top 10 clients
 - Sort: Descending by total card limit
 - Use a bar chart to clearly show top clients.



Client Drill-through Details

- - Create a drill-through page showing all card details (e.g., card_type, card_brand, limit) for a selected client_id when a user clicks from any chart.
 - Add filters like card_type or expire_dates (Year).

client_id

0

1

10

100

1000

1001

1002

1003

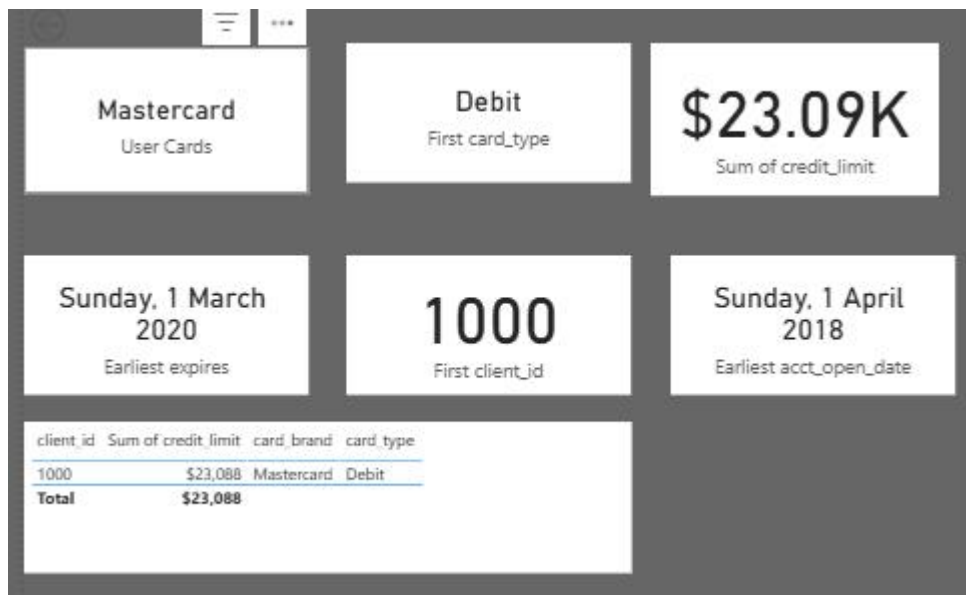
1004

1005

1006

1007

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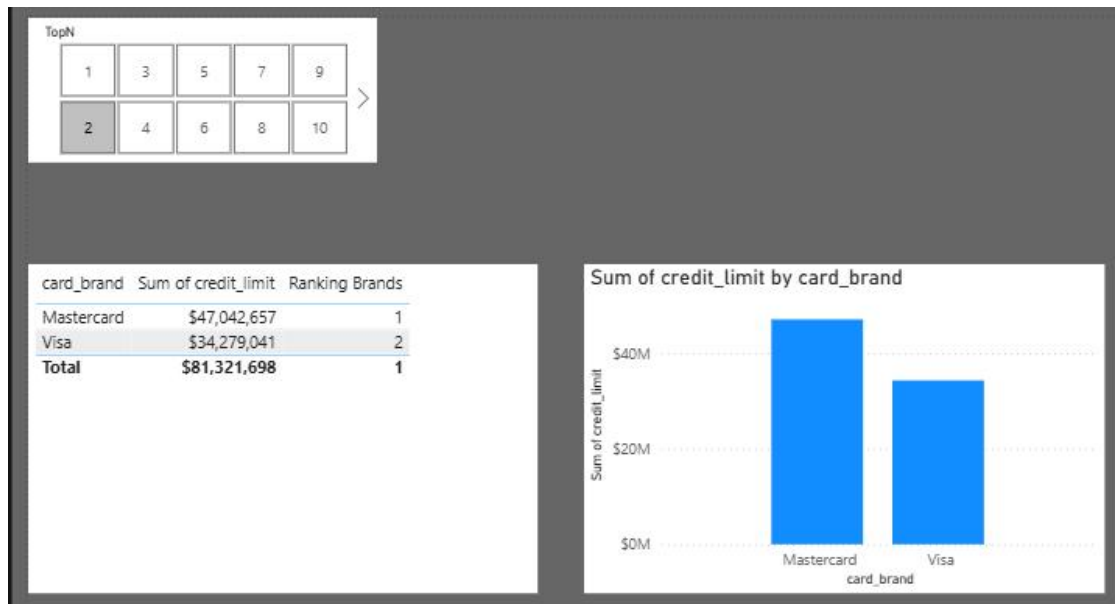
Heatmap-style Matrix of Expiry Trends

- Rows: card_brand
- Columns: Year of expire_dates
- Values: Count of cards expiring
- Format as a matrix with conditional formatting to highlight peaks (red for more expiries).

card_brand	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
Amex	2		2	1	8	5	2	9	6	3	6	3	8	9	6	79	57	62	53	77	402
Discover	1		2	2	4	6	4	7	1	6	3	1	1	1	5	55	23	35	25	27	209
Mastercard	4	19	17	20	29	30	36	46	35	42	49	59	50	66	60	486	459	466	466	321	3209
Visa	4	9	15	16	21	21	22	35	34	33	39	38	27	46	43	426	343	383	364	319	2326
Total	11	28	36	39	62	62	64	97	76	84	97	101	86	122	114	1314	909	939	908	962	6146

Create a dynamic slicer which will give options to select or to enter number and bar chart or column chart need to show only Top N (N should be selected by user in dynamic slicer) Card Brands according to their card limit. (column chart)

1.
 - X axis: Card Brand
 - Y axis: Sum of Card Limit



Download sales.csv file and disable Auto DateTime options by Options in Current File and create new DATE table by using Calendarauto and Format functions.

2.

- Calculate Average number of days between Sales date and previous sales date for each customer
(ex:
last sales date 05.05.2025,
prev sales date 05.01.2025,
sales before prev sales date 04.21.2025
Answer: 7 (4 + 10) / 2)

CustomerID	Average Days BetweenSales
101	11.33
102	17.00
103	17.33
104	3.00
105	13.00
106	20.67
107	33.33
108	21.00
109	10.50
110	18.33
111	28.67
Total	19.14