Number of Graduated Students From 2013 to 2017

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Introduction :

This dataset is about the number of graduated students between 2013 to 2017 at Saudi Arabia universities in different majors .

This data was retrieved from ministry of education on July 4th, 2019.

The idea of this project is to know the most common majors in KSA universities

For students who have been graduated during 2013 - 2017

Goal:

The project focus on finding out the most common majors in KSA universities that have been chosen by students during 2013 to 2017. Once we determine the top five majors and define in which regions, we will establish bootcamps training to help the students in those regions to be ready for their future job and help them to have a good career.

Data Structure

This is a simple overview of the data structure, in which the names of the columns and some rows are explained Columns 10 , Rows: 2998

Before cleaning the data :

Out[172]:

	academic year	Educational level	Study level	Administrative Region	Educational	Detailed area	school system	gender	Nationality	the number
0	01/12/16	Bachelor's	Bachelor's	Patio	Al Baha university	Biology	regular	Male	Saudi	27
1	01/12/16	Bachelor's	Bachelor's	Riyadh	University collected	Religion and Religions	regular	feminine	Saudi	63
2	01/12/17	Bachelor's	Bachelor's	Patio	Al Baha university	Literature and Languages	Affiliate	Male	Saudi	3
3	01/12/16	Bachelor's	Bachelor's	difficult	University of Bisha	Develop and analyze software and applications	regular	Male	Saudi	17
4	01/12/15	Bachelor's	Bachelor's	Makkah	Taif University	Management and management	regular	feminine	Non-Saudi	8
...										
2993	01/12/17	Postgraduate	Master's	Riyadh	King Saud bin Abdulaziz Health Sciences	Management and management	regular	feminine	Saudi	13
2994	01/12/17	Bachelor's	Bachelor's	Makkah	Umm Al Qura University	Law	regular	Male	Saudi	205
2995	01/12/17	Bachelor's	Bachelor's	Makkah	King Abdulaziz University	Political Science and Civil Education	regular	Male	Saudi	29
2996	01/12/13	Bachelor's	Bachelor's	Tabuk	Tabouk university	Accounting and taxes	regular	feminine	Saudi	18
2997	01/12/17	Bachelor's	Bachelor's	Makkah	Umm Al Qura University	Rehabilitation and rehabilitation	regular	Male	Non-Saudi	3

2998 rows × 10 columns

Data Structure

After cleaning the data

	Year	Study level	Administrative Region	University	Major	gender	Nationality	Number_of_graduates
0	01/12/16	Bachelor's	AL Baha	Al Baha university	Biology	Male	Saudi	27
1	01/12/16	Bachelor's	Riyadh	University collected	Religion and Religions	Female	Saudi	63
2	01/12/17	Bachelor's	AL Baha	Al Baha university	Literature and Languages	Male	Saudi	3
3	01/12/16	Bachelor's	Asir	University of Bisha	Develop and analyze software and applications	Male	Saudi	17
4	01/12/15	Bachelor's	Makkah	Taif University	Administration and management	Female	Non-Saudi	8
...	...	...	...	...	...	...	...	....
2993	01/12/17	Master's	Riyadh	King Saud bin Abdulaziz Health Sciences	Administration and management	Female	Saudi	13
2994	01/12/17	Bachelor's	Makkah	Umm Al Qura University	Law	Male	Saudi	205
2995	01/12/17	Bachelor's	Makkah	King Abdulaziz University	Political Science and Civil Education	Male	Saudi	29
2996	01/12/13	Bachelor's	Tabuk	Tabouk university	Accounting and taxes	Female	Saudi	18
2997	01/12/17	Bachelor's	Makkah	Umm Al Qura University	Rehabilitation and rehabilitation	Male	Non-Saudi	3

Data Cleaning :

Delete Two Columns :

I deleted two columns because it was not needed .

Name columns [Educational level , school system].

Edit Column Names :

Editing some wrong names because the data is translated from Arabic to English

Names of the columns that have been modified

Educational (University) , Detailed area (Major)

the number (Number_of_graduates) academic year (Year)

Data Cleaning :

Edit Values Names :

Some values for spelling errors For example, the word female is misspelled

Other examples of changes :

Management and management After modification Administration and management .

Patio After modification AL Baha , difficult After modification Asir.

Edit Dtypes :

Edited the year from object to datetime .

Edited the Number_of_graduates from object to integer .

