

18 jul 2023

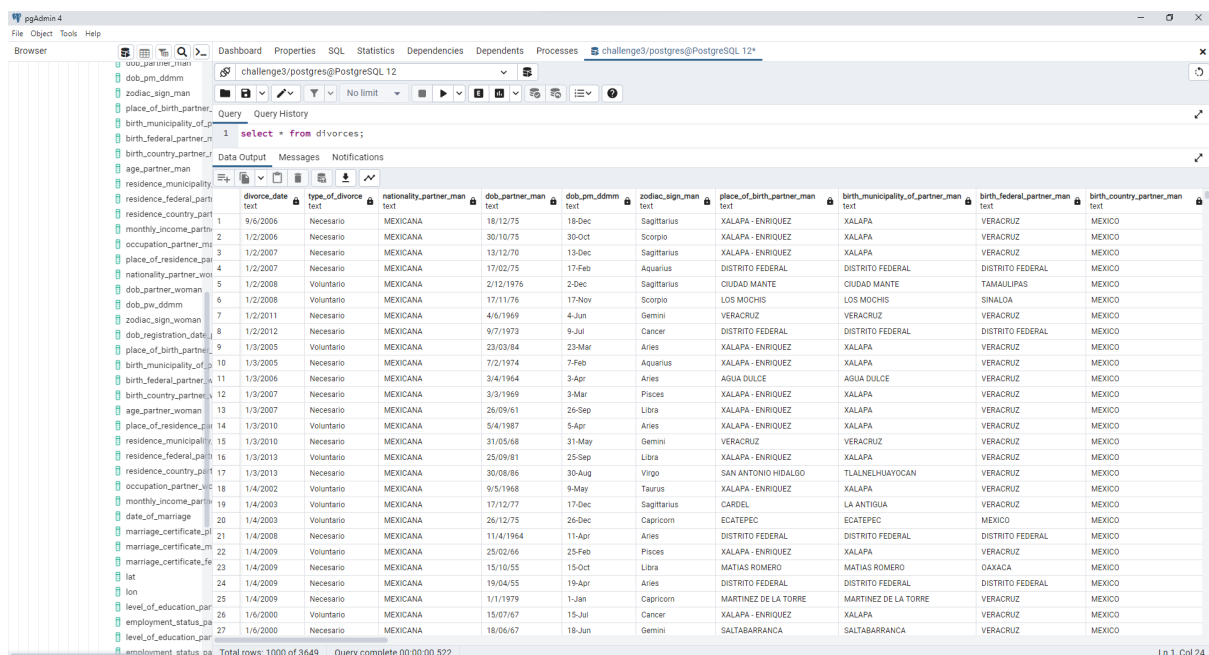
Project 3 - Proposal

The topic

Our chosen topic is “Analyzing Astrological Influence on Divorce Rates”. In other words, Astrology claims that certain signs are compatible in romantic relationships while others are not, but, can this be proven with the rate of divorces in our dataset? Which combination of signs most leads to divorce? Which combination is most/least likely to divorce? (Does Astrology have claims/warnings about this particular pair?) Which sign of a man/woman is most common to divorce? Which signs are the most educated?

Our database also contained demographic data which we chose to explore to answer some of our questions: At what age the divorce rate is the most common? Does the scholarization level have any impact? Where do most of these divorces happen? For this last one we were really interested in showing a map.

The database



The screenshot shows the pgAdmin 4 interface. The SQL query editor contains the following query:

```
1 select * from divorces;
```

The query results are displayed in a table with the following columns:

divorce_date	type_of_divorce	nationality_partner_man	dob_partner_man	dob_pm_ddmm	zodiac_sign_man	place_of_birth_partner_man	birth_municipality_of_partner_man	birth_federal_partner_man	birth_country_partner_man
9/6/2006	Necesario	MEXICANA	18/12/75	18-Dec	Sagittarius	XALAPA - ENRIQUEZ	XALAPA	VERACRUZ	MEXICO
1/2/2006	Necesario	MEXICANA	30/10/75	30-Oct	Scorpio	XALAPA - ENRIQUEZ	XALAPA	VERACRUZ	MEXICO
1/2/2007	Necesario	MEXICANA	13/12/70	13-Dec	Sagittarius	XALAPA - ENRIQUEZ	XALAPA	VERACRUZ	MEXICO
1/2/2007	Necesario	MEXICANA	17/02/75	17-Feb	Aquarius	DISTRITO FEDERAL	DISTRITO FEDERAL	DISTRITO FEDERAL	MEXICO
1/2/2008	Voluntario	MEXICANA	2/12/1976	2-Dec	Sagittarius	CIUDAD MANTE	CIUDAD MANTE	TAMAULIPAS	MEXICO
1/2/2008	Voluntario	MEXICANA	17/11/76	17-Nov	Scorpio	LOS MOCHIS	LOS MOCHIS	SINALOA	MEXICO
1/2/2011	Necesario	MEXICANA	4/6/1969	4-Jun	Gemini	VERACRUZ	VERACRUZ	VERACRUZ	MEXICO
1/2/2012	Necesario	MEXICANA	9/7/1973	9-Jul	Cancer	DISTRITO FEDERAL	DISTRITO FEDERAL	DISTRITO FEDERAL	MEXICO
1/3/2005	Voluntario	MEXICANA	23/03/84	23-Mar	Aries	XALAPA - ENRIQUEZ	XALAPA	VERACRUZ	MEXICO
1/3/2005	Necesario	MEXICANA	7/2/1974	7-Feb	Aquarius	XALAPA - ENRIQUEZ	XALAPA	VERACRUZ	MEXICO
1/3/2006	Necesario	MEXICANA	3/4/1964	3-Apr	Aries	AGUA DULCE	AGUA DULCE	VERACRUZ	MEXICO
1/3/2007	Necesario	MEXICANA	3/3/1969	3-Mar	Pisces	XALAPA - ENRIQUEZ	XALAPA	VERACRUZ	MEXICO
1/3/2010	Necesario	MEXICANA	26/09/61	26-Sep	Libra	XALAPA - ENRIQUEZ	XALAPA	VERACRUZ	MEXICO
1/3/2010	Voluntario	MEXICANA	5/4/1987	5-Apr	Aries	XALAPA - ENRIQUEZ	XALAPA	VERACRUZ	MEXICO
1/3/2013	Necesario	MEXICANA	31/05/68	31-May	Gemini	VERACRUZ	VERACRUZ	VERACRUZ	MEXICO
1/3/2013	Voluntario	MEXICANA	25/09/81	25-Sep	Libra	XALAPA - ENRIQUEZ	XALAPA	VERACRUZ	MEXICO
1/3/2013	Necesario	MEXICANA	30/08/86	30-Aug	Virgo	SAN ANTONIO HIDALGO	TLALNELHUAYOCAN	VERACRUZ	MEXICO
1/4/2002	Voluntario	MEXICANA	9/5/1968	9-May	Taurus	XALAPA - ENRIQUEZ	XALAPA	VERACRUZ	MEXICO
1/4/2003	Voluntario	MEXICANA	17/12/77	17-Dec	Sagittarius	CARDEL	LA ANTIGUA	VERACRUZ	MEXICO
1/4/2003	Voluntario	MEXICANA	26/12/75	26-Dec	Capricorn	ECATEPEC	ECATEPEC	MEXICO	MEXICO
1/4/2008	Necesario	MEXICANA	11/4/1964	11-Apr	Aries	DISTRITO FEDERAL	DISTRITO FEDERAL	DISTRITO FEDERAL	MEXICO
1/4/2009	Voluntario	MEXICANA	25/02/66	25-Feb	Pisces	XALAPA - ENRIQUEZ	XALAPA	VERACRUZ	MEXICO
1/4/2009	Necesario	MEXICANA	15/10/55	15-Oct	Libra	MATIAS ROMERO	MATIAS ROMERO	OAXACA	MEXICO
1/4/2009	Necesario	MEXICANA	19/04/55	19-Apr	Aries	DISTRITO FEDERAL	DISTRITO FEDERAL	DISTRITO FEDERAL	MEXICO
1/4/2009	Necesario	MEXICANA	1/1/1979	1-Jan	Capricorn	MARTINEZ DE LA TORRE	MARTINEZ DE LA TORRE	VERACRUZ	MEXICO
1/6/2000	Voluntario	MEXICANA	15/07/67	15-Jul	Cancer	XALAPA - ENRIQUEZ	XALAPA	VERACRUZ	MEXICO
1/6/2000	Necesario	MEXICANA	18/06/67	18-Jun	Gemini	SALTABARRANCA	SALTABARRANCA	VERACRUZ	MEXICO

The status bar at the bottom indicates: Total rows: 1000 of 3649. Query complete 00:00:00.522. Ln 1, Col 24.

