EDA Student at University in KSA

Abstract:

In the framework of working to achieve Vision 2030, the Ministry of Human Resources wishes to employ newly graduated students from universities in the Kingdom of Saudi Arabia to fill jobs available in the country. Knowledge of preparing students in the most important disciplines. The Department of Data Scientists was asked to conduct a study on the data of students graduating in universities, including all disciplines at the university. And preparing a report on the results in order to develop a cooperation strategy with the Ministry of Education to keep pace with the development in new disciplines at the world level and to provide human cadres in the newly created jobs.

Design:

This project was analyzed by number student in univestiy The aim of this project is to know the most specialized specializations in the preparation of students in recent years and compare them with vacant jobs in the country. Learn about the most growing specialties in the last five years This analysis is recommended annually between the Ministry of Education and the Ministry of Resources and Human Development to identify new jobs, equip human resources, keep pace with global development and contribute to the 2030 vision. Focus on King Faisal University and develop new specialties The result were presented in graphic images that easily simulate this information's.

Data:

The data set is about number of enrolled university students by field of study in Saudi Arabia 2013-2018 The dataset provided by Saudi open data Type of data (TEXT, INT) Size of data (15*67983) Rows (67983) Columns (15) Name columns used (Year, number of students, Region, University Name, field, Specialization, gender, Academic level, Nationality, Education type, type of educational institution) Name columns do not need (Educational level, type of university, state, general field)

Algorithms:

- Read Data

2- Check if there is missing values (for numerical calculate the mean, and for

categorical the mode).

3- Transformation (Data transformation is a method to change the structure, format,

and value of the data so that our data become more accessible for analysis.)

4- Visualization:

• outlier detection in numerical

• show some Categorical features

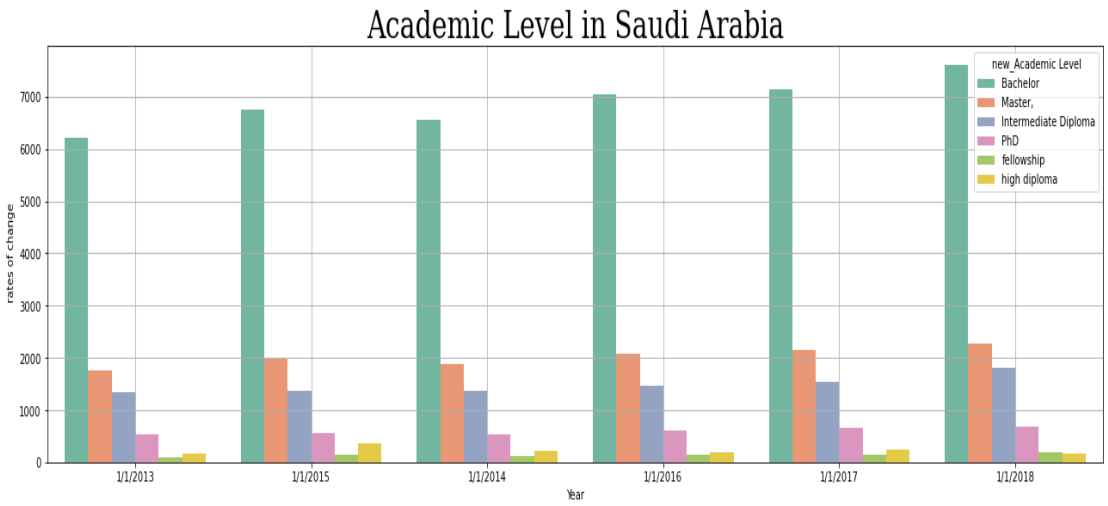
• Answer multiple questions:

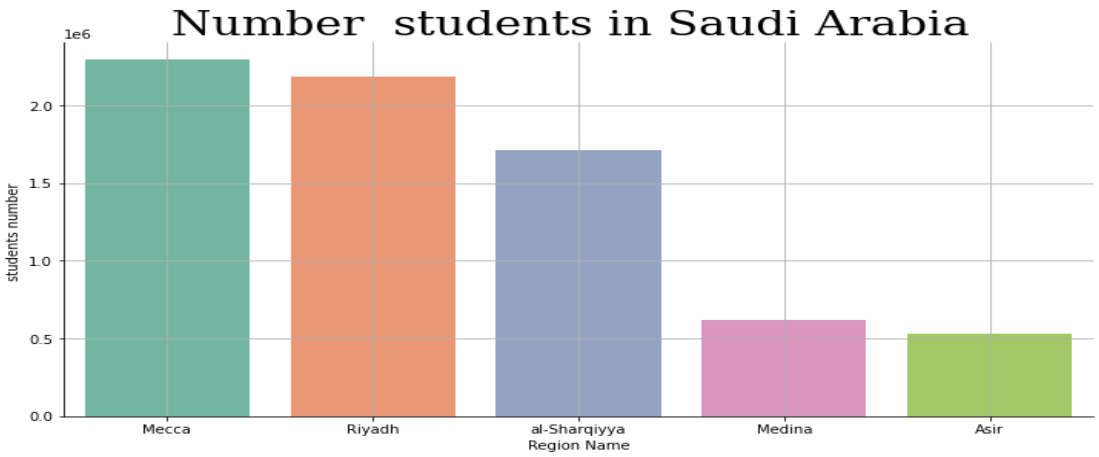
- Number of BSc., master's degree, Diploma, and PHD graduate Students according to the years?
- Number of graduate students according to the gender of study?
- Sorting graduate students according to the university?
- Sorting number of students according to the field of study?

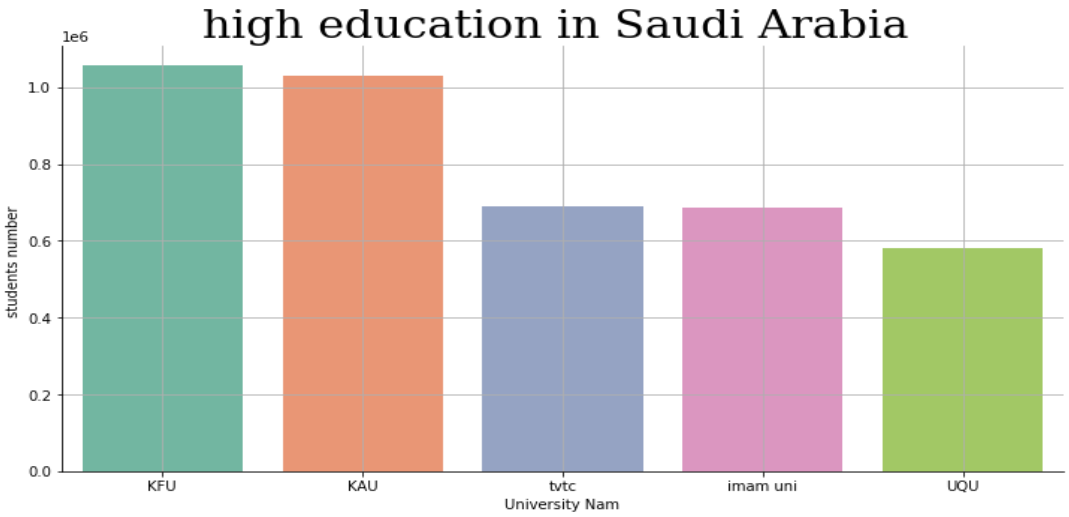
Tools:

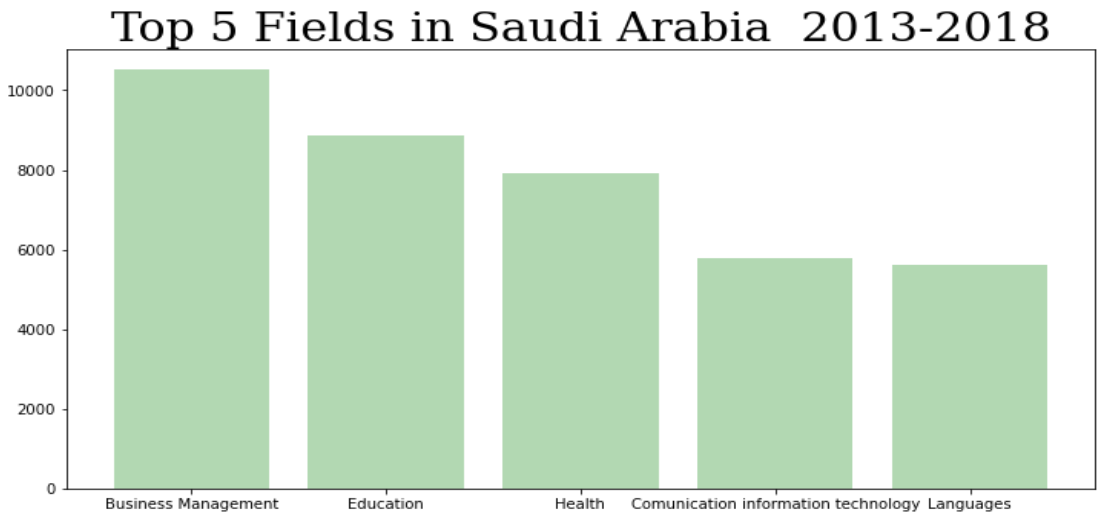
- Programs: SQLite, Jupyter
- Libraries: Pandas, NumPy, Seaborn and Matplotlib.
- Plots: pie plot, Histogram

