

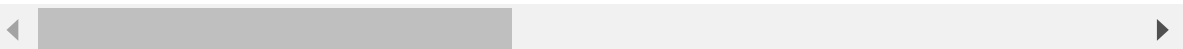
```
In [1]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

```
In [13]: file_path=r"C:\Users\Mrityunjay\Desktop\Data science naresh it\Class notes by me\Vi
visa_df=pd.read_csv(file_path)
visa_df
```

```
Out[13]:
```

	case_id	continent	education_of_employee	has_job_experience	requires_job_train
0	EZYV01	Asia	High School		N
1	EZYV02	Asia	Master's		Y
2	EZYV03	Asia	Bachelor's		N
3	EZYV04	Asia	Bachelor's		N
4	EZYV05	Africa	Master's		Y
...
25475	EZYV25476	Asia	Bachelor's		Y
25476	EZYV25477	Asia	High School		Y
25477	EZYV25478	Asia	Master's		Y
25478	EZYV25479	Asia	Master's		Y
25479	EZYV25480	Asia	Bachelor's		Y

25480 rows × 12 columns



```
In [39]: visa_df["continent"].value_counts()
```

```
Out[39]: continent
Asia          16861
Europe         3732
North America  3292
South America   852
Africa          551
Oceania         192
Name: count, dtype: int64
```

```
In [41]: visa_df["case_status"].value_counts()
```

```
Out[41]: case_status
Certified    17018
Denied       8462
Name: count, dtype: int64
```

```
In [105... visa_df["continent"].unique()
```

```
Out[105... array(['Asia', 'Africa', 'North America', 'Europe', 'South America',
        'Oceania'], dtype=object)
```

```
In [54]: visa_df["case_status"].unique()
```

```
Out[54]: array(['Denied', 'Certified'], dtype=object)
```

```
In [82]: for i in visa_df["continent"].unique():
        con=visa_df["continent"]==i
        count=len(visa_df[con])
        print(f'{i}:{count}')
```

```
Asia:16861
Africa:551
North America:3292
Europe:3732
South America:852
Oceania:192
```

```
In [88]: for i in visa_df["case_status"].unique():
        con=visa_df["case_status"]==i
        count=len(visa_df[con])
        print(f'{i}:{count}')
```

```
Denied:8462
Certified:17018
```

```
In [158... con1=visa_df["case_status"]=="Certified"
visa_df[con1][["continent", "case_status"]]
```

```
Out[158...
   continent case_status
1      Asia    Certified
4      Africa    Certified
5      Asia    Certified
6      Asia    Certified
8      Asia    Certified
...      ...          ...
25475   Asia    Certified
25476   Asia    Certified
25477   Asia    Certified
25478   Asia    Certified
25479   Asia    Certified
```

17018 rows × 2 columns

In [138... *#how many applicants got Certified Visa per continent wise*

```
con2=visa_df["case_status"]=="Certified"
df=visa_df[con2]
df["continent"].value_counts()
```

Out[138... continent

Asia	11012
Europe	2957
North America	2037
South America	493
Africa	397
Oceania	122

Name: count, dtype: int64

In [160... con1=visa_df["case_status"]=="Denied"
visa_df[con1][["continent", "case_status"]]

Out[160... continent case_status

	continent	case_status
0	Asia	Denied
2	Asia	Denied
3	Asia	Denied
7	North America	Denied
11	Asia	Denied
...
25454	Asia	Denied
25459	Asia	Denied
25461	Asia	Denied
25462	Europe	Denied
25466	Europe	Denied

8462 rows × 2 columns

In [134... *#how many applicants got Denied Visa per continent wise*

```
con2=visa_df["case_status"]=="Denied"
df=visa_df[con2]
df["continent"].value_counts()
```

```
Out[134... continent
Asia 5849
North America 1255
Europe 775
South America 359
Africa 154
Oceania 70
Name: count, dtype: int64
```

```
In [188... con1=visa_df["continent"]=="Asia"
con2=visa_df["case_status"]=="Certified"
con=con1 & con2
visa_df[con][["continent", "case_status"]]
```

```
Out[188... continent case_status
```

	continent	case_status
1	Asia	Certified
5	Asia	Certified
6	Asia	Certified
8	Asia	Certified
10	Asia	Certified
...
25475	Asia	Certified
25476	Asia	Certified
25477	Asia	Certified
25478	Asia	Certified
25479	Asia	Certified

11012 rows × 2 columns

