

Data Management for Analytics (IE6700)

Milestone Report #3:

“Vehicle Insurance Policy Data Management System”

Group 14:

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List each query, describe their analytic purpose:

SHOW TABLES; (to see tables in our database)

	Tables_in_db_vehide_insurance
▶	accident
	address
	claim
	driver
	insurance
	insurance_company
	owner
	person
	settlement
	vehide

1.Find top 10 states with maximum no. of registered car.

```
SELECT STATE, COUNT(REGISTRATION_NO) AS NUMBER_OF_VEHICLES
FROM VEHICLE
GROUP BY STATE
ORDER BY COUNT(REGISTRATION_NO) DESC
LIMIT 10;
```

	state	Number_of_Vehides
▶	Texas	74
	Florida	62
	California	54
	New York	41
	Virginia	30
	Pennsylvania	26
	District of Columbia	24
	Arizona	22
	Ohio	22
	Georgia	22

2.Find top 10 people with maximum no. of accidents along with their address

```
SELECT P.PERSON_ID, P.FIRST_NAME, P.GENDER, P.PHONE, D.LICENSE_NO,
COUNT(V.ACCIDENT_ID) AS TOTAL_NO_ACCIDENTS, A.SUITE, A.STREET, A.CITY,A.STATE, A.ZIP
FROM VEHICLE V, DRIVER D, PERSON P, ADDRESS A
WHERE P.PERSON_ID = D.DRIVER_ID
AND D.DRIVER_ID = V.DRIVER_ID
AND P.ADDRESS_ID = A.ADDRESS_ID
GROUP BY P.PERSON_ID
ORDER BY COUNT(V.ACCIDENT_ID) DESC
```

LIMIT 10;

	person_ID	first_name	gender	phone	license_no	Total_No_Accidents	suite	street	city	state	zip
▶	302	Vilma	Female	(992) 3903030	1448	5	281	82 Anniversary Street	Charlotte	North Carolina	28299
	183	Ximenez	Male	(566) 3386838	7151	5	415	8 Merchant Place	Youngstown	Ohio	44555
	70	Lisa	Female	(243) 9207915	3153	5	753	84 Gerald Crossing	South Bend	Indiana	46699
	30	Barb	Female	(942) 3542539	8474	5	716	222 Hansons Center	Denver	Colorado	80217
	279	Alexandro	Male	(708) 4274785	2349	5	688	048 Spenser Parkway	Sacramento	California	95828
	59	Chrystel	Female	(719) 3984672	1768	5	583	38234 2nd Plaza	Texarkana	Texas	75507
	131	Sybyl	Female	(429) 9922271	4649	5	842	1 Straubel Drive	Jamaica	New York	11480
	16	Simeon	Male	(384) 6815685	5443	4	387	1 Portage Terrace	Jacksonville	Florida	32204
	209	Katy	Female	(969) 3094131	3334	4	853	86 Moose Terrace	Tucson	Arizona	85743
	141	Delly	Bigender	(495) 7875576	3156	4	424	3 Park Meadow Pass	Sioux Falls	South Dakota	57110

3. Retrieve the min, max, average and total premium amount company wise.

```

SELECT IC.COMPANY_ID, IC.NAME, MIN(I.PREMIUM_AMOUNT), MAX(I.PREMIUM_AMOUNT),
AVG(I.PREMIUM_AMOUNT), SUM(I.PREMIUM_AMOUNT)
FROM INSURANCE I, INSURANCE_COMPANY IC
WHERE I.INSURANCE_COMP_ID = IC.COMPANY_ID
GROUP BY IC.COMPANY_ID;

```

	company_ID	name	min(i.premium_amount)	max(i.premium_amount)	avg(i.premium_amount)	sum(i.premium_amount)
▶	95	Cole-Bode	188	1309	895.3333	2686
	133	Lindgren, Batz and Kohler	390	978	770.3333	2311
	99	Casper-Stehr	679	1456	1090.6667	9816
	8	Mertz, Berge and Kassulke	828	1158	960.2000	4801
	76	Glover, Lang and Franecki	263	1470	787.0000	6296
	140	Gulgowski, Kshlerin and Lebsack	218	1265	741.3333	2224
	67	Cronin-Paucek	205	1442	953.6667	2861
	149	Hagenes Inc	479	1087	819.1250	6553
	32	Stamm LLC	435	1446	917.8000	4589
	93	Hintz, Marvin and Homenick	612	1435	1051.5000	4206
	77	Berge Group	407	1361	742.4000	3712
	110	Torp, Cole and Schaefer	170	1430	688.1000	6881
	48	Keeling, Mills and Rolfson	706	1443	1034.7500	4139
	97	Hirthe-Watsica	219	1380	764.7500	3059

Result 27 x

4. Retrieve total settled amount company wise.

```

SELECT S.INSURANCE_COMP_ID, IC.NAME, S.STATUS, SUM(S.FINAL_AMOUNT) AS
TOTAL_SETTLEMENT
FROM SETTLEMENT S, INSURANCE_COMPANY IC
WHERE S.INSURANCE_COMP_ID = IC.COMPANY_ID
AND S.STATUS = 'SETTLED'
GROUP BY S.INSURANCE_COMP_ID
LIMIT 10;

```

	insurance_comp_id	name	status	Total_Settlement
▶	1	Spinka, Sawayn and Wolf	Settled	18479
	2	West, Sawayn and Volkman	Settled	29574
	3	Kertzmann, Welch and Blick	Settled	16391
	4	McKenzie and Sons	Settled	24286
	5	Harris, West and Hand	Settled	18358
	6	Smitham-Rippin	Settled	15062
	7	Wilderman-Anderson	Settled	24495
	8	Mertz, Berge and Kassulke	Settled	13084
	10	Lesch LLC	Settled	17311
	11	Kihn, Kutch and Senger	Settled	17519

5. Find car brand that are least reliable

```
SELECT BRAND, COUNT(ACCIDENT_ID)
FROM VEHICLE
GROUP BY BRAND
ORDER BY COUNT(ACCIDENT_ID) ASC
LIMIT 10;
```

	brand	count(incident_id)
▶	Shelby	1
	Smart	1
	Fiat	1
	Lamborghini	2
	Geo	2
	Aston Martin	2
	Ferrari	2
	Maybach	2
	Lotus	2
	Maserati	2

6. Retrieve insurance company state wise with maximum number of registered vehicles.

```
SELECT V.STATE, IC.NAME, COUNT(I.INSURANCE_ID) AS NO_OF_INSURANCES
FROM INSURANCE I, INSURANCE_COMPANY IC, VEHICLE V
WHERE I.VEHICLE_REG_NO = V.REGISTRATION_NO
AND I.INSURANCE_COMP_ID = IC.COMPANY_ID
GROUP BY V.STATE
LIMIT 10;
```

	state	name	No_of_Insurances
►	Pennsylvania	West, Sawayn and Volkman	18
	Florida	West, Sawayn and Volkman	69
	Virginia	West, Sawayn and Volkman	37
	West Virginia	West, Sawayn and Volkman	7
	Texas	Kertzmann, Welch and Blick	74
	North Carolina	Kertzmann, Welch and Blick	18
	Colorado	Kertzmann, Welch and Blick	22
	Illinois	Kertzmann, Welch and Blick	31
	Minnesota	McKenzie and Sons	18
	New York	McKenzie and Sons	41

7. Retrieve state with highest accidents

```
SELECT STATE, COUNT(ACCIDENT_ID)
FROM ACCIDENT
GROUP BY STATE
ORDER BY COUNT(ACCIDENT_ID) DESC
LIMIT 10;
```

	state	count(incident_id)
►	Texas	123
	California	94
	Florida	71
	New York	53
	Virginia	45
	District of Columbia	38
	Colorado	35
	Illinois	34
	Ohio	34
	Georgia	30

8. Find details of people whose claim amount > 5000 USD along with date

```
SELECT P.PERSON_ID, P.FIRST_NAME, P.LAST_NAME, P.GENDER, P.EMAIL, C.DATE,
C.TOTAL_AMOUNT
FROM PERSON P, CLAIM C
WHERE P.PERSON_ID = C.PERSON_ID
AND C.TOTAL_AMOUNT > 5000
GROUP BY P.PERSON_ID;
```

	PERSON_ID	FIRST_NAME	LAST_NAME	GENDER	EMAIL	DATE	TOTAL_AMOUNT	
▶	2	Gonzales	Hagart	Male	ghagart1@zimbio.com	2022-05-29	6896	
	4	Liesa	Boodle	Female	lboodle3@amazon.de	2019-09-10	8228	
	6	Larina	Larroway	Female	NULL	2022-08-15	9395	
	7	Lorilee	Spanton	Female	lspanton6@unc.edu	2020-08-08	6732	
	8	Richmound	Clackers	Male	rdackers7@discuz.net	2019-03-14	8030	
	9	Lemmie	Kynson	Male	lkynson8@marketwatch.com	2019-09-04	9493	
	10	Ruthann	Hanvey	Female	rhanvey9@soup.io	2021-04-07	5059	50
	11	Edy	Fahy	Female	efahya@sitemeter.com	2020-09-04	8093	

9. Find number of vehicles which are insured and which are not

```

SELECT I.STATUS, COUNT(V.REGISTRATION_NO)
FROM VEHICLE V, INSURANCE I
WHERE V.REGISTRATION_NO = I.VEHICLE_REG_NO
GROUP BY I.STATUS;

```

	status	count(v.registration_no)
▶	Insured	320
	Uninsured	377

10. Find insurance company that offered highest settlement

```

SELECT IC.NAME, MAX(S.FINAL_AMOUNT)
FROM INSURANCE_COMPANY IC, SETTLEMENT S
WHERE S.INSURANCE_COMP_ID = IC.COMPANY_ID
AND S.STATUS = 'SETTLED';

```

	name	max(s.final_amount)
▶	Spinka, Sawayn and Wolf	9991