Домашня робота №2 з предмету МТІАД

Шевченко Юлія, ФІ-92

In [1]:
```
# Імпорт необхідних бібліотек
import pandas as pd
import statistics as stat
```

In [2]:
```
# Вхідні дані
data = pd.read_csv('data.csv')

group1_age = [17, 16, 17, 18, 18, 17, 17, 17, 16, 18, 18, 18, 17, 17, 17, 17, 17, 18]
group2_age = [18, 19, 19, 17, 17, 17, 17, 17, 17, 17, 17, 17, 18, 16, 19, 18, 17, 17, 18,
group3_age = [17, 17, 17, 17, 18, 17, 18, 17, 18, 21, 19, 17, 17, 17, 17, 18, 17, 18, 17]

data
```

Out[2]:

	Group	Total amount	Male	Female	Kyiv citizens	Dormitory	Other
0	Group 1	18	15	3	7	10	1
1	Group 2	20	12	8	8	8	4
2	Group 3	19	12	7	5	9	5

In [3]:
```
print("----------------------------------------")
print("MAX")
print("----------------------------------------")
print(f"Max age of 'Group 1': {max(group1_age)}")
print(f"Max age of 'Group 2': {max(group2_age)}")
print(f"Max age of 'Group 3': {max(group3_age)}")
print(f"Max amount of males: {max(data['Male'])}")
print(f"Max amount of females: {max(data['Female'])}")
print(f"Max amount of Kyiv citizens: {max(data['Kyiv citizens'])}")
print(f"Max amount of dormitory residents: {max(data['Dormitory'])}")
print(f"Max amount of neither Kyiv citizens nor dormitory residents: {max(data['Other'])}"
print("----------------------------------------")
print("MIN")
print("----------------------------------------")
print(f"Min age of 'Group 1': {min(group1_age)}")
print(f"Min age of 'Group 2': {min(group2_age)}")
print(f"Min age of 'Group 3': {min(group3_age)}")
print(f"Min amount of males: {min(data['Male'])}")
print(f"Min amount of females: {min(data['Female'])}")
print(f"Min amount of Kyiv citizens: {min(data['Kyiv citizens'])}")
print(f"Min amount of dormitory residents: {min(data['Dormitory'])}")
print(f"Min amount of neither Kyiv citizens nor dormitory residents: {min(data['Other'])}"
print("----------------------------------------")
print("Variation")
print("----------------------------------------")
print(f"Age variation of 'Group 1': {max(group1_age) - min(group1_age)}")
print(f"Age variation of 'Group 2': {max(group2_age) - min(group2_age)}")
print(f"Age variation of 'Group 3': {max(group3_age) - min(group3_age)}")
print(f"Amount variation of males: {max(data['Male']) - min(data['Male'])}")
print(f"Amount variation of females: {max(data['Female']) -min(data['Female'])}")
print(f"Amount variation of Kyiv citizens: {max(data['Kyiv citizens']) -min(data['Kyiv cit
print(f"Amount variation of dormitory residents: {max(data['Dormitory']) - min(data['Dormi
print(f"Amount variation of neither Kyiv citizens nor dormitory residents: {max(data['Othe
```

```
print("----------------------------------------")
print("Mode")
print("----------------------------------------")
print(f"Age mode of 'Group 1': {stat.mode(group1_age)}")
print(f"Age mode of 'Group 2': {stat.mode(group2_age)}")
print(f"Age mode of 'Group 3': {stat.mode(group3_age)}")
print("----------------------------------------")
print("Median")
print("----------------------------------------")
print(f"Age median of 'Group 1': {stat.median(group1_age)}")
print(f"Age median of 'Group 2': {stat.median(group2_age)}")
print(f"Age median of 'Group 3': {stat.median(group3_age)}")
print("----------------------------------------")
print("Quartiles")
print("----------------------------------------")
print(f"Quartiles age of 'Group 1': {stat.quantiles(group1_age, n = 4)}")
print(f"Quartiles age of 'Group 2': {stat.quantiles(group2_age, n = 4)}")
print(f"Quartiles age of 'Group 3': {stat.quantiles(group3_age, n = 4)}")
print(f"Quartiles of males: {stat.quantiles(data['Male'], n = 4)}")
print(f"Quartiles of females: {stat.quantiles(data['Female'], n = 4)}")
print(f"Quartiles of Kyiv citizens: {stat.quantiles(data['Kyiv citizens'], n = 4)}")
print(f"Quartiles of dormitory residents: {stat.quantiles(data['Dormitory'], n = 4)}")
print(f"Quartiles of neither Kyiv citizens nor dormitory residents: {stat.quantiles(data['
print("----------------------------------------")
print("Quantiles")
print("----------------------------------------")
print(f"Quantiles age of 'Group 1': {stat.quantiles(group1_age, n = 5)}")
print(f"Quantiles age of 'Group 2': {stat.quantiles(group2_age, n = 5)}")
print(f"Quantiles age of 'Group 3': {stat.quantiles(group3_age, n = 5)}")
print(f"Quantiles of males: {stat.quantiles(data['Male'], n = 5)}")
print(f"Quantiles of females: {stat.quantiles(data['Female'], n = 5)}")
print(f"Quantiles of Kyiv citizens: {stat.quantiles(data['Kyiv citizens'], n = 5)}")
print(f"Quantiles of dormitory residents: {stat.quantiles(data['Dormitory'], n = 5)}")
print(f"Quantiles of neither Kyiv citizens nor dormitory residents: {stat.quantiles(data['
print("----------------------------------------")
print("Deciles")
print("----------------------------------------")
print(f"Deciles age of 'Group 1': {stat.quantiles(group1_age, n = 10)}")
print(f"Deciles age of 'Group 2': {stat.quantiles(group2_age, n = 10)}")
print(f"Deciles age of 'Group 3': {stat.quantiles(group3_age, n = 10)}")
print(f"Deciles of males: {stat.quantiles(data['Male'], n = 10)}")
print(f"Deciles of females: {stat.quantiles(data['Female'], n = 10)}")
print(f"Deciles of Kyiv citizens: {stat.quantiles(data['Kyiv citizens'], n = 10)}")
print(f"Deciles of dormitory residents: {stat.quantiles(data['Dormitory'], n = 10)}")
print(f"Deciles of neither Kyiv citizens nor dormitory residents: {stat.quantiles(data['Ot
print("----------------------------------------")
print("Percentiles")
print("----------------------------------------")
print(f"Percentiles age of 'Group 1': {stat.quantiles(group1_age, n = 100)}")
print(f"Percentiles age of 'Group 2': {stat.quantiles(group2_age, n = 100)}")
print(f"Percentiles age of 'Group 3': {stat.quantiles(group3_age, n = 100)}")
print(f"Percentiles of males: {stat.quantiles(data['Male'], n = 100)}")
print(f"Percentiles of females: {stat.quantiles(data['Female'], n = 100)}")
print(f"Percentiles of Kyiv citizens: {stat.quantiles(data['Kyiv citizens'], n = 100)}")
print(f"Percentiles of dormitory residents: {stat.quantiles(data['Dormitory'], n = 100)}")
print(f"Percentiles of neither Kyiv citizens nor dormitory residents: {stat.quantiles(data
print("----------------------------------------")
print("Arithmetic mean")
print("----------------------------------------")
print(f"Mean age of 'Group 1': {stat.mean(group1_age)}")
print(f"Mean age of 'Group 2': {stat.mean(group2_age)}")
print(f"Mean age of 'Group 3': {stat.mean(group3_age)}")
print(f"Mean amount of males: {stat.mean(data['Male'])}")
print(f"Mean amount of females: {stat.mean(data['Female'])}")
print(f"Mean amount of Kyiv citizens: {stat.mean(data['Kyiv citizens'])}")
print(f"Mean amount of dormitory residents: {stat.mean(data['Dormitory'])}")
```

```
print(f"Mean amount of neither Kyiv citizens nor dormitory residents: {stat.mean(data['Oth
print("----------------------------------------")
print("Geometric mean")
print("----------------------------------------")
print(f"Mean age of 'Group 1': {stat.geometric_mean(group1_age)}")
print(f"Mean age of 'Group 2': {stat.geometric_mean(group2_age)}")
print(f"Mean age of 'Group 3': {stat.geometric_mean(group3_age)}")
print(f"Mean amount of males: {stat.geometric_mean(data['Male'])}")
print(f"Mean amount of females: {stat.geometric_mean(data['Female'])}")
print(f"Mean amount of Kyiv citizens: {stat.geometric_mean(data['Kyiv citizens'])}")
print(f"Mean amount of dormitory residents: {stat.geometric_mean(data['Dormitory'])}")
print(f"Mean amount of neither Kyiv citizens nor dormitory residents: {stat.geometric_mean
print("----------------------------------------")
print("Harmonic mean")
print("----------------------------------------")
print(f"Mean age of 'Group 1': {stat.harmonic_mean(group1_age)}")
print(f"Mean age of 'Group 2': {stat.harmonic_mean(group2_age)}")
print(f"Mean age of 'Group 3': {stat.harmonic_mean(group3_age)}")
print(f"Mean amount of males: {stat.harmonic_mean(data['Male'])}")
print(f"Mean amount of females: {stat.harmonic_mean(data['Female'])}")
print(f"Mean amount of Kyiv citizens: {stat.harmonic_mean(data['Kyiv citizens'])}")
print(f"Mean amount of dormitory residents: {stat.harmonic_mean(data['Dormitory'])}")
print(f"Mean amount of neither Kyiv citizens nor dormitory residents: {stat.harmonic_mean
print("----------------------------------------")
print("Standard deviation")
print("----------------------------------------")
print(f"Deviation age of 'Group 1': {stat.stdev(group1_age)}")
print(f"Deviation age of 'Group 2': {stat.stdev(group2_age)}")
print(f"Deviation age of 'Group 3': {stat.stdev(group3_age)}")
print(f"Deviation of males: {stat.stdev(data['Male'])}")
print(f"Deviation of females: {stat.stdev(data['Female'])}")
print(f"Deviation of Kyiv citizens: {stat.stdev(data['Kyiv citizens'])}")
print(f"Deviation of dormitory residents: {stat.stdev(data['Dormitory'])}")
print(f"Deviation of neither Kyiv citizens nor dormitory residents: {stat.stdev(data['Othe
print("----------------------------------------")
print("Variance")
print("----------------------------------------")
print(f"Variance age of 'Group 1': {stat.variance(group1_age)}")
print(f"Variance age of 'Group 2': {stat.variance(group2_age)}")
print(f"Variance age of 'Group 3': {stat.variance(group3_age)}")
print(f"Variance of males: {stat.variance(data['Male'])}")
print(f"Variance of females: {stat.variance(data['Female'])}")
print(f"Variance of Kyiv citizens: {stat.variance(data['Kyiv citizens'])}")
print(f"Variance of dormitory residents: {stat.variance(data['Dormitory'])}")
print(f"Variance of neither Kyiv citizens nor dormitory residents: {stat.variance(data['Ot
```

```
----------------------------------------
MAX
----------------------------------------
Max age of 'Group 1': 18
Max age of 'Group 2': 19
Max age of 'Group 3': 21
Max amount of males: 15
Max amount of females: 8
Max amount of Kyiv citizens: 8
Max amount of dormitory residents: 10
Max amount of neither Kyiv citizens nor dormitory residents: 5
----------------------------------------
MIN
----------------------------------------
Min age of 'Group 1': 16
Min age of 'Group 2': 16
Min age of 'Group 3': 17
Min amount of males: 12
Min amount of females: 3
```

```
Min amount of Kyiv citizens: 5
Min amount of dormitory residents: 8
Min amount of neither Kyiv citizens nor dormitory residents: 1
---------------------------------------
Variation
---------------------------------------
Age variation of 'Group 1': 2
Age variation of 'Group 2': 3
Age variation of 'Group 3': 4
Amount variation of males: 3
Amount variation of females: 5
Amount variation of Kyiv citizens: 3
Amount variation of dormitory residents: 2
Amount variation of neither Kyiv citizens nor dormitory residents: 4
---------------------------------------
Mode
---------------------------------------
Age mode of 'Group 1': 17
Age mode of 'Group 2': 17
Age mode of 'Group 3': 17
---------------------------------------
Median
---------------------------------------
Age median of 'Group 1': 17.0
Age median of 'Group 2': 17.0
Age median of 'Group 3': 17
---------------------------------------
Quartiles
---------------------------------------
Quartiles age of 'Group 1': [17.0, 17.0, 18.0]
Quartiles age of 'Group 2': [17.0, 17.0, 18.0]
Quartiles age of 'Group 3': [17.0, 17.0, 18.0]
Quartiles of males: [12.0, 12.0, 15.0]
Quartiles of females: [3.0, 7.0, 8.0]
Quartiles of Kyiv citizens: [5.0, 7.0, 8.0]
Quartiles of dormitory residents: [8.0, 9.0, 10.0]
Quartiles of neither Kyiv citizens nor dormitory residents: [1.0, 4.0, 5.0]
---------------------------------------
Quantiles
---------------------------------------
Quantiles age of 'Group 1': [17.0, 17.0, 17.0, 18.0]
Quantiles age of 'Group 2': [17.0, 17.0, 17.0, 18.0]
Quantiles age of 'Group 3': [17.0, 17.0, 17.0, 18.0]
Quantiles of males: [12.0, 12.0, 13.2, 15.6]
Quantiles of females: [2.2, 5.4, 7.4, 8.2]
Quantiles of Kyiv citizens: [4.6, 6.2, 7.4, 8.2]
Quantiles of dormitory residents: [7.8, 8.6, 9.4, 10.2]
Quantiles of neither Kyiv citizens nor dormitory residents: [0.4, 2.8, 4.4, 5.2]
---------------------------------------
Deciles
---------------------------------------
Deciles age of 'Group 1': [16.0, 17.0, 17.0, 17.0, 17.0, 17.0, 18.0, 18.0, 18.0]
Deciles age of 'Group 2': [17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 18.0, 18.0, 19.0]
Deciles age of 'Group 3': [17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 18.0, 18.0, 19.0]
Deciles of males: [12.0, 12.0, 12.0, 12.0, 12.0, 13.2, 14.4, 15.6, 16.8]
Deciles of females: [0.6, 2.2, 3.8, 5.4, 7.0, 7.4, 7.8, 8.2, 8.6]
Deciles of Kyiv citizens: [3.8, 4.6, 5.4, 6.2, 7.0, 7.4, 7.8, 8.2, 8.6]
Deciles of dormitory residents: [7.4, 7.8, 8.2, 8.6, 9.0, 9.4, 9.8, 10.2, 10.6]
Deciles of neither Kyiv citizens nor dormitory residents: [-0.8, 0.4, 1.6, 2.8, 4.0, 4.4,
4.8, 5.2, 5.6]
---------------------------------------
Percentiles
---------------------------------------
Percentiles age of 'Group 1': [16.0, 16.0, 16.0, 16.0, 16.0, 16.0, 16.0, 16.0, 16.0, 16.0,
16.09, 16.28, 16.47, 16.66, 16.85, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 1
7.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 1
```

```
7.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 1
7.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.16, 17.35, 17.54, 17.73, 17.92, 1
8.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 1
8.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 1
8.0]
Percentiles age of 'Group 2': [15.21, 15.42, 15.63, 15.84, 16.05, 16.26, 16.47, 16.68, 16.
89, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 1
7.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 1
7.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 1
7.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.02, 17.23, 17.44, 17.65, 17.86, 18.0, 1
8.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.01, 18.22,
18.43, 18.64, 18.85, 19.0, 19.0, 19.0, 19.0, 19.0, 19.0, 19.0, 19.0, 19.0, 19.0, 19.0, 19.
0, 19.0, 19.0]
Percentiles age of 'Group 3': [17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0,
17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0,
17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0,
17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0, 17.0,
17.0, 17.0, 17.0, 17.0, 17.0, 17.2, 17.4, 17.6, 17.8, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0,
18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0, 18.0,
18.2, 18.4, 18.6, 18.8, 19.0, 19.4, 19.8, 20.2, 20.6, 21.0, 21.4, 21.8, 22.2, 22.6]
Percentiles of males: [12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 1
2.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 1
2.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 1
2.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.0, 12.12, 12.24, 12.36, 12.48, 12.6, 12.
