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CS130 Databases

Lab 2 Report

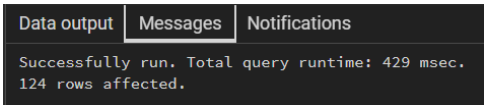
Lab2_Q1: Find the number parking events where the colour of the car is Yellow.

SQL Language: *SELECT * FROM cs130lab2 WHERE (car_color='Yellow')*

Running result: *124 rows returned*

```
SELECT * FROM cs130lab2 WHERE (car_color='Yellow')
```

	parking_id [PK] integer	car_reg character varying (50)	car_make character varying (50)	car_model character varying (50)	car_color character varying (50)	num_occupants integer	parking_day character varying (9)	parking_hours integer	parking_level integer
1	4	12-WD-8797	Scion	xB	Yellow	6	Friday	1	1
2	9	10-KY-846	Lexus	LX	Yellow	3	Sunday	7	1
3	32	151-MH-56281	Mercedes-Benz	R-Class	Yellow	2	Monday	2	2
4	67	151-WD-998	GMC	Yukon Denali	Yellow	4	Thursday	4	2
5	116	10-KK-9255	Mazda	B-Series	Yellow	1	Monday	8	2

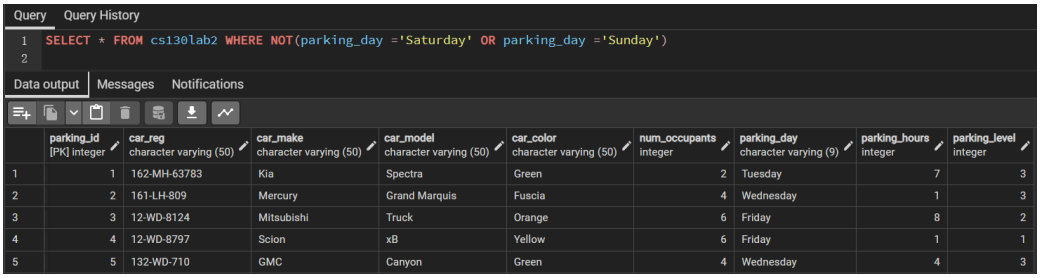


```
Successfully run. Total query runtime: 429 msec.
124 rows affected.
```

Lab2_Q2: Find the number of parking events which did not happen on a Saturday or Sunday.

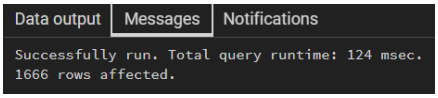
SQL Language: *SELECT * FROM cs130lab2 WHERE NOT(parking_day ='Saturday' OR parking_day ='Sunday')*

Running result: *1666 rows returned*



```
SELECT * FROM cs130lab2 WHERE NOT(parking_day ='Saturday' OR parking_day ='Sunday')
```

	parking_id [PK] integer	car_reg character varying (50)	car_make character varying (50)	car_model character varying (50)	car_color character varying (50)	num_occupants integer	parking_day character varying (9)	parking_hours integer	parking_level integer
1	1	162-MH-63783	Kia	Spectra	Green	2	Tuesday	7	3
2	2	161-LH-809	Mercury	Grand Marquis	Fuscia	4	Wednesday	1	3
3	3	12-WD-8124	Mitsubishi	Truck	Orange	6	Friday	8	2
4	4	12-WD-8797	Scion	xB	Yellow	6	Friday	1	1
5	5	132-WD-710	GMC	Canyon	Green	4	Wednesday	4	3



```
Successfully run. Total query runtime: 124 msec.
1666 rows affected.
```

Lab2_Q3: Find the number of parking events in which a car with a car model name ending in '2500' was involved.

SQL Language: *SELECT * FROM cs130lab2 WHERE (car_model Like '%2500')*

Running result: *47 rows returned*

```
Query  Query History
1 SELECT * FROM cs130lab2 WHERE (car_model Like '%2500')
2
```

Data output | Messages | Notifications

	parking_id [PK] integer	car_reg character varying (50)	car_make character varying (50)	car_model character varying (50)	car_color character varying (50)	num_occupants integer	parking_day character varying (9)	parking_hours integer	parking_level integer
1	37	142-WD-865	Chevrolet	Suburban 2500	Fuscia	4	Monday	6	3
2	53	12-KK-684	GMC	Savana 2500	Turquoise	4	Monday	3	1
3	56	162-WD-65032	Chevrolet	Express 2500	Teal	2	Tuesday	5	2
4	68	10-WD-8038	GMC	2500	Indigo	6	Sunday	1	3
5	73	02-WD-907	Dodge	Ram 2500	Orange	4	Thursday	7	2

Data output | Messages | Notifications

```
Successfully run. Total query runtime: 180 msec.
47 rows affected.
```

Lab2_Q4: Find the number of parking events in which a car with car make Toyota and car model type Corolla was involved.

SQL Language: *SELECT * FROM cs130lab2 WHERE (car_make = 'Toyota' AND car_model = 'Corolla')*

Running result: *6 rows returned*

```
Query  Query History
1 SELECT * FROM cs130lab2 WHERE (car_make = 'Toyota' AND car_model = 'Corolla')
2
```

Data output | Messages | Notifications

	parking_id [PK] integer	car_reg character varying (50)	car_make character varying (50)	car_model character varying (50)	car_color character varying (50)	num_occupants integer	parking_day character varying (9)	parking_hours integer	parking_level integer
1	227	161-WD-9139	Toyota	Corolla	Puce	4	Tuesday	4	3
2	287	11-KY-65207	Toyota	Corolla	Aquamarine	5	Tuesday	6	2
3	753	10-KY-801	Toyota	Corolla	Teal	6	Saturday	3	2
4	1039	12-WD-8278	Toyota	Corolla	Green	4	Sunday	5	3
5	2054	11-KY-53284	Toyota	Corolla	Maroon	6	Wednesday	3	2
6	2309	08-WD-13865	Toyota	Corolla	Red	5	Wednesday	7	3

Data output | Messages | Notifications

```
Successfully run. Total query runtime: 25 secs 835 msec.
6 rows affected.
```

Lab2_Q5: Return all of the parking events in which cars registered in Meath(MH) or Kildare (KE) were involved. Your query should only display the car reg, car make and car model.

SQL Language:

SELECT car_reg,car_make,car_model FROM cs130lab2

WHERE (car_reg LIKE '%MH%' OR car_reg LIKE '%KE%')

Running result: *27 rows returned*

```
Query  Query History
1 SELECT car_reg,car_make,car_model FROM cs130lab2
2 WHERE (car_reg LIKE '%MH%' OR car_reg LIKE '%KE%')
```

Data output | Messages | Notifications

	car_reg character varying (50)	car_make character varying (50)	car_model character varying (50)
1	162-MH-63783	Kia	Spectra
2	161-KE-25225	Toyota	4Runner
3	151-MH-56281	Mercedes-Benz	R-Class
4	12-KE-241	Honda	Civic
5	151-KE-750	Ford	Econoline E250

Data output | Messages | Notifications

```
Successfully run. Total query runtime: 274 msec.
27 rows affected.
```

Lab2_Q6: Return all of parking event s in which cars registered in 2016 are involved.

SQL Language: *SELECT * FROM cs130lab2 WHERE (car_reg Like '16%')*

Running result: *607 rows returned*

Messages | Query | Query History | Notifications

```
1  SELECT * FROM cs130lab2 WHERE (car_reg Like '16%')
```

Data output

	parking_id [PK] integer	car_reg character varying (50)	car_make character varying (50)	car_model character varying (50)	car_color character varying (50)	num_occupants integer	parking_day character varying (9)	parking_hours integer	parking_level integer
1	1	162-MH-63783	Kia	Spectra	Green	2	Tuesday	7	3
2	2	161-LH-809	Mercury	Grand Marquis	Fuscia	4	Wednesday	1	3
3	6	161-WD-994	BMW	330	Maroon	1	Saturday	3	3
4	12	161-KE-25225	Toyota	4Runner	Orange	1	Wednesday	1	2
5	17	161-WD-939	Dodge	Dakota Club	Green	4	Friday	7	3

Messages | Query | Query History | Notifications

```
Successfully run. Total query runtime: 8 secs 643 msec.
607 rows affected.
```

Lab2_Q7: Return all of the parking events where the cars parked for a duration of four or more hours and had at least three occupants. Your query should only display the car_reg, num_occupants and parking hours.

SQL Language:

SELECT car_reg,car_make,car_model FROM cs130lab2

WHERE (parking_hours>=4) AND (num_occupants>=3)

Running result: *930 rows returned*

Query | Query History

```
1  SELECT car_reg,num_occupants,parking_hours FROM cs130lab2
2  WHERE (parking_hours>=4) AND (num_occupants>=3)
```

Data output | Messages | Notifications

	car_reg character varying (50)	num_occupants integer	parking_hours integer
1	12-WD-8124	6	8
2	132-WD-710	4	4
3	152-KK-924	6	5
4	10-KY-846	3	7
5	152-KY-7414	5	6

Data output | Messages | Notifications

```
Successfully run. Total query runtime: 112 msec.
930 rows affected.
```

Lab2_Q8: Return all of the parking events where the cars parked on level three on Tuesdays or the cars were of the color green. Your query should only display the car_reg, parking day, parking level and color.

SQL Language:

SELECT car_reg,parking_day,parking_level,car_color FROM cs130lab2

WHERE ((parking_level=3) AND (parking_day='Tuesday')) OR (car_color='Green')

Running result: *255 rows returned*

Query | Query History

```
SELECT car_reg,parking_day,parking_level,car_color FROM cs130lab2
WHERE ((parking_level=3) AND (parking_day='Tuesday')) OR (car_color='Green')
```

Data output | Messages | Notifications

	car_reg character varying (50)	parking_day character varying (9)	parking_level integer	car_color character varying (50)
1	162-MH-63783	Tuesday	3	Green
2	132-WD-710	Wednesday	3	Green
3	152-KY-7414	Tuesday	3	Turquoise
4	12-KY-69432	Sunday	1	Green
5	161-WD-939	Friday	3	Green

Data output | Messages | Notifications

```
Successfully run. Total query runtime: 1 secs 389 msec.
255 rows affected.
```

Lab2_Q9: Return all of the parking events involving cars which have car make beginning with the letter T, car model beginning with the letter T and parking day beginning with the letter T.

SQL Language: *SELECT * FROM cs130lab2 WHERE (car_make Like 'T%')AND(parking_day LIKE 'T%')*

Running result: *38 rows returned*

Query | Query History

```
SELECT * FROM cs130lab2 WHERE (car_make Like 'T%')AND(parking_day LIKE 'T%')
```

Data output | Messages | Notifications

	parking_id [PK] integer	car_reg character varying (50)	car_make character varying (50)	car_model character varying (50)	car_color character varying (50)	num_occupants integer	parking_day character varying (9)	parking_hours integer	parking_level integer
1	206	131-KY-63718	Toyota	Cressida	Puce	1	Tuesday	7	2
2	227	161-WD-9139	Toyota	Corolla	Puce	4	Tuesday	4	3
3	233	142-KY-62711	Toyota	RAV4	Turquoise	4	Thursday	3	1
4	237	00-KY-731	Toyota	Echo	Mauv	3	Thursday	7	2
5	287	11-KY-65207	Toyota	Corolla	Aquamarine	5	Tuesday	6	2

Data output | Messages | Notifications

```
Successfully run. Total query runtime: 885 msec.
38 rows affected.
```

Lab2_Q10: Write an SQL query to find all parking events involving cars registered in Dublin (D) who did not park on the top level of the car park.

SQL Language: *SELECT * FROM cs130lab2 WHERE (car_reg Like '%-D-%') AND (parking_level !=3)*

Running result: *30 rows returned*

Messages | Query | Query History | Notifications

```
SELECT * FROM cs130lab2 WHERE (car_reg Like '%-D-%') AND (parking_level !=3)
```

Data output

	parking_id [PK] integer	car_reg character varying (50)	car_make character varying (50)	car_model character varying (50)	car_color character varying (50)	num_occupants integer	parking_day character varying (9)	parking_hours integer	parking_level integer
1	42	161-D-943	Cadillac	DeVille	Blue	1	Tuesday	4	2
2	71	12-D-744	Suzuki	Daewoo Lacetti	Maroon	3	Thursday	5	1
3	210	162-D-806	Nissan	Pathfinder	Red	1	Thursday	2	1
4	312	06-D-9240	Pontiac	Grand Prix	Green	5	Thursday	5	1
5	331	162-D-64293	BMW	Z4	Pink	1	Saturday	4	1

Messages | Query | Query History | Notifications

```
Successfully run. Total query runtime: 87 msec.
30 rows affected.
```

Lab2_Q11: Find all parking events involving cars whose registration start and end with the character 1 and the car make is either BMW or Chevrolet.

SQL Language: *SELECT * FROM cs130lab2 WHERE (car_reg Like '1%1') AND ((car_make='BMW' OR car_make='Chevrolet'))*

Running result: *24 rows returned*

Messages Query Query History Notifications

```
1  SELECT * FROM cs130lab2 WHERE (car_reg Like '1%1') AND ((car_make='BMW' OR car_make='Chevrolet'))
```

Data output

	parking_id [PK] integer	car_reg character varying (50)	car_make character varying (50)	car_model character varying (50)	car_color character varying (50)	num_occupants integer	parking_day character varying (9)	parking_hours integer	parking_level integer
1	252	12-WD-8131	Chevrolet	Express 3500	Aquamarine	5	Saturday	4	3
2	361	161-WD-7641	Chevrolet	Monte Carlo	Mauv	1	Sunday	6	1
3	381	132-WD-42331	BMW	1 Series	Green	6	Sunday	8	2
4	503	151-KK-951	Chevrolet	Corvette	Goldenrod	4	Friday	4	3
5	678	12-C-711	Chevrolet	Aveo	Violet	2	Wednesday	4	1

Messages Query Query History Notifications

```
Successfully run. Total query runtime: 214 msec.
24 rows affected.
```