```
In [228... l=[]
for i in visa_df["continent"].unique():
    for j in visa_df["case_status"].unique():
        con1=visa_df["continent"]==i
        con2=visa_df["case_status"]==j
        con=con1 & con2
        l.append(visa_df[con][["continent", "case_status"]])
l
```

```
Out[228...] [      continent case_status
0          Asia      Denied
2          Asia      Denied
3          Asia      Denied
11         Asia      Denied
15         Asia      Denied
...         ...         ...
25450       Asia      Denied
25452       Asia      Denied
25454       Asia      Denied
25459       Asia      Denied
25461       Asia      Denied
```

```
[5849 rows x 2 columns],
      continent case_status
1          Asia  Certified
5          Asia  Certified
6          Asia  Certified
8          Asia  Certified
10         Asia  Certified
...         ...         ...
25475       Asia  Certified
25476       Asia  Certified
25477       Asia  Certified
25478       Asia  Certified
25479       Asia  Certified
```

```
[11012 rows x 2 columns],
      continent case_status
242       Africa      Denied
273       Africa      Denied
895       Africa      Denied
908       Africa      Denied
1068      Africa      Denied
...       ...         ...
24557     Africa      Denied
24627     Africa      Denied
25015     Africa      Denied
25190     Africa      Denied
25329     Africa      Denied
```

```
[154 rows x 2 columns],
      continent case_status
4          Africa  Certified
18         Africa  Certified
74         Africa  Certified
194        Africa  Certified
387        Africa  Certified
...         ...         ...
25385     Africa  Certified
25408     Africa  Certified
25443     Africa  Certified
25446     Africa  Certified
25474     Africa  Certified
```

```
[397 rows x 2 columns],
```

	continent	case_status
7	North America	Denied
66	North America	Denied
75	North America	Denied
91	North America	Denied
96	North America	Denied
...
25371	North America	Denied
25377	North America	Denied
25427	North America	Denied
25434	North America	Denied
25451	North America	Denied

[1255 rows x 2 columns],

	continent	case_status
21	North America	Certified
23	North America	Certified
25	North America	Certified
43	North America	Certified
78	North America	Certified
...
25447	North America	Certified
25465	North America	Certified
25467	North America	Certified
25469	North America	Certified
25470	North America	Certified

[2037 rows x 2 columns],

	continent	case_status
36	Europe	Denied
72	Europe	Denied
187	Europe	Denied
223	Europe	Denied
240	Europe	Denied
...
25317	Europe	Denied
25331	Europe	Denied
25414	Europe	Denied
25462	Europe	Denied
25466	Europe	Denied

[775 rows x 2 columns],

	continent	case_status
9	Europe	Certified
16	Europe	Certified
24	Europe	Certified
37	Europe	Certified
42	Europe	Certified
...
25420	Europe	Certified
25426	Europe	Certified
25435	Europe	Certified
25448	Europe	Certified
25460	Europe	Certified

[2957 rows x 2 columns],

	continent	case_status
121	South America	Denied
332	South America	Denied
356	South America	Denied
390	South America	Denied
421	South America	Denied
...
25162	South America	Denied
25185	South America	Denied
25252	South America	Denied
25282	South America	Denied
25319	South America	Denied

[359 rows x 2 columns],

	continent	case_status
130	South America	Certified
171	South America	Certified
188	South America	Certified
224	South America	Certified
265	South America	Certified
...
25300	South America	Certified
25364	South America	Certified
25413	South America	Certified
25444	South America	Certified
25455	South America	Certified

[493 rows x 2 columns],

	continent	case_status
288	Oceania	Denied
955	Oceania	Denied
960	Oceania	Denied
1859	Oceania	Denied
2254	Oceania	Denied
...
23335	Oceania	Denied
23395	Oceania	Denied
24318	Oceania	Denied
24349	Oceania	Denied
24865	Oceania	Denied

[70 rows x 2 columns],

	continent	case_status
241	Oceania	Certified
708	Oceania	Certified
1099	Oceania	Certified
1531	Oceania	Certified
1701	Oceania	Certified
...
24727	Oceania	Certified
25150	Oceania	Certified
25196	Oceania	Certified
25404	Oceania	Certified
25405	Oceania	Certified

[122 rows x 2 columns]]

```
In [192... visa_df["continent"].unique(),visa_df["case_status"].unique()
```

```
Out[192... (array(['Asia', 'Africa', 'North America', 'Europe', 'South America',  
        'Oceania'], dtype=object),  
        array(['Denied', 'Certified'], dtype=object))
```

```
In [ ]:
```