72, 12.84, 12.96, 13.08, 13.2, 13.32, 13.44, 13.56, 13.68, 13.8, 13.92, 14.04, 14.16, 14.2
8, 14.4, 14.52, 14.64, 14.76, 14.88, 15.0, 15.12, 15.24, 15.36, 15.48, 15.6, 15.72, 15.84,
15.96, 16.08, 16.2, 16.32, 16.44, 16.56, 16.68, 16.8, 16.92, 17.04, 17.16, 17.28, 17.4, 1
7.52, 17.64, 17.76, 17.88]
Percentiles of females: [-0.84, -0.68, -0.52, -0.36, -0.2, -0.04, 0.12, 0.28, 0.44, 0.6,
0.76, 0.92, 1.08, 1.24, 1.4, 1.56, 1.72, 1.88, 2.04, 2.2, 2.36, 2.52, 2.68, 2.84, 3.0, 3.1
6, 3.32, 3.48, 3.64, 3.8, 3.96, 4.12, 4.28, 4.44, 4.6, 4.76, 4.92, 5.08, 5.24, 5.4, 5.56,
5.72, 5.88, 6.04, 6.2, 6.36, 6.52, 6.68, 6.84, 7.0, 7.04, 7.08, 7.12, 7.16, 7.2, 7.24, 7.2
8, 7.32, 7.36, 7.4, 7.44, 7.48, 7.52, 7.56, 7.6, 7.64, 7.68, 7.72, 7.76, 7.8, 7.84, 7.88,
7.92, 7.96, 8.0, 8.04, 8.08, 8.12, 8.16, 8.2, 8.24, 8.28, 8.32, 8.36, 8.4, 8.44, 8.48, 8.5
2, 8.56, 8.6, 8.64, 8.68, 8.72, 8.76, 8.8, 8.84, 8.88, 8.92, 8.96]
Percentiles of Kyiv citizens: [3.08, 3.16, 3.24, 3.32, 3.4, 3.48, 3.56, 3.64, 3.72, 3.8,
3.88, 3.96, 4.04, 4.12, 4.2, 4.28, 4.36, 4.44, 4.52, 4.6, 4.68, 4.76, 4.84, 4.92, 5.0, 5.0
8, 5.16, 5.24, 5.32, 5.4, 5.48, 5.56, 5.64, 5.72, 5.8, 5.88, 5.96, 6.04, 6.12, 6.2, 6.28,
6.36, 6.44, 6.52, 6.6, 6.68, 6.76, 6.84, 6.92, 7.0, 7.04, 7.08, 7.12, 7.16, 7.2, 7.24, 7.2
8, 7.32, 7.36, 7.4, 7.44, 7.48, 7.52, 7.56, 7.6, 7.64, 7.68, 7.72, 7.76, 7.8, 7.84, 7.88,
7.92, 7.96, 8.0, 8.04, 8.08, 8.12, 8.16, 8.2, 8.24, 8.28, 8.32, 8.36, 8.4, 8.44, 8.48, 8.5
2, 8.56, 8.6, 8.64, 8.68, 8.72, 8.76, 8.8, 8.84, 8.88, 8.92, 8.96]
Percentiles of dormitory residents: [7.04, 7.08, 7.12, 7.16, 7.2, 7.24, 7.28, 7.32, 7.36,
7.4, 7.44, 7.48, 7.52, 7.56, 7.6, 7.64, 7.68, 7.72, 7.76, 7.8, 7.84, 7.88, 7.92, 7.96, 8.
0, 8.04, 8.08, 8.12, 8.16, 8.2, 8.24, 8.28, 8.32, 8.36, 8.4, 8.44, 8.48, 8.52, 8.56, 8.6,
8.64, 8.68, 8.72, 8.76, 8.8, 8.84, 8.88, 8.92, 8.96, 9.0, 9.04, 9.08, 9.12, 9.16, 9.2, 9.2
4, 9.28, 9.32, 9.36, 9.4, 9.44, 9.48, 9.52, 9.56, 9.6, 9.64, 9.68, 9.72, 9.76, 9.8, 9.84,
9.88, 9.92, 9.96, 10.0, 10.04, 10.08, 10.12, 10.16, 10.2, 10.24, 10.28, 10.32, 10.36, 10.
