

```
import pandas as pd
```

```
from google.colab import drive
drive.mount('/content/gdrive')
```

Drive already mounted at /content/gdrive; to attempt to forcibly remount, call drive.mount()

```
data=pd.read_table("/content/gdrive/MyDrive/Person.txt",delim_whitespace=True)
print(data)
```

	Age	agegroup	height	status	yearsmarried
0	21	adult	6.0	single	-1
1	2	child	3.0	married	0
2	18	adult	5.7	married	20
3	221	elderly	5.0	widowed	2
4	34	child	-7.0	married	3

```
def check_age_range(data):
    age_range = lambda r: r in range(151) #r>=0 and r<=150
    return data['Age'].apply(age_range).rename('Check Age Range')
```

```
def check_age(data):
    age_limit = lambda r: r[0] > r[4]
    return data.apply(age_limit,axis=1).rename("Check Age")
```

```
def check_status(data):
    status_value= lambda r: r in data["status"].values
    return data['status'].apply(status_value).rename("Check status")
```

```
def check_age_group(data):
    age_group = lambda x: (x[0] in range(18) and x[1]=="child") or (x[0] in range(18,66) and x[1]=="adult")
    return data[['Age', 'agegroup']].apply(age_group, axis =1).rename("Check age group")
```

```
E={"check_age_range":check_age_range, "check_age_limit":check_age, "check_status_value":check_status, "check_age_group":check_age_group}
result=list()
```

```
for i in E.keys():
    #print(result)
    #print(E[i](data))
    result.append(E[i](data))
print("Number of violations by age group:")
```

```
print( number of violations by peoples: )
print(len(result)-sum(result))
```

Number of violations by peoples:

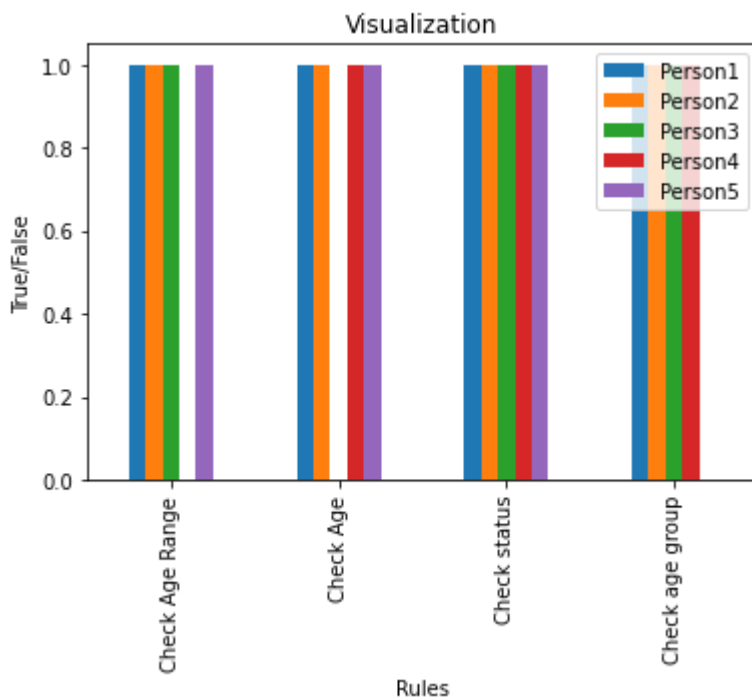
```
0    0
1    0
2    1
3    1
4    1
dtype: int64
```

```
result=pd.DataFrame(result)
print(result.describe())
```

```
count      0      1      2      3      4
unique      1      1      2      2      2
top    True  True  True  True  True
freq       4      4      3      3      3
```

```
import matplotlib.pyplot as plt
result.astype(int).plot(kind='bar')
plt.title("Visualization")
plt.xlabel('Rules')
plt.ylabel('True/False')
plt.legend(['Person1', 'Person2', 'Person3', 'Person4', 'Person5'])
```

↳ <matplotlib.legend.Legend at 0x7f21ff314810>



+ Code

+ Text