Image 1: Using SQL for our database

The inspiration:

1. Which Sign (for man and woman) divorces the most. Bar chart, frequency of each zodiac.

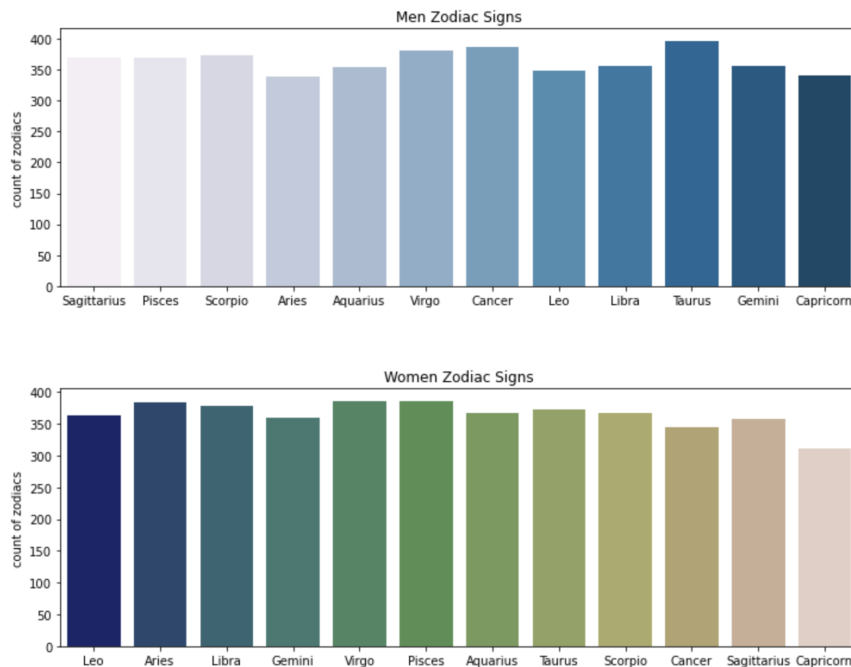


Image 2: Inspiration #1

2. Testing the astrological claims on compatibility with Divorce data cases in Xalapa, Veracruz, Mexico. We will do this by researching the most compatible signs according to Astrology and comparing that to the results of our data and seeing if those “compatible” signs result in fewer divorces. And vice versa with least “compatible signs”. / Which pair combination of Horoscope signs has the highest rate of divorce? Since there are 12 Horoscope signs, there are 144 possible combinations.

	Aries	Taurus	Gemini	Cancer	Leo	Virgo	Libra	Scorpio	Sagittarius	Capricorn	Aquarius	Pisces
Aries	50%	38%	83%	42%	97%	63%	85%	50%	93%	47%	78%	67%
Taurus	38%	65%	33%	97%	73%	90%	65%	88%	30%	98%	58%	85%
Gemini	83%	33%	60%	65%	88%	68%	93%	28%	60%	68%	85%	53%
Cancer	42%	97%	65%	75%	35%	90%	43%	94%	53%	83%	27%	98%
Leo	97%	73%	88%	35%	45%	35%	97%	58%	93%	35%	68%	38%
Virgo	63%	90%	68%	90%	35%	65%	68%	88%	48%	95%	30%	88%
Libra	85%	65%	93%	43%	97%	68%	75%	35%	73%	55%	90%	88%
Scorpio	50%	88%	28%	94%	58%	88%	35%	80%	28%	95%	73%	97%
Sagittarius	93%	30%	60%	53%	93%	48%	73%	28%	45%	60%	90%	63%
Capricorn	47%	98%	68%	83%	35%	95%	55%	95%	60%	75%	68%	88%
Aquarius	78%	58%	85%	27%	68%	30%	90%	73%	90%	68%	45%	45%
Pisces	67%	85%	53%	98%	38%	88%	88%	97%	63%	88%	45%	60%

Image 3: Inspiration #2

- Incorporate the longitude and latitude of divorces in a map. Since we have a lot of location data, we wanted to explore how does the divorces were spread across a map, we used this as an inspiration:

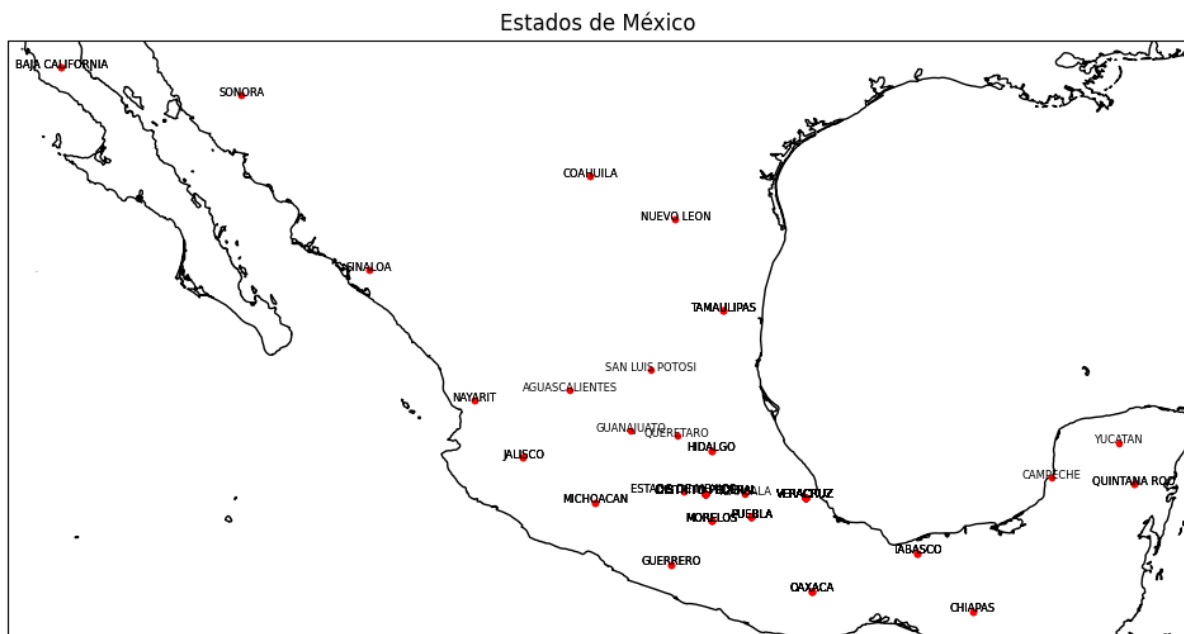


Image 4: Inspiration #3

Sketch of our final design

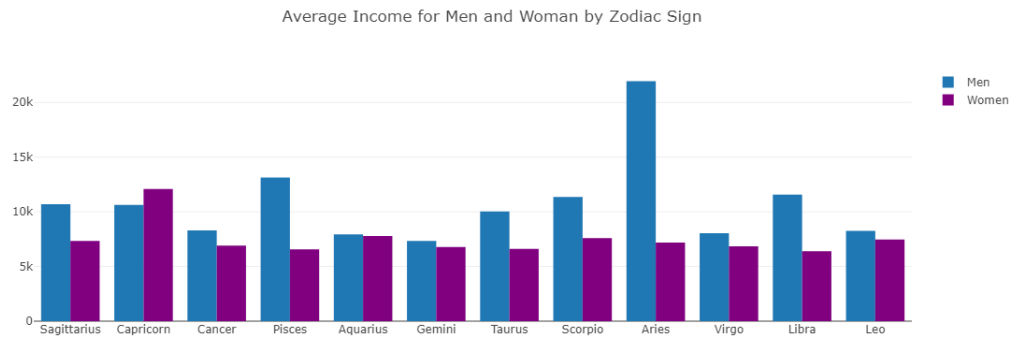


Image 5: Final sketch #1

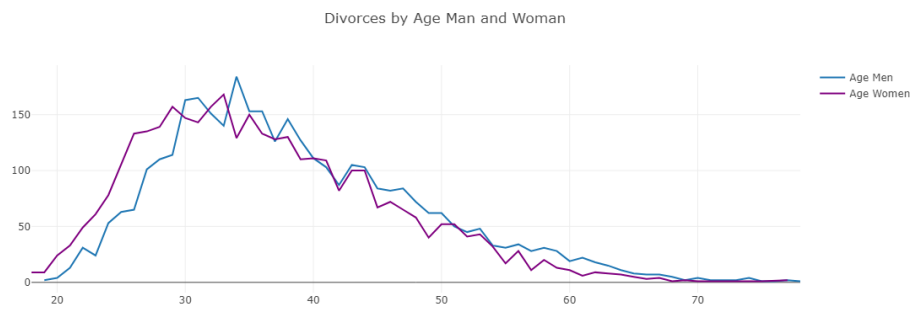


Image 6: Final sketch #2

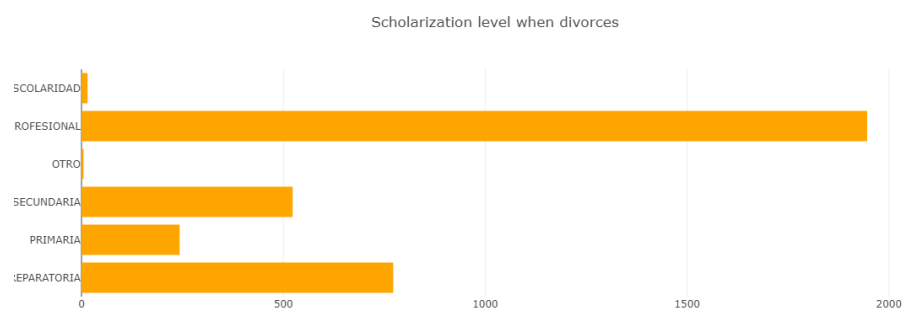


Image 7: Final sketch #3

Link to the primary GitHub repository: https://github.com/OlivaVe/project3_team7