Introduction

This is a simple analysis made in Postgres with a dataset of beers and breweries found on Kaggle:
https://www.kaggle.com/nickhould/craft-cans

Queries

#Display the number of offerings in descending order by state
SELECT br.state, count(b.name) AS "Number of Offerings"
FROM breweries AS br, beer AS b
WHERE b.brewery_id = br.brewery_id
GROUP BY br.state
ORDER BY "Number of Offerings" DESC;

	state character varying	Number of Offerings bigint
1	CO	265
2	CA	183
3	MI	162
4	IN	139
5	TX	130
6	OR	125
7	PA	100

#Display the number of breweries operating in each state and order by desc number
SELECT br.state, count(br.*) AS "Number of Breweries"
FROM breweries AS br
GROUP BY br.state
ORDER BY "Number of Breweries" DESC;

	state character varying	Number of Breweries bigint
1	CO	47
2	CA	39
3	MI	32
4	OR	29
5	TX	28
6	PA	25
7	WA	23

#Display the number of beers by style and provide the average style abv in desc order
SELECT b.style, COUNT(*) AS "Number of Beer Offerings", ROUND(AVG(b.abv),3) AS "Average Style ABV",
ROUND(AVG(b.ibu)) AS "Average Style IBUs"
FROM beer as b, breweries AS br
WHERE b.brewery_id = br.brewery_id
GROUP BY b.style
ORDER BY "Average Style ABV" DESC;

	style character varying	Number of Beer Offerings bigint	Average Style ABV numeric	Average Style IBUs numeric
1	English Barleywine	3	0.108	67
2	Quadrupel (Quad)	4	0.104	24
3	American Barleywine	3	0.099	96
4	American Malt Liquor	1	0.099	[null]
5	Russian Imperial Stout	11	0.098	87
6	American Double / Imp...	9	0.094	62
7	Tripel	11	0.087	24

#Display the number of beers by style and and provid average style abv, list in desc
#order of offerings

```
SELECT b.style, COUNT(*) AS "Number of Beer Offerings", ROUND(AVG(b.abv),3) AS
"Average Style ABV",
        ROUND(AVG(b.ibu)) AS "Average Style IBUs"
FROM beer as b, breweries AS br
WHERE b.brewery_id = br.brewery_id
GROUP BY b.style
ORDER BY "Number of Beer Offerings" DESC;
```

	style character varying	Number of Beer Offerings bigint	Average Style ABV numeric	Average Style IBUs numeric
1	American IPA	424	0.065	68
2	American Pale Ale (APA)	245	0.055	45
3	American Amber / Red ...	133	0.057	36
4	American Blonde Ale	108	0.050	21
5	American Double / Imp...	105	0.087	93
6	American Pale Wheat ...	97	0.048	21
7	American Brown Ale	70	0.058	30

```
#Display the number of beers by style and and provid average style abv, list in desc
#order of IBUs
SELECT b.style, COUNT(*) AS "Number of Beer Offerings", ROUND(AVG(b.abv),3) AS
"Average Style ABV",
        ROUND(AVG(b.ibu)) AS "Average Style IBUs"
FROM beer as b, breweries AS br
WHERE b.brewery_id = br.brewery_id
GROUP BY b.style
ORDER BY "Average Style IBUs" DESC;
```

style character varying	Number of Beer Offerings bigint	Average Style ABV numeric	Average Style IBUs numeric
American Barleywine	3	0.099	96
American Double / Imp...	105	0.087	93
Russian Imperial Stout	11	0.098	87
American Double / Imp...	2	0.078	85
Belgian Strong Dark Ale	6	0.084	72
American Black Ale	36	0.069	69
American IPA	424	0.065	68

```
#Display the beer style, number of offerings, and average abv grouped by style. Omit
#IPAs, pilsners, and lagers and display only groups with >= 10% abv
```

```
SELECT b.style, COUNT(*) AS "Number of Beer Offerings", ROUND(AVG(b.abv),3) AS
"Average Style ABV"
FROM beer as b, breweries AS br
WHERE b.brewery_id = br.brewery_id
AND b.id NOT IN
        (SELECT b.id
    FROM beer AS b
    WHERE b.style LIKE '%IPA'
        OR b.style LIKE '%Lager'
        OR b.style LIKE '%Pilsner'
        OR b.style LIKE '%India Pale Ale'
        OR b.style LIKE '%Pilsener')
GROUP BY b.style
HAVING COUNT(*) >= 10
ORDER BY "Number of Beer Offerings" DESC;
```

	style character varying	Number of Beer Offerings bigint	Average Style ABV numeric
1	American Pale Ale (APA)	245	0.055
2	American Amber / Red …	133	0.057
3	American Blonde Ale	108	0.050
4	American Pale Wheat …	97	0.048
5	American Brown Ale	70	0.058
6	American Porter	68	0.060
7	Saison / Farmhouse Ale	52	0.061

```
#Break the breweries down by region (West, Midwest, Southwest, Southeast, Northeast)
#and display the number of breweries in each region
SELECT *
FROM
        (
        SELECT COUNT(br.*) AS "West"
        FROM breweries AS br
        WHERE br.state LIKE '%AK%'
        OR br.state LIKE '%HI%'
        OR br.state LIKE '%WA%'
        OR br.state LIKE '%OR%'
        OR br.state LIKE '%CA%'
        OR br.state LIKE '%NV%'
        OR br.state LIKE '%ID%'
```

```
OR br.state LIKE '%MT%'
OR br.state LIKE '%WY%'
OR br.state LIKE '%CO%'
OR br.state LIKE '%UT%'
) AS "West",
(
SELECT COUNT(br.*) AS "Southwest"
FROM breweries AS br
WHERE br.state LIKE '%AZ%'
OR br.state LIKE '%NM%'
OR br.state LIKE '%TX%'
OR br.state LIKE '%OK%'
) AS "Southwest",
(
SELECT COUNT(br.*) AS "Midwest"
FROM breweries AS br
WHERE br.state LIKE '%ND%'
OR br.state LIKE '%SD%'
OR br.state LIKE '%NE%'
OR br.state LIKE '%KS%'
OR br.state LIKE '%MN%'
OR br.state LIKE '%IA%'
OR br.state LIKE '%MO%'
OR br.state LIKE '%WI%'
OR br.state LIKE '%IL%'
OR br.state LIKE '%MI%'
OR br.state LIKE '%OH%'
OR br.state LIKE '%IN%'
) AS "Midwest",
(
SELECT COUNT(br.*) AS "Southeast"
FROM breweries AS br
WHERE br.state LIKE '%AR%'
OR br.state LIKE '%LA%'
OR br.state LIKE '%MS%'
OR br.state LIKE '%KY%'
OR br.state LIKE '%TN%'
OR br.state LIKE '%AL%'
OR br.state LIKE '%FL%'
OR br.state LIKE '%GA%'
OR br.state LIKE '%SC%'
OR br.state LIKE '%NC%'
OR br.state LIKE '%VA%'
OR br.state LIKE '%WV%'
```

```
OR br.state LIKE '%DC%'
OR br.state LIKE '%MD%'
OR br.state LIKE '%DE%'
) AS "Southeast",
(
SELECT COUNT(br.*) AS "Northeast"
FROM breweries AS br
WHERE br.state LIKE '%PA%'
OR br.state LIKE '%NJ%'
OR br.state LIKE '%NY%'
OR br.state LIKE '%CT%'
OR br.state LIKE '%RI%'
OR br.state LIKE '%MA%'
OR br.state LIKE '%VT%'
OR br.state LIKE '%NH%'
OR br.state LIKE '%ME%'
) AS "Northeast";
```

West bigint	Southwest bigint	Midwest bigint	Southeast bigint	Northeast bigint
173	49	143	91	102

```
#Display the number of offerings by bottle size
SELECT b.ounces, COUNT(*) AS "Number Available"
FROM beer AS b
GROUP BY b.ounces;
```

	ounces numeric	Number Available bigint
1	8.4	1
2	16	841
3	12	1525
4	19.2	15
5	16.9	1
6	24	22
7	32	5

```
#Display the name, number of offerings, and average abv for each brewery and
#list in desc order of offerings
SELECT br.name, COUNT(b.id) AS "Number of Offerings", ROUND(AVG(b.abv),3) AS
"Average ABV"
FROM breweries AS br, beer AS b
WHERE br.brewery_id = b.brewery_id
GROUP BY br.name
ORDER BY "Number of Offerings" DESC;
```

	name character varying	Number of Offerings bigint	Average ABV numeric
1	Brewery Vivant	62	0.070
2	Oskar Blues Brewery	46	0.074
3	Sun King Brewing Com…	38	0.069
4	Cigar City Brewing Co…	25	0.063
5	Sixpoint Craft Ales	24	0.064
6	Hopworks Urban Brew…	23	0.049
7	Stevens Point Brewery	22	0.051