

## SQL Queries

### Out of Country Transfers

1.

Assignment 6 que...ANNY\amann (68))

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-- OUT OF COUNTRY TRANSFERS
-- 1. What are the top five countries that people moved from to KING County?
-- Answer: Canada, Brazil, India, China and Germany

Select prior_country, COUNT(*) as Total_Transfers, county
from Driver_Licenses
where out_of_country_license_transfers = '1' and county= 'King'
group by prior_country, county
order by Total_Transfers desc
```

101 %

Results Messages

	prior_country	Total_Transfers	county
1	Canada	1371	King
2	Brazil	575	King
3	India	437	King
4	China	407	King
5	Germany	275	King

2.

```
-- 2. What are the top five countries that people moved from to Snohomish County?
-- Answer: Canada, Brazil, South Korea, Guam, India

Select prior_country, COUNT(*) as Total_Transfers, county
from Driver_Licenses
where out_of_country_license_transfers = '1' and county= 'Snohomish'
group by prior_country, county
order by Total_Transfers desc
```

101 %

Results Messages

	prior_country	Total_Transfers	county
1	Canada	173	Snohomish
2	Brazil	120	Snohomish
3	South Korea	53	Snohomish
4	Guam	47	Snohomish
5	India	42	Snohomish

3.

```
-- 3. What are the top five countries that people moved from to Pierce County?
-- Answer: American Samoa, Guam, Canada, South Korea, Puerto Rico

Select prior_country, COUNT(*) as Total_Transfers, county
from Driver_Licenses
where out_of_country_license_transfers = '1' and county= 'Pierce'
group by prior_country, county
order by Total_Transfers desc
```

101 %

Results Messages

	prior_country	Total_Transfers	county
1	American Samoa	229	Pierce
2	Guam	148	Pierce
3	Canada	77	Pierce
4	South Korea	45	Pierce
5	Puerto Rico	41	Pierce

4.

```
-- 4. What percentage of people from out of the country moved to KING County?
-- Answer: 57% of King County has foreigners from out of the country

select (count(prior_country) * 100 / (select count(prior_country) from driver_licenses where out_of_country_license_transfers = '1')) as Percentage_King
from driver_licenses
where out_of_country_license_transfers = '1' and county = 'King'
```

```
-- 5. Other than King, Snohomish and Pierce County, what are the next 3 most popular counties that people from out of the country register for a new license?
-- Answer: Clark (329 transfers), Whatcom (286 transfers) and Spokane (176 transfers)
```

101 %

Results Messages

	Percentage_King
1	57

5.

```
-- 5. Other than King, Snohomish and Pierce County, what are the next 3 most popular counties that people from out of the country register for a new license?
-- Answer: Clark (329 transfers), Whatcom (286 transfers) and Spokane (176 transfers)

select county, count(*) as Transfers_Count
from Driver_Licenses
where county not in ('Pierce', 'King', 'Snohomish') and out_of_country_license_transfers = '1' and county != 'Unknown'
group by county
order by Transfers_Count desc
```

101 %

Results Messages

	county	Transfers_Count
1	Clark	329
2	Whatcom	286
3	Spokane	176

6.

Max:

```
-- Which month and year have the most people transferred licenses/ids from out of the country? the least?
-- Answer: The max was in October, 2018 (514 transfers) and the least was in June, 2020 (28 transfers)

select month, year, count(out_of_country_license_transfers) as Num_Transfers
from Driver_Licenses
where out_of_country_license_transfers = '1'
group by month, year
order by Num_Transfers desc
```

101 %

Results Messages

	month	year	Num_Transfers
1	10	2018	514

Min:

26	6	2020	28
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Out of State Transfers:

1.

```
-- OUT OF STATE TRANSFERS
-- What are the top five states that people have moved from?
-- Answer: California (4498 transfers), Arizona( 1722 transfers) , Alaska (770 transfers), Alabama (236 transfers), Arkansas (200 transfers)

select prior_state, count(*) as Total_Transfers
from Driver_Licenses
where prior_state != 'Washington' and prior_state != 'Not Applicable'
group by prior_state
order by Total_Transfers desc
```

101 %

Results Messages

	prior_state	Total_Transfers
1	California	4498
2	Arizona	1722
3	Alaska	770
4	Alabama	236
5	Arkansas	200

2.

```
-- What are the top five states that people moved from to KING County?
-- Answer: California (1617 transfers), Arizona (425 transfers), Alaska (152 transfers), Alabama (66 transfers), Arkansas (55 transfers)

Select prior_state, count(*) as Total_Transfers, county
from Driver_Licenses
where prior_state != 'Washington' and prior_state != 'Not Applicable' and county='King'
group by prior_state, county
order by Total_Transfers desc
```

101 %

Results Messages

	prior_state	Total_Transfers	county
1	California	1617	King
2	Arizona	425	King
3	Alaska	152	King
4	Alabama	66	King
5	Arkansas	55	King

3.

```
-- What are the top five states that people moved from to Snohomish County?
-- Answer: California (312 transfers), Arizona (156 transfers), Alaska (60 transfers), Alabama (19 transfers), Arkansas (16 transfers)

Select prior_state, count(*) as Total_Transfers, county
from Driver_Licenses
where prior_state != 'Washington' and prior_state != 'Not Applicable' and county='Snohomish'
group by prior_state, county
order by Total_Transfers desc
```

101 %

Results Messages

	prior_state	Total_Transfers	county
1	California	312	Snohomish
2	Arizona	156	Snohomish
3	Alaska	60	Snohomish
4	Alabama	19	Snohomish
5	Arkansas	16	Snohomish

4.