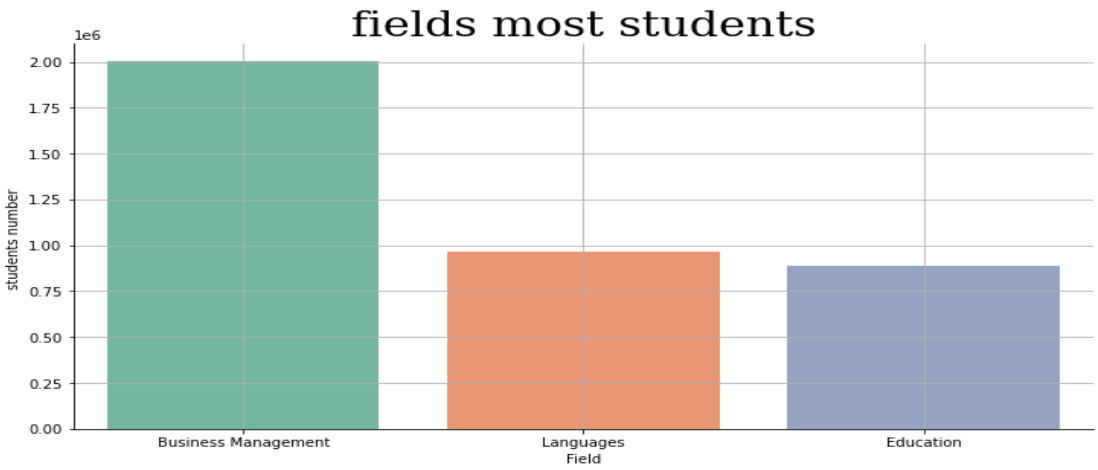
Communications

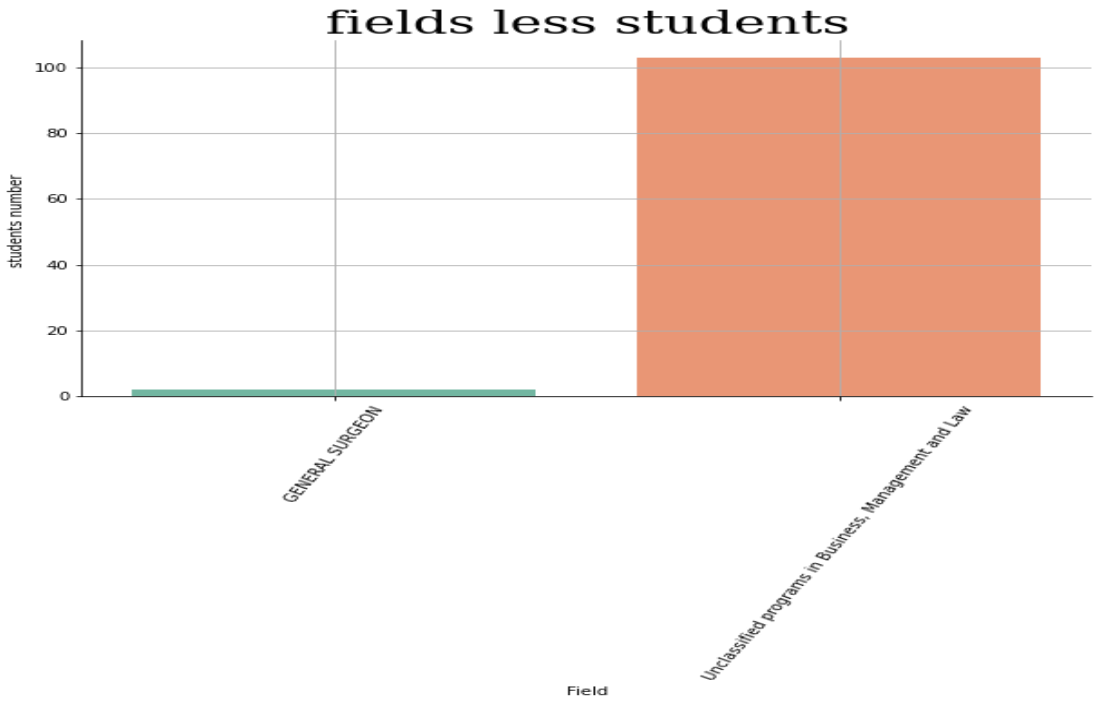



Number students in Saudi Arabia
1e6
2.0
1.5
1.0
0.5
0.0
students number
Mecca
Riyadh
al-Sharqiyya
Medina
Asir
Region Name

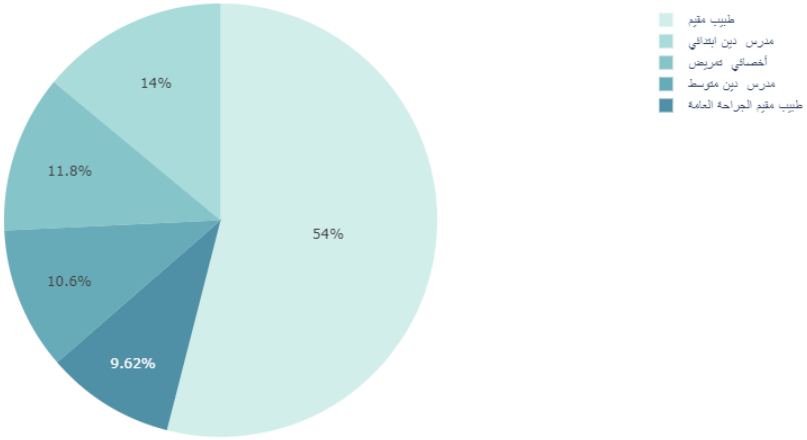

high education in Saudi Arabia
1e6
1.0
0.8
0.6
0.4
0.2
0.0
students number
KFU
KAU
tvtc
imam uni
UQU
University Nam


Top 5 Fields in Saudi Arabia 2013-2018
10000
8000
6000
4000
2000
0
Business Management
Education
Health
Comunication information technology
Languages





Most jobs in KSA 2016


طبيب مقيم
مدرس دين ابتدائي
أخصائي ممريض
مدرس دين متوسط
طبيب مقيم الجراحة العامة
14%
11.8%
10.6%
9.62%
54%