Data Analysis

I analyzed each year separately to find out the most common specialties. I am also interested in knowing the administrative areas

The Most Common Majors With Graduated Students in KSA- 2013 :

1-Training teachers without special subject

2-Psychology

3- Training teachers with specialty

4-Administration and management

5- Literature and Languages

The Most Common Majors With Graduated Students in KSA-2014 :

1-Training teachers without special subject

2-Law

3-Training teachers

3- Language acquisition

5- Teacher training

Data Analysis

The Most Common Majors With Graduated Students in KSA-2015:

1- Marketing and advertising

2- Meeting and cultural studies

3- psychology

4- Administration and management

5- Religion and Religions

The Most Common Majors With Graduated Students in KSA-2016:

1-Language acquisition

2- Training teachers without special subject

3- Administration and management

4- Social services and guidance

5- Law
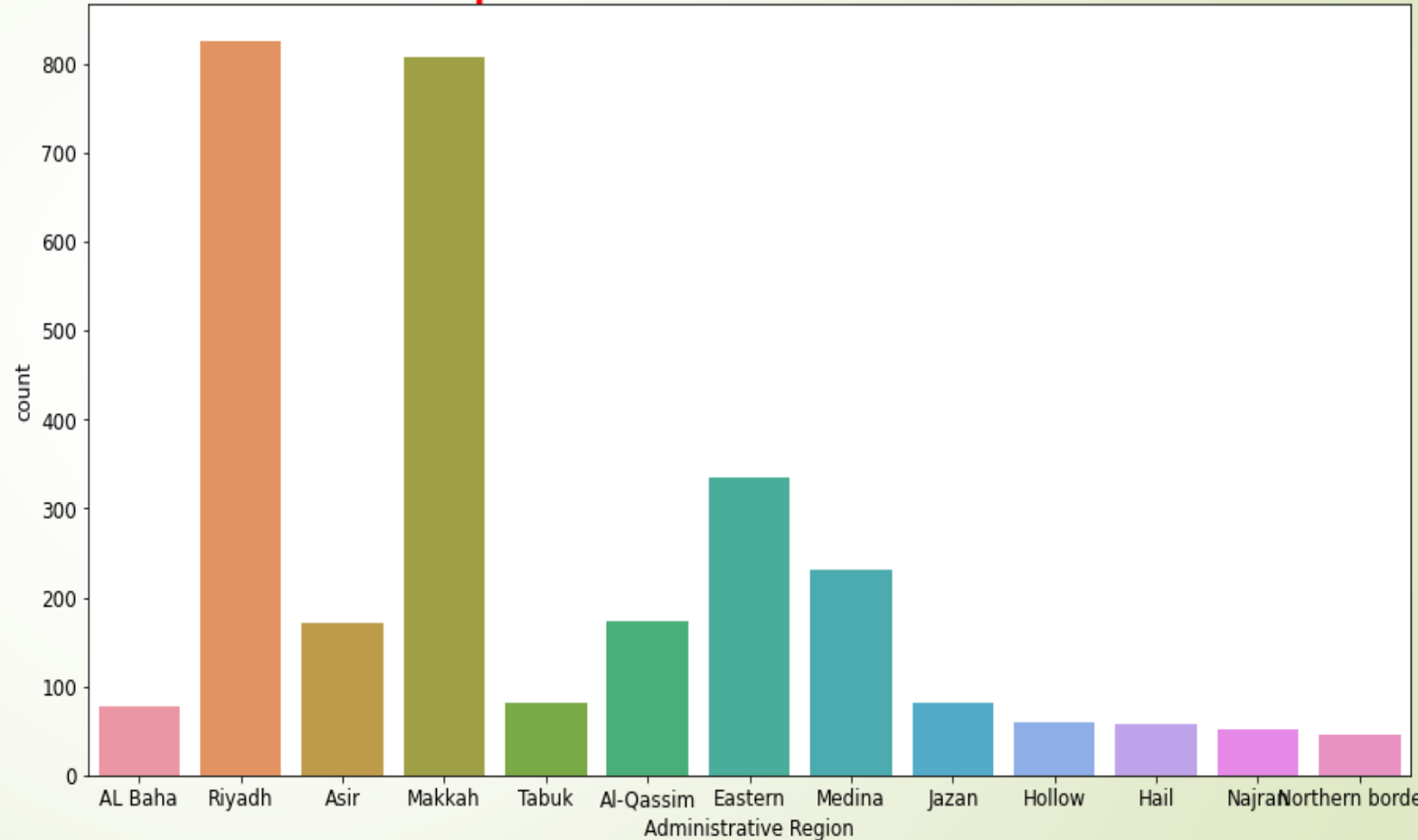
Data Analysis

The best administrative regions in terms of preparing graduates

1- Riyadh

2- Makkah

3- Eastern

4- Medina

5- Al-Qassim

Comparison of universities

Consclusion

The figure shows us that Riyadh, Makkah, Eastern, Madinah, Al-Qassim regions have more graduated students comparing to other regions in Saudi Arabia.

As a result, we will focus our effort to establish the bootcamps in those regions because the numbers of graduated students.