```
-- What are the top five states that people moved from to Pierce County?
-- Answer: California (438 transfers), Arizona (204 transfers), Alaska (87 transfers), Alabama (33 transfers), Arkansas (31 transfers)

Select prior_state, count(*) as Total_Transfers, county
from Driver_Licenses
where prior_state != 'Washington' and prior_state != 'Not Applicable' and county='Pierce'
group by prior_state, county
order by Total_Transfers desc
```

101 %

Results Messages

	prior_state	Total_Transfers	county
1	California	438	Pierce
2	Arizona	204	Pierce
3	Alaska	87	Pierce
4	Alabama	33	Pierce
5	Arkansas	31	Pierce

5.

```
-- What percentage of people from out of state moved to KING County?
-- Answer: 31% of the people in King County are from out of the state

select (count(prior_state) * 100 / (select count(prior_state) from driver_licenses where prior_state != 'Washington' and prior_state != 'Not Applicable' )) as Percentage_King
from driver_licenses
where prior_state != 'Washington' and prior_state != 'Not Applicable' and county='King'
```

101 %

Results Messages

	Percentage_King
1	31

6.

```
-- Other than King, Snohomish and Pierce County, what are the next 3 most popular counties that people from out of state register for a new license?
-- Answer: Clark (607 transfers), Spokane (582 transfers), Thurston (312 transfers), Kitsap (296 transfers) and Whatcom (230 transfers)

select county, count(*) as Transfers_Count
from Driver_Licenses
where county not in ('Pierce', 'King', 'Snohomish') and prior_state != 'Washington' and prior_state != 'Not Applicable'
group by county
order by Transfers_Count desc
```

101 %

Results Messages

	county	Transfers_Count
1	Clark	607
2	Spokane	582
3	Thurston	312

7.

Max:

```
-- Which month and year have the most people transferred licenses/ids from out of the state? the least?
-- Answer: The most month/year is 10/2020 with 583 transfers and the least month/year is 5/2020 with 1 transfer

select month, year, count(prior_state) as Num_Transfers
from Driver_Licenses
where prior_state != 'Washington' and prior_state != 'Not Applicable'
group by month, year
order by Num_Transfers desc
```

101 %

Results Messages

	month	year	Num_Transfers
1	10	2020	583

Min:

27	5	2020	1
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1. The state of Washington has asked you to provide information on how to reallocate budget for the counties. You are being asked to create a classification system of up to 5 levels that assigns each county by transfer frequency for budget priority. What would that classification system look like? How would you classify each county into each level? Create a list showing the names of the counties and which level they would belong to.

The classification system is based on the highest to the lowest number of transfers for each county. The higher the level number or transfer number, the higher the priority is for budget allocation.

First, the data of the counties was extracted then organized and counted for, to divide them. Second, since there were 38 counties and 5 levels, I decided to include in each level at least 7 counties ( $38/5$ ) except the last one that has 8 counties.

Level 1 (from 1-7):

	county	num_transfers
1	King	7504
2	Pierce	1613
3	Snohomish	1418
4	Clark	936
5	Spokane	758
6	Whatcom	516
7	Thurston	485

Level 2 (from 8-15):

8	Kitsap	447
9	Benton	220
10	Yakima	199
11	Skagit	178
12	Clallam	166
13	Island	150
14	Cowlitz	115
15	Grant	109

Level 3 (16-22):

16	Whitman	108
17	Grays Harbor	98
18	Chelan	91
19	Franklin	83
20	Lewis	80
21	Mason	64
22	Walla Walla	59

#### Level 4 (23-29)

23	Jefferson	58
24	Stevens	54
25	Kititas	49
26	Douglas	39
27	Okanogan	39
28	San Juan	25
29	Klickitat	24

#### Level 5 (30-38)

30	Pacific	23
31	Asotin	16
32	Skamania	14
33	Lincoln	14
34	Adams	14
35	Pendoreille	13
36	Ferry	7
37	Columbia	3
38	Wahkiakum	2

2. The state would like to create a conference for Licensing Agencies to attend. Which two months of the year would be the best to have a conference with the least amount of transfers?

The best months for the conference are in April and May, when both the out-of-state and out-of-country transfers are low. By choosing any of those two months, the staff who will attend will be less stressed and can focus on the outcomes of the conference.

3. The state has some additional marketing budget that they would like to use to create brochures in the official or prominent language of the top 10 countries identified by your data. Locate the official language of those countries and the county/counties that the brochure should be sent to.

	Prior_Country	Total_Transfers	county
1	Canada	1371	King
2	Brazil	575	King
3	India	437	King
4	China	407	King
5	Germany	275	King
6	South Korea	253	King
7	Canada	233	Whatcom
8	American Samoa	229	Pierce
9	American Samoa	226	King
10	Canada	173	Snohomish
11	Japan	149	King
12	Guam	148	Pierce

Since many of the countries have languages in common with the US, we should focus on the following besides English:

- French in Snohomish, King, and Whatcom for Canada
- Portuguese in King for Brazil
- Hindu in King for India
- Samoan in King and Pierce for American Samoa
- Mandarin in King for China
- German in King for Germany
- Korean in King for South Korea
- Samoan in Pierce and King for American Samoa
- Japanese in King for Japan
- Chamorro in Pierce for Guam

By being able to cover a variety of languages, the state can ensure that their advertising brochures reach a greater audience.