



- SCENARIO
- QUESTIONS SOLVED
- INSIGHTS

SCENARIO

YOU ARE A **DATA ANALYS**T AT A SOCIAL RESEARCH COMPANY.
YOU MANAGER HAS A SIMPLE ADHOC REQUEST TO UNCOVER
SOME STATS ABOUT ALCOHOL CONSUMPTION ACROSS THE WORLD.

QUESTIONS SOLVED

- 1. WHICH CONTINENT DRINKS MORE BEER ON AVERAGE?
- 2. FOR EACH CONTINENT PRINT THE STATISTICS FOR WINE CONSUMPTION.
- 3. PRINT THE MEAN ALCOHOL CONSUMPTION PER CONTINENT FOR EVERY COLUMN.
- 4. Print the median alcohol consumption per continent for every column.

data = pd.read_csv('alcohol_cons.csv')
data.head()

| | country | beer_servings | spirit_servings | wine_servings | total_litres_of_pure_alcohol | continent |
|---|-------------|---------------|-----------------|---------------|------------------------------|-----------|
| 0 | Afghanistan | 0 | 0 | 0 | 0.0 | AS |
| 1 | Albania | 89 | 132 | 54 | 4.9 | EU |
| 2 | Algeria | 25 | 0 | 14 | 0.7 | AF |
| 3 | Andorra | 245 | 138 | 312 | 12.4 | EU |
| 4 | Angola | 217 | 57 | 45 | 5.9 | AF |

DATA SET

1. WHICH CONTINENT DRINKS MORE BEER ON AVERAGE?

1. Which continent drinks more beer on average?

```
# Group by continent and calculate the average beer servings
average_beer_by_continent = data.groupby('continent')['beer_servings'].mean()

# Find the continent that drinks more beer on average
continent_with_most_beer = average_beer_by_continent.idxmax()

# Print the result
print(f"The continent that drinks more beer on average is: {continent_with_most_beer}")
The continent that drinks more beer on average is: EU
```

2. For each continent print the statistics for wine consumption

```
# Group by continent and print statistics for wine consumption
wine_statistics_by_continent = data.groupby('continent')['wine_servings'].describe()
# Print the result
print(wine_statistics_by_continent)
```

| | count | mean | std | min | 25% | 50% | 75% | max |
|-----------|-------|------------|-----------|-----|------|-------|--------|-------|
| continent | | | | | | | | |
| AF | 53.0 | 16.264151 | 38.846419 | 0.0 | 1.0 | 2.0 | 13.00 | 233.0 |
| AS | 44.0 | 9.068182 | 21.667034 | 0.0 | 0.0 | 1.0 | 8.00 | 123.0 |
| EU | 45.0 | 142.222222 | 97.421738 | 0.0 | 59.0 | 128.0 | 195.00 | 370.0 |
| NA | 23.0 | 24.521739 | 28.266378 | 1.0 | 5.0 | 11.0 | 34.00 | 100.0 |
| OC | 16.0 | 35.625000 | 64.555790 | 0.0 | 1.0 | 8.5 | 23.25 | 212.0 |
| SA | 12.0 | 62.416667 | 88.620189 | 1.0 | 3.0 | 12.0 | 98.50 | 221.0 |

2. FOR EACH CONTINENT PRINT THE STATISTICS FOR WINE CONSUMPTION.

3. Print the mean alcohol consumption per continent for every column.

```
# Group by continent and calculate the mean for each column
mean alcohol consumption by continent = data.groupby('continent').mean()
# Print the result
print(mean_alcohol_consumption_by_continent)
           beer servings spirit servings wine servings \
continent
               61.471698
                                16.339623
                                                16.264151
AS
               37.045455
                                60.840909
                                                 9.068182
              193.777778
                               132,555556
                                               142.222222
ΕU
              145.434783
                                                24.521739
                               165.739130
               89.687500
                                58.437500
                                                35.625000
OC.
              175.083333
                               114.750000
                                                62.416667
           total litres of pure alcohol
continent
                               3.007547
AS
                               2.170455
                               8.617778
ΕU
NΑ
                               5.995652
OC.
                               3.381250
SA
                               6.308333
```

3. PRINT THE MEAN ALCOHOL CONSUMPTION PER CONTINENT FOR EVERY COLUMN.

4. Print the median alcohol consumption per continent for every column.

```
# Group by continent and calculate the median for each column
median_alcohol_consumption_by_continent = data.groupby('continent').median()
# Print the result
print(median alcohol consumption by continent)
           beer servings spirit servings wine servings \
continent
                    32.0
                                      3.0
                                                      2.0
                    17.5
                                     16.0
                                                     1.0
AS
EU
                   219.0
                                    122.0
                                                   128.0
                                    137.0
                                                    11.0
NΑ
                   143.0
OC.
                    52.5
                                     37.0
                                                     8.5
                   162.5
                                    108.5
                                                    12.0
SA
           total litres of pure alcohol
continent
ΑF
                                   2.30
                                   1.20
AS
EU
                                  10.00
                                   6.30
NΑ
OC.
                                   1.75
SA
                                   6.85
```

4. PRINT THE MEDIAN ALCOHOL CONSUMPTION PER CONTINENT FOR EVERY COLUMN.

SUMMARY

BEER CONSUMPTION:

- CONTINENT WITH THE HIGHEST AVERAGE BEER CONSUMPTION IS EU.
- AVERAGE BEER CONSUMPTION IN EU IS 193.77 LITRES.

SPIRIT CONSUMPTION:

- CONTINENT WITH THE HIGHEST AVERAGE SPIRIT CONSUMPTION IS NA.
- AVERAGE SPIRIT CONSUMPTION IN NA IS 165.73 LITRES.

WINE CONSUMPTION:

- CONTINENT WITH THE HIGHEST AVERAGE WINE CONSUMPTION IS EU.
- AVERAGE WINE CONSUMPTION IN EU IS 142.22 LITRES.

PURE ALCOHOL CONSUMPTION:

- CONTINENT WITH THE HIGHEST AVERAGE PURE ALCOHOL CONSUMPTION IS EU.
- AVERAGE PURE ALCOHOL CONSUMPTION IN EU IS 8.61 LITRES.