```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

```
df=pd.read_csv("/content/Asia top 100 Universities.csv")
```

```
df
```

	name	world_ranking	asia_ranking	contry_ranking	country	city	type	acce
0	Ankara University	#581 / 14,131	#95 / 5,830	#3 / 175	Turkey	Ankara	Non-profit	
1	Bar-Ilan University	#480 / 14,131	#71 / 5,830	#6 / 36	Israel	Ramat Gan	Non-profit	
2	Beihang University	#412 / 14,131	#56 / 5,830	#29 / 960	China	Beijing	Non-profit	
3	Beijing Institute of Technology	#472 / 14,131	#68 / 5,830	#34 / 960	China	Beijing	Non-profit	
4	Beijing Normal University	#336 / 14,131	#43 / 5,830	#21 / 960	China	Beijing	Non-profit	
...	...	...	...	...	...	...	...	
95	Xiamen University	#358 / 14,131	#46 / 5,830	#24 / 960	China	Xiamen	Non-profit	
96	Xi'an Jiaotong University	#290 / 14,131	#33 / 5,830	#15 / 960	China	Xi'an	Non-profit	
97	Yonsei University	#293 / 14,131	#34 / 5,830	#2 / 193	South Korea	Seoul	For-profit	
98	Zhejiang University	#109 / 14,131	#7 / 5,830	#3 / 960	China	Hangzhou	Non-profit	
99	Zhengzhou University	#506 / 14,131	#78 / 5,830	#36 / 960	China	Zhengzhou	Non-profit	

100 rows × 14 columns

```
df.isnull().sum()
```

```
name             0
world_ranking    0
```

```
asia_ranking      0
contry_ranking    0
country           0
city              0
type              5
acceptance_rat    0
publication       0
high_degree       2
web               8
language          2
Unnamed: 12       1
Unnamed: 13       0
dtype: int64
```

```
df.dropna(subset=["type"],inplace=True)
```

```
df.dropna(subset=["high_degree"],inplace=True)
```

```
df.dropna(subset=["web"],inplace=True)
```

```
df.dropna(subset=["language"],inplace=True)
```

```
df.dropna(subset=["Unnamed: 12"],inplace=True)
```

```
df.isnull().sum()
```

```
name              0
world_ranking     0
asia_ranking      0
contry_ranking    0
country           0
city              0
type              0
acceptance_rat    0
publication       0
high_degree       0
web               0
language          0
Unnamed: 12       0
Unnamed: 13       0
dtype: int64
```

```
df.head()
```

```
df
```

	name	world_ranking	asia_ranking	contry_ranking	country	city	type	acce
0	Ankara University	#581 / 14,131	#95 / 5,830	#3 / 175	Turkey	Ankara	Non-profit	
1	Bar-Ilan University	#480 / 14,131	#71 / 5,830	#6 / 36	Israel	Ramat Gan	Non-profit	
2	Beihang University	#412 / 14,131	#56 / 5,830	#29 / 960	China	Beijing	Non-profit	
3	Beijing Institute of Technology	#472 / 14,131	#68 / 5,830	#34 / 960	China	Beijing	Non-profit	
5	Ben-Gurion University of the Negev	#395 / 14,131	#54 / 5,830	#5 / 36	Israel	Beersheba	Non-profit	
...	...	...	...	...	...	...	...	
95	Xiamen University	#358 / 14,131	#46 / 5,830	#24 / 960	China	Xiamen	Non-profit	
96	Xi'an Jiaotong University	#290 / 14,131	#33 / 5,830	#15 / 960	China	Xi'an	Non-profit	
97	Yonsei University	#293 / 14,131	#34 / 5,830	#2 / 193	South Korea	Seoul	For-profit	
98	Zhejiang University	#109 / 14,131	#7 / 5,830	#3 / 960	China	Hangzhou	Non-profit	
99	Zhengzhou University	#506 / 14,131	#78 / 5,830	#36 / 960	China	Zhengzhou	Non-profit	

83 rows × 14 columns

```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
Int64Index: 83 entries, 0 to 99
Data columns (total 14 columns):
 #   Column          Non-Null Count  Dtype 
---  ------          --------------  ----- 
 0   name            83 non-null     object
 1   world_ranking   83 non-null     object
 2   asia_ranking    83 non-null     object
 3   contry_ranking  83 non-null     object
 4   country         83 non-null     object
 5   city            83 non-null     object
```

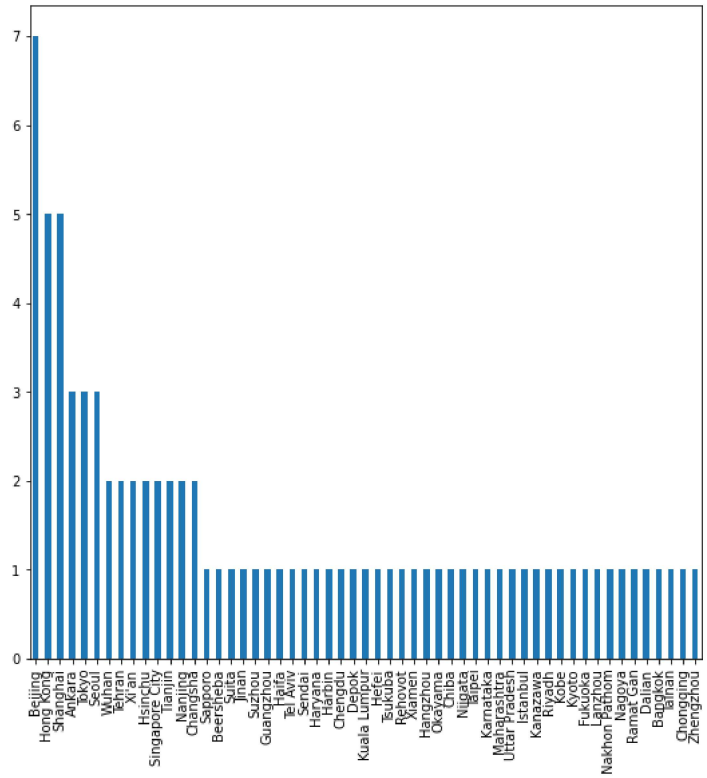
```
 6   type            83 non-null     object
 7   acceptance_rat  83 non-null     object
 8   publication     83 non-null     object
 9   high_degree     83 non-null     object
 10  web             83 non-null     object
 11  language        83 non-null     object
 12  Unnamed: 12     83 non-null     object
 13  Unnamed: 13     83 non-null     object
dtypes: object(14)
memory usage: 9.7+ KB
```

