**Hand-in assignment**

**Project assignment in Descriptive Statistics**

**Due 2021-04-25**

**4 SH**

**Question 1**:

Explain the basic concepts used in descriptive Statistics, such as:

population, sample, statistics, parameters, representative, observations, variance, standard deviation, cumulative graphs, different graphical forms of representation (i.e. the different diagrams), measures of the center of data, measures of the spread of data.

You must explain and present the different concepts using your own words and making sure it makes sense to the reader. Envision a 1st year IBB student who has not yet learned statistics – she should be able to understand your explanation. This part of the hand-in: max 2 pages.

**Question 2**:

Make a statistical analysis with data that are non-grouped. Your analysis must contain appropriate concepts from question 1

The table with labels is below. Fill in the blanks, using data of your own

# Non-grouped observations

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Index** | **Frequency hi** | **Relative frequency fi** | **Relative cumulative frequency Fi** | **Prod 1**  **xi\*fi** | **Prod 2**  **(xi-*x*)^2\*fi** |
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**Question 3**:

Make an example of your own. The data are to be grouped and the analysis must contain all the concepts from question 1. Draw also some graphs that could be useful for your interpretation

# Grouped observations

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| **Index** | **Frequency hi** | **Rel. freq. fi** | **Rel.cum. freq. Fi** | **Mid-point**  **mi** | **Upp.class limit** | **Prod 1 mi\*fi** | **Prod 2**  **(mi-*x*)^2\*fi** |
| 60-65 |  |  |  |  |  |  |  |
| 65-70 |  |  |  |  |  |  |  |
| 70-75 |  |  |  |  |  |  |  |
| 75-80 |  |  |  |  |  |  |  |
| 80-85 |  |  |  |  |  |  |  |
| 85-90 |  |  |  |  |  |  |  |
| 90-95 |  |  |  |  |  |  |  |
| 95-100 |  |  |  |  |  |  |  |
| 100-105 |  |  |  |  |  |  |  |
| 105-110 |  |  |  |  |  |  |  |
| 110-115 |  |  |  |  |  |  |  |
| 115-120 |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |