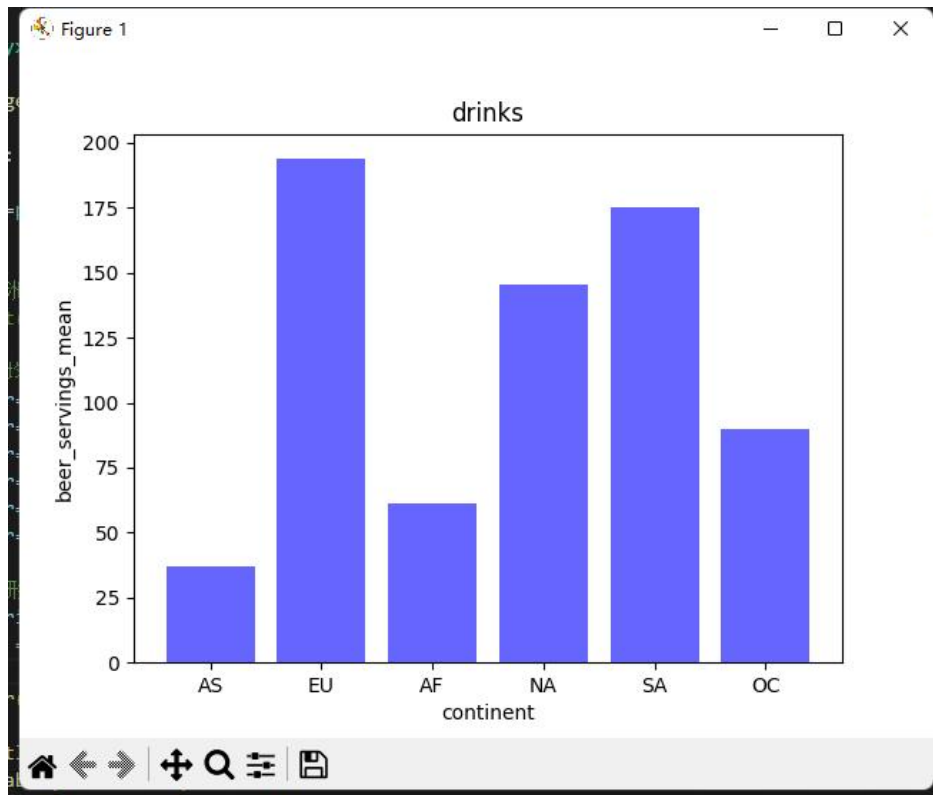


- 1、由数据可知，欧洲（EU）平均消耗的啤酒最多，为：193.777778，文字数据储存在 beer\_data.txt 中，并输出柱状图：



- 2、各大洲红酒消耗统计性说明：保存在 wine\_data.csv

```
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问题 输出 调试控制台 终端 端口

由数据可知，欧洲（EU）平均消耗的啤酒最多，为：193.777778

*****wine*****

AS:
count      44.000000
mean       9.068182
std        21.667034
min         0.000000
25%         0.000000
50%         1.000000
75%         8.000000
max        123.000000
Name: wine_servings, dtype: float64

EU:
count      45.000000
mean      142.222222
std        97.421738
min         0.000000
25%        59.000000
50%       128.000000
75%       195.000000
max       370.000000
Name: wine_servings, dtype: float64

AF:
count      53.000000
mean      16.264151
std        38.846419
min         0.000000
25%         1.000000
50%         2.000000
75%        13.000000
max       233.000000
Name: wine_servings, dtype: float64

NA:
count      23.000000
mean      24.521739
```

|   | A     | B        | C        | D        | E        | F        | G        |
|---|-------|----------|----------|----------|----------|----------|----------|
| 1 |       | AS wine  | EU wine  | AF wine  | NA wine  | SA wine  | OC wine  |
| 2 | count | 44       | 45       | 53       | 23       | 12       | 16       |
| 3 | mean  | 9.068182 | 142.2222 | 16.26415 | 24.52174 | 62.41667 | 35.625   |
| 4 | std   | 21.66703 | 97.42174 | 38.84642 | 28.26638 | 88.62019 | 64.55579 |
| 5 | min   | 0        | 0        | 0        | 1        | 1        | 0        |
| 6 | 25%   | 0        | 59       | 1        | 5        | 3        | 1        |
| 7 | 50%   | 1        | 128      | 2        | 11       | 12       | 8.5      |
| 8 | 75%   | 8        | 195      | 13       | 34       | 98.5     | 23.25    |
| 9 | max   | 123      | 370      | 233      | 100      | 221      | 212      |

3、每个大陆每种酒类别平均消耗值：结果保存在 mean\_data.txt

\*\*\*\*\*每个大洲每种酒消耗平均值\*\*\*\*\*

```
AS
beer_mean:37.045455
spirit_mean:60.840909
wine_mean:9.068182
EU
beer_mean:193.777778
spirit_mean:132.555556
wine_mean:142.222222
AF
beer_mean:61.471698
spirit_mean:16.339623
wine_mean:16.264151
NA
beer_mean:145.434783
spirit_mean:165.739130
wine_mean:24.521739
SA
beer_mean:175.083333
spirit_mean:114.750000
wine_mean:62.416667
OC
beer_mean:89.687500
spirit_mean:58.437500
wine_mean:35.625000
```

4、每个大洲每种酒类消耗中位数：结果保存在 middle\_data.txt

\*\*\*\*\*每个大洲每种酒消耗中位数\*\*\*\*\*

```
AS
beer_middle:17.500000
spirit_middle:16.000000
wine_middle:1.000000
EU
beer_middle:219.000000
spirit_middle:122.000000
wine_middle:128.000000
AF
beer_middle:32.000000
spirit_middle:3.000000
wine_middle:2.000000
NA
beer_middle:143.000000
spirit_middle:137.000000
wine_middle:11.000000
SA
beer_middle:162.500000
spirit_middle:108.500000
wine_middle:12.000000
OC
beer_middle:52.500000
spirit_middle:37.000000
wine_middle:8.500000
```

\*\*\*\*\*每个大洲spirit的平均值，最大值，最小值\*\*\*\*\*

5、每个大洲对 spirit 饮品消耗平均值，最大值最小值：结果保存在 spirit\_data.txt

\*\*\*\*\*每个大洲spirit的平均值、最大、最小值\*\*\*\*\*

AS

spirit\_mean:60.840909

spirit\_max:326.000000

spirit\_min:0.000000

EU

spirit\_mean:132.555556

spirit\_max:373.000000

spirit\_min:0.000000

AF

spirit\_mean:16.339623

spirit\_max:152.000000

spirit\_min:0.000000

NA

spirit\_mean:165.739130

spirit\_max:438.000000

spirit\_min:68.000000

SA

spirit\_mean:114.750000

spirit\_max:302.000000

spirit\_min:25.000000

OC

spirit\_mean:58.437500

spirit\_max:254.000000

spirit\_min:0.000000