```
df.describe()
```

	name	world_ranking	asia_ranking	contry_ranking	country	city	type	ac
count	83	83	83	83	83	83	83	
unique	83	83	83	83	13	55	2	
top	Ankara University	#581 / 14,131	#95 / 5,830	#3 / 175	China	Beijing	Non-profit	
freq	1	1	1	1	39	7	81	

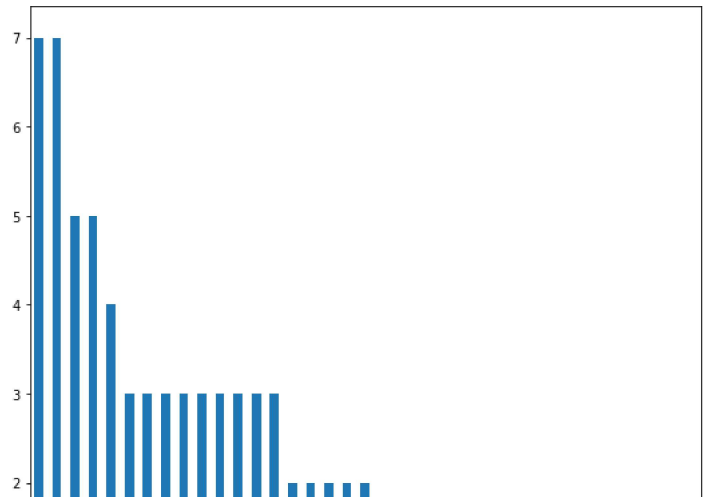
```
df["city"].value_counts().plot(kind="bar",figsize=(9,9))
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f18699759a0>
```



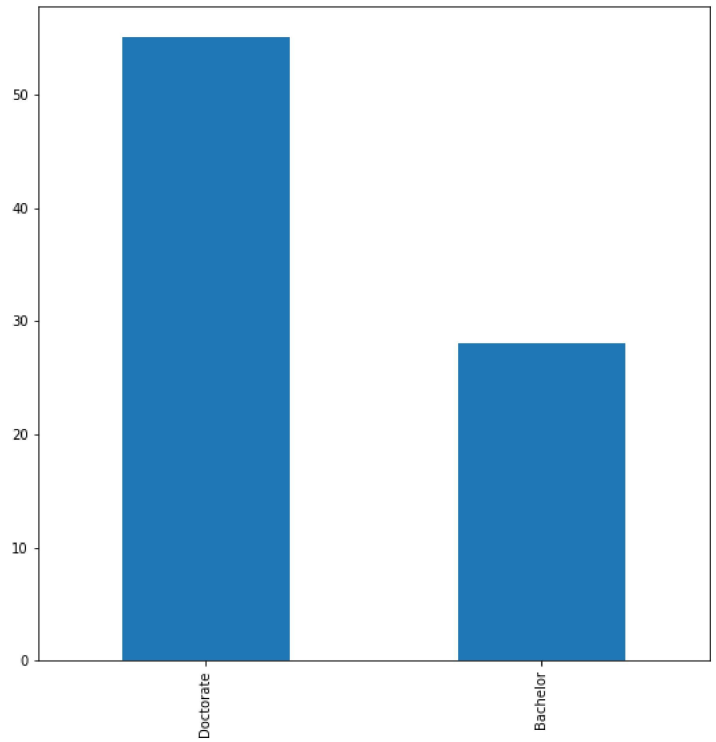

```
df["acceptance_rat"].value_counts().plot(kind="bar",figsize=(9,9))
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f1869240940>
```




```
df["high_degree"].value_counts().plot(kind="bar",figsize=(9,9))
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f18696e4d00>
```




```
df["city"].loc[df["type"]=="Non-profit"].unique()
```

```
array(['Ankara', 'Ramat Gan', 'Beijing', 'Beersheba', 'Changsha', 'Chiba',
       'Hong Kong', 'Chongqing', 'Bangkok', 'Dalian', 'Shanghai',
       'Harbin', 'Sapporo', 'Wuhan', 'Karnataka', 'Maharashtra',
       'Uttar Pradesh', 'Istanbul', 'Kanazawa', 'Riyadh', 'Kobe', 'Kyoto',
       'Fukuoka', 'Lanzhou', 'Nakhon Pathom', 'Nagoya', 'Nanjing',
       'Tianjin', 'Singapore City', 'Tainan', 'Hsinchu', 'Taipei',
       'Niigata', "Xi'an", 'Okayama', 'Suita', 'Seoul', 'Jinan', 'Suzhou',
       'Guangzhou', 'Haifa', 'Tehran', 'Tel Aviv', 'Sendai', 'Tokyo',
       'Haryana', 'Chengdu', 'Depok', 'Kuala Lumpur', 'Hefei', 'Tsukuba',
       'Rehovot', 'Xiamen', 'Hangzhou', 'Zhengzhou'], dtype=object)
```

```
df["high_degree"].value_counts()
```

```
Doctorate    55
Bachelor     28
Name: high_degree, dtype: int64
```

```
df["asia_ranking"].value_counts()
```

```
#95 / 5,830    1
#29 / 5,830    1
#53 / 5,830    1
#10 / 5,830    1
#87 / 5,830    1
               ..
#65 / 5,830    1
#93 / 5,830    1
#82 / 5,830    1
#75 / 5,830    1
#78 / 5,830    1
Name: asia_ranking, Length: 83, dtype: int64
```

```
df["city"].sum()
```

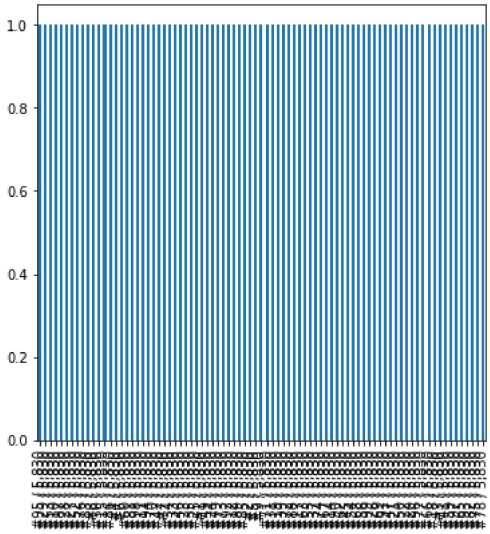
```
'AnkaraRamat GanBeijingBeijingBeershebaChangshaChibaBeijingHong KongChongqingBangkokHong
KongDalianShanghaiShanghaiAnkaraSeoulHarbinSapporoHong KongHong KongWuhanChangshaKarnatak
aMaharashtraUttar PradeshIstanbulKanazawaRiyadhKobeKyotoFukuokaLanzhouNakhon PathomAnkara
NagoyaNanjingTianjinSingapore CityTainanHsinchuTaipeiHsinchuSingapore CityNiigataXi'anOka
yamaSuitaBeijingBeijingSeoulJinanShanghaiShanghaiSuzhouNanjingGuangzhouHaifaTehranTel Avi
```

```
df["city"].value_counts()
```

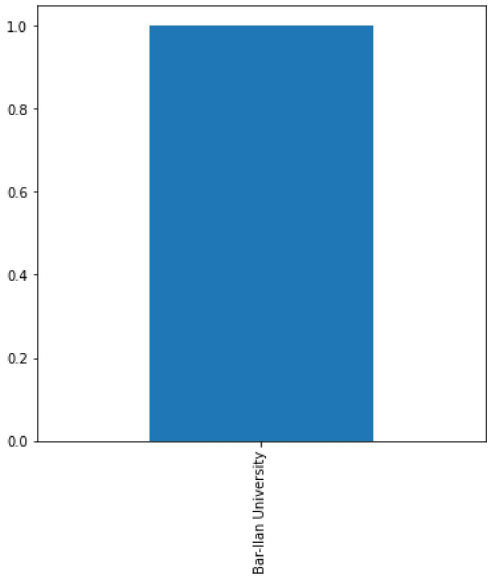
```
Beijing           7
Hong Kong         5
Shanghai          5
Ankara            3
Tokyo             3
Seoul             3
Wuhan             2
Tehran            2
Xi'an             2
Hsinchu           2
Singapore City    2
Tianjin           2
Nanjing           2
Changsha          2
Sapporo           1
Beersheba         1
Suita             1
Jinan             1
Suzhou            1
Guangzhou         1
Haifa             1
Tel Aviv          1
Sendai            1
Haryana           1
Harbin            1
Chengdu           1
Depok             1
Kuala Lumpur      1
Hefei             1
Tsukuba           1
Rehovot           1
Xiamen            1
Hangzhou          1
Okayama           1
Chiba             1
Niigata           1
Taipei            1
Karnataka         1
Maharashtra       1
Uttar Pradesh     1
Istanbul          1
Kanazawa          1
Riyadh            1
Kobe              1
Kyoto             1
Fukuoka           1
Lanzhou           1
Nakhon Pathom     1
Nagoya            1
Ramat Gan         1
Dalian            1
Bangkok           1
Tainan            1
Chongqing         1
Zhengzhou         1
Name: city, dtype: int64
```

```
df["asia_ranking"].value_counts().plot(kind="bar",figsize=(6,6))
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f1868f609a0>
```



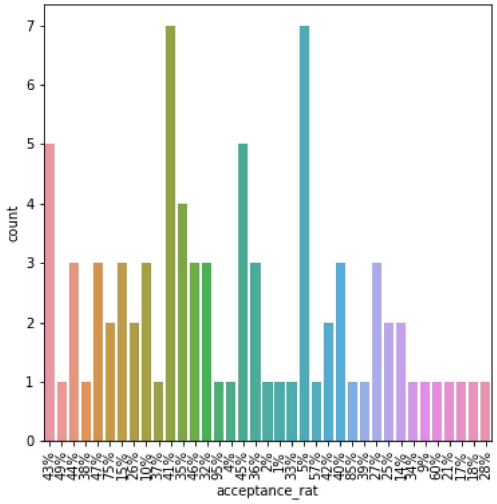

