CREDIT CARD SPENDINGS SQL QUERIES

Basic Data Exploration

i. First & Last day of transaction in the database

min(transaction_date)	max(transaction_date)
2013-10-04	2015-05-26

ii. Types of Credit cards



iii. Types of spending through Credit Card



Data Analysis using multiple cases

1. Write a query to print top 5 cities with highest spends and their percentage contribution of total credit card spends.

	city	total_amount	total_spent	percentage_contribution
•	Greater Mumbai	576751476	4074833373	14.154
	Bengaluru	572326739	4074833373	14.045
	Ahmedabad	567794310	4074833373	13.934
	Delhi	556929212	4074833373	13.668
	Kolkata	115466943	4074833373	2.834

2. Write a query to print highest spend month and amount spent in that month for each card type.

	card_type	yr	mth	total_spend
•	Gold	2015	5	38131657
	Platinum	2015	5	42203610
	Signature	2014	2	43998063
	Silver	2013	11	44993492

3. Write a query to print the transaction details(all columns from the table) for each card type when it reaches a cumulative of 1000000 total spends(We should have 4 rows in the o/p one for each card type).

	transaction_id	city	transaction_date	card_type	spend_type	gender	amount	total_spend
•	1521	Delhi	2013-10-04	Gold	Food	M	281924	1272624
	190	Ahmedabad	2013-10-05	Platinum	Bills	F	612572	1537482
	72	Delhi	2013-10-04	Signature	Bills	F	550782	1285819
	7564	Bengaluru	2013-10-04	Silver	Food	F	205179	1115582

4. Write a query to find city which had lowest percentage spend for gold card type.

	city	gold_ratio
•	Dhamtari	0.00003

5. Write a query to print 3 columns: city, highest_expense_type , lowest_expense_type (example format : Delhi , bills, Fuel).

city	highest_exp_type	lowest_exp_type
Achalpur	Grocery	Entertainment
Adilabad	Bills	Food
Adityapur	Food	Grocery
Adoni	Bills	Entertainment
Adoor	Fuel	Bills
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Zaidpur	Food	Bills
Zamania	Entertainment	Fuel
Zira	Entertainment	Grocery
Zirakpur	Fuel	Entertainment
Zunheboto	Grocery	Entertainment

6. Write a query to find percentage contribution of spends by females for each expense type.

	spend_type	percentage_female_contribution
•	Bills	63.94588
	Food	54.90531
	Travel	51.13287
	Grocery	50.91102
	Fuel	49.71038
	Entertainment	49.37291

7. Which card and expense type combination saw highest month over month growth in Jan-2014.

card_type	spend_type	yr	mth	total_spend	prev_month_spend	MoM_growth
Gold	Travel	2014	1	2092554	1113534	87.92008
Platinum	Grocery	2014	1	12256343	7757562	57.9922
Silver	Travel	2014	1	1170975	810826	44.41754
Gold	Fuel	2014	1	12281691	9570035	28.33486
Gold	Food	2014	1	11511990	9573474	20.24883
Gold	Entertainment	2014	1	9940137	8521114	16.65302
Platinum	Bills	2014	1	12138233	11134282	9.01676
Gold	Bills	2014	1	11137964	10289023	8.25094
Platinum	Fuel	2014	1	10698936	9940343	7.63146
Silver	Fuel	2014	1	12614488	11823131	6.69329
Silver	Food	2014	1	10019659	9487253	5.6118
Platinum	Entertainment	2014	1	9303489	9442901	-1.47637
Silver	Bills	2014	1	10458449	11522251	-9.23259
Signature	Food	2014	1	9655792	10956523	-11.87175
Gold	Grocery	2014	1	7726804	8910512	-13.2844
Silver	Grocery	2014	1	9728433	11367575	-14.41945
Platinum	Food	2014	1	10090531	12060595	-16.33472
Signature	Fuel	2014	1	8374754	10106706	-17.13666
Signature	Entertainment	2014	1	8669623	10657529	-18.6526
Signature	Grocery	2014	1	9066931	11699280	-22.50009
Silver	Entertainment	2014	1	7888949	10387931	-24.05659
Signature	Bills	2014	1	9529821	13191926	-27.7602
Signature	Travel	2014	1	847777	2187558	-61.24551
Platinum	Travel	2014	1	446659	1755965	-74.56333

8. During weekends which city has highest total spend to total no of transcations ratio.

	city	total_spend	total_transactions	ratio
•	Greater Mumbai	172418991	1017	172418991.0000
	Bengaluru	166140238	1050	166140238.0000
	Delhi	164810553	983	164810553.0000
	Ahmedabad	161356124	1036	161356124.0000
	Hyderabad	35996951	242	35996951.0000
	Jaipur	33909676	232	33909676.0000
	Lucknow	33877673	217	33877673.0000
	Chennai	32838233	223	32838233.0000
	Surat	32766659	211	32766659.0000
	Kanpur	31834380	215	31834380.0000
	Kolkata	31179970	210	31179970.0000

9. Which city took least number of days to reach its 500th transaction after the first transaction in that city.

	city	max(transaction_date)	min(transaction_date)	days_took_to_500_trans
•	Bengaluru	2013-12-24	2013-10-04	81