4, 10.44, 10.48, 10.52, 10.56, 10.6, 10.64, 10.68, 10.72, 10.76, 10.8, 10.84, 10.88, 10.9
2, 10.96]
Percentiles of neither Kyiv citizens nor dormitory residents: [-1.88, -1.76, -1.64, -1.52,
-1.4, -1.28, -1.16, -1.04, -0.92, -0.8, -0.68, -0.56, -0.44, -0.32, -0.2, -0.08, 0.04, 0.1
6, 0.28, 0.4, 0.52, 0.64, 0.76, 0.88, 1.0, 1.12, 1.24, 1.36, 1.48, 1.6, 1.72, 1.84, 1.96,
2.08, 2.2, 2.32, 2.44, 2.56, 2.68, 2.8, 2.92, 3.04, 3.16, 3.28, 3.4, 3.52, 3.64, 3.76, 3.8
8, 4.0, 4.04, 4.08, 4.12, 4.16, 4.2, 4.24, 4.28, 4.32, 4.36, 4.4, 4.44, 4.48, 4.52, 4.56,
4.6, 4.64, 4.68, 4.72, 4.76, 4.8, 4.84, 4.88, 4.92, 4.96, 5.0, 5.04, 5.08, 5.12, 5.16, 5.
2, 5.24, 5.28, 5.32, 5.36, 5.4, 5.44, 5.48, 5.52, 5.56, 5.6, 5.64, 5.68, 5.72, 5.76, 5.8,
5.84, 5.88, 5.92, 5.96]
----------------------------------------
Arithmetic mean
----------------------------------------
Mean age of 'Group 1': 17.2222222222222
Mean age of 'Group 2': 17.45
Mean age of 'Group 3': 17.57894736842105
Mean amount of males: 13
Mean amount of females: 6
```

```
Mean amount of Kyiv citizens: 6.666666666666667
Mean amount of dormitory residents: 9
Mean amount of neither Kyiv citizens nor dormitory residents: 3.3333333333333335
----------------------------------------
Geometric mean
----------------------------------------
Mean age of 'Group 1': 17.210679281011203
Mean age of 'Group 2': 17.431826436673717
Mean age of 'Group 3': 17.553099499033205
Mean amount of males: 12.926608140191302
Mean amount of females: 5.517848352762241
Mean amount of Kyiv citizens: 6.542132620377179
Mean amount of dormitory residents: 8.962809493114328
Mean amount of neither Kyiv citizens nor dormitory residents: 2.7144176165949063
----------------------------------------
Harmonic mean
----------------------------------------
Mean age of 'Group 1': 17.19906323185012
Mean age of 'Group 2': 17.414028716374325
Mean age of 'Group 3': 17.529118400471518
Mean amount of males: 12.857142857142858
Mean amount of females: 4.99009900990099
Mean amount of Kyiv citizens: 6.412213740458015
Mean amount of dormitory residents: 8.925619834710744
Mean amount of neither Kyiv citizens nor dormitory residents: 2.0689655172413794
----------------------------------------
Standard deviation
----------------------------------------
Deviation age of 'Group 1': 0.6467616667635546
Deviation age of 'Group 2': 0.8255779474818965
Deviation age of 'Group 3': 1.0173926082384548
Deviation of males: 1.7320508075688772
Deviation of females: 2.6457513110645907
Deviation of Kyiv citizens: 1.5275252316519465
Deviation of dormitory residents: 1.0
Deviation of neither Kyiv citizens nor dormitory residents: 2.081665999466133
----------------------------------------
Variance
----------------------------------------
Variance age of 'Group 1': 0.41830065359477125
Variance age of 'Group 2': 0.6815789473684211
Variance age of 'Group 3': 1.0350877192982457
Variance of males: 3
Variance of females: 7
Variance of Kyiv citizens: 2.333333333333333
Variance of dormitory residents: 1
Variance of neither Kyiv citizens nor dormitory residents: 4.333333333333334
```