```
df["name"].loc[df["name"]=="Bar-Ilan University"].value_counts().plot(kind="bar",figsize=(6,6))
plt.show()
```



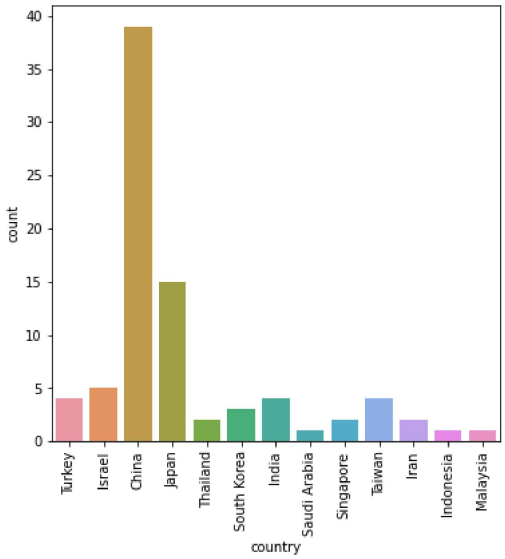

```
df.describe().transpose()
```

	count	unique	top	freq

```
plt.figure(figsize=(6,6))
sns.countplot(data=df, x="acceptance_rat")
plt.xticks(rotation=90)
plt.show()
```

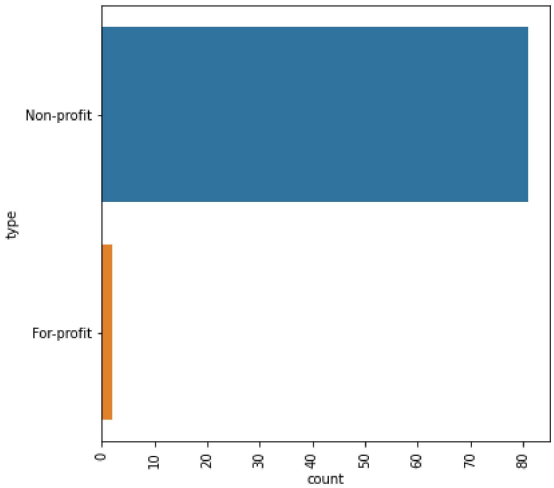



```
plt.figure(figsize=(6,6))
sns.countplot(data=df, x="country")
plt.xticks(rotation=90)
plt.show()
```

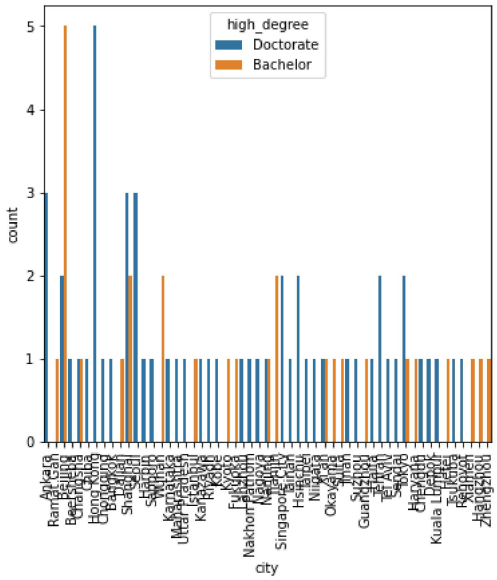



```
plt.figure(figsize=(6,6))
sns.countplot(data=df, y="high_degree")
plt.show()
```


```
plt.figure(figsize=(6,6))
sns.countplot(data=df, y="type")
plt.xticks(rotation=90)
plt.show()
```




```
plt.figure(figsize=(6,6))
sns.countplot(data=df, x="city",hue="high_degree")
plt.xticks(rotation=90)
plt